## uropa

 components
## Catalogue 2015

Quality Components at Competitive Prices


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Low Minimum Order Value Only

The prices shown in this catalogue were correct at the time of going to press.
List prices can only be guaranteed if our suppliers do not have a price increase.
Due to the volatile nature of the market in raw materials price changes may occur at very short notice.
No liability can be accepted for the information given in this catalogue.
Technical information should be used as a guide only.
Please contact our sales department for advice and manufacturer's literature.

## Hemopa Delivery Charges....

for orders over £100 nett

There is a minimum goods order value of $£ 20.00$ nett (not including carriage).
NB: There is a delivery charge of $£ 8.50$ for all orders under $£ 100.00$ nett.
Orders received by 3.00pm for ex-stock components are normally despatched same day.
Guaranteed next day delivery is available at extra cost:


## There is an additional $£ 2.50$ surcharge for deliveries direct to site.

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- Any discrepancy must be notified to Europa Components within 10 working days.
- All returns must be accompanied by a returns number issued by the sales desk.
- Pallet charges may apply to some orders.

Same day courier service is also available on request at extra cost.

## Quality Components at Competitive Prices

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## http://www.europacomponents.com

Electrical Products Page
Bell Transformer ..... 29
Cable Glands: Metric \& PG Types / Metric Blanking Plugs / PG to Metric Adaptors ..... 38-39
Cam Switches ..... 53
Capacitors: Motor Capacitors ..... 89
Changeover Switches ..... 46-48
Consumer Units - 17th Edition: Split Load / Switched Incomer / RCCB / Metal Clad ..... 11-13
Control Relays / Contactors / Overloads / Contactor Accessories ..... 74-83
Din Rail (Slotted 35 mm and Plain 35mm Types) ..... 90-91
Din Rail Terminals ..... 90-91
Distribution Enclosures \& Accessories ..... 13-15
DOL Starters: Plastic Enclosure / Metal Clad / DOL with Isolator ..... 84-85
Electronic Timer: Multi Function ..... 31
Enclosures: Adaptable Boxes / Contactor Enclosures / Junction Boxes /Plastic Enclosures / Steel Enclosures / Stainless Steel32-37
Fused Switches 32-100A (Metal Enclosed Door Interlocked) ..... 47
Garage Units ..... 13
Hour Run Meters ..... 89
Indicator Lamps (LED BA9) and Holders64
Industrial Plugs and Sockets / Switched Interlocked Sockets ..... 40-42Inspection Windows for Enclosures37
Integrated $\mathbf{2 2 . 5 m m}$ Push Buttons, Switches and Control Station Enclosures ..... 66-67
Kilo Watt Hour Meter / MID Approved Kilo Watt Hour Meter ..... 29
LED Lamps: $16 \mathrm{~mm} / 22.5 \mathrm{~mm}$ Lamp Test / $22.5 \mathrm{~mm} / 22.5 \mathrm{~mm}$ with Sounder ..... 65
Load Break (Isolators including AC and DC types) Switches and Accessories ..... 43-51
Mainswitch / Isolator 2 Pole and 4 Pole ..... 21
Manual Motor Starters and Accessories ..... 86
Miniature Circuit Breakers and Accessories ..... 18-20
Modular Contactors 2 Pole and 4 Pole ..... 29
Neutral Cables (spares) ..... 15
Push Buttons and Selector Switches (22.5mm) ..... 68-71
Push Button Stations ..... 72-73
PVC Electrical Insulation Tape ..... 38
PV - Photovoltaics: DC Isolator Switches / Enclosed MID Approved kWh Meter Switch Assembly / PV System Main Isolator / Combined AC \& DC PV Isolator Switches (also refer to pages 8 \& 9) ..... 50-53
RCD 13A Sockets ..... 23
Relays: Phase Failure / Star Delta / Power and Control ..... 87-89
Residual Current Devices ..... 21-23
Safe Switch Load Break Switches / Switch Fuses / Changeover Switches (Enclosed \& Door Interlock types) ..... 54-63
Shower Units ..... 13
Single Phase Fused Switches 80A Insulated / 100A Metal Clad ..... 23
Star Delta Starters (Enclosed with Isolator) ..... 86
Surge Protection Devices ..... 24-28
Terminal Blocks 12 Way U - PE \& PP Types from 3-60A \& E-Box Terminal Strip Enclosures ..... 32-33
Terminal Boxes Steel (IP65) ..... 37
Time Clocks (Din Rail Mounting and Panel Mounting types) ..... 30-31
Three Phase Boards ..... 16-17
3 Phase Boards, Adaptable Boxes \& Multi Meter Panel / Type A Distribution Boards ..... 17
Warning Beacons ..... 92-93
Fuses \& Fuse Holders ..... Page
American Midget Fuses ..... 119-120
Bottle Fuses ..... 113-114
BS1362 Plug Top Fuses / BS646 Plug \& Outlet Adaptor Fuses ..... 103-104
BS88 Industrial Fuses ..... 95-102
BS88 Semiconductor Fuses ..... 100-102
Consumer Unit Fuses ..... 104
Cylindrical Fuses \& Fuse Holders ..... 109-113
Fork Lift Truck Fuses ..... 118
Fuse Holders for BS88 Fuses ..... 103
Miniature Fuses105-109Multi Meter Fuses (UR 1000V)
Photovoltaic FusesSolid Neutral Links for BS88 Fuses109
NH Knife Blade Fuses, Fuse Holders \& Accessories110102
Technical Details \& Look Up Tables
American Fuses \& American Semiconductor Fuses Comparison Chart ..... 120
BS88 Industrial Fuse Comparison Chart by Fixing Centres ..... 122
Clipfit Fuse Holder Comparison Chart / Bolt In Fuse Holder Comparison Chart ..... 121
Contactors: Comparison Chart / Dims / Motor Current Selection Table /
Coil Look up Table / Overload Chart130-131
Contactor Heating \& Lighting Guide ..... 132-135
Din Rail Terminals Data ..... 125
Enclosures Dimensions ..... 129
Electronic Timer: 2470001 ..... 138-139
Fibox Features \& Dimensions ..... 130
General Terms \& Tips For Sourcing Fuses \& BS88 Industrial Fuse Comparison Chart ..... 94
Integrated 22.5mm Push Buttons, Switches \& Enclosures Data ..... 128
IP Rating Table ..... 140
Load Break Switch Technical Data ..... 123-125
Modular Contactor Lighting Guide ..... 136
Relay Look up Table ..... 137
Solid Neutral Link Table ..... 121
New Products Quick Reference ..... Page
PV- Photovoltaic Introduction Pages ..... 8-9
TPN Board Single Phase Kit Spare Labels ..... 17
Type A Distribution Boards ..... 17
RCBO C Curve 1P 6kA ..... 21
RCBO C Curve 2P 6kA Type A
RCCB 2 \& 4P 6 kA (Extended Range)
Surge Protection Devices (SPDs) (Extended Range)
MID Approved Kilo Watt Hour Meter
E-Box Terminal Strip Enclosure (Extended Range)Metal Clad Contactor Enclosures (IP54 Rated)Steel Enclosures (Extended Range)36
Weather Hoods and Extension Boxes for Steel Enclosures ..... 36
Stainless Steel Enclosures (Extended Range) ..... 37
4 Module ABS Open Front Enclosure (with Din Rail) ..... 37
Blanking Plugs (Extended Range) ..... 39
IP65 Interlocked Switch Sockets (RCCB Protected) (Extended Range) ..... 41
IP67 Interlocked Switch Sockets ..... 42
3P + Switch Neutral Boxed Isolators ..... 43
3P + Switch Neutral Boxed Isolators (in Large Enclosure) ..... 44
3P + Switch Neutral Boxed Isolators (in Die Cast Enclosure) ..... 45
2P Enclosed Changeover Switches (Extended Range) ..... 46
4P Enclosed Changeover Switches (Extended Range) ..... 47
Enclosed Door Interlocked Fused Switches 32-100A ..... 47
DC 4 Pole Din Rail Mount Isolator ..... 51
Enclosed MID Approved kWh Meter Switch Assembly ..... 52
PV System Main AC Isolator ..... 52
Combined AC \& DC PV Isolator Switches ..... 53
Safe Switch Metal Enclosed Load Break Switches (Extended Range) ..... 56
Safe Switch Stainless Steel Enclosed Load Break Switches ..... 57
Safe Switch Metal Enclosed Switch Fuses (Extended Range) ..... 58
Safe Switch Stainless Steel Enclosed Switch Fuses ..... 58
Safe Switch Metal Enclosed Changeover Switches (Extended Range) ..... 59
Safe Switch Door Interlocked Load Break Switches (Extended Range) ..... 60
Safe Switch Door Interlocked Switch Fuses (Extended Range)
Safe Switch Door Interlocked Changeover Switches (Extended Range)6161
Safe Switch Terminal Shroud Sets (Extended Range) ..... 62
Safe Switch Auxiliary Contacts (Extended Range) ..... 62
Safe Switch Neutral Links ..... 63
Safe Switch Neutral Link Terminal Shrouds ..... 63
Safe Switch Extended Shafts ..... 63
Safe Switch Spare Handles \& Shafts ..... 63Auxiliary Contact Block for DOL Starters
DOL Starters with Isolator84Slotted Top Hat Din Rail $35 \times 15 \mathrm{~mm}$8591
Plain G Rail $32 \times 15 \mathrm{~mm}$ ..... 91

## Hrope components <br> Service and Support....



Find out more about Europa and the services we offer. Scan the QR code to watch our video!
$\checkmark$ Professional - flexible and friendly approach....

$\checkmark$ Marketing - Catalogues, images, mats, flyers \& more...


Our team of engineers are on hand to help with your (technical enquiries - call direct on: 01582692 444. In
$\checkmark$ Technical Help - expert engineers on hand

$\checkmark$ UPS Tracking - Automatic real time e-mail updates


Visit europacomponents.com on your pc, tablet or smart phone for the mobile friendly experience!
$\checkmark$ Order on-line - popular, quick \& easy....

$\checkmark$ Product Display Boards - Ideal for your P.O.S

$\checkmark$ Large Stock Holding - for next day deliveries

$\checkmark$ Direct to Site Deliveries
$\checkmark$ Carriage Paid Orders - for orders over $£ 100$ nett $\checkmark$ Low Minimum Order - still only £20 nett!

## Delivery Exception Areas.

## (1) Please refer to the table below...

If you are located within any of the postal code areas listed below you will need to contact the sales department prior to placing your order. This is important to determine the timing of your delivery and any potential surcharges applicable to the location.


## (i) Stock Cleanse Terms:

Europa Components understand the need for regular stock rotation and the introduction of new lines. Take advantage of our Stock Cleanse Service.
The following Terms and Conditions apply:

1) Only purchased from Europa, from our current range, in undamaged original packaging and in a saleable / useable condition.
2) Been purchased and delivered within 12 months of Cleanse request.
3) $25 \%$ handling charge applies or a 2 for 1 replacement order service available. Both options based on the original order costs.
4) Cleanse items must be accompanied with their original invoice and returns reference number
5) Returned at your own cost to our warehouse within 5 working days of agreement, please provide tracking details.

Please contact our sales team for further details.
All stock cleanses are subject to handling terms as set out in the Europa Components standard terms and conditions 4.2 ©.

## Europa Components Display Pack Simple Re-sealable Packs....



A comprehensive range of Control Gear products in attractive re-sealable Clam Packaging. Selection Charts and Banners are available and each product comes complete with a data sheet for your convenience. Please ask for details of this exciting range including how to get your own stand and your free copy of the full Display Pack Gatefold Catalogue!


| Part Number | Description | Price | Per |
| :---: | :---: | :---: | :---: |
| COL10 | TC1 OVERLOAD RELAY 1.00-1.65A CP | £19.95 | 1 |
| COL20 | TC1 OVERLOAD RELAY 1.60-2.50A CP | £19.95 | 1 |
| COL30 | TC1 OVERLOAD RELAY 2.5-4.0A CP | £19.95 | 1 |
| COL40 | TC1 OVERLOAD RELAY 4.0-6.0A CP | $£ 19.95$ | 1 |
| COL50 | TC1 OVERLOAD RELAY 5.5-8.0A CP | £19.95 | 1 |
| COL60 | TC1 OVERLOAD RELAY 7.0-10.0A CP | $£ 19.95$ | 1 |
| COL70 | TC1 OVERLOAD RELAY 9.0-13.0A CP | £19.95 | 1 |
| COL80 | TC1 OVERLOAD RELAY 12.0-18.0A CP | £25.55 | 1 |
| COL90 | TC1 OVERLOAD RELAY 17.0-25.0A CP | £26.00 | 1 |
| CAUX22 | AUX CONT BLOCK F/MTG 4P 2N/O+2N/C CP | £9.00 | 1 |
| CTK410 | $10 \times 4 \mathrm{MM}$ SCREW TERMINAL KIT CP | £6.50 | 1 |
| CTK45 | $5 \times$ 4MM SCREW TERMINAL KIT CP | $£ 6.10$ | 1 |
| CTK510 | $5 \times 10 \mathrm{MM}$ SCREW TERMINAL KIT CP | $£ 5.79$ | 1 |
| CTK525 | $5 \times 25 \mathrm{MM}$ SCREW TERMINAL KIT CP | $£ 7.16$ | 1 |
| CSDIN | 1/2 METER SLOTTED DIN RAIL 35MM X 17.5MM CP | $£ 1.25$ | 1 |
| CRLY10 | RELAY 8 PIN OCTAL 2PCO 10A 24V DC CP | £8.50 | 1 |
| CRLY15 | RELAY 8 PIN OCTAL 2PCO 10A 24V AC CP | £8.50 | 1 |
| CRLY20 | RELAY 8 PIN OCTAL 2PCO 10A 110V AC CP | $£ 8.75$ | 1 |
| CRLY25 | RELAY 8 PIN OCTAL 2PCO 10A 230V AC CP | £8.75 | 1 |
| CRLY30 | RELAY 11 PIN OCTAL 3PCO 10A 24V DC CP | $£ 9.00$ |  |
| CRLY35 | RELAY 11 PIN OCTAL 3PCO 10A 24V AC CP | $£ 9.00$ | 1 |
| CRLY40 | RELAY 11 PIN OCTAL 3PCO 10A 110V AC CP | £9.50 | 1 |
| CRLY45 | RELAY 11 PIN OCTAL 3PCO 10A 230V AC CP | $£ 9.50$ | 1 |
| CRLY50 | RELAY 14 PIN 4PCO 6A 24V DC CP | $£ 7.75$ | 1 |
| CRLY55 | RELAY 14 PIN 4PCO 6A 24V AC CP | $£ 7.75$ | 1 |
| CRLY60 | RELAY 14 PIN 4PCO 6A 110V AC CP | $£ 7.75$ |  |
| CRLY65 | RELAY 14 PIN 4PCO 6A 230V AC CP | $£ 7.75$ | 1 |
| CRB10 | RELAY BASE 8 PIN OCTAL CP | $£ 5.50$ |  |
| CRB30 | RELAY BASE 11 PIN OCTAL CP | $£ 5.50$ | 1 |
| CRB50 | RELAY BASE 14 PIN PLUG IN CP | $£ 5.50$ | 1 |
| CLD30B | LED LAMP 24V AC/DC GREEN CP | $£ 4.75$ | 1 |
| CLD30F | LED LAMP 110V AC GREEN CP | £4.75 | 1 |
| CLD30P | LED LAMP 230V AC GREEN CP | £4.75 | 1 |
| CLD40B | LED LAMP 24V AC/DC RED CP | £4.75 | 1 |
| CLD40F | LED LAMP 110V AC RED CP | £4.75 | 1 |
| CLD40P | LED LAMP 230V AC RED CP | $£ 4.75$ | 1 |
| CLD50B | LED LAMP 24V AC/DC AMBER CP | $£ 4.75$ | 1 |
| CLD50F | LED LAMP 110V AC AMBER CP | $£ 4.75$ | 1 |
| CLD50P | LED LAMP 230V AC AMBER CP | $£ 4.75$ | 1 |
| CFB30 | FLUSH PUSH BUTTON HEAD GREEN CP | $£ 5.50$ | 1 |
| CFB40 | FLUSH PUSH BUTTON HEAD RED CP | $£ 5.50$ | 1 |
| CES10 | EM STOP HEAD RED TWIST REL 40MM CP | £8.85 | 1 |
| CES20 | EM STOP HEAD KEY REL RED + M/B 40MM CP | $£ 12.00$ |  |
| CSW20 | SEL SW 2POS CP | $£ 7.50$ | 1 |
| CSW30 | SEL SW 3 POS CP | $£ 8.00$ |  |
| CKS20 | KEY SELECTOR SWITCH 2 POS CP | £9.00 | 1 |
| CKS30 | KEY SELECTOR SWITCH 3 POS CP | $£ 10.00$ |  |
| CCBNC | CONTACT BLOCK N/C CP | £4.50 | 1 |
| CCBNO | CONTACT BLOCK N/O CP | £4.50 | 1 |


|  | Part Number | Description | Price | Per |
| :---: | :---: | :---: | :---: | :---: |
|  | CRC1P | PUSH BUTT STN 1POS CP | £11.00 | 1 |
| $-2$ | CRC1PY | PUSH BUTT STN 1POS YELLOW CP | £12.00 | 1 |
|  | CRC2P | PUSH BUTT STN 2 POS EMPTY + LABELS CP | £14.00 | 1 |
|  | CRC3P | PUSH BUTT STN 3 POS EMPTY CON + LABELS CP | £16.00 | 1 |
|  | CC123N | CONTACTOR 12A 5.5KW 1N/O AUX 415V CP | £18.63 | 1 |
|  | CC123P | CONTACTOR 12A 5.5KW 1N/O AUX 230V CP | £18.63 | 1 |
|  | CC124P | CONTACTOR 4 POLE 25A AC1 230V COIL CP | £20.62 | 1 |
|  | CC253N | CONTACTOR 25A 11KW 1N/O AUX 415V CP | £31.86 | 1 |
|  | CC253P | CONTACTOR 25A 11KW 1N/O AUX 230V CP | $£ 31.86$ | 1 |
|  | CC254P | CONTACTOR 4 POLE 40A AC1 230V COIL CP | $£ 35.30$ | 1 |
|  | CMC202P | MODULAR CONTACTOR 20A 230V CP | £21.26 | 1 |
|  | CMC254P | MODULAR CONTACTOR 4 POLE 25A 230V CP | $£ 38.04$ | 1 |
|  | CMC404P | MODULAR CONTACTOR 4 POLE 40A 230V CP | £50.94 | 1 |
|  | CMC634P | MODULAR CONTACTOR 4 POLE 63A 230V CP | £56.61 | 1 |
|  | CLB204 | ISOLATOR ENC 20A 4P CP | £15.64 | 1 |
| $1 \pm$ | CLB254 | ISOLATOR ENC 25A 4P CP | £17.56 | 1 |
|  | CLB324 | ISOLATOR ENC 32A 4P CP | £19.36 | 1 |
|  | CLB404 | ISOLATOR ENC 40A 4P CP | $£ 25.67$ | 1 |
|  | CMFT | CRM-91H MULTI-FUNCTION 12-230 TIMER CP | $£ 38.28$ | 1 |
|  | CET1 | 16A TIME CLOCK ANALOGUE 24 HR 15MIN SEG CP | £29.22 | 1 |
|  | CET2 | 24HR TIME CLOCK 15MIN SEG 1MODULE CP | $£ 43.14$ | 1 |
|  | CET3 | STAIRCASE 230V TIMER CP | £19.57 | 1 |
| $\cdots$ | CET4 | 16 A 7 DAY DIGITAL TIMER 1 CHANNEL 16 PERIOD CP | $£ 30.57$ | 1 |
| $\ldots$ | CET5 | TIME CLOCK 1CH 16AMP 7 DAY CP | $£ 33.06$ | 1 |
|  | CET6 | TIME CLOCK 2CHAN N/O 7 DAY CP | $£ 52.00$ | 1 |
|  | CRCD1GP | PLASTIC RCD 13A SINGLE SOCKET UNSWITCHED CP | $£ 24.00$ | 1 |
|  | CRCD2GM | METAL CLAD RCD 13A DOUBLE SOCKET SWITCHED CP | £33.11 | 1 |
|  | CRCD2GP | PLASTIC RCD 13A DOUBLE SOCKET SWITCHED CP | £26.24 | 1 |
| $=3$ | CRCDFSP | RCD SINGLE 13AMP SPUR OUTLET CP | $£ 23.10$ | 1 |
| 0 (- .63 0-6 | CBLMVA | XENON BEAC L/P 2W 10-72V AC/DC AMBER CP | $£ 30.00$ | 1 |
|  | CBTMVA | XENON BEAC AMBER 10-72 V AC/DC 2W CP | $£ 37.50$ | 1 |
|  | CBTMVR | XENON BEAC RED 10-72 V AC/DC 2W CP | $£ 37.50$ | 1 |
| $\square$ | CBLMVR | XENON BEAC L/P 2W 10-72V AC/DC RED CP | $£ 35.00$ | 1 |
|  | LE1-D123U7 | DOL STARTER 12A 240V NO OVERLOAD | £26.93 | 1 |
|  | LE1-D123N7 | DOL STARTER 12A 415V NO OVERLOAD | $£ 26.93$ | 1 |
|  | LE1-D253U7 | DOL STARTER 25A 240V NO OVERLOAD | $£ 38.80$ | 1 |
|  | LE1-D253N7 | DOL STARTER 25A 415V NO OVERLOAD | $£ 38.80$ | 1 |
| - | BE1-D123U7 | DOL M/CLAD STARTER 12A 240V NO O/LOAD | $£ 36.78$ | 1 |
|  | BE1-D253N7 | DOL M/CLAD STARTER 25A 415V NO O/LOAD | $£ 52.92$ | 1 |
|  | PB25C | IP67 CONTACTOR ENC C/W BACKPLATE \& DINRAIL | £27.25 | 1 |
|  | DISPLAY STAND | DISPLAY STAND, CHARTS, BANNER + 50 HOOKS | $£ 200$ | 1 |

## Make Life Easier with our Selection

 Charts and Banners.... ED Europa

## 2015 Catalogue

## The Europa Solar Photovoltaic Solution



Europa Components are committed to supporting renewable technologies. We have extended our range of solar photovoltaic (PV) products in the 2015 catalogue to provide a complete solution. The products shown above are listed below with the page number they can be found within the catalogue for more information.

1. Photovoltaic AC DC Isolator
LBACDC40/25ME
2. Photovoltaic AC $2 \times D C$ Isolators LBACDC40/25/25ME
3. Enclosed MID Approved kWh Switch Assembly ECMID16A
4. Photovoltaic PV System Main AC Isolator EC4ACSW
5. DC 4 Pole Boxed Isolator Switch ............................................... LB164PDC / LB254PDC / LB324PDC
6. DC 4 Pole Door Interlocked Isolator Switch .............................. LBDI164PDC / LBDI254PDC / LBDI324PDC
7. DC 4 Pole Din Rail Mount Isolator Switch ................................. LBDR254PDC
8. AC 3 \& 4 Pole Boxed Isolator Switch ......................................... LB323P, 403P, 204P, 254P, 324P, 404P
9. Garage Units GRG16E / GRG32E
10. $10 \times 38 \mathrm{~mm}$ uR gPV 1000V DC String Fuses 50-215-26/ 10A, 12A, 15A, 16A, 20A
11. $10 \times 38 \mathrm{~mm}$ Fuse Holder for uR gPV 1000V DC String Fuses D1009979
Type A RCBOs
EUBLM16C30A / EUBLM40C30A
Type 2 SPD Devices for PV Systems. 952510 / 952511
SDM120A

Page 53
Page 53
Page 52
Page 52
Page 51
Page 51
Page 51
Page 43-44
Page 13
Page 110
Page 111
Page 22
Page 27
Page 29

## Renewable Energy - Choose The Europa Safe PV Solution

The demand for renewable energy including PV systems is growing at a rapid rate due to the rising costs of fossil fuels and the negative effect their emissions have on the environment.

Photovoltaics use energy from the sun to generate electricity. PV cells are made from semi-conductor materials which convert solar energy into DC electricity. The DC is converted into an AC voltage via an inverter and used to power appliances and lighting. Contrary to popular belief PV cells only require daylight, not direct sunlight to generate electricity.

All Photovoltaic installations must have a DC and AC Switch to disconnect the DC / AC inverter from the photovoltaic panels in accordance with IEC 60364-7-712.

Europa DC Isolators have been specifically designed to switch Direct Current (DC) at voltages up to 1000 volts. Their robust design and ability to switch such voltages, at rated current, means that they are ideally suited to be used in the switching of Photovoltaic (PV) systems.

Europa DC isolators have been a popular addition to our main line catalogue and have a proven track record. The introduction of the additional PV lines in the 2015 catalogue is to offer a complete and safe solution for PV installations.

Please refer to the diagram below for a typical installation.
See pages 50 to 53 for the Photovoltaic Range and refer to the PV index on page 8 for all related PV products.


String


# Eyropa High Integrity and Flexibility.... 

See pages 24-28 for our extended range of SPD Surge Protection Devices
$\checkmark$ Ferruled cable ends $\checkmark$ Multiple knock-outs (located top \& bottom) for trunking
$\checkmark$ Flexible wiring for easy removal of gear tray

(1) Simply cut the (1) bar to suit your choice of application....

## Quality Components at Competitive Prices



- High quality to meet all current standards
- Flexible busbar configurations
- Generous internal wiring space
- Surge protection available
- Options up to 18 useable ways
- Metal \& insulated units available



## ABS Consumer Units

17th Edition (BS7671) Box Qty 8 (4 for 21 \& 24SP)


CE \& SEMKO Certified BS 7671 17th Edition Boards
IP40 Rating / Flame Retardant ABS Enclosure / Earth \& Neutral Busbars Included / Quick Release Cover with Transparent Drop Down Lid

| Part Number ECU14SP17/63 | Description <br> 14 Module 8 Free Ways <br> 100A Switch + $2 \times 63$ A RCCB | Price <br> $£ 74.85$ | Per 1 |
| :---: | :---: | :---: | :---: |
| ECU18SP17/63 | 18 Module 12 Free Ways 100A Switch + 2 x 63A RCCB | $£ 82.46$ | 1 |
| ECU14SP17/80 | 14 Module 8 Free Ways 100A Switch + $2 \times 80$ A RCCB | $£ 86.68$ | 1 |
| (1) ECU16SP17/80 | 16 Module 10 Free Ways 100A Switch + $2 \times 80$ A RCCB | $£ 78.65$ | 1 |
| ECU18SP17/80 | 18 Module 12 Free Ways 100A Switch + $2 \times 80$ A RCCB | $£ 99.12$ | 1 |
| ECU21SP17/80 | 21 Module 15 Free Ways 100A Switch + 2 x 80A RCCB | £127.51 | 1 |
| (2) ECU24SP17/80 | 24 Module 18 Free Ways 100A Switch + $2 \times 80$ R RCCB | £140.25 | 1 |

[^0]

## CE \& SEMKO Certified

IP40 Rating / Flame Retardant ABS Enclosure / Earth \& Neutral Terminal Bars Included / Quick Release Cover with Transparent Drop Down Lid

| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :---: |
| ECU8M | 100A 6 Free Ways | $£ 34.57$ | 1 |
| ECU10M | 100A 8 Free Ways | $£ 35.91$ | 1 |
| ECU14M | 100A 12 Free Ways | $£ 44.01$ | 1 |
| ECU18M | 100A 16 Free Ways | $£ 63.65$ | 1 |
| ECU21M | 100A 19 Free Ways | $£ 75.78$ | 1 |

$\checkmark$ For use with RCBOs to meet 17th edition requirements.


[^1]2015 Catalogue
Split Load $\quad$ Box Qty 8


## CE \& SEMKO Certified

IP40 Rating / Flame Retardant ABS Enclosure / Earth \& Neutral Terminal Bars Included / Quick Release Cover with Transparent Drop Down Lid

| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :---: |
| ECU-10SP/63 | 100A SW + 63A RCCB 3 + 3 | $£ 56.53$ | 1 |
| ECU-10SP/80 | 100A SW + 80A RCCB 3 + 3 | $£ 60.61$ | 1 |
| ECU-14SP/80 | 100A SW + 80A RCCB 5 + 5 | $£ 65.04$ | 1 |
| ECU-18SP/80 | 100A SW + 80A RCCB 7 + 7 | $£ 80.12$ | 1 |

$\checkmark$ For use with MCBs and RCBOs to meet 17th Edition requirements.

| Consumer Unit Dimensions Table (mm) |  |  |  |
| :--- | :---: | :---: | :---: |
| ABS Consumer Unit Enclosure Dimensions (mm) |  |  |  |
| Type | Height | Width | Depth |
| ECU-8 | 230.50 mm | 215.60 mm | 120 mm |
| ECU-10 | 230.50 mm | 253.60 mm | 120 mm |
| ECU-14 | 230.50 mm | 327.50 mm | 120 mm |
| ECU-16 | 254 mm | 362.50 mm | 120 mm |
| ECU-18 | 230.50 mm | 397.50 mm | 120 mm |
| ECU-21 | 230.50 mm | 451 mm | 120 mm |
| ECU-24 | 460 mm | 290 mm | 120 mm |
| Metal Clad Consumer Unit Enclosure Dimensions (mm) |  |  |  |
| MECU8 | 234 mm | 235 mm | 105 mm |
| MECU10 | 234 mm | 270 mm | 105 mm |
| MECU14 | 234 mm | 340 mm | 105 mm |
| MECU18 | 234 mm | 410 mm | 105 mm |

## Metal Clad Consumer Units

## Meta Clad 17th Edition (BS 7671) Box Qty 4



## CE \& SEMKO Certified

IP40 Rating / Earth \& Neutral Busbars Included / Lift Up Stay Put Lid Large Enclosure for Easy Wiring

| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :---: |
| MECU14SP17/80 | 14 Module 8 Free Ways |  |  |
|  | 100A Switch + 2 x 80A RCD | $£ 125.56$ | 1 |
| MECU18SP17/80 | 18 Module 12 Free Ways |  |  |
|  | 100A Switch + 2 x 80A RCD | $£ 138.18$ | 1 |

Metal Clad Switched Incomer Box Qty 6 (4 for 14M)


CE \& SEMKO Certified
IP40 Rating / Earth \& Neutral Busbars Included / Lift Up Stay Put Lid Large Enclosure for Easy Wiring

| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :---: |
| MECU8M | 100A Switch 6 Way | $£ 45.80$ | 1 |
| MECU10M | 100A Switch 8 Way | $£ 48.62$ | 1 |
| MECU14M | 100A Switch 12 Way | $£ 60.70$ | 1 |

Metal Clad RCCB Incomer Box Qty 6


## CE \& SEMKO Certified

IP40 Rating / Earth \& Neutral Terminal Bars Included / Lift Up Stay Put Lid Large Enclosure for Easy Wiring

| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :---: |
| MECU8R | 80A RCD 6 Way | $£ 63.40$ | 1 |
| MECU10R | 80A RCD 8 Way | $£ 65.95$ | 1 |

Metal Clad Split Load
Box Qty 6 (4 for 14SP)


## CE \& SEMKO Certified

IP40 Rating / Earth \& Neutral Terminal Bars Included / Lift Up Stay Put Lid Large Enclosure for Easy Wiring

| Part Number | Description | Price | Per |
| :--- | :--- | :---: | :---: |
| MECU10SP/80 | 100A Switch + 80A RCCB |  | £81.40 |
|  | $3+3$ Split | 1 |  |
| MECU14SP/80 | $100 A$ Switch $+80 A$ RCCB <br> $5+5$ Split | £92.18 | 1 |

Metal Clad (Consumer Unit) Empty Enclosures


IP40 Rating / Earth \& Neutral Terminal Bars Included / Lift Up Stay Put Lid Large Enclosure For Easy Wiring

| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :---: |
| MECU8 | 8 Module Empty Enclosure | $£ 38.00$ | 1 |
| MECU10 | 10 Module Empty Enclosure | $£ 43.00$ | 1 |
| MECU14 | 14 Module Empty Enclosure | $£ 50.00$ | 1 |

NB: See page 12 for dimensions

## Garage \& Shower Units


(1) Please Note:

We can offer Garage
\& Shower Units with other variations of RCCBs \& MCBs on request.

Price on application.

Garage Units (5 Module Enclosure) Box Qty 12


Perfect for Photovoltaic (PV) Installations


CE Approved \& SEMKO Certified
IP55 Rating / EN 60898 \& EN 61008 Compliant / ABS Enclosure with Polycarbonate Lid / Earth \& Neutral Terminals Included Dimensions: Height 175 mm / Width 130mm / Depth 115mm

| Part Number | Description | Price | Per |
| :--- | :--- | :---: | :---: |
| GRG16E | 40 A RCCB +6 A \& 16A MCB | $£ 45.38$ | 1 |
| GRG32E | $63 A R C C B+6 A \& 32 A$ MCB | $£ 45.38$ | 1 |



IP40 Rating
SU40 EN 61009 Compliant
SU50 EN 60898 \& EN 61008 Compliant
ABS Enclosure with Polycarbonate Lid
Earth \& Neutral Terminals Included
Dimensions: Height 200mm / Width 112 mm / Depth 92 mm

| Part Number | Description | Price | Per |
| :--- | :--- | :---: | :---: |
| 1 | SU40E | $40 A R C B O$ | $£ 38.30$ |
| 2 | SU50E | $50 A$ MCB $+63 A$ RCCB | $£ 38.30$ |

## Empty Distribution Enclosures

Insulated Open Front Enclosure (IP20 Rating)


## 2015 Catalogue

Metal Clad Modular Enclosures

## Uro OE components



## CE Approved

MEC2: IP20 Rating
20mm Knock-outs (1 top \& 1 bottom) Complete with Earth Terminal \& Din Rail

MEC4: IP20 Rating
$2 \times 20 \mathrm{~mm}+2 \times 25 \mathrm{~mm}$ Knock-outs (top \& bottom)
Complete with Earth Terminal \& Din Rail
MEC4C: IP40 Rating
$2 \times 20 \mathrm{~mm}+2 \times 25 \mathrm{~mm}$ Knock-outs (top \& bottom)
Complete with Earth Terminal, Neutral Cable \& Din Rail

| Part Number |  | Description | Price | Per |
| :--- | :--- | :--- | :--- | :---: |
| (1) | MEC2 | 2 Module (Open Front) | $£ 11.02$ | 1 |
| 2 | MEC4 | 4 Module (Open Front) | $£ 13.79$ | 1 |
| 3 | MEC4C | 4 Module (with Lid) | $£ 24.00$ | 1 |


| Metal Clad Modular Enclosure Dimensions (mm) |  |  |  |
| :---: | :---: | :---: | :---: |
| Part No. | Height | Width | Depth |
| MEC2 | 145 mm | 80 mm | 62 mm |
| MEC4 | 225 mm | 115 mm | 62 mm |
| MEC4C | 240 mm | 130 mm | 85 mm (105mm inc lid) |

Europa Despatch Details
Free standard delivery for orders over $£ 100$ nett
Under $£ 100$ delivery charge only $£ 8.50$
Next day and special deliveries available
Minimum order value only $£ 20$
Keep up to date with the latest developments:
w w w.e urop a com pon ents.com

Insulated Distribution Enclosures (IP65)


IP65 Rating
ABS Enclosure with Polycarbonate Lid
Earth and Neutral Terminals Included
Complete with Din Rail Can be used with RCBOs
Please note: the * ECW24 double height is not suitable for use with RCBOs

| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :---: |
| ECW4 | 4 Module Distribution Box | $£ 11.00$ | 1 |
| ECW5 | 5 Module Distribution Box | $£ 13.20$ | 1 |
| ECW6 | 6 Module Distribution Box | $£ 14.69$ | 1 |
| ECW8 | 8 Module Distribution Box | $£ 18.17$ | 1 |
| ECW12 | 12 Module Distribution Box | $£ 21.78$ | 1 |
| ECW18 | 18 Module Distribution Box | $£ 29.79$ | 1 |
| ECW24 | 24 Module Distribution Box | $£ 41.78$ | 1 |


| Insulated Distribution Enclosure Dimensions (mm) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Part Number | Description | Height | Width | Depth |
| ECW4 | 4 Module | 215 mm | 125 mm | 100 mm |
| ECW5 | 5 Module | 215 mm | 145 mm | 100 mm |
| ECW6 | 6 Module | 215 mm | 160 mm | 100 mm |
| ECW8 | 8 Module | 215 mm | 215 mm | 100 mm |
| ECW12 | 12 Module | 215 mm | 270 mm | 100 mm |
| ECW18 | 18 Module | 230 mm | 380 mm | 100 mm |
| ECW24 | 24 Mod. Double Height | 340 mm | 285 mm | 100 mm |

## Quality Components at Competitive Prices

Spare Busbars for Distribution Enclosures


For use with the ECW range of Distribution Enclosures.
Please Note: Use $2 \times$ ECWBB12 for the ECW24 double height 24 module enclosure.

| Part Number | Description | Price | Per |
| :--- | :--- | :--- | :---: |
| ECWBB4 | 100A 4 Way Busbar | $£ 1.40$ | 1 |
| ECWBB5 | 100A 5 Way Busbar | $£ 1.80$ | 1 |
| ECWBB6 | 100A 6 Way Busbar | $£ 2.11$ | 1 |
| ECWBB8 | 100A 8 Way Busbar | $£ 2.80$ | 1 |
| ECWBB12 | 100A 12 Way Busbar | $£ 4.04$ | 1 |
| ECWBB18 | 100A 18 Way Busbar | $£ 5.93$ | 1 |


| 1000 mm Busbars |  |  |  |
| :---: | :---: | :---: | :---: |
| Can be cut to any length |  |  |  |
|  |  |  |  |
| Part Number | Description | Price | Per |
| BB1PP80/1000 | Bus Bar 1P Pin 80A 1000mm | $£ 17.75$ | 1 |
| BB1PF80/1000 | Bus Bar 1P Fork 80A 1000mm | £17.75 | 1 |
| BB1PP100/1000 | Bus Bar 1P Pin 100A 1000mm | £23.61 | 1 |
| BB3PP100/1000 | Bus Bar 3P Pin 100A 1000mm | £58.16 | 1 |

Busbar for Consumer Units - (Spare Part) See Pages 11-12


Suitable for all consumer units when the application requires the bar to be cut to suit a specific number of ways.

| Part Number De | Description |  | Price | Per |
| :---: | :---: | :---: | :---: | :---: |
| ECUBB10S 100 | 100A Spare Busbar 6 MCB Ways |  | $£ 2.76$ | 1 |
| ECUBB14S 100 | 100A Spare Busbar 10 MCB Ways |  | £3.93 | 1 |
| ECUBB18S 100 | 100A Spare Busbar 14 MCB Ways |  | $£ 4.20$ | 1 |
| (i) Consumer Unit Spare Busbar Compatibility Table |  |  |  |  |
| ECUBB10S (6 MCB Ways) | Can be used with | ECU10SP/80/ECU8M / ECU8R ECU14SP17/80 / ECU18SP17/80 |  |  |
| ECUBB14S (10 MCB Ways) | Can be used with | $\begin{aligned} & \text { ECU14SP17/80 / ECU10M / } \\ & \text { ECU24SP17/80 (x2) } \end{aligned}$ |  |  |
| ECUBB18S (14 MCB Ways) | Can be used with | ECU16SP/80 / ECU18SP/80 ECU14M / ECU14R |  |  |

## Neutral Cables - Spare Part

| ECWNT10230 | Neutral cable $10 \mathrm{~mm}^{2} \times 230 \mathrm{~mm}$ | $£ 2.50$ | 1 |
| :--- | :--- | :--- | :---: |
| ECWNT16230 | Neutral cable $16 \mathrm{~mm}^{2} \times 230 \mathrm{~mm}$ | $£ 3.50$ | 1 |

## Blanks for Consumer Units, Garage Units \& Shower Units

 1 Module Blank (Din Rail Mount)

Blanking Modules
Iuropa components


Blanking Plates for use in Consumer Units, Garage Units \& Shower Units
Part Number Description Price Per ECUBP Module Blanks $2 \times 4$ Strips
£0.84 1
(i) See pages 11-13 for Consumer Units, Garage and Shower Units....

TPN 3 Phase Boards \& Accessories

$\checkmark$ IP20 rated incomer \& neutral bar connections
$\checkmark$ 125A 4 pole isolator fitted as standard giving isolation to 3 phase \& neutral


IP20 Rated incommer and neutral bar connections

$\checkmark$ 100A RCCB incomer can be fitted if required - See page 22 (EUR1100.30/4, EUR1100.100/4, EUR1100.300/4)
$\checkmark$ Robust epoxy coated steel enclosure (RAL 7035)
$\checkmark$ Available up to 54 ways (all with 125A switch)
$\checkmark$ Half din rail for simple fast fitting \& removal of breakers
$\checkmark$ Can accommodate either 6kA or 10kA Europa MCBs \& RCBOs
$\checkmark$ Easily removable top \& bottom 2 mm thick gland plates
$\checkmark$ Incoming isolator capacity: $50 \mathrm{~mm}^{2}$
$\checkmark$ M8 earth bolts suitable for lugs


Extension boxes \& meter panels available...


Earth and neutral termination on both the left and right hand side of board make it clearer to identify which neutral relates to which outgoing MCB making wiring simple, safe and clear


## 3 Phase Distribution Boards

TPN 3 Phase Boards (125A) (IP40 Enclosure)


EN 60439-3
Pre-wired with 125A 4 Pole Isolator / Blank panels for easy identification Provision for direct connected neutral input using the cage terminal Directly connected to the neutral bar

| Part Number | Description | Price | Per |
| :--- | :--- | :---: | :---: |
| TPN04 | 12 Way 125A Switch | $£ 160.77$ | 1 |
| TPN06 | 18 Way 125A Switch | $£ 182.75$ | 1 |
| TPN08 | 24 Way 125A Switch | $£ 214.62$ | 1 |
| TPN10 | 30 Way 125A Switch | $£ 251.91$ | 1 |
| TPN12 | 36 Way 125A Switch | $£ 276.98$ | 1 |
| TPN14 | 42 Way 125A Switch | $£ 302.91$ | 1 |
| TPN16 | 48 Way 125A Switch | $£ 328.45$ | 1 |
| TPN18 | 54 Way 125A Switch | $£ 354.00$ | 1 |

## 3 Phase Board Accessories

TPN Board Adaptable Boxes Uropa

See page 16 for product images

| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :---: |
| (1) TPNEB | TPN Extension Box | $£ 29.50$ | 1 |
| (2 TPNA16W | TPN Type A 16 Way Enclosure | $£ 48.00$ | 1 |
| 3 TPNMM | TPN Multi Meter Panel | $£ 360.00$ | 1 |

The TPN range of adaptable boxes are specifically designed to simply bolt on to the top or bottom of Europa TPN 3 phase boards.

The TPMM consists of a 3 phase multi meter that can measure volts, amps, KW, KWH, KVAR, KVARH, phase angle and frequency ( Hz ). Pre-wired meter box, easy to set up and programme.
For more advanced operations Modbus and RS485 communication is available. Please Note: the TPNMM can only be fitted to the bottom of the distribution board.

The TPNEB is supplied complete with a pre-fitted back plate.

The TPNA16W is a 16 way single phase extension box complete with din rail, earth and neutral terminals.

NB: The extension box, type A enclosure and multi meter panel can only be used with Europa TPN Boards.


Single Phase Kit

uropa components
Extended Range


The kit includes:
Warning labels $\times 2$ / Numbered way ID labels 1-54 (x2)
Busbar (x1) / Busbar Strap (x1)

| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :---: |
| TPN1P | Single Phase Kit for TPN Board | $£ 15.38$ | 1 |
| TPN1PLABEL | Spare Labels for Single Phase Kit | $£ 2.75$ | 1 |
|  |  |  |  |
|  |  |  |  |
| Single Phase Type A Distribution Boards |  | remponents |  |



CE \& SEMKO Certified
IP40 Rating / Earth \& Neutral Busbars Included / Lift Up Stay Put Lid Metal Clad Large Enclosure for Easy Wiring / RAL 7035

| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :---: |
| TPA8 | Empty Enclosure 8 Module | $£ 50.00$ | 1 |
| TPA12 | Empty Enclosure 12 Module | $£ 55.00$ | 1 |
| TPA16 | Empty Enclosure 16 Module | $£ 65.00$ | 1 |
| TPA8M | C / W 100A Switch 6 Free Ways | $£ 60.00$ | 1 |
| TPA12M | C / W 100A Switch 10 Free Ways | $£ 65.00$ | 1 |
| TPA16M | C / W 100A Switch 14 Free Ways | $£ 75.00$ | 1 |

## 2015 Catalogue

Miniature Circuit Breakers, Residual Current Devices
\& Accessories

6kA MCB B-Curve


CE \& SEMKO Certified
6kA Rated / EN 60898

| Part Number | Description | Price | Per |
| :--- | :--- | :--- | :---: |
| EUB16B | 6 Amps | $£ 3.83$ | 1 |
| EUB110B | 10 Amps | $£ 3.83$ | 1 |
| EUB116B | 16 Amps | $£ 3.83$ | 1 |
| EUB120B | 20 Amps | $£ 3.83$ | 1 |
| EUB125B | 25 Amps | $£ 3.83$ | 1 |
| EUB132B | 32 Amps | $£ 3.83$ | 1 |
| EUB140B | 40 Amps | $£ 3.83$ | 1 |
| EUB150B | 50 Amps | $£ 3.83$ | 1 |
| EUB163B | 63 Amps | $£ 3.83$ | 1 |

## 6kA MCB C-Curve

1 Pole MCB 6kA C Curve
Box Qty 12


CE \& SEMKO Certified
6kA Rated / EN 60898

| Part Number | Description | Price | Per |
| :--- | :--- | :---: | :---: |
| EUB16C | 6 Amps | $£ 4.34$ | 1 |
| EUB110C | 10 Amps | $£ 4.34$ | 1 |
| EUB116C | 16 Amps | $£ 4.34$ | 1 |
| EUB120C | 20 Amps | $£ 4.34$ | 1 |
| EUB125C | 25 Amps | $£ 4.34$ | 1 |
| EUB132C | 32 Amps | $£ 4.34$ | 1 |
| EUB140C | 40 Amps | $£ 4.34$ | 1 |
| EUB150C | 50 Amps | $£ 4.34$ | 1 |
| EUB163C | 63 Amps | $£ 4.34$ | 1 |

## 10kA MCB B Curve

## 1 Pole MCB 10 kA B Curve <br> Box Qty 12



CE \& SEMKO Certified 10kA Rated / EN 60898

| Part Number | Description | Price | Per |
| :--- | :--- | :---: | :---: |
| EUC1P1B | 1 Amp | $£ 7.50$ | 1 |
| EUC1P2B | 2 Amps | $£ 7.50$ | 1 |
| EUC1P4B | 4 Amps | $£ 7.50$ | 1 |
| EUC1P6B | 6 Amps | $£ 7.50$ | 1 |
| EUC1P10B | 10 Amps | $£ 7.50$ | 1 |
| EUC1P16B | 16 Amps | $£ 7.50$ | 1 |
| EUC1P20B | 20 Amps | $£ 7.50$ | 1 |
| EUC1P25B | 25 Amps | $£ 7.50$ | 1 |
| EUC1P32B | 32 Amps | $£ 7.50$ | 1 |
| EUC1P40B | 40 Amps | $£ 7.50$ | 1 |
| EUC1P50B | 50 Amps | $£ 7.50$ | 1 |
| EUC1P63B | 63 Amps | $£ 7.50$ | 1 |

3 Pole MCB 10kA B Curve
Box Qty 4


CE \& SEMKO Certified
10kA Rated / EN 60898

| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :---: |
| EUC3P1B | 1 Amp | $£ 23.00$ | 1 |
| EUC3P2B | 2 Amps | $£ 23.00$ | 1 |
| EUC3P6B | 6 Amps | $£ 23.00$ | 1 |
| EUC3P10B | 10 Amps | $£ 23.00$ | 1 |
| EUC3P16B | 16 Amps | $£ 23.00$ | 1 |
| EUC3P20B | 20 Amps | $£ 23.00$ | 1 |
| EUC3P25B | 25 Amps | $£ 23.00$ | 1 |
| EUC3P32B | 32 Amps | $£ 23.00$ | 1 |
| EUC3P40B | 40 Amps | $£ 23.00$ | 1 |
| EUC3P50B | 50 Amps | $£ 23.00$ | 1 |
| EUC3P63B | 63 Amps | $£ 23.00$ | 1 |

## 10kA MCB C Curve



2 Pole MCB 10kA C Curve
Box Qty 6


CE \& SEMKO Certified
10kA Rated / EN 60898

| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :---: |
| EUC2P1C | 1 Amp | $£ 16.00$ | 1 |
| EUC2P2C | 2 Amps | $£ 16.00$ | 1 |
| EUC2P4C | 4 Amps | $£ 16.00$ | 1 |
| EUC2P6C | 6 Amps | $£ 16.00$ | 1 |
| EUC2P10C | 10 Amps | $£ 16.00$ | 1 |
| EUC2P16C | 16 Amps | $£ 16.00$ | 1 |
| EUC2P20C | 20 Amps | $£ 16.00$ | 1 |
| EUC2P25C | 25 Amps | $£ 16.00$ | 1 |
| EUC2P32C | 32 Amps | $£ 16.00$ | 1 |
| EUC2P40C | 40 Amps | $£ 16.00$ | 1 |
| EUC2P50C | 50 Amps | $£ 16.00$ | 1 |
| EUC2P63C | 63 Amps | $£ 16.00$ | 1 |

## 10kA MCB D Curve

1 Pole MCB 10kA D Curve Box Qty 12


CE \& SEMKO Certified 10kA Rated / EN 60898

| Part Number | Description | Price | Per |
| :--- | :--- | :--- | :---: |
| EUC1P1D | 1 Amp | $£ 9.00$ | 1 |
| EUC1P2D | 2 Amps | $£ 9.00$ | 1 |
| EUC1P4D | 4 Amps | $£ 9.00$ | 1 |
| EUC1P6D | 6 Amps | $£ 9.00$ | 1 |
| EUC1P10D | 10 Amps | $£ 9.00$ | 1 |
| EUC1P16D | 16 Amps | $£ 9.00$ | 1 |
| EUC1P20D | 20 Amps | $£ 9.00$ | 1 |
| EUC1P25D | 25 Amps | $£ 9.00$ | 1 |
| EUC1P32D | 32 Amps | $£ 9.00$ | 1 |
| EUC1P40D | 40 Amps | $£ 9.00$ | 1 |
| EUC1P50D | 50 Amps | $£ 9.00$ | 1 |
| EUC1P63D | 63 Amps | $£ 9.00$ | 1 |

listed in LUCKINS live
(i) See pages 11-12 for Consumer Units


CE \& SEMKO Certified
10kA Rated / EN 60898

| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :---: |
| EUC3P1C | 1 Amp | $£ 22.00$ | 1 |
| EUC3P2C | 2 Amps | $£ 22.00$ | 1 |
| EUC3P4C | 4 Amps | $£ 22.00$ | 1 |
| EUC3P6C | 6 Amps | $£ 22.00$ | 1 |
| EUC3P10C | 10 Amps | $£ 22.00$ | 1 |
| EUC3P16C | 16 Amps | $£ 22.00$ | 1 |
| EUC3P20C | 20 Amps | $£ 22.00$ | 1 |
| EUC3P25C | 25 Amps | $£ 22.00$ | 1 |
| EUC3P32C | 32 Amps | $£ 22.00$ | 1 |
| EUC3P40C | 40 Amps | $£ 22.00$ | 1 |
| EUC3P50C | 50 Amps | $£ 22.00$ | 1 |
| EUC3P63C | 63 Amps | $£ 22.00$ | 1 |

## Curve <br> Box Qty 12


(1) Abbreviations explained....

## 2015 Catalogue




CE \& SEMKO Certified
10kA Rated / EN 60898

| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :---: |
| EUC2P1D | 1 Amp | $£ 19.00$ | 1 |
| EUC2P2D | 2 Amps | $£ 19.00$ | 1 |
| EUC2P4D | 4 Amps | $£ 19.00$ | 1 |
| EUC2P6D | 6 Amps | $£ 19.00$ | 1 |
| EUC2P10D | 10 Amps | $£ 19.00$ | 1 |
| EUC2P16D | 16 Amps | $£ 19.00$ | 1 |
| EUC2P20D | 20 Amps | $£ 19.00$ | 1 |
| EUC2P25D | 25 Amps | $£ 19.00$ | 1 |
| EUC2P32D | 32 Amps | $£ 19.00$ | 1 |
| EUC2P40D | 40 Amps | $£ 19.00$ | 1 |
| EUC2P50D | 50 Amps | $£ 19.00$ | 1 |
| EUC2P63D | 63 Amps | $£ 19.00$ | 1 |

3 Pole MCB 10 kA D Curve
Box Qty 4


CE \& SEMKO Certified
10kA Rated / EN 60898

| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :---: |
| EUC3P1D | 1 Amp | $£ 26.50$ | 1 |
| EUC3P2D | 2 Amps | $£ 26.50$ | 1 |
| EUC3P4D | 4 Amps | $£ 26.50$ | 1 |
| EUC3P6D | 6 Amps | $£ 26.50$ | 1 |
| EUC3P10D | 10 Amps | $£ 26.50$ | 1 |
| EUC3P16D | 16 Amps | $£ 26.50$ | 1 |
| EUC3P20D | 20 Amps | $£ 26.50$ | 1 |
| EUC3P25D | 25 Amps | $£ 26.50$ | 1 |
| EUC3P32D | 32 Amps | $£ 26.50$ | 1 |
| EUC3P40D | 40 Amps | $£ 26.50$ | 1 |
| EUC3P50D | 50 Amps | $£ 26.50$ | 1 |
| EUC3P63D | 63 Amps | $£ 26.50$ | 1 |

## MCB Accessories

MCB Lock Device (3Per Pack)


Manufactured from Strong Nylon
Fits most modern breakers. (MCB not included)
Locks MCB's, RCBO's, RCCB's, \& Mainswitches in the ON or OFF positions.

| Part Number | Description | Price | Per |
| :--- | :--- | :--- | :---: |
| EUBLOCK | MCB Lock (3 per pack) | $£ 5.22$ | Pack |

## Padlock for MCB Lock Device (3 Per Pack)

## 

Padlock Ideal for securing MCB lock device.

| Part Number | Description | Price | Per |
| :--- | :--- | :--- | :--- |
| EUBPADLOCK | Pad Lock (3 per pack) | $£ 9.27$ | Pack |

Auxiliary Switch 1 Pole Changeover Uropa components


CE Approved
Suitable for use with either 6kA or 10kA Europa MCB's

| Part Number | Description | Price | Per |
| :--- | :--- | :--- | :---: |
| EUCA11 | Aux Sw 1P C/O with Test Button | $£ 7.75$ | 1 |

## Mainswitch / Isolator

## Mainswitch / Isolator



CE \& SEMKO Certified
EN 60947-3

| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :---: |
| ISO63-2 | 63A 2 Pole Mainswitch / Isolator | $£ 4.76$ | 1 |
| ISO100-2 | 100A 2 Pole Mainswitch / Isolator | $£ 4.76$ | 1 |
| ISO100-4 | 100A 4 Pole Mainswitch / Isolator | $£ 9.54$ | 1 |
| ISO125-3 | 125A 3 Pole Mainswitch / Isolator | $£ 13.13$ | 1 |
| ISO125-4 | 125A 4 Pole Mainswitch / Isolator | $£ 17.33$ | 1 |

Terminal Capacity: Cable up to $50 \mathrm{~mm}^{2}$

## RCBOs

An RCBO is a combination of an MCB and RCD. This enables both over current protection and earth fault current protection within a single module.

Terminal Capacity: Cable up to $16 \mathrm{~mm}^{2}$
The single pole RCBO is the same width as an mcb (17.5mm) and can be retro-fitted in a consumer unit when the extra protection of an RCCB is required.

RCBO B - Curve 1 Pole 6kA


CE \& SEMKO Certified
EN 61009 230V / Type AC

## -uroroz

| Part Number | Description | Price | Per |
| :--- | :--- | :---: | :---: |
| EUB1R.6/1B | 6A 30mA Trip 1 Pole | $£ 35.50$ | 1 |
| EUB1R.10/1B | 10A 30mA Trip 1 Pole | $£ 35.50$ | 1 |
| EUB1R.16/1B | 16A 30mA Trip 1 Pole | $£ 35.50$ | 1 |
| EUB1R.20/1B | 20A 30mA Trip 1 Pole | $£ 35.50$ | 1 |
| EUB1R.32/1B | 32A 30mA Trip 1 Pole | $£ 35.50$ | 1 |
| EUB1R.40/1B | 40A 30mA Trip 1 Pole | $£ 35.50$ | 1 |

$\triangle$ For More Information
sales@europacomponents.com

## RCBO C - Curve 1 Pole 6kA



## New Product

Compliant

CE \& SEMKO Certified
EN 61009 230V / Type AC

| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :---: |
| EUB1R.6/1C | 6A 30mA Trip 1 Pole | $£ 39.95$ | 1 |
| EUB1R.10/1C | 10A 30mA Trip 1 Pole | $£ 39.95$ | 1 |
| EUB1R.16/1C | 16A 30mA Trip 1 Pole | $£ 39.95$ | 1 |
| EUB1R.20/1C | 20A 30mA Trip 1 Pole | $£ 39.95$ | 1 |
| EUB1R.32/1C | 32A 30mA Trip 1 Pole | $£ 39.95$ | 1 |
| EUB1R.40/1C | 40A 30mA Trip 1 Pole | $£ 39.95$ | 1 |

RCBO B - Curve 1 Pole 10kA


RCBO C - Curve 1 Pole 10kA


CE \& SEMKO Certified
EN 61009 230V / Type AC

| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :---: |
| EUC7R.6/1C | 6A 30mA Trip 1 Pole | $£ 44.70$ | 1 |
| EUC7R.10/1C | 10A 30mA Trip 1 Pole | $£ 44.70$ | 1 |
| EUC7R.16/1C | 16A 30mA Trip 1Pole | $£ 44.70$ | 1 |
| EUC7R.20/1C | 20A 30mA Trip 1 Pole | $£ 44.70$ | 1 |
| EUC7R.32/1C | 32A 30mA Trip 1 Pole | $£ 44.70$ | 1 | 2015 Catalogue

RCBO B - Curve 2 Pole 6kA


CE \& SEMKO Certified
EN 61009 230V / Type AC

| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :---: |
| EUBLM6B30 | 6A 30mA Trip 2 Pole | $£ 44.19$ | 1 |
| EUBLM16B30 | 16A 30mA Trip 2 Pole | $£ 44.19$ | 1 |
| EUBLM20B30 | 20 A 30mA Trip 2 Pole | $£ 44.19$ | 1 |
| EUBLM32B30 | 32A 30mA Trip 2 Pole | $£ 44.19$ | 1 |
| EUBLM40B30 | 40A 30mA Trip 2 Pole | $£ 44.19$ | 1 |

Terminal Capacity: Cable up to $25 \mathrm{~mm}^{2}$

RCBO C - Curve 2 Pole 6kA


CE \& SEMKO Certified
EN 61009 230V / Type AC

| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :---: |
| EUBLM6C30 | 6A 30mA Trip 2 Pole | $£ 44.19$ | 1 |
| EUBLM16C30 | 16A 30mA Trip 2 Pole | $£ 44.19$ | 1 |
| EUBLM20C30 | 20A 30mA Trip 2 Pole | $£ 44.19$ | 1 |
| EUBLM32C30 | 32A 30mA Trip 2 Pole | $£ 44.19$ | 1 |
| EUBLM40C30 | 40A 30mA Trip 2 Pole | $£ 44.19$ | 1 |
|  |  |  |  |
| EUBLM16C30A | 16A 30mA Trip 2 Pole | Type A | $£ 51.09$ |
| EUBLM40C30A | 40A 30mA Trip 2 Pole | Type A | $£ 51.09$ |

Terminal Capacity: Cable up to $25 \mathrm{~mm}^{2}$


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RCCB / RCD
RCCB 2 Pole 6kA


EN 61008 110-230V / Type AC
Residual Current Circuit Breaker (RCCB) providing Earth fault safety protection.

| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :---: |
| EUR125.30/2 | 25A 30mA Trip | $£ 29.82$ | 1 |
| EUR125.100/2 | 25A 100mA Trip | $£ 29.82$ | 1 |
| EUR140.30/2 | 40A 30mA Trip | $£ 29.82$ | 1 |
| EUR140.100/2 | 40A 100mA Trip | $£ 29.82$ | 1 |
| EUR163.30/2 | 63A 30mA Trip | $£ 29.82$ | 1 |
| EUR163.100/2 | 63A 100mA Trip | 1 |  |
| EUR180.30/2 | 80A 30mA Trip | $£ 39.03$ | 1 |
| EUR180.100/2 | 80A 100mA Trip | $£ 39.03$ | 1 |
| EUR180.100/2S | 80A 100mA Trip Time Delay | $£ 52.63$ | 1 |
| EUR180.300/2 | 80A 300mA Trip | $£ 42.11$ | 1 |
| EUR1100.30/2 | 100 Amp 30mA Trip | $£ 61.50$ | 1 |
| EUR1100.100/2 | 100A 100mA Trip | $£ 61.50$ | 1 |
| EUR1100.300/2 | 100A 300mA Trip | $£ 63.70$ | 1 |

Terminal Capacity: Cable up to $35 \mathrm{~mm}^{2}$

## Extended Range

RCCB 4 Pole 6kA
Iuropa
components


CE \& SEMKO Certified / EN 61008
EN 61008 380-415V / Type AC
Residual Current Circuit Breaker (RCCB) providing Earth fault safety protection.
\(\left.$$
\begin{array}{llrc}\text { Part Number } & \text { Description } & \begin{array}{c}\text { Price } \\
£ 51.08\end{array}
$$ \& Per <br>

EUR125.30/4 \& 25A 30mA Trip\end{array}\right]\)| $£ 51.08$ | 1 |  |
| :--- | :--- | :---: |
| EUR125.100/4 | 25A 100mA Trip | $£ 51.08$ |
| EUR140.30/4 | 40A 30mA Trip | $£ 51.08$ |
| EUR140.100/4 | 40A 100mA Trip | $£ 51.08$ |
| EUR163.30/4 | 63A 30mA Trip | $£ 51.08$ |
| EUR163.100/4 | 63A 100mA Trip | $£ 59.38$ |
| EUR180.30/4 | 80A 30mA Trip | 1 |
| EUR180.100/4 | 80A 100mA Trip | $£ 59.38$ |
| EUR180.300/4 | 80A 300mA Trip | $£ 64.47$ |
| EUR180.100/4S | 80A 100mA Trip Time Delay | $£ 69.74$ |
| EUR1100.30/4 | 100A 30mA Trip | 1 |
| EUR1100.100/4 | 100A 100mA Trip | $£ 75.00$ |
| EUR1100.300/4 | 100A 300mA Trip | $£ 75.00$ |

Terminal Capacity: Cable up to $35 \mathrm{~mm}^{2}$

Quality Components at
Competitive Prices Yuropa
components

RCD Sockets
-Urope
components


## BS7288 / CE Approved

Rated Voltage: 230 V 50 Hz
Trip Current 30mA / Trip Speed: 40mS (typical)
On / Off Indicator / Test Facility
Mechanically Latching (sockets will not trip in the event of a power failure)

| Part Number | Description | Price | Per |
| :--- | :--- | :---: | :---: |
| RCD13A1GS | Plastic RCD 13A Single Socket | $£ 20.50$ | 1 |
| RCD13AMC | Metal Clad RCD 13A |  |  |
|  | Double Socket | $£ 31.50$ | 1 |
| RCD13ASS | Plastic RCD 13A Double Socket | $£ 24.50$ | 1 |
| RCD13AP1GS | Plastic RCD 13A |  |  |
|  | Single Socket Switched | $£ 24.00$ | 1 |
| RCD13AMC1GS | Metal Clad RCD 13A |  |  |
|  | SIngle Socket Switched | $£ 30.50$ | 1 |

Europa 13A RCD safety sockets provide added protection against the risk of electric shock. The sockets are simple to install, fitting standard socket outlet boxes for surface or flush mounting. 13A RCD safety sockets are particularly suitable for use where liquids are present and where tools are being used outdoors, e.g hedge trimmers and lawnmowers.

## 13A Plastic RCD Spur Outlet



CE Approved / BS7288
30 mA Trip / Test Facility / On /Off Indicator / Rated Voltage 240V, 50Hz Rated Current 13A / Typical trip Time less than 40 mS / Mechanically Latching

| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :---: |
| RCDFSP | $13 A$ Single RCD Spur Outlet | $£ 23.10$ | 1 |

## Single Phase Fused Switches



| Insulated 80A Fused Switch Dimensions Dimensions (mm) |  |  |  |
| :--- | :---: | :---: | :---: |
| Part Number | H | W | D |
| SPSF80 | 80 mm | 127 mm | 53 mm |


| Cable entry shroud (sold separately) |
| :--- |
| 80A Double Pole Fused Switch (Fuse not inc) |
| Insulated Enclosure |
| Terminal Capacity Up To 25mm² |
| Use ME House Service Cut Out Fuses - See Page 104 |
|  |
| Part Number |
| Description |
| SPSF80 |
| SPSFS |$\quad$ 80A Single Phase Fused Switch | Price | Per |
| :--- | ---: | :--- |

## Metal Clad 100A Fused Switch



4 Module Metal Clad Enclosure / Fuse Holder with Padlock Facility Fused Switch Rated at 100A 230V (Fuse not inc)
Incoming terminal capacity 2.5 to $50 \mathrm{~mm}^{2}$
Use ME House Service Cut Out Fuses - see page 104

| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :---: |
| SPSF100M | $100 A$ Single Phase Fused Switch | $£ 50.00$ | 1 |

## SPD Surge Protection Devices

## Basic information required to select the correct SPD for your application.

■ Does the building have a Lightning Protection System (LPS)?

- Is there an overhead power cable to the building?

■ What type of earthing system is installed (TT, TN-S \& TN-C-S / PME)?
■ Is there a sub distribution board more than 10 metres away from the main distribution board?

- Is the equipment to be protected more than 10 metres away from the SPD?
$\square$ Is there sensitive electronic equipment in the premises?


SPD's should be selected and installed according to sections 443 \& 534 of the IET Wiring Regulations (BS7671) and the manufacturers installation instructions.

## Below are some salient points regarding selection and installation:

■ Combined Type $1 / 2$ and Type 2 devices are installed as close as possible to the incoming supply of the installation or as close as possible to the main distribution board (Refer to Sections 443.2.6 \& 534.2.1)

■ If a sub distribution board or equipment to be protected (protective distance) is more than 10 metres away from the main distribution board, additional SPD devices shall be installed (Refer to Section 534.2.3.1.1)

- Additional SPDs (typically Type 3) are required to protect sensitive and critical equipment (for example hospital equipment and fire/security alarm systems). Such SPDs shall be coordinated with the SPDs installed upstream. All Dehn SPD Type 1, 2 \& 3 products are fully coordinated. (Refer to Sections 534.2.1 \& 534.2.3.6)

■ The connecting conductors of SPDs (Section 534.2.10) shall either:

* Have a cross-sectional area of not less that $4 \mathrm{~mm}^{2}$ copper if the cross-sectional area of the line conductors is greater than $4 \mathrm{~mm}^{2}$, or
* Have a cross-sectional area not less than that of the line conductors, where the line conductors have a cross-sectional area less than $4 \mathrm{~mm}^{2}$
* Where there is a Lightning Protection System (LPS) or overhead cable application, the minimum cross-sectional area for Type 1 SPDs shall be $16 \mathrm{~mm}^{2}$ copper

■ To gain maximum protection, the conductors shall be kept as short as possible. The critical length of the connecting conductors to the SPDs should preferably not exceed 0.25 metres, but shall in no case exceed 0.5 metres in length (Refer to Section 534.2.9)

Protection against SPD short circuits is provided by Over Current Protective Devices (OCPDs which can be MCBs \& Fuses etc.) which shall be selected according to the recommended ratings given in the product data sheets (Refer to Section 534.2.4). In certain circumstances the OCPD at the origin may provide sufficient over current protection. However, we would recommend that a separate coordinated OCPD (not required if the SPD has an integrated OCPD) is fitted to protect the SPD so that if a short-circuit occurs in the SPD, the power to the installation is maintained. This will also provide a means of isolation for maintenance.


Turopa components


Surge Protection Devices


Compact Combined Type 1 \& 2 Devices for TT/TN Earthing Systems

## Extended Range

Compact Combined Type 1 \& 2 for TT/TN


Suitable for all earthing systems TT, TN-S \& TN-C-S (PME)
For Lightning Protection Systems (LPS) with Lightning Protection Levels (LPL) 3 or 4 up to 12.5 kA or for an overhead supply line Compact monoblock design
Protects against surges and from direct lightning strikes
For domestic, commercial \& light industrial applications typically up to 125A. Ideal for where space is limited i.e. Consumer units \& Distribution Boards

| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :---: |
| 941110 | 2 Module Type 1/2 |  |  |
|  | Single Phase TT/TN | $£ 261.76$ | 1 |
| 941310 | 4 Module Type 1/2 |  |  |
|  | Three Phase TT/TN | $£ 465.15$ | 1 |

## Compact Combined Type 1 \& 2 Devices for TN Earthing

 SystemsExtended Range
Compact Combined Type $1 \& 2$ for TN


Suitable for TN-S \& TN-C-S (PME) earthing systems
For installations with Lightning Protection System (LPS) or for an overhead supply line
Compact monoblock design
Protects against surges and from direct lightning strikes
For domestic, commercial \& light industrial applications typically up to 125A Ideal for where space is limited i.e. Consumer Units \& Distribution Boards

| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :---: |
| 941200 | 2 Module Type 1/2 |  |  |
|  | Single Phase TN | $£ 232.58$ | 1 |
| 941400 | 4 Module Type 1/2 |  |  |
|  | Three Phase TN | $£ 435.96$ | 1 |

## Combined Type 1 \& 2 Devices for TT/TN Earthing Systems

## Combined Type $1 \& 2$ for TT/TN



Suitable for all earthing systems TT, TN-S \& TN-C-S (PME) For all Lightning Protection Systems (LPS) with Lightning Protection Levels (LPL) up to 100 kA or for an overhead supply line Protects against surges and from direct lightning strikes Plug in module for ease of replacement Alarm option for surge status monitoring

| Part Number 951110 | Description | Price | Per |
| :---: | :---: | :---: | :---: |
|  | 4 Module Type 1/2 |  |  |
|  | Single Phase TT/TN | $£ 532.00$ | 1 |
| 951115 | 4 Module Type 1/2 |  |  |
|  | Single Phase TT/TN + Alarm | $£ 574.38$ | 1 |
| 951310 | 8 Module Type 1/2 |  |  |
|  | Three Phase TT/TN | $£ 1001.86$ | 1 |
| 951315 | 8 Module Type 1/2 |  |  |
|  | Three Phase TT/TN + Alarm | £1086.61 | 1 |

## Combined Type 1 \& 2 Devices for TN Earthing Systems



Suitable for TN-S \& TN-C-S (PME) earthing systems For installations with Lightning Protection System (LPS) or for an overhead supply line
Protects against surges and from direct lightning strikes Plug in module for ease of replacement Alarm option for surge status monitoring

| Part Number <br> 951200 | Description <br> 4 Module Type 1/2 | Price | Per |
| :--- | :--- | ---: | :---: |
|  | Single Phase TN | $£ 382.38$ | 1 |
| 951205 | 4 Module Type 1/2 |  |  |
|  | Single Phase TN + Alarm | $£ 416.31$ | 1 |
| 951400 | 8 Module Type 1/2 |  |  |
|  | Three Phase TN | $£ 734.60$ | 1 |
| 951405 | 8 Module Type 1/2 |  |  |
|  | Three Phase TN + Alarm | $£ 802.48$ | 1 |

## 2015 Catalogue

Compact Type 2 Devices for TT/TN Earthing Systems for Circuits up to 125A

Compact Type 2 Devices for TT/TN (up to 125A)



Suitable for all earthing systems TT, TN-S \& TN-C-S (PME)
For installations without Lightning Protection Systems (LPS) and without an overhead supply line
Compact monoblock design
Protects against supply and induced surge currents
For domestic, commercial \& light industrial applications typically up to 125A
Ideal for where space is limited i.e. Consumer units \& Distribution Boards

| Part Number | Description <br> 1 Module Type 2 | Price | Per |
| :--- | :--- | ---: | :---: |
| 900450 | Single Phase TT/TN | $£ 69.34$ | 1 |
| 900455 | 2 Module Type 2 |  |  |
|  | Three Phase TT/TN | $£ 141.15$ | 1 |

## Type 2 Devices for TT/TN Earthing Systems

## Type 2 Devices for TT/TN



Suitable for all earthing systems TT, TN-S \& TN-C-S (PME)
For installations without Lightning Protection Systems (LPS) and without an overhead supply line
Protects against supply and induced surge currents
Plug in module for ease of replacement
Alarm option for surge status monitoring

| Part Number | Description <br> 952110 | Price | Per |
| :--- | :--- | :---: | :---: |
|  | 2 Module Type 1/2 <br> Single Phase TT/TN | $£ 124.39$ | 1 |
| 952115 | 2 Module Type 1/2 <br>  <br>  <br> Single Phase TT + Alarm | $£ 135.68$ | 1 |
| 952310 | 4 Module Type 2 |  |  |
| Three Phase TT/TN | $£ 231.35$ | 1 |  |
| 952315 | 4 Module Type 2 <br> Three Phase TT/TN + Alarm | $£ 264.78$ | 1 |

## Type 2 Devices for TN Earthing Systems



Suitable for TN-S \& TN-C-S (PME) earthing systems
For installations without Lightning Protection Systems (LPS) and without an overhead supply line
Protects against supply and induced surge currents
Plug in module for ease of replacement
Alarm option for surge status monitoring

| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :---: |
| 952200 | 2 Module Type 2 |  |  |
|  | Single Phase TN | $£ 82.96$ | 1 |
| 952205 | 2 Module Type 2 |  |  |
|  | Single Phase TN + Alarm | $£ 101.06$ | 1 |
| 952400 | 4 Module Type 2 |  |  |
|  | Three Phase TN | $£ 165.91$ | 1 |
| 952405 | 4 Module Type 2 |  |  |
|  | Three Phase TN + Alarm | $£ 202.11$ | 1 |

## Type 2 Devices for TN-C-S Earthing Systems

Type 2 Devices for TN-C-S


Suitable for TN-C-S (PME) earthing systems
For installations without Lightning Protection Systems (LPS) and without an overhead supply line
Protects against supply and induced surge currents
Plug in module for ease of replacement

| Part Number <br> 952070 | Description <br> 1 Module Type 2 | Price | Per |
| :--- | :--- | :---: | :---: |
|  | Single Phase TN-C-S | $£ 59.13$ | 1 |
| 952090 | 1 Module Type 2 |  |  |
|  | SIngle Phase TN-C-S + Alarm | $£ 70.43$ | 1 |

## Type 2 Devices for PV Systems

Type 2 Devices for PV Systems


For installations without Lightning Protection System (LPS) Not suitable for PV systems installed on metal roofs Protects the inverter input against surges Integrated DC fuse with SCI function Plug in module for ease of replacement Recommended IP65 enclosure: ECW4

## Enclosed Type 1 \& 2 TT/TN

## Devices

## Type 3 Devices for all Earthing Systems



Suitable for all earthing systems TT, TN-S \& TN-C-S (PME)
Important: A combined Type $1 / 2$ or Type 2 device must be installed at the origin of supply
To be installed close to the equipment to be protected Protects sensitive equipment e.g. TV's, Computers etc. Plug in module for ease of replacement (except 924396)
Alarm option for surge status monitoring

| Part Number <br> (1) 924396 | Description <br> Flush Mount Type 3 <br> Single Phase + Buzzer | Price | Per |
| :--- | :--- | :---: | :---: |
|  | 1 Module Type 3 <br> (2 9ingle Phase 25A | $£ 55.65$ | 1 |
| (2 953200 | 1 Module Type 3 <br> Single Phase 25A + Alarm | $£ 65.30$ | 1 |
| (2) 953228 | 1 Module Type 3 <br> Single Phase 32A + Alarm | $£ 72.50$ | 1 |
| (2) 953229 | 1 Module Type 3 <br> Single Phase 32A + Alarm | $£ 86.50$ | 1 |
| (3) 953400 | 2 Module Type 3 <br>  <br> Three Phase 25A | $£ 135.00$ | 1 |
|  | 2 Module Type 3 <br> Three Phase 25A + Alarm | $£ 146.08$ | 1 |


(i) See over the page for:
(1) Enclosed Type 1 \& 2 TN Devices
© Enclosed Type 2 TN Devices

(i) Please see page 14 for the ECW range of IP65 Distribution Enclosures

## Enclosed Type 1 \& 2 TN Devices

Combined Type 1/2 TN Devices in IP65 Enclosure


Protects against surges and from direct lightning strikes

| Part Number ESB12PA240 | Description | Price | Per |
| :---: | :---: | :---: | :---: |
|  | Boxed Type 1/2 |  |  |
|  | Single Phase TN | $£ 450.00$ | 1 |
| ESB12PF240 | Boxed Type 1/2 |  |  |
|  | Single Phase TN + Fuse | £436.00 | 1 |
| ESB12P415 | Boxed Three Phase Type 1/2 TN | TN £775.00 | 1 |
| ESB12PA415 | Boxed Type 1/2 |  |  |
|  | Three Phase TN | $£ 843.00$ | 1 |
| ESB12PF415 | Boxed Type 1/2 |  |  |
|  | Three Phase TN | $£ 857.00$ | 1 |
| ESP12DSH240 | Boxed DSH Type 1/2 |  |  |
|  | Single Phase TN | $£ 260.93$ | 1 |
| ESP12DSH415 | Boxed DSH Type 1/2 |  |  |
|  | Three Phase TN | $£ 468.51$ | 1 |
| Part Number | SPD | Enclosures |  |
| ESB12PA240 | 951205 | ECW5 |  |
| ESB12PF240 | 951200 | ECW6 |  |
| ESB12P415 | 951400 | ECW8 |  |
| ESB12PA415 | 951405 | ECW8 |  |
| ESB12PF415 | 951400 | ECW14SPEL |  |
| ESB12DSH240 | 941200 | ECW5 |  |
| ESB12DSH415 | 941400 | ECW5 |  |


| Single Phase <br> Module Size | Surge Device <br> Only | Surge + <br> MCB | Surge + <br> $\mathbf{2 2 \times 5 8}$ Fuse |
| :---: | :---: | :---: | :---: |
| 1 | ECW5 | ECW5 | ECW5 |
| 2 | ECW5 | ECW5 | ECW5 |
| 4 | ECW5 | ECW5 | ECW6 |
| Three Phase <br> Module Size | Surge Device <br> Only | Surge + <br> MCB | Surge + <br> $\mathbf{2 2} \times 58$ Fuse |
| 2 | ECW5 | ECW5 | ECW8 |
| 4 | ECW5 | ECW8 | ECW12 |
| 8 | ECW8 | ECW12 | ECW14SPEL |


| Insulated Distribution Enclosure Dimensions (mm) see page 14 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Part Number | Description | Height | Width | Depth |
| ECW5 | 5 Module | 215 mm | 145 mm | 100 mm |
| ECW6 | 6 Module | 215 mm | 160 mm | 100 mm |
| ECW8 | 8 Module | 215 mm | 215 mm | 100 mm |
| ECW12 | 12 Module | 215 mm | 270 mm | 100 mm |
| ECW14SPEL | 14 Module | 300 mm | 300 mm | 142 mm |

## Enclosed Type 2 TN Devices

Type 2 TN Devices in IP65 Enclosure


Protects against supply and induced surge currents

| Part Number | Description | Price | Per |
| :---: | :---: | :---: | :---: |
| ESB2P240 | Boxed Single Phase Type 2 TN | £111.00 | 1 |
| ESB2PA240 | Boxed Single Phase Type 2 |  |  |
| ESB2PF240 | Boxed Single Phase Type 2 |  |  |
| ESB2P415 | Boxed Three P | £198.00 | 1 |
| ESB2PA415 | Boxed Three Phase Type 2 TN + Alarm | $£ 231.00$ | 1 |
| ESB2PF415 | Boxed Three Phase Type 2 TN | $£ 229.00$ | 1 |
| Part Number | SPD | Enclosures |  |
| ESB2P240 | 952200 | ECW5 |  |
| ESB2PA240 | 952205 | ECW5 |  |
| ESB2PF240 | 952200 | ECW5 |  |
| ESB2P415 | 952400 | ECW5 |  |
| ESB2PA415 | 952405 | ECW5 |  |
| ESB2PF415 | 952400 | ECW8 |  |

Surge Protection (SPD) Accessories


| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :---: |
| (1) 952010 | Type 2 Spare L Plug | $£ 46.89$ | 1 |
| (2 952050 | Type 2 Spare N Plug TT | $£ 59.60$ | 1 |
| (3 952589 | 1 Pole STAK25 Terminal * (MOQ 4 pcs) $£ 6.28$ | 1 |  |
| (4) 953010 | Type 3 Spare Plug Single Phase | $£ 56.83$ | 1 |
| © 953020 | Type 3 Spare Plug Three Phase | $£ 111.27$ | 1 |

* Please note product 952589 is sold only in multiples of 4 units.


## Modular Contactors

2 Pole Modular Contactor (Din Rail Mounting)


4 Pole Modular Contactor (Din Rail Mounting)


Width 25A 36mm / 40A \& 63A 54mm / Rated Insulation Voltage (Ui) 500V AC Terminal Capacity: 25A 1.5-10mm² / 40A \& 63A $2.5-25 \mathrm{~mm}^{2}$

| Part Number | Description | Price | Per |
| :--- | :--- | :---: | :---: |
| EUC2-25-4P | 4 Pole N/O 25A 230V | $£ 38.04$ | 1 |
| EUC2-25-4NOB | 4 Pole 4 N/O 25A 24V | $£ 41.35$ | 1 |
| EUC2-25-4NCB | 4 Pole N/C 25A 24V | $£ 41.34$ | 1 |
| EUC2-25-4NCP | 4 Pole N/C 25A 230V | $£ 41.34$ | 1 |
| EUC3-40-4P | 4 Pole N/O 40A 230V | $£ 50.94$ | 1 |
| EUC3-40-4NOB | 4 Pole 4 N/O 40A 24V | $£ 59.81$ | 1 |
| EUC3-40-4NCB | 4 Pole N/C 40A 24V | $£ 59.80$ | 1 |
| EUC3-40-4NCP | 4 Pole N/C 40A 230V | $£ 59.80$ | 1 |
| EUC3-63-4P | 4 Pole N/O 63A 230V | $£ 56.61$ | 1 |
| EUC3-63-4NOB | 4 Pole 4 N/O 63A 24V | $£ 66.45$ | 1 |
| EUC3-63-4NCB | 4 Pole N/C 63A 24V | $£ 66.45$ | 1 |
| EUC3-63-4NCP | 4 Pole N/C 63A 230V | $£ 66.45$ | 1 |

[^2]| Modular Contactor Spec. | EUC1-20-2P | EUC1-25-2P | EUC2-25-4P | EUC3-40-4P | EUC3-63-4P |
| :---: | :---: | :---: | :---: | :---: | :---: |
| No. of Modules Wide | 1 Module |  | 2 Modules | 3 Modules |  |
| Width (mm) | 18 mm |  | 36 mm | 54 mm |  |
| Rated current (In) | 20A | 25A |  | 40A | 63A |
| Rated Insulation Voltage (Ui) | 400VAC |  | 500VAC |  |  |
| Rated Operating Voltage (Un) | 240VAC |  | 400VAC |  |  |
| Rated Operation Current AC1 (le) | 20A |  | A | 40A | 63A |
| Rated Operation Current AC3 (le) | 9A |  |  | 25A | 32A |
| Rated Power AC1 | 4KW (230VAC) |  | 16KW | 28KW | 40KW |
| Rated powerAC3 | - | - | 4KW | 12KW | 15KW |
| Rated Terminal Capacity | 1.5-10mm ${ }^{2}$ |  |  | $2.5-25 \mathrm{~mm}^{2}$ |  |
| Rated Terminal Capacity (Coil) | $0.75-2.5 \mathrm{~mm}^{2}$ |  |  |  |  |

## Bell Transformer

## 230V Bell Transformer (Din Rail Mounting)



EN 61558
230V / 8VA / 50Hz / Width: 35mm

| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :---: |
| EBT16-8 | 230V 8VA Bell Transformer AC | $£ 16.95$ | 1 |

Kilo Watt Hour Meters
32A Kilo Watt Hour Meter (Din Rail Mounting)


Single phase kilo watt hour meter / 3 colour LED / Display $6+1$ digits Non resetable / Memory backup / 50 / 60Hz

| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :---: |
| DDS-1Y-M | Analogue 32A (1 Module) | $£ 35.50$ | 1 |

MID Approved 45A Kilo Watt Hour Meter uropa


MID Approved
Single phase kilo watt hour meter / analogue display / 50 / 60Hz

| Part Number | Description | Price | Per |
| :--- | :--- | :---: | :---: |
| SDM120A | 45A 1 Module kWh Meter | $£ 45.25$ | 1 |

## 2015 Catalogue



## (1) Panel Mount Versions (230V)



## CE Approved

- Remove lid by undoing the fixing screws

- Cut panel hole: $67 \times 67 \mathrm{~mm}$
- Locate the main body of the timer under the panel
- Connect the terminals as required beneath the panel (before re-attaching the lid)
- Secure in position by re-attaching the lid, sandwiching the panel between the lid and the body of the timer. Using a screw driver turn out the secure holding tags.

| Part Number <br> ET1624HDPM | Description <br> 7 Day Digital 1 Channel 16 Period <br> (1 Minute Segments) (Panel Mount) | Price | Per |
| :--- | :--- | :---: | :---: |
|  | 24 Hour Analogue 15 Minute Segments <br> (Panel Mount) | 1 <br> ET1624HAPM | $£ 29.22$ |

## ET1624HA 16A 24 Hour (Din Rail Mount) Analogue



A 3 module 1 channel (1NO +1 NC contacts) timer with 96 segments on the wheel, each segment relating to 15 minutes.

Any segment can be used to operate the time relay either in discreet 15 minute intervals or in multiple blocks of 15 minutes together. Battery back up.

## ET1624HEA 16A 24 Hour (Din Rail Mount) Analogue



A 1 module 1 channel (1NO contact) timer with 96 segments on the wheel, each segment relating to 15 minutes. Any segment can be used to operate the time relay either in discreet 15 minute intervals or in multiple blocks of 15 minutes together. Battery back up.

## ET1624HD 16A 7 Day 24 Hour (Din Rail Mount) Digital

A 3 module 1 channel (1NO +1NC contacts) timer with up to 16 ON/OFF periods can be set for each day of the week. Any one period can be set between 1 Minute and 168 Hours. To simplify the setting of the day or days that are required there are a number of preset combinations of days within the programme. Manual Summer / Winter adjustment. Battery back up.

## ET167D2C 16A 7 Day 24 Hour (Din Rail Mount) Digital



A 2 module 2 channel ( $2 \mathrm{NO}+2 \mathrm{NC}$ contacts) timer with up to 44 memory settings. 24 Hr (1 minute) ON/OFF periods can be set for each day of the week. Ideal for switching lighting or alarm systems. Auto Summer / Winter adjustment. Battery back up.

## ET167DYD 16A 7 Day 24 Hour (Din Rail Mount) Digital



A 2 module 1 channel (1NO + 1NC contacts) timer with up to 16 ON/OFF periods can be set for each day of the week. Any one period can be set between 1 Minute and 168 Hours. To simplify the setting of the day or days that are required there are a number of prese
combinations of days within the programme. Battery back up.

## ET16STCA 16A Staircase Timer (Din Rail Mount)



A 1 Module 1 channel (1NO contact) variable delay timer for control of stairwell lighting with the following features:
Permanent ON function.
Adjustment range: $0.5,5,10,15,20$ Minutes. 3 or 4 wire connection.
Incandescent load (0.6 ${ }^{\phi}$ ).
IP20 rating.

16A 230V 24 Hour (Din Rail Mounting)


Multi Function Timer 0-10 Days 16A 12-230V AC/DC


Manufactured by Relpol
CE Approved
EN 61812
IP20 Rating


1P Changeover contact
10 Time Functions
8 Time Ranges
Module width: 17.5 mm
Din Rail Mounting
Rated Current 16A / 230V AC

(B)

| Part Number | Description | Price | Per |
| :--- | :--- | :--- | :--- |
| 2470001 | Multi Function Timer |  |  |
|  | 0.1Sec-10 Days | $£ 38.28$ | 1 |

(i) For technical data please refer to pages 138-139

Scan the QR code to view a video
demonstration of the 2470001
listed in
LUCKINSIIVe


## 2015 Catalogue



Insulated Socket Enclosures (IP65)


IP65 Outdoor Gang Boxes / Accommodates Standard Socket, Spur, Switches and RCDs / 20mm Knock-outs located top, bottom, side and back / Grey Enclosure / Corrosion Resistant / Padlockable for added security. The ECWSK1 \& SK2 have an improved design to accommodate most styles of 13A sockets and moulded plugs

| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :---: |
| ECWSK1 | 1 Gang Socket Enclosure | $£ 7.25$ | 1 |
| ECWSK2 | 2 Gang Socket Enclosure | $£ 9.58$ | 1 |
| ECWSK21 | $2 \times 1$ Gang Socket Enclosure | $£ 12.23$ | 1 |

## 12 Way Terminal Blocks



| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :---: |
| TBU03PE | 3A PE 12 Way | $£ 3.50$ | Pack |
| TBU06PE | 6A PE 12 Way | $£ 4.00$ | Pack |
| TBU10PE | 10A PE 12 Way | $£ 5.50$ | Pack |
| TBU16PE | 16A PE 12 Way | $£ 7.30$ | Pack |
| TBU20PE | 20A PE 12 Way | $£ 8.00$ | Pack |
| TBU30PE | 30A PE 12 Way | $£ 10.80$ | Pack |
| TBU60PE | 60A PE 12 Way | $£ 22.50$ | Pack |

PP 12 Way Terminal Blocks (sold in packs of 10)


12 way polypropylene U blocks
Flame retardent material

| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :---: |
| TBU03PP | 3A PP 12 Way | $£ 3.80$ | Pack |
| TBU06PP | 6A PP 12 Way | $£ 4.50$ | Pack |
| TBU10PP | 10A PP 12 Way | $£ 6.30$ | Pack |
| TBU16PP | 16A PP 12 Way | $£ 8.80$ | Pack |
| TBU20PP | 20A PP 12 Way | $£ 9.50$ | Pack |
| TBU30PP | 30A PP 12 Way | $£ 13.00$ | Pack |
| TBU60PP | 60A PP 12 Way | $£ 27.00$ | Pack |

(1) U PE \& PP Terminal Block Dimensions

| 1. |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |
|  | L | W | H | A | B | mm ${ }^{2}$ | Volt | Amp |
| 3A | 90.3 | 15.5 | 11.5 | 6 | 7.7 | 4 | 400 V | 3A |
| 6A | 110.5 | 15.5 | 12.4 | 6.5 | 9.5 | 6 | 400 V | 6A |
| 10A | 116.7 | 20 | 14.9 | 8 | 10 | 10 | 400 V | 10A |
| 16A | 136.8 | 21.5 | 16.7 | 10 | 11.7 | 12 | 400 V | 16A |
| 20A | 153.5 | 24.5 | 17.4 | 11.5 | 13.2 | 14 | 400 V | 20A |
| 30A | 165 | 25 | 20 | 12 | 14.1 | 16 | 400 V | 30A |
| 60A | 187.6 | 29 | 23.5 | 12 | 16 | 25 | 400 V | 60A |

## Terminal Strip Enclosures

E-Box Terminal Strip Enclosures (sold in packs of 20)


The E-Box Terminal Strip Enclosures
have a unique design exclusive to
Europa Components
with the following features:
30A max current
Suitable for all sizes of Europa 12 way terminal blocks
Cable clamp suitable from $1.5 \mathrm{~mm}^{2}$ to $4 \mathrm{~mm}^{2}$ including $2 \times 2.5 \mathrm{~mm}^{2}$ cable
Fixing lugs for secure fixing

* Unique top securing lid for easy inspection of terminals

| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :---: |
| (1) ECT010 | PE 30A Terminal Strip Enclosure | $£ 18.40$ | Pack |
| (2 ECT010PP | PP 30A Terminal Strip Enclosure | $£ 23.20$ | Pack |

## Insulated Junction Boxes

IP55 Rated Junction Boxes


## VDE Approved



| Thermoplastic Boxes (Terminals not included) Halogen Free / IEC 60998 |  |  |  |
| :---: | :---: | :---: | :---: |
| Snap-on-lid / Suited to cramped environments / External Fixings |  |  |  |
| Part Number | Description | Price | Per |
| JB25 | H: $89 \times$ W: $43 \times \mathrm{D}: 37 \mathrm{~mm}$ | £1.03 | 1 |
| JBSD7 | H: $75 \times$ W: $75 \times$ D: 37 mm | £0.76 | 1 |

IP65 Rated Junction Boxes


Thermoplastic Boxes (Including Terminal Strip) Halogen Free / IEC 60998 / Soft Sealing Membrane

| Part Number JBAB025 | Description <br> H: $80 \times \mathrm{W}: 80 \times \mathrm{D}: 52 \mathrm{~mm}$ <br> 2.5-4mm (5 Terminals) | Price <br> $£ 3.55$ | Per <br> 1 |
| :---: | :---: | :---: | :---: |
| JBAB040 | H: $93 \times$ W: $93 \times$ D: 55 mm 2.5-4mm (5 Terminals) | $£ 4.13$ | 1 |
| JBAB060 | H: $110 \times \mathrm{W}: 110 \times \mathrm{D}: 67 \mathrm{~mm}$ 6.0 mm ( 5 Terminals) | $£ 8.58$ | 1 |

## IP54 / IP55 Rated Junction Boxes



Thermoplastic Enclosures (Terminals not Inc) / Halogen Free / Non Flammable

| Part Number | Description | Price | Per |
| :---: | :---: | :---: | :---: |
| PB5757540 | IP54 H: $75 \times \mathrm{W}: 75 \times \mathrm{D}: 40 \mathrm{~mm}$ | $£ 1.26$ | 1 |
| PB5858545 | IP54 H; $85 \times$ W: $85 \times$ D: 45 mm | £1.39 | 1 |
| PB510010050 | IP54 H: $100 \times \mathrm{W}: 100 \times \mathrm{D}: 50 \mathrm{~mm}$ | $£ 1.58$ | 1 |
| PB590D | IP55 90mm Diameter x D; 45mm | $£ 1.31$ | 1 |
| PB570D | IP55 70mm Diameter x D: 40 mm | $£ 1.26$ | 1 |
| PB5909055EM | IP55 H: $90 \times \mathrm{W}: 90 \times \mathrm{D}: 55 \mathrm{~mm}$ * (with elastic membrane) | $£ 4.25$ | 1 |
| PB5757545EM | IP55 H: $75 \times \mathrm{W}: 75 \times \mathrm{D}: 45 \mathrm{~mm}$ <br> * (with elastic membrane) | $£ 3.20$ | 1 |

IP67 Rated Junction Boxes


Thermoplastic Enclosures (Terminals Not Included) / Halogen Free / Non Flammable

| Part Number | Description | Price | Per |
| :--- | :--- | :--- | :---: |
| PB6757540 | H: $75 \times$ W: $75 \times$ D: 40 mm | $£ 1.85$ | 1 |
| PB6858545 | H; $85 \times$ W: $85 \times$ D; 45 | $£ 1.88$ | 1 |
| PB690D | 90 mm Diameter $\times$ D: 60 mm | $£ 1.91$ | 1 |
| PB610010050 | H: $100 \times$ W: $100 \times$ D: 60 mm | $£ 1.93$ | 1 |
| PB611011070 | H: $110 \times$ W: $110 \times$ D: 70 mm | $£ 3.26$ | 1 |
| PB6110110110 | H: $110 \times$ W: $110 \times$ D: 110 mm | $£ 6.95$ | 1 |

(i) The PB6110110110 is an ideal size for housing power \& control relays
(see pages 87-89). Din rail sold separately.

## 2015 Catalogue

## Insulated Adaptable Boxes (IP55)



IP55 Rated ABS Boxes / Quick Turn Screws / Hinged Lid on both Opaque and Clear Lid Types * Mounting Plates Available

| Part Number | Description | Price | Per |
| :---: | :---: | :---: | :---: |
| PB520158 | $200 \times 155 \times 80 \mathrm{~mm}$ | £8.25 | 1 |
| PB5201514 | $200 \times 155 \times 140 \mathrm{~mm}$ | £15.00 | 1 |
| PB526219 | $260 \times 210 \times 95 \mathrm{~mm}$ | £12.75 | 1 |
| PB5262116 | $260 \times 210 \times 116 \mathrm{~mm}$ | £22.00 | 1 |
| PB5322413 | $320 \times 240 \times 135 \mathrm{~mm}$ | £20.25 | 1 |
| PB5322418 | $320 \times 240 \times 180 \mathrm{~mm}$ | £32.50 | 1 |
| PB5403013 | $400 \times 300 \times 135 \mathrm{~mm}$ | £33.50 | 1 |
| PB520158C | H: $200 \times$ W: $155 \times \mathrm{D}: 80 \mathrm{~mm}$ (Clear Lid) | $£ 13.00$ | 1 |
| PB5201514C | H: $200 \times$ W: $155 \times \mathrm{D}: 140 \mathrm{~mm}$ (Clear Lid) | $£ 25.50$ | 1 |
| PB526219C | H: $260 \times$ W: $210 \times \mathrm{D}: 95 \mathrm{~mm}$ (Clear Lid) | £17.50 | 1 |
| PB5262116C | H: $260 \times$ W: $210 \times \mathrm{D}: 160 \mathrm{~mm}$ (Clear Lid) | $£ 31.00$ | 1 |
| PB5322413C | H: $320 \times$ W: $240 \times \mathrm{D}: 135 \mathrm{~mm}$ (Clear Lid) | £24.50 | 1 |
| PB5322418C | H: $200 \times$ W: $155 \times \mathrm{D}: 80 \mathrm{~mm}$ (Clear Lid) | $£ 42.50$ | 1 |
| PB5403013C | H: 400 W: 300 D: 135 mm (Clear Lid) | $£ 45.90$ | 1 |
| PBM2015 | Mounting Plate $200 \times 155 \mathrm{~mm}$ | £4.40 | 1 |
| PBM2621 | Mounting Plate $260 \times 210 \mathrm{~mm}$ | £5.90 | 1 |
| PBM3224 | Mounting Plate $320 \times 240 \mathrm{~mm}$ | £7.50 | 1 |
| PBM4030 | Mounting Plate $400 \times 300 \mathrm{~mm}$ | £10.00 | 1 |



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## Contactor Enclosures

MNX Polycarbonate Contactor Enclosures (IP67)


Manufactured by Fibox


| Model | Height | Width | Depth |
| :---: | :---: | :---: | :---: |
| PB25C | 180 mm | 130 mm | 150 mm |
| PB65C | 255 mm | 180 mm | 175 mm |

Adaptable enclosure for use with TC1-D range contactors (up to 65A) and accessories (see from page 74). The back plate and din rail is pre-fitted in the enclosure for easy installation of contactors and accessories. Pre-fitted with Din Rail for easy installation of Contactors and Overload Relays (sold separately).

| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :---: |
| PB25C | Contactor Enclosure for 9-32A | $£ 27.25$ | 1 |
| PB65C | Contactor Enclosure for 40-65A | $£ 59.09$ | 1 |

Ideal for lighting applications.
The PB65C can also accommodate the 80A \& 95A contactors but without side mounting auxiliaries. See page 130 for further details.

Metal Clad Contactor Enclosures (IP54)


| Model | Height | Width | Depth |
| :---: | :---: | :---: | :---: |
| MC18C | 186 mm | 120 mm | 126 mm |
| MC38C | 216 mm | 144 mm | 130 mm |

CE Approved
For TC1-D Contactors
Lid RAL 7035
Base RAL 7012
Powder Coated Steel Enclosure

Part Number
MC18C
MC38C


## Description

Contact Enclosure for 9-18A Contact Enclosure for 25-38A

Pre-fitted with Din Rail for easy installation of Contactors and Overload Relays.


Price Per $£ 19.36 \quad 1$
$£ 25.47 \quad 1$


Insulated ABS Plastic Enclosures (IP65)
RAL: 7035 / Strong ABS Enclosure / Back Plate and Fixing Brackets Inc.

| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :---: |
| PBE2821013 | $\mathrm{H}: 280 \times \mathrm{W}: 210 \times \mathrm{D}: 130 \mathrm{~mm}$ | $£ 31.50$ | 1 |
| PBE332513 | $\mathrm{H}: 330 \times \mathrm{W}: 250 \times \mathrm{D}: 130 \mathrm{~mm}$ | $£ 36.00$ | 1 |
| PBE4030016 | $\mathrm{H}: 400 \times \mathrm{W}: 300 \times \mathrm{D}: 165 \mathrm{~mm}$ | $£ 43.00$ | 1 |
| PBE403019 | $\mathrm{H}: 400 \times \mathrm{W}: 300 \times \mathrm{D}: 195 \mathrm{~mm}$ | $£ 53.00$ | 1 |
| PBE503519 | $\mathrm{H}: 500 \times \mathrm{W}: 350 \times \mathrm{D}: 195 \mathrm{~mm}$ | $£ 60.00$ | 1 |
| PBE504017 | $\mathrm{H}: 500 \times \mathrm{W}: 400 \times \mathrm{D}: 175 \mathrm{~mm}$ | $£ 62.00$ | 1 |
| PBE604020 | $\mathrm{H}: 600 \times \mathrm{W}: 400 \times \mathrm{D}: 200 \mathrm{~mm}$ | $£ 75.50$ | 1 |
| PBE605022 | $\mathrm{H}: 600 \times \mathrm{W}: 500 \times \mathrm{D}: 220 \mathrm{~mm}$ | $£ 125.00$ | 1 |
| PBE705024 | $\mathrm{H}: 700 \times \mathrm{W}: 500 \times \mathrm{D}: 245 \mathrm{~mm}$ | $£ 174.50$ | 1 |
| PBE806026 | $\mathrm{H}: 800 \times \mathrm{W}: 600 \times \mathrm{D}: 260 \mathrm{~mm}$ | $£ 236.25$ | 1 |
| PBEKEY010 | PBE Spare Key | $£ 3.00$ | 1 |



| Part number | External Dimensions |  |  | Internal Depth | Mounting plate |  | Other Information |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | H (mm) | W (mm) | D (mm) | ID | W3 (mm) | H3 (mm) |  |
| PBE2821013 | 280 | 210 | 130 | 106 | 150 | 230 | $1 \Delta$ Lock, No Glandplate |
| PBE332513 | 330 | 250 | 130 | 108 | 190 | 280 |  |
| PBE4030016 | 400 | 300 | 165 | 139 | 240 | 350 | $2 \Delta$ Locks, No Glandplate |
| PBE403019 | 400 | 300 | 195 | 165 | 240 | 350 |  |
| PBE503519 | 500 | 350 | 195 | 168 | 288 | 450 |  |
| PBE504017 | 500 | 400 | 175 | 145 | 345 | 340 |  |
| PBE604020 | 600 | 400 | 200 | 170 | 345 | 340 |  |
| PBE605022 | 600 | 500 | 220 | 185 | 445 | 530 |  |
| PBE705024 | 700 | 500 | 245 | 205 | 450 | 630 |  |
| PBE806026 | 800 | 600 | 260 | 225 | 540 | 725 | $3 \Delta$ Locks, No Glandplate |

*key: $:$ back plate


Epoxy Coated Steel Enclosure (*IP65)
ITropa
RAL: 7035 / 1.2 mm Thick Steel Earth Studs Included

## Extended Range

Top and Bottom Gland Plates / Galvanised Back Plate Included Fixing Brackets Available / *IP65 Rated Enclosure when Fully Sealed

| Part Number | Description | Price | Per |
| :---: | :---: | :---: | :---: |
| STB252515 | H: $250 \times$ W: $250 \times$ D: 150 mm | £30.03 | 1 |
| STB302515 | H: $300 \times$ W: $250 \times$ D: 150 mm | £34.34 | 1 |
| STB303015 | H: $300 \times$ W: $300 \times$ D: 150 mm | $£ 40.92$ | 1 |
| STB303020 | H: $300 \times$ W: $300 \times$ D: 200 mm | £44.52 | 1 |
| STB403015 | H: $400 \times$ W: $300 \times$ D: 150 mm | £44.23 | 1 |
| STB403020 | H: $400 \times$ W: $300 \times$ D: 200 mm | £48.71 | 1 |
| STB403025 | H: $400 \times$ W: $300 \times$ D: 250 mm | $£ 58.28$ | 1 |
| STB404015 | H: $400 \times$ W: $400 \times$ D: 150 mm | £51.66 | 1 |
| STB404020 | H: $400 \times$ W: $400 \times$ D: 200 mm | £56.62 | 1 |
| STB504020 | H: $500 \times$ W: $400 \times$ D: 200 mm | £64.29 | 1 |
| STB504025 | H: $500 \times$ W: $400 \times$ D: 250 mm | £68.78 | 1 |
| STB505025 | H: $500 \times$ W: $500 \times$ D: 250 mm | £80.46 | 1 |
| STB604020 | H: $600 \times$ W: $400 \times$ D: 200 mm | £72.95 | 1 |
| STB604030 | H: $600 \times$ W: $400 \times$ D: 300 mm | £87.30 | 1 |
| STB605020 | H: $600 \times$ W: $500 \times$ D: 200 mm | £82.24 | 1 |
| STB605025 | H: $600 \times$ W: $500 \times$ D: 250 mm | $£ 90.56$ | 1 |
| STB605030 | H: $600 \times$ W: $500 \times$ D: 300 mm | £93.99 | 1 |
| STB606020 | H: $600 \times$ W: $600 \times$ D: 200 mm | $£ 96.45$ | 1 |
| STB606025 | H: $600 \times$ W: $600 \times$ D: 250 mm | £101.63 | 1 |
| STB705020 | H: $700 \times$ W: $500 \times$ D: 200 mm | £93.22 | 1 |
| STB705025 | H: $700 \times$ W: $500 \times$ D: 250 mm | £104.16 | 1 |
| STB705030 | H: $700 \times$ W: $500 \times$ D: 300 mm | £115.09 | 1 |
| STB804030 | H: $800 \times$ W: $400 \times$ D: 300 mm | £119.75 | 1 |
| STB806020 | H: $800 \times$ W: $600 \times$ D: 200 mm | £128.25 | 1 |
| STB806030 | H: $800 \times$ W: $600 \times$ D: 300 mm | £152.75 | 1 |
| STB1006030 | H: $1000 \times$ W: $600 \times$ D: 300 mm | £184.50 | 1 |
| STB1008030 | H: $1000 \times$ W: $800 \times$ D: 300 mm | £231.65 | 1 |
| STB1206030 | H: $1200 \times$ W: $600 \times$ D: 300 mm | £268.55 | 1 |
| STB1208030 | H: $1200 \times$ W: $800 \times$ D: 300 mm | £325.95 | 1 |
| STBRACKET | Fixing Brackets $\times 4$ (Only for STB) | £4.65 | 1 |
| STBKEYLOCK | Key Lock (all keys alike) (for STB \& SSTB) | $£ 5.30$ | 1 |
| STBKEY010 | Spare Plastic Key (for STB \& SSTB) | £2.50 | 1 |

Dimensions please


Strong Steel Extension Boxes and Weather Hoods

New Product
Extension Boxes \& Weather Hoods (*|P65) TYupa


RAL: 7035 / 1.2mm Thick Steel * IP65 Rated When Fully Sealed Extension Boxes Include Earth Studs and Galvanised Back Plates
Part Number Description Price Per (1) Extension Boxes

| STBEX204020 | H: $200 \times \mathrm{W}: 400 \times \mathrm{D}: 200 \mathrm{~mm}$ | $£ 35.95$ | 1 |
| :--- | :--- | ---: | ---: |
| STBEX206020 | H: $200 \times \mathrm{W}: 600 \times$ D: 200 mm | $£ 47.39$ | 1 |
| STBEX206030 | H: $200 \times \mathrm{W}: 600 \times$ D: 300 mm | $£ 58.35$ | 1 |

(2) Weather Hoods

| STBWH104020 | H: $100 \times$ W: $400 \times$ D: 200 mm | $£ 23.57$ | 1 |
| :--- | :--- | :--- | :--- | :--- |
| STBWH106020 | H: $100 \times$ W: $600 \times$ D: 200 mm | $£ 33.95$ | 1 |
| STBWH106030 | H: $100 \times$ W: $600 \times$ D: 300 mm | $£ 43.16$ | 1 |

NB: Suitable for a range of Safe Switch Metal Enclosed products (pages 56, 58 \& 59 ). For corresponding enclosures please refer to the data sheets on our website.

## Stainless Steel Enclosures

Brushed Stainless Steel Enclosures (*IP65)


Grade 304 Stainless Steel / Earth Studs and galvanised back plate included. * IP65 When fully sealed / For Dimensions please see page 129

| Part Number | Description | Price | Per |
| :---: | :---: | :---: | :---: |
| SSTB302015 | H: $300 \times$ W: $200 \times$ D: 150 mm | £126.00 | 1 |
| SSTB303015 | H: $300 \times$ W: $300 \times$ D: 150 mm | £141.75 | 1 |
| SSTB403020 | H: $400 \times$ W: $300 \times$ D: 200 mm | £173.25 | 1 |
| SSTB404020 | H: $400 \times$ W: $400 \times$ D: 200 mm | £180.60 | 1 |
| SSTB504020 | H: $500 \times$ W: $400 \times$ D: 200 mm | £223.65 | 1 |
| SSTB604020 | H: $600 \times$ W: $400 \times$ D: 200 mm | £241.50 | 1 |
| SSTB606020 | H: $600 \times$ W: $600 \times$ D: 200 mm | £330.7 | 1 |
| SSTB806030 | H: $800 \times$ W: $600 \times$ D: 300 mm | £540.75 | 1 |
| SSTB808030 | H: $800 \times$ W: $800 \times$ D: 300 mm | £682.50 | 1 |
| STBKEYLOCK | Key Lock (all keys alike) (for STB \& SSTB) | $£ 5.30$ | 1 |
| STBKEY010 | Spare Plastic Key (for STB \& SSTB) | $£ 2.50$ | 1 |

## Strong Steel Terminal Boxes

## Steel Terminal Boxes (*IP65) <br> 4uroße



RAL: 7035

* IP65 Rated when fully sealed / 1.2 mm thick steel

Complete with earth studs and galvanised back plate as standard

| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :---: |
| STBT151580 | H: $150 \times \mathrm{W}: 150 \times \mathrm{D}: 80 \mathrm{~mm}$ | $£ 18.00$ | 1 |
| STBT151512 | $\mathrm{H}: 150 \times \mathrm{W}: 150 \times \mathrm{D}: 120 \mathrm{~mm}$ | $£ 19.00$ | 1 |
| STBT201580 | $\mathrm{H}: 200 \times \mathrm{W}: 150 \times \mathrm{D}: 80 \mathrm{~mm}$ | $£ 19.50$ | 1 |
| STBT201512 | $\mathrm{H}: 200 \times \mathrm{W}: 150 \times \mathrm{D}: 120 \mathrm{~mm}$ | $£ 21.50$ | 1 |
| STBT202080 | $\mathrm{H}: 200 \times \mathrm{W}: 200 \times \mathrm{D}: 80 \mathrm{~mm}$ | $£ 20.00$ | 1 |
| STBT202012 | $\mathrm{H}: 200 \times \mathrm{W}: 200 \times \mathrm{D}: 120 \mathrm{~mm}$ | $£ 22.50$ | 1 |
| STBT301512 | $\mathrm{H}: 300 \times \mathrm{W}: 150 \times \mathrm{D}: 120 \mathrm{~mm}$ | $£ 27.00$ | 1 |
| STBT302080 | $\mathrm{H}: 300 \times \mathrm{W}: 200 \times \mathrm{D}: 80 \mathrm{~mm}$ | $£ 28.00$ | 1 |
| STBT302012 | $\mathrm{H}: 300 \times \mathrm{W}: 200 \times \mathrm{D}: 120 \mathrm{~mm}$ | $£ 30.00$ | 1 |

## 4 Module ABS Open Front Enclosure (with Din Rail)

Secure Fit Screw Sealed Lid / Security Screw with Wire Lock Off Option

| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :---: |
| EC4T | H: $150 \times$ W: $100 \times$ D: 70 mm | $£ 17.00$ | 1 |

## Enclosure Inspection Windows



Polycarbonate weather proof inspection windows to IP67 when fitted correctly. Complete with fixing bracket and din rail to take standard modular components such as MCBs, fuse holders and time clocks.

| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :---: |
| IW4M | 4 Module | $£ 14.55$ | 1 |
| IW6M | 6 Module | $£ 16.35$ | 1 |
| IW8M | 8 Module | $£ 17.35$ | 1 |
| IW12M | 12 Module | $£ 19.35$ | 1 |

## Earth Strap for Metal Enclosures

Earth Strap for Steel Enclosures
curopa components

RoHs Compliant

Earth Strap for Steel Enclosures / 220mm Length / 4Sqmm To suit M6 Earth Stud

| Part Number | Description | Price | Per |
| :--- | :--- | :--- | :---: |
| STBE220 | $220 \mathrm{~mm} \times 4$ Sqmm | $£ 0.75$ | 1 |

## Cable Management

## PVC Electrical Insulation Tape


$\underset{\text { RoHS }}{\text { Compliant }}$

Thickness: 0.13 mm / Tensile Strength: 20 N/cm / Elongation: 200\% Adhesion Strength: $1.5 \mathrm{~N} / \mathrm{cm} /$ Maximum Operating Temperature: $80^{\circ} \mathrm{C}$

| Part Number | Description |  | Price | Per |
| :--- | :--- | :--- | :--- | :--- |
| PVCT20BLK | Black | $19 \mathrm{~mm} \times 20 \mathrm{~m}$ | $£ 0.99$ | Roll |
| PVCT20RED | Red | $19 \mathrm{~mm} \times 20 \mathrm{~m}$ | $£ 0.99$ | Roll |
| PVCT20BLU | Blue | $19 \mathrm{~mm} \times 20 \mathrm{~m}$ | $£ 0.99$ | Roll |
| PVCT20GRY | Grey | $19 \mathrm{~mm} \times 20 \mathrm{~m}$ | $£ 0.99$ | Roll |
| PVCT20WHT | White | $19 \mathrm{~mm} \times 20 \mathrm{~m}$ | $£ 0.99$ | Roll |
| PVCT20BRN | Brown | $19 \mathrm{~mm} \times 20 \mathrm{~m}$ | $£ 0.99$ | Roll |
| PVCT20G/Y | Green \& Yellow $19 \mathrm{~mm} \times 20 \mathrm{~m}$ | $£ 1.15$ | Roll |  |
| PVCT33BLK | Black | $19 \mathrm{~mm} \times 33 \mathrm{~m}$ | $£ 1.59$ | Roll |
| PVCT33RED | Red | $19 \mathrm{~mm} \times 33 \mathrm{~m}$ | $£ 1.59$ | Roll |
| PVCT33BLU | Blue | $19 \mathrm{~mm} \times 33 \mathrm{~m}$ | $£ 1.59$ | Roll |
| PVCT33GRY | Grey | $19 \mathrm{~mm} \times 33 \mathrm{~m}$ | $£ 1.59$ | Roll |
| PVCT33WHT | White | $19 \mathrm{~mm} \times 33 \mathrm{~m}$ | $£ 1.59$ | Roll |
| PVCT33BRN | Brown | $19 \mathrm{~mm} \times 33 \mathrm{~m}$ | $£ 1.59$ | Roll |
| PVCT33G/Y | Green \& Yellow $19 \mathrm{~mm} \times 33 \mathrm{~m}$ | $£ 1.70$ | Roll |  |

## Insulated Cable Glands



CE Approved
IP65 Rating / Manufactured from Nylon / Low Smoke / Halogen Free Locking Nut Included / Dynamic state $-20^{\circ} \mathrm{C}$ to $+80^{\circ} \mathrm{C}$, intermittent $+100^{\circ} \mathrm{C}$

| Part Number | Description |  | Price | Per |
| :---: | :---: | :---: | :---: | :---: |
| PG7DG | PG7 | $\triangle$ Grey 3-6.5mm | £3.99 | 10 |
| PG9DB | PG9 | - Black 4-8mm | £4.95 | 10 |
| PG9DG | PG9 | $\triangle$ Grey 4-8mm | £4.95 | 10 |
| PG9DW | PG9 | $\triangle$ White 4-8mm | £4.95 | 10 |
| PG11DG | PG11 | $\triangle$ Grey $5-10 \mathrm{~mm}$ | $£ 5.56$ | 10 |
| PG13.5DB | PG13.5 | ( Black $6-12 \mathrm{~mm}$ | $£ 5.56$ | 10 |
| PG13.5DG | PG13.5 | $\triangle$ Grey $6-12 \mathrm{~mm}$ | $£ 5.56$ | 10 |
| PG13.5DW | PG13.5 | $\triangle$ White $6-12 \mathrm{~mm}$ | £5.56 | 10 |
| PG16DB | PG16 | ( Black $10-14 \mathrm{~mm}$ | £7.01 | 10 |
| PG16DG | PG16 | $\triangle$ Grey 10-14mm | £7.01 | 10 |
| PG16DW | PG16 | $\triangle$ White $10-14 \mathrm{~mm}$ | £7.01 | 10 |
| PG21DB | PG21 | - Black $13-18 \mathrm{~mm}$ | £9.25 | 10 |
| PG21DG | PG21 | $\triangle$ Grey 13-18mm | £9.25 | 10 |
| PG21DW | PG21 | $\triangle$ White 13-18mm | £9.25 | 10 |
| PG29DG | PG29 | $\triangle$ Grey 18-25mm | £16.83 | 10 |

components


CE Approved

IP68 Rating (with washer sold separately) / Manufactured from Nylon Low Smoke / Halogen Free / Locking Nut Included Dynamic state $-20^{\circ} \mathrm{C}$ to $+80^{\circ} \mathrm{C}$, intermittent $+100^{\circ} \mathrm{C}$


Cable Gland Accessories


## CE Approved

IP68 Rating (with washer sold separately)
Temperature Range: $-20^{\circ} \mathrm{C}$ to $+80^{\circ} \mathrm{C}$, intermittent $+100^{\circ} \mathrm{C}$
Material: Nylon
Halogen Free
Colours: RAL 7035 (light grey)
RAL 9005 (jet black)

| Part Number | Description | Price | Per |
| :--- | :--- | :---: | :---: |
| M12BPB | M12 Blanking Plug Black | $£ 4.50$ | 10 |
| M12BPG | M12 Blanking Plug Grey | $£ 4.50$ | 10 |
| M16BPB | M16 Blanking Plug Black | $£ 4.75$ | 10 |
| M16BPG | M16 Blanking Plug Grey | $£ 4.75$ | 10 |
| M20BPB | M20 Blanking Plug Black | $£ 5.00$ | 10 |
| M20BPG | M20 Blanking Plug Grey | $£ 5.00$ | 10 |
| M25BPB | M25 Blacking Plug Black | $£ 5.50$ | 10 |
| M25BPG | M25 Blanking Plug Grey | $£ 5.50$ | 10 |
| M32BPB | M32 Blanking Plug Black | $£ 10.75$ | 10 |
| M32BPG | M32 Blanking Plug Grey | $£ 10.75$ | 10 |
| M40BPB | M40 Blanking Plug Black | $£ 18.00$ | 10 |
| M40BPG | M40 Blanking Plug Grey | $£ 18.00$ | 10 |
|  |  |  |  |
| PG21BPG | PG21 Blanking Plug Grey | $£ 9.00$ | 10 |


| (i) Blanking Plug Dimensions mm | Type | D | L | TL |
| :---: | :---: | :---: | :---: | :---: |
|  | M12 | M12 $\times 1.5$ | 6 | 8 |
|  | M16 | M16 $\times 1.5$ | 6 | 9 |
|  | M20 | M20 x 1.5 | 6 | 9.5 |
|  | M25 | M $25 \times 1.5$ | 8 | 11.5 |
|  | M32 | M $32 \times 1.5$ | 8 | 12 |
|  | M40 | M $40 \times 1.5$ | 8 | 13 |
|  | PG21 | PG21 | 8 | 11 |

## IIsted in <br> LUCKINSIIVe

IP68 Rating (with washer sold separately)
Temperature range $-20^{\circ} \mathrm{C}$ to $+80^{\circ} \mathrm{C}$, intermittent $+100^{\circ} \mathrm{C}$
PG male to metric female
Material: Nylon
Halogen Free
Colour: RAL 7035 (light grey)
Locking nut not included


| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :---: |
| PG7-M12AG | PG7 to M12 Adaptor Grey | $£ 16.00$ | 10 |
| PG9-M16AG | PG9 to M16 Adaptor Grey | $£ 17.50$ | 10 |
| PG11-M20AG | PG11 to M20 Adaptor Grey | $£ 19.00$ | 10 |
| PG13.5-M20AG | PG13.5 to M20 Adaptor Grey | $£ 21.00$ | 10 |
| PG16-M25AG | PG16 to M25 Adaptor Grey | $£ 21.50$ | 10 |
| PG21-M25AG | PG21 to M25 Adaptor Grey | $£ 24.50$ | 10 |
| PG29-M40AG | PG29 to M40 Adaptor Grey | $£ 34.00$ | 10 |


| (1) Adaptor <br> Dimensions mm | Type | Da | Di | L | SW | TL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 7-12 | PG7 | M12 $\times 1.5$ | 9 | 16 | 27 |
|  | 9-16 | PG9 | M16 $\times 1.5$ | 9 | 20 | 27 |
|  | 11-20 | PG11 | M20 $\times 1.5$ | 9 | 24 | 27 |
|  | 13.5-20 | PG13 | M20 $\times 1.5$ | 10 | 24 | 28 |
|  | 16-25 | PG16 | M $25 \times 1.5$ | 10 | 29 | 28 |
|  | 21-25 | PG21 | M $25 \times 1.5$ | 12 | 33 | 30 |
|  | 29-40 | PG29 | M40 $\times 1.5$ | 12 | 46 | 30 |

Washers for Metric Cable Glands uropa


For use with metric nylon cable glands.
Neoprene washer for use with Europa metric cable glands to guarantee an IP68 degree of protection.

| Part Number | Description | Price | Per |
| :--- | :--- | ---: | ---: |
| M16W | M16 Rubber Washer | $£ 5.80$ | 100 |
| M20W | M20 Rubber Washer | $£ 5.80$ | 100 |
| M25W | M25 Rubber Washer | $£ 7.20$ | 100 |
| M32W | M32 Rubber Washer | $£ 6.75$ | 100 |
| M40W | M40 Rubber Washer | $£ 15.00$ | 100 |
| M50W | M50 Rubber Washer | $£ 23.27$ | 100 |

## 2015 Catalogue



The Europa range of industrial plugs and sockets up to 63A have been designed to resist harsh environmental conditions.
They are solid and well sealed making them ideally suited for use in the industrial, leisure and entertainment sectors.
IP44 Industrial Plugs Surope


CE \& SEMKO Certified
IEC 60309 / Easy Installation / Long Life / High Reliability Suited to Extreme Conditions / High Quality Housing

| Part Number | Description | Price | Per |
| :---: | :---: | :---: | :---: |
| IP163F | $110 V 2 P+E 16 A$ | £2.58 | 1 |
| IP163P | 230V $2 P+E 16 A$ | $£ 2.58$ | 1 |
| IP164N | $415 V 3 P+E 16 A$ | £2.68 | 1 |
| IP165N | $415 \mathrm{~V} 3 \mathrm{P}+\mathrm{N}+\mathrm{E} 16 \mathrm{~A}$ | $£ 3.31$ | 1 |
| IP323F | $110 V 2 P+E 32 A$ | £3.68 | 1 |
| IP323P | - $230 \mathrm{~V} 2 \mathrm{P}+\mathrm{E} 32 \mathrm{~A}$ | £3.94 | 1 |
| IP324N | 415V 3P + E 32A | £4.19 | 1 |
| IP325N | - $415 \mathrm{~V} 3 \mathrm{P}+\mathrm{N}+\mathrm{E} 32 \mathrm{~A}$ | £4.73 | 1 |



CE \& SEMKO Certified
IEC 60309 / Easy Installation / Long Life / High Reliability Suited to Extreme Conditions / High Quality Housing

| Part Number | Description | Price | Per |
| :---: | :---: | :---: | :---: |
| IS163F | 110V 2P + E 16A In-line | $£ 3.10$ | 1 |
| IS163P | 230V 2P + E 16A In-Line | $£ 3.10$ | 1 |
| IS164N | 415V 3P + E 16A In-line | £4.08 | 1 |
| IS165N | $415 \mathrm{~V} 3 \mathrm{P}+\mathrm{N}+\mathrm{E}$ 16A In-line | $£ 4.31$ | 1 |
| IS323F | 110V 2P + E 32A In-line | $£ 3.99$ | 1 |
| IS323P | 230V 2P + E 32A In-line | $£ 3.99$ | 1 |
| IS324N | 415V 3P + E 32A In-line | £4.41 | 1 |
| IS325N | - $415 \mathrm{~V} 3 \mathrm{P}+\mathrm{N}+\mathrm{E} 32 \mathrm{~A}$ In-line | £4.99 | 1 |
| (i) Surface Sockets with PG21 Cable Entry |  |  |  |
| ISS163F | 110V 2P + E 16A Surface | $£ 4.46$ | 1 |
| ISS163P | 230V 2P + E 16A Surface | £4.46 | 1 |
| ISS164N | 415V 3P + E 16A Surface | $£ 4.73$ | 1 |
| ISS165N | 415V 3P + N + E 16A Surface | £4.94 | 1 |
| ISS323F | 110V 2P + E 32A Surface | $£ 6.30$ | 1 |
| ISS323P | - $230 \mathrm{~V} 2 \mathrm{P}+\mathrm{E} 32 \mathrm{~A}$ Surface | $£ 6.83$ | 1 |
| ISS324N | 415V 3P + E 32A Surface | £6.98 | 1 |
| ISS325N | - $415 \mathrm{~V} 3 \mathrm{P}+\mathrm{N}+\mathrm{E} 32 \mathrm{~A}$ Surface | $£ 7.88$ | 1 |
| IPS163F | 110V 2P + E 16A Panel Socket | £3.62 | 1 |
| IPS163P | - $230 \mathrm{~V} 2 \mathrm{P}+\mathrm{E}$ 16A Panel Socket | $£ 3.62$ | 1 |

IP67 Weather Proof Industrial Plugs uropa


## CE \& SEMKO Certified

IEC 60309 / Easy Installation / Long Life / High Reliability Suited to Extreme Conditions / High Quality Housing

| Part Number | Description | Price | Per |
| :---: | :---: | :---: | :---: |
| IPW163F | $110 V 2 P+E 16 A$ | £4.22 | 1 |
| IPW163P | - $230 \mathrm{~V} 2 \mathrm{P}+\mathrm{E}$ 16A | £4.22 | 1 |
| IPW164N | $415 \mathrm{~V} 3 P+E 16 \mathrm{~A}$ | $£ 5.00$ | 1 |
| IPW165N | $415 V 3 P+N+E 16 A$ | $£ 6.01$ | 1 |
| IPW323F | $110 V 2 P+E 32 A$ | $£ 6.97$ | 1 |
| IPW323P | - $230 \mathrm{~V} 2 \mathrm{P}+\mathrm{E} 32 \mathrm{~A}$ | $£ 6.97$ | 1 |
| IPW324N | $415 V 3 P+E 32 A$ | $£ 7.98$ | 1 |
| IPW325N | $415 \mathrm{~V} 3 P+N+E 32 A$ | £8.81 | 1 |
| IPW633P | $230 V 2 P+E 63 A$ | £25.23 | 1 |
| IPW634N | $415 \mathrm{~V} 3 P+E 63 A$ | £28.51 | 1 |
| IPW635N | $415 \mathrm{~V} 3 \mathrm{P}+\mathrm{N}+\mathrm{E} 63 \mathrm{~A}$ | £31.85 | 1 |

## IP67 Weather Proof Industrial Sockets <br> 4uro oe components

 In-line Socket

Surface Socket (63A shown - other ratings do not have the back box)

## CE \& SEMKO Certified

IEC 60309 / Easy Installation / Long Life / High Reliability Suited to Extreme Conditions / High Quality Housing

| Part Number | Description | Price | Per |
| :---: | :---: | :---: | :---: |
| ISW163F | 110V In-line 2P + E 16A | £5.64 | 1 |
| ISW163P | 230V In-line 2P + E 16A | £5.64 | 1 |
| ISW164N | 415 V In-line 3P + E 16A | $£ 6.43$ | 1 |
| ISW165N | 415V In-line 3P + N + E 16A | $£ 7.53$ | 1 |
| ISW323F | 110V In-line 2P + E 32A | $£ 9.01$ | 1 |
| ISW323P | 230V In-line 2P + E 32A | $£ 9.01$ | 1 |
| ISW324N | 415 V In-line 3P + E 32A | $£ 9.75$ | 1 |
| ISW325N | 415V In-line 3P + N + E 32A | £10.75 | 1 |
| ISW633P | 230V In-line 2P + E 63A | $£ 30.55$ | 1 |
| ISW634N | 415V In-line 3P +E 63A | $£ 35.14$ | 1 |
| ISW635N | 415V In-line 3P + N + E 63A | £38.66 | 1 |
| ISSW163F | 110V Surface 2P + E 16A | £10.20 | 1 |
| ISSW163P | 230V Surface 2P + E 16A | £10.20 | 1 |
| ISSW164N | 415V Surface 3P + E 16A | £11.10 | 1 |
| ISSW165N | 415V Surface 3P + N + E 16A | £12.00 | 1 |
| ISSW323F | 110V Surface 2P + E 32A | £14.04 | 1 |
| ISSW323P | 230V Surface 2P + E 32A | £14.04 | 1 |
| ISSW324N | 415V Surface 3P + E 32A | £14.64 | 1 |
| ISSW325N | 415V Surface 3P + N + E 32A | £16.20 | 1 |
| ISSW633P | 230V Surface 2P+E 63A | £34.92 | 1 |
| ISSW634N | 415V Surface 3P + E 63A | $£ 36.78$ | 1 |
| ISSW635N | - 415V Surface 3P + N + E 63A | $£ 39.45$ | 1 |
| IPSW163F | 110V Panel $2 P+E 16 A$ | $£ 5.57$ | 1 |
| IPSW163P | 230V Panel 2P + E 16A | £5.57 | 1 |
| IPSW164N | 415V Panel 3P + E 16A | $£ 6.27$ | 1 |
| IPSW165N | 415V Panel 3P + N + E 16A | $£ 7.23$ | 1 |
| IPSW323F | 110V Panel 2P + E 32A | £8.16 | 1 |
| IPSW323P | 230V Panel 2P + E 32A | £8.16 | 1 |
| IPSW324N | - 415V Panel 3P + E 32A | £8.60 | 1 |
| IPSW325N | 415V Panel 3P + N + E 32A | $£ 9.10$ | 1 |

## (1) Voltage Colour Codes:



IP44 Interlocked Switch Sockets (RCCB Protected)


Compliant

## EANION



IP44 Rating / Complete with RCD pre-fitted Manufactured from self-extinguishing \& shock resistant thermoplastic Four cable inlets: M25 / M32 top, bottom and side entry Inox screws resist chemical agents / Compact size Includes spirit level to make installation easier

| Part Number | Description | Price | Per |
| :--- | :---: | :---: | :---: |
| SISR163F | 110V 2P+E 16A 4h (40A 30mA 2P RCD) | $£ 125.00$ | 1 |
| SISR163P | 230V 2P+E 16A 6h (40A 30mA 2P RCD) | $£ 130.00$ | 1 |
| SISR164V | $400 \mathrm{~V} 3 \mathrm{P}+\mathrm{E}$ 16A 6h (40A 30mA 4P RCD) | $£ 145.00$ | 1 |
| SISR165V | $400 \mathrm{~V} 3 \mathrm{P}+\mathrm{N}+\mathrm{E}$ 16A 6h (40A 30mA 4P RCD) | $£ 150.00$ | 1 |
| SISR323F | 110V 2P+E 32A 4h (40A 30mA 2P RCD) | $£ 145.00$ | 1 |
| SISR323P | 230V 2P+E 32A 6h (40A 30mA 2P RCD) | $£ 150.00$ | 1 |
| SISR324V | $400 \mathrm{~V} 3 \mathrm{P}+\mathrm{E}$ 32A 6h (40A 30mA 4P RCD) | $£ 160.00$ | 1 |
| SISR325V | $400 \mathrm{~V} 3 \mathrm{P}+\mathrm{N}+\mathrm{E} 32 \mathrm{~A} 6 \mathrm{~h}$ (40A 30mA 4P RCD) | $£ 165.00$ | 1 |
|  |  |  |  |
| SISKEY | Spare Keys (Pack of 10) | $£ 13.78$ | 10 |

IP65 Interlocked Switch Sockets (RCCB Protected)


Extended Range

IP65 Rating / Complete with RCD pre-fitted EANTON


Manufactured from self-extinguishing \& shock resistant thermoplastic Four cable inlets: M25 / M32 top, bottom and side entry Inox screws resist chemical agents / Compact size Includes spirit level to make installation easier

| Part Number | Description | Price | Per |
| :---: | :---: | :---: | :---: |
| SISRW163P | $230 \mathrm{~V} 2 \mathrm{P}+\mathrm{E}$ 16A 6h (40A 30mA 2 P RCD ) | £170.00 | 1 |
| SISRW164V | $400 \mathrm{~V} 3 \mathrm{P}+\mathrm{E}$ 16A 6h (40A 30mA 4P RCD) | £175.00 | 1 |
| SISRW165V | $400 \mathrm{~V} 3 \mathrm{P}+\mathrm{N}+\mathrm{E}$ 16A 6h (40A 30mA 4P RCD) | £180.00 | 1 |
| SISRW323P | $230 \mathrm{~V} 2 \mathrm{P}+\mathrm{E} 32 \mathrm{~A} 6 \mathrm{~h}$ (40A 30mA 2P RCD) | $£ 190.00$ | 1 |
| SISRW324V | $400 \mathrm{~V} 3 \mathrm{P}+\mathrm{E}$ 16A 6h (40A 30mA 4P RCD) | £195.00 | 1 |
| SISRW325V | $400 \mathrm{~V} 3 \mathrm{P}+\mathrm{N}+\mathrm{E} 32 \mathrm{~A} 6 \mathrm{~h}$ (40A 30mA 4P RCD) | £200.00 | 1 |

$\begin{array}{llll}\text { SISKEY } & \text { Spare Keys (Pack of 10) } & \text { £13.78 } 1\end{array}$

## 2015 Catalogue

IP44 Interlocked Switched Sockets (with Key)
 Compliant


IP44 Rating / Compact size
Manufactured from self-extinguishing \& shock resistant thermoplastic. Unique aluminium key - once removed the control lever can no longer be activated. Two cable inlets M25 / M32 one top and bottom. Inox screws resist chemical agents.

| Part Number | Description | Price | Per |
| :---: | :---: | :---: | :---: |
| SIS163F | $110 \mathrm{~V} 2 \mathrm{P}+\mathrm{E}$ 16A 4h | £56.00 | 1 |
| SIS163P | 230V 2P+E 16A 6h | £56.00 | 1 |
| SIS164V | $400 \mathrm{~V} 3 \mathrm{P}+\mathrm{E}$ 16A 6h | £64.00 | 1 |
| SIS165V | $400 \mathrm{~V} 3 \mathrm{P}+\mathrm{N}+\mathrm{E}$ 16A 6h | $£ 66.00$ | 1 |
| SIS323F | $110 \mathrm{~V} 2 \mathrm{P}+\mathrm{E} 32 \mathrm{~A} 6 \mathrm{~h}$ | £69.00 | 1 |
| SIS323P | 230V 2P+E 32A 6h | $£ 69.00$ | 1 |
| SIS324V | $400 \mathrm{~V} 3 \mathrm{P}+\mathrm{E}$ 32A 6h | £75.00 | 1 |
| SIS325V | - $400 \mathrm{~V} 3 \mathrm{P}+\mathrm{N}+\mathrm{E} 32 \mathrm{~A} 6 \mathrm{~h}$ | $£ 78.00$ | 1 |

IP65 Interlocked Switched Sockets (with Key)


IP65 Rating
Compact size.
Manufactured from self-extinguishing \& shock resistant thermoplastic. Unique aluminium key - once removed the control lever can no longer be activated. Two cable inlets M25 / M32 one top and bottom. Inox screws resist chemical agents.

| Part Number | Description | Price | Per |
| :---: | :---: | :---: | :---: |
| SISW163PF | 230V 2P+E 16A 6h | $£ 62.00$ | 1 |
| SISW164VF | 400V 3P+E 16A 6h | $£ 70.00$ | 1 |
| SISW165VF | $400 \mathrm{~V} 3 \mathrm{P}+\mathrm{N}+\mathrm{E}$ 16A 6h | $£ 73.00$ | 1 |
| SISW323PF | 230V 2P+E 32A 6h | $£ 76.00$ | 1 |
| SISW324VF | $400 \mathrm{~V} 3 \mathrm{P}+\mathrm{E} 32 \mathrm{~A} 6 \mathrm{~h}$ | £83.00 | 1 |
| SISW325VF | - $400 \mathrm{~V} 3 \mathrm{P}+\mathrm{N}+\mathrm{E} 32 \mathrm{~A} 6 \mathrm{~h}$ | $£ 86.00$ | 1 |

IP67 Weather Proof Switched Interlock Sockets


Robust
Enclosure

## CE \& SEMKO Approved

IP67 Rated Polycarbonate Enclosure
$3 \times$ M25 + $1 \times$ M32 Cable Entries
$3 \times$ M25 Blanking Plugs $+1 \times$ M32 Cable Gland Included
Quick Turn Screws
Padlockable in the Off Position

| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :---: |
| SISW163P | $230 \mathrm{~V} 2 \mathrm{P}+\mathrm{E}$ 16A 6h | $£ 55.00$ | 1 |
| SISW165N | $415 \mathrm{~V} 3 \mathrm{P}+\mathrm{N}+\mathrm{E}$ 16A 6h | $£ 59.00$ | 1 |
| SISW323P | $230 \mathrm{~V} 2 \mathrm{P}+\mathrm{E}$ 32A 6h | $£ 60.00$ | 1 |
| SISW325N | $415 \mathrm{~V} 3 \mathrm{P}+\mathrm{N}+\mathrm{E}$ 32A 6h | $£ 65.00$ | 1 |

IP44 Padlockable Switched Interlock Sockets


IP44 Rated ABS Enclosure / CE Approved
Padlockable in the On and Off positions for added security with multiple knock-outs for easier installation.

| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :---: |
| SIS163PK | $230 \mathrm{~V} 2 \mathrm{P}+\mathrm{E}$ 16A 6h | $£ 38.00$ | 1 |
| SIS165VK | $400 \mathrm{~V} 3 \mathrm{P}+\mathrm{N}+$ E 16A 6h | $£ 44.00$ | 1 |
| SIS325VK | $400 \mathrm{~V} 3 \mathrm{P}+\mathrm{N}+\mathrm{E}$ 32A 6h | $£ 56.00$ | 1 |



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3 Pole Boxed Isolators (IP65)
Uropa


CB, CE, SEMKO, UL508
IEC \& EN 60947-3
20 mm Knock-outs up to 40A / 25mm on 63 \& 80A
Easy Access \& Switch Removal / Flame Retardant Material
Padlockable for Added Security / All Switch Ratings at AC-21

| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :---: |
| LB323P | 32A 3 Pole (Insulated Enclosure) | $£ 17.33$ | 1 |
| LB403P | 40A 3 Pole (Insulated Enclosure) | $£ 21.52$ | 1 |
| LB633P | 63A 3 Pole (Insulated Enclosure) | $£ 24.95$ | 1 |
| LB803P | 80A 3 Pole (Insulated Enclosure) | $£ 27.01$ | 1 |

(1) 3 Pole Boxed Isolator Switch (IP65) Dimensions (mm)

| Part Number | Height | Width | Depth | Depth (Inc Switch) |
| :---: | :---: | :---: | :---: | :---: |
| LB323P | 125 | 100 | 74 | 118 |
| LB403P |  |  |  |  |
| LB633P | 175 | 125 | 90 | 134 |
| LB803P |  |  |  |  |

3 Pole + Sw. Neutral Boxed Isolators (IP65) Uropa


New Product


Early Make / Late Break
Neutral Contact.
Supplied in blue for easy identification.

CB, CE, SEMKO, UL508 / IEC \& EN 60947-3
20 mm Knock-outs up to $40 \mathrm{~A} / 25 \mathrm{~mm}$ on 63 to 125 A Easy Access \& Switch Removal / Flame Retardent Material
Padlockable for Added Security
Switch Ratings at AC-21 20-80A / AC-22 100 \& 125A

| Part Number <br> LB203PSN | Description <br> 20A 3P + Sw. Neutral <br> (Insulated Enclosure) | Price | Per |
| :--- | :--- | :---: | :---: |
| LB253PSN | 25A 3P + Sw. Netral <br> (Insulated Enclosure) | $£ 15.64$ | 1 |
| LB323PSN | 32A 3P + Sw. Neutral <br> (Insulated Enclosure) | $£ 20.24$ | 1 |
| LB403PSN | 40A 3P + Sw. Neutral <br> (Insulated Enclosure) | $£ 25.67$ | 1 |
| LB633PSN | 63A 3P + Sw. Neutral <br> (Insulated Enclosure) | $£ 29.58$ | 1 |
| LB803PSN | 80A 3P + Sw. Netral <br> (Insulated Enclosure) | $£ 32.14$ | 1 |
| LB1003PSN | 100A 3P + Sw. Neutral <br> (Insulated Enclosure) | $£ 76.35$ | 1 |
| LB1253PSN | 125A 3P + Sw. Neutral <br> (Insulated Enclosure) | $£ 84.38$ | 1 |


| (1) 3 Pole + Sw. Neutral Boxed Isolator Switch (IP65) Dimensions (mm) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Part Number | Height | Width | Depth | Depth (Inc Switch) |
| LB203PSN <br> LB253PSN <br> LB323PSN <br> LB403PSN | 125 | 100 | 74 | 118 |
| LB633PSN <br> LB803PSN | 175 | 125 | 90 | 134 |
| LB1003PSN <br> LB1253PSN | 270 | 215 | 122 | 182 |

Boxed Isolator Data - See Pages 123-125
4 Pole Isolators are supplied with 4 main poles (except changeover switches), all opening \& closing simultaneously.
Some applications require that the neutral pole is Early Make Late Break. (Refer to the new 3P + Switch Neutral Range above and on pages $44 \& 45)$.

4 Pole Boxed Isolators (IP65)
4urore components


CB, CE, SEMKO, UL508
IEC \& EN 60947-3
20mm Knock-outs up to 40A / 25mm on 63 to 125A Easy Access \& Switch Removal / Flame Retardant Material Padlockable for Added Security
Switch Ratings at AC-21 20-80A / AC-22 100 \& 125A

| Part Number | Description | Price | Per |
| :--- | :--- | :---: | :---: |
| LB204P | 20A 4 Pole (Insulated Enclosure) | $£ 13.60$ | 1 |
| LB254P | 25A 4 Pole (Insulated Enclosure) | $£ 15.96$ | 1 |
| LB324P | 32A 4 Pole (Insulated Enclosure) | $£ 17.60$ | 1 |
| LB404P | 40A 4 Pole (Insulated Enclosure) | $£ 22.32$ | 1 |
| LB634P | 63A 4 Pole (Insulated Enclosure) | $£ 25.72$ | 1 |
| LB804P | 80A 4 Pole (Insulated Enclosure) | $£ 27.95$ | 1 |
| LB1004P | 100A 4 Pole (Insulated Enclosure) | $£ 66.39$ | 1 |
| LB1254P | 125A 4 Pole (Insulated Enclosure) | $£ 73.37$ | 1 |


| (1) 4 Pole Boxed Isolator Switch (IP65) Dimensions (mm) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Part Number | Height | Width | Depth | Depth (Inc Switch) |
| LB204P | 125 | 100 | 74 | 118 |
| LB254P |  |  |  |  |
| LB324P |  |  |  |  |
| LB404P |  |  |  |  |
| LB634P | 175 | 125 | 90 | 134 |
| LB804P |  |  |  |  |
| LB1004P | 280 | 190 | 130 | 190 |
| LB1254P |  |  |  |  |

## 3 Pole + Sw. Neutral Larger Enclosure Version (IP65)



New Product

CB, CE, SEMKO, UL508
IEC \& EN 60947-3 / 25mm Knock-outs
Easy Access \& Switch Removal / Flame Retardant Material
Padlockable for Added Security / All Switch Ratings at AC-21

| Part Number LB253PSNBB | Description 25A 3P + Sw. Neutral BB (Insulated Larger Enclosure) |  |  | Price <br> £23.55 | Per <br> 1 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| LB323PSNBB | 32A 3P + Sw. Neutral BB (Insulated Larger Enclosure) |  |  | £28.20 | 1 |
| LB403PSNBB | 40A 3P + Sw. Neutral BB (Insulated Larger Enclosure) |  |  | $£ 31.30$ | 1 |
| (1) Larger Enclosure 3 Pole + Sw. Neutral Boxed Isolator Switch (IP65) Dimensions (mm |  |  |  |  |  |
| Part Number | Height | Width | Depth | Depth (Inc Switch) |  |
| LB253PSNBB LB323PSNBB LB403PSNBB | 175 | 125 | 90 | 134 |  |

4 Pole Larger Enclosure Version (IP65) uropa


RoHS Compliant

CB, CE, SEMKO, UL508
IEC \& EN 60947-3
25mm Knock-outs / Easy Access \& Switch Removal / Flame Retardant Material / Padlockable For Added Security / All Switch Ratings at AC-21

| Part Number | Description |  |  | Price |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| LB254PBB | 25A 4 Pole (Insulated Enclosure) |  |  | £21.00 |  |
| LB324PBB | 32A 4 pole (Insulated Enclosure) |  |  | $£ 25.50$ |  |
| LB404PBB | 40A 4 Pole (Insulated Enclosure) |  |  | £27.20 | 1 |
| (1) Larger Enclosure 4 Pole Boxed Isolator Switch (IP65) Dimensions (mm) |  |  |  |  |  |
| Part Number | Height | Width | Depth | Depth (Inc Switch) |  |
| LB254PBB | 175 | 125 | 90 |  |  |
| LB324PBB |  |  |  | 134 |  |
| LB404PBB |  |  |  |  |  |

## 3 Pole Metal Clad Enclosed Isolator (IP54)



CB, CE, SEMKO, UL508
IEC \& EN 60947-3
Metal Clad Enclsoure: Epoxy Coated Steel / Padlockable for Added Security Box Lid RAL: 7032 / Back Box RAL: 7043 / All Switch Ratings at AC-21

| Part Number | Description | Price | Per |
| :--- | :--- | :---: | :---: |
| LB253PSTB | 25A 3 Pole (Metal Clad Enclosure) $£ 25.94$ | 1 |  |
| LB323PSTB | 32A 3 Pole (Metal Clad Enclosure) $£ 28.76$ | 1 |  |
| LB403PSTB | 40A 3 Pole (Metal Clad Enclosure) $£ 32.93$ | 1 |  |
| LB633PSTB | 63A 3 Pole (Metal Clad Enclosure) $£ 34.80$ | 1 |  |
| LB803PSTB | 80A 3 Pole (Metal Clad Enclosure) $£ 39.50$ | 1 |  |

(1) 3 Pole Metal Clad Enclosed Isolator Switch (IP54) Dimensions (mm)

| Part Number | Height | Width | Depth | Depth (Inc Switch) |
| :---: | :---: | :---: | :---: | :---: |
| LB253PSTB |  |  |  |  |
| LB323PSTB |  | 220 | 145 | 90 |
| LB403PSTB |  |  |  |  |
| LB633PSTB |  |  |  |  |
| LB803PSTB |  |  |  |  |

## Boxed Isolator Data - See Pages 123-125

4 Pole Isolators are supplied with 4 main poles (Except changeover switches), all opening \& closing simultaneously. Some applications require that the neutral pole is Early Make Late Break (Refer to the new 3P + Switch Neutral ranges). For other products the 4th pole should be replaced with the required amperage from our range of Neutral Contacts - please see page 48.

4 Pole Metal Clad Enclosed Isolator (IP54) Urope


CB, CE, SEMKO, UL508
IEC \& EN 60947-3
Metal Clad Enclosure: Epoxy Coated Steel / Padlockable for Added Security Box Lid RAL: 7032 / Back Box RAL: 7043
Switch Ratings at AC-21 25-80A / AC-22 100 \& 125A

| Part Number | Description | Price | Per |
| :--- | :--- | :---: | :---: |
| LB254PSTB | 25A 4 Pole (Metal Clad Enclosure) | $£ 26.41$ | 1 |
| LB324PSTB | 32A 4 Pole (Metal Clad Enclosure) | $£ 29.54$ | 1 |
| LB404PSTB | 40A 4 Pole (Metal Clad Enclosure) | $£ 34.86$ | 1 |
| LB634PSTB | 63A 4 Pole (Metal Clad Enclosure) | $£ 36.36$ | 1 |
| LB804PSTB | 80A 4 Pole (Metal Clad Enclosure) | $£ 41.48$ | 1 |
| LB1004PSTB | 100A 4 Pole (Metal Clad Enclosure) | $£ 72.70$ | 1 |
| LB1254PSTB | 125A 4 Pole (Metal Clad Enclosure) | $£ 78.65$ | 1 |


| (1) 4 Pole Metal Clad Enclosed Isolator Switch (IP54) Dimensions (mm) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Part Number | Height | Width | Depth | Depth (Inc Switch) |
| LB254PSTB | 220 | 145 | 90 | 134 |
| LB324PSTB |  |  |  |  |
| LB404PSTB |  |  |  |  |
| LB634PSTB |  |  |  |  |
| LB804PSTB |  |  |  |  |
| LB1004PSTB | 270 | 215 | 125 | 185 |
| LB1254PSTB |  |  |  |  |

4 Pole Metal Clad Enclosed Isolator (IP65)


CB, CE, SEMKO, UL508
IEC \& EN 60947-3
Metal Clad Enclosure: Epoxy Coated Steel RAL: 7035
Padlockable for Added Security
All Switch Ratings at AC-22

| Part Number | Description |  |  | Price | Per |
| :---: | :---: | :---: | :---: | :---: | :---: |
| LB254PST | 25A 4 Pole (Metal Clad Enclosure) |  |  | £58.99 | 1 |
| LB324PST | 32A 4 Pole (Metal Clad Enclosure) |  |  | £61.37 | 1 |
| LB404PST | 40A 4 Pole (Metal Clad Enclosure) |  |  | $£ 65.25$ | 1 |
| LB634PST | 63A 4 Pole (Metal Clad Enclosure) |  |  | £69.57 | 1 |
| LB804PST | 80A 4 Pole (Metal Clad Enclosure) |  |  | $£ 77.40$ | 1 |
| (1) 4 Pole Metal Clad Enclosed Isolator Switch (IP65) Dimensions (mm) |  |  |  |  |  |
| Part Number | Height | Width | Depth | Depth (Inc | witch) |
| LB254PST | 173 | 100 | 120 | 164 |  |
| LB324PST |  |  |  |  |  |
| LB404PST |  |  |  |  |  |
| LB634PST | 178 | 178 | 135 | 179 |  |
| LB804PST |  |  |  |  |  |



CB, CE, SEMKO, UL508
IEC \& EN 60947-3
Fully Earth Bonded
Grade 304 Brushed Stainless Steel / Padlockable for Added Security Particularly Suitable for Pharmaceutical \& Food Preparation Areas All Switch Ratings at AC-22

| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :---: |
| LB254PSS | 25A 4 Pole | $£ 139.18$ | 1 |
| LB324PSS | 32A 4 Pole | $£ 142.14$ | 1 |
| LB404PSS | 40A 4 pole | $£ 144.55$ | 1 |
| LB634PSS | 63A 4 pole | $£ 171.42$ | 1 |
| LB804PSS | 80A 4 pole | $£ 176.37$ | 1 |

(1) 4 Pole Stainless Steel Enclosed Isolator Switch (IP65) Dimensions (mm)

| Part Number | Height | Width | Depth | Depth (Inc Switch) |
| :---: | :---: | :---: | :---: | :---: |
| LB254PSS | 173 | 100 | 120 | 164 |
| LB324PSS |  |  |  |  |
| LB404PSS |  |  |  |  |
| LB634PSS | 178 | 178 | 135 | 179 |
| LB804PSS |  |  |  |  |

## 3 Pole + Sw. Neutral Die Cast Enclosed Isolators (IP65)



CB, CE, SEMKO, UL508
IEC \& EN 60947-3
Robust Die Cast Enclosure
curopa
New Product

Padlockable for Added Security
Box Lid RAL: 7032 / Back Box RAL: 7043
All Switch Ratings at AC-21

| Part Number | Description |  |  | Price Per |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| LB253PSNAL | 25A 3P | 25A 3P + Sw. Neutral |  | $£ 49.92$ | 1 |
| LB323PSNAL | 32A 3P + Sw. Neutral (Die Cast Enclosure) |  |  | £53.19 | 1 |
| LB403PSNAL | 40A 3P + Sw. Neutral (Die Cast Enclosure) |  |  | $£ 58.75$ | 1 |
| LB633PSNAL | 63A 3P + Sw. Neutral (Die Cast Enclosure) |  |  | £60.33 | 1 |
| (i) 3P + Sw. Neutral Die Cast Enclosed Isolator Switch (IP65) Dimensions (mm) |  |  |  |  |  |
| Part Number | Height | Width | Depth | Depth (Inc | witch) |
| LB253PSNAL | 152 | 140 | 100 | 144 |  |
| LB323PSNAL |  |  |  |  |  |
| LB403PSNAL |  |  |  |  |  |
| LB633PSNAL |  |  |  |  |  |

## 2015 Catalogue

## 4 Pole Die Cast Enclosed Isolators (IP65)



CB, CE, SEMKO, UL508
IEC \& EN 60947-3
Robust Die Cast Enclosure Padlockable for Added Security Box Lid RAL: 7032 / Back Box RAL: 7043 All Switch Ratings at AC-21

| Part Number | Description |  |  | Price |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| LB254PAL | 25A 4 Pole (Die Cast Enclosure) |  |  | £43.41 | 1 |
| LB324PAL | 32A 4 Pole (Die Cast Enclosure) |  |  | $£ 46.25$ | 1 |
| LB404PAL | 40A 4 Pole (Die Cast Enclosure) |  |  | £51.09 | 1 |
| LB634PAL | 63A 4 Pole (Die Cast Enclosure) |  |  | $£ 52.46$ | 1 |
| (1) 4 Pole Die Cast Enclosed Isolator Switch (IP65) Dimensions (mm) |  |  |  |  |  |
| Part Number | Height | Width | Depth | Depth (Inc | witch) |
| LB254PAL | 152 | 140 | 100 | 144 |  |
| LB324PAL |  |  |  |  |  |
| LB404PAL |  |  |  |  |  |
| LB634PAL |  |  |  |  |  |



CB, CE, SEMKO, UL508
IEC \& EN 60947-3
Insulated Enclosure: 25mm Knock-outs / Padlockable for Added Security Easy Access \& Switch Removal / Flame Retardant Material
All switch ratings at AC-22
Steel Enclosure: Padlockable for Added Security / Bottom Gland Plate Epoxy Coated Strong Steel / RAL: 7035 / All Switch ratings at AC-22

| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :---: |
| LB256P | 25A 6 Pole (Insulated Enclosure) | $£ 43.22$ | 1 |
| LB326P | 32A 6 Pole (Insulated Enclosure) | $£ 45.02$ | 1 |
| LB406P | 40A 6 Pole (Insulated Enclosure) | $£ 47.09$ | 1 |
| LB636P | 63A 6 Pole (Steel Enclosure) | $£ 105.77$ | 1 |
| LB806P | 80A 6 Pole (Steel Enclosure) | $£ 126.84$ | 1 |
| LB1256P | 125A 6 Pole (Steell Enclosure) | $£ 145.18$ | 1 |

There is room to add 1 extra auxiliary block either side of the switch if required
(1) 6 Pole Enclosed Isolator Switch (IP65) Dimensions (mm)

| Part Number | Height | Width | Depth | Depth (Inc Switch) |
| :---: | :---: | :---: | :---: | :---: |
| LB256P | 280 | 190 | 130 | 190 |
| LB326P |  |  |  |  |
| LB406P | 400 | 300 | 200 | 260 |
| LB636P |  |  |  |  |
| LB806P |  |  | 200 |  |



CB, CE, SEMKO, UL508
IEC \& EN 60947-3
Insulated Enclosure:
25mm Knock-outs / Padlockable for Added Security
Easy Access \& Switch Removal / Flame Retardant Material All switch ratings at AC-22

Steel Enclosure: Padlockable for Added Security / Bottom Gland Plate Epoxy Coated Strong Steel / RAL: 7035 / All Switch Ratings at AC-22

| Part Number | Description |  |  | Price | Per |
| :---: | :---: | :---: | :---: | :---: | :---: |
| LB258P | 25A 8 Pole (Insulated Enclosure) |  |  | $£ 45.80$ | 1 |
| LB328P | 32A 8 Pole (Insulated Enclosure) |  |  | $£ 49.99$ | 1 |
| LB408P | 40 A 8 Pole (Insulated Enclosure) |  |  | £52.25 | 1 |
| LB638P | 63A 8 Pole (Steel Enclosure) |  |  | £108.21 | 1 |
| LB808P | 80A 8 Pole (Steel Enclosure) |  |  | £133.62 | 1 |
| LB1258P | 125A 8 Pole (Steel Enclosure) |  |  | £151.98 | 1 |
| (1) 8 Pole Enclosed Isolator Switch (IP65) Dimensions (mm) |  |  |  |  |  |
| Part Number | Height | Width | Depth | Depth (Inc | witch) |
| LB258P | 280 | 190 | 130 | 190 |  |
| LB328P |  |  |  |  |  |
| LB408P |  |  |  |  |  |
| LB638P | 400 | 300 | 200 | 260 |  |
| LB808P |  |  |  |  |  |
| LB1258P |  |  |  |  |  |



Bureau Veritas, Lloyds Registered and CE Approved
EN 60947-3 / Padlockable for Added Security
Switch Ratings AC-21 25A / AC-22 32-100A

| Part Number | $\begin{array}{l}\text { Description } \\ \text { LBC252P }\end{array}$ | $\begin{array}{r}\text { Price }\end{array}$ | Per |
| :--- | :--- | ---: | :---: |
| 25A 2 Pole (Insulated Enclosure) |  |  |  |
| £55.98 |  |  |  |$) 1$

(1) 2 Changeover Switch (IP65) Dimensions (mm)

| Part Number | Height | Width | Depth | Depth (Inc Switch) |
| :---: | :---: | :---: | :---: | :---: |
| LBC252P | 175 | 151 | 95 | 129 |
| LBC322P |  |  |  |  |
| LBC402P | 180 | 182 | 137 | 178 |
| LBC632P | 254 | 180 |  | 178 |

## 4 Pole Enclosed Changeover Switches <br> Turopa components



CB, CE, SEMKO, UL508
IEC \& EN 60947-3
All Switch Ratings at AC-22


Insulated Enclosure: (IP65)
25 mm Knock-outs / Easy Access \& Switch Removal
Flame Retardant Material / Padlockable for Added Security
Metal Clad Enclosure (STB): (IP54) / Padlockable for Added Security Box Lid RAL: 7032 / Back Box RAL: 7043

Steel Enclosure: (IP65) / Padlockable for Added Security / Bottom Gland Plate
Epoxy Coated Steel / RAL: 7035

| Part Number | Description | Price | Per |
| :---: | :---: | :---: | :---: |
| LBC254P | 25A 4 Pole (Insulated Enclosure) | £44.50 | 1 |
| LBC324P | 32A 4 Pole (Insulated Enclosure) | £49.66 | 1 |
| LBC404P | 40A 4 Pole (Insulated Enclosure) | £52.90 | 1 |
| LBC254PSTB | 25A 4 Pole (Metal Clad Enclosure) | £71.50 | 1 |
| LBC324PSTB | 32A 4 Pole (Metal Clad Enclosure) | £75.79 | 1 |
| LBC404PSTB | 40A 4 Pole (Metal Clad Enclosure) | £82.30 | 1 |
| LBC634PSTB | 63A 4 Pole (Metal Clad Enclosure) | £104.28 | 1 |
| LBC634P | 63A 4 Pole (Steel Enclosure) | £144.15 | 1 |
| LBC804P | 80A 4 Pole (SteelEnclosure) | £227.66 | 1 |
| LBC1254P | 125A 4 Pole (Steel Enclosure) | £265.26 | 1 |

Break before make 3 position switch - centre OFF
NB: 4P changeover switches are fitted with 2 early make / late break neutral contacts
(1) 4 Pole Changeover Switch Dimensions (mm)

| Part Number | Height | Width | Depth | Depth (Inc Switch) |
| :---: | :---: | :---: | :---: | :---: |
| LBC254P | 280 | 190 | 130 | 190 |
| LBC324P |  |  |  |  |
| LBC404P |  |  |  |  |
| LBC254PSTB | 270 | 215 | 125 | 185 |
| LBC324PSTB |  |  |  |  |
| LBC404PSTB |  |  |  |  |
| LBC634PSTB |  |  |  |  |
| LBC634P | 400 | 300 | 200 | 260 |
| LBC804P |  |  |  |  |
| LBC1254P |  |  |  |  |



## Enclosed Door Interlocked Fused Switches 32-100A

## Enclosed Door Interlocked Fused Switches 32-100A (IP65)

New Product


## CE Approved

CB \& SEMKO Approved Loadbreak Switch to EN 60947-3 TUV Approved Fuse Holder to EN60269-1 \& HD60269-2


3 pole + early make / late break neutral switch Switch handle padlockable in the off position for up to 3 padlocks IP20 protection on incoming terminals
Supplied with fully rated gL fuses (Please pages 110-113) Top and bottom gland plates All switch ratings AC-22

| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :---: |
| (1) FS323PSNME | 32A Enclosed 3P + Sw. Neutral |  |  |
|  | Fused Switch | $£ 91.35$ | 1 |
| (2) FS803PSNME | 80A Enclosed 3P + Sw. Neutral |  |  |
|  | Fused Switch | $£ 148.46$ | 1 |
| (2) FS1003PSNME | 100A Enclosed 3P + Sw. Neutral |  |  |
|  | Fused Switch | $£ 172.15$ | 1 |


(2)

(1) 3P + Sw. Neutral Fused Switch Dimensions (mm)

| Part Number | Height | Width | Depth | Depth (Inc <br> Switch) | Fuse Holder |
| :---: | :---: | :---: | :---: | :---: | :---: |
| FS323PSNME | 300 | 250 | 150 | 194 | $10 \times 38$ |
| FS803PSNME | 500 | 300 | 200 | 244 | $22 \times 58$ |
| FS1003PSNME |  |  |  |  |  |

2015 Catalogue

## Door Interlock Loadbreak Switches 25-125A

## Door Interlock with Metal Shaft Curopa



CB, CE, SEMKO, UL508
IEC \& EN 60947-3 / Padlockable for Added Security Din Rail mount (Metal shaft 282mm 3P / 94mm 6P) Shaft 8 mm across flats (hexagonal)
All Switch Ratings at AC-22

| Part Number | Description | Price | Per |
| :--- | :--- | :---: | :---: |
| LBDI253P | 25A 3P Door Interlocked | $£ 16.32$ | 1 |
| LBDI323P | 32A 3P Door Interlocked | $£ 19.54$ | 1 |
| LBDI403P | 40A 3P Door Interlocked | $£ 21.69$ | 1 |
| LBDI633P | 63A 3P Door Interlocked | $£ 25.03$ | 1 |
| LBDI803P | 80A 3P Door Interlocked | $£ 30.49$ | 1 |
| LBDI1003P | 100A 3P Door Interlocked | $£ 34.63$ | 1 |
| LBDI1253P | 125A 3P Door Interlocked | $£ 39.72$ | 1 |
|  |  |  |  |
| LBDI256P | 25A 6 Pole Door Interlocked | $£ 37.21$ | 1 |
| LBDI326P | 32A 6 Pole Door Interlocked | $£ 41.25$ | 1 |
| LBDI406P | 40A 6 Pole Door Interlocked | $£ 41.95$ | 1 |
| LBDI636P | 63A 6 Pole Door Interlocked | $£ 46.02$ | 1 |
| LBDI806P | 80A 6 Pole Door Interlocked | $£ 67.09$ | 1 |
| LBDI1256P | 125A 6 Pole Door Interlocked | $£ 85.44$ | 1 |

## Door Interlock Changeover Switches 25-125A

```
Door Interlock Changeover
```



Break before make 3 position switch - centre OFF NB: 4P changeover switches are fitted with 2 early make / late break neutral contacts

CB, CE, SEMKO, UL508 / IEC \& EN 60947-3 2 Hole Rear Mount Or Snap On Din Rail Mount (35mm) Door Interlock (Door Openable In Off Position Only) Padlockable for added security / All Switch Ratings at AC-22

| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :---: |
| LBCDI254P | 25A 4 Pole | $£ 36.12$ | 1 |
| LBCDI404P | 40A 4 Pole | $£ 41.76$ | 1 |
| LBCDI634P | 63A 4 Pole | $£ 53.55$ | 1 |
| LBCDI804P | 80A 4 Pole | $£ 88.69$ | 1 |
| LBCDI1254P | 125A 4 Pole | $£ 107.05$ | 1 |

Complete with Bus Bars. Metal Shaft 98mm - shaft 8mm across flats (hexagonal). A 282 mm shaft is available on request.

## Panel Mount



CB, CE, SEMKO, UL508
IEC \& EN 60947-3
Padlockable for Added Security
All Switch Ratings at AC-22

| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :---: |
| LBPM253P | 25A 3P Panel Mount | $£ 11.49$ | 1 |
| LBPM323P | 32A 3P Panel Mount | $£ 12.12$ | 1 |
| LBPM403P | 40A 3P Panel Mount | $£ 15.74$ | 1 |
| LBPM633P | 63A 3P Panel Mount | $£ 18.27$ | 1 |
| LBPM803P | 80A 3P Panel Mount | $£ 24.47$ | 1 |
| LBPM1003P | 100A 3P Panel Mount | $£ 28.62$ | 1 |

## Accessories for Boxed and Door Interlocked Isolators



CB, CE, SEMKO, UL508 / IEC \& EN 60947-3 Neutral Switch Auxiliary Block / Rear Mount for Door Interlock \& Boxed Isolators All Switch Ratings AC-22

| Part Number | Description | Price | Per |
| :--- | :--- | :---: | :---: |
| LB263AUXEM | 25A-63A Neutral Contact R/M | $£ 3.38$ | 1 |
| LB280AUXEM | 80A Neutral Contact R/M | $£ 8.45$ | 1 |
| LB2125AUXEM | 100-125A Neutral Contact R/M | $£ 8.45$ | 1 |

Volt Free Contact
Ⓤrooe components


Volt free contacts
rated at AC-15 6A 230V / 4A 415V.
Maximum terminal capacity $1.5 \mathrm{~mm}^{2}$

CB, CE, SEMKO, UL508
Rear Mount for Door Interlocked and Boxed Isolators

| Part Number <br> * LBAC16RM | Description <br> 20-63A Aux Switch | Price | Per |
| :--- | :--- | :---: | :---: |
|  | 1N/C \& 1N/O R/M | $£ 5.27$ | 1 |
| * LBAC125RM | 80A to 125A Aux switch |  |  |
|  | 1N/C \& 1N/O R/M | $£ 5.81$ | 1 |
| LBAC16RM2NO | 20-63A Aux Switch 2N/O R/M | $£ 5.27$ | 1 |
| LBAC125RM2NO | 80-125A Aux Switch 2/O R/M | $£ 5.81$ | 1 |

* 1N/O Contact Early Break / Late Make + 1N/C Contact


## Main Pole Contacts


-urore
CB, CE, SEMKO, UL508 / IEC \& EN 60947-3
Main pole for when an additional pole is required
Rear mount for door interlock and boxed isolators
All Switch Ratings at AC-22

| Part Number | Description | Price | Per |
| :--- | :--- | :---: | :---: |
| LB263MAINPOLE | 25A-63A R/M | $£ 3.38$ | 1 |
| LB280MAINPOLE | $80 \mathrm{AR} / \mathrm{M}$ | $£ 8.45$ | 1 |
| LB2125MAINPOLE | $125 \mathrm{~A} \mathrm{R/M}$ | $£ 8.45$ | 1 |

## Extended Auxiliaries

Uuropa components
 Compliant

## CB, CE, SEMKO, UL508

Main and Neutral Contact to IEC \& EN 60947-3
Combined main or neutral pole with volt free contacts (1NO+1NC) Allows for additonal volt free contact to be fitted on a 4 pole switch (Note the 4th pole or neutral contact (if fitted) must be removed) All main pole and neutral contacts rated at AC-22 (25-63A)

| Part Number LB263EFMC | Description 20-63A Extended Aux Main Pole + * 1N/C \& 1N/O Contact F/M | Price <br> $£ 6.50$ | Per <br> 1 |
| :---: | :---: | :---: | :---: |
| LB263EFNC | 20-63A Extended Aux Neutral Pole <br> + * 1N/C \& 1N/O Contact F/M | $£ 6.50$ | 1 |
| LB263ERMC | 20-63A Extended Aux Main Pole <br> + * 1N/C \& 1N/O Contact R/M | $£ 6.50$ | 1 |
| LB263ERNC | 20-63A Extended Aux Neutral Pole <br> + * 1N/C \& 1N/O Contact R/M | $£ 6.50$ | 1 |

* 1N/O Contact Early Break / Late Make + 1N/C Contact

Front Mounting Auxiliaries for Panel Mount Isolators


CB, CE, SEMKO, UL508 / IEC \& EN 60947-3
All Switch ratings at AC-22

| Part Number <br> LB263AUXEMFM | Description <br> 25A-63A Neutral Contact <br> (Early Make Late Break) | Price | Per |
| :--- | :--- | :---: | :---: |
|  | $£ 3.06$ | 1 |  |
| LB263MAINFM | 25A-63A Main Pole Contact | $£ 3.06$ | 1 |

## Rubber Gasket



For use with Panel Mount \& Door Interlock Devices to improve the IP rating to IP65 on OEM installations

| Part Number Description <br> LBGASKET Gasket Providing |  Price Per <br> IP65 Protection $£ 1.30$ 1 |
| :---: | :---: |
| (i) Europa Load Break Enclosure / Add on Auxiliary Table |  |
| Load Break Enclosure / Switch Size | Potential No. of Additional Auxiliarys |
| 3P Boxed 32-80A | 1 Auxiliary |
| $3 P+$ Sw. Neutral Boxed 20-40A | - |
| 4P Boxed 20-40A | - |
| $3 P+$ Sw. Neutral Boxed 63-80A | 1 Auxiliary |
| 4P Boxed 63-80A | 1 Auxiliary |
| $3 P+$ Sw. Neutral Boxed 100-125A | - |
| 4P Boxed 100-125A | - |
| 3P + Sw. Neutral Large Enclosure 25-40A | 1 Auxiliary |
| 4P Large Enclosure 25-40A | 1 Auxiliary |
| 3P Metal Clad 25-80A | 1 Auxiliary |
| 4P Metal Clad 25-125A | 1 Auxiliary |
| 3P + Sw. Neutral Diecast 25-63A | 1 Auxiliary |
| 4P Diecast 25-63A | 1 Auxiliary |
| 4P Stainless Steel 25-40A | - |
| 4P Stainless Steel 63-80A | 1 Auxiliary |
| 6P Boxed 25-40A | 2 Auxiliarys (1 either side) |
| 6P Boxed 63-125A | 2 Auxiliarys (1 either side) |
| 8P Boxed 25-40A | - |
| 8P Boxed 63-125A | - |
| 4P Boxed Change Over 25-40A | - |
| 4P Metal Clad Change Over 32-63A | - |
| 4P Metal Enc Change Over 63-125A | - |



## DC Load Break Switches

 Switch Rated at 1000V DC
## Perfect for Photovoltaic (PV) Installations - Key Features:

$\checkmark$ IP65 rated enclosure (for boxed version)
$\checkmark$ Ample internal space for easier wiring
$\checkmark$ Polycarbonate flame retardant RoHs compliant plastic
$\checkmark$ 16A, 25A \& 32A all rated up to 1000 V DC
$\checkmark$ Unique spring loaded mechanism for high speed switching ( 5 ms max)
$\checkmark$ Knife edge self-cleaning contacts for increased switch life
$\checkmark$ Long arc chambers to help rapid arc suppression
$\checkmark 16 \mathrm{~mm}^{2}$ rising clamp terminals for easy wiring
$\checkmark$ The switch is padlockable in the off position (with up to 3 padlocks)


Europa DC Isolators have been specifically designed to switch Direct Current (DC) at voltages up to 1000 volts. Their robust design and ability to switch such voltages, at rated current, means that they are ideally suited to be used in the switching of Photovoltaic (PV) systems.
Differences between AC and DC switching:
Alternating Current (AC) rises and falls in value with time, passing through zero volts twice in each cycle. This means that when making or breaking AC current any arc that is created is suppressed as the voltage falls to zero. When switching DC the voltage is constant and current does not reduce to zero. Any arc that is created has to be suppressed as quickly as possible so as to reduce the destructive energy within it. There are two methods that can be used to achieve a successful arc quenching, firstly by breaking the arc as quickly as possible and secondly by increasing the length of the arc to the point that it can no longer sustain itself. The Europa DC Switch utilises both methods.

The Europa DC switch achieves ultra-rapid switching through a 'Snap Action', spring driven, operating mechanism. When the front actuator is rotated energy is accumulated in the mechanism until a point is reached at which the contacts are fired open or closed. This system will operate the switch under load within 5 ms thereby reducing the arcing time to a minimum.

In order to reduce the chances of an arc propagating, the Europa switch employs rotary contact technology. This is designed to make and break the circuit through a revolving double break contact assembly that wipes as it moves. The wiping action has the added advantage of keeping the contact faces clean thereby reducing the circuit resistance and increasing the life of the switch.

The Europa boxed DC isolators are manufactured from flame retardant polycarbonate plastic resulting in an extremely strong, reliable, safe switch. They are also supplied in an enclosure which gives plenty of space for cabling.

All Photo Voltaic installations must have a DC Switch to disconnect the DC / AC inverter from the photovoltaic panels in accordance with IEC 60364-7-712.
Europa Components are committed to supporting renewable technologies. We have extended our range of solar photovoltaic (PV) products in the 2015 catalogue to provide a complete solution. See page 9 for a typical PV installation diagram.


Photovoltaic
DC 4 Pole Isolator Switches



DC 4 Pole Din Rail Mount Isolator


New Product


CE Approved / TUV Certified / EN 60947-3
Padlockable in the OFF position for added Security Switch Rated at 1000V

| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :---: |
| LBR254PDC | 25A DC 4 Pole | $£ 45.00$ | 1 |

CE Approved / TUV Certified / EN 60947-3
Padlockable in the OFF position for added security Switch rated at $\mathbf{1 0 0 0 V}$

| Part Number LB164PDC | Description 16A DC 4 Pole |  |  | Price £45.00 | Per <br> 1 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| LB254PDC | 25A DC 4 Pole |  |  | $£ 59.00$ | 1 |
| LB324PDC | 32A DC 4 Pole |  |  | £70.00 | 1 |
| (1) 4 Pole DC Boxed Isolator Switch (IP65) Dimensions (mm) |  |  |  |  |  |
| Part Number | Height | Width | Depth | Depth (Inc | witch) |
| LB164PDC | 170 | 102 | 80 | 110 |  |
| LB254PDC |  |  |  |  |  |
| LB324PDC |  |  |  |  |  |

## DC 4 Pole Door Interlocked Isolator



CE Approved / TUV Certified / EN 60947-3
Padlockable in the OFF position for added security
Complete with 130 mm shaft
Switch rated at 1000V

| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :---: |
| LBDI164PDC | 16A DC 4 Pole | $£ 42.50$ | 1 |
| LBDI254PDC | 25A DC 4 Pole | $£ 56.50$ | 1 |
| LBDI324PDC | 32A DC 4 Pole | $£ 64.00$ | 1 |



# Enclosed MID Approved kWh Meter Switch Assembly 

|  |
| ---: | New Product


$\checkmark$ 100A Mainswitch
$\checkmark$ 16A 30mA trip 2 Pole 6kA C Curve RCBO
45A Direct Read MID Meter

Photo Voltaic (PV) Consumer Unit Maximum Load 16A

Pre-assembled unit complete with MID Certified Meter IP65 ABS Flame Retardant Enclosure with Polycarbonate Lid Combined, ready wired unit for quick and easy installation Other versions are available on request
Analogue display for kWh meter reading

| Part Number | Description | Price | Per |
| :--- | :--- | :---: | :---: |
| ECMID16A | MID Single Phase |  |  |
|  | 16A B Curve RCBO kWh Meter | $£ 115.00$ | 1 |


| MID Meter Insulated Enclosure Dimensions (mm) |  |  |  |
| :--- | :---: | :---: | :---: |
| Description | Height | Width | Depth |
| 8 Module | 215 mm | 215 mm | 100 mm |
| (1) Other size enclosures are available. Please contact sales for details |  |  |  |



## PV System

Main AC Isolator



## CE, SEMKO Certified

Dual Supply PV / Mains Supply Switch
Compact combined dual supply isolator for quick installation
Allows for the simple addition of a PV system into an existing installation

Enclosure:
IP40
ABS
4 Module
Secure Fit Screw Sealed Lid
Security Screw with Wire Lock OFF Option


4 Pole Mainswitch Isolator.
CE \& SEMKO Certified
EN 60947-3
100A AC-22A
4 Pole
Can be locked in the OFF Position

| Part Number | Description | Price | Per |
| :--- | :--- | :---: | :---: |
| EC4ACSW | 100 A 4 Pole |  |  |
|  | 2 Input Mainswitch / Isolator | $£ 27.50$ | 1 |

## PV System Main AC Isolator Enclosure Dimensions (mm)

| Description | Height | Width | Depth |
| :--- | :---: | :---: | :---: |
| 4 Module | 150 mm | 100 mm | 70 mm |



See pages 24-28 for SPD
(Surge protection devices)

## Combined AC \& DC PV Isolator Switches

## Photovoltaic Combined AC DC Switch



New Product

(1)

## curopa <br> components

2 Pole Mainswitch Isolator:
CE \& SEMKO Certified
EN 60947-3
40A AC-22A
2 Pole
Can be locked in the OFF Position

25A DC Switch:
CE Approved / TUV Certified / EN 60947-3
Can be locked in the OFF Position


Switch Rated at 1000 V
Enclosure:
IP40 / Metal Clad

| Part Number | Description | Price | Per |
| :--- | :--- | :---: | :---: |
| (1) LBACDC40/25ME | AC + DC Switch  <br>  $40 \mathrm{~A} / 25 \mathrm{~A}$ | $£ 100.00$ | 1 |
| (1) LBACDC40/25/25ME | $\mathrm{AC}+2 \mathrm{DC}$ Switches |  |  |
|  | $40 \mathrm{~A} / 25 \mathrm{~A}+25 \mathrm{~A}$ | $£ 155.00$ | 1 |

Combined AC \& DC PV Isolator Enclosure Dimensions (mm)

| Height | Width | Depth | Depth Including Switch |
| :---: | :---: | :---: | :---: |
| 240 mm | 240 mm | 90 mm | 115 mm |


$10 \times 38$ uR
(1)

String Fuses \& Fuse Holders Page 110-111

## Cam Switches

## 4 Hole Fixing

4 Hole Fixing 16 Amp (AC21A / AC1)


UL CSA \& CE approved
Degree of Protection: IP55 (From front) Operating temp $-25^{\circ} \mathrm{C}$ to $+55^{\circ} \mathrm{C} / 48 \times 48 \mathrm{~mm}$ bezels

| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :---: |
| TP1661002 | OFF-ON Switch 2 Pole | $£ 6.99$ | 1 |
| TP1661004 | OFF-ON Switch 4 Pole | $£ 9.29$ | 1 |
| TP1661006 | OFF-ON Switch 6 Pole | $£ 11.46$ | 1 |
| TP1661026 | 1-0-2 Switch 2 Pole | $£ 9.29$ | 1 |
| TP1661028 | 1-0-2 Switch 4 Pole | $£ 14.16$ | 1 |
| TP1661038 | 1-2 Switch 2 Pole | $£ 9.29$ | 1 |
| TP1661069 | 1-2-3 Switch 2 Pole | $£ 11.61$ | 1 |
| TP1661313RST | 3 Phase Voltmeter Switch | $£ 12.18$ | 1 |
| TP1661325 | 3 Phase + OFF Amm Sw | $£ 12.18$ | 1 |

## Single Hole Fixing

Single Hole Fixing 16 Amp (AC21A / AC1)


## UL CSA \& CE approved

Degree of Protection: IP65 (From front)
Operating temp $-25^{\circ} \mathrm{C}$ to $+55^{\circ} \mathrm{C} / 48 \times 48 \mathrm{~mm}$ bezels

| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :---: |
| TP1661002B19 | 16A OFF-ON Switch 2 Pole | $£ 9.03$ | 1 |
| TP1661026B19 | 16A 1-0-2 Switch 2 Pole | $£ 11.35$ | 1 |
| TP1661030B19 | 16A 1-0-2 Switch 6 Pole | $£ 20.12$ | 1 |

## (1) Europa Despatch Details



Keep up to date with the latest developments:
www.europacomponents.com

## Extended Safe Switch Range for 2015



Europa Safe Switch - A popular range of load break switches offering you greater choice and flexibility.
This fantastic range is available in three switch formats:
(1) Load Break Switches (160-1000A) 2 BS88 Switch Fuses (125-800A) 3 Changeover Switches (160-1000A)

A supporting range of terminal shroud sets, auxiliary contacts, neutral links, extended shafts and spare handles (including shafts) are also available to cater for a wide variety of applications.

The load break switches are available in either Europa's popular high quality IP65 steel enclosures, IP65 stainless steel enclosures or as a door interlock version.

Fantastic features include:
$\square$ IP65 steel or stainless steel enclosure $\quad$ Generous wiring space $\quad$ Top \& bottom gland plates on IP65 steel enclosures

- Shrouded \& fully rated neutral Link (where fitted)
- IP20 input terminal shrouds on enclosed versions BS88 fuses \& fuse shrouds fitted as standard on switch fuse models

Please contact sales for other amperages or switch applications.

## Quality Components at Competitive Prices

## Key Features of the Safe Switch Range



## 2015 Catalogue

## IP65 Metal Enclosed Door Interlocked Load Break Switches 160-1000A



## Bureau Veritas, KEMA Certified and CE Approved

EN 60947-3
Handle padlockable in the OFF position for up to 3 padlocks IP20 protection on input terminals
Top \& bottom gland plates / Fully rated neutral link (where fitted) Neutral switch contact - early make / late break (where fitted) Door interlock with defeat mechanism (for authorised personnel only) Removable door for easier installation / All AC ratings at 400 / 415V

3 Pole + Neutral Link Enclosed Load Break Switches (IP65)
Extended Range

| Part Number LB1603PNLME | Description 160A (AC-23) Enclosed 3P + Neutral Link Load Break Switch | Price <br> $£ 280.77$ | Per 1 |
| :---: | :---: | :---: | :---: |
| LB2003PNLME | 200A (AC-22) Enclosed 3P + Neutral Link Load Break Switch | $£ 332.87$ | 1 |
| LB2503PNLME | 250A (AC-22) Enclosed 3P + Neutral Link Load Break Switch | $£ 347.17$ | 1 |
| LB3153PNLME | 315A (AC-23) Enclosed 3P + Neutral Link Load Break Switch | $£ 502.48$ | 1 |
| LB4003PNLME | 400A (AC-23) Enclosed 3P + Neutral Link Load Break Switch | $£ 580.46$ | 1 |
| LB6303PNLME | 630A (AC-23) Enclosed 3P + Neutral Link Load Break Switch | $£ 867.46$ | 1 |
| LB8003PNLME | 800A (AC-22) Enclosed 3P + Neutral Link Load Break Switch | $£ 1320.52$ | 1 |
| LB10003PNLME | 1000A (AC-22) Enclosed 3P + Neutral Link Load Break Switch | $£ 1781.98$ | 1 |



3 Pole + Sw. Neutral Enclosed Load Break Switches (IP65)
Extended Range

| Part Number LB1603PSNME | Description 160A (AC-23) Enclosed 3P + Sw. Neutral Load Break Switch | Price $£ 280.77$ | Per 1 |
| :---: | :---: | :---: | :---: |
| LB2003PSNME | 200A (AC-22) Enclosed 3P + Sw. Neutral Load Break Switch | $£ 332.87$ | 1 |
| LB2503PSNME | 250A (AC-22) Enclosed 3P + Sw. Neutral Load Break Switch | $£ 347.17$ | 1 |
| LB3153PSNME | 315A (AC-23) Enclosed 3P + Sw. Neutral Load Break Switch | $£ 502.48$ | 1 |
| LB4003PSNME | 400A (AC-23) Enclosed 3P + Sw. Neutral Load Break Switch | $£ 580.46$ | 1 |
| LB6303PSNME | 630A (AC-23) Enclosed 3P + Sw. Neutral Load Break Switch | £867.46 | 1 |
| LB8003PSNME | 800A (AC-22) Enclosed 3P + Sw. Neutral Load Break Switch | $£ 1320.52$ | 1 |
| LB10003PSNME | 1000A (AC-22) Enclosed 3P + Sw. Neutral Load Break Switch | $£ 1781.98$ | 1 |

## (1) Metal Enclosure Load Break Switch Dimensions (mm)

| With Neutral Link | Switched Neutral | Height (mm) | Width (mm) | Depth (mm) | Depth inc. Handle (mm) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| LB1603PNLME | LB1603PSNME | 500 | 400 | 200 | 245 |
| LB2003PNLME | LB2003PSNME |  |  |  |  |
| LB2503PNLME | LB2503PSNME |  |  |  |  |
| LB3153PNLME | LB3153PSNME | 800 | 600 | 200 | 245 |
| LB4003PNLME | LB4003PSNME |  |  |  |  |
| LB6303PNLME | LB6303PSNME | 1000 | 800 | 300 | 360 |
| LB8003PNLME | LB8003PSNME |  |  |  |  |
| LB10003PNLME | LB10003PSNME | 1200 |  |  |  |

IP65 Stainless Steel Enclosed Door Interlocked Load Break Switches 160-250A

New Product


3 Pole + Neutral Link Enclosed Load Break Switches (IP65)

## Bureau Veritas, KEMA Certified and CE Approved

EN 60947-3
Handle padlockable in the OFF position for up to three padlocks Grade 304 Brushed Stainless Steel / IP20 protection on input terminals Fully rated neutral link (where fitted)
Neutral switch contact - early make / late break (where fitted)
Door interlock with defeat mechanism (for authorised personnel only)
Removable door for easier installation / All AC ratings at 400 / 415V

| Part Number | Description | Price | Per |
| :--- | :--- | :---: | :---: |
| LB1603PNLSS | 160A (AC-23) Enclosed 3P + <br>  <br>  <br> Neutral Link Load Break Switch | $£ 448.78$ | 1 |
| LB2003PNLSS | 200A (AC-22) Enclosed 3P + <br> Neutral Link Load Break Switch | $£ 473.52$ | 1 |
| LB2503PNLSS | 250A (AC-22) Enclosed 3P + <br>  | Neutral Link Load Break Switch | $£ 485.69$ |

3 Pole + Sw. Neutral Enclosed Load Break Switches (IP65)

| Part Number LB1603PSNSS | Description <br> 160A (AC-23) Enclosed 3P + <br> SW. Neutral Load Break Switch |  |  | Price$£ 448.78$ |  | Per $1$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| LB2003PSNSS | 200A (AC-22) Enclosed 3P + |  |  | $£ 473.52$ |  | 1 |
| LB2503PSNSS | 250A (AC-22) Enclosed 3P + |  |  | £485.69 |  | 1 |
| (1) Stainless Steel Enclosure Load Break Switch Dimensions (mm) |  |  |  |  |  |  |
| With Neutral Link | Switched Neutral | Height (mm) | Width (mm) | $\begin{aligned} & \text { Depth } \\ & (\mathrm{mm}) \end{aligned}$ |  | th inc. (mm) |
| LB1603PNLSS | LB1603PSNSS | 500 | 400 | 200 | 245 |  |
| LB2003PNLSS | LB2003PSNSS |  |  |  |  |  |
| LB2503PNLSS | LB2503PSNSS |  |  |  |  |  |


(i) 160-1000A Enclosed Load Break Switch Accessory Selection Table

| Part Number <br> (Enclosed) | Input Terminal <br> Shroud Sets | Output <br> Terminal <br> Shroud Sets | Auxiliary <br> Contact <br> 1NO \& 1NC | Auxiliary <br> Contact <br> 2NO \& 2NC |
| :---: | :---: | :---: | :---: | :---: |

3 Pole Load Break Switches

| LB1603PNLME | With Tunnel Terminals Shroud Sets Not Required |  | LBAC010 | LBAC020 |
| :---: | :---: | :---: | :---: | :---: |
| LB2003PNLME | LBTS010 | LBTS010 |  |  |
| LB2503PNLME |  |  |  |  |
| LB3153PNLME | LBTS020 | LBTS020 |  |  |
| LB4003PNLME | LBTS030 | LBTS030 |  |  |
| LB6303PNLME | LBTS040 | LBTS040 |  |  |
| LB8003PNLME |  |  |  |  |
| LB10003PNLME | LBTS160 | LBTS160 |  |  |
| 3 Pole + Switched Neutral Load Break Switches |  |  |  |  |
| LB1603PSNME | With Tunnel Terminals Shroud Sets Not Required |  | LBAC010 | LBAC020 |
| LB2003PSNME | LBTS010 | LBTS010 |  |  |
| LB2503PSNME |  |  |  |  |
| LB3153PSNME | LBTS020 | LBTS020 |  |  |
| LB4003PSNME | LBTS030 | LBTS030 |  |  |
| LB6303PSNME | LBTS040 | LBTS040 |  |  |
| LB8003PSNME |  |  |  |  |
| LB10003PSNME | LBTS160 | LBTS160 |  |  |

3 Pole + Neutral Link Stainless Steel Enclosed Load Break Switches

| LB1603PNLSS | With Tunnel Terminals Shroud Sets Not Required |  | LBAC010 | LBAC020 |
| :---: | :---: | :---: | :---: | :---: |
| LB2003PNLSS | LBTS010 | LBTS010 |  |  |
| LB2503PNLSS |  |  |  |  |
| 3 Pole + Sw. Neutral Stainless Steel Enclosed Load Break Switches |  |  |  |  |
| LB1603PSNSS | With Tunnel Terminals Shroud Sets Not Required |  | LBAC010 | LBAC020 |
| LB2003PSNSS | LBTS010 | LBTS010 |  |  |
| LB2503PSNSS |  |  |  |  |

## IP65 Metal Enclosed Door Interlocked Switch Fuses 125-800A

3 Pole + Neutral Link Enclosed BS88 Switch Fuses (IP65)


## Extended Range

ROHS
RoHS Compliant

KEMA Certified \& CE Approved
EN 60947-3
Handle padlockable in the OFF position for up to 3 padlocks IP20 protection on input terminals
Fuses fully isolated (top \& bottom) for safe replacement
Fuse covers fitted as standard / Supplied with fully rated fuses and input shrouds Neutral switch contact early make / late break (where fitted)
Fully rated neutral link (where fitted) / Top and bottom gland plates Door interlock with defeat mechanism (for authorised personnel only) Removable door for easier installation
All AC ratings at $400 / 415 \mathrm{~V}$

| Part Number | Description | Price | Per |
| :---: | :---: | :---: | :---: |
| LBF1253PNLME | 125A (AC-23) Enclosed 3P + Neutral Link BS88 Switch Fuse | £409.03 | 1 |
| LBF1603PNLME | 160A (AC-23) Enclosed 3P + Neutral Link BS88 Switch Fuse | $£ 521.74$ | 1 |
| LBF2003PNLME | 200A (AC-23) Enclosed 3P + Neutral Link BS88 Switch Fuse | $£ 544.45$ | 1 |
| LBF3153PNLME | 315A (AC-23) Enclosed 3P + Neutral Link BS88 Switch Fuse | £849.71 | 1 |
| LBF4003PNLME | 400A (AC-23) Enclosed 3P + Neutral Link BS88 Switch Fuse | £1046.48 | 1 |
| LBF6303PNLME | 630A (AC-23) Enclosed 3P + Neutral Link BS88 Switch Fuse | £1725.49 | 1 |
| LBF8003PNLME | 800A (AC-22) Enclosed 3P + Neutral Link BS88 Switch Fuse | $£ 2393.66$ | 1 |

3 Pole + Sw. Neutral Enclosed BS88 Switch Fuses (IP65)

| Part Number | Description | Price | Per |
| :--- | :--- | :--- | :---: |
| LBF1253PSNME | 125A (AC-23) Enclosed 3P + |  |  |
|  | Sw. Neutral BS88 Switch Fuse | $£ 457.25$ | 1 |
| LBF1603PSNME | 160A (AC-23) Enclosed 3P + |  |  |
|  | Sw. Neutral BS88 Switch Fuse | $£ 599.77$ | 1 |
| LBF2003PSNME | 200A (AC-23) Enclosed 3P + |  |  |
|  | Sw. Neutral BS88 Switch Fuse | $£ 637.84$ | 1 |
| LBF3153PSNME | 315A (AC-23) Enclosed 3P + |  |  |
|  | Sw. Neutral BS88 Switch Fuse | $£ 880.61$ | 1 |
| LBF4003PSNME | 400A (AC-23) Enclosed 3P + |  |  |
|  | Sw. Neutral BS88 Switch Fuse | $£ 1149.52$ | 1 |
| LBF6303PSNME | 630A (AC-23) Enclosed 3P + |  |  |
|  | Sw. Neutral BS88 Switch Fuse | $£ 1987.29$ | 1 |
| LBF8003PSNME | 800A (AC-22) Enclosed 3P + |  |  |
|  | Sw. Neutral BS88 Switch Fuse | $£ 2619.96$ | 1 |



KEMA Certified and CE Approved
EN 60947-3
Handle padlockable in the off position for up to three padlocks Grade 304 Brushed Stainless Steel / IP20 protection on input terminals Fuses fully isolated (top \& bottom) for safe replacement Fuse covers fitted as standard / Supplied with fully rated fuses Neutral switch contact early make / late break (where fitted) Fully rated neutral link (where fitted) Door interlock with defeat mechanism (for authorised personnel only) Removable door for easier installation All AC ratings at 400 / 415V

| Part Number | Description | Price | Per |
| :--- | :--- | :---: | :---: |
| LBF1603PNLSS | 160A (AC-23) Enclosed 3P + |  |  |
|  | Neutral Link BS88 Switch Fuse | $£ 766.45$ | 1 |
| LBF2003PNLSS | 200A (AC-23) Enclosed 3P + |  |  |
|  | Neutral Link BS88 Switch Fuse | $£ 781.32$ | 1 |

3 Pole + Sw. Neutral Enclosed BS88 Switch Fuses (IP65)

| Part Number <br> LBF1603PSNSS | Description <br> 160A (AC-23) Enclosed 3P + <br> Sw. Neutral BS88 Switch Fuse | Price | Per |
| :--- | :--- | :--- | :---: |
|  | £852.71 | 1 |  |
| LBF2003PSNSS | 200A (AC-23) Enclosed 3P + |  |  |
|  | Sw. Neutral BS88 Switch Fuse | $£ 892.66$ | 1 |

## Quality Components at Competitive Prices

(1) 125-800A BS88 Switch Fuse Enclosure Dimensions (mm)

| With Neutral Link | Switched Neutral | Height (mm) | Width (mm) | Depth (mm) | Depth inc. Handle (mm) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| BS88 Switch Fuses |  |  |  |  |  |
| LBF1253PNLME | LBF1253PSNME | 500 | 400 | 200 | 245 |
| LBF1603PNLME | LBF1603PSNME | 600 | 400 | 200 | 245 |
| LBF2003PNLME | LBF2003PSNME |  |  |  |  |
| LBF3153PNLME | LBF3153PSNME | 800 | 600 | 300 | 360 |
| LBF4003PNLME | LBF4003PSNME |  |  |  |  |
| LBF6303PNLME | LBF6303PSNME | 1000 | 800 | 300 | 360 |
| LBF8003PNLME | LBF8003PSNME |  |  |  |  |
| LBF1603PNLSS | LBF1603PSNS | 600 | 400 | 200 | 245 |
| LBF2003PNLSS | LBF2003PSNS |  |  |  |  |

## BS88 3 Pole + Neutral Link Switch Fuse

| LBF1253PNLME | With Tunnel Terminals Shroud Sets Not Required |  | LBAC050 | LBAC060 |
| :---: | :---: | :---: | :---: | :---: |
| LBF1603PNLME |  |  |  |  |
| LBF2003PNLME |  |  |  |  |
| LBF3153PNLME |  |  |  |  |
| LBF4003PNLME | LBTS080 | LBTS090 | LBACO10 | LBAC020 |
| LBF6303PNLME |  | STS120 |  |  |
| LBF8003PNLME |  |  |  |  |

BS88 3 Pole + Switched Neutral Switch Fuse

| LBF1253PSNME | With Tunnel Terminals <br> Shroud Sets Not Required |  |  | LBAC050 |
| :---: | :---: | :---: | :---: | :---: | LBAC060

BS88 3 Pole + Neutral Link Switch Fuse Stainless Steel Enclosure

| LBF1603PNLSS | LBTS050 | LBTS060 | LBAC010 | LBAC020 |
| :---: | :---: | :---: | :---: | :---: |
| LBF2003PNLSS |  |  |  |  |
| BS88 3 Pole + Switch Neutral Switch Fuse Stainless Steel Enclosure |  |  |  |  |
| LBF1603PSNSS | LBTS070 | LBTS070 | LBAC010 | LBAC020 |
| LBF2003PSNSS |  |  |  |  |

## IP65 Metal Enclosed Door Interlocked Changeover Switches 160-1000A

3 Pole + Sw. Neutral Enclosed Changeover Switches (IP65)


KEMA Certified \& CE Approved


Handle padlockable in the OFF position for up to 3 padlocks IP20 protection on input terminals
Break before make 3 position switch - centre OFF Neutral switch contact early make / late break / Top \& bottom gland plates Door interlock with defeat mechanism (for authorised personnel only) Removable door for easier installation / All AC switch ratings 400 / 415V

| Part Number LBC1603PSNME |  |  |  | Price Per |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 60A (AC-23) Enclosed 3P + <br> Sw. Neutral Changeover Switch |  |  | $£ 517.26$ | 1 |
| LBC2003PSNME | 200A (AC-22) Enclosed 3P + |  |  | $£ 614.12$ | 1 |
| LBC2503PSNME | $250 \mathrm{~A}(\mathrm{AC}-2$ <br> Sw. Neutral | Enclose | witch | $£ 710.31$ | 1 |
| LBC3153PSNME | 315A (AC-22) Enclosed 3P + |  |  | £955.89 | 1 |
| LBC4003PSNME | 400A (AC-2 <br> Sw. Neutral | Enclose | witch | $£ 1143.78$ | 1 |
| LBC6303PSNME | Sw. Neutral Changeover Switch |  |  | $£ 1545.98$ | 1 |
| LBC8003PSNME | 800A (AC-22) Enclosed 3P + Sw. Neutral Changeover Switch |  |  | $£ 1962.42$ | 1 |
| LBC10003PSNME |  |  |  | £3017.47 | 1 |
| (1) 160-1000A C | geover S | clo | nen | ns (mm) |  |
| Switched Neutral | Height (mm) | Width (mm) | $\begin{aligned} & \text { Depth } \\ & (\mathrm{mm}) \end{aligned}$ | Dept Handl | inc. (mm) |
| LBC1603PSNME |  |  |  |  |  |
| LBC2003PSNME | 500 | 400 | 200 | 26 |  |
| LBC2503PSNME |  |  |  |  |  |
| LBC3153PSNME | 800 | 600 |  |  |  |
| LBC4003PSNME | 800 | 600 |  |  |  |
| LBC6303PSNME | 1000 |  | 300 |  |  |
| LBC8003PSNME LBC10003PSNME | 1200 | 800 |  |  |  |


| (1) 160-1000A Changeover Switch Accessory Selection Table |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Part Number (Enclosed) | Input Terminal Shroud | Output Terminal Shroud | Aux. Contact 1NO \& 1NC | Aux. Contact $2 \mathrm{NO} \& 2 \mathrm{NC}$ |
| LBC1603PSNME | LBTS010 | LBTS010 | LBAC030 | LBAC040 |
| LBC2003PSNME |  |  |  |  |
| LBC2503PSNME |  |  |  |  |
| LBC3153PSNME | LBTS070 | LBTS140 | LBAC010 | LBAC020 |
| LBC4003PSNME |  |  |  |  |
| LBC6303PSNME | LBTS100 | LBTS150 |  |  |
| LBC8003PSNME |  |  |  |  |
| LBC10003PSNME | LBTS130 | LBTS170 |  |  |

2015 Catalogue

## Door Interlocked Load Break Switches 160-1000A



Bureau Veritas, KEMA Certified and CE Approved
EN 60947-3

## Extended Range

Supplied with IP65 door handle and shaft / Handle padlockable in the OFF position for up to 3 padlocks
Handle with defeat mechanism (for authorised personnel only) / Neutral switch contact early make / late break (where fitted)
Terminal shrouds supplied separately / All AC ratings 400 / 415V

| 3 Pole Door Interlocked Load Break Switches |  |  |  |
| :--- | :--- | :---: | :---: |
| Part Number | Description <br> 160A (AC-23) Door Interlock 3P <br> LBD1603P | Price | Per |
|  | Load Break Switch \& Handle | $£ 110.92$ | 1 |
| LBD2003P | 200A (AC-22) Door Interlock 3P <br> Load Break Switch \& Handle | $£ 129.55$ | 1 |
| LBD2503P | 250A (AC-22) Door Interlock 3P <br> Load Break Switch \& Handle | $£ 141.52$ | 1 |
| LBD3153P | 315A (AC-23) Door Interlock 3P <br> Load Break Switch \& Handle | $£ 190.98$ | 1 |
| LBD4003P | 400A (AC-23) Door Interlock 3P <br> Load Break Switch \& Handle | $£ 266.35$ | 1 |
| LBD6303P | 630A (AC-23) Door Interlock 3P <br> Load Break Switch \& Handle | $£ 321.65$ | 1 |
| LBD8003P | 800A (AC-22) Door Interlock 3P <br> Load Break Switch \& Handle | $£ 536.35$ | 1 |
| LBD10003P | 1000A (AC-22) Door Interlock 3P <br> Load Break Switch \& Handle | $£ 838.06$ | 1 |


| 3 Pole + Sw. Neutral Door Interlocked Load Break Switches |  |  |
| :---: | :---: | :---: |
| Part Number LBD1603PSN | Description Price | Per |
|  | 160A (AC-23) Door Interlock 3P + |  |
|  | SW. Neutral LB Switch \& Handle £119.28 | 1 |
| LBD2003PSN | 200A (AC-22) Door Interlock 3P + |  |
|  | SW. Neutral LB Switch \& Handle £138.83 | 1 |
| LBD2503PSN | 250A (AC-22) Door Interlock 3P + |  |
|  | SW. Neutral LB Switch \& Handle £151.22 | 1 |
| LBD3153PSN | 315A (AC-23) Door Interlock 3P + |  |
|  | SW. Neutral LB Switch \& Handle £203.35 | 1 |
| LBD4003PSN | 400A (AC-23) Door Interlock 3P + |  |
|  | SW. Neutral LB Switch \& Handle £282.81 | 1 |
| LBD6303PSN | 630A (AC-23) Door Interlock 3P + |  |
|  | SW. Neutral LB Switch \& Handle £345.09 | 1 |
| LBD8003PSN | 800A (AC-22) Door Interlock 3P + |  |
|  | SW. Neutral LB Switch \& Handle £568.78 | 1 |
| LBD10003PSN | 1000A (AC-22) Door Interlock 3P + |  |
|  | SW. Neutral LB Switch \& Handle £962.90 | 1 |

(1) 160-1000A Switch Accessory Selection Table

| Part Number (Door Interlock) | Input Terminal Shroud Sets | Output Terminal Shroud Sets | Auxiliary Contact $1 \mathrm{NO} \& 1 \mathrm{NC}$ | Auxiliary Contact 2NO \& 2NC |
| :---: | :---: | :---: | :---: | :---: |
| 3 Pole Load Break Switches |  |  |  |  |
| LBD1603P | With Tunnel Terminals Shroud Sets Not Required |  | LBAC010 | LBAC020 |
| LBD2003P | LBTS010 | LBTS010 |  |  |
| LBD2503P |  |  |  |  |
| LBD3153P | LBTS020 | LBTS020 |  |  |
| LBD4003P | LBTS030 | LBTS030 |  |  |
| LBD6303P | LBTS040 | LBTS040 |  |  |
| LBD8003P |  |  |  |  |
| LBD10003P | LBTS160 | LBTS160 |  |  |
| 3 Pole + Switched Neutral Load Break Switches |  |  |  |  |
| LBD1603PSN | With Tunnel Terminals Shroud Sets Not Required |  | LBAC010 | LBAC020 |
| LBD2003PSN | LBTS010 | LBTS010 |  |  |
| LBD2503PSN |  |  |  |  |
| LBD3153PSN | LBTS020 | LBTS020 |  |  |
| LBD4003PSN | LBTS030 | LBTS030 |  |  |
| LBD6303PSN | LBTS040 | LBTS040 |  |  |
| LBD8003PSN |  |  |  |  |
| LBD10003PSN | LBTS160 | LBTS160 |  |  |

## Door Interlocked BS88 Switch Fuses 125-800A



KEMA Certified and CE Approved
EN 60947-3
Supplied with IP65 door handle and shaft
Handle padlockable in the OFF position for up to 3 padlocks Handle with defeat mechanism (for authorised personnel only) Fuses fully isolated (top \& bottom) for safe replacement Fuse covers fitted as standard /
NB: Fuses supplied separately (Bolted Type)
Neutral switch contact early make / late break (where fitted)
Terminal shrouds supplied separately / All AC ratings 400 / 415V

3 Pole Door Interlocked BS88 Switch Fuses

| Part Number | Description | Price | Per |
| :---: | :---: | :---: | :---: |
| LBFD1253P | 125A (AC-23) Door Interlock 3P |  |  |
|  | BS88 Switch Fuse \& Handle | £196.25 | 1 |
| LBFD1603P | 160A (AC-23) Door Interlock 3P |  |  |
|  | BS88 Switch Fuse \& Handle | $£ 321.98$ | 1 |
| LBFD2003P | 200A (AC-23) Door Interlock 3P |  |  |
|  | BS88 Switch Fuse \& Handle | $£ 333.61$ | 1 |
| LBFD3153P | 315A (AC-23) Door Interlock 3P |  |  |
|  | BS88 Switch Fuse \& Handle | $£ 452.75$ | 1 |
| LBFD4003P | 400A (AC-23) Door Interlock 3P |  |  |
|  | BS88 Switch Fuse \& Handle | $£ 502.66$ | 1 |
| LBFD6303P | 630A (AC-23) Door Interlock 3P |  |  |
|  | BS88 Switch Fuse \& Handle | $£ 912.13$ | 1 |
| LBFD8003P | 800A (AC-22) Door Interlock 3P |  |  |
|  | BS88 Switch Fuse \& Handle | $£ 1086.62$ | 1 |

3 Pole + Sw. Neutral Door Interlocked BS88 Switch Fuses

| Part Number | Description | Price | Per |
| :--- | :--- | :--- | :--- |
| LBFD1253PSN | 125A (AC-23) Door Interlock 3P + Sw. Neutral |  |  |
|  | BS88 Switch Fuse \& Handle | $£ 249.68$ | 1 |
| LBFD1603PSN | 160A (AC-23) Door Interlock 3P + Sw. Neutral |  |  |
|  | BS88 S/Fuse \& Handle | $£ 402.36$ | 1 |
| LBFD2003PSN | 200A (AC-23) Door Interlock 3P + Sw. Neutral |  |  |
|  | BS88 S/Fuse \& Handle | $£ 409.13$ | 1 |
| LBFD3153PSN | 315A (AC-23) Door Interlock 3P + Sw. Neutral |  |  |
|  | BS88 S/Fuse \& Handle | $£ 527.63$ | 1 |
| LBFD4003PSN | 400A (AC-23) Door Interlock 3P + Sw. Neutral |  |  |
|  | BS88 S/Fuse \& Handle | $£ 557.67$ | 1 |
| LBFD6303PSN | 630A (AC-23) Door Interlock 3P + Sw. Neutral |  |  |
|  | BS88 S/Fuse \& Handle | $£ 1018.89$ | 1 |
| LBFD8003PSN | 800A (AC-22) Door Interlock 3P + Sw. Neutral |  |  |
|  | BS88 S/Fuse \& Handle | $£ 1216.15$ | 1 |

## Door Interlocked Changeover Switches 160-1000A

3 Pole + Sw. Neutral Door Interlocked Changeover Switches


Extended Range


KEMA Certified and CE Approved
EN 60947-3
Supplied with IP65 door handle and shaft Handle padlockable in the OFF position for up to 3 padlocks Handle with defeat mechanism (for authorised personnel only) Neutral switch contact early make / late break (where fitted)
Terminal shrouds supplied separately / All AC ratings 400 / 415V


## 2015 Catalogue

## Accessories for Safe Switch Range

## Terminal Shroud Sets for Safe Switch Range



To provide IP20 terminal protection on the input and output terminals Transparent terminal shrouds to assist in maintenance inspection

| Part Number © LBTS010 | Description | Price | Per |
| :---: | :---: | :---: | :---: |
|  | Shroud Set for LB200-250A |  |  |
|  | LBC160-250A 3P 3PSN (input / output) | $£ 6.78$ | 1 |
| LBTS020 | Shroud Set for LB315A |  |  |
|  | 3P 3PSN (input / output) | $£ 8.44$ | 1 |
| LBTS030 | Shroud Set for LB400A |  |  |
|  | 3P 3PSN (input / output) | £15.10 | 1 |
| (2) LBTS040 | Shroud Set for LB630-800A (input / output) | £10.40 | 1 |
| LBTS050 | Shroud Set for LBF160-200A |  |  |
|  | $3 P$ (input) | £10.77 | 1 |
| LBTS060 | Shroud Set for LBF160-200A |  |  |
|  | 3P (output) | £10.77 | 1 |
| LBTS070 ** | Shroud Set for LBF160-200A 3PSN |  |  |
|  | LBC315-400A (input) | £16.43 | 1 |
| (3) LBTS080 | Shroud Set for LBF315-400A |  |  |
|  | 3 P (input) | £23.75 | 1 |
| LBTS090 | Shroud Set for LBF315-400A |  |  |
|  | 3P (output) | £23.75 | 1 |
| (4) LBTS100 ** | Shroud Set for LBF315-400A 3PSN |  |  |
|  | LBC630-800A (input) | £29.19 | 1 |
| LBTS110 | Shroud Set for LBF630-800A |  |  |
|  | 3P (input) | £29.19 | 1 |
| LBTS120 | Shroud Set for LBF630-800A |  |  |
|  | 3P (output) | £29.19 | 1 |
| LBTS130 ${ }_{* *}^{*}$ | Shroud Set for LBF630-800A |  |  |
|  | 3PSN (input / output) | £31.73 | 1 |
| LBTS140 | Shroud Set for LBC315-400A |  |  |
|  | 3PSN (output) | £15.64 | 1 |
| LBTS150 | Shroud Set for LBC6300800A |  |  |
|  | 3PSN (output) | £25.41 | 1 |
| LBTS160 | Shroud Set for LB1000A (Input or output) | £14.55 | 1 |
| LBTS170 | Shroud Set for LBC1000A |  |  |
|  | (Output) | £30.85 | 1 |

* Shroud for LBF630-800A (input / output) is also suitable for the LBC1000A (input)
** NB: 2 sets of input terminal shrouds are required (input $1 \&$ input 2) for 315-1000A changeover switche

Auxiliary Contacts for Safe Switch Range


Complete with fixings
16A resitive loads / 4A inductive loads at 240 V AC

| Part Number LBAC010 | Description <br> 1 N/O + 1 N/C Aux. Contact for LB,LBF 160-800A, LBC 315-800A | Price <br> £11.48 | Per <br> 1 |
| :---: | :---: | :---: | :---: |
| LBAC020 | 2 N/O + 2 N/C Aux. Contact for LB,LBF 160-800A, LBC 315-800A | £28.28 | 1 |
| LBAC030 | 1 N/O + 1 N/C Aux. Contact for LBC 160-250A | £12.31 | 1 |
| LBAC040 | 2 N/O + 2 N/C Aux. Contact for LBC 160-250A | $£ 32.06$ | 1 |
| LBAC050 | 1 N/O + 1 N/C Aux. Contact for LBF125A | $£ 15.98$ | 1 |
| LBAC060 | 2 N/O + 2 N/C Aux. Contact for LBF125A | £26.61 | 1 |

LBC160-250A Bridging Links for Safe Switch Range


Bridging links can be connected to either side of the changeover switch Bridging links are not required for switches rated at 315-800A as these come complete with internal bridging links
Rated up to 250A

| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :---: |
| LBCBL010 | Bridging Links LBC 160-250A | $£ 33.19$ | 1 |

NB: Both enclosed and door interlock LBC160-250A switches are supplied with Bridging Links as standard.

## Quality Components at Competitive Prices

## Neutral Links for Safe Switch Range



New Product

## CE Approved / 100\% Fully Rated

IEC 61439
Conductor: Tin Plated High Conductivity Copper
Support: Glass Reinforced Polyamide 6.6
Equipment Voltage Ue: 690V
Insulation Voltage Ui: 690V
Impulse Voltage Uimp: 8kV
Easy to use link disconnect
UL 94-VO shroud covers available for added protection

| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :---: |
| LBNL125A | Neutral Link 125A | $£ 20.92$ | 1 |
| LBNL250A | Neutral Link 250A | $£ 21.70$ | 1 |
| LBNL400A | Neutral Link 400A | $£ 45.00$ | 1 |
| LBNL630A | Neutral Link 630A | $£ 64.29$ | 1 |
| LBNL800A | Neutral Link 800A | $£ 128.57$ | 1 |
| LBNL1000A | Neutral Link 1000A | $£ 188.06$ | 1 |

Neutral Link Terminal Shrouds for Safe Switch Range


CE Approved
Neutral Link Terminal Shrouds
Material: Polyamide 6
Flammability: UL94-VO
IP Rating: Neutral Link Plus Shroud IP2X

| Part Number | Description | Price | Per |
| :--- | :--- | :---: | :---: |
| LBNLTS250A | Shroud for 250A <br> Neutral Link Terminal | $£ 12.86$ | 1 |
| LBNLTS630A | Shroud for 400-630A <br> Neutral Link Terminal | $£ 32.14$ | 1 |
| LBNLTS800A | Shroud for 800-1000A <br> Neutral Link Terminal | $£ 36.97$ | 1 |

## Extended Shafts for Safe Switch Range



Specially designed for use with the Safe Switch Range of Door Interlocked Load Break, BS88 Switch Fuse and Changeover Switches. These extended shafts assist in the installation of the switches into deep enclosures and panel boards.

| Part Number | Description | Price | Per |
| :--- | :--- | :---: | :---: |
| LBES010 | 250mm Shaft for LB \& LBC160-250A | $£ 11.13$ | 1 |
| LBES020 | 387 mm Shaft for LB, LBF125 \& LBC160-250A $£ 12.30$ | 1 |  |
| LBES030 | 376 mm Shaft for LB \& LBC315-400A | $£ 13.65$ | 1 |
| LBES040 | 536 mm Shaft for LB \& LBC315-400A | $£ 16.96$ | 1 |
| LBES050 | 345 mm Shaft for LB \& LBC630-1000A | $£ 18.70$ | 1 |
| LBES060 | 535 mm Shaft for LB \& LBC630-1000A | $£ 18.78$ | 1 |

Spare Blue \& White Handle \& Shaft for Safe Switch Range


IP65 Handle padlockable in the OFF position for up to three padlocks Handle with defeat mechanism (for authorised personnel only)

| Part Number | Description | Price | Per |
| :---: | :---: | :---: | :---: |
| LBPHBW010 | For LB160-250A | £27.86 | 1 |
| LBPHBW020 | For LB315-400A + LBF160-200A | $£ 52.98$ | 1 |
| LBPHBW030 | For LB630-800A | $£ 55.38$ | 1 |
| LBPHBW040 | For LBF315-400A | $£ 60.22$ | 1 |
| LBPHBW050 | For LBF630-800A | £53.65 | 1 |
| LBPHBW060 | For LBC160-250A | $£ 29.28$ | 1 |
| LBPHBW070 | For LBC315-400A | $£ 51.07$ | 1 |
| LBPHBW080 | For LBC630-800A | £56.02 | 1 |
| LBPHBW090 | For LB1000A | £61.08 | 1 |
| LBPHBW100 | For LBF125A | $£ 38.74$ | 1 |
| LBPHBW110 | For LBC1000A | £95.34 | 1 |
| NB: All safe Switches are supplied with blue / white handles and shafts as standard. |  |  |  |
| Red and Yellow Handle and Shaft for Safe Switch Range |  |  |  |
|  |  |  |  |
|  |  |  |  |

IP65 Handle padlockable in the OFF position for up to three padlocks Handle with defeat mechanism (for authorised personnel only)

| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :---: |
| LBPHRY010 | For LB160-250A | $£ 31.16$ | 1 |
| LBPHRY020 | For LB315-400A \& LBF160-200A | $£ 58.06$ | 1 |
| LBPHRY030 | For LB630-800A | $£ 63.17$ | 1 |
| LBPHRY040 | For LBF315-400A | $£ 66.74$ | 1 |
| LBPHRY050 | For LBF630-800A | $£ 63.17$ | 1 |
| LBPHRY090 | For LB1000A | $£ 67.47$ | 1 |
| LBPHRY100 | For LBF125A | $£ 43.97$ | 1 |



LED BA9 Bayonet (10 x 23mm)


AC / DC
IP55 Rated / Long Life: 30,000 Hours
Operating Temperature: $-25^{\circ} \mathrm{C}$ to $+55^{\circ} \mathrm{C}$

| Part Number | Description | Price | Per |
| :--- | :--- | :--- | :---: |
| BA9LED1B | 24V White 2 Chip LED BA9 | $£ 1.50$ | 1 |
| BA9LED1F | 110V White 4 Chip LED BA9 | $£ 1.50$ | 1 |
| BA9LED3F | 110V Green 2 Chip LED BA9 | $£ 1.25$ | 1 |
| BA9LED1P | 230V White 4 Chip LED BA9 | $£ 1.50$ | 1 |
| BA9LED3P | 230V Green 2 Chip LED BA9 | $£ 1.25$ | 1 |
| BA9LED3B | 24V Green 1 Chip LED BA9 | $£ 1.25$ | 1 |
| BA9LED4B | 24V Red 2 Chip LED BA9 | $£ 1.25$ | 1 |
| BA9LED4F | 110V Red 2 Chip LED BA9 | $£ 1.25$ | 1 |
| BA9LED4P | 230V Red 2 Chip LED BA9 | $£ 1.25$ | 1 |
| BA9LED5B | 24V Amber 2 Chip LED BA9 | $£ 1.25$ | 1 |
| BA9LED5F | 110V Amber 2 Chip LED BA9 | $£ 1.25$ | 1 |
| BA9LED5P | 230V Amber 2 Chip LED BA9 | $£ 1.25$ | 1 |
| BA9LED6B | 24V Blue 2 Chip LED BA9 | $£ 1.25$ | 1 |
| BA9LED6F | 110V Blue 2 Chip LED BA9 | $£ 1.25$ | 1 |
| BA9LED6P | 230V Blue 2 Chip LED BA9 | $£ 1.25$ | 1 |

Lamp Holders (BA9 Type) + Collar


UL and CSA Approved
Includes mounting collar
NB: LP6 \& LP7 lamp holders are suitable for use with illuminated push buttons and selector switches

| Part Number | Description | Price | Per |
| :--- | :--- | :---: | :---: |
| (1) RAS-LP3 | Transformer Type 110V >6V | $£ 8.94$ | 1 |
| (2 RAS-LP4 | Transformer Type 240V >6V | $£ 8.94$ | 1 |
| 3 RAS-LP6 | Direct Connected (Any Voltage) | $£ 2.61$ | 1 |
| 4 RAS-LP7 | Diode \& Series Resistor 230>110V | $£ 2.79$ | 1 |

Lamp Lens Only


UL and CSA Approved

| Part Number | Description | Price | Per |
| :--- | :--- | :---: | :---: |
| RAS-LP001 | White | $£ 1.00$ | 1 |
| RAS-LP003 | Green | $£ 1.00$ | 1 |
| RAS-LP004 | Red | $£ 1.00$ | 1 |
| RAS-LP005 | Amber | $£ 1.00$ | 1 |
| RAS-LP006 | Blue | $£ 1.00$ | 1 |
| RAS-LP007 | Clear | $£ 1.00$ | 1 |

Lamp Head Only


UL and CSA Approved

| Part Number | Description | Price | Per |
| :--- | :--- | :--- | :---: |
| RAS-LP01 | White | $£ 1.53$ | 1 |
| RAS-LP03 | Green | $£ 1.53$ | 1 |
| RAS-LP04 | Red | $£ 1.53$ | 1 |
| RAS-LP05 | Amber | $£ 1.53$ | 1 |
| RAS-LP06 | Blue | $£ 1.53$ | 1 |
| RAS-LP07 | Clear | $£ 1.53$ | 1 |

## Quality Components at Competitive Prices

## 16mm LED Pilot Lamps (IP65)



CE Approved / EN 60947
Multi segment / Long life: 30,000 hours / Low temperature 24V \& 110V AC/DC / 230V AC / Complete with locking nut Current Rating 20 mA

| Part Number | Description <br> White 24V | Price | Per |
| :--- | :--- | :---: | :---: |
| RAD161B | G3.55 | 1 |  |
| RAD163B | Green 24V | $£ 3.55$ | 1 |
| RAD164B | Red 24V | $£ 3.55$ | 1 |
| RAD165B | Amber 24V | $£ 3.55$ | 1 |
| RAD166B | Blue 24V | $£ 3.55$ | 1 |
| RAD161F | White 110V | $£ 3.55$ | 1 |
| RAD163F | Green 110V | $£ 3.55$ | 1 |
| RAD164F | Red 110V | $£ 3.55$ | 1 |
| RAD165F | Amber 110V | $£ 3.55$ | 1 |
| RAD166F | Blue 110V | $£ 3.55$ | 1 |
| RAD161P | White 230V | $£ 3.55$ | 1 |
| RAD163P | Green 230V | $£ 3.55$ | 1 |
| RAD164P | Red 230V | $£ 3.55$ | 1 |
| RAD165P | Amber 230V | $£ 3.55$ | 1 |
| RAD166P | Blue 230V |  |  |

22mm LED Pilot Lamps (IP65)
Uuro ez


CE Approved / EN 60947
Multi segment / Long life: 30,000 hours / Low temperature 24 V \& 110V AC/DC / 230V AC / Complete with locking nut Current Rating 20mA

| Part Number | Description | Price | Per |
| :--- | :--- | :--- | :---: |
| RAD221B | White 24V | $£ 3.55$ | 1 |
| RAD223B | Green 24V | $£ 3.55$ | 1 |
| RAD224B | Red 24V | $£ 3.55$ | 1 |
| RAD225B | Amber 24V | $£ 3.55$ | 1 |
| RAD226B | Blue 24V | $£ 3.55$ | 1 |
| RAD221F | White 110V | $£ 3.55$ | 1 |
| RAD223F | Green 110V | $£ 3.55$ | 1 |
| RAD224F | Red 110V | $£ 3.55$ | 1 |
| RAD225F | Amber 110V | $£ 3.55$ | 1 |
| RAD226F | Blue 110V | $£ 3.55$ | 1 |
| RAD221P | White 230V | $£ 3.55$ | 1 |
| RAD223P | Green 230V | $£ 3.55$ | 1 |
| RAD224P | Red 230V | $£ 3.55$ | 1 |
| RAD225P | Amber 230V | $£ 3.55$ | 1 |
| RAD226P | Blue 230V | $£ 6.50$ | 1 |
| RAD-ADD22 | Spanner (tightening tool) |  |  |

22mm LED With Lamp Test Facility (IP65)


CE Approved / EN 60947
Multi segment / Long life: 30,000 hours / Low temperature 24 V \& 110V AC/DC / 230V AC / Complete with locking nut Current Rating 20 mA / (See page 67 for EP-FAA enclosures)

| Part Number | Description | Price | Per |
| :--- | :--- | :--- | :---: |
| RADT221B | White (with test) 24V | $£ 6.85$ | 1 |
| RADT223B | Green (with test) 24V | $£ 6.85$ | 1 |
| RADT224B | Red (with test) 24V | $£ 6.85$ | 1 |
| RADT225B | Amber (with test) 24V | $£ 6.85$ | 1 |
| RADT226B | Blue (with test) 24V | $£ 6.85$ | 1 |
| RADT221F | White (with test) 110V | $£ 6.85$ | 1 |
| RADT223F | Green (with test) 110V | $£ 6.85$ | 1 |
| RADT224F | Red (with test) 110V | $£ 6.85$ | 1 |
| RADT225F | Amber (with test) 110V | $£ 6.85$ | 1 |
| RADT226F | Blue (with test) 110V | $£ 6.85$ | 1 |
| RADT221P | White (with test) 230V | $£ 6.85$ | 1 |
| RADT223P | Green (with test) 230V | $£ 6.85$ | 1 |
| RADT224P | Red (with test) 230V | $£ 6.85$ | 1 |
| RADT225P | Amber (with test) 230V | $£ 6.85$ | 1 |
| RADT226P | Blue (with test) 230V | $£ 6.85$ | 1 |

This range of LEDs offers a Lamp Test (or push to test) facility enabling individual or groups of lamps to be tested from a single push button by the application of a test voltage without interrupting normal operation.

LED with Sounder Sound Output (((80DB))) Uropes


CE Approved / EN 60947

Flashing LED / Multi Segment / Long Life: 30,000 hours Low Temperature
24V \& 110V AC/DC / 230V AC / Complete With Locking Nut
Current Rating 20mA / (See page 67 for EP-FAA enclosures)

| Part Number | Description | Price | Per |
| :--- | :--- | :---: | :---: |
| RAD22SM4B | Red 24V AC/DC LED Buzzer | $£ 6.75$ | 1 |
| RAD22SM5B | Amber 24V AC/DC LED Buzzer | $£ 6.75$ | 1 |
| RAD22SM6B | Blue 24V AC/DC LED Buzzer | $£ 6.75$ | 1 |
| RAD22SM4F | Red 110V AC/DC LED Buzzer | $£ 6.75$ | 1 |
| RAD22SM5F | Amber 110V AC/DC LED Buzzer | $£ 6.75$ | 1 |
| RAD22SM6F | Blue 110V AC/DC LED Buzzer | $£ 6.75$ | 1 |
| RAD22SM4P | Red 230V AC LED Buzzer | $£ 6.75$ | 1 |
| RAD22SM5P | Amber 230V AC LED Buzzer | $£ 6.75$ | 1 |
| RAD22SM6P | Blue 230V AC LED Buzzer | $£ 6.75$ | 1 |



## Integrated 22.5mm Push Buttons and Switches



Integrated 22.5 mm Flush Push Buttons


## UL Approved

IP65 Rating / IP20 Terminal Protection / Current Rating 6A at 240V AC Compact Mono Block Design / Quick Installation
Complete Assembly (no need to order contact block \& collar separately)
Panel Mount (or to be used with EP-FAA enclosures only).

| Part Number | Description | Price | Per |
| :--- | :--- | :---: | :---: |
| EE1GFD1 | Green 1 N/O Contact | $£ 3.80$ | 1 |
| EE2RFD1 | Red 1 N/C Contact | $£ 3.80$ | 1 |
| EE3AFD1 | Amber 1 N/O + 1 N/C Contact | $£ 5.50$ | 1 |
| EE3RFD1 | Red 1 N/O + 1 N/C Contact | $£ 5.50$ | 1 |
| EE3CFD1 | Black 1 N/O + 1 N/C Contact | $£ 5.50$ | 1 |
| EE3GFD1 | Green 1 N/O + 1 N/C Contact | $£ 5.50$ | 1 |
| EE4GFD1 | Green 2 N/O Contacts | $£ 5.50$ | 1 |
| EE4AFD1 | Amber 2 N/O Contacts | $£ 5.50$ | 1 |
| EE4CFD1 | Black 2 N/O Contacts | $£ 5.50$ | 1 |
| EE5RFD1 | Red 2 N/C Contacts | $£ 5.50$ | 1 |

## Quality Components at Competitive Prices

## Integrated 22.5mm Projecting Push Buttons



Extended Range

## UL Approved

IP65 Rating / IP20 Terminal Protection / Current Rating 6A at 240V AC Compact Mono Block Design / Quick Installation
Complete Assembly (no need to order contact block \& collar separately) Panel Mount (or to be used with EP-FAA enclosures only)

| Part Number | Description | Price | Per |
| :--- | :--- | :--- | :---: |
| EE1GPD1 | Green 1 N/O Contact | $£ 3.80$ | 1 |
| EE2RPD1 | Red 1 N/C Contact | $£ 3.80$ | 1 |
| EE2GPD1 | Green 1 N/C Contact | $£ 3.80$ | 1 |
| EE3RPD1 | Red 1 N/O + 1 N/C Contact | $£ 5.50$ | 1 |
| EE3GPD1 | Green 1 N/O + 1 N/C Contact | $£ 5.50$ | 1 |
| EE3APD1 | Amber 1 N/O + 1 N/C Contact | $£ 5.50$ | 1 |
| EE3CPD1 | Black 1 N/O + 1 N/C Contact | $£ 5.50$ | 1 |
| EE5RPD1 | Red 2 N/C Contacts | $£ 5.50$ | 1 |

## Integrated 22.5mm Selector Switches with Standard Handle



## UL Approved

IP65 Rating / IP20 Terminal Protection / Current Rating 6A at 240V AC Compact Mono Block Design / Quick Installation
Complete Assembly (no need to order contact block and collar separately) Panel Mount (or to be used with EP-FAA enclosures only).

## 2 Position Selector Switches

| Part Number | Description | Price | Per |
| :--- | :--- | :---: | :---: |
| EE3CSK1 | 2 Pos Black 1 N/O + 1 N/C Contact | $£ 8.81$ | 1 |
| EE3CSI1 | 2 Pos Spring Ret Black 1 N/O |  |  |
|  | +1 N/C Contact | $£ 8.81$ | 1 |
| EE4CSK1 | 2 Pos Black 2 N/O Contacts | $£ 8.81$ | 1 |
| EE4CSI1 | 2 Pos Spring Ret Black 2 N/O Contacts | $£ 8.81$ | 1 |
| EE5CSK1 | 2 Pos Black 2 N/C Contacts | $£ 8.81$ | 1 |
| EE5CSI1 | 2 Pos Spring Ret Black 2 N/C Contacts | $£ 8.81$ | 1 |

## 3 Position Selector Switches

| Part Number | Description | Price | Per |
| :--- | :--- | :--- | :---: |
| EE3CSL1 | 3 Pos Black 1 N/O + 1 N/C Contact | $£ 9.21$ | 1 |
| EE3CSJ1 | 3 Pos Spring Ret Black 1 N/O |  |  |
|  | +1 N/C Contact | $£ 9.21$ | 1 |
| EE4CSL1 | 3 Pos Black 2 N/O Contacts | $£ 9.21$ | 1 |
| EE4CSJ1 | 3 Pos Spring Ret Black 2 N/O Contacts | $£ 9.21$ | 1 |
| EE5CSL1 | 3 Pos Black 2 N/C Contacts | $£ 9.21$ | 1 |
| EE5CSJ1 | 3 Pos Spring Ret Black 2 N/C Contacts | $£ 9.21$ | 1 |

Integrated 22.5mm Key Operated Selector Switches


## UL Approved

IP65 Rating / IP20 Terminal Protection / Current Rating 6A at 240V AC Compact Mono Block Design / Quick Installation
Complete Assembly (no need to order contact block and collar separately) Panel Mount (or to be used with EP-FAA enclosures only).

## 2 Position Key Operated Selector Switches

| Part Number <br> EE3CKK1 | Description <br> 2 Pos BBlack 1 N/O | Price | Per |
| :--- | :--- | :---: | :---: |
|  | 1 N/C Contact | $£ 10.79$ | 1 |
| EE3CKI1 | 2 Pos Spring Ret Black 1 N/O |  |  |
|  | + 1 N/C Contact | $£ 10.79$ | 1 |
| EE4CKK1 | 2 Pos Black 2 N/O Contacts | $£ 10.79$ | 1 |
| EE4CKI1 | 2 Pos Spring Ret Black | $£ 10.79$ | 1 |
|  | 2 N/O Contacts | $£ 10.79$ | 1 |
| EE5CKK1 | 2 Pos Black 2 N/C Contacts |  |  |
| EE5CKI1 | 2 Pos Spring Ret Black | $£ 10.79$ | 1 |
|  | 2 N/C Contacts | $£ 1.54$ | 1 |
| EEKEY010 | Spare Key for EE3-5 |  |  |

## 3 Position Key Operated Selector Switches

| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :---: |
| EE3CKL1 | 3 Pos 1 N/O + 1 N/C Contact | $£ 11.05$ | 1 |
| EE3CKJ1 | 3 Pos Spring Ret Black 1 N/O |  |  |
|  | +1 N/C Contact | $£ 11.05$ | 1 |
| EE4CKL1 | 3 Pos Black 2 N/O Contacts | $£ 11.05$ | 1 |
| EE4CKJ1 | 3 Pos Black 2 N/O Contacts | $£ 11.05$ | 1 |
| EE5CKL1 | 3 Pos Black 2 N/C Contacts | $£ 11.05$ | 1 |
| EE5CKJ1 | 3 Pos Spring Ret Black |  |  |
|  | 2 N/C Contacts | $£ 11.05$ | 1 |
| EEKEY010 | Spare Key for EE3-5 | $£ 1.54$ | 1 |

Empty Control Station Enclosures for Integrated 22.5mm Push Buttons


IP65 Rating / Quick Installation
For use with integrated 22.5 mm switches
(i) Legend plates for EP enclosures available on request

| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :---: |
| EP1FAA | P/Button Stn 1 Pos Empty | $£ 8.93$ | 1 |
| EP2FAA | P/Button Stn 2 Pos Empty | $£ 9.98$ | 1 |
| EP3FAA | P/Button Stn 3 Pos Empty | $£ 11.03$ | 1 |

## 2015 Catalogue

Flush
Push Buttons


Standard Flush Push Button Head + Collar (IP65)


* Please Note: Both RB2 parts do NOT include the mounting collar.

Booted Push Button + Collar (IP65)

(i) See pages 72-73 for

Control Stations \& Empty Enclosures

## Illuminated Push Button Head Only (IP65)



UL \& CSA Approved (IP65)
Collar is supplied with the lamp holder (sold separately)

| Part Number | Description | Price | Per |
| :--- | :--- | :---: | :---: |
| RAS-PB131 | White | $£ 1.90$ | 1 |
| RAS-PB133 | Green | $£ 1.90$ | 1 |
| RAS-PB134 | Red | $£ 1.90$ | 1 |
| RAS-PB135 | Amber | $£ 1.90$ | 1 |
| RAS-PB136 | Blue | $£ 1.90$ | 1 |
| RAS-PB137 | Clear | $£ 1.90$ | 1 |

(i) Please refer to our range of BA9 bulbs on page 64

Twin Push Button (IP40)


Plastic Push Buttons + Mounting Clip (IP65)


| Part Number | Description | Price | Per |
| :--- | :--- | :---: | :---: |
| RP2 BA1 | Flush P/B Head White | $£ 2.50$ | 1 |
| RP2 BA2 | Flush P/B Head Black | $£ 2.50$ | 1 |
| RP2 BA3 | Flush P/B Head Green | $£ 2.50$ | 1 |
| RP2 BA4 | Flush P/B Head Red | $£ 2.50$ | 1 |
| RP2 BA5 | Flush P/B Head Yellow | $£ 2.50$ | 1 |
| RP2 BA6 | Flush P/B Head Blue | $£ 2.50$ | 1 |
| RP2-BL4 | Projecting P/B Head Red | $£ 3.98$ | 1 |

## Quality Components at Competitive Prices

## Plastic Weather Proof Push Button (IP67)



NB: Part number RAP2-BHZ (mounting clip) is also required. See Page 71

The weather proof range is suitable for panel mount or for use in plastic control stations.

| Part Number | Description | Price | Per |
| :--- | :--- | :--- | :---: |
| RAP2-BA1 | White | $£ 4.37$ | 1 |
| RAP2-BA2 | Black | $£ 4.37$ | 1 |
| RAP2-BA3 | Green | $£ 4.37$ | 1 |
| RAP2-BA334 | White with Arrow | $£ 4.37$ | 1 |
| RAP2-BA335 | Black with Arrow | $£ 4.37$ | 1 |
| RAP2-BA4 | Red | $£ 4.37$ | 1 |
| RAP2-BA5 | Yellow | $£ 4.37$ | 1 |
| RAP2-BA6 | Blue | $£ 4.37$ | 1 |

## Projecting Push-Buttons



## Selector Switches

Plastic Key Operated Selector Switches + Mounting Clip


| Part Number | Description | Price | Per |
| :--- | :--- | :---: | :---: |
| RP2-BG0 | 3 Pos Key Rem 3 Pos | $£ 6.99$ | 1 |
| RP2-BG2 | 2 Pos Key Rem Left Pos | $£ 6.74$ | 1 |
| RP2-BG3 | 3 Pos Key Rem Centre Only | $£ 6.99$ | 1 |
| RP2-BG4 | 2 Pos Key Rem 2 Pos | $£ 6.74$ | 1 |
| RP2-BG5 | 3 Pos Key Rem L \& R Pos | $£ 6.99$ | 1 |



UL and CSA Approved
IP65 Rated

| Part Number | Description | Price | Per |
| :--- | :--- | :---: | :---: |
| RCAS-BG6 | Spring Return from Right | $£ 6.55$ | 1 |
| RCAS-BG7 | Spring Return from Left \& Right | $£ 6.78$ | 1 |
| RCAS-SWK2 | 2 Pos Key Rem Centre Off Pos | $£ 6.55$ | 1 |
| RCAS-SWK2RS | 2 Pos Key Rem 2 Pos | $£ 6.55$ | 1 |
| RCAS-SWK3 | 3 Pos Key Rem Centre Off Pos | $£ 6.78$ | 1 |
| RCAS-SWK3RS | 3 Pos Key Rem 3 Pos | $£ 6.78$ | 1 |

Standard Handle Selector Switches + Collar (IP65)


UL and CSA Approved
IP65 Rated

| Part Number | Description | Price | Per |
| :--- | :--- | :--- | :---: |
| RCAS-SW2 | 2 Pos Stay Put | $£ 4.75$ | 1 |
| RCAS-SW3 | 3 Pos Stay Put | $£ 5.11$ | 1 |
| RCAS-SWL2 | 2 Pos Stay Put Long Handle | $£ 4.97$ | 1 |
| RCAS-SWL3 | 3 Pos Stay Put Long Handle | $£ 5.22$ | 1 |
| RCAS-SWR2 | Centre off / Spring Return from Right | $£ 4.75$ | 1 |
| RCAS-SWR3 | Centre off Spring Return from |  |  |
|  | Left \& Right | $£ 5.11$ | 1 |
| RCAS-SWRL2 | Centre off / Spring Return from |  |  |
|  | Right (Long Handle) | $£ 5.91$ | 1 |
| RCAS-SWRL3 |  <br> Right (Long Handle) |  |  |
|  | Rig1 |  |  |

## 2015 Catalogue

Weather Proof Stay Put Selector Switches + Mounting Clip (IP67)

Illuminated Stay Put Selector Switches (IP65)

UL and CSA Approved
IP65 Rated

| Part Number | Description | Price | Per |
| :--- | :--- | :---: | :---: |
| RB2-BK123 | 2 Position Green | $£ 4.75$ | 1 |
| RB2-BK124 | 2 Position Red | $£ 4.75$ | 1 |
| RB2-BK125 | 2 Position Amber | $£ 4.75$ | 1 |
| RB2-BK133 | 3 Position Green | $£ 5.17$ | 1 |
| RB2-BK134 | 3 Position Red | $£ 5.17$ | 1 |
| RB2-BK135 | 3 Position Amber | $£ 5.17$ | 1 |

NB: Collar is supplied with the lamp holder (sold separately - see page 64)

## Accessories for 22mm Push Buttons

```
Spare Key (No 455)
Spare Key (No 455)
```



|  |  |  |  |
| :--- | :--- | :--- | :---: |
| Part Number | Description | Price | Per |
| RAP2-BD2 | 2 Position | $£ 4.60$ | 1 |
| RAP2-BD3 | 3 Position | $£ 4.60$ | 1 |

 Compliant


## Legend Plates



UL and CSA Approved
Suitable for use with all 22 mm diameter push buttons

| Part Number | Description | Price | Per |
| :--- | :--- | :--- | :---: |
| RB2-PY2303 | Start | $£ 0.95$ | 1 |
| RB2-PY2304 | Stop | $£ 0.95$ | 1 |
| RB2-PY2305 | Forward | $£ 0.95$ | 1 |
| RB2-PY2306 | Reverse | $£ 0.95$ | 1 |
| RB2-PY2307 | Up | $£ 0.95$ | 1 |
| RB2-PY2308 | Down | $£ 0.95$ | 1 |
| RB2-PY2311 | On | $£ 0.95$ | 1 |
| RB2-PY2312 | Off | $£ 0.95$ | 1 |
| RB2-PY2313 | Open | $£ 0.95$ | 1 |
| RB2-PY2314 | Close | $£ 0.95$ | 1 |
| RB2-PY2315 | Auto | $£ 0.95$ | 1 |
| RB2-PY2316 | Hand | $£ 0.95$ | 1 |
| RB2-PY2323 | Reset | $£ 0.95$ | 1 |
| RB2-PY2336 | Off On | $£ 0.95$ | 1 |
| RB2-PY2337 | Stop Start | $£ 0.95$ | 1 |
| RB2-PY2338 | Up Down | $£ 0.95$ | 1 |
| RB2-PY2350 | L1 | $£ 0.95$ | 1 |
| RB2-PY2351 | L2 | $£ 0.95$ | 1 |
| RB2-PY2352 | L3 | $£ 0.95$ | 1 |
| RB2-PY2353 | G1 N G2 | $£ 0.95$ | 1 |
| RB2-PY2354 | Man Auto (left \& right position) | $£ 0.95$ | 1 |
| RB2-PY2356 | Ready | $£ 0.95$ | 1 |
| RB2-PY2357 | Trip | $£ 0.95$ | 1 |
| RB2-PY2358 | Gen Supply | $£ 0.95$ | 1 |
| RB2-PY2359 | Lamp Test | $£ 0.95$ | 1 |
| RB2-PY2364 | Auto-Hand | $£ 0.95$ | 1 |
| RB2-PY2385 | Hand Off Auto | $£ 0.95$ | 1 |
| RB2-PY3301 | Change Over | $£ 0.95$ | 1 |
| RB2-PY3302 | Black Arrow Up | $£ 1.12$ | 1 |
| RB2-PY3303 | White Arrow Down |  |  |

Mounting Collar


UL and CSA Approved

| Part Number | Description | Price | Per |
| :--- | :--- | :--- | :---: |
| RAS-FB | Mounting Collar | $£ 0.88$ | 1 |

## Quality Components at Competitive Prices

## Mounting Clip



For use with the RAP2 range of IP67 weather proof plastic Push Buttons.

| Part Number | Description | Price | Per |
| :--- | :--- | :--- | :---: |
| RAP2-BHZ | Mounting Clip | $£ 0.43$ | 1 |

Auxiliary Contact Blocks


UL and CSA Approved
Rated 240 V at 10A

| /O Green N/C Red |  |  |  |
| :---: | :---: | :---: | :---: |
| Part Number | Description |  |  |
| (1) RAS-BCBNC | N/C Back Mounting for Plastic Control Stations | £1.62 | 1 |
| (2) RAS-BCBNO | N/O Back Mounting for Plastic Control Stations | £1.62 | 1 |
| (3) RAS-CBNC | N/C | £1.62 | 1 |
| (4) RAS-CBNO | N/O | £1.62 | 1 |

When assembling control stations: (See page 73)
■ Plastic enclosures - use back mounted contact blocks (RAS-BCBNO or RAS-BCBNC) - Metal enclosures - use the standard contact blocks (RAS-CBNO or RAS-CBNC)

## Mushroom Head Push Button

40 mm Black Mushroom Head (Non Latching) (IP65)

## Emergency Stops



Plastic Emergency Stop Buttons (Latching) (IP65)


UL and CSA Approved
IP65 Rated / 40mm mushroom head
When fitting into plastic control stations use back mounted contact blocks.
Mounting clip required for panel use.

| Part Number | Description | Price | Per |
| :--- | :--- | :--- | :---: |
| (1) RP2-ES14 | Key Release (Plastic Body) | $£ 8.26$ | 1 |
| (2 RP2-BS54 | Twist Release (Plastic Body) | $£ 3.96$ | 1 |



Manufactured by RAAS Controls
UL \& CSA Approved

| Part Number | Description | Price | Per |
| :--- | :--- | :--- | :---: |
| RAS-ES54B | Spring Return | $£ 3.49$ | 1 |

## 2015 Catalogue

Plastic Boxed Emergency Stop Stations (IP65)


UL and CSA Approved
IP65 Rated / Rated up to 240V at 10A

Part Number
(1) RCAS-ESB141NC
(2) RCAS-ESB541NC

Description

4 RCAS-ESBT42NC Pull Release $+2 N / C$

|  | Price | Per |
| :---: | :---: | :---: |
| N/C | $£ 15.35$ | 1 |
| 1N/C | $£ 12.34$ | 1 |
| 1N/C | $£ 12.34$ | 1 |
| N/C | $£ 14.84$ | 1 |

Metal Boxed Emergency Stop Stations (IP65)


UL and CSA Approved
IP65 Rated / Rated up to 240 V at 10A

| Part Number | Description | Price | Per |
| :--- | :---: | :---: | :---: |
| (1) RM1BS142 | Key Release + 1 N/C | $£ 40.50$ | 1 |
| (2 RM1BS542 | Twist Release + 1 N/C | $£ 35.62$ | 1 |

Pre-assembled Control Stations
1 Position Plastic (IP65)


UL and CSA Approved
IP65 Rated

| Part Number | Description | Price | Per |
| :--- | :--- | :---: | :---: |
| (1) RC1PBG4 | Key On / Off + 1N/O | $£ 11.21$ | 1 |
| (2 RC1PG | Green $+1 \mathrm{~N} / \mathrm{O}$ | $£ 10.75$ | 1 |
| (3 RC1PR | Red $+1 \mathrm{~N} / \mathrm{C}$ | $£ 10.75$ | 1 |

1 Position Metal (IP65)


2 Position Metal (IP65)


UL and CSA Approved IP65 Rated

Part Number
(2) RM2GG
(3) RM2GR

Price Per
(3) Green/Green + 2N/O Green/Red + 1N/O+1NC

## 3 Position Plastic (IP65)



UL and CSA Approved
IP65 Rated

| Part Number | Description | Price | Per |
| :--- | :--- | :---: | :---: |
| © RC3PGRG | Green/Red/Green $+2 \mathrm{~N} / \mathrm{O}+1 \mathrm{~N} / \mathrm{C}$ | $£ 21.27$ | 1 |
| © RC3PWBS | Black/White/SW2 $+2 \mathrm{~N} / \mathrm{O}+1 \mathrm{~N} / \mathrm{C}$ | $£ 24.02$ | 1 |
| © RC3PWRB | White/Red/Black +2N/O+1N/C | $£ 21.27$ | 1 |

## 3 Position Metal (IP65)



UL and CSA Approved
IP65 Rated
Part Number
Description
Green/Red/Green 2N/O+1N/C


RM3GRG

## Price Per

Empty Control Station Enclosures
Plastic Empty Control Stations (IP65)


UL and CSA Approved
IP65 Rated / for Customer Assembly

| Part Number | Description | Price | Per |
| :--- | :--- | :---: | :---: |
| (1) RC1P | 1 Hole | $£ 7.72$ | 1 |
| ( RC1PY | 1 Hole (Yellow Lid) | $£ 7.72$ | 1 |
| 3 RC2P | 2 Hole | $£ 7.96$ | 1 |
| 4 RC3P | 3 Hole | $£ 9.28$ | 1 |
| © RC4P | 4 Hole | $£ 10.56$ | 1 |

Metal Empty Control Stations (IP65)
$\qquad$



UL and CSA Approved
IP65 Rated / for Customer Assembly

| Part Number | Description | Price | Per |
| :--- | :--- | :---: | :---: |
| (1) RC-1M | 1 Hole | $£ 15.76$ | 1 |
| ( RC-1MY | 1 Hole (Yellow Lid) | $£ 16.28$ | 1 |
| 3 RC-2M | 2 Hole | $£ 16.96$ | 1 |
| 4 RC-3M | 3 Hole | $£ 18.60$ | 1 |
| ( RC-4M | 4 Hole | $£ 20.50$ | 1 |

Metal Empty Control Stations with Shroud (IP65)


CE Approved
Complete with protective shroud to guard against accidental operation of the switch. (IP65 when fully sealed). PG $16 \times 1$ Cable entry (on top).

| Part Number | Description |  | Price | Per |
| :--- | :--- | :--- | ---: | :---: |
| RC-1MS | 1 Hole H: $72 \times$ W: $72 \times$ D: 57 mm | $£ 21.40$ | 1 |  |
| RC-2MS | 2 Hole H: $112 \times$ W: $72 \times$ D: 57 mm | $£ 24.52$ | 1 |  |
| RC-3MS | 3 Hole H: $142 \times$ W: $72 \times$ D: 57 mm | $£ 27.60$ | 1 |  |

## Part Selection for Control Station Assembly:

Plastic Empty Enclosures: Use with back mounting contact blocks RAS-BCBNO or RAS-BCBNC. Only suitable for use with plastic flush push buttons and selector switches.

Metal Empty Enclosures: Use with front mounting contact blocks RAS-CBNO or RAS-CBNC. Both the metal flush push buttons \& the plastic range can be used (the RAP2-BHZ clip will be required for plastic buttons).

For dimensions of control station enclosures please see page 128

components


Control Relays (AC)
Control Relays (Ith: 10A)


CE, EN 60947-4-1


NB: The control relays are compatible with the TA1 and TA8 range of front and side mounting auxiliary blocks.

| Part Number | Description | Price | Per |
| :--- | :--- | :---: | :---: |
| TCA2-DN22B7 | 2N/O + 2N/C 24V AC | $£ 17.76$ | 1 |
| TCA2-DN22E7 | 2N/O + 2N/C 48V AC | $£ 17.76$ | 1 |
| TCA2-DN22F7 | 2N/O + 2N/C 110V AC | $£ 17.76$ | 1 |
| TCA2-DN22P7 | 2N/O + 2N/C 230V AC | $£ 17.76$ | 1 |
| TCA2-DN31B7 | 3N/O + 1N/C 24V AC | $£ 17.76$ | 1 |
| TCA2-DN31E7 | 3N/O + 1N/C 48V AC | $£ 17.76$ | 1 |
| TCA2-DN31F7 | 3N/O + 1N/C 110V AC | $£ 17.76$ | 1 |
| TCA2-DN31P7 | 3N/O + 1N/C 230V AC | $£ 17.76$ | 1 |
| TCA2-DN40B7 | 4N/O 24V AC | $£ 17.76$ | 1 |
| TCA2-DN40E7 | 4N/O 48V AC | $£ 17.76$ | 1 |
| TCA2-DN40F7 | 4N/O 110V AC | $£ 17.76$ | 1 |
| TCA2-DN40P7 | 4N/O 230V AC | $£ 17.76$ | 1 |

## TC1 3 Pole



## Contactors with AC Coils

## 4kW 9A AC3 (25A AC1) 3 Pole

Made in India CE, CSA, UL Listed, EN 60947-4-1
Maximum Rated Operational Voltage 690V

| Part Number | Description | Price | Per |
| :--- | :--- | :---: | :---: |
| TC1-D0901B7 | 24V AC 1N/C Aux | $£ 16.18$ | 1 |
| TC1-D0901E7 | 48V AC 1N/C Aux | $£ 16.18$ | 1 |
| TC1-D0901F7 | 110V AC 1N/C Aux | $£ 16.18$ | 1 |
| TC1-D0901P7 | 230V AC 1N/C Aux | $£ 16.18$ | 1 |
| TC1-D0901N7 | 415V AC 1N/C Aux | $£ 16.18$ | 1 |
| TC1-D0910B7 | 24V AC 1N/O Aux | $£ 16.18$ | 1 |
| TC1-D0910E7 | 48V AC 1N/O Aux | $£ 16.18$ | 1 |
| TC1-D0910F7 | 110V AC 1N/O Aux | $£ 16.18$ | 1 |
| TC1-D0910P7 | 230V AC 1N/O Aux | $£ 16.18$ | 1 |
| TC1-D0910N7 | 415V AC 1N/O Aux | $£ 16.18$ | 1 |

See page 80 for Spare (AC) coils TX1D**7

* $24 \mathrm{~V}, 48 \mathrm{~V}, 110 \mathrm{~V}, 230 \mathrm{~V}, 415 \mathrm{~V}$ \& 380 V


## 5.5 kW 12 A AC3 (25A AC1) 3 Pole

Made in India CE, CSA, UL Listed, EN 60947-4-1 Maximum Rated Operational Voltage 690V

| Part Number | Description | Price | Per |
| :--- | :--- | :---: | :---: |
| TC1-D1201B7 | 24V AC 1N/C Aux | $£ 18.63$ | 1 |
| TC1-D1201E7 | 48V AC 1N/C Aux | $£ 18.63$ | 1 |
| TC1-D1201F7 | 110V AC 1N/C Aux | $£ 18.63$ | 1 |
| TC1-D1201P7 | 230V AC 1N/C Aux | $£ 18.63$ | 1 |
| TC1-D1201N7 | 415V AC 1N/C Aux | $£ 18.63$ | 1 |
| TC1-D1210B7 | 24V AC 1N/O Aux | $£ 18.63$ | 1 |
| TC1-D1210E7 | 48V AC 1N/O Aux | $£ 18.63$ | 1 |
| TC1-D1210F7 | 110V AC 1N/O Aux | $£ 18.63$ | 1 |
| TC1-D1210P7 | 230V AC 1N/O Aux | $£ 18.63$ | 1 |
| TC1-D1210N7 | 415V AC 1N/O Aux | $£ 18.63$ | 1 |

9kW 18A AC3 (32A AC1) 3 Pole

Made in India CE, CSA, UL Listed, EN 60947-4-1
Maximum Rated Operational Voltage 690V

| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :---: |
| TC1-D1801B7 | 24V AC 1N/C Aux | $£ 23.06$ | 1 |
| TC1-D1801E7 | 48V AC 1N/C Aux | $£ 23.06$ | 1 |
| TC1-D1801F7 | 110V AC 1N/C Aux | $£ 23.06$ | 1 |
| TC1-D1801P7 | 230V AC 1N/C Aux | $£ 23.06$ | 1 |
| TC1-D1801N7 | 415V AC 1N/C Aux | $£ 23.06$ | 1 |
| TC1-D1810B7 | 24V AC 1N/O Aux | $£ 23.06$ | 1 |
| TC1-D1810E7 | 48V AC 1N/O Aux | $£ 23.06$ | 1 |
| TC1-D1810F7 | 110V AC 1N/O Aux | $£ 23.06$ | 1 |
| TC1-D1810P7 | 230V AC 1N/O Aux | $£ 23.06$ | 1 |
| TC1-D1810N7 | 415V AC 1N/O Aux | $£ 23.06$ | 1 |

11kW 25A AC3 (40A AC1) 3 Pole

Made in India CE, CSA, UL Listed, EN 60947-4-1
Maximum Rated Operational Voltage 690V

| Part Number | Description | Price | Per |
| :--- | :--- | :---: | :---: |
| TC1-D2501B7 | 24V AC 1N/C Aux | $£ 31.86$ | 1 |
| TC1-D2501F7 | 110V AC 1N/C Aux | $£ 31.86$ | 1 |
| TC1-D2501P7 | 230V AC 1N/C Aux | $£ 31.86$ | 1 |
| TC1-D2501N7 | 415V AC 1N/C Aux | $£ 31.86$ | 1 |
| TC1-D2510B7 | 24V AC 1N/O Aux | $£ 31.86$ | 1 |
| TC1-D2510E7 | 48V AC 1N/O Aux | $£ 31.86$ | 1 |
| TC1-D2510F7 | 110V AC 1N/O Aux | $£ 31.86$ | 1 |
| TC1-D2510P7 | 230V AC 1N/O Aux | $£ 31.86$ | 1 |
| TC1-D2510N7 | 415V AC 1N/O Aux | $£ 31.86$ | 1 |

## (1) Contactor Loads



AC3 $=$ Motor Load (Inductive)
AC1 = Heating Load (Resistive)
(Standard Lighting)

View our contactor heating and lighting guide pages on 132-135 or
at: www.europacomponents.com Tecnical help

## 2015 Catalogue



Average AC Coil Consumption $50 / 60 \mathrm{~Hz}$

| Contactor $50 / 60 \mathrm{~Hz}$ | TCA2 Control Relay | TC1-D09 to D18 | TC1-D25 to D38 | TC1-D40 to D95 |
| :--- | :---: | :---: | :---: | :---: |
| Pull In / Holding | $70 / 8 \mathrm{VA}$ | $70 / 8 \mathrm{VA}$ | $100 / 8.5 \mathrm{VA}$ | $245 / 26 \mathrm{VA}$ |



## 15kW 32A AC3 (50A AC1) 3 Pole

Made in India CE, CSA, UL Listed, EN 60947-4-1
Maximum Rated Operational Voltage 690V

| Part Number | Description | Price | Per |
| :--- | :--- | :---: | :---: |
| TC1-D3201B7 | 24V AC 1N/C Aux | $£ 44.64$ | 1 |
| TC1-D3201E7 | 48V AC 1N/C Aux | $£ 44.64$ | 1 |
| TC1-D3201F7 | 110V AC 1N/C Aux | $£ 44.64$ | 1 |
| TC1-D3201P7 | 230V AC 1N/C Aux | $£ 44.64$ | 1 |
| TC1-D3201N7 | 415V AC 1N/C Aux | $£ 44.64$ | 1 |
| TC1-D3210B7 | 24V AC 1N/O Aux | $£ 44.64$ | 1 |
| TC1-D3210E7 | 48V AC 1N/O Aux | $£ 44.64$ | 1 |
| TC1-D3210F7 | 110V AC 1N/O Aux | $£ 44.64$ | 1 |
| TC1-D3210P7 | 230V AC 1N/O Aux | $£ 44.64$ | 1 |
| TC1-D3210N7 | 415V AC 1N/O Aux | $£ 44.64$ | 1 |

## 18.5kW 38A AC3 (50A AC1) 3 Pole

Made in India CE, CSA, UL Listed, EN 60947-4-1
Maximum Rated Operational Voltage 690V

| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :---: |
| TC1-D3801B7 | 24V AC 1N/C Aux | $£ 60.00$ | 1 |
| TC1-D3801F7 | 110V AC 1N/C Aux | $£ 60.00$ | 1 |
| TC1-D3801P7 | 230V AC 1N/C Aux | $£ 60.00$ | 1 |
| TC1-D3801N7 | 415V AC 1N/C Aux | $£ 60.00$ | 1 |
| TC1-D3810B7 | 24V AC 1N/O Aux | $£ 60.00$ | 1 |
| TC1-D3810F7 | 110V AC 1N/O Aux | $£ 60.00$ | 1 |
| TC1-D3810P7 | 230V AC 1N/O Aux | $£ 60.00$ | 1 |
| TC1-D3810N7 | 415V AC 1N/O Aux | $£ 60.00$ | 1 |

## 22kW 40A AC3 (60A AC1) 3 Pole

Made in India CE, CSA, UL Listed, EN 60947-4-1 Maximum Rated Operational Voltage 690V

| Part Number | Description | Price | Per |
| :--- | :--- | :---: | :---: |
| TC1-D4011B7 | 24V AC 1N/O + 1N/C Aux | $£ 64.00$ | 1 |
| TC1-D4011E7 | 48V AC 1N/O + 1N/C Aux | $£ 64.00$ | 1 |
| TC1-D4011F7 | 110V AC 1N/O + 1N/C Aux | $£ 64.00$ | 1 |
| TC1-D4011P7 | 230V AC | 1N/O + 1N/C Aux | $£ 64.00$ |
| TC1-D4011N7 | 415V AC | $1 \mathrm{~N} / \mathrm{O}+1 \mathrm{~N} / \mathrm{C}$ Aux | $£ 64.00$ |

## 25kW 50A AC3 (80A AC1) 3 Pole

Made in India CE, CSA, UL Listed, EN 60947-4-1
Maximum Rated Operational Voltage 690V

| Part Number | Description | Price | Per |
| :--- | :--- | :---: | :---: |
| TC1-D5011B7 | 24V AC 1N/O + 1N/C Aux | $£ 75.66$ | 1 |
| TC1-D5011E7 | $48 \mathrm{~V} \mathrm{AC} \mathrm{1N/O} \mathrm{+} \mathrm{1N/C} \mathrm{Aux}$ | $£ 75.66$ | 1 |
| TC1-D5011F7 | 110V AC 1N/O + 1N/C Aux | $£ 75.66$ | 1 |
| TC1-D5011P7 | 230V AC 1N/O + 1N/C Aux | $£ 75.66$ | 1 |
| TC1-D5011N7 | 415V AC 1N/O + 1N/C Aux | $£ 75.66$ | 1 |

37 kW 65A AC3 (80A AC1) 3 Pole

Made in India CE, CSA, UL Listed, EN 60947-4-1 Maximum Rated Operational Voltage 690V

| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :---: |
| TC1-D6511B7 | 24V AC 1N/O + 1N/C Aux | $£ 102.14$ | 1 |
| TC1-D6511E7 | 48V AC 1N/O + 1N/C Aux | $£ 102.14$ | 1 |
| TC1-D6511F7 | 110V AC 1N/O + 1N/C Aux | $£ 102.14$ | 1 |
| TC1-D6511P7 | 230V AC | $1 N / O+1 N / C ~ A u x$ | $£ 102.14$ |
| TC1-D6511N7 | 415V AC | 1 N/O + 1N/C Aux | $£ 102.14$ |

## 45kW 80A AC3 (125A AC1) 3 Pole

Made in India CE, CSA, UL Listed, EN 60947-4-1 Maximum Rated Operational Voltage 690V

| Part Number | Description | Price | Per |
| :---: | :---: | :---: | :---: |
| TC1-D8011B7 | 24 V AC 1N/O + 1N/C Aux | £130.00 | 1 |
| TC1-D8011E7 | 48 V AC 1N/O + 1N/C Aux | £130.00 | 1 |
| TC1-D8011F7 | 110V AC 1N/O + 1N/C Aux | £130.00 | 1 |
| TC1-D8011P7 | 230 V AC 1N/O + 1N/C Aux | £130.00 | 1 |
| TC1-D8011N7 | 415 V AC 1N/O + 1N/C Aux | £130.00 | 1 |

Mounting for TC1 \& TP1 Contactors

[^3]

## Quality Components at Competitive Prices

## 45kW 95A AC3 (125A AC1) 3 Pole

Made in India CE, CSA, UL Listed, EN 60947-4-1
Maximum Rated Operational Voltage 690V

| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :---: |
| TC1-D9511B7 | 24V AC 1N/O + 1N/C Aux | $£ 155.00$ | 1 |
| TC1-D9511F7 | 110V AC 1N/O + 1N/C Aux | $£ 155.00$ | 1 |
| TC1-D9511P7 | 230V AC | 1N/O + 1N/C Aux | $£ 155.00$ |
| TC1-D9511N7 | 415V AC | $1 \mathrm{~N} / \mathrm{O}+1 \mathrm{~N} / \mathrm{C} \mathrm{Aux}$ | $£ 155.00$ |



4kW 9A AC3 (25A AC1) 3 Pole

Made in India CE, CSA, UL Listed, EN 60947-4-1 Maximum Rated Operational Voltage 690V

| Part Number | Description | Price | Per |
| :--- | :--- | :---: | :---: |
| TP1-D0901JD | 12V DC 1N/C Aux | $£ 32.00$ | 1 |
| TP1-D0901BD | 24V DC 1N/C Aux | $£ 32.00$ | 1 |
| TP1-D0901ED | 48V DC 1N/C Aux | $£ 32.00$ | 1 |
| TP1-D0901FD | 110V DC 1N/C Aux | $£ 32.00$ | 1 |
| TP1-D0910JD | 12V DC 1N/O Aux | $£ 32.00$ | 1 |
| TP1-D0910BD | 24V DC 1N/O Aux | $£ 32.00$ | 1 |
| TP1-D0910ED | 48V DC 1N/O Aux | $£ 32.00$ | 1 |
| TP1-D0910FD | 110V DC 1N/O Aux | $£ 32.00$ | 1 |

## 5.5kW 12A AC3 (25A AC1) 3 Pole

| Made in India CE, CSA, UL Listed, EN 60947-4-1 <br> Maximum Rated Operational Voltage 690V |  |  |  |
| :--- | :--- | ---: | :---: |
|  |  |  |  |
| Part Number | Description | Price | Per |
| TP1-D1201JD | 12V DC 1N/C Aux | $£ 35.00$ | 1 |
| TP1-D1201BD | 24V DC 1N/C Aux | $£ 35.00$ | 1 |
| TP1-D1201ED | 48V DC 1N/C Aux | $£ 35.00$ | 1 |
| TP1-D1201FD | 110V DC 1N/C Aux | 1 |  |
| TP1-D1210JD | 12V DC 1N/O Aux | $£ 35.00$ | 1 |
| TP1-D1210BD | 24V DC 1N/O Aux | $£ 35.00$ | 1 |
| TP1-D1210ED | 48V DC 1N/O Aux | $£ 35.00$ | 1 |
| TP1-D1210FD | 110V DC 1N/O Aux | $£ 35.00$ | 1 |

## 9kW 18A AC3 (32A AC1) 3 Pole

Made in India CE, CSA, UL Listed, EN 60947-4-1
Maximum Rated Operational Voltage 690V

| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :---: |
| TP1-D1801JD | 12V DC 1N/C Aux | $£ 45.00$ | 1 |
| TP1-D1801BD | 24V DC 1N/C Aux | $£ 45.00$ | 1 |
| TP1-D1801ED | 48V DC 1N/C Aux | $£ 45.00$ | 1 |
| TP1-D1801FD | 110V DC 1N/C Aux | $£ 45.00$ | 1 |
| TP1-D1810JD | 12V DC 1N/O Aux | $£ 45.00$ | 1 |
| TP1-D1810BD | 24V DC 1N/O Aux | $£ 45.00$ | 1 |
| TP1-D1810ED | 48V DC 1N/O Aux | $£ 45.00$ | 1 |
| TP1-D1810FD | 110V DC 1N/O Aux | $£ 45.00$ | 1 |

## 11kW 25A AC3 (40A AC1) 3 Pole

Made in India CE, CSA, UL Listed, EN 60947-4-1
Maximum Rated Operational Voltage 690V

| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :---: |
| TP1-D2501JD | 12V DC 1N/C Aux | $£ 65.00$ | 1 |
| TP1-D2501BD | 24V DC 1N/C Aux | $£ 65.00$ | 1 |
| TP1-D2501ED | 48V DC 1N/C Aux | $£ 65.00$ | 1 |
| TP1-D2501FD | 110V DC 1N/C Aux | $£ 65.00$ | 1 |
| TP1-D2510JD | 12V DC 1N/O Aux | $£ 65.00$ | 1 |
| TP1-D2510BD | 24V DC 1N/O Aux | $£ 65.00$ | 1 |
| TP1-D2510ED | 48V DC 1N/O Aux | $£ 65.00$ | 1 |
| TP1-D2510FD | 110V DC 1N/O Aux | $£ 65.00$ | 1 |

## 15kW 32A AC3 (50A AC1) 3 Pole

Made in India CE, CSA, UL Listed, EN 60947-4-1
Maximum Rated Operational Voltage 690V

| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :---: |
| TP1-D3201JD | 12V DC 1N/C Aux | $£ 90.00$ | 1 |
| TP1-D3201BD | 24V DC 1N/C Aux | $£ 90.00$ | 1 |
| TP1-D3201ED | 48V DC 1N/C Aux | $£ 90.00$ | 1 |
| TP1-D3201FD | 110V DC 1N/C Aux | $£ 90.00$ | 1 |
| TP1-D3210JD | 12V DC 1N/O Aux | $£ 90.00$ | 1 |
| TP1-D3210BD | 24V DC 1N/O Aux | $£ 90.00$ | 1 |
| TP1-D3210ED | 48V DC 1N/O Aux | $£ 90.00$ | 1 |
| TP1-D3210FD | 110V DC 1N/O Aux | $£ 90.00$ | 1 |

## 22kW 40A AC3 (60A AC1) 3 Pole

Made in India CE, CSA, UL Listed, EN 60947-4-1
Maximum Rated Operational Voltage 690V

| Part Number | Description | Price | Per |
| :---: | :---: | :---: | :---: |
| TP1-D4011JD | 12 V DC 1N/O + 1N/C Aux | £115.00 | 1 |
| TP1-D4011BD | 24 V DC 1N/O + 1N/C Aux | £115.00 | 1 |
| TP1-D4011ED | 48 V DC 1N/O + 1N/C Aux | £115.00 | 1 |
| TP1-D4011FD | 110 V DC 1N/O + 1N/C Aux | £115.00 | 1 |

See pages 80-81 for spare (DC) coils TX \& LX $12 \mathrm{~V}, 24 \mathrm{~V}, 48 \mathrm{~V}, 110 \mathrm{~V}$

## 25kW 50A AC3 (80A AC1) 3 Pole

Made in India CE, CSA, UL Listed, EN 60947-4-1 Maximum Rated Operational Voltage 690V

| Part Number | Description | Price | Per |
| :--- | :--- | :--- | :---: |
| TP1-D5011JD | 12V DC 1N/O + 1N/C Aux | $£ 150.00$ | 1 |
| TP1-D5011BD | 24V DC 1N/O + 1N/C Aux | $£ 150.00$ | 1 |
| TP1-D5011ED | 48V DC 1N/O + 1N/C Aux | $£ 150.00$ | 1 |
| TP1-D5011FD | 110V DC 1N/O + 1N/C Aux | $£ 150.00$ | 1 |

37kW 65A AC3 (80A AC1) 3 Pole

Made in India CE, CSA, UL Listed, EN 60947-4-1 Maximum Rated Operational Voltage 690V

| Part Number | Description | Price | Per |
| :---: | :---: | :---: | :---: |
| TP1-D6511JD | 12V DC 1N/O + 1N/C Aux | £175.00 | 1 |
| TP1-D6511BD | 24V DC 1N/O + 1N/C Aux | £175.00 | 1 |
| TP1-D6511ED | 48 V DC 1N/O + 1N/C Aux | £175.00 | 1 |
| TP1-D6511FD | 110 V DC 1N/O + 1N/C Aux | £175.00 | 1 |

45kW 80 A AC3 (125A AC1) 3 Pole

Made in India CE, CSA, UL Listed, EN 60947-4-1
Maximum Rated Operational Voltage 690V

| Part Number | Description |  | Price | Per |
| :---: | :---: | :---: | :---: | :---: |
| TP1-D8011JD | 12V DC 1N/O + 1N/C Aux |  | £200.00 | 1 |
| TP1-D8011BD | 24 V DC 1N/O + 1N/C Aux |  | £200.00 | 1 |
| TP1-D8011ED | 48 V DC 1N/O + 1N/C Aux |  | £200.00 | 1 |
| TP1-D8011FD | 110V DC 1N/O + 1N/C Aux |  | $£ 200.00$ | 1 |
| Average DC Coil Consumption |  |  |  |  |
| DC Contactor | TP1-D09 to D18 | TP1-D25 to D38 | TP1-D40 | D80 |
| Pull In / Holding | $9 / 9 W$ | 11 / 11W | $22 / 2$ |  |



| Amp | Height | 3 Pole <br> Width | 4 Pole <br> Width | Depth AC | Depth DC |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 9-12A | 74 mm | 45 mm | 45 mm | 80 mm | 115 mm |
| 18A | 74 mm | 45 mm | - | 85 mm | 120 mm |
| 25A | 84 mm | 56 mm | 56 mm | 93 mm | 130 mm |
| 32A | 84 mm | 56 mm | - | 98 mm | 135 mm |
| 38A | 84 mm | 56 mm | - | 98 mm | 135 mm |
| 40-65A | 127 mm | 75 mm | 85 mm | 114 mm | 171 mm |
| 80A | 127 mm | 85 mm | 96 mm | 125 mm | 181 mm |
| 95A | 127 mm | 85 mm | - | 125 mm | - |

## TC1 4 Pole

## Contactors with AC Coils

Made in India CE, CSA, UL Listed, EN 60947-4-1 Maximum Rated Operational Voltage 690V

| Part Number | Description | Price | Per |
| :--- | :--- | :---: | :---: |
| TC1-D09004B7 | 24V AC 4N/O | $£ 19.70$ | 1 |
| TC1-D09004E7 | 48V AC 4N/O | $£ 19.70$ | 1 |
| TC1-D09004F7 | 110V AC 4N/O | $£ 19.70$ | 1 |
| TC1-D09004P7 | 230V AC 4N/O | $£ 19.70$ | 1 |
| TC1-D09004N7 | 415V AC 4N/O | $£ 19.70$ | 1 |
| TC1-D09008B7 | 24V AC 2N/O + 2N/C | $£ 22.00$ | 1 |
| TC1-D09008E7 | 48V AC 2N/O + 2N/C | $£ 22.00$ | 1 |
| TC1-D09008F7 | 110V AC 2N/O + 2N/C | $£ 22.00$ | 1 |
| TC1-D09008P7 | 230V AC 2N/O + 2N/C | $£ 22.00$ | 1 |
| TC1-D09008N7 | 415V AC 2N/O + 2N/C | $£ 22.00$ | 1 |

## 5.5kW 12A AC3 (25A AC1) 4 Pole

Made in India CE, CSA, UL Listed, EN 60947-4-1 Maximum Rated Operational Voltage 690V

| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :---: |
| TC1-D12004B7 | 24V AC 4N/O | $£ 20.62$ | 1 |
| TC1-D12004E7 | 48V AC 4N/O | $£ 20.62$ | 1 |
| TC1-D12004F7 | 110V AC 4N/O | $£ 20.62$ | 1 |
| TC1-D12004P7 | 230V AC 4N/O | $£ 20.62$ | 1 |
| TC1-D12004N7 | 415V AC 4N/O | $£ 20.62$ | 1 |
| TC1-D12006B7 | 24V AC 4N/C | $£ 23.00$ | 1 |
| TC1-D12006F7 | 110V AC 4N/C | $£ 23.00$ | 1 |
| TC1-D12006P7 | 230V AC 4N/C | 1 |  |
| TC1-D12006N7 | 415V AC 4N/C | $£ 23.00$ | 1 |
| TC1-D12008B7 | 24V AC 2N/O + 2N/C | $£ 23.00$ | 1 |
| TC1-D12008E7 | 48V AC | 2N/O + 2N/C | 1 |
| TC1-D12008F7 | 110V AC 2N/O + 2N/C | $£ 23.00$ | 1 |
| TC1-D12008P7 | 230V AC 2N/O + 2N/C | $£ 23.00$ | 1 |
| TC1-D12008N7 | 415V AC 2N/O + 2N/C | $£ 23.00$ | 1 |

## 11kW 25A AC3 (40A AC1) 4 Pole

Made in India CE, CSA, UL Listed, EN 60947-4-1 Maximum Rated Operational Voltage 690V

| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :---: |
| TC1-D25004B7 | 24V AC 4N/O | $£ 35.30$ | 1 |
| TC1-D25004E7 | 48V AC 4N/O | $£ 35.30$ | 1 |
| TC1-D25004F7 | 110V AC 4N/O | $£ 35.30$ | 1 |
| TC1-D25004P7 | 230V AC 4N/O | $£ 35.30$ | 1 |
| TC1-D25004N7 | 415V AC 4N/O | $£ 35.30$ | 1 |
| TC1-D25006B7 | 24V AC 4N/C | $£ 39.00$ | 1 |
| TC1-D25006F7 | 110V AC 4N/C | $£ 39.00$ | 1 |
| TC1-D25006P7 | 230V AC 4N/C | $£ 39.00$ | 1 |
| TC1-D25006N7 | 415V AC 4N/C | $£ 39.00$ | 1 |
| TC1-D25008B7 | 24V AC 2N/O + 2N/C | $£ 39.00$ | 1 |
| TC1-D25008E7 | 48V AC 2N/O + 2N/C | $£ 39.00$ | 1 |
| TC1-D25008F7 | 110V AC 2N/O + 2N/C | $£ 39.00$ | 1 |
| TC1-D25008P7 | 230V AC 2N/O + 2N/C | $£ 39.00$ | 1 |

## 22kW 40A AC3 (60A AC1) 4 Pole

Made in India CE, CSA, UL Listed, EN 60947-4-1 Maximum Rated Operational Voltage 690V

| Part Number | Description | Price <br> T70 | Per |
| :--- | :--- | ---: | :---: |
| TC1-D40004B7 | 24V AC 4N/O | $£ 70.00$ | 1 |
| TC1-D40004E7 | 48V AC 4N/O | 1 |  |
| TC1-D40004F7 | 110V AC 4N/O | $£ 70.00$ | 1 |
| TC1-D40004P7 | 230V AC 4N/O | $£ 70.00$ | 1 |
| TC1-D40004N7 | 415V AC 4N/O | $£ 77.00$ | 1 |
| TC1-D40008B7 | 24V AC 2N/O + 2N/C | $£ 77.00$ | 1 |
| TC1-D40008E7 | 48V AC 2N/O + 2N/C | $£ 77.00$ | 1 |
| TC1-D40008F7 | 110V AC 2N/O + 2N/C | $£ 77.00$ | 1 |
| TC1-D40008P7 | 230V AC 2N/O + 2N/C | $£ 77.00$ | 1 |
| TC1-D40008N7 | 415V AC 2N/O + 2N/C |  |  |

37 kW 65 A AC3 (80A AC1) 4 Pole

Made in India CE, CSA, UL Listed, EN 60947-4-1
Maximum Rated Operational Voltage 690V

| Part Number | Description | Price <br> Per | Per |
| :--- | :--- | :--- | :---: |
| TC1-D65004B7 | 24V AC 4N/O | $£ 114.00$ | 1 |
| TC1-D65004E7 | 48V AC 4N/O | $£ 114.00$ | 1 |
| TC1-D65004F7 | 110V AC 4N/O | 1 |  |
| TC1-D65004P7 | 230V AC 4N/O | $£ 114.00$ | 1 |
| TC1-D65004N7 | 415V AC 4N/O | $£ 125.00$ | 1 |
| TC1-D65008B7 | 24V AC 2N/O + 2N/C | $£ 125.00$ | 1 |
| TC1-D65008E7 | 48V AC 2N/O + 2N/C | $£ 125.00$ | 1 |
| TC1-D65008F7 | 110V AC 2N/O + 2N/C | $£ 125.00$ | 1 |
| TC1-D65008P7 | 230V AC 2N/O + 2N/C | $£ 125.00$ | 1 |
| TC1-D65008N7 | 415V AC 2N/O + 2N/C |  |  |

## 45kW 80A AC3 (125A AC1) 4 Pole

Made in India CE, CSA, UL Listed, EN 60947-4-1
Maximum Rated Operational Voltage 690V

| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :---: |
| TC1-D80004B7 | 24V AC 4N/O | $£ 210.00$ | 1 |
| TC1-D80004F7 | 110V AC 4N/O | $£ 210.00$ | 1 |
| TC1-D800004N7 | $415 V ~ A C ~ 4 N / O$ | $£ 210.00$ | 1 |
| TC1-D80004P7 | 230V AC 4N/O | $£ 210.00$ | 1 |
| TC1-D80008B7 | $24 V$ AC 2N/O + 2N/C | $£ 231.00$ | 1 |
| TC1-D80008F7 | 110 V AC 2N/O + 2N/C | $£ 231.00$ | 1 |
| TC1-D80008N7 | $415 V ~ A C ~ 2 N / O ~+~ 2 N / C ~$ | $£ 231.00$ | 1 |
| TC1-D80008P7 | $230 V ~ A C ~ 2 N / O ~+~ 2 N / C ~$ | $£ 231.00$ | 1 |

(1) LC1-F Range Dimensions

## LC1-F Range Contactors

Made in China CE Approved / Maximum Rated Operational Voltage 690V Supplied with incoming and outgoing shrouds

## 3 Pole / 3 Normally Open (Supplied without coil)


(i) F range contactors are supplied without a coil.
The required coil voltage must be ordered separately.
A supporting range of auxiliarys and accessories are available including spare terminal shrouds.

| Part Number | Description | Price <br> P161.22 | Per |
| :--- | :--- | ---: | :---: |
| LC1-F115A-A65 | 59KW 115A AC3 (200AAC1) | $£ 1655.62$ | 1 |
| LC1-F150A-A65 | 80KW 150A AC3 (250A AC1) | $£ 255.54$ | 1 |
| LC1-F185A-A65 | 100KW 185A AC3 (275A AC1) | $£ 332.54$ | 1 |
| LC1-F225A-A65 | 110KW 225A AC3 (315A AC1) | $£ 368.05$ | 1 |
| LC1-F265A-A65 | 140KW 265A AC3 (350A AC1) | $£ 433.00$ | 1 |
| LC1-F330A-A65 | 180KW 330A AC3 (400AAC1) | $£ 484.97$ | 1 |
| LC1-F400A-A65 | 220KW 400A AC3 (500A AC1) | $£ 579.50$ | 1 |
| LC1-F500A-A65 | 280KW 500A AC3 (700AAC1) | $£ 929.29$ | 1 |
| LC1-F630A-A65 | 355KW 630A AC3 (1000AAC1) | $£ 1479.42$ | 1 |
| LC1-F780A-A65 | 425KW 780A AC3 (1600AAC1) | $£ 2029.18$ | 1 |

4 Pole / 4 Normally Open (Supplied without coil)


| Part Number | Description | Price <br> LC1-F1154A-A65 | Per |
| :--- | :--- | ---: | :---: |
| 59KW 115A AC3 (200A AC1) | $£ 228.77$ | 1 |  |
| LC1-F1504A-A65 | 80KW 150A AC3 (250AAC1) | $£ 340.91$ | 1 |
| LC1-F1854A-A65 | 100KW 185A AC3 (275A AC1) | $£ 443.40$ | 1 |
| LC1-F2254A-A65 | 110KW 225A AC3 (315A AC1) | $£ 490.02$ | 1 |
| LC1-F2654A-A65 | 140KW 265A AC3 (350AAC1) | $£ 577.34$ | 1 |
| LC1-F3304A-A65 | 180KW 330A AC3 (400AAC1) | $£ 710.92$ | 1 |
| LC1-F4004A-A65 | 220KW 400A AC3 (500A AC1) | $£ 772.33$ | 1 |
| LC1-F5004A-A65 | 280KW 500AAC3 (700AAC1) | $£ 1358.18$ | 1 |
| LC1-F6304A-A65 | 375KW 630A AC3 (1000AAC1) | $£ 1692.46$ | 1 |
| LC1-F7804A-A65 | 425KW 780A AC3 (1600AAC1) | $£ 2295.82$ | 1 |


| $\begin{aligned} & \text { 픋 } \\ & \text { O} \\ & \frac{0}{1} \end{aligned}$ | To | AC3 Rating | 3 Pole Height | 3 Pole Width | 3 Pole Depth | 4 Pole Height | 4 Pole Width | 4 Pole Depth |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\bigcirc$ | F115A | 162mm | 164mm | 171 mm | 162mm | 201mm | 171 mm |
|  | 믐 | F150A | 170 mm |  |  | 170 mm |  |  |
|  |  | F185A | 174 mm | 169mm | 181 mm | 174 mm | 209mm | 181 mm |
|  |  | F225A | 197 mm |  |  | 197 mm |  |  |
|  |  | F265A | 203mm | 202mm | 213mm | 203mm | 245mm | 213mm |
|  | Width | F330A | 206mm | 213mm | 219mm | 206mm | 261 mm | 219mm |
|  |  | F400A |  |  |  |  |  |  |
|  |  | F500A | 238mm | 233mm | 232mm | 238mm | 288mm | 232mm |
|  |  | F630A | 304 mm | 309 mm | 255mm | 304 mm | 389 mm | 255mm |
|  |  | F780A | 435 mm | 704mm |  | 435 mm | 864mm |  |

## 2015 Catalogue

## Spare AC Coils

 for TC1Contactors


| TC1D09-D18 (AC) |  |  |  |
| :---: | :---: | :---: | :---: |
| CE Approved / 50/60Hz |  |  |  |
| Part Number | Description | Price | Per |
| TX1D2B7 | 24 V AC | £6.29 | 1 |
| TX1D2E7 | 48 V AC | £6.29 | 1 |
| TX1D2F7 | 110 V AC | £6.29 | 1 |
| TX1D2P7 | 230 V AC | £6.29 | 1 |
| TX1D2Q7 | 380 V AC | £6.29 | 1 |
| TX1D2N7 | 415VAC | £6.29 | 1 |

TC1D25-D32 (AC)

CE Approved / 50/60Hz

| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :---: |
| TX1D4B7 | 24V AC | $£ 10.37$ | 1 |
| TX1D4E7 | 48V AC | $£ 10.37$ | 1 |
| TX1D4F7 | 110V AC | $£ 10.37$ | 1 |
| TX1D4P7 | 230V AC | $£ 10.37$ | 1 |
| TX1D4Q7 | 380 V AC | $£ 10.37$ | 1 |
| TX1D4N7 | 415 V AC | $£ 10.37$ | 1 |

TC1D40-D95 (AC)


CE Approved / 50/60Hz


See Page 34 for Contactor Enclosures!

| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :---: |
| TX1D6B7 | 24V AC | $£ 19.27$ | 1 |
| TX1D6E7 | 48V AC | $£ 19.27$ | 1 |
| TX1D6F7 | 110V AC | $£ 19.27$ | 1 |
| TX1D6P7 | 230V AC | $£ 19.27$ | 1 |
| TX1D6Q7 | 380 V AC | $£ 19.27$ | 1 |
| TX1D6N7 | 415 V AC | $£ 19.27$ | 1 |



AC3 = Motor Load (Inductive)
AC1 = Heating Load (Resistive)
(Standard Lighting)

## Spare DC Coils for TP1 Contactors

```
TP1D09-D18 (DC)
```



CE Approved

| Part Number | Description | Price | Per |
| :--- | :--- | :--- | :---: |
| TX4D2JD | 12V DC | $£ 9.02$ | 1 |
| TX4D2BD | 24V DC | $£ 9.02$ | 1 |
| TX4D2FD | 110 V DC | $£ 9.02$ | 1 |
| TX4D2ED | 48V DC | $£ 9.02$ | 1 |

TP1D25-D32 (DC)


CE Approved

| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :---: |
| TX4D4JD | 12VDC | $£ 15.60$ | 1 |
| TX4D4BD | 24V DC | $£ 15.60$ | 1 |
| TX4D4ED | 48V DC | $£ 15.60$ | 1 |
| TX4D4FD | 110V DC | $£ 15.60$ | 1 |

TP1D40-D65 (DC)


CE Approved

| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :---: |
| LX4D40JD | 12V DC | $£ 30.14$ | 1 |
| LX4D40BD | 24V DC | $£ 30.14$ | 1 |
| LX4D40FD | 110V DC | $£ 30.14$ | 1 |
| LX4D40ED | 48 V DC | $£ 30.14$ | 1 |

listed in
LUCKİNSIIVe


CE Approved

| Part Number | Description | Price | Per |
| :---: | :---: | :---: | :---: |
| LX4D80JD | 12V DC | £50.59 | 1 |
| LX4D80BD | 24V DC | £50.59 | 1 |
| LX4D80ED | 48 V DC | $£ 50.59$ | 1 |
| LX4D80FD | 110V DC | $£ 50.59$ | 1 |

## AC Coils for

## LC1 Contactors

CE Approved / 50Hz / 60 Hz available on request

| LC1-F115-F150A (AC) |  |  |  |
| :--- | :--- | ---: | :---: |
|  |  |  |  |
|  |  |  |  |
| Part Number | Description | Price | Per |
| LX1-FFB | 24V AC | $£ 37.00$ | 1 |
| LX1-FFE | 48 V AC | $£ 37.00$ | 1 |
| LX1-FFF | 110 V AC | $£ 37.00$ | 1 |
| LX1-FFU | 240 V AC | $£ 37.00$ | 1 |
| LX1-FFN | 415 V AC | $£ 37.00$ | 1 |

LC1-F185-F225A (AC)

| Part Number | Description | Price | Per |
| :--- | :--- | :---: | :---: |
| LX1-FGB | 24V AC | $£ 49.60$ | 1 |
| LX1-FGE | 48V AC | $£ 49.60$ | 1 |
| LX1-FGF | 110V AC | $£ 49.60$ | 1 |
| LX1-FGU | 240V AC | $£ 52.35$ | 1 |
| LX1-FGN | 415V AC | $£ 52.35$ | 1 |
| LX1-FGQ | 380V AC | $£ 52.35$ | 1 |


| LC1-F265-F330 (AC) |  |  |  |
| :---: | :---: | :---: | :---: |
| Part Number | Description | Price | Per |
| LX1-FHB | 24 V AC | £57.08 | 1 |
| LX1-FHE | 48 V AC | £57.08 | 1 |
| LX1-FHF | 110 V AC | £57.08 | 1 |
| LX1-FHU | 240V AC | £57.08 | 1 |
| LX1-FHQ | 380 V AC | £57.08 | 1 |
| LX1-FHN | 415 V AC | £57.08 | 1 |

LC1 Coils - Simple Click Fitting Instructions Included

## LC1-F400A (AC)

| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :---: |
| LX1-FJF | 110 V AC | $£ 102.29$ | 1 |
| LX1-FJU | 240 V AC | $£ 102.29$ | 1 |
| LX1-FJN | 415 V AC | $£ 102.29$ | 1 |

LC1-F500A (AC)

| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :---: |
| LX1-FKF | 110 V AC | $£ 113.00$ | 1 |
| LX1-FKU | 240 V AC | $£ 113.00$ | 1 |
| LX1-FKN | 415 V AC | $£ 113.00$ | 1 |

LC1-F630A (AC)

| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :---: |
| LX1-FLF | 110 V AC | $£ 128.47$ | 1 |
| LX1-FLU | 240 V AC | $£ 128.47$ | 1 |
| LX1-FLN | 415 V AC | $£ 128.47$ | 1 |

LC1-F780A (AC) 2 Per Set

| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :---: |
| LX1-FXF | 110 V AC | $£ 263.42$ | 1 |
| LX1-FXP | 230 V AC | $£ 263.42$ | 1 |
| LX1-FXN | 415 V AC | $£ 263.42$ | 1 |

## DC Coils for LC1 Contactors

CE Approved

| LC1-F115-F150A (DC) |  |  |  |
| :--- | :--- | ---: | :---: |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
| Part Number | Description | Price | Per |
| LX4FFB | 24V DC | $£ 54.08$ | 1 |
| LX4FFE | 48 VDC | $£ 54.08$ | 1 |
| LX4FFF | 110 V DC | $£ 54.08$ | 1 |

LC1-F185-F225A (DC)

| Part Number | Description | Price <br> LX4FGB | Per <br> 24V DC |
| :--- | :--- | ---: | :---: |
| LX4FGE | 48V DC | $£ 70.24$ | 1 |
| LX4FGF | 110V DC | $£ 70.24$ | 1 |
|  |  |  |  |
|  |  |  |  |
| LC1-F265-F330A (DC) |  |  |  |
|  |  |  |  |
|  |  | Price | Per |
| Part Number | Description | $£ 90.74$ | 1 |
| LX4FHB | 24V DC | $£ 90.74$ | 1 |
| LX4FHE | 48V DC | $£ 90.74$ | 1 |

2015 Catalogue

| LC1-F400A (DC) |  |  |  |
| :---: | :---: | :---: | :---: |
| Part Number LX4FJF | Description 110V DC | $\begin{array}{r} \text { Price } \\ £ 147.68 \end{array}$ | Per $1$ |
| LC1-F500A (DC) |  |  |  |
| Part Number LX4FKF | Description 110V DC | $\begin{array}{r} \text { Price } \\ £ 193.29 \\ \hline \end{array}$ | Per $1$ |


| LC1-F630A (DC) |  |  |  |
| :---: | :---: | :---: | :---: |
| Part Number LX4FLF | Description 110V DC | $\begin{array}{r} \text { Price } \\ £ 203.86 \end{array}$ | Per <br> 1 |
| LC1-F780A (DC) |  |  |  |
| Part Number LX4FXF | Description 110V DC | $\begin{array}{r} \text { Price } \\ £ 425.69 \end{array}$ | $\begin{gathered} \text { Per } \\ 1 \\ \hline \end{gathered}$ |

## Contactor Accessories

TC1-D Range Contactor Overload Relays


## LC1-F Range Contactor Overload Relay



| Part Number | Description | Price <br> LR1-FM105 | $65-105 \mathrm{~A}$ |
| :--- | :--- | ---: | :---: | | Per |
| :---: |
| LR1-FM125 |

## Front Mounting Auxiliary Contact Block



Suitable for use with TC1-D, TP1-D \& F range contactors (adding 33mm to the depth of the TC1-D \& TP1-D range).

CE UL \& CSA Approved / Rated Thermal Current 10A

| Part Number | Description | Price | Per |
| :--- | :--- | :---: | :---: |
| TA1-DN11 | 1 NO +1 NC | $£ 4.04$ | 1 |
| TA1-DN13 | 1 NO +3 NC | $£ 7.20$ | 1 |
| TA1-DN20 | 2 NO | $£ 4.04$ | 1 |
| TA1-DN02 | 2 NC | $£ 4.04$ | 1 |
| TA1-DN22 | $2 \mathrm{NO}+2 \mathrm{NC}$ | $£ 7.20$ | 1 |
| TA1-DN31 | $3 \mathrm{NO}+1 \mathrm{NC}$ | $£ 7.20$ | 1 |
| TA1-DN40 | 4 NO | $£ 7.20$ | 1 |
| TA1-DN04 | 4 NC | $£ 7.20$ | 1 |

Side Mounting Auxiliary Contact Blocks


Suitable for use with TC1-D range contactors and TP1-D09-D36 contactors
(adding 12.5 mm to the width).

* Not suitable for use with F Range contactors.

CE UL \& CSA Approved / Rated Thermal Current 10A

| Part Number | Description | Price | Per |
| :--- | :--- | :--- | :---: |
| TA8-DN11 | $1 \mathrm{NO}+1 \mathrm{NC}$ | $£ 4.04$ | 1 |
| TA8-DN20 | 2 NO | $£ 4.04$ | 1 |



CE Approved / Suitable for TC1-D \& F Range Contactors

| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :---: |
| TA2-DT0 | $0.1-3 \mathrm{Sec}$ | $£ 16.79$ | 1 |
| TA2-DT2 | $1-30 \mathrm{Sec}$ | $£ 16.79$ | 1 |
| TA2-DT4 | $0-180 \mathrm{Sec}$ | $£ 16.79$ | 1 |

## TC Off Delay



## Simple Click ${ }_{\text {Fitting }}$ <br> Front Mounting Device

CE Approved / Suitable for TC1-D \& F Range Contactors

| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :---: |
| TA3-DR0 | $0.1-3 \mathrm{Sec}$ | $£ 16.79$ | 1 |
| TA3-DR2 | $1-30 \mathrm{Sec}$ | $£ 16.79$ | 1 |
| TA3-DR4 | $10-180 \mathrm{Sec}$ | $£ 16.79$ | 1 |

## Star Delta 0.1-30 Seconds



## Simple Click ${ }_{\text {Fitting }}$

Front Mounting Device

CE Approved / Suitable for TC1-D and F range contactors

| Part Number | Description | Price | Per |
| :--- | :--- | :---: | :---: |
| TA2-DS2 | Star Delta $0.1-30 \mathrm{Sec}$ | $£ 19.88$ | 1 |

Contact Sets for LC1-F Range Contactors


| Part Number | Description | Price | Per |
| :--- | :--- | :---: | :---: |
| LA5FF431-F115A | Contact Set For F115A | $£ 109.75$ | 1 |
| LA5FF431-F150A | Contact Set For F150A | $£ 109.75$ | 1 |
| LA5FG431-F185A | Contact Set For F185A | $£ 208.93$ | 1 |
| LA5FG431-F225A | Contact Set For F225A | $£ 208.93$ | 1 |
| LA5FH431 | Contact Set For F265A | $£ 232.43$ | 1 |
| LA5F400803-F330A | Contact Set For F330A | $£ 323.84$ | 1 |
| LA5F400803-F400A | Contact Set For F400A | $£ 323.84$ | 1 |
| LA5F630803 | Contact Set For F630A | $£ 665.99$ | 1 |

## Mechanical Interlocks



Will fit both TC1-D Range and TP1-D Range Contactors

| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :---: |
| LA9-D09978 | TC1-D09 to D32 | $£ 6.36$ | 1 |
| LA9-D50978 | TC1-D40 to D65 | $£ 10.37$ | 1 |
| LA9-D80978 | TC1-D80 | $£ 10.37$ | 1 |
| LA9-FF970 | LC1-FF115 to 150 Horizontal | $£ 20.16$ | 1 |
| LA9-FF971 | LC1-FF115 to 150 Vertical | $£ 20.16$ | 1 |
| LA9-FG970 | LC1-FF185 to 225 Horizontal | $£ 20.16$ | 1 |
| LA9-FG971 | LC1-FF185 to 225 Vertical | $£ 20.16$ | 1 |
| LA9-FJ970 | LC1-FF265 to 500 Horizontal | $£ 30.53$ | 1 |
| LA9-FJ971 | LC1-FF265 to 500 Vertical | $£ 30.53$ | 1 |
| LA9-FL970 | LC1-FF630 Horizontal | $£ 50.00$ | 1 |
| LA9-FL971 | LC1-FF630 Vertical | $£ 50.00$ | 1 |

TR2 Overload Mounting Plates


For remote mounting of TC1 Overload Relays / Din Rail Mounted

| Part Number | Description | Price | Per |
| :--- | :--- | :--- | :---: |
| TA7-D0964 | Up to TR2-D25 | $£ 7.83$ | 1 |
| TA7-D3264 | From TR2-D25-D32 | $£ 15.67$ | 1 |

## Spare Terminal Shrouds



Suppressor Block


| Part Number | Description | Price | Per |
| :--- | :--- | :--- | :---: |
| LA9-D09980 | Suppressor Block | $£ 5.89$ | 1 |

## 2015 Catalogue

Auxiliary Contact Block for DOL Starters


Motor Starters Direct On Line Motor Starters


ABS Enclosure 2 Button 110V DOL (IP65)

| Part Number | Description | Price | Per |
| :--- | :---: | :---: | :---: |
| © LE1-D123F7 | 12A 5.5 Kw 110 V No Overload | $£ 26.94$ | 1 |
| O LE1-D253F7 | 25A 11Kw 110V No Overload | $£ 38.80$ | 1 |

ABS Enclosure 2 Button 240V DOL (IP65)

| Part Number | Description | Price | Per |
| :--- | :---: | :---: | :---: |
| (1) LE1-D123U7 | 12A 5.5Kw 240V No Overload | $£ 26.93$ | 1 |
| (1) LE1-D253U7 | 25 A 11 Kw 240 V No Overload | $£ 38.80$ | 1 |

ABS Enclosure 2 Button 415V DOL (IP65)

| Part Number | Description | Price | Per |
| :--- | :---: | :---: | :---: |
| (1) LE1-D123N7 | 12A 5.5Kw 415V No Overload | $£ 26.93$ | 1 |
| (1) LE1-D253N7 | $25 A 11 K w 415 V$ No Overload | $£ 38.80$ | 1 |

Metal Enclosure 2 Button 240V DOL (IP54)

| Part Number | Description | Price | Per |
| :--- | :---: | :---: | :---: |
| (2 BE1-D123U7 | 12A 5.5Kw 240V No Overload | $£ 36.78$ | 1 |
| (2 BE1-D253U7 | 25 A 11 Kw 240 V No Overload | $£ 52.92$ | 1 |

Metal Enclosure 2 Button 415V DOL (IP54)

| Part Number | Description | Price | Per |
| :--- | :---: | :---: | :---: |
| (2) BE1-D123N7 | 12A 5.5Kw 415V No Overload | $£ 36.78$ | 1 |
| (2 BE1-D253N7 | 25A 11Kw 415V No Overload | $£ 52.92$ | 1 |


| Cable Type | Contactor Type |  |
| :---: | :---: | :---: |
|  | 12 A (TC1-D12) | 25A (TC1-D25) |
| Stranded | $2 \times 1 \mathrm{~mm}$ Min | $2 \times 1.5 \mathrm{~mm}$ Min |
|  | $2 \times 4 \mathrm{~mm}$ Max | $2 \times 6 \mathrm{~mm} \mathrm{Max}$ |
|  | - | $1 \times 10 \mathrm{~mm} \mathrm{Max}$ |
| Stranded with Ferrule | $2 \times 1 \mathrm{~mm}$ Min | $2 \times 1 \mathrm{~mm}$ Min |
|  | $2 \times 2.5 \mathrm{~mm}$ Max | $2 \times 4 \mathrm{~mm} \mathrm{Max}$ |
|  | $1 \times 4 \mathrm{~mm}$ Max | $1 \times 6 \mathrm{~mm}$ Max |
| Solid without Ferrule | $2 \times 1 \mathrm{~mm}$ Min | $2 \times 1.5 \mathrm{~mm}$ Min |
|  | $2 \times 4 \mathrm{~mm}$ Max | $2 \times 6 \mathrm{~mm} \mathrm{Max}$ |
|  | - | $1 \times 6 \mathrm{~mm} \mathrm{Max}$ |


|  |  | $\frac{2 \text { HOLES }}{20000}$ <br> $\varnothing 20.00$ | Please Note: <br> For all DOLs never use an overload that exceeds the rating of the contactor! |  |
| :---: | :---: | :---: | :---: | :---: |
| Measurement | Metal Clad 12A | Metal Clad 25A | $\begin{array}{r} \text { ABS } \\ 12 A \end{array}$ | $\begin{aligned} & \text { ABS } \\ & 25 A \end{aligned}$ |
| a | 116mm | 135mm | 120 mm | 135 mm |
| b | 128 mm | 147 mm | 140 mm | 155 mm |
| c | 214 mm | 252mm | 166 mm | 185 mm |
| d | 134 mm | 162 mm | 150 mm | 165 mm |
| e | 123 mm | 156mm | 88mm | 101 mm |

## Direct On Line Motor Starters with Isolator


-


The Europa Safe Start Direct on Line motor starter (DOL) is designed to switch a single or three phase induction motor at rated voltage. It comprises of a 3P + sw. neutral isolator (padlockable in the OFF position), steel enclosure, contactor, start contact, link wires and stop / start buttons. The thermal overload is supplied as a separate item (see page 82). Various factors should be considered when selecting the correct DOL. The size of unit is dictated by the motor that is being supplied and can be selected using the table below.

| Enclosure Type | Coil Voltage | Current Rating | Max Motor Size Approx kW @ 415V | Part No. |
| :---: | :---: | :---: | :---: | :---: |
| Steel | 240 V | 12 Amps AC3 | 5.5 kW | BE2-D123U7 |
| Steel | 415 V | $12 \mathrm{Amps} \mathrm{AC3}$ | 5.5 kW | BE2-D123N7 |
| Steel | 240 V | 25 Amps AC3 | 11 kW | BE2-D253U7 |
| Steel | 415 V | 25 Amps AC3 | 11 kW | BE2-D253N7 |

Metal Enclosure 2 Button 240V DOL + Isolator (IP54)

| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :---: |
| BE2-D123U7 | 12A 5.5kW 240V No Overload | $£ 99.52$ | 1 |
| BE2-D253U7 | 25A 11kW 240V No Overload | $£ 112.23$ | 1 |

Metal Enclosure 2 Button 415V DOL + Isolator (IP54)

| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :---: |
| BE2-D123N7 | 12A 5.5kW 415V No Overload | $£ 99.52$ | 1 |
| BE2-D253N7 | 25 A 11 kW 415 V No Overload | $£ 112.23$ | 1 |



DOL Overload Selection Table. See page 131 for more info!

| Overload Part Number | Relay Range | Price Each | Useable with 12ADOL | Useable with 25ADOL |
| :---: | :---: | :---: | :---: | :---: |
| TR2-D09301 | 0.10-0.16A | $£ 17.81$ | $\checkmark$ | $\checkmark$ |
| TR2-D09302 | 0.16-0.25A | £17.81 | $\checkmark$ | $\checkmark$ |
| TR2-D09303 | 0.25-0.40A | £17.81 | $\checkmark$ | $\checkmark$ |
| TR2-D09304 | 0.40-0.63A | £17.81 | $\checkmark$ | $\checkmark$ |
| TR2-D09305 | 0.63-1.00A | £17.81 | $\checkmark$ | $\checkmark$ |
| TR2-D09306 | 1.00-1.65A | £17.81 | $\checkmark$ | $\checkmark$ |
| TR2-D09307 | 1.60-2.50A | $£ 17.81$ | $\checkmark$ | $\checkmark$ |
| TR2-D09308 | 2.5-4.00A | £17.81 | $\checkmark$ | $\checkmark$ |
| TR2-D09310 | 4.00-6.00A | $£ 17.81$ | $\checkmark$ | $\checkmark$ |
| TR2-D09312 | 5.50-8.00A | £17.81 | $\checkmark$ | $\checkmark$ |
| TR2-D09314 | 7.00-10.0A | $£ 17.81$ | $\checkmark$ | $\checkmark$ |
| TR2-D12316 | 9.00-13.0A | $£ 18.74$ | $\checkmark$ | $\checkmark$ |
| TR2-D18321 | 12.0-18.0A | $£ 22.79$ | - | $\checkmark$ |
| TR2-D25322 | 17.0-25.0A | £25.31 | - | $\checkmark$ |
| (i) LE1 DOLs will accept TA1 front mounted auxiliaries |  |  |  |  |
| (i) BE1 DOLs will accept TA8 side mounted auxiliaries |  |  |  |  |

## 2015 Catalogue

## DOL Manual Motor Starters


-uroos components


Main application:
Thermal and short circuit protection of AC electric motors with power up to $15 \mathrm{~kW}(380 / 440 \mathrm{~V}) 32 \mathrm{~A}$; it can also be used as a main switch. Simple snap fitting on 35 mm mounting rail.

| Part Number | Description | Price <br> MMS016S | Per <br> M36.55 |
| :--- | :--- | ---: | :---: |
| MMS025S | $0.1-0.16 \mathrm{~A}$ | $£ 36.55$ | 1 |
| MMS04S | $0.25-0.25 \mathrm{~A}$ | $£ 36.55$ | 1 |
| MMS063S | $0.4-0.63 \mathrm{~A}$ | $£ 36.55$ | 1 |
| MMS1S | $0.63-1 \mathrm{~A}$ | $£ 38.20$ | 1 |
| MMS1.6S | $1-1.6 \mathrm{~A}$ | $£ 38.20$ | 1 |
| MMS2.5S | $1.6-2.5 \mathrm{~A}$ | $£ 38.20$ | 1 |
| MMS4S | $2.5-4 \mathrm{~A}$ | $£ 38.20$ | 1 |
| MMS6.3S | $4-6.3 \mathrm{~A}$ | $£ 38.20$ | 1 |
| MMS10S | $6-10 \mathrm{~A}$ | $£ 46.53$ | 1 |
| MMS14S | $9-14 \mathrm{~A}$ | $£ 46.52$ | 1 |
| MMS18S | $13-18 \mathrm{~A}$ | $£ 46.53$ | 1 |
| MMS23S | $17-23 A$ | $£ 46.53$ | 1 |
| MMS25S | $20-25 \mathrm{~A}$ | $£ 51.04$ | 1 |
| MMS32S | $24-32 \mathrm{~A}$ | $£ 53.19$ | 1 |

## Manual Motor Starter Accessories

## MMS Range Accessories



-     - 

| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :---: |
| MMSENC | IP55 enclosure for MMS 0.1-32A | $£ 13.50$ | 1 |
| MMSAUXAE11 | Auxiliary contact 1N/C + 1N/O (top mount) | $£ 4.61$ | 1 |
| MMSAUXAE20 | Auxiliary contact 2 N/O (top mount) | $£ 4.61$ | 1 |
| MMSU24 | Under voltage trip 24V | $£ 19.62$ | 1 |
| MMSU110 | Under voltage trip 110V | $£ 19.62$ | 1 |
| MMSU240 | Under voltage trip 220-240V | $£ 19.62$ | 1 |
| MMSU415 | Under voltage trip 380-415V | $£ 19.62$ | 1 |

## Star Delta Starters in Metal Enclosure



IP65 Rated Enclosure (when fully sealed)
Strong Steel (Powder Epoxy Coated) Enclosure RAL: 7035 Supplied Complete with Internal Wiring Terminated to the Terminal Block.

| Part Number SDS11EIP7 | Description <br> 11 kW 230V Coil (with Isolator) | Price | Per |
| :---: | :---: | :---: | :---: |
|  | TR2-D18321 Overload 12-18A | $£ 334.53$ | 1 |
| SDS11EIN7 | 11kW 415V Coil (with Isolator) |  |  |
|  | TR2-D18321 Overload 12-18A | £318.29 | 1 |
| SDS15EIP7 | 15kW 230V Coil (with Isolator) |  |  |
|  | TR2-D18321 Overload 12-18A | $£ 339.88$ | 1 |
| SDS15EIN7 | 15kW 415V Coil (with Isolator) |  |  |
|  | TR2-D18321 Overload 12-18A | $£ 329.98$ | 1 |
| SDS22EIP7 | 22kW 230V Coil (with Isolator) |  |  |
|  | TR2-D25322 Overload 17-25A | $£ 465.39$ | 1 |
| SDS22EIN7 | 22kW 415V Coil (with Isolator) |  |  |
|  | TR2-D25322 Overload 17-25A | $£ 451.84$ | 1 |
| SDS30EIP7 | 30kW 230V Coil (with Isolator) |  |  |
|  | TR2-D40355 Overload 30-40A | $£ 628.97$ | 1 |
| SDS30EIN7 | 30kW 415V Coil (with Isolator) |  |  |
|  | TR2-D40355 Overload 30-40A | $£ 610.65$ | 1 |
| SDS37EIP7 | 37kW 230V Coil (with Isolator) |  |  |
|  | TR2-D40355 Overload 30-40A | $£ 769.58$ | 1 |
| SDS37EIN7 | 37 kW 415 V Coil (with Isolator) |  |  |
|  | TR2-D40355 Overload 30-40A | $£ 747.17$ | 1 |
| SDS45EIP7 | 45kW 230V Coil (with Isolator) |  |  |
|  | TR2-D65357 Overload 37-50A | $£ 769.58$ | 1 |
| SDS45EIN7 | 45kW 415V Coil (with Isolator) |  |  |
|  | TR2-D65357 Overload 37-50A | $£ 747.17$ | 1 |
| SDS55EIP7 | 55kW 230V Coil (with Isolator) |  |  |
|  | TR2-D65359 Overload 48-65A | $£ 1115.30$ | 1 |
| SDS55EIN7 | 55 kW 415 V Coil (with Isolator) |  |  |
|  | TR2-D65359 Overload 48-65A | £1082.81 | 1 |

Europa Star Delta Starters are built using industry proven quality components to guarantee the safety and protection you need for your applications. 110 V version available on request.

| KW Rating | Height mm | Width mm | Depth mm |
| :---: | :---: | :---: | :---: |
| 11KW | 400mm | 300 mm | 200mm |
| 15KW |  |  |  |
| 22KW |  |  |  |
| 30KW | 600mm | 400mm |  |
| 37KW |  |  |  |
| 45KW |  | 500 mm |  |
| 55KW |  | 500mm |  |

(1) Dimensions

Scan me for technical data


## Relays

## Phase Failure Relays



## Star Delta Timer Relays



UL, CSA, VDE, CE Approved / Lloyds Registered Mechanical Indicator \& Lockable Front Test Button


| Part Number | Description | Price | Per |
| :--- | :--- | :---: | :---: |
| R11R12D3PDT | 12V DC | $£ 8.84$ | 1 |
| R11R24A3PDT | 24V AC | $£ 8.84$ | 1 |
| R11R24D3PDT | 24V DC | $£ 8.84$ | 1 |
| R11R110A3PDT | 110V AC | $£ 8.84$ | 1 |
| R11R230A3PDT | 230V AC | $£ 8.84$ | 1 |
| RB11R | 11 Pin Octal Base | $£ 3.50$ | 1 |

## 2015 Catalogue

Slim Line 8 Pin (8A 2PCO)


UL, CSA, VDE, CE Approved Lloyds Registered

| Part Number | Description | Price | Per |
| :--- | :--- | :---: | :---: |
| R88M12A2PDT | 12V AC | $£ 4.00$ | 1 |
| R88M12D2PDT | 12V DC | $£ 4.00$ | 1 |
| R88M24A2PDT | 24V AC | $£ 4.00$ | 1 |
| R88M24D2PDT | 24V DC | $£ 4.00$ | 1 |
| R88M110A2PDT | 110V AC | $£ 4.00$ | 1 |
| R88M230A2PDT | 230V AC | $£ 5.10$ | 1 |
| RB8M | 8 Pin Slim Line Base | $£ 3.95$ | 1 |

Miniature Industrial 8 Pin (12A 2PCO)


Lloyds Registered
Mechanical Indicator \& Lockable Front Test Button LED Indicator

| Part Number | Description | Price | Per |
| :--- | :--- | :--- | :---: |
| R8S12D2PDT | 12V DC | $£ 5.60$ | 1 |
| R8S24A2PDT | 24V AC | $£ 5.60$ | 1 |
| R8S24D2PDT | 24V DC | $£ 5.60$ | 1 |
| R8S110A2PDT | 110V AC | $£ 6.50$ | 1 |
| R8S230A2PDT | 230V AC | $£ 6.50$ | 1 |
| RB8S | 8 Pin Plug in Base | $£ 2.95$ | 1 |

Miniature Industrial 11 Pin (10A 3PCO)


See Page 137 for
Terminal Layout

UL, CSA, VDE, CE Approved / Lloyds Registered Mechanical Indicator \& Lockable Front Test Button LED Indicator

| Part Number | Description | Price | Per |
| :--- | :--- | :--- | :---: |
| R11S24A3PDT | 24V AC | $£ 6.50$ | 1 |
| R11S24D3PDT | 24V DC | $£ 6.50$ | 1 |
| R11S110A3PDT | 110V AC | $£ 6.50$ | 1 |
| R11S230A3PDT | 230V AC | $£ 6.50$ | 1 |
| RB11S | 11 Pin Plug In Base | $£ 4.32$ | 1 |

Miniature Industrial 14 Pin (6A 4PCO)


UL, CSA, VDE, CE Approved / Lloyds Registered Mechanical Indicator \& Lockable Front Test Button LED Indicator

| Part Number | Description | Price | Per |
| :--- | :--- | :--- | :---: |
| R14S12D4PDT | 12V DC | $£ 5.00$ | 1 |
| R14S24A4PDT | 24V AC | $£ 5.00$ | 1 |
| R14S24D4PDT | 24V DC | $£ 5.00$ | 1 |
| R14S110A4PDT | 110V AC | $£ 5.00$ | 1 |
| R14S230A4PDT | 230V AC | $£ 5.00$ | 1 |
| RB14S | 14 Pin Plug in Base | $£ 3.50$ | 1 |

(i) See page 31 for 2470001
Multifunction Timer


Slim Line 8 Pin (16A 1PCO)


UL, CSA, VDE, CE Approved / Lloyds Registered

| Part Number | Description | Price | Per |
| :--- | :--- | :---: | :---: |
| R168M12D1PDT | 12V DC | $£ 4.00$ | 1 |
| R168M24A1PDT | 24V AC | $£ 4.00$ | 1 |
| R168M24D1PDT | 24V DC | $£ 4.00$ | 1 |
| R168M110A1PDT | 110V AC | $£ 5.50$ | 1 |
| R168M230A1PDT | 230V AC | $£ 5.50$ | 1 |
| RB8M | 8 Pin Slim Line Base | $£ 3.95$ | 1 |

## Hours Run Counters

48mm Hour Run Meter (IP65)


UL CSA CE \& VDE Approved

| Part Number | Description | Price | Per |
| :--- | :--- | :---: | :---: |
| HM632.2.24.50 | 24V AC 50HZ Black | $£ 18.00$ | 1 |
| HM632.2.110.50 | 110V AC 50HZ Black | $£ 14.54$ | 1 |
| HM632.2.230.50 | 230V AC 50HZ Black | $£ 14.54$ | 1 |
| HM632.2.230.60 | 230V AC 60HZ Black | $£ 14.54$ | 1 |
| HM632.2.10-80.DC 10-80V DC | $£ 45.00$ | 1 |  |

## HM632 Hour Run Meter Bezels



| Part Number | Description | Price | Per |
| :--- | :--- | :--- | :---: |
| C5555 | 55 mm bezel for HM632 range | $£ 0.92$ | 1 |
| C7272 | 72 mm bezel for HM632 range | $£ 0.93$ | 1 |

## Motor Starter Capacitors

Ducati Metallic Case with Spade Terminals 450V


Ducati Plastic Case with Spade Terminals 450V


| Part Number | Description | Price | Per |
| :--- | :--- | :--- | :--- |
| 4.16 .15 .69 .64 | 1 uF $28 \times 55$ | $£ 2.22$ | 1 |
| 4.16 .15 .01 .64 | 2 uF $28 \times 55$ | $£ 2.29$ | 1 |
| 4.16 .10 .03 .64 | 3 uF $28 \times 55$ | $£ 2.61$ | 1 |
| 4.16 .10 .06 .64 | 4 uF $28 \times 55$ | $£ 2.93$ | 1 |
| 4.16 .10 .08 .64 | 5 uF $28 \times 55$ | $£ 3.50$ | 1 |
| 4.16 .10 .13 .64 | 8 uF $32 \times 55$ | $£ 4.32$ | 1 |
| 4.16 .10 .15 .64 | 10 uF $36 \times 58$ | $£ 4.70$ | 1 |
| 4.16 .10 .17 .64 | 12 uF $36 \times 70$ | $£ 5.21$ | 1 |
| 4.16 .10 .22 .64 | 15 uF $36 \times 70$ | $£ 6.61$ | 1 |
| 4.16 .10 .24 .64 | 18 uF $40 \times 70$ | $£ 8.01$ | 1 |
| 4.16 .10 .25 .64 | 20 uF $40 \times 70$ | $£ 8.96$ | 1 |
| 4.16 .10 .26 .64 | 25 uF $40 \times 92$ | $£ 10.50$ | 1 |
| 4.16 .10 .70 .64 | 30 uF $40 \times 92$ | $£ 11.50$ | 1 |
| 4.16 .10 .65 .64 | 36 uF $45 \times 92$ | $£ 11.00$ | 1 |
| 4.16 .10 .29 .64 | 40 uF $45 \times 92$ | $£ 14.00$ | 1 |
| 4.16 .10 .65 .14 | 36 uF $45 \times 92$ | $£ 15.00$ | 1 |
| 4.16 .10 .30 .64 | 50 uF $45 \times 117$ |  |  |
| 4.16 .10 .61 .64 | 60 uF $120 \times 50$ |  |  |

## Ducati Plastic Case with Leads 450V



| Part Number | Description | Price | Per |
| :--- | :--- | :--- | :---: |
| 4.16 .15 .69 .14 | 1 uF $28 \times 55$ | $£ 2.67$ | 1 |
| 4.16 .15 .01 .14 | 2 uF $28 \times 55$ | $£ 2.35$ | 1 |
| 4.16 .15 .28 .14 | 2.5 uF $28 \times 55$ | $£ 2.86$ | 1 |
| 4.16 .10 .03 .14 | 3 uF $28 \times 55$ | $£ 2.86$ | 1 |
| 4.16 .10 .06 .14 | 4 uF $28 \times 55$ | $£ 3.81$ | 1 |
| 4.16 .10 .08 .14 | 5 uF $28 \times 55$ | $£ 4.07$ | 1 |
| 4.16 .10 .13 .14 | 8 uF $32 \times 55$ | $£ 4.83$ | 1 |
| 4.16 .10 .15 .14 | 10 uF $36 \times 58$ | $£ 5.47$ | 1 |
| 4.16 .10 .17 .14 | 12 uF $36 \times 70$ | $£ 5.98$ | 1 |
| 4.16 .10 .22 .14 | 15 uF $36 \times 70$ | $£ 6.99$ | 1 |
| 4.16 .10 .24 .14 | 18 uF $40 \times 70$ | $£ 6.99$ | 1 |
| 4.16 .10 .25 .14 | 20 uF $40 \times 70$ | $£ 8.33$ | 1 |
| 4.16 .10 .26 .14 | 25 uF $40 \times 92$ | $£ 9.72$ | 1 |
| 4.16 .10 .70 .14 | 30 uF $40 \times 92$ | $£ 11.00$ | 1 |
| 4.16 .10 .65 .14 | 36 uF $45 \times 92$ | $£ 12.21$ | 1 |
| 4.16 .10 .29 .14 | 40 uF $45 \times 92$ | $£ 17.98$ | 1 |

Din Rail Terminals \& Accessories


Feed-through screw clamp terminals: CTS2.5UN - CTS95U


A versatile range of universal ( 35 mm ) din rail mounting terminal blocks taking wire from 0.5 to 95 mm sq. The flexible foot enables easy mount / dismount from the din rail with a screwdriver. The terminals are available in a variety of colours and take international K (insert type) markers.

Single level safety fuse link terminals: CSFL4U


For electrical and control applications that require fuse protection. The terminal block has a hinged fuse carrier for a $6.3 \mathrm{~A} 5 \times 20 \mathrm{~mm}$ glass fuse. A wider range complete with an LED fuse blown indicator are also available. Please ask sales for details.

## Double level terminals: CDL4U



The ideal solution for applications with high wiring density. Useful features include:
$\checkmark$ Double level wiring density.
$\checkmark$ Interconnection / shorting at both levels. $\checkmark$ K type ID markers can be fitted at both levels.

## Knife disconnect terminals: CKT4U



Ideal for measuring, control and regulatory circuits. Disconnection is achieved by lifting the orange hinged lever, operating a knife contact. NB: These are not suitable for interrupting the load! The supply must be switched OFF before moving the hinged lever.
Earth terminals: CGT4U - CGT35U


Green and yellow earth terminals taking wire from 0.5 to 35 mm sq. Other features include:
$\checkmark$ Tin plated brass foot for low contact resistance.
$\checkmark$ Vibration proof grounding (tighten central screw).
$\checkmark$ High torque clamping yokes accept a wide range of wires.

## Din Rail Terminals

|  | UR, CSA \& V |  |  |
| :---: | :---: | :---: | :---: |
| Part Number | Description | Price | Per |
| CTS2.5UN | 2.5 mm | £35.98 | 100 |
| CTS4UN | 4 mm | £41.24 | 100 |
| CTS6U | 6 mm | $£ 49.18$ | 100 |
| CTS10U | 10 mm | $£ 64.38$ | 100 |
| CTS16U | 16 mm (with integrated end plate) | £95.26 | 100 |
| CTS25U | 25 mm | £110.15 | 100 |
| CTS35U | 35 mm | £184.13 | 100 |
| CTS50U | 50 mm (with integrated end plate) | £11.64 | 1 |
| CTS95U | 95 mm (with integrated end plate) | £19.07 | 1 |
| CSFL4U | 4 mm fuse term (use $5 \times 20 \mathrm{~mm}$ fuse) | £129.79 | 100 |
| CDL-4U | 4mm Double Decker Terminal | £113.79 | 100 |
| CKT4U | 4mm Knife Disconnect Terminal | £162.15 | 100 |
| Earth Terminals |  |  |  |
| CGT4U | 4mm Earth Terminal | £138.08 | 100 |
| CGT6U | 6 mm Earth Terminal | £164.78 | 100 |
| CGT10U | 10mm Earth Terminal | £229.87 | 100 |
| CGT16U | 16mm Earth Terminal | £284.55 | 100 |
| CGT35U | 35mm Earth Terminal | $£ 497.12$ | 100 |



| CTS2.5UNBLUE | 2.5mm Blue | $£ 43.49$ | 100 |
| :--- | :--- | ---: | :---: |
| CTS4UNBLUE | 4 mm Blue | $£ 49.83$ | 100 |
| CTS6UNBLUE | 6 mm Blue | $£ 59.43$ | 100 |
| CTS10UBLUE | 10 mm Blue | $£ 77.26$ | 100 |
| CTS16UBLUE | 16 mm Blue (with integrated end plate) | $£ 114.31$ | 100 |
| CTS25UBLUE | 25 mm Blue | $£ 132.18$ | 100 |
| CTS35UBLUE | 35 mm Blue | $£ 220.96$ | 100 |
| CTS50UBLUE | 50 mm Blue (with integrated end plate) | $£ 13.97$ | 1 |
| CTS95UBLUE | 95 mm Blue (with integrated end plate) | $£ 22.88$ | 1 |

## Slotted Top Hat Din Rail $35 \times 7.5 \mathrm{~mm}$



## Quality Components at Competitive Prices

Slotted Top Hat Din Rail $35 \times 15 \mathrm{~mm}$ ( 10 Lengths per Pack)



Plain G Din Rail $32 \times 15 \mathrm{~mm}$ (10 Lengths Per Pack)


| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :---: |
| STBGDR2MP | Plain 32 mm G Din Rail 2 Metre | $£ 63.50$ | Pack |

## End Plates



## End Plates

are used to cover the live parts of the last terminal block making the assembly finger safe. Not required
 on CTS16, 50 \& 95 terminals.

| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :--- |
| CTSEP5U | $2.5-$ 4mm | $£ 21.62$ | 100 |
| CSFLEPU | 4 mm Fuse Terminal | $£ 26.32$ | 100 |
| CDL-4U-EP | 4 mm Double Decker | $£ 26.17$ | 100 |
| CKTEPU | 4 mm Knife Disconnect End Plate | $£ 28.93$ | 100 |
| CTSEP2U | $6-10 \mathrm{~mm}$ | $£ 21.62$ | 100 |
| CTSEP3U | 25 mm | $£ 53.85$ | 100 |
| CTSEP4U | 35 mm | $£ 53.85$ | 100 |


| Partition Plates |  |  |  |
| :---: | :---: | :---: | :---: |
|  |  | Partition plates identify \& segregate terminal block groups \& can be used electrically isolate adjacent cross connection sets. <br> The partition plate also maintains the required creepage and clearance va in the assembly. |  |
| Part Number CTSPP5U | Description $2.5-4 \mathrm{~mm}$ | Price <br> £32.48 | $\begin{aligned} & \text { Per } \\ & 100 \\ & \hline \end{aligned}$ |
| CTSPP2U | 6-10mm | $£ 36.03$ | 100 |
| CTSPP3U | 25 mm | £53.86 | 100 |
| CTSPP4U | 35 mm | £53.86 | 100 |

## Blank Terminal Markers



* The CA509/K2 should also be used with the CDL-4U double decker terminal.


## Jumper Bars (10 Way Insulated Shorting Links)



## Din Rail Terminal Accessories



| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :---: |
| (1)CA302 | Steel End Clamp For Din 35 Rail | $£ 0.37$ | 1 |
| (2)CA509/G1 | Group Marker | $£ 31.83$ | 100 |
| (3)CA603 | Mounting Bracket | $£ 50.63$ | 100 |
| (4)CA702 | End Stop (keeps end plate in position) | $£ 0.39$ | 1 |
| (5)CSP1 | Holding Plate | $£ 0.50$ | 1 |
| (6)CTSPC | Protective Cover 150mm | $£ 0.92$ | 1 |
| (7) GMH7 | Group Marker Holder | $£ 73.65$ | 100 |
| (8)CSFL4UCL | Copper Link for Fuse Terminal | $£ 46.82$ | 100 |

An extended range of terminals and accessories are available on request. Please ask for details.

NB: Please see page 125 for technical details. 2015 Catalogue


## Warning Tower Beacons

## 70 mm LED Modules



Unique click-fit modular design for easy connection and installation. Long life / low maintenance / low power consumption LED lights Switchable flash / constant light Adjustable volume control 4 tone alarm Entire range IP65 rated
Available in 24 V or $85 \sim 275 \mathrm{~V}$ AC
5 mounting options


| Part Number | Description | Price | Per |
| :--- | :---: | :---: | :---: |
| DIS7211 | 70mm Blue 85-275V AC | $£ 35.89$ | 1 |
| DIS7212 | 70 mm Green 85-275V AC | $£ 43.19$ | 1 |
| DIS7213 | 70 mm Red 85-275V AC | $£ 32.95$ | 1 |
| DIS7214 | 70 mm White 85-275V AC | $£ 43.19$ | 1 |
| DIS7215 | 70 mm Amber 85-275V AC | $£ 32.95$ | 1 |
| DIS7221 | 70 mm Blue 24V DC | $£ 32.95$ | 1 |
| DIS7222 | 70 mm Green 24V DC | $£ 40.25$ | 1 |
| DIS7223 | 70 mm Red 24V DC | $£ 29.97$ | 1 |
| DIS7224 | 70 mm White 24V DC | $£ 40.25$ | 1 |
| DIS7225 | 70 mm Amber 24V DC | $£ 29.97$ | 1 |
|  |  |  |  |

(i) The meaning of colours....
Red - signifies danger status, immediate action required.
Green - signifies normal status, no action required.
White - signifies other status, can be identified by the user.
Amber - signifies abnormal status, monitor or action required.
Blue - signifies discontinuity status, action mandatory.

## 70 mm Standard 4 Bolt Bases


delta design
ackanamanno

Our most popular bases....

| Part Number | Description | Price | Per |
| :--- | :--- | :---: | :---: |
| DIS7001 | 4 Bolt Base 70 mm Black | $£ 11.69$ | 1 |
| DIS7002 | 4 Bolt Base 70 mm White | $£ 15.23$ | 1 |

[^4]

70 mm Buzzer for Tower Beacons $(((120 \mathrm{~dB})))$


Continuous / intermittent buzzer

| Part Number | Description <br> DIS7122X | Price | Per |
| :--- | :--- | :---: | :---: |
|  | Black 120dB 24V DC | $£ 36.55$ | 1 |

60-80 beeps per minute

## LED Beacons

LED High Profile Beacons


## delta design

## CE Approved

IP67 (when installed)
Height: 95 mm Width: 76 mm
Flash Rate 65 per min / Flashing and Continuously Lit Modes
Clear Lens with Coloured LED / Low Power Consumption

| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :---: |
| LT-LEDMVRED | LED Multi-volt 10-100V DC Red | $£ 38.55$ | 1 |
| LT-LEDMVAMBER | LED Multi-volt $10-100$ VC Amber | $£ 38.55$ | 1 |

LED Low Profile Beacons


## delta design

## CE Approved

IP67 (when installed)
Height: 44 mm Width: 76 mm
Flash Rated 65 per min / Flashing and Continuously Lit Modes
Clear Lens with Coloured LED / Low Power Consumption

| Part Number | Description | Price | Per |
| :--- | :--- | :---: | :---: |
| 447002 | LED 110V $/ 230$ V Amber | $£ 36.50$ | 1 |
| LP-LED110/230RED | LED 110V $/ 230$ V Red | $£ 37.90$ | 1 |

A wider range is available with a choice of different colours, voltages and sizes - please ask....


## Xenon Beacons

## Low Profile Xenon Beacons



## delta design <br> 

## CE Approved

IP67 (when installed) CE Approved / Height: 45mm / LP1 Flash Rate 60 per Min / LP4 Flash Rate 75 per Min

| Part Number <br> LP4XMV/2 | Description <br> 2W Multi-volt 10-100V DC / <br> 20-72V AC Amber | Price | Per |
| :--- | :--- | :---: | :---: |
|  | $£ 21.44$ | 1 |  |
| LP4XMV/2RED | 2W Multi-volt 10-100V DC / |  |  |
|  | 20-72V AC Red | $£ 24.90$ | 1 |
| LP1X110/2 | 2W 110V AC (90-125V AC) Amber | $£ 25.31$ | 1 |
| LP1X110/2RED | 2W 110V AC (90-125V AC) Red | $£ 25.31$ | 1 |
| LP1X230/2 | 2W 230V AC Amber | $£ 24.33$ | 1 |
| LP1X230/2RED | 2W 230V AC Red | $£ 24.33$ | 1 |
| LPFX2 | Mounting Base for LP \& LT Beacons | $£ 3.34$ | 1 |
| 521058 | Sounder + Pole for LP \& LT <br>  <br>  <br>  <br>  Beacons 72dB 12-24V AC/DC | $£ 49.72$ | 1 |

High Profile Xenon Beacons


## Delta Star Beacons

Delta Star RB Series


## delta design

## CE Approved

IP65 / Height: 120mm / Width: 148 mm Flash Rate: 125 per min

| Part Number | Description | Price | Per |
| :--- | :--- | :---: | :---: |
| 470002 | RB Beacon 10-30V DC 15W Amber | $£ 55.87$ | 1 |
| 470003 | RB Beacon 10-30V DC 15W Red | $£ 55.87$ | 1 |

Sourcing a Fuse? - Follow These Helpful Tips
There are 1000 s of different fuses from many manufacturers worldwide. When trying to source a fuse the following information will be very useful.

- Manufacturer
- Part Number
- Dimensions (Length of fuse body, diameter, overall length, width)
- Current rating in Amps

If you have obtained the above information, there is no need to proceed any further, however customers do not often have the above information so you will need to ask:

- Voltage (AC or DC)?
- Characteristic (eg: gL,aM,gR)?
- Are approvals required (eg: UL, IEC)?
- Fixing centres (how far apart - if relevant)?
- How is the fuse mounted (If relevant)?
- What is the fuse protecting?
- Does the fuse have an indicator?

■ Does the fuse have a striker to operate a microswitch?

Understanding General Fuse Terminology
Miniature Fuses:

```
-FF
```

- F or QA or QB - Fast Blow
- M or MD - Medium Blow
- T or SB - Slow Blow / Time Delay / Anti Surge
- TT - Ultra Slow
Bottle Fuses:
- DIAZED 500V Bottle fuses DI (E16), DII (E27), DIII (E33)
- NEOZED 380V Bottle fuses D01 (E14), D02 (E18)
- SILAZED Ultra Rapid Bottle fuses DII (E27), DIII (E33)
Industrial Fuses:

| -aR or gR or $u R$ | - Ultra Rapid |
| :--- | :--- |
| $-\mathrm{gL} / \mathrm{gG}$ | - General Line |
| -aM | - Motor Rated |
| $-\mathrm{gF} / \mathrm{gTF}$ | - Transformer / Cable protection |
| -gB | - Mining Fuses |

SICHERUNGEN/-USES
BS88 Industrial Fuse Comparison Chart

| $\begin{gathered} \text { BS88 } \\ \text { Ref. } \end{gathered}$ | Rating Amps | Europa Order Code | GE Power (GEC) | Lawson | Cooper Bussmann | MEM | BRUSH |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| F1 | 2-32 | 50-086-01 | NS | NS | NSD | SN2 | FO6 |
| - | 2-20 | 50-013-01 | SS | SS | SSN | SS | DO4 |
| A1 | 2-32 | 50-085-01 | NIT | NIT | NITD | SA2 | F21 |
| A2 | 2-32 | 50-001-01 | TIA | TIA | AAO | SB3 | HO7 |
| A3 | 32-63 | 50-002-01 | TIS | TIS | BAO | SB4 | KO7 |
| - | 2-63 | 50-006-01 | TB | TB | BC | SE4 | KO8 |
| B1 | 2.63 | 50-007-01 | TBC | TBC | AD/BD | SF3 | KO9 |
| B1 | 80-100 | 50-008-01 | TC | TC | CD | SF5 | LO9 |
| B2 | 125-200 | 50-009-01 | TF | TF | DD | SF6 | MO9 |
| A4 | 63-100 | 50-003-01 | TCP | TCP | CEO | SD5 | L14 |
| - | 125-200 | 50-004-01 | TFP | TFP | DEO | SD6 | M14 |
| B3 | 250-315 | 50-010-01 | TKF | TKF | ED | SF7 | NO9 |
| B4 | 355-400 | 50-110-01 | TMF | TMF | ED | SF8 | PO9 |
| C1 | 250-315 | 50-011-01 | TKM | TKM | EFS | SG7 | N11 |
| C1 | 355-400 | 50-039-01 | TM | TM | EF | SH8 | P11 |
| C2 | 450-630 | 50-040-01 | TTM | TTM | FF | SH9 | R11 |
| C3 | 560-800 | 50-041-01 | TLM | TLM | GF | SH10 | S11 |
| - | 450-630 | - | TT | TT | FG | SY9 | R12 |
| - | 670-800 | - | TLT | TLT | GG | SY10 | S12 |

(i) BS88 J Type Fuse Cross Reference Chart

| Lawson | GE Power (GE) | Brush | Bussmann | MEM |
| :--- | :---: | :---: | :---: | :---: |
| JHU | $96 T Y$ | MJ29 | JHDS | JW6 / JWS6 |
| JPU | $95 T Y ~ / ~ 95 T J ~ / ~ 171 T N ~$ | MJ27 / MJ30 / PJ30 | JPDS / JOPCS / J1PCS / J2PCS | JX6 / JX7 / JX8 / JXS6 / JXS7 / JXS8 |
| JSU | 385TJ / 386TN / 387TW | MJ31 / PJ31 / SJ31 | JSDS / JOSCS / J1SCS / J2SCS / J3SCS | JY7 / JY8 / JY10 / JYS7 / JYS8 / JYS10 |


| (i) Quick Reference Fuse Index |  |
| :--- | :--- |
| American Midget Fuses | $119-120$ |
| Bottle Fuses | $113-114$ |
| BS1362 Plug Top \& Outlet Adaptor Fuses | $103-104$ |
| BS88 Industrial Fuses | $95-102$ |
| BS88 Semiconductor Fuses | $100-102$ |
| Consumer Unit Fuses | 104 |
| Cylindrical Fuses \& Fuse Holders | $109-113$ |
| Fork Lift Truck Fuses | 118 |
| Fuse Holders for BS88 Fuses | 103 |
| House Service Cut Out Fuses | 104 |
| Miniature Fuses | $105-109$ |
| Multi Meter Fuses (UR 1000V) | 109 |
| NH Knife Blade Fuses, Holders \& Accessories | $114-118$ |
| Photovoltaic Fuses | 110 |
| Solid Neutral Links for BS88 Fuses | 102 |

## BS88 HRC Fuses

Industrial

## NIT NITD SA2

Box Qty 10

Mer=eN
-LAMSSOBN

## Manufactured by Mersen / Lawson

Rated at 550V AC 80 kA
Fixing Centres: $44.5 \mathrm{~mm} /$ Diameter (Size A1)
ASTA 20 Certified

| Part Number | Description | Price | Per |
| :--- | :--- | :--- | :---: |
| $50-085-01 / 2 \mathrm{~A}$ | 2 A | $£ 2.70$ | 1 |
| $50-085-01 / 4 \mathrm{~A}$ | 4 A | $£ 2.70$ | 1 |
| $50-085-01 / 6 \mathrm{~A}$ | 6 A | $£ 2.70$ | 1 |
| $50-085-01 / 10 \mathrm{~A}$ | 10 A | $£ 2.70$ | 1 |
| $50-085-01 / 16 \mathrm{~A}$ | 16 A | $£ 2.70$ | 1 |
| $50-085-01 / 20 \mathrm{~A}$ | 20 A | $£ 2.85$ | 1 |
| $50-085-01 / 25 \mathrm{~A}$ | 25 A | $£ 2.85$ | 1 |
| $50-085-01 / 32 \mathrm{~A}$ | 32 A | $£ 2.85$ | 1 |

NB: Also available in a Motor Rated Version
TIA AAO SB3 Box Qty 10


## Mersen

LAWsón


## Manufactured by Mersen / Lawson

Rated at 550V AC 80kA
Fixing Centres: 73mm Diameter: 16mm (Size A2C) ASTA 20 Certified

| Part Number | Description | Price | Per |
| :--- | :--- | :--- | :---: |
| $50-001-01 / 2 \mathrm{~A}$ | 2 A | $£ 3.20$ | 1 |
| $50-001-01 / 4 \mathrm{~A}$ | 4 A | $£ 3.20$ | 1 |
| $50-001-01 / 6 \mathrm{~A}$ | 6 A | $£ 3.20$ | 1 |
| $50-001-01 / 10 \mathrm{~A}$ | 10 A | $£ 3.20$ | 1 |
| $50-001-01 / 16 \mathrm{~A}$ | 16 A | $£ 3.20$ | 1 |
| $50-001-01 / 20 \mathrm{~A}$ | 20 A | $£ 3.20$ | 1 |
| $50-001-01 / 25 \mathrm{~A}$ | 25 A | $£ 3.20$ | 1 |
| $50-001-01 / 32 \mathrm{~A}$ | 32 A | $£ 3.20$ | 1 |

NB: Also available in a Motor Rated Version

TIS BAO SB4
Box Qty 10


Mer=eN

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## Manufactured by Mersen / Lawson

Rated at 550V AC 80kA
Fixing Centres: 73mm Diameter: 18.5mm (Size A3C) ASTA 20 Certified

| Part Number | Description | Price | Per |
| :--- | :--- | :--- | :---: |
| $50-002-01 / 40 \mathrm{~A}$ | 40 A | $£ 4.80$ | 1 |
| $50-002-01 / 50 \mathrm{~A}$ | 50 A | $£ 4.80$ | 1 |
| $50-002-01 / 63 \mathrm{~A}$ | 63 A | $£ 4.80$ | 1 |

NB: Also available in a Motor Rated Version

TIS BAO OS OSD SB4
Box Qty 10

|  |  | M-FE-N |  |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
| Manufactured by Mersen / Lawson <br> Fixing Centres: 73mm <br> Diameter 26mm 415V 80kA |  | -LAWS'ÓN |  |
| Part Number | Description | Price | Per |
| TIS80A | 80A | £12.80 | 1 |
| TIS100A | 100A | £13.20 | 1 |
| TIS125A | 125A | £17.10 | 1 |

NB: Other values are available on request

Please Note: A Lawson range is also available from 6A upwards.

## Mersen

## Manufactured by Mersen / Lawson

Rated at 415V AC 80KA
Fixing Centres: 94mm Diameter: 25mm (29mm 80A, 100A) (Size A4) ASTA 20 Certified

| Part Number | Description | Price | Per |
| :--- | :--- | :---: | :---: |
| $50-003-01 / 63 \mathrm{~A}$ | 63 A | $£ 12.00$ | 1 |
| $50-003-01 / 80 \mathrm{~A}$ | 80 A | $£ 11.00$ | 1 |
| $50-003-01 / 100 \mathrm{~A}$ | 100 A | $£ 11.00$ | 1 |

NB: Also available in a Motor Rated Version / Other values available on request

TFP DEO SD6
Box Qty 3


Manufactured by Mersen / Lawson
Rated at 415V 80KA
Fixing Centres: 94mm Diameter: 38mm ASTA 20 Certified

| Part Number | Description | Price | Per |
| :--- | :--- | :--- | :---: |
| $50-004-01 / 125 \mathrm{~A}$ | 125 A | $£ 16.00$ | 1 |
| $50-004-01 / 160 \mathrm{~A}$ | 160 A | $£ 16.50$ | 1 |
| $50-004-01 / 200 \mathrm{~A}$ | 200 A | $£ 17.20$ | 1 |

(i) Also available in a Motor Rated version / please note we also offer the Lawson CTFP Compact range with 30 mm diameter
SS SSD Box Qty 10


Manufactured by Lawson

Rated at 240 V 20kA / $12.7 \times 51 \mathrm{~mm}$

| Part Number | Description | Price | Per |
| :--- | :--- | :--- | :---: |
| SS2 | 2 A | $£ 2.70$ | 1 |
| SS4 | 4 A | $£ 2.70$ | 1 |
| SS6 | 6 A | $£ 2.70$ | 1 |
| SS10 | 10 A | $£ 2.70$ | 1 |
| SS16 | 16 A | $£ 2.70$ | 1 |
| SS20 | 20 A | $£ 2.90$ | 1 |
| SS25 | 25 A | $£ 2.90$ | 1 |
| SS32 | 32 A | $£ 2.90$ | 1 |

NS NSD SN2 Box Qty 10


Mersen

LAWSÓN

Manufactured by Mersen / Lawson
Rated at 415 V AC 80 kA
Overall length: 61mm Diameter: 14mm (Size F1)

| Part Number | Description | Price | Per |
| :--- | :--- | :--- | :---: |
| $50-086-01 / 2 \mathrm{~A}$ | 2 A | $£ 2.70$ | 1 |
| $50-086-01 / 4 \mathrm{~A}$ | 4 A | $£ 2.70$ | 1 |
| $50-086-01 / 6 \mathrm{~A}$ | 6 A | $£ 2.70$ | 1 |
| $50-086-01 / 10 \mathrm{~A}$ | 10 A | $£ 2.70$ | 1 |
| $50-086-01 / 16 \mathrm{~A}$ | 16 A | $£ 2.70$ | 1 |
| $50-086-01 / 20 \mathrm{~A}$ | 20 A | $£ 2.85$ | 1 |
| $50-086-01 / 25 \mathrm{~A}$ | 25 A | $£ 2.85$ | 1 |
| $50-086-01 / 32 \mathrm{~A}$ | 32 A | $£ 3.30$ | 1 |

MES ES ESD SP
Box Qty 10


## Mersen

Manufactured by Mersen / Lawson
QLAWSOM
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Rated at $415 \mathrm{~V} 80 \mathrm{kA} / 69 \times 17.5 \mathrm{~mm}$

| Part Number | Description | Price | Per |
| :--- | :--- | :--- | :---: |
| MES10 | 10 A | $£ 5.90$ | 1 |
| MES16 | 16 A | $£ 5.90$ | 1 |
| MES20 | 20 A | $£ 6.20$ | 1 |
| MES32 | 32 A | $£ 6.20$ | 1 |
| MES40 | 40 A | $£ 6.90$ | 1 |
| MES50 | 50 A | $£ 7.50$ | 1 |
| MES63 | 63 A | $£ 8.00$ | 1 |

TB AC SE4 Box Qty 10

## Mersen



## Manufactured by Mersen / Lawson

Rated at 415V 80KA / Fixing Centres: 97mm Diameter: 22mm ASTA 20 Certified

| Part Number | Description | Price | Per |
| :--- | :--- | :--- | :---: |
| $50-006-01 / 20 \mathrm{~A}$ | 20 A | $£ 8.70$ | 1 |
| $50-006-01 / 32 \mathrm{~A}$ | 32 A | $£ 8.70$ | 1 |
| $50-006-01 / 40 \mathrm{~A}$ | 40 A | $£ 8.80$ | 1 |
| $50-006-01 / 50 \mathrm{~A}$ | 50 A | $£ 8.80$ | 1 |
| $50-006-01 / 63 \mathrm{~A}$ | 63 A | $£ 8.80$ | 1 |

NB: Also available in a Motor Rated Version


NB: Also available in a Motor Rated Version


NB: Also available in a Motor Rated Version

TF DD SF6
Box Qty 3

Mersed

## Manufactured by Mersen / Lawson

Rated at 415 V 80kA
Fixing Centres: 111 mm Diameter: $35 \mathrm{~mm} /$ ASTA 20 Certfied / (Size B2)

| Part Number | Description | Price | Per |
| :--- | :--- | :---: | :---: |
| $50-009-01 / 125 A$ | 125 A | $£ 18.50$ | 1 |
| $50-009-01 / 160 \mathrm{~A}$ | 160 A | $£ 19.40$ | 1 |
| $50-009-01 / 200 \mathrm{~A}$ | 200 A | $£ 20.50$ | 1 |

TKF ED SF7 Box Qty 3


LAWSÓN

Manufactured by Mersen / Lawson
Rated at 415V 80KA / Fixing Centres: 111 mm Diameter: 41 mm ASTA 20 Certfied (Size B3)

| Part Number | Description | Price | Per |
| :--- | :--- | :---: | :---: |
| $50-010-01 / 250 \mathrm{~A}$ | 250 A | $£ 31.50$ | 1 |
| $50-010-01 / 315 \mathrm{~A}$ | 315 A | $£ 34.50$ | 1 |

NB: Also available in a Motor Rated Version
TKM SG7 Box Qty 3


NB: Other values available on request

TMF ED SF8

NB: Also available in a Motor Rated Version



## Manufactured by Mersen / Lawson

Rated at 415 V 80kA
Fixing Centres: 111 mm Diameter: $51 \mathrm{~mm} /$ ASTA 20 Certfied (Size B4)

| Part Number | Description | Price | Per |
| :--- | :--- | :---: | :---: |
| $50-110-01 / 355 A$ | 355 A | $£ 47.10$ | 1 |
| $50-110-01 / 400 \mathrm{~A}$ | 400 A | $£ 49.00$ | 1 |

TM EF SH8
Box Qty 3
JPU JP JCS MJ30
Box Qty 1


MERGeN

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Manufactured by Mersen / Lawson
Rated at 415V 80kA
Fixing Centres: 133 mm inner holes / 184mm outer holes Diameter: 51mm / ASTA 20 Certfied
(Size C1)

| Part Number | Description | Price | Per |
| :--- | :--- | :---: | :---: |
| $50-039-01 / 355 \mathrm{~A}$ | 355 A | $£ 47.10$ | 1 |
| $50-039-01 / 400 \mathrm{~A}$ | 400 A | $£ 49.00$ | 1 |

TTM FF SH9 Box Qty 1


MerGeN

LAWSÓN

Manufactured by Mersen / Lawson
Rated at 415V 80kA
Fixing Centres: 133mm inner holes / 184mm outer holes
Diameter: 61mm / ASTA 20 Certfied / (Size C2)

| Part Number | Description | Price | Per |
| :--- | :--- | :---: | :---: |
| $50-040-01 / 500 \mathrm{~A}$ | 500 A | $£ 78.50$ | 1 |
| $50-040-01 / 560 \mathrm{~A}$ | 560 A | $£ 81.80$ | 1 |
| $50-040-01 / 630 \mathrm{~A}$ | 630 A | $£ 83.00$ | 1 |

TLM GF SH10 Box Qty 1


## Mer=eN

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## Manufactured by Mersen / Lawson

Rated at 415V 80kA
Fixing Centres: 133mm inner holes / 184mm outer holes Diameter: 73mm
ASTA 20 Certfied / (Size C3)

| Part Number | Description | Price | Per |
| :--- | :--- | :--- | :---: |
| $50-041-01 / 710 \mathrm{~A}$ | 710 A | $£ 138.00$ | 1 |
| $50-041-01 / 800 \mathrm{~A}$ | 800 A | $£ 145.00$ | 1 |



LAWs'Ó'

Manufactured by Mersen / Lawson
Fixing Centres: 82mm 415V

| Part Number | Description | Price | Per |
| :--- | :--- | :---: | :---: |
| JPU63 | $63 A$ | $£ 23.60$ | 1 |
| JPU80 | 80 A | $£ 23.60$ | 1 |
| JPU100 | 100 A | $£ 23.60$ | 1 |
| JPU125 | 125 A | $£ 23.60$ | 1 |
| JPU160 | 160 A | $£ 23.60$ | 1 |
| JPU200 | 200 A | $£ 27.80$ | 1 |
| JPU250 | 250 A | $£ 27.80$ | 1 |
| JPU315 | 315 A | $£ 27.80$ | 1 |
| JPU400 | 400 A | $£ 33.00$ | 1 |

NB: The JHU range with 72 mm fixing is also available on request
JSU JS JCS MJ31 Box Qty 1


Manufactured by Mersen / Lawson
Fixing Centres: 92mm 415V

| Part Number | Description | Price | Per |
| :---: | :---: | :---: | :---: |
| JSU20 | 20A | £27.10 | 1 |
| JSU32 | 32A | £27.10 | 1 |
| JSU40 | 40A | £27.10 | 1 |
| JSU50 | 50A | £27.10 | 1 |
| JSU63 | 63A | $£ 27.10$ | 1 |
| JSU80 | 80A | £27.10 | 1 |
| JSU100 | 100A | £27.10 | 1 |
| JSU125 | 125A | £27.10 | 1 |
| JSU160 | 160A | $£ 27.10$ | 1 |
| JSU200 | 200A | £27.10 | 1 |
| JSU250 | 250A | $£ 30.00$ | 1 |
| JSU315 | 315A | £30.00 | 1 |
| JSU355 | 355A | £32.60 | 1 |
| JSU400 | 400A | £33.60 | 1 |
| JSU500 | 500A | £48.70 | 1 |
| JSU630 | 630A | $£ 69.40$ | 1 |

(1) Please refer to page 94 for a cross reference / selection chart for $J$ type fuses.

| LST STD LS 240V | Box Qty 10 |  |  |
| :---: | :---: | :---: | :---: |
|  | OLAWSÓN' |  |  |
| Manufactured by Lawson <br> Fixing Centres: $38.5 \mathrm{~mm} / 48 \times 12.7 \mathrm{~mm} 240 \mathrm{~V}$ |  |  |  |
| Part Number | Description | Price | Per |
| LST2 | 2A | £2.50 | 1 |
| LST4 | 4A | £2.50 | 1 |
| LST6 | 6A | £2.50 | 1 |
| LST10 | 10A | £2.50 | 1 |
| LST16 | 16A | £2.50 | 1 |
| LST20 | 20A | £2.70 | 1 |
| LST25 | 25A | £2.70 | 1 |
| LST32 | 32A | £2.70 | 1 |

MD SMD 415V Box Qty 10

|  | QLAWSÓN |  |  |
| :---: | :---: | :---: | :---: |
| Manufactured by Lawson |  |  |  |
| Rated at 415 V 80kA / $29 \times 12.7 \mathrm{~mm} / \mathrm{ASTA} 20$ Certified |  |  |  |
| Part Number | Description | Price | Per |
| MD2 | 2A | £3.65 | 1 |
| MD4 | 4A | £3.65 |  |
| MD6 | 6A | £3.65 | 1 |
| MD8 | 8A | £3.65 | 1 |
| MD10 | 10A | £3.65 | 1 |
| MD16 | 16A | £3.65 | 1 |
| MD20 | 20A | $£ 3.65$ | 1 |
| MD25 | 25A | £3.65 |  |
| MD32 | 32A | $£ 3.65$ | 1 |

## Motor Rated BS88 Fuses



| TIA AAO SB2 aM | Box Qty 10 |
| :--- | :--- | :--- |

NB: Other values available on request


NB: Other values available on request
TIS OS OSD aM Box Qty 10



Manufactured by Mersen / Lawson
Rated at 415 V 80kA
Fixing Centres: 94mm Diameter: 35 mm

| Part Number <br> $50-003-16 / 125 A$ | Description <br> 100 M 125 A | Price | Per |
| :--- | :--- | :---: | :---: |
| $50-003-16 / 160 \mathrm{~A}$ | 100 M 160 A | $£ 20.30$ | 1 |
| $50-003-16 / 200 \mathrm{~A}$ | 100 M 200 A | $£ 21.90$ | 1 |

NS NSD SN2 aM
Box Qty 10

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LAMSS'O゚|́́


## Manufactured by Mersen / Lawson

Rated at 415V AC 80kA
Overall Length: 62mm Diameter 13.5 mm (17.5mm 32M40-M63)

| Part Number | Description | Price | Per |
| :--- | :--- | :--- | :---: |
| NS20M25 | 20M25A | $£ 3.70$ | 1 |
| NS20M32 | $20 \mathrm{M} 32 A$ | $£ 3.70$ | 1 |
| NS32M40 | 32M40A | $£ 7.50$ | 1 |
| NS32M50 | 32M50A | $£ 8.00$ | 1 |
| NS32M63 | 32M63A | $£ 8.00$ | 1 |

NB: Other values available on request / Please Note: that from the NS32M40 upwards the MES holder is required as the fuses will not fit the NS holder


TKF ED SF7 aM Box Qty 3


Manufactured by Mersen / Lawson
Rated at 415V 80kA
Fixing Centres: 111mm Diameter: 51mm

| Part Number | Description | Price | Per |
| :--- | :--- | :---: | :---: |
| $50-010-16 / 400 \mathrm{~A}$ | 315M400A | $£ 49.40$ | 1 |

## Semi Conductor Fuses to BS88

## LCT GSA



Manufactured by Siba
Fixing Centres: 38.1 mm
$8 \times 47.6 \mathrm{~mm} 250 \mathrm{~V}$

| Part Number | Description | Price | Per |
| :--- | :--- | :--- | :---: |
| $50-076-06 / 5 \mathrm{~A}$ | 5 A | $£ 5.80$ | 1 |
| $50-076-06 / 10 \mathrm{~A}$ | 10 A | $£ 5.80$ | 1 |
| $50-076-06 / 16 \mathrm{~A}$ | 16 A | $£ 5.80$ | 1 |
| $50-076-06 / 20 \mathrm{~A}$ | 20 A | $£ 5.80$ | 1 |
|  |  |  |  |

## Quality Components at Competitive Prices

LET GSA GSD
Box Qty 10
CT GSB
Box Qty 10


## listed in <br> LUCKINSIIVe



Manufactured by Siba
Fixing Centres: $63 \mathrm{~mm} / 17.5 \times 77 \mathrm{~mm} / 690 \mathrm{~V}$

| Part Number | Description | Price | Per |
| :--- | :--- | :--- | :---: |
| $50-073-06 / 16 \mathrm{~A}$ | 16 A | $£ 7.95$ | 1 |
| $50-073-06 / 20 \mathrm{~A}$ | 20 A | $£ 7.95$ | 1 |
| $50-073-06 / 25 \mathrm{~A}$ | 25A | $£ 7.95$ | 1 |
| $50-073-06 / 32 \mathrm{~A}$ | 32 A | $£ 8.95$ | 1 |
| $50-073-06 / 35 \mathrm{~A}$ | 35 A | $£ 9.95$ | 1 |
| $50-073-06 / 40 \mathrm{~A}$ | 40 A | $£ 9.95$ | 1 |
| $50-073-06 / 45 \mathrm{~A}$ | 45 A | $£ 9.95$ | 1 |
| $50-073-06 / 50 \mathrm{~A}$ | 50 A | $£ 10.25$ | 1 |
| $50-073-06 / 56 \mathrm{~A}$ | 56 A | $£ 10.25$ | 1 |
| $50-073-06 / 63 \mathrm{~A}$ | 63 A | $£ 10.25$ | 1 |
| $50-073-06 / 75 \mathrm{~A}$ | 75 A | $£ 10.25$ | 1 |
| $50-073-06 / 80 \mathrm{~A}$ | 80 A | $£ 10.70$ | 1 |
| $50-073-06 / 100 \mathrm{~A}$ | 100 A | $£ 11.60$ | 1 |
| ET-KIT | Trip Indicator \& Clips |  |  |

NB: Indicator kit available on request

| EET |  | Box Qty 6 |  |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
| Manufactured by Siba <br> Fixing Centres 70mm / 690V |  |  |  |
| Part Number 20-559-20/110A | Description 110A | Price <br> £20.11 | Per <br> 1 |
| 20-559-20/125A | 125A | $£ 20.11$ | 1 |
| 20-559-20/160A | 160A | £21.11 | 1 |
| 20-559-20/250A | 250A | $£ 23.73$ | 1 |
| 20-559-20/315A | 315A | £24.99 | 1 |

2015 Catalogue


Manufactured by Siba
Fixing Centres: $81.7 \mathrm{~mm} / 34.6 \times 107 \mathrm{~mm} / 690 \mathrm{~V}$

| Part Number <br> $50-074-06 / 100 \mathrm{~A}$ | Description | Price | Per |
| :--- | :--- | :---: | :---: |
| $50-074-06 / 160 \mathrm{~A}$ | 100 A | $£ 21.10$ | 1 |
| $50-074-06 / 180 \mathrm{~A}$ | 160 A | $£ 21.80$ | 1 |
| $50-074-06 / 200 \mathrm{~A}$ | 180 A | $£ 23.00$ | 1 |
| $50-074-06 / 250 \mathrm{~A}$ | 200 A | $£ 23.00$ | 1 |
| MT-KIT | 250 A | $£ 28.80$ | 1 |

NB: Indicator kit available on request

## MMT GSGB <br> Box Qty 1



Manufactured by Siba
Twin Bodied Fuse: Fixing Centres: $81.7 \mathrm{~mm} / 2 \times 34.6 \times 107 \mathrm{~mm} / 690 \mathrm{~V}$

| Part Number <br> $50-075-06 / 200 \mathrm{~A}$ | Description <br> 200 A | Price <br> $£ 47.70$ | Per <br> $50-075-06 / 225 A$ |
| :--- | :--- | :--- | :---: |
| $50-075-06 / 250 \mathrm{~A}$ | $£ 477.70$ | 1 |  |
| $50-075-06 / 300 \mathrm{~A}$ | 250 A | $£ 47.70$ | 1 |
| $50-075-06 / 350 \mathrm{~A}$ | 300 A | $£ 47.70$ | 1 |
| $50-075-06 / 400 \mathrm{~A}$ | 350 A | $£ 47.70$ | 1 |
| $50-075-06 / 450 \mathrm{~A}$ | 400 A | $£ 51.50$ | 1 |
| $50-075-06 / 500 \mathrm{~A}$ | 450 A | $£ 51.50$ | 1 |




GE Power Controls
Manufactured by GE Power Controls $80 \times 26.4 \mathrm{~mm}$

| Part Number | Description | Price | Per |
| :--- | :--- | :--- | :---: |
| XS10 | 10 A | $£ 11.62$ | 1 |
| XS20 | 20 A | $£ 13.98$ | 1 |
| XS32 | 32 A | $£ 13.98$ | 1 |
| XS40 | 40 A | $£ 13.98$ | 1 |
| XS50 | 50 A | $£ 13.98$ | 1 |
| XS63 | 63 A | $£ 13.98$ | 1 |
| XS80 | 80 A | $£ 15.09$ | 1 |
| XS100 | 100 A | $£ 16.54$ | 1 |
| XS125 | 125 A | $£ 20.17$ | 1 |

## Solid / Neutral Links for BS88 Fuses

| BS88 Compact Dimension Type |  | Box Qty 10 |  |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
| Manufactured by Mersen / Lawson |  |  |  |
| Part Number SLE120 | Description <br> Solid Link E1 <br> (SS fuse) Rated 20A | Price <br> $£ 8.50$ | Per 10 |
| SLF132 | Solid Link F1 <br> (NS fuse) Rated 32A | $£ 8.50$ | 10 |
| SLF263 | Solid Link F2 <br> (MES fuse) Rated 63A | $£ 18.00$ | 10 |

BS88 Bolted Type

* Box Qty Shown Below

|  | Price | Per |
| :--- | :--- | :--- | :--- |
| Manufactured by Mersen / Lawson |  |  |
| * Box Qty 10: SLA120 / SLA232 / SLA363 |  |  |

## Quality Components at Competitive Prices

## Fuse Holders for BS88 Fuses

(i) Colour: Black - White is available on request.
(Substitute BK with WH on part number. A surcharge of $20 \%$ applies)
 Mersel

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Manufactured by Mersen / Lawson

| Bolt In $660 / 690 \mathrm{~V} /$ Comply with BS88: Part 2 ASTA Certified |  |  |  |
| :--- | :--- | ---: | :---: |
|  |  |  |  |
| Part Number | Description | Price | Per |
| LBI20FC/BCBK | Front / Back Connected | $£ 10.50$ | 1 |
| LBI20FC/FCBK | Front Connected | $£ 9.60$ | 1 |

## LBI32 for TIA / GTIA Fuses (Bolt In) Box Qty 10

Manufactured by Mersen / Lawson

| Part Number | Description | Price | Per |
| :---: | :---: | :---: | :---: |
| LBI32BC/BCBK | Back Connected | £14.70 | 1 |
| LBI32FC/BCBK | Front / Back Connected | £13.60 | 1 |
| LBI32FC/FCBK | Front Connected | $£ 12.60$ | 1 |


| LBI63 for TIS Fuses (Bolt In) | Box Qty 10 |  |
| :--- | ---: | :--- |
|  |  |  |
| Manufactured by Mersen / Lawson |  |  |
| Bolt In 660 / 690V / Comply with BS88: Part 2 ASTA Certified |  |  |
|  |  |  |
| Part Number | Description | Price |
| LBI63FC/BCBK | Front / Back Connected | $£ 16.30$ |
| LBI63FC/FCBK | Front Connected | $£ 15.20$ |


| LBl100 for TCP Fuses (Bolt In) | Box Qty 5 |  |
| :--- | :--- | :--- |
|  |  |  |
| Manufactured by Mersen / Lawson |  |  |
| Bolt In 660 / 690V / Comply with BS88: Part 2 ASTA Certified |  |  |
|  |  |  |
| Part Number | Description | Price |
| Per |  |  |
| LBI100BC/BCBK | Back Connected | $£ 31.60$ |
| LBI100FC/BCBK | Front / Back Connected | 1 |
| LBI100FC/FCBK | Front Connected | $£ 29.50$ |


| LBl200 for TF Fuses (Bolt In) Box Qty 2 |  |  |
| :--- | ---: | :--- |
| Manufactured by Mersen / Lawson |  |  |
| Bolt In 660 / 690 V / Comply with BS88: Part 2 ASTA Certified |  |  |
|  |  |  |
| Part Number | Description | Price |
| LBI200FC/FCBK | Front Connected | $£ 78.70$ |

LCF20 for SS Fuses (Clip Fit) Box Qty 10
 Mersen

LAWSÓN


Manufactured by Mersen / Lawson
Clipfit 240 / 415V / ASTA Certified

| Part Number | Description | Price | Per |
| :--- | :--- | :---: | :---: |
| LCF20FC/FCBK | Front Connected | $£ 5.30$ | 1 |


| LCF32 for NS Fuses (Clip Fit) | Box Qty 10 |  |
| :--- | :--- | :--- |
| Manufactured by Mersen / Lawson |  |  |
| Clipfit 240 / 415V / ASTA Certified |  |  |
|  |  |  |
| Part Number | Description | Price |
| Per |  |  |
| LCF32BC/BCBK | Back Connected | $£ 8.60$ |
| LCF32FC/BCBK | Front / Back Connected | $£ 6.80$ |
| LCF32FC/FCBK | Front Connected | $£ 5.30$ |

## LCF63 for MES Fuses (Clip Fit) Box Qty 10

Manufactured by Mersen / Lawson
Clip fit 240 / 415V / ASTA Certified

| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :---: |
| LCF63FC/BCBK | Front / Back Connected | $£ 12.80$ | 1 |
| LCF63FC/FCBK | Front Connected | $£ 10.20$ | 1 |



Back Connected

## Domestic Fuses

## Plug Top Fuses



| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :--- |
| $50-030-04 / 1 \mathrm{~A}$ | 1 A | $£ 58.43$ | 100 |
| $50-030-04 / 2 \mathrm{~A}$ | 2 A | $£ 58.43$ | 100 |
| $50-030-04 / 3 \mathrm{~A}$ | 3 A | $£ 30.75$ | 100 |
| $50-030-04 / 5 \mathrm{~A}$ | 5 A | $£ 30.75$ | 100 |
| $50-030-04 / 7 \mathrm{~A}$ | 7 A | $£ 58.43$ | 100 |
| $50-030-04 / 10 \mathrm{~A}$ | 10 A | $£ 30.75$ | 100 |
| $50-030-04 / 13 \mathrm{~A}$ | 13 A | $£ 30.75$ | 100 |

2015 Catalogue

For Plugs \& Outlet Adaptors to BS646 (TDC17) Box Qty 10


Manufactured by Lawson
Conforms to BS646 / $5 \times 19 \mathrm{~mm} / 250 \mathrm{~V}$ AC
Breaking Capacity 1000A at 0.6 lagging power factor - 250V

| Part Number | Description | Price | Per |
| :--- | :--- | :--- | :---: |
| BL1 | 1 A | $£ 0.78$ | 1 |
| BL2 | 2 A | $£ 0.78$ | 1 |
| BL3 | 3A | $£ 0.78$ | 1 |
| BL5 | 5 A | $£ 0.78$ | 1 |

## Consumer Unit Fuses

LA D55 C55 (BS1361 / BS88-3) Box Qty 10


LAWS'ÓN
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Manufactured by Lawson
$6.35 \times 23 \mathrm{~mm} 240 \mathrm{~V}$


LD C30 (BS1361)
Box Qty 10


Manufactured by Lawson $12.7 \times 29 \mathrm{~mm} 240 \mathrm{~V}$

| Part Number | Description | Price | Per |
| :---: | :---: | :---: | :---: |
| LD6 | 6A Olack | £2.50 | 1 |
| LD10 | 10A Black | £2.50 | 1 |
| LD16 | 16A Black | £2.50 | 1 |
| LD20 | 20A Black | $£ 2.50$ | 1 |
| LD25 | 25A Black | $£ 2.50$ | 1 |
| LD30 | 30A Red | $£ 2.50$ | 1 |



## House Service Cut Out Fuses

ME RHF KR85 Box Qty 10


Manufactured by Mersen / Lawson

| Part Number | Description | Price | Per |
| :--- | :--- | :--- | :---: |
| ME5 | 5 A | $£ 6.80$ | 1 |
| ME10 | 10 A | $£ 6.80$ | 1 |
| ME15 | 15 A | $£ 6.80$ | 1 |
| ME20 | 20A | $£ 6.80$ | 1 |
| ME30 | 30 A | $£ 6.80$ | 1 |
| ME40 | 40 A | $£ 6.80$ | 1 |
| ME45 | 45 A | $£ 6.80$ | 1 |
| ME50 | 50 A | $£ 6.80$ | 1 |
| ME60 | 60 A | $£ 6.80$ | 1 |
| ME80 | 80 A | $£ 6.80$ | 1 |
| ME100 | 100A | $£ 6.80$ | 1 |

(i) Can be used with our Single Phase Switch Fuse on page 23.


MF RHLF LR85
Box Qty 10


Mersen

LAWSÓN

Manufactured by Mersen / Lawson
$30.16 \times 57 \mathrm{~mm} 415 \mathrm{~V}$

| Part Number | Description | Price | Per |
| :--- | :--- | :--- | :---: |
| MF50 | 50 A | $£ 8.30$ | 1 |
| MF60 | 60 A | $£ 8.30$ | 1 |
| MF80 | 80 A | $£ 8.30$ | 1 |
| MF100 | 100 A | $£ 8.30$ | 1 |

(i)Slydlock Fuses \& Holders are available on request....


## Miniature Fuses

## $5 \times 20 \mathrm{~mm}$ Miniature Fuses



## Many more specialist fuses are available

Our X-reference database has over 25,000 entries
Please call sales for details.


Manufactured by Siba
250 V

| Part Number | Description |  |  |
| :--- | :--- | :--- | :--- |
| $70-001-02 / 0.25 \mathrm{~A}$ | 250 mA | Price <br> $£ 27.40$ | Per |
| $70-001-02 / 0.5 \mathrm{~A}$ | 500 mA | $£ 27.40$ | 100 |
| $70-001-02 / 1 \mathrm{~A}$ | 1 A | $£ 27.40$ | 100 |
| $70-004-02 / 1.6 \mathrm{~A}$ | 1.6 A | $£ 26.10$ | 100 |
| $70-004-02 / 2 \mathrm{~A}$ | 2 A | $£ 26.10$ | 100 |
| $70-004-02 / 2.5 \mathrm{~A}$ | 2.5 A | $£ 26.10$ | 100 |
| $70-004-02 / 3.15 \mathrm{~A}$ | 3.15 A | $£ 26.10$ | 100 |
| $70-004-02 / 4 \mathrm{~A}$ | 4 A | $£ 26.10$ | 100 |
| $70-004-02 / 5 \mathrm{~A}$ | 5 A | $£ 26.10$ | 100 |
| $70-004-02 / 6.3 \mathrm{~A}$ | 6.3 A | $£ 26.10$ | 100 |
| $70-004-02 / 8 \mathrm{~A}$ | 8 A | $£ 26.10$ | 100 |
| $70-004-02 / 10 \mathrm{~A}$ | 10 A | $£ 26.10$ | 100 |
|  |  |  |  |

$5 \times 20 \mathrm{~m}(\mathrm{~T})$ Slow Blow Glass Box Qty 10


NB: Other values available on request 2015 Catalogue

## $5 \times 20 \mathrm{~mm}$ (F) Quick Blow Ceramic Box Qty 10



Manufactured by Siba 250V

| Part Number | Description |  |  |
| :--- | :--- | :--- | :--- |
| $70-007-33 / 0.25 \mathrm{~A}$ | 250 mA | Price <br> $£ 28.75$ | Per |
| $70-007-33 / 0.315 \mathrm{~A}$ | 315 mA | $£ 28.75$ | 100 |
| $70-007-33 / 0.5 \mathrm{~A}$ | 500 mA | $£ 20.25$ | 100 |
| $70-007-33 / 0.63 \mathrm{~A}$ | 630 mA | $£ 20.25$ | 100 |
| $70-007-33 / 0.8 \mathrm{~A}$ | 800 mA | $£ 20.25$ | 100 |
| $70-007-33 / 1 \mathrm{~A}$ | 1 A | $£ 20.25$ | 100 |
| $70-007-33 / 1.25 \mathrm{~A}$ | 1.25 A | $£ 20.25$ | 100 |
| $70-007-33 / 1.6 \mathrm{~A}$ | 1.6 A | $£ 20.25$ | 100 |
| $70-007-33 / 2.5 \mathrm{~A}$ | 2.5 A | $£ 20.25$ | 100 |
| $70-007-33 / 2 \mathrm{~A}$ | 2 A | $£ 20.25$ | 100 |
| $70-007-33 / 3.15 \mathrm{~A}$ | 3.15 A | $£ 20.25$ | 100 |
| $70-007-33 / 4 \mathrm{~A}$ | 4 A | $£ 20.25$ | 100 |
| $70-007-33 / 5 \mathrm{~A}$ | 5 A | $£ 20.25$ | 100 |
| $70-007-33 / 6.3 \mathrm{~A}$ | 6.3 A | $£ 20.25$ | 100 |
| $70-007-33 / 8 \mathrm{~A}$ | 8 A | $£ 20.25$ | 100 |
| $70-007-33 / 10 \mathrm{~A}$ | 10 A | $£ 20.25$ | 100 |
| $70-007-33 / 12.5 \mathrm{~A}$ | 12.5 A | $£ 20.25$ | 100 |
| $70-007-33 / 16 \mathrm{~A}$ | 16 A | $£ 20.25$ | 100 |

NB: Other values available on request
$5 \times 20 \mathrm{~mm}(\mathrm{~T})$ Slow Blow Ceramic Box Qty 10


NB: Other values available on request

Manufactured by Siba
250V

| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :--- |
| $70-001-40 / 0.63$ | 0.63 A | $£ 80.22$ | 100 |
| $70-001-40 / 1 \mathrm{~A}$ | 1 A | $£ 94.30$ | 100 |
| $70-001-40 / 1.6 \mathrm{~A}$ | 1.6 A | $£ 94.30$ | 100 |
| $70-001-40 / 2 \mathrm{~A}$ | 2 A | $£ 94.30$ | 100 |
| $70-001-40 / 3.15 \mathrm{~A}$ | 3.15 A | $£ 94.30$ | 100 |
| $70-001-40 / 5 \mathrm{~A}$ | 5 A | $£ 94.30$ | 100 |
| $70-001-40 / 6.3 \mathrm{~A}$ | 6.3 A | $£ 94.30$ | 100 |
| $70-001-40 / 8 \mathrm{~A}$ | 8 A | $£ 94.30$ | 100 |
| $70-001-40 / 10 \mathrm{~A}$ | 10 A | $£ 94.30$ | 100 |

NB: Other values available on request

## $6 \times 32 \mathrm{~mm}$ Miniature Fuses

$6 \times 32 \mathrm{~mm}$ (F) Quick Blow Glass Box Qty 10

|  |  |  |  |
| :--- | :--- | ---: | :--- |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
| Manterungenfuses |  |  |  |

NB: Other values available on request

## Quality Components at Competitive Prices

$6 \times 32 \mathrm{~mm}(\mathrm{~T})$ Slow Blow Glass


Manufactured by Siba
250V

| Part Number | Description | Price | Per |
| :---: | :---: | :---: | :---: |
| 70-059-61/0.25A | 250mA | £23.50 | 100 |
| 70-059-61/0.5A | 500mA | £23.50 | 100 |
| 70-059-61/0.63A | 630 mA | £23.50 | 100 |
| 70-059-61/0.8A | 800mA | $£ 23.50$ | 100 |
| 70-059-61/1A | 1A | £23.50 | 100 |
| 70-059-61/1.25A | 1.25A | $£ 23.50$ | 100 |
| 70-059-61/1.6A | 1.6A | £23.50 | 100 |
| 70-059-61/2A | 2A | £23.50 | 100 |
| 70-059-61/2.5A | 2.5A | £23.50 | 100 |
| 70-059-61/3.15A | 3.15A | $£ 23.50$ | 100 |
| 70-059-61/4A | 4A | £23.50 | 100 |
| 70-059-61/5A | 5A | £23.50 | 100 |
| 70-059-61/6.3A | 6.3A | £23.50 | 100 |
| 70-059-61/8A | 8A | $£ 23.50$ | 100 |
| 70-059-61/10A | 10A | £23.50 | 100 |
| 70-059-61/12.5A | 12.5A | £23.50 | 100 |
| 70-059-61/16A | 16A | £23.50 | 100 |
| 70-059-61/20A | 20A | $£ 23.50$ | 100 |

NB: Other values available on request

## $6 \times 32 \mathrm{~mm}$ (F) Quick Blow Ceramic Box Qty 10



## Manufactured by Siba

500V 250mA -16A / 400V 20-25A

| Part Number | Description | Price | Per |
| :--- | :--- | :--- | :--- |
| $70-065-63 / 0.5 \mathrm{~A}$ | 500 mA | $£ 44.40$ | 100 |
| $70-065-63 / 1 \mathrm{~A}$ | 1 A | $£ 44.40$ | 100 |
| $70-065-63 / 1.25 \mathrm{~A}$ | 1.25 A | $£ 44.40$ | 100 |
| $70-065-63 / 1.6 \mathrm{~A}$ | 1.6 A | $£ 44.40$ | 100 |
| $70-065-63 / 2 \mathrm{~A}$ | 2 A | $£ 44.40$ | 100 |
| $70-065-63 / 3 \mathrm{~A}$ | 3 A | $£ 44.40$ | 100 |
| $70-065-63 / 4 \mathrm{~A}$ | 4 A | $£ 44.40$ | 100 |
| $70-065-63 / 5 \mathrm{~A}$ | 5 A | $£ 44.40$ | 100 |
| $70-065-63 / 6.3 \mathrm{~A}$ | 6.3 A | $£ 44.40$ | 100 |
| $70-065-63 / 8 \mathrm{~A}$ | 8 A | $£ 44.40$ | 100 |
| $70-065-63 / 10 \mathrm{~A}$ | 10 A | $£ 44.40$ | 100 |
| $70-065-63 / 12.5 \mathrm{~A}$ | 12.5 A | $£ 44.40$ | 100 |
| $70-065-63 / 16 \mathrm{~A}$ | 16 A | $£ 44.40$ | 100 |
| $70-065-63 / 20 \mathrm{~A}$ | 20 A | $£ 58.80$ | 100 |
| $70-065-63 / 25 \mathrm{~A}$ | 25 A | $£ 58.80$ | 100 |


| $\cdots$ |  | $\underset{\text { SIBA }}{\text { Scherangenves }}$ |  |
| :---: | :---: | :---: | :---: |
| - |  |  |  |
| Manufactured by Siba |  |  |  |
| 500V 500mA-16A / 400V 20-25A / 250V 32A |  |  |  |
| Part Number | Description | Price | Per |
| 70-065-65/0.5A | 500 mA | $£ 48.30$ | 100 |
| 70-065-65/1A | 1A | $£ 48.30$ | 100 |
| 70-065-65/1.6A | 1.6A | £48.30 | 100 |
| 70-065-65/2A | 2A | $£ 48.30$ | 100 |
| 70-065-65/2.5A | 2.5A | $£ 48.30$ | 100 |
| 70-065-65/3A | 3A | £48.30 | 100 |
| 70-065-65/3.15A | 3.15A | £48.30 | 100 |
| 70-065-65/5A | 5A | $£ 48.30$ | 100 |
| 70-065-65/6.3A | 6.3A | £48.30 | 100 |
| 70-065-65/8A | 8A | £48.30 | 100 |
| 70-065-65/10A | 10A | $£ 48.30$ | 100 |
| 70-065-65/12.5A | 12.5A | £96.65 | 100 |
| 70-065-65/16A | 16A | $£ 96.65$ | 100 |
| 70-065-65/20A | 20A | £121.45 | 100 |
| 70-065-65/25A | 25A | £128.00 | 100 |
| 70-065-65/32A | 32A | £169.80 | 100 |

NB: Other values available on request
$6 \times 32 \mathrm{~mm}$ (FF) Ultra Rapid Ceramic Box Qty 10


Manufactured by Siba
700V 250mA-2A / 600V 2.5-10A (500V from 12.5A)

| Part Number | Description | Price | Per |
| :--- | :--- | :--- | :--- |
| $70-125-40 / 0.5 \mathrm{~A}$ | 500 mA | $£ 215.50$ | 100 |
| $70-125-40 / 1 \mathrm{~A}$ | 1 A | $£ 215.50$ | 100 |
| $70-125-40 / 1.6 \mathrm{~A}$ | 1.6 A | $£ 215.50$ | 100 |
| $70-125-40 / 2 \mathrm{~A}$ | 2 A | $£ 215.50$ | 100 |
| $70-125-40 / 3.15 \mathrm{~A}$ | 3.15 A | $£ 215.50$ | 100 |
| $70-125-40 / 5 \mathrm{~A}$ | 5 A | $£ 215.50$ | 100 |
| $70-125-40 / 6.3 \mathrm{~A}$ | 6.3 A | $£ 215.50$ | 100 |
| $70-125-40 / 8 \mathrm{~A}$ | 8 A | $£ 215.50$ | 100 |
| $70-125-40 / 10 \mathrm{~A}$ | 10 A | $£ 215.50$ | 100 |
| $70-125-40 / 12.5 \mathrm{~A}$ | 12.5 A | $£ 215.50$ | 100 |
| $70-125-40 / 16 \mathrm{~A}$ | 16 A | $£ 215.50$ | 100 |
| $70-125-40 / 20 \mathrm{~A}$ | 20 A | $£ 215.50$ | 100 |

NB: Other values available on request

NB: Other values available on request 2015 Catalogue
$5 \times 25 \mathrm{~mm}$ Miniature Fuses

| $5 \times 25 \mathrm{~mm}$ (F) Quick Blow Glass |  | Box Qty 10 |
| :---: | :---: | :---: |
|  |  |  |
| Manufactured by Siba 250V 1.6-10A Sand Filled |  |  |
| Part Number | Description | Price Per |
| 70-002-34/1A | 1A | £103.20 100 |
| 70-002-34/1.25A | 1.25A | $£ 103.20100$ |
| 70-002-34/1.6A | 1.6A | $£ 103.20100$ |
| 70-002-34/2A | 2A | $£ 103.20100$ |
| 70-002-34/3.15A | 3.15A | £103.20 100 |
| 70-002-34/5A | 5A | £103.20 100 |
| 70-002-34/6.3A | 6.3A | $£ 103.20100$ |
| 70-002-34/8A | 8A | $£ 103.20100$ |
| 70-002-34/10A | 10A | £103.20 100 |

NB: Other values available on request

## $5 \times 25 \mathrm{~mm}(\mathrm{M})$ Medium Blow Glass Box Qty 10



SICHERUNGEN/FUSES
Manufactured by Siba
250V 1.6-10A Sand Filled
$\left.\begin{array}{llrl}\text { Part Number } & \text { Description } & \begin{array}{c}\text { Price } \\ \text { 70-002-02/0.5A }\end{array} & 500 \mathrm{~mA}\end{array}\right)$

NB: Other values available on request
$5 \times 25 \mathrm{~mm}$ (F) Quick Blow Ceramic Box Qty 10


Manufactured by Siba
250V / with Indicator

| Part Number | Description | Price <br> Per | Per |
| :--- | :--- | ---: | :--- |
| $70-010-04 / 1.6 \mathrm{~A}$ | 1.6 A | $£ 199.80$ | 100 |
| $70-010-04 / 2 \mathrm{~A}$ | 2 A | $£ 199.80$ | 100 |
| $70-010-04 / 3.15 \mathrm{~A}$ | 3.15 A | $£ 199.80$ | 100 |
| $70-010-04 / 4 \mathrm{~A}$ | 4 A | $£ 199.80$ | 100 |
| $70-010-04 / 5 \mathrm{~A}$ | 5 A | $£ 199.80$ | 100 |
| $70-010-04 / 6.3 \mathrm{~A}$ | 6.3 A | $£ 199.80$ | 100 |
| $70-010-04 / 8 \mathrm{~A}$ | 8 A | $£ 199.80$ | 100 |
| $70-010-04 / 10 \mathrm{~A}$ | 10 A | $£ 199.80$ | 100 |



## 5 x 30mm Miniature Fuses

$5 \times 30 \mathrm{~mm}(\mathrm{~F})$ Quick Blow Glass Box Qty 10


## Manufactured by Siba

500V Sand Filled

| Part Number | Description | Price | Per |
| :--- | :--- | :--- | :--- |
| $70-003-34 / 0.5 \mathrm{~A}$ | 500 mA | $£ 141.00$ | 100 |
| $70-003-34 / 1 \mathrm{~A}$ | 1 A | $£ 141.00$ | 100 |
| $70-003-34 / 1.6 \mathrm{~A}$ | 1.6 A | $£ 141.00$ | 100 |
| $70-003-34 / 2 \mathrm{~A}$ | 2 A | $£ 141.00$ | 100 |
| $70-003-34 / 3.15 \mathrm{~A}$ | 3.15 A | $£ 141.00$ | 100 |
| $70-003-34 / 4 \mathrm{~A}$ | 4 A | $£ 141.00$ | 100 |
| $70-003-34 / 5 \mathrm{~A}$ | 5 A | $£ 141.00$ | 100 |
| $70-003-34 / 6.3 \mathrm{~A}$ | 6.3 A | $£ 141.00$ | 100 |
| $70-003-34 / 10 \mathrm{~A}$ | 10 A | $£ 141.00$ | 100 |
| $70-003-34 / 8 \mathrm{~A}$ | 8 A | $£ 141.00$ | 100 |

NB: Other values available on request

Many more specialist fuses are available. Please ask.
$5 \times 30 \mathrm{~mm}(\mathrm{M})$ Medium Blow Glass Box Qty 10


Manufactured by Siba
500V 1.6-10A Sand Filled

| Part Number <br> $70-003-02 / 0.5 \mathrm{~A}$ | Description <br> 500 mA | Price <br> $£ 141.00$ | 100 |
| :--- | :--- | ---: | :--- |
| $70-003-02 / 1 \mathrm{~A}$ | 1 A | $£ 141.00$ | 100 |
| $70-003-02 / 1.25 \mathrm{~A}$ | 1.25 A | $£ 141.00$ | 100 |
| $70-006-02 / 1.6 \mathrm{~A}$ | 1.6 A | $£ 143.70$ | 100 |
| $70-006-02 / 2 \mathrm{~A}$ | 2 A | $£ 143.70$ | 100 |
| $70-006-02 / 2.5 \mathrm{~A}$ | 2.5 A | $£ 143.70$ | 100 |
| $70-006-02 / 3.15 \mathrm{~A}$ | 3.15 A | $£ 143.70$ | 100 |
| $70-006-02 / 4 \mathrm{~A}$ | 4 A | $£ 143.70$ | 100 |
| $70-006-02 / 5 \mathrm{~A}$ | 5 A | $£ 143.70$ | 100 |
| $70-006-02 / 6.3 \mathrm{~A}$ | 6.3 A | $£ 143.70$ | 100 |
| $70-006-02 / 8 \mathrm{~A}$ | 8 A | $£ 143.70$ | 100 |
| $70-006-02 / 10 \mathrm{~A}$ | 10 A | $£ 143.70$ | 100 |

NB: Other values available on request

## 1000V Multi Meter Fuses

$6 \times 32 \mathrm{~mm}$ uR 1000V for Multi Meters Box Qty 10

$10 \times 35 \mathrm{~mm}$ uR 1000V for Multi Meters Box Qty 10

Manufactured by Siba
1000V AC / DC Equivalent to DMM 0.4

| Part Number | Description | Price | Per |
| :--- | :--- | :--- | :---: |
| $50-210-06 / 0.44 \mathrm{~A}$ | 440 mA | $£ 6.00$ | 1 |

$10 \times 38 \mathrm{~mm}$ uR 1000V for Multi Meters Box Qty 10


## Cylindrical Fuses \& Accessories $8 \times 31 \mathrm{~mm}$ Cylindrical Fuses <br> $8 \times 31 \mathrm{~mm}$ gL (General Line) Box Qty 10



Mersen

Manufactured by Mersen
Rated at 400V 20kA

| Part Number | Description | Price | Per |
| :--- | :--- | :--- | :---: |
| 15011 | 1 A | $£ 0.71$ | 1 |
| 15013 | 2 A | $£ 0.47$ | 1 |
| 15019 | 4 A | $£ 0.47$ | 1 |
| 15023 | 6 A | $£ 0.47$ | 1 |
| 15031 | 10 A | $£ 0.47$ | 1 |
| 15035 | 16 A | $£ 0.47$ | 1 |
| 15037 | 20 A | $£ 0.47$ | 1 |
| 15039 | 25 A | $£ 0.68$ | 1 |

NB: Other values available on request
$8 \times 31 \mathrm{~mm}$ aM (Motor Rated)
Box Qty 10


Mersen

Manufactured by Mersen
Rated at 400V 20kA

| Part Number | Description | Price | Per |
| :--- | :--- | :--- | :---: |
| 15511 | 1A | $£ 0.79$ | 1 |
| 15513 | AA | $£ 0.68$ | 1 |
| 15519 | 4A | $£ 0.68$ | 1 |
| 15523 | 6A | $£ 0.68$ | 1 |
| 15531 | 10A | $£ 0.68$ | 1 |

NB: Other values available on request
$8 \times 31 \mathrm{~mm}$ Fuse Holders (Din Rail Mounting) Mersen
$10 \times 38 \mathrm{~mm}$ gL (General Line) Box Qty 10

|  |  | MصロडصN |  |
| :---: | :---: | :---: | :---: |
| Manufactured by Mersen Din Rail Mounting |  |  |  |
|  |  |  |  |
| Part Number | Description | Price | Per |
| 24000 | MSC 8 / 10 Neutral | £4.41 | 1 |
| 24002 | MS 1P | £3.76 | 1 |
| $\underline{24014}$ | MS 3P | £13.96 | 1 |

## $10 \times 38 \mathrm{~mm}$ Cylindrical Fuses

```
\(10 \times 38 \mathrm{~mm}\) uR gPV 600V DC
Box Qty 10
```



SICHERUNGEN/IUSES

|  | MصRSصN |  |  |
| :---: | :---: | :---: | :---: |
| $-1 \mathrm{H}_{\mathrm{s}}$ |  |  |  |
| Manufactured by Mersen |  |  |  |
| Rated at 500 V 120 kA up to 25A ( 400 V 120 kA 32 A ) |  |  |  |
| Part Number | Description | Price | Per |
| 16011 | 1A | £0.86 | 1 |
| 16013 | 2A | £0.49 | 1 |
| 16019 | 4A | £0.49 | 1 |
| 16023 | 6A | £0.49 | 1 |
| 16027 | 8A | £0.49 | 1 |
| 16031 | 10A | £0.49 | 1 |
| 16033 | 12A | £0.63 | 1 |
| 16035 | 16A | £0.49 | 1 |
| 16037 | 20A | $£ 0.55$ | 1 |
| 16039 | 25A | $£ 0.55$ |  |
| 16043 | 32A | £0.55 | 1 |

NB: Other values available on request
$10 \times 38 \mathrm{~mm}$ aM (Motor Rated)

Mersen

## Manufactured by Mersen

Rated at 500V 120kA up to 20A (400V 120kA 25A \& 32A)

| Part Number | Description | Price | Per |
| :--- | :--- | :--- | :---: |
| 16511 | 1A | $£ 0.91$ | 1 |
| 16513 | 2A | $£ 0.57$ | 1 |
| 16519 | 4A | $£ 0.57$ | 1 |
| 16523 | $6 A$ | $£ 0.57$ | 1 |
| 16527 | 8A | $£ 0.57$ | 1 |
| 16531 | 10A | $£ 0.57$ | 1 |
| 16533 | 12A | $£ 0.57$ | 1 |
| 16535 | 16A | $£ 0.57$ | 1 |
| 16537 | 20A | $£ 0.59$ | 1 |
| 16539 | $25 A$ | $£ 0.59$ | 1 |
| 16543 | 32A | $£ 0.79$ | 1 |

NB: Other values available on request
(i) With our fuse database we can cross reference over 25,000 fuses at the touch of a button. Contact sales with any fuse queries for an immediate solution.


## Quality Components at Competitive Prices


$10 \times 38 \mathrm{~mm}$ Fuse Holder for uR gPV 1000V DC String Fuses

|  |  |  |  |
| :---: | :---: | :---: | :---: |
| Manufactured by Siba 600V |  |  |  |
| Part Number | Description | Price | Per |
| 60-033-05/2A | 2A | £5.00 | 1 |
| 60-033-05/4A | 4A | $£ 5.00$ | 1 |
| 60-033-05/6A | 6A | $£ 5.00$ | 1 |
| 60-033-05/10A | 10A | $£ 5.00$ | 1 |
| 60-033-05/16A | 16A | $£ 5.00$ | 1 |
| 60-033-05/20A | 20A | $£ 5.00$ | 1 |
| 60-033-05/25A | 25A | $£ 5.00$ | 1 |
| 60-033-05/30A | 30A | $£ 5.00$ | 1 |

(i) 660 V version available on request

$10 \times 38 \mathrm{~mm}$ Fuse Holders (Din Rail Mounting)



## $14 \times 51 \mathrm{~mm}$ Cylindrical Fuses

## $14 \times 51 \mathrm{~mm}$ gL (General Line)

Box Qty 10

|  | MصREصN |  |  |
| :---: | :---: | :---: | :---: |
| Manufactured by Mersen |  |  |  |
| Rated at 690V 80kA up to 25A (500V 120kA 32A \& 40A / 400V 120kA 50A) |  |  |  |
| Part Number | Description | Price | Per |
| 17031 | 10A | £1.20 | 1 |
| 17035 | 16A | £1.20 | 1 |
| 17037 | 20A | £1.20 | 1 |
| 17039 | 25A | £1.20 | 1 |
| 17043 | 32A | £1.28 | 1 |
| 17047 | 40A | £1.28 | 1 |
| 17051 | 50A | £1.32 | 1 |

NB: Other values available on request
$14 \times 51 \mathrm{~mm}$ aM (Motor Rated) Box Qty 10


Mersed

Manufactured by Mersen
Rated at 690 V 80kA up to 25A (500V 120kA 32A \& 40A / 400V 120kA 50A)

| Part Number | Description | Price | Per |
| :--- | :--- | :--- | :---: |
| 17535 | 16 A | $£ 1.20$ | 1 |
| 17537 | 20 A | $£ 1.20$ | 1 |
| 17539 | 25 A | $£ 1.20$ | 1 |
| 17543 | 32 A | $£ 1.34$ | 1 |
| 17547 | 40 A | $£ 1.34$ | 1 |
| 17551 | 50 A | $£ 1.34$ | 1 |

NB: Other values available on request
$14 \times 51 \mathrm{~mm} 690 \mathrm{~V}$ uR (Ultra Rapid) (aR) Box Qty 10


| Part Number | Description | Price | Per |
| :--- | :--- | :--- | :---: |
| $50-124-06 / 4 \mathrm{~A}$ | 4 A | $£ 7.00$ | 1 |
| $50-124-06 / 6 \mathrm{~A}$ | 6 A | $£ 7.00$ | 1 |
| $50-124-06 / 8 \mathrm{~A}$ | 8 A | $£ 7.00$ | 1 |
| $50-124-06 / 10 \mathrm{~A}$ | 10 A | $£ 7.00$ | 1 |
| $50-124-06 / 16 \mathrm{~A}$ | 16 A | $£ 7.00$ | 1 |
| $50-124-06 / 20 \mathrm{~A}$ | 20 A | $£ 7.15$ | 1 |
| $50-124-06 / 25 \mathrm{~A}$ | 25 A | $£ 7.15$ | 1 |
| $50-124-06 / 32 \mathrm{~A}$ | 32 A | $£ 7.40$ | 1 |
| $50-124-06 / 40 \mathrm{~A}$ | 40 A | $£ 7.40$ | 1 |
| $50-124-06 / 50 \mathrm{~A}$ | 50 A | $£ 8.00$ | 1 |

$14 \times 51 \mathrm{~mm} 690 \mathrm{~V}$ uR (Ultra Rapid + Striker) Box Qty 10

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Manufactured by Siba

| Part Number | Description | Price | Per |
| :--- | :--- | :--- | :---: |
| $50-126-06 / 20 \mathrm{~A}$ | 20 A | $£ 11.70$ | 1 |
| $50-126-06 / 25 \mathrm{~A}$ | 25 A | $£ 11.70$ | 1 |
| $50-126-06 / 32 \mathrm{~A}$ | 32 A | $£ 11.70$ | 1 |
| $50-126-06 / 40 \mathrm{~A}$ | 40 A | $£ 11.70$ | 1 |
| $50-126-06 / 50 \mathrm{~A}$ | 50 A | $£ 13.45$ | 1 |

$14 \times 51 \mathrm{~mm}$ Fuse Holders (Din Rail Mounting)


Manufactured by Mersen
Din Rail Mounting

| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :---: |
| 29002 | MS 1P | $£ 9.02$ | 1 |
| 29014 | MS 3P | $£ 30.87$ | 1 |

## $22 \times 58 \mathrm{~mm}$ Cylindrical Fuses

$22 \times 58 \mathrm{~mm}$ gL (General Line) Box Qty 10

Manufactured by Mersen
Rated at 690V 80kA up to 63A
(500V 120kA 80A + 100A / 400V 120kA 125A)

| Part Number | Description | Price | Per |
| :--- | :--- | :--- | :---: |
| 18043 | 32 A | $£ 2.68$ | 1 |
| 18047 | 40 A | $£ 2.68$ | 1 |
| 18051 | 50 A | $£ 2.68$ | 1 |
| 18055 | 63 A | $£ 2.68$ | 1 |
| 18059 | 80 A | $£ 2.68$ | 1 |
| 18063 | 100 A | $£ 2.92$ | 1 |
| 18065 | 125 A | $£ 2.92$ | 1 |

NB: Other values available on request
$22 \times 58 \mathrm{~mm}$ aM (Motor Rated) Box Qty 10


## MERERN

Manufactured by Mersen
Rated at 690V 80kA up to 80A
(500V 120kA 100A / 400V 120kA 125A)

| Part Number | Description | Price | Per |
| :--- | :--- | :--- | :---: |
| 18543 | 32 A | $£ 2.68$ | 1 |
| 18547 | 40 A | $£ 2.68$ | 1 |
| 18551 | 50 A | $£ 2.68$ | 1 |
| 18555 | 63 A | $£ 3.02$ | 1 |
| 18559 | 80 A | $£ 3.02$ | 1 |
| 18563 | 100 A | $£ 3.12$ | 1 |
| 18565 | 125 A | $£ 3.12$ | 1 |

NB: Other values available on request

Keep up to date with the latest real time status of your order! Make sure we have your current e-mail address and an automatic notification (including your unique UPS tracking number) will be sent to you as soon as your package leaves our warehouse.


$22 \times 58 \mathrm{~mm} 690 \mathrm{~V}$ uR (Ultra Rapid + Striker) Box Qty 10


## Manufactured by Siba

| Part Number | Description | Price | Per |
| :--- | :--- | :--- | :---: |
| $50-142-06 / 25 A$ | $25 A$ | $£ 12.65$ | 1 |
| $50-142-06 / 32 A$ | $32 A$ | $£ 12.65$ | 1 |
| $50-142-06 / 40 A$ | $40 A$ | $£ 15.20$ | 1 |
| $50-142-06 / 50 \mathrm{~A}$ | 50 A | $£ 15.20$ | 1 |
| $50-142-06 / 63 \mathrm{~A}$ | 63 A | $£ 16.40$ | 1 |
| $50-142-06 / 80 \mathrm{~A}$ | 80 A | $£ 16.40$ | 1 |
| $50-142-06 / 100 \mathrm{~A}$ | 100 A | $£ 17.35$ | 1 |

$22 \times 58 \mathrm{~mm}$ Fuse Holders (Din Rail Mounting)


Mersen

## Manufactured by Mersen

Din Rail Mounting

| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :---: |
| 29202 | MS 1P | $£ 12.95$ | 1 |
| 29214 | MS 3P | $£ 41.20$ | 1 |



Manufactured by Mersen

| Part Number | Description | Price | Per |
| :--- | :--- | :--- | :---: |
| 19000 | $8 \times 31$ | $£ 0.91$ | 1 |
| 19100 | $10 \times 38$ | $£ 0.85$ | 1 |
| 19200 | $14 \times 51$ | $£ 1.27$ | 1 |
| 19300 | $22 \times 58$ | $£ 2.47$ | 1 |

## Bottle Fuses (D-Type)

D01 (E14) gL (Neozed)
D01 (E14) gL 11mm x 36mm (Neozed) Box Qty 10


## Manufactured by ETI

400 V AC / 250V DC

| Part Number | Description | Price | Per |
| :--- | :--- | :--- | :---: |
| D01/2A/GL | 2 A | $£ 0.72$ | 1 |
| $D 01 / 4 \mathrm{~A} / \mathrm{GL}$ | 4 A | $£ 0.72$ | 1 |
| $D 01 / 6 \mathrm{~A} / \mathrm{GL}$ | 6 A | $£ 0.70$ | 1 |
| $\mathrm{D} 01 / 10 \mathrm{~A} / \mathrm{GL}$ | 10 A | $£ 0.67$ | 1 |
| $\mathrm{D} 01 / 16 \mathrm{~A} / \mathrm{GL}$ | 16 A | $£ 0.67$ | 1 |

## D02 (E18) gL (Neozed)

D02 (E18) gL 15.3mm x 36mm (Neozed) Box Qty10


2015 Catalogue

DI ND (E16) gL (Diazed)
DI ND (E16) gL 12.5mm x 50mm (Diazed) Box Qty 10


Manufactured by ETI
500 V AC

| Part Number | Description | Price | Per |
| :--- | :--- | :--- | :---: |
| $\mathrm{DI} / 2 \mathrm{~A} / \mathrm{GL}$ | 2 A | $£ 0.97$ | 1 |
| $\mathrm{D} / 4 \mathrm{~A} / \mathrm{GL}$ | 4 A | $£ 0.97$ | 1 |
| $\mathrm{DI} / 6 \mathrm{~A} / \mathrm{GL}$ | 6 A | $£ 0.97$ | 1 |
| $\mathrm{DI} / / 0 \mathrm{~A} / \mathrm{GL}$ | 10 A | $£ 0.82$ | 1 |
| $\mathrm{DI} / 16 \mathrm{~A} / \mathrm{GL}$ | 16 A | $£ 0.82$ | 1 |
| $\mathrm{D} / / 20 \mathrm{~A} / \mathrm{GL}$ | 20 A | $£ 1.03$ | 1 |
| $\mathrm{DI} / 25 \mathrm{~A} / \mathrm{GL}$ | 25 A | $£ 1.03$ | 1 |

DII (E27) gL (Diazed)
DII (E27) gL 22mm x 50mm (Diazed) Box Qty 5


Manufactured by ETI
500 V AC

| Part Number | Description | Price | Per |
| :--- | :--- | :--- | :---: |
| $\mathrm{D} I / 2 \mathrm{~A} / \mathrm{GL}$ | 2 A | $£ 0.78$ | 1 |
| $\mathrm{D} I / / 4 \mathrm{~A} / \mathrm{GL}$ | 4 A | $£ 0.78$ | 1 |
| $\mathrm{D} I / / 6 \mathrm{~A} / \mathrm{GL}$ | 6 A | $£ 0.78$ | 1 |
| $\mathrm{D} I / / 10 \mathrm{~A} / \mathrm{GL}$ | 10 A | $£ 0.57$ | 1 |
| $\mathrm{D} I / 16 \mathrm{~A} / \mathrm{GL}$ | 16 A | $£ 0.57$ | 1 |
| $\mathrm{D} I / / 20 \mathrm{~A} / \mathrm{GL}$ | 20 A | $£ 0.82$ | 1 |
| $\mathrm{D} I / / 25 \mathrm{~A} / \mathrm{GL}$ | 25 A | $£ 0.82$ | 1 |



A full range of ETI Bases, Gauge Pieces \& Screw Caps are available from stock.

Please ask sales for further details.

DIII (E33) gL (Diazed)
DIII (E33) gL 27mm x 50 mm (Diazed) Box Qty 5


## NH Blade Type Fuses

NH Size 00 Blade Type Fuses

NHc00 Compact (000) gL 500V Box Qty 10 or 3



## Manufactured by Siba

With Combi Indicator
Dimensions: W 20.5 / H 40.5 / L 78

| Part Number | Description | Price | Per |
| :--- | :--- | :--- | :---: |
| $20-000-13 / 6 \mathrm{~A}$ | 6 A | $£ 7.94$ | 1 |
| $20-000-13 / 10 \mathrm{~A}$ | 10 A | $£ 3.97$ | 1 |
| $20-000-13 / 16 \mathrm{~A}$ | 16 A | $£ 3.97$ | 1 |
| $20-000-13 / 20 \mathrm{~A}$ | 20 A | $£ 3.97$ | 1 |
| $20-000-13 / 25 \mathrm{~A}$ | 25 A | $£ 3.97$ | 1 |
| $20-000-13 / 32 \mathrm{~A}$ | 32 A | $£ 3.97$ | 1 |
| $20-000-13 / 35 \mathrm{~A}$ | 35 A | $£ 3.97$ | 1 |
| $20-000-13 / 40 \mathrm{~A}$ | 40 A | $£ 3.97$ | 1 |
| $20-000-13 / 50 \mathrm{~A}$ | 50 A | $£ 3.97$ | 1 |
| $20-000-13 / 63 \mathrm{~A}$ | 63 A | $£ 3.97$ | 1 |
| $20-000-13 / 80 \mathrm{~A}$ | 80 A | $£ 3.97$ | 1 |
| $20-000-13 / 100 \mathrm{~A}$ | 100 A | $£ 3.97$ | 1 |

(1) Europa Despatch Details

Free standard delivery for orders over $£ 100$ nett

Under $£ 100$ delivery charge only $£ 8.50$
Next day and special deliveries available
Minimum order value only $£ 20$


## NH00 gL (General Line) 500V Box Qty 10 or 3



SCHERUNGENIFUSES

## Manufactured by Siba

With Combi Indicator
Dimensions: W 29.5 / H 46 / L 78

| Part Number | Description | Price | Per |
| :--- | :--- | :--- | :---: |
| $20-001-13 / 125 A$ | $125 A$ | $£ 5.02$ | 1 |
| $20-001-13 / 160 \mathrm{~A}$ | 160 A | $£ 5.18$ | 1 |

NHOOO / NHOO aM (Motor Rated) 690V Box Qty 3


Manufactured by Siba
With Combi Indicator
20-477-08 Dimensions: W 20.5 / H 47 / L 78
Other amperages available on request

| Part Number | Description | Price | Per |
| :--- | :--- | :--- | :---: |
| $20-477-08 / 35 A$ | $35 A$ | $£ 9.35$ | 1 |
| $20-477-08 / 40 \mathrm{~A}$ | 40 A | $£ 9.35$ | 1 |
| $20-477-08 / 50 \mathrm{~A}$ | 50 A | $£ 9.35$ | 1 |

20-209-08 Dimensions: W 29.5 / H 47 / L 78

| $20-209-08 / 63 A$ | $63 A$ | $£ 10.67$ | 1 |
| :--- | :--- | :--- | :--- |
| $20-209-08 / 80 \mathrm{~A}$ | 80 A | $£ 10.67$ | 1 |
| $20-209-08 / 100 \mathrm{~A}$ | 100 A | $£ 11.50$ | 1 |
| $20-209-08 / 125 \mathrm{~A}$ | 125 A | $£ 11.50$ | 1 |

NH00 uR (Ultra Rapid) 500V Box Qty 3


## Manufactured by Siba

With Combi Indicator
Dimensions: W 28 / H 42 / L 78

| Part Number | Description | Price | Per |
| :--- | :--- | :---: | :---: |
| $20-001-04 / 100 \mathrm{~A}$ | 100 A | $£ 21.50$ | 1 |
| $20-001-04 / 125 \mathrm{~A}$ | 125 A | $£ 23.30$ | 1 |
| $20-001-04 / 160 \mathrm{~A}$ | 160 A | $£ 24.45$ | 1 |

## NHOO 80mm Fixing Centres

NH00 uR (Ultra Rapid) 690 / 700V Box Qty 3


## NH Size 0 Blade Type Fuses

NH0 gL (General Line) 500V Box Qty 3

## 2015 Catalogue

NH0 aM (Motor Rated) 660 / 690V
Box Qty 3


SIBA
SCHERUNGEN/FUSES

## Manufactured by Siba

With Combi Indicator

| Dimensions: W 29 / H 42 / L 125 |  |  |  |
| :--- | :--- | ---: | :---: |
|  |  |  |  |
| Part Number | Description | Price | Per |
| 20-210-08/125A | 125 A | $£ 14.50$ | 1 |
| $20-210-08 / 160 \mathrm{~A}$ | 160 A | $£ 14.60$ | 1 |

## NH Size 1 Blade Type Fuses

NH1 gL (General Line) 500V
Box Qty 3


## Manufactured by Siba

With Combi Indicator
Dimensions: 50A to 160A: W 29.5 / H 46 / L 135
200A to 250A: W 42 / H 51.5 / L 135

| Part Number | Description | Price | Per |
| :--- | :--- | :---: | :---: |
| $20-003-13 / 50 \mathrm{~A}$ | 50 A | $£ 9.65$ | 1 |
| $20-003-13 / 63 \mathrm{~A}$ | 63 A | $£ 9.65$ | 1 |
| $20-003-13 / 80 \mathrm{~A}$ | 80 A | $£ 9.65$ | 1 |
| $20-003-13 / 100 \mathrm{~A}$ | 100 A | $£ 9.65$ | 1 |
| $20-003-13 / 125 \mathrm{~A}$ | 125 A | $£ 9.65$ | 1 |
| $20-003-13 / 160 \mathrm{~A}$ | 160 A | $£ 9.65$ | 1 |
| $20-003-13 / 200 \mathrm{~A}$ | 200 A | $£ 10.05$ | 1 |
| $20-003-13 / 224 \mathrm{~A}$ | 224 A | $£ 10.05$ | 1 |
| $20-003-13 / 250 \mathrm{~A}$ | 250 A | $£ 10.05$ | 1 |



SCHERUNGENFUSES
Manufactured by Siba
With Combi Indicator / Dimensions: W 29 / H 42 / L 135
Dimensions: 200A + W 42 / H 51.5 / L 150

| Part Number | Description | Price | Per |
| :--- | :--- | :--- | :---: |
| $20-211-08 / 63 A$ | 63 A | $£ 13.55$ | 1 |
| $20-211-08 / 80 \mathrm{~A}$ | 80 A | $£ 13.55$ | 1 |
| $20-211-08 / 100 \mathrm{~A}$ | 100 A | $£ 13.55$ | 1 |
| $20-211-08 / 125 \mathrm{~A}$ | 125 A | $£ 14.50$ | 1 |
| $20-211-08 / 160 \mathrm{~A}$ | 160 A | $£ 14.50$ | 1 |
| $20-211-08 / 200 \mathrm{~A}$ | 200 A | $£ 15.25$ | 1 |
| $20-211-08 / 250 \mathrm{~A}$ | 250 A | $£ 16.75$ | 1 |

NH1 uR (Ultra Rapid) 500V
Box Qty 3


SIBA
SiCHERUNGENIUUSES

## Manufactured by Siba

With Combi Indicator
Dimensions: W 29 / H 42 / L 135
Dimensions: 200A + W 42 / H 51.5 / L 135

| Part Number | Description | Price | Per |
| :--- | :--- | :---: | :---: |
| $20-003-04 / 125 \mathrm{~A}$ | 125 A | $£ 49.30$ | 1 |
| $20-003-04 / 160 \mathrm{~A}$ | 160 A | $£ 53.75$ | 1 |
| $20-003-04 / 200 \mathrm{~A}$ | 200 A | $£ 53.75$ | 1 |
| $20-003-04 / 250 \mathrm{~A}$ | 250 A | $£ 59.10$ | 1 |
| $20-003-04 / 400 \mathrm{~A}$ | 400 A | $£ 85.95$ | 1 |

NH Size 2 Blade Type Fuses
NH2 gL (General Line) 500V Box Qty 3


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SICHERUNGENFUSES

Manufactured by Siba
With Combi Indicator / Dimensions: W 53 / H 59 / L 150

| Part Number | Description | Price | Per |
| :--- | :--- | :--- | :---: |
| $20-004-13 / 100 \mathrm{~A}$ | 100 A | $£ 12.30$ | 1 |
| $20-004-13 / 125 \mathrm{~A}$ | 125 A | $£ 12.30$ | 1 |
| $20-004-13 / 160 \mathrm{~A}$ | 160 A | $£ 12.30$ | 1 |
| $20-004-13 / 200 \mathrm{~A}$ | 200 A | $£ 12.30$ | 1 |
| $20-004-13 / 250 \mathrm{~A}$ | 250 A | $£ 12.30$ | 1 |
| $20-004-13 / 315 \mathrm{~A}$ | 315 A | $£ 16.25$ | 1 |
| $20-004-13 / 355 \mathrm{~A}$ | 355 A | $£ 16.25$ | 1 |
| $20-004-13 / 400 \mathrm{~A}$ | 400 A | $£ 16.25$ | 1 |

NH2 aM (Motor Rated) 660 / 690V Box Qty 3



Manufactured by Siba
With Combi Indicator / Dimensions: W 53 / H 59 / L 150

| Part Number | Description | Price | Per |
| :--- | :--- | :---: | :---: |
| $20-212-08 / 250 A$ | 250 A | $£ 17.50$ | 1 |
| $20-212-08 / 315 \mathrm{~A}$ | 315 A | $£ 22.25$ | 1 |
| $20-212-08 / 355 \mathrm{~A}$ | 355 A | $£ 22.40$ | 1 |
| $20-212-08 / 400 \mathrm{~A}$ | 400 A | $£ 22.50$ | 1 |

NB: An Ultra Rapid version is also available

## NH Size 3 Blade Type Fuses



Manufactured by Siba
With Combi Indicator / Dimensions: W 65 / H 73.5 / L 150

| Part Number | Description | Price | Per |
| :--- | :--- | :---: | :---: |
| $20-005-13 / 500 \mathrm{~A}$ | 500 A | $£ 33.90$ | 1 |
| $20-005-13 / 630 \mathrm{~A}$ | 630 A | $£ 33.90$ | 1 |

NH3 aM (Motor Rated) 660 / 690V
Box Qty 3


## Manufactured by Siba

With Combi Indicator
Dimensions: W 75 / H 75 / L 150

| Part Number | Description | Price | Per |
| :--- | :--- | :---: | :---: |
| $20-213-08 / 500 \mathrm{~A}$ | 500 A | $£ 57.40$ | 1 |
| $20-213-08 / 630 \mathrm{~A}$ | 630 A | $£ 57.40$ | 1 |

NB: An Ultra Rapid version is also available

## NH Size 4 Blade Type Fuses



## NH Blade Type Fuse Holders

## Ceramic Fuse Base



SiCherungenfuses

Manufactured by Siba
Screw Mounting

| Part Number | Description | Price | Per |
| :--- | :--- | :---: | :---: |
| $\underline{21-001-01}$ | Size 00 1P | $£ 14.40$ | 1 |
| $21-002-04$ | Size 0 1P | $£ 17.60$ | 1 |
| $21-003-01$ | Size 1 1P | $£ 29.80$ | 1 |
| $21-004-01$ | Size 2 1P | $£ 34.90$ | 1 |
| $21-005-01$ | Size 3 1P | $£ 50.75$ | 1 |
| $21-006-01$ | Size 4 1P | $£ 199.00$ | 1 |

Polyester Fuse Base


Mer=eN

## Manufactured by Mersen

Screw \& Din Rail Mounting

| Part Number | Description | Price | Per |
| :--- | :--- | :---: | :---: |
| 42002 | Size 00 1P | $£ 11.27$ | 1 |
| 40502 KIT | Size 00 3P | $£ 28.50$ | 1 |
| 42302 | Size 0 1P | $£ 19.29$ | 1 |
| 42402 | Size 1 1P | $£ 25.75$ | 1 |
| 42414 | Size 1 3P | $£ 93.48$ | 1 |



Manufactured by Mersen

| Part Number | Description | Price | Per |
| :--- | :--- | :--- | :---: |
| 44610 | Size $1 \& 2$ | $£ 3.60$ | 1 |

44610
Size 1 \& 2

Box Qty 2


Manufactured by Mersen
For use with polyester bases

| Part Number | Description | Price | Per |
| :--- | :--- | :--- | :---: |
| 44502 | Size 00 | $£ 2.10$ | 1 |
| 44510 | Size $1 \& 2$ | $£ 3.80$ | 1 |

Fuse Covers Box Qty 3


Mersen

## Manufactured by Mersen

For use with polyester bases

| Part Number | Description | Price | Per |
| :--- | :--- | :--- | :---: |
| 44802 | Size 00 | $£ 2.70$ | 1 |
| 44810 | Size $1 \& 2$ | $£ 3.36$ | 1 |

Cover Shield (Use with Poly Bases) Box Qty 6


Manufactured by Mersen
For use with polyester bases

| Part Number | Description | Price | Per |
| :--- | :--- | :--- | :---: |
| 44702 | Size 00 | $£ 1.85$ | 1 |
| 44708 | Size 1 | $£ 3.20$ | 1 |

## NH Handle (Size 00 to Size 4)



Mersen

Manufactured by Mersen

| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :---: |
| 45311 | Handle for NH Fuses | $£ 31.32$ | 1 |

## Fuse Disconnect

## NH Fuse Load Switches



MerGeN

Manufactured by Albrecht Jung and Mersen

| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :---: |
| DTL160KIT | NH00 + Shrouds | $£ 72.50$ | 1 |
| DTL250KIT | NH1 + Shrouds | $£ 176.66$ | 1 |
| DTL400KIT | NH2 + Shrouds | $£ 311.15$ | 1 |
| DTL630KIT | NH3 + Shrouds | $£ 333.60$ | 1 |

## Fork Lift Truck Fuse 60mm

60mm Enclosed 80V Fork Lift Truck Fuse Box Qty 20


Manufactured by Siba

| Part Number | Description | Price | Per |
| :--- | :--- | :--- | :---: |
| $90-058-05 / 35 \mathrm{~A}$ | 35 A | $£ 2.80$ | 1 |
| $90-058-05 / 50 \mathrm{~A}$ | 50 A | $£ 2.80$ | 1 |
| $90-058-05 / 63 \mathrm{~A}$ | 63 A | $£ 2.80$ | 1 |
| $90-058-05 / 80 \mathrm{~A}$ | 80 A | $£ 2.80$ | 1 |
| $90-058-05 / 100 \mathrm{~A}$ | 100 A | $£ 2.80$ | 1 |
| $90-058-05 / 125 \mathrm{~A}$ | 125 A | $£ 2.80$ | 1 |
| $90-058-05 / 160 \mathrm{~A}$ | 160 A | $£ 2.80$ | 1 |
| $90-058-05 / 175 \mathrm{~A}$ | 175 A | $£ 2.80$ | 1 |
| $90-058-05 / 200 \mathrm{~A}$ | 200 A | $£ 2.80$ | 1 |
| $90-058-05 / 225 \mathrm{~A}$ | 225 A | $£ 2.80$ | 1 |
| $90-058-05 / 250 \mathrm{~A}$ | 250 A | $£ 2.80$ | 1 |
| $90-058-05 / 275 \mathrm{~A}$ | 275 A | $£ 2.80$ | 1 |
| $90-058-05 / 300 \mathrm{~A}$ | 300 A | $£ 2.80$ | 1 |
| $90-058-05 / 325 \mathrm{~A}$ | 325 A | $£ 2.80$ | 1 |
| $90-058-05 / 355 \mathrm{~A}$ | 355 A | $£ 2.80$ | 1 |
| $90-058-05 / 375 \mathrm{~A}$ | 375 A | $£ 2.80$ | 1 |
| $90-058-05 / 400 \mathrm{~A}$ | 400 A | $£ 2.80$ | 1 |
| $90-058-05 / 425 \mathrm{~A}$ | 425 A | $£ 2.80$ | 1 |
| $90-058-05 / 500 \mathrm{~A}$ | 500 A | $£ 2.80$ | 1 |

American Fuses
Midget Fuses


NB: Other values available on request

## Manufactured by Mersen

$10.3 \times 38 \mathrm{~mm}$
600 V AC 200kA IR

| Part Number | Description | Price | Per |
| :--- | :--- | :--- | :---: |
| ATMR1/4 | $1 / 4 \mathrm{~A}$ | $£ 11.18$ | 1 |
| ATMR1/2 | $1 / 2 \mathrm{~A}$ | $£ 8.90$ | 1 |
| ATMR1 | 1 A | $£ 8.51$ | 1 |
| ATMR2 | 2 A | $£ 8.51$ | 1 |
| ATMR3 | 3 A | $£ 8.51$ | 1 |
| ATMR5 | 5 A | $£ 8.51$ | 1 |
| ATMR6 | 6 A | $£ 8.90$ | 1 |
| ATMR8 | 8 A | $£ 9.10$ | 1 |
| ATMR10 | 10 A | $£ 8.51$ | 1 |
| ATMR12 | 12 A | $£ 8.66$ | 1 |
| ATMR15 | 15 A | $£ 8.51$ | 1 |
| ATMR20 | 20 A | $£ 8.51$ | 1 |
| ATMR25 | 25 A | $£ 9.10$ | 1 |
| ATMR30 | 30 A | $£ 8.51$ | 1 |

NB: Other values available on request
ATQ Box Qty 10


Mersen

## Manufactured by Mersen

Time Delay
$10.3 \times 38 \mathrm{~mm}$
500 V AC

| Part Number | Description | Price | Per |
| :--- | :--- | :--- | :---: |
| ATQ1/2 | $1 / 2 \mathrm{~A}$ | $£ 6.60$ | 1 |
| ATQ1 | 1 A | $£ 6.34$ | 1 |
| ATQ2 | 2 A | $£ 6.34$ | 1 |
| ATQ3 | 3 A | $£ 6.34$ | 1 |
| ATQ5 | 5 A | $£ 6.34$ | 1 |
| ATQ6 | 6 A | $£ 6.34$ | 1 |
| ATQ10 | 10 A | $£ 6.34$ | 1 |
| ATQ15 | 15 A | $£ 6.34$ | 1 |
| ATQ20 | 20 A | $£ 6.34$ | 1 |
| ATQ25 | 25 A | $£ 6.34$ | 1 |
| ATQ30 | 30 A | $£ 6.34$ | 1 |

NB: Other values available on request

NB: Other values available on request

## ATQR Class CC

Box Qty 10

Mersen
Manufactured by Mersen
Time Delay
$10.3 \times 38 \mathrm{~mm} 200 \mathrm{kA}$ IR

| Part Number | Description | Price | Per |
| :--- | :--- | :--- | :---: |
| ATQR1 | 1 A | $£ 12.00$ | 1 |
| ATQR2 | 2 A | $£ 12.00$ | 1 |
| ATQR3 | 3 A | $£ 12.00$ | 1 |
| ATQR4 | 4 A | $£ 12.00$ | 1 |
| ATQR5 | 5 A | $£ 12.00$ | 1 |
| ATQR10 | 10 A | $£ 12.00$ | 1 |
| ATQR20 | 20 A | $£ 12.00$ | 1 |
| ATQR25 | 25 A | $£ 12.00$ | 1 |

NB: Other values available on request

AG Class G
Box Qty 10

## Power Fuses

AJT Class J Box Qty 10


Mersen

Manufactured by Mersen
Time Delay / 600V AC / 200kA IR

| Part Number | Description | Price | Per |
| :--- | :--- | ---: | :---: |
| AJT10 | 10 A | $£ 16.15$ | 1 |
| AJT15 | 15 A | $£ 16.15$ | 1 |
| AJT20 | 20 A | $£ 16.15$ | 1 |
| AJT30 | 30 A | $£ 16.15$ | 1 |
| AJT50 | 50 A | $£ 27.44$ | 1 |
| AJT100 | 100 A | $£ 56.76$ | 1 |
| AJT200 | 200 A | $£ 113.53$ | 1 |

NB: Other values available on request

Mersen

## Manufactured by Mersen

480 V AC / 100kA IR

| Part Number | Description | Price | Per |
| :--- | :--- | :--- | :---: |
| AG15 | 15A | $£ 11.27$ | 1 |
| AG20 | 20A | $£ 12.02$ | 1 |
| AG30 | 30 A | $£ 15.74$ | 1 |

NB: Other values available on request

## TRM

Box Qty 10

Mersed

## Manufactured by Mersen

Time Delay / $10.3 \times 38 \mathrm{~mm} / 250 \mathrm{~V}$ AC

| Part Number | Description | Price | Per |
| :--- | :--- | :--- | :---: |
| TRM1 | 1 A | $£ 4.50$ | 1 |
| TRM2 | 2 A | $£ 4.10$ | 1 |
| TRM5 | 5 A | $£ 4.10$ | 1 |
| TRM6 | 6 A | $£ 4.67$ | 1 |
| TRM10 | 10 A | $£ 4.10$ | 1 |
| TRM12 | 12 A | $£ 4.67$ | 1 |
| TRM15 | 15 A | $£ 4.10$ | 1 |
| TRM20 | 20 A | $£ 4.33$ | 1 |
| TRM30 | 30 A | $£ 4.33$ | 1 |

NB: Other values available on request

| (i) American Fuse Comparison Chart |  |  |
| :---: | :---: | :---: |
| M-®E®N | Bussmann | Littlefuse |
| ATM | KTK | KLK |
| TRM | FNM | FLM |
| ATQ | FNQ | FLQ |
| OTM | BAN | BLN |
| OTM | BAF | BLF |
| SBS | BBS | BLS |
| GFN | FNA | FLA |
| ATDR | LPCC | CCMR |
| ATQR | FNQR | KLDR |
| ATMR | KTKR | KLKR |
| AG | SC | SLC |

## Quality Components at Competitive Prices

## (i) Comparison Chart for American Semiconductor Fuses

| Voltage | Ferraz Shawmut | Bussmann | Littlefuse |
| :---: | :---: | :---: | :---: |
| 150 V AC | A13X | KAA/KAH/KAW | L15S |
| 250 V AC | A25X | KAB/KAX | L25S |
| 500 V AC | A50P | KBH/KLH | L50S |
| 500 V AC | A50P | FWH | - |
| 600 V AC | A60X | KBC | L60S |
| 700 V AC | A70P | FWP | L70S |
| 500 V AC | A50QS | XL50F (Brush) | - |
| 700 V AC | A70Q | XL70F (Brush) | - |
| 1000 V AC | A100P | XL100F (Brush) | - |

## (i) Look Up Table for Solid / Neutral Links (Type SL)

| BS88 Reference <br> (And Fixing Centres) | Catalogue <br> No: | Current <br> Rating | Box <br> Qty | Fixing <br> Centres (mm) | Replaces Fuse Type <br> 415V |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | BS88 Bolted Type |  |  |  |


| (i) Comparison Chart for Boltin Fuse Holders |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lawson Reference | Bussmann Hawker | GEC Alsthom | Bill | MEM | Dorman Smith | To Fit Fuse |
| LBI20FC/FCBK LBI20FC/BCBK LBI20BC/BCBK | 32NF CM32FC 32NFBS 32NBS | $\begin{aligned} & \text { RS20H } \\ & \text { RS20PH } \\ & \text { RS20P } \end{aligned}$ | - | $\begin{aligned} & 20 \mathrm{MFB} \\ & 20 \mathrm{MFD} \\ & 20 \mathrm{MFC} \end{aligned}$ | $\begin{aligned} & \text { 32NNF } \\ & \text { 32NNFB } \\ & \text { 32NNBS } \end{aligned}$ | $\begin{aligned} & \text { NIT } \\ & \text { NIT } \\ & \text { NIT } \end{aligned}$ |
|  | 32AF CM32F 32AFBS 32ABS | $\begin{aligned} & \text { RS32H } \\ & \text { RS32PH } \\ & \text { RS32P } \end{aligned}$ | - | 32MFB 32MFD 32MFC | 2AF <br> 32AFBS <br> 32ABS | GTIA/TIA GTIA/TIA GTIA/TIA |
| LBI63FC/FCBK LBI63FC/BCBK LBI63BC/BCBK | 63BF CM63F 63BFBS 63BBS | $\begin{gathered} \text { RS63H } \\ \text { RS63PH } \\ \text { RS63P } \end{gathered}$ | - | 63MFB 63MFD <br> 63MFC | $\begin{gathered} \text { 63BF } \\ \text { 63BFBS } \\ 63 B B S \end{gathered}$ | $\begin{aligned} & \text { TIS } \\ & \text { TIS } \\ & \text { TIS } \end{aligned}$ |
| LBI100FC/FCBK <br> LBI100FC/BCBK <br> LBI100BC/BCBK | $\begin{gathered} \text { 100CF CM100F } \\ \text { 100CFBS } \\ \text { 100CBS } \end{gathered}$ | $\begin{aligned} & \text { RS100H } \\ & \text { RS100PH } \\ & \text { RS100P } \end{aligned}$ | $\begin{aligned} & \text { V100FF } \\ & \text { V100FB } \\ & \text { V100BB } \end{aligned}$ | $\begin{aligned} & \text { 100MF } \\ & \text { 100CFB } \\ & \text { 100MFC } \end{aligned}$ | $\begin{aligned} & \text { 100CF } \\ & \text { 100CFBS } \\ & 100 \mathrm{CBS} \end{aligned}$ | $\begin{aligned} & \text { TCP } \\ & \text { TCP } \\ & \text { TCP } \end{aligned}$ |
|  | $\begin{aligned} & \text { 200DF } \\ & \text { 200DFBS } \\ & \text { 200DBS } \end{aligned}$ | $\begin{aligned} & \text { RS200H } \\ & \text { RS200PH } \\ & \text { RS200P } \end{aligned}$ | $\begin{aligned} & \text { V200FF } \\ & \text { V200BF } \\ & \text { V200BB } \end{aligned}$ | $\begin{aligned} & 200 \mathrm{MFB} \\ & 200 \mathrm{MFD} \\ & 200 \mathrm{MFC} \end{aligned}$ | $\begin{aligned} & \text { 200DF } \\ & \text { 200DFBS } \\ & \text { 200DBS } \end{aligned}$ | $\begin{aligned} & \text { TF } \\ & \text { TF } \\ & \text { TF } \end{aligned}$ |


| Comparison Chart for Clipfit Fuse Holders |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Lawson Reference | Bussmann Hawker | GEC Alsthom | BiII | To Fit Fuse |
| LCF32FC/FCBK | 32NNSF | SC32H-D | V32FF | NS |
| LCF32FC/BBCBK | - | SC32BH | - | NS |
| LCF32FC/BCBK | 32NNSFBS | - | V32FB | NS |
| LCF32BC/BCBK | 32NNBSBS | SC32P | - | NS |
| LCF32FC/FCWH | 32NNSF/W | SC32H-D WHITE | V32FFW | NS |
| LCF32FC/BBCWH | - | - | - | NS |
| LCF32FC/BCWH | 32NNSFBS/W | - | V32FBW | NS |
| LCF32BC/BCWH | 32NNBSBS/W | SC32PWHITE | - | NS |
| LCF63FC/FCBK | 63ENSF | SC63H-D | V63FF | MES |
| LCF63FC/BBCBK | - | SC63BH | - | MES |
| LCF63FC/BCBK | 63ENSFBS | - | V63FB | MES |
| LCF63BC/BCBK | 63ENSBS | SC63P | - | MES |
| LCFC/FCWH | 63ENSF/W | SC63H-D WHITE | V63FFW | MES |
| LCF63FC/BBCWH | - | - | - | MES |
| LCF63FC/BCWH | 63ENSFBS/W | - | V63FBW | MES |
| LCF63BC/BCWH | 63ENBSBS/W | - | - | MES |

(1) BS88 Industrial Fuse Comparison Chart with Fixing Centres

| Fixing Centres | Rating Amps | $\begin{gathered} \text { BS88 } \\ \text { Ref } \end{gathered}$ | Europa Order Code | GE Power (GEC) | Lawson | Cooper Bussmann | MEM | Brush |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Off Set Tags | - | - | - | - | - | - | - | - |
| 44.5 mm | 2-32A | A1 | $\begin{gathered} 50-085-01 \\ \text { Page } 95 \end{gathered}$ |  | NIT | NITD | SA2 | F21 |
| 73mm | 2-32A | A2 | 50-001-01 Page 95 | TIA | TIA | AAO | SB3 | HO7 |
| 73mm | 32-63A | A3 | $\begin{gathered} 50-002-01 \\ \text { Page } 95 \end{gathered}$ | TIS | TIS | BAO | SB4 | KO7 |
| 94mm | 80-100A | A4 | $\begin{gathered} 50-003-01 \\ \text { Page } 96 \end{gathered}$ | TCP | TCP | CEO | SD5 | L14 |
| 94mm | 125-200A | - | $\begin{gathered} \text { 50-004-01 } \\ \text { Page } 96 \end{gathered}$ | TFP | TFP | DEO | SD6 | M14 |
| Central Tags | - | - | - | - | - | - | - | - |
| 97 mm | 40-63A | - | $\begin{gathered} \text { 50-006-01 } \\ \text { Page } 96 \end{gathered}$ | TB | TB |  | SE4 | KO8 |
| 111mm | 6-63A | B1 | $\begin{gathered} \text { 50-007-01 } \\ \text { Page } 97 \end{gathered}$ | TBC | TBC | AD/BD |  |  |
| 111mm | 80-100A | B1 | $\begin{gathered} 50-008-01 \\ \text { Page } 97 \end{gathered}$ | TC | TC |  | SF5 | LO9 |
| 111 mm | 125-200A | B2 | $\begin{gathered} \text { 50-009-01 } \\ \text { Page } 97 \end{gathered}$ | TF | TF | DD | SF6 | MO9 |
| 111 mm | 250-315A | B3 | $\begin{gathered} \text { 50-010-01 } \\ \text { Page } 97 \end{gathered}$ | TKF | TKF | ED | SF7 | NO9 |
| 133 mm | 250-315A | C1 | $\begin{gathered} \text { 50-011-01 } \\ \text { Page } 97 \end{gathered}$ | TKM | TKM | EFS | SG7 | N11 |
| 111mm | 355-400A | B4 | $50-110-01$ $\text { Page } 97$ | TMF | TMF | ED | SF8 | PO9 |
| 133 / 184mm | 355-400A | C1 | $\begin{gathered} \text { 50-039-01 } \\ \text { Page } 98 \end{gathered}$ | TM | TM | EF | SH8 | P11 |
| 134 / 184mm | 450-630A | C2 | $\begin{gathered} \text { 50-040-01 } \\ \text { Page } 98 \end{gathered}$ | TTM | TTM | FF | SH9 | R11 |
| 165 / 229mm | 450-630A | - | - | TT | TT | FG | SY9 | R12 |
| 133 / 184mm | 670-800A | C3 | $\begin{gathered} \text { 50-041-01 } \\ \text { Page } 98 \end{gathered}$ | TLM | TLM | GF | SH10 | S11 |
| 165 / 229mm | 670-800A | - | - | TLT | TLT | GG | SY10 | S12 |

(i) Technical Specifications for Boxed 3 \& 4 Pole Load Break Switches (excluding Stainless Steel 4 Pole Isolator Switches) from page 43... (AC-21)

| Approvals | CB. CE \& SEMKO |  |  |
| :---: | :---: | :---: | :---: |
| UL Standard | UL508 |  |  |
| International/European Standard | IEC \& EN 60947-1 and 3 |  |  |


|  |  |  | Switch Current Ratings |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DATA | Range | Units | 20A | 25A | 32A | 40A | 63A | 80A |
| Rated operational voltage Ue |  |  |  |  |  |  |  |  |
| IEC \& EN | Volts | V | 690 | 690 | 690 | 690 | 690 | 690 |
| UL | Volts | V | 600 | 600 | 600 | 600 | 600 | 600 |
| Main switch: Isolating voltage up to | Volts | V | 750 | 750 | 750 | 750 | 750 | 750 |
| Rated impulse withstand voltage Uimp | Volts | kV | 6 | 6 | 6 | 6 | 6 | 6 |
| Rated uniinterrupted current lu | Amps | A | 16 | 20 | 25 | 32 | 40 | 63 |


| Rated operational current le |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| IEC \& EN | AC-22A | Up to 690V | A | 16 | 20 | 25 | 32 | 40 | 63 |
|  | AC-21A | Up to 690V | A | 20 | 25 | 32 | 40 | 63 | 80 |
|  | AC-1 | Up to 690V | A | 20 | 25 | 32 | 40 | 63 | 80 |


| Rated operational power AC-23A ( $50-60 \mathrm{~Hz}$ ) |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| IEC \& EN | 3 Phase | 230 (240V) | kW | 7.5 | 7.5 | 11 | 15 | 22 | 30 |
|  |  | 400 (415V) | kW | 11 | 11 | 15 | 18.5 | 30 | 37 |
|  |  | 690 V | kW | 15 | 15 | 22 | 22 | 45 | 45 |


| Rated operational power AC-3 ( $50-60 \mathrm{~Hz}$ ) |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| IEC \& EN | 3 Phase | 230 (240V) | kW | 4 | 5.5 | 7.5 | 11 | 15 | 22 |
|  |  | 400 (415V) | kW | 5.5 | 7.5 | 11 | 11 | 18.5 | 22 |
|  |  | 690 V | kW | 11 | 11 | 15 | 15 | 30 | 30 |


| UL Power Rating |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DOL | 3 Phase | 120 V | hp | 1.5 | 1.5 | 3 | 3 | 5 | 7.5 |
|  |  | 240 V | hp | 3 | 3 | 7.5 | 7.5 | 10 | 15 |
|  |  | 480 V | hp | 7.5 | 7.5 | 15 | 20 | 20 | 25 |
|  |  | 600 V | hp | 10 | 10 | 20 | 25 | 30 | 30 |
|  | 1 Phase | 120 V | hp | 0.5 | 0.5 | 1.5 | 2 | 3 | 3 |
|  |  | 240 V | hp | 1.5 | 1.5 | 2 | 3 | 5 | 7.5 |


| UL Short Circuit Ratings |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fuse rating, class J | Amps | A | - | - | 45 | 45 | 70 | 70 |
| Fuse rating, class RK5 | Amps | A | 20 | 20 | - | - | - | - |
| Rated Fused short circuit current | Amps | kA | 10 | 10 | 10 | 10 | 10 | 10 |
| Short Circuit Capacity (IEC) |  |  |  |  |  |  |  |  |
| Max fuse size (Type gl) | Amps | A | 20 | 20 | 32 | 32 | 63 | 63 |
| Rated Fused short circuit current | Amps | kA | 5 | 5 | 30 | 30 | 30 | 30 |
| Terminal Specification |  |  |  |  |  |  |  |  |
| Single/ Multple strand wire |  | Min-mm ${ }^{2}$ | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 |
|  |  | Max-mm ${ }^{2}$ | 10 | 10 | 10 | 10 | 25 | 25 |
| Fine strand with sleeve |  | Min-mm ${ }^{2}$ | 0.75 | 0.75 | 0.75 | 0.75 | 2.5 | 2.5 |
|  |  | Max-mm ${ }^{2}$ | 6 | 6 | 6 | 6 | 10 | 10 |
| American wire gauge |  | AWG | 10 | 10 | 10 | 10 | 6 | 6 |
| Recommended Tightening Torque |  | Nm | 1.7 | 1.7 | 1.7 | 1.7 | 2.0 | 2.0 |

(i) Technical Specifications for: Boxed 6 \& 8 Pole Isolator Switches / Boxed 4 Pole Meta/ Clad / Boxed Changeover Switches

Stainless Steel 4 Pole Isolator Switches / Door Interlock and Panel Mount Loadbreak Switches from page 45 ..
(AC-22)




| UL Power Rating |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DOL | 3 Phase | 120 V | hp | 3 | 3 | 5 | 7.5 | 7.5 | 7.5 | 7.5 |
|  |  | 240 V | hp | 7.5 | 7.5 | 10 | 15 | 20 | 20 | 30 |
|  |  | 480 V | hp | 15 | 20 | 20 | 25 | 30 | 30 | 40 |
|  |  | 600 V | hp | 20 | 25 | 30 | 30 | 40 | 40 | 50 |
|  | 1 Phase | 120 V | hp | 1.5 | 2 | 3 | 3 | 3 | 3 | 3 |
|  |  | 240 V | hp | 2 | 3 | 5 | 7.5 | 7.5 | 7.5 | 7.5 |

## UL Short Circuit Ratings

| Fuse rating, class J | Amps | A | 45 | 45 | 70 | 70 | 125 | 125 | 125 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fuse rating, class RK5 | Amps | A | - | - | - | - | - | - | - |
| Rated Fused short circuit current | Amps | kA | 10 | 10 | 10 | 10 | 10 | 10 | 10 |

Short Circuit Capacity (IEC)

| Max fuse size (Type gl) | Amps | A | 32 | 32 | 63 | 63 | 125 | 125 | 125 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rated Fused short circuit current | Amps | kA | 30 | 30 | 30 | 30 | 30 | 30 | 30 |

Terminal Specification

| Single/ Multple strand wire | Min-mm ${ }^{2}$ | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Max-mm ${ }^{2}$ | 10 | 10 | 25 | 25 | 50 | 50 | 50 |
| Fine strand with sleeve | Min-mm ${ }^{2}$ | 0.75 | 0.75 | 2.5 | 2.5 | 4 | 4 | 4 |
|  | Max-mm ${ }^{2}$ | 6 | 6 | 10 | 10 | 50 | 50 | 50 |
| American wire gauge | AWG | 10 | 10 | 6 | 6 | 1 | 1 | 1 |
| Recommended Tightening Torque | Nm | 1.7 | 1.7 | 2.0 | 2.0 | 2.5 | 2.5 | 2.5 |

（i）Load Break Switch－Operating Temperatures（from page 43）

| Temperature | Derating | 20A | 25A | 32A | 40A | 63A | 80A | 100A | 125A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $40^{\circ} \mathrm{C}$ | 100\％ | 20A | 25A | 32A | 40A | 63A | 80A | 100A | 125A |
| $45^{\circ} \mathrm{C}$ | 95\％ | 19A | 24A | 30A | 38A | 60A | 76A | 95A | 119A |
| $50^{\circ} \mathrm{C}$ | 90\％ | 18A | 23A | 29A | 36A | 57A | 72A | 90A | 113A |
| $55^{\circ} \mathrm{C}$ | 85\％ | 17A | 21A | 27A | 34A | 54A | 68A | 85A | 106A |
| $60^{\circ} \mathrm{C}$ | 80\％ | 16A | 20A | 26A | 32A | 50A | 64A | 80A | 100A |
| $65^{\circ} \mathrm{C}$ | 75\％ | 15A | 19A | 24A | 30A | 47A | 60A | 75A | 94A |
| $70^{\circ} \mathrm{C}$ | 70\％ | 14A | 18A | 22A | 28A | 44A | 56A | 70A | 88A |
| $75^{\circ} \mathrm{C}$ | 65\％ | 13A | 16A | 21A | 26A | 41A | 52A | 65A | 81A |
| $80^{\circ} \mathrm{C}$ | 60\％ | 12A | 15A | 19A | 24A | 38A | 48A | 60A | 75A |

The normal operating temperature range for our switch disconnectors is from $-25^{\circ} \mathrm{C}$ to $+40^{\circ} \mathrm{C}$ ．For higher ambient temperatures of more than $+40^{\circ} \mathrm{C}$ the switch has to be derated accordingly．

The table above shows the percentage of derating in load for different temperature ranges．The maximum operating temperature of our switches in continuous use is $+80^{\circ} \mathrm{C}$ ．
（i）Din Rail Terminal－Technical Data：See pages 90－91

| （1） |  |  | $\begin{aligned} & \text { כָ } \\ & \stackrel{0}{0} \end{aligned}$ | $\begin{aligned} & \frac{2}{\circ} \\ & \frac{5}{6} \end{aligned}$ | $\begin{aligned} & \frac{\rightharpoonup}{5} \\ & \stackrel{5}{6} \end{aligned}$ | $\begin{aligned} & \text { כ్N } \\ & \text { N } \\ & \text { N- } \end{aligned}$ | $\begin{aligned} & \text { స్గ్ } \\ & \text { だ } \\ & \stackrel{0}{0} \end{aligned}$ | $\begin{aligned} & \text { כ } \\ & \text { in } \\ & \stackrel{0}{6} \end{aligned}$ | $\begin{aligned} & \text { T} \\ & \stackrel{\circ}{\circ} \\ & \stackrel{\circ}{0} \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 5 mm | 6 mm | 8mm | 10mm | 12 mm | 12mm | 15mm | 20．5mm | 25 mm |
|  | 0.5 | 0.5 | 1.5 | 1.5 | 2.5 | 6 | 10 | 16 | 16 |
|  | to | to | to | to | to | to | to | to | to |
| $0 \%$ | 2.5 | 4 | 6 | 10 | 16 | 25 | 35 | 50 | 95 |
|  | 0.5 | 0.5 | 1.5 | 1.5 | 2.5 | 6 | 10 | 16 | 16 |
|  | to | to | to | to | to | to | to | to | to |
| $0>$ | 4 | 6 | 10 | 16 | 25 | 35 | 50 | 70 | 120 |
|  | 800V | 800V | 800V | 800V | 800V | 800V | 800V | 1000V | 1000V |
|  | 24A | 32A | 41A | 57A | 76A | 101A | 125A | 150A | 232A |


| (1) | 马 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 6 mm | 8mm | 10mm | 12 mm | 16 mm |
|  | $0.5$ <br> to $4$ | $1.5$ <br> to $6$ | $0.5$ <br> to $10$ | 2.5 <br> to <br> 16 | 10 to 35 |
|  | $0.5$ <br> to $6$ | $\begin{aligned} & 1.5 \\ & \text { to } \\ & 10 \end{aligned}$ | $\begin{aligned} & 0.5 \\ & \text { to } \\ & 16 \end{aligned}$ | 2.5 <br> to <br> 25 | 10 to 50 |
|  | 32A | 41A | 57A | 76A | 125A |


| （i）Duty Category Information Table |  |  |  |
| :---: | :---: | :---: | :---: |
| Current | Category | Typical applications | Relevant IEC Product Standard |
| AC | AC 1 <br> AC－3 <br> AC－15 <br> AC－21 <br> AC－22 <br> AC－23 | Non－inductive or slightly inductive loads，resistance furnaces． <br> Squirrel－cage motors： <br> Starting，switching off motors during running． <br> Control of AC electromagnetic Loads． <br> Switching of resistive loads，including moderate overloads． <br> Switching of mixed resistive \＆inductive loads． <br> Switching of motor loads or other highly inductive loads． | 947－4 <br> 947－3 <br> 947－5－1 <br> 947－3 <br> 947－3 <br> 947－3 |
| DC | DC-1 <br> DC－13 | Non－inductive or slightly inductive loads，resistance furnaces． <br> Control of DC electromagnets | $\begin{gathered} 947-4 \\ 947-5-1 \end{gathered}$ |


| Technical Specifications for Enclosed \& Door Interlock Safe Switch Loadbreak Switches |  |  | Switch Types (pages 56, 57 \& 60) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | LB160 | LB200 | LB250 | LB315 | LB400 | LB6303 | LB800 | LB1000 |
| Data | Range | Units | LBD160 | LBD200 | LBD250 | LBD315 | LBD400 | LBD630 | LBD800 | LBD1000 |
| Rated thermal current at $50^{\circ} \mathrm{C}$ | Amps | A | 160 | 200 | 250 | 315 | 400 | 630 | 800 | 1000 |
| Rated insulation voltage $\mathrm{Ui}^{\text {i }}$ | Volts | V | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |
| Rated dielectric strength | Volts | kV | 4 | 4 | 5 | 5 | 5 | 8 | 8 | 8 |
| Rated impulse voltage Uimp | Volts | kV | 8 | 8 | 8 | 8 | 8 | 12 | 12 | 12 |
| Rated operational current le at 400V AC-22 | Amps | A | 160 | 200 | 250 | 315 | 400 | 630 | 800 | 1000 |
| Rated operational current le at 400V AC-23 | Amps | A | 160 | 160 | 160 | 315 | 400 | 630 | 630 | 800 |
| Rated operational power Pe at 400V AC-23 | Watts | kW | 89 | 89 | 89 | 175 | 222 | 349 | 349 | 443 |
| Rated breaking capacity | Amps | A | 1280 | 1280 | 1280 | 2520 | 3200 | 5000 | 5000 | 6400 |
| Rated making capacity | Amps | A | 1600 | 1600 | 1600 | 3150 | 4000 | 6300 | 6300 | 8000 |
| Rated short circuit making capacity (peak value) lcm | Amps | kA | 13 | 13 | 13 | 20 | 20 | 26 | 26 | 60 |
| Rated short-time withstand current ( 1 sec ) rms Icw | Amps | kA | 7 | 7 | 7 | 12 | 12 | 16 | 16 | 25 |
| Minimum number of mechanical operations | - | Cycles | 30,000 | 30,000 | 30,000 | 20,000 | 20,000 | 10,000 | 10,000 | 10,000 |
| Minimum number of electrical operations @ 400V AC-23 | - | Cycles | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 500 | 500 |
| Terminal Capacity (rigid copper cable) | - | $\mathrm{mm}^{2}$ | 95 | 120 | 120 | 185 | 240 | 2x240 | 2x240 | 2x300 |
| Lug bolt size | - | - | - | M10 | M10 | M10 | M10 | M10 | M10 | M14 |
| Maximum size of busbar connection | - | mm | - | $5 \times 30$ | $5 \times 30$ | 7x25 | 7x40 | $2 \times 5 \times 40$ | $2 \times 5 \times 40$ | $2 \times 10 \times 50$ |


| Technical Specifications for Enclosed \& Door Interlock Safe Switch Changeover Switches |  |  | Switch Types (pages 59 \& 61) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | LBC160 | LBC200 | LBC250 | LBC315 | LBC400 | LBC630 | LBC800 | LBC1000 |
| Data | Range | Units | LBCD160 | LBCD200 | LBCD250 | LBCD315 | LBCD400 | LBCD630 | LBCD800 | LBCD1000 |
| Rated thermal Ith current at $40^{\circ} \mathrm{C}$ | Amps | A | 160 | 200 | 250 | 315 | 400 | 630 | 800 | 1000 |
| Rated insulation voltage Ui | Volts | V | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |
| Rated dielectric strength | Volts | kV | 4 | 5 | 5 | 6 | 6 | 8 | 8 | 8 |
| Rated impulse voltage Uimp | Volts | kV | 8 | 8 | 8 | 8 | 8 | 12 | 12 | 12 |
| Rated operational current le at 400 V AC-22 | Amps | A | 160 | 200 | 250 | 315 | 400 | 630 | 800 | 1000 |
| Rated operational current le at 400 V AC-23 | Amps | A | 160 | 160 | 160 | 200 | 250 | 500 | 630 | 1000 |
| Rated operational power Pe at 400V AC-23 | Watts | kW | 89 | 89 | 89 | 100 | 125 | 250 | 315 | 501 |
| Rated breaking capacity | Amps | A | 1280 | 1280 | 1280 | 1600 | 2000 | 4000 | 4000 | 8000 |
| Rated making capacity | Amps | A | 1600 | 1600 | 1600 | 2000 | 2500 | 5000 | 5000 | 10,000 |
| Rated short circuit making capacity (peak value) Icm | Amps | kA | 13 | 13 | 13 | 12 | 12 | 20 | 20 | 32 |
| Rated short-time withstand current ( 1 sec ) rms Icw | Amps | kA | 7 | 7 | 7 | 8 | 8 | 13 | 13 | 25 |
| Minimum number of mechanical operations | - | Cycles | 10,000 | 10,000 | 10,000 | 10,000 | 10,000 | 10,000 | 10,000 | 10,000 |
| Minimum number of electrical operations @ 400V AC-22 | - | Cycles | 1,000 | 1,000 | 1,000 | 1,000 | 200 | 1,000 | 100 | 500 |
| Terminal Capacity (rigid copper cable) | - | $\mathrm{mm}^{2}$ | 95 | 120 | 120 | 240 | 240 | $2 \times 240$ | 2x240 | 2x300 |
| Lug bolt size | - | - | M10 | M10 | M10 | M10 | M10 | M12 | M12 | M14 |
| Maximum size of busbar connection | - | mm | $5 \times 30$ | $5 \times 30$ | $5 \times 30$ | $2 \times 5 \times 30$ | $2 \times 5 \times 30$ | $2 \times 6 \times 45$ | $2 \times 6 \times 45$ | 2x10x60 |


| Technical Specifications for Enclosed \& Door Interlock Safe Switch - Switch Fuses |  |  | Switch Types (pages 58 \& 61) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | LBF125 | LBF160 | LBF200 | LBF315 | LBF400 | LBF630 | LBF800 |
| Data | Range | Units | LBFD125 | LBFD160 | LBFD200 | LBFD315 | LBFD400 | LBFD630 | LBFD800P |
| BS88 Fuse size | - | - | A2-A3 | A4 | B1-B2 | B1-B3 | B1-B4 | C1-C2 | C1-C3 |
| Rated thermal current at $40^{\circ} \mathrm{C}$ | Amps | A | 125 | 160 | 200 | 315 | 400 | 630 | 800 |
| Rated insulation voltage Ui | Volts | V | 800 | 800 | 800 | 1000 | 1000 | 1000 | 1000 |
| Rated dielectric strength | Volts | kV | 6 | 6 | 6 | 8 | 8 | 8 | 8 |
| Rated impulse voltage Uimp | Volts | kV | 8 | 8 | 8 | 12 | 12 | 12 | 12 |
| Rated operational current le at 400V AC-22 | Amps | A | 125 | 160 | 200 | 315 | 400 | 630 | 800 |
| Rated operational current le at 400V AC-23 | Amps | A | 125 | 160 | 200 | 315 | 400 | 630 | 630 |
| Rated operational power Pe at 400V AC-23 | Watts | kW | 65 | 90 | 110 | 160 | 220 | 355 | 355 |
| Rated breaking capacity | Amps | A | 1000 | 1280 | 1600 | 2600 | 3200 | 5100 | 5100 |
| Rated making capacity | Amps | A | 1250 | 1600 | 2000 | 3150 | 4000 | 6300 | 6300 |
| Rated short circuit making current (rms) with fuses fitted | Amps | kA | 50 | 100 | 100 | 100 | 100 | 100 | 100 |
| Rated short circuit withstand current (rms) with fuses fitted | Amps | kA | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Minimum number of mechanical operations | - | Cycles | 10,000 | 10,000 | 10,000 | 10,000 | 10,000 | 5,000 | 5,000 |
| Minimum number of electrical @ 400V AC-23 | - | Cycles | 1,500 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 500 |
| Terminal Capacity (rigid copper cable) | - | $\mathrm{mm}^{2}$ | 95 | 120 | 120 | 240 | 240 | 2x185 | 2x240 |
| Lug bolt size | - | - | - | M8 | M8 | M10 | M10 | M12 | $4 \mathrm{MM8}$ |
| Maximum size of busbar connection | - | mm | - | $5 \times 25$ | $5 \times 25$ | $6 \times 40$ | $6 \times 40$ | 2x7×50 | 2x7x50 |


(i) Integrated 22.5mm Push Buttons \& Switches Part Number Configuration \& Dimensions. See pages 66-67

$1=1$ NO Contact
$2=1$ NC Contact
$3=1 \mathrm{NO}+1 \mathrm{NC}$ Contact

4 = 2 NO Contacts

5 = 2 NC Contacts

CT
ROHS
Compliant

FD1 $=$ Flush Push Button
PD1 $=$ Projecting Push Button
SK1 = 2 Position Selector Switch Standard Handle
SI1 = 2 Position Selector Switch Standard Handle (Spring Return)
SL1 $=3$ Position Selector Switch Standard Handle
SJ1 $=3$ Position Selector Switch Standard Handle (Spring Return)
KK1 = 2 Position Key Operated Selector Switch
KI1 $=2$ Position Key Operated Selector Switch (Spring Return)
KL1 = 3 Position Key Operated Selector Switch

KJ1 = 3 Position Key Operated Selector Switch (Spring Return)


| Plastic |  |  |  |  | Metal |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Measure | 1 Hole | 2 Hole | 3 Hole | 4 Pole | 1 Hole | 2 Hole | 3 Hole | 4 Hole |
| H | 51 mm |  |  |  | 51 mm |  |  |  |
| W | 68mm |  |  |  | 68mm |  |  |  |
| L | 74 mm | 104mm | 134mm | 164 mm | 74 mm | 105mm | 134 mm | 164mm |
| W 1 | 54mm |  |  |  | 54mm |  |  |  |
| L 1 | 38 mm | 68mm | 68mm | 128 mm | 46 mm | 78 mm | 108 mm | 138mm |

(i) Europa Enclosures Dimensions Table - See Pages 36-37

|  |  |  |  |  | Dimensions provided are for guidance purposes only |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Part number | External Dimensions |  |  | Internal Depth <br> ID | Gland Plate Hole |  | Mounting plate |  | Other Information (GPTB = Gland Plate Top \& Bottom) |
|  | H (mm) | W (mm) | D (mm) |  | W1 (mm) | D1 (mm) | W3 (mm) | H3 (mm) |  |
| STB252515 | 250 | 250 | 150 | 125 | 130 | 62 | 195 | 200 | 1 Lock, GPTB |
| STB302515 | 300 | 250 | 150 | 125 | 130 | 62 | 195 | 245 | 1 Lock, GPTB |
| STB303015 | 300 | 300 | 150 | 125 | 180 | 62 | 245 | 245 | 1 Lock, GPTB |
| STB303020 | 300 | 300 | 200 | 175 | 180 | 62 | 245 | 245 | 1 Lock, GPTB |
| STB403015 | 400 | 300 | 150 | 125 | 180 | 62 | 245 | 345 | 1 Lock, GPTB |
| STB403020 | 400 | 300 | 200 | 175 | 180 | 62 | 245 | 345 | 1 Lock, GPTB |
| STB403025 | 400 | 300 | 250 | 225 | 180 | 62 | 245 | 350 | 1 Lock, GPTB |
| STB404015 | 400 | 400 | 150 | 125 | 215 | 62 | 345 | 345 | 1 Lock, GPTB |
| STB404020 | 400 | 400 | 200 | 175 | 216 | 62 | 345 | 345 | 1 Lock, GPTB |
| STB504020 | 500 | 400 | 200 | 175 | 317 | 120 | 345 | 445 | 2 Lock, GPTB |
| STB504025 | 500 | 400 | 250 | 225 | 317 | 120 | 345 | 445 | 2 Lock, GPTB |
| STB505025 | 500 | 500 | 250 | 225 | 415 | 120 | 454 | 450 | 2 Lock, GPTB |
| STB604020 | 600 | 400 | 200 | 175 | 317 | 120 | 345 | 545 | 2 Locks, GPTB |
| STB604030 | 600 | 400 | 300 | 275 | 317 | 120 | 345 | 545 | 2 Locks, GPTB |
| STB605020 | 600 | 500 | 200 | 175 | 415 | 120 | 445 | 545 | 2 Locks, GPTB |
| STB605025 | 600 | 500 | 250 | 225 | 415 | 120 | 445 | 545 | 2 Locks, GPTB |
| STB605030 | 600 | 500 | 300 | 275 | 415 | 120 | 445 | 545 | 2 Locks, GPTB |
| STB606020 | 600 | 600 | 200 | 175 | 415 | 120 | 540 | 540 | 2 Locks, GPTB |
| STB606025 | 600 | 600 | 250 | 225 | 415 | 120 | 540 | 540 | 2 Locks, GPTB |
| STB705020 | 700 | 500 | 200 | 175 | 415 | 120 | 640 | 440 | 2 Locks, GPTB |
| STB705025 | 700 | 500 | 250 | 225 | 415 | 120 | 640 | 440 | 2 Locks, GPTB |
| STB705030 | 700 | 500 | 300 | 275 | 415 | 120 | 640 | 440 | 2 Locks, GPTB |
| STB804030 | 800 | 400 | 300 | 275 | 317 | 120 | 345 | 740 | 2 Locks, GLTB |
| STB806020 | 800 | 600 | 200 | 175 | 415 | 120 | 540 | 740 | 2 Locks, GPTB |
| STB806030 | 800 | 600 | 300 | 275 | 415 | 120 | 540 | 740 | 2 Locks, GPTB |
| STB1006030 | 1000 | 600 | 300 | 275 | 415 | 120 | 540 | 940 | 2 Locks, GPTB |
| STB1008030 | 1000 | 800 | 300 | 275 | 315 | 120 | 730 | 940 | 2 locks, 4 Gland Plates (2 top / 2 bottom) |
| STB1206030 | 1200 | 600 | 300 | 275 | 315 | 120 | 540 | 1135 | 3 locks, 4 Gland Plates (2 top / 2 bottom) |
| STB1208030 | 1200 | 800 | 300 | 275 | 315 | 120 | 730 | 1135 | 3 locks, 4 Gland Plates (2 top / 2 bottom) |
|  |  |  |  |  |  |  |  |  |  |
| PBE2821013 | 280 | 210 | 130 | 106 |  |  | 150 | 230 | $1 \Delta$ Lock, No Glandplate |
| PBE332513 | 330 | 250 | 130 | 108 |  |  | 190 | 280 | $1 \Delta$ Lock, No Glandplate |
| PBE4030016 | 400 | 300 | 165 | 139 |  |  | 240 | 350 | $2 \Delta$ Locks, No Glandplate |
| PBE403019 | 400 | 300 | 195 | 165 |  |  | 240 | 350 | $2 \Delta$ Locks, No Glandplate |
| PBE503519 | 500 | 350 | 195 | 168 |  |  | 288 | 450 | $2 \Delta$ Locks, No Glandplate |
| PBE504017 | 500 | 400 | 175 | 145 |  |  | 340 | 450 | $2 \Delta$ Locks, No Glandplate |
| PBE604020 | 600 | 400 | 200 | 170 |  |  | 340 | 545 | $2 \Delta$ Locks, No Glandplate |
| PBE605022 | 600 | 500 | 220 | 185 |  |  | 445 | 530 | $2 \Delta$ Locks, No Glandplate |
| PBE705024 | 700 | 500 | 245 | 205 |  |  | 450 | 630 | $2 \Delta$ Locks, No Glandplate |
| PBE806026 | 800 | 600 | 260 | 225 |  |  | 540 | 725 | $3 \Delta$ Locks, No Glandplate |
|  |  |  |  |  |  |  |  |  |  |
| SSTB302015 | 300 | 200 | 150 | 130 |  |  | 145 | 160 | 1 Lock, No Glandplate |
| SSTB303015 | 300 | 300 | 150 | 130 |  |  | 245 | 250 | 1 Lock, No Glandplate |
| SSTB403020 | 400 | 300 | 200 | 180 |  |  | 245 | 350 | 1 Lock, No Glandplate |
| SSTB404020 | 400 | 400 | 200 | 180 |  |  | 345 | 350 | 1 Lock, No Glandplate |
| SSTB504020 | 500 | 400 | 200 | 180 |  |  | 345 | 450 | 1 Lock, No Glandplate |
| SSTB604020 | 600 | 400 | 200 | 180 |  |  | 340 | 540 | 2 Locks, No Glandplate |
| SSTB606020 | 600 | 600 | 200 | 180 |  |  | 545 | 550 | 2 Locks, No Glandplate |
| SSTB806030 | 800 | 600 | 300 | 285 |  |  | 545 | 745 | 2 Locks, No Glandplate |
| SSTB808030 | 800 | 800 | 300 | 285 |  |  | 745 | 745 | 2 Locks, No Glandplate |



## (i) TC1-D \& LC1-F Range Contactor Comparison Chart



* This comparison chart is for guidance only and we do not guarantee identical performance for the comparative types shown


## (i) Motor Current Selection Table

Three Phase Motor Approximate Full Load Current at Line Voltage

| - | - | - | - | Motor |  | Rating |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{2 2 0 V}$ | $\mathbf{2 4 0 V}$ | $\mathbf{3 8 0 V}$ | $\mathbf{4 1 5 V}$ | $\mathbf{5 5 0 V}$ | $\mathbf{K w}$ | $\mathbf{H P}$ |
| - | - | - | - | - | 0.07 | $1 / 12$ |
| 0.7 | 0.6 | 0.4 | 0.4 | 0.3 | 0.1 | $1 / 8$ |
| 1 | 0.9 | 0.5 | 0.5 | 0.3 | 0.12 | $1 / 6$ |
| 1.3 | 1.2 | 0.8 | 0.7 | 0.4 | 0.18 | $1 / 4$ |
| 1.6 | 1.5 | 0.9 | 0.9 | 0.6 | 0.25 | $1 / 3$ |
| 2.5 | 2.3 | 1.4 | 1.3 | 0.8 | 0.37 | $1 / 2$ |
| 3.1 | 2.8 | 1.8 | 1.6 | 1.1 | 0.56 | $3 / 4$ |
| 3.5 | 3.2 | 2 | 1.8 | 1.4 | 0.75 | 1 |
| 5 | 4.5 | 2.8 | 2.6 | 1.9 | 1.1 | 1.5 |
| 6.4 | 5.8 | 3.7 | 3.4 | 2.6 | 1.5 | 2 |
| 9.5 | 8.7 | 5.5 | 5 | 3.5 | 2.2 | 3 |
| 12 | 11 | 7 | 6.5 | 4.7 | 3 | 4 |
| 15 | 13 | 8 | 8 | 6 | 3.7 | 5 |
| 16 | 14 | 9 | 8 | 6 | 4 | 5.5 |
| 20 | 19 | 12 | 11 | 8 | 5.5 | 7.5 |
| 27 | 25 | 16 | 15 | 11 | 7.5 | 10 |
| 34 | 32 | 20 | 18 | 14 | 9.3 | 12.5 |
| 37 | 34 | 22 | 20 | 15 | 10 | 13.5 |
| 41 | 37 | 23 | 22 | 16 | 11 | 15 |
| 64 | 50 | 31 | 28 | 21 | 15 | 20 |
| 67 | 62 | 39 | 36 | 26 | 18.5 | 25 |
| 74 | 70 | 43 | 39 | 30 | 22 | 30 |
|  |  |  |  |  |  |  |

(i) Fibox Enclosure External Dimensions See page 34

- Degree of protection: IP67 FiBCX
- Adaptable enclosure for use with TC1-D range contactors (up to 65A) and accessories
- The back plate and din rail is pre-fitted in the enclosure for easy installation of contactors and accessories
- The depth of the boxes allows for addition of overload relays and front mounting accessories such as pneumatic timers and add on blocks.
- Ideal for lighting applications. The PB65C can also accommodate the 80A \& 95A contactors but without side mounting auxiliaries.
- Metric knock-outs
- Clear covers are available on request
- Approvals: UL, CSA, KEMA, FIMKO, DNV, LR
- Impact resistance: IK08
- Temperature range:
- $-40^{\circ} \mathrm{C}$ to $+120^{\circ} \mathrm{C}$ (Short Term)
- $-40^{\circ} \mathrm{C}$ to $+80^{\circ} \mathrm{C}$ (Long Term)

- Flammability rating: UL94-5V


| (i) Contactor Operating Times |
| :--- |
| - TC1-D09 / D12 / D18 |
| - TC1-D25 / D32 / D38 |
| - TC1-D40 / D50 / D65 |
| - TC1-D80 / D95 |


| Closing Times <br> (milliseconds) | Opening Times <br> (milliseconds) |
| :---: | :---: |
| $12 \ldots .22$ | $4 \ldots .12$ |
| $15 \ldots .24$ | $5 \ldots .19$ |
| $20 \ldots .26$ | $8 \ldots .12$ |
| $20 \ldots .35$ | $6 \ldots .20$ |

(i) TC1 (AC) \& TP1 (DC) Contactor \& Overload Relay Chart

| Overload Relay | Relay Range | For use with Contactors: TC1 (AC) / TP1 (DC) |
| :---: | :---: | :---: |
| TR2-D09301 | 0.10-0.16A | D09 / D12 / D18 / D25 / D32 / D38 |
| TR2-D09302 | 0.16-0.25A | D09 / D12 / D18 / D25 / D32 / D38 |
| TR2-D09303 | 0.25-0.40A | D09 / D12 / D18 / D25 / D32 / D38 |
| TR2-D09304 | 0.40-0.63A | D09 / D12 / D18 / D25 / D32 / D38 |
| TR2-D09305 | 0.63-1.00A | D09 / D12 / D18 / D25 / D32 / D38 |
| TR2-D09306 | 1.00-1.65A | D09 / D12 / D18 / D25 / D32 / D38 |
| TR2-D09307 | 1.60-2.50A | D09 / D12 / D18 / D25 / D32 / D38 |
| TR2-D09308 | 2.5-4.00A | D09 / D12 / D18 / D25 / D32 / D38 |
| TR2-D09310 | 4.00-6.00A | D09 / D12 / D18 / D25 / D32 / D38 |
| TR2-D09312 | $5.50-8.00 \mathrm{~A}$ | D09 / D12 / D18 / D25 / D32 / D38 |
| TR2-D09314 | 7.00-10.0A | D09 / D12 / D18 / D25 / D32 / D38 |
| TR2-D12316 | 9.00-13.0A | D09 / D12 / D18 / D25 / D32 / D38 |
| TR2-D18321 | 12.0-18.0A | D09 / D12 / D18 / D25 / D32 / D38 |
| TR2-D25322 | 17.0-25.0A | D09 / D12 / D18 / D25 / D32 / D38 |
| TR2-D32353 | 23.0-32.0A | D25 / D32 / D38 |
| TR2-D32355 | 30.0-40.0A | D32 / D38 (i) See Below |
| TR2-D40353 | 23.0-32.0A | D40 / D50 / D65 |
| TR2-D40355 | 30.0-40.0A | D40 / D50 / D65 |
| TR2-D65357 | 37.0-50.0A | D50 / D65 |
| TR2-D65359 | 48.0-65.0A | D65 |
| TR2-D65361 | 55.0-70.0A | D65 |
| TR2-D80363 | 63.0-80.0A | D80 |
| TR2-D95365 | 80.0-93.0A | D95 |


| (i) Contactor \& Overload Ratings |  |  |  |  |  |  |  |  |  |  |  |  |  | NB: The TR2 Overload relays will not fit on 4 pole contactors with $2 \mathrm{~N} / \mathrm{O}+2 \mathrm{~N} / \mathrm{C}$ contacts |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| For safety reasons the rating of an overload should not exceed the rating of the contactor it is being used with. However in specific applications when a contactor is used based on the AC1 rating (resitive load) then an overload up to the AC1 rating can be safely used. For example: a contactor rated 9AAC3 / 25AAC1 can be used with a TR2-D25322 (17-25A) to protect a 25AAC1 load. |  |  |  |  |  |  |  |  |  |  |  |  |  | (i) Contactor Coil Look Up Table |  |  |  |  |  |  |  |
|  | Volts | 12 | 24 | 48 | 72 | 110 | 120 | 125 | 208 | 220 | 230 | 240 | 250 | 277 | 380 | 400 | 415 | 440 | 480 | 575 | 600 |
| AC | 50 Hz |  | B5 | E5 |  | F5 |  |  |  | M5 | P5 | U5 |  |  | Q5 | V5 | N5 | R5 |  |  |  |
|  | 60 Hz |  | B6 | E6 |  | F6 | G6 |  | L6 | M6 |  | U6 |  | w6 | Q6 |  |  | R6 | T6 | S6 | X6 |
|  | $50 / 60 \mathrm{~Hz}$ |  | B7 | E7 |  | F7 | G7 |  |  | M7 | P7 | U7 |  |  | Q7 | v7 | N7 | R7 |  |  |  |
| DC |  | JD | BD | ED | SD | FD |  | GD |  | MD |  |  | UD |  |  |  |  | RD |  |  |  |

## 2015 Catalogue

(1) The following information is for guidance purposes only!
(i) Contactor Heating Guides, 9-95A

## Component Selection according to power switched

The combinations suggested below are given for an ambient temperature of $55^{\circ} \mathrm{C}$ and for powers at the rated voltage, but they also ensure switching in the event of prolonged overloads at 1.05 Un.

Scheme

Single-Phase 2 Pole Switching


Maximum Power (kW)
Contactor
Reference

| $220 / 240 \mathrm{~V}$ | $380 / 415 \mathrm{~V}$ | $660 / 690 \mathrm{~V}$ |  |
| :---: | :---: | :---: | :---: |
| 4 | 7 | 12 | TC1-D1210** |
| 5 | 9 | 15.5 | TC1-D1810** |
| 6 | 11 | 19 | TC1-D2510** |
| 8.5 | 15 | 25.5 | TC1-D3210** |
| 11 | 19 | 33 | TC1-D4011** |
| 14 | 24 | 41.5 | TC1-D6511** |
| 20 | 35 | 61 | TC1-D8011** |

## Component Selection according to power switched

The combinations suggested below are given for an ambient temperature of $55^{\circ} \mathrm{C}$ and for powers at the rated voltage, but they also ensure switching in the event of prolonged overloads at 1.05 Un.

## Scheme

Single-Phase
4 Pole Switching


Maximum Power (kW)

| 220 / 240V | 380 / 415V | 660 / 690V |  |
| :---: | :---: | :---: | :---: |
| 6 | 11 | 19 | TC1-D12004** |
| 10 | 17.5 | 30.5 | TC1-D25004** |
| 17.5 | 30 | 53 | TC1-D40004** |
| 22 | 38 | 66.5 | TC1-D65004** |
| 32 | 55 | 98 | TC1-D80004** |

## Component Selection according to power switched

The combinations suggested below are given for an ambient temperature of $55^{\circ} \mathrm{C}$ and for powers at
the rated voltage, but they also ensure switching in the event of prolonged overloads at 1.05 Un.

Contactor Reference

## Scheme

3 Phase
Switching

| Maximum Power (kW) |  |  | Reference |
| :---: | :---: | :---: | :---: |
| 220 / 240V | 380 / 415V | 660 / 690V |  |
| 6 | 11 | 20.5 | TC1-D1210** |
| 8 | 15.5 | 27 | TC1-D1810** |
| 11 | 19 | 33 | TC1-D2510** |
| 15 | 26 | 44 | TC1-D3210** |
| 19 | 32 | 57 | TC1-D4011** |
| 24 | 41 | 72 | TC1-D6511** |
| 34 | 59 | 105 | TC1-D8011** |

Contactor Reference
(1) Replace ${ }^{* *}$ for the required coil voltage eg: P7 ( $230 \mathrm{~V} 50 / 60 \mathrm{~Hz}$ )

## Quality Components at Competitive Prices

(i) Contactor Heating Guides, 115-780A

## Component Selection according to power switched

The combinations suggested below are given for an ambient temperature of $55^{\circ} \mathrm{C}$ and for powers at the rated voltage, but they also ensure switching in the event of prolonged overloads at 1.05 Ue .

Contactor Reference
Scheme $\quad$ Maximum Power (kW)

Single-Phase
2 Pole Switching


| $\mathbf{2 2 0} / \mathbf{2 4 0 V}$ | $380 / 415 \mathrm{~V}$ | $660 / 690 \mathrm{~V}$ | $\mathbf{1 0 0 0 V}$ |  |
| :---: | :---: | :---: | :---: | :---: |
| 36 | 62 | 95 | 126 | LC1-F115A |
| 44 | 76 | 118 | 157 | LC1-F150A |
| 48 | 83 | 130 | 170 | LC1-F185A |
| 52 | 90 | 145 | 185 | LC1-F225A |
| 60 | 104 | 160 | 210 | LC1-F265A |
| 75 | 130 | 200 | 250 | LC1-F330A |
| 86 | 145 | 230 | 300 | LC1-F400A |
| 116 | 200 | 310 | 400 | LC1-F500A |
| 170 | 290 | 450 | 695 | LC1-F630A |
| 270 | 460 | 715 | 945 | LC1-F780A |

## Component Selection according to power switched

The combinations suggested below are given for an ambient temperature of $55^{\circ} \mathrm{C}$ and for powers at
the rated voltage, but they also ensure switching in the event of prolonged overloads at 1.05 Ue.

Contactor Reference
Scheme

Single-Phase
4 Pole Switching
Maximum Power (kW)

| $\mathbf{2 2 0} / \mathbf{2 4 0 V}$ | $\mathbf{3 8 0} / \mathbf{4 1 5 V}$ | $660 / 690 \mathrm{~V}$ | $\mathbf{1 0 0 0 V}$ |  |
| :---: | :---: | :---: | :---: | :---: |
| 57 | 99 | 152 | 201 | LC1-F1154A |
| 70 | 121 | 190 | 251 | LC1-F1504A |
| 76 | 132 | 202 | 270 | LC1-F1854A |
| 80 | 142 | 230 | 295 | LC1-F2254A |
| 96 | 166 | 253 | 335 | LC1-F2654A |
| 120 | 205 | 320 | 400 | LC1-F3304A |
| 137 | 236 | 363 | 480 | LC1-F4004A |
| 185 | 320 | 490 | 650 | LC1-F5004A |
| 272 | 470 | 718 | 950 | LC1-F6304A |
| 425 | 735 | 1140 | 1520 | LC1-F7804A |

## Component Selection according to power switched

The combinations suggested below are given for an ambient temperature of $55^{\circ} \mathrm{C}$ and for powers at the rated voltage, but they also ensure switching in the event of prolonged overloads at 1.05 Ue. Contactor Reference

3 Phase
Switching
Maximum Power (kW)

| $220 / \mathbf{2 4 0 V}$ | $\mathbf{3 8 0} / \mathbf{4 1 5 V}$ | $\mathbf{6 6 0} / \mathbf{6 9 0 V}$ | $\mathbf{1 0 0 0 V}$ |  |
| :---: | :---: | :---: | :---: | :---: |
| 62 | 107 | 165 | 220 | LC1-F115A |
| 76 | 131 | 206 | 275 | LC1-F150A |
| 82 | 143 | 220 | 295 | LC1-F185A |
| 90 | 155 | 250 | 320 | LC1-F225A |
| 103 | 179 | 275 | 370 | LC1-F265A |
| 130 | 225 | 345 | 432 | LC1-F330A |
| 149 | 256 | 395 | 525 | LC1-F400A |
| 200 | 346 | 530 | 710 | LC1-F500A |
| 294 | 509 | 780 | 1030 | LC1-F630A |
| 463 | 800 | 1235 | 1650 | LC1-F780A |

2015 Catalogue

The following information is for guidance purposes only and can be effected by the length \&
cross section of supply cables, type of electronic balast units and the make of lamp.
(i) Contactor Lighting Guides, 9-95A

| High Pressure Mercury Vapour Lamps |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Contactor Size |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Non - Corrected |  |  |  |  |  |  |  | With Parallel Correction |  |  |  |  |  |  | TC1- / TP1- |
| P (W) | 50 | 80 | 125 | 250 | 400 | 700 | 1000 | 50 | 80 | 125 | 250 | 400 | 700 | 1000 | - |
| IB (A) | 0.54 | 0.81 | 1.20 | 2.30 | 4.10 | 6.80 | 9.9 | 0.3 | 0.45 | 0.67 | 1.3 | 2.3 | 3.8 | 5.5 | - |
| C (uF) | - | - | - | - | - | - | - | 10 | 10 | 10 | 18 | 25 | 40 | 60 | - |
|  | 22 | 14 | 9 | 5 | 2 | 1 | 1 | 40 | 26 | 17 | 9 | - | - | - | D09, D12 |
| Number | 27 | 18 | 12 | 6 | 3 | 2 | 1 | 50 | 33 | 22 | 11 | 6 | - | - | D18 |
| Of | 35 | 23 | 15 | 8 | 4 | 2 | 1 | 63 | 42 | 28 | 14 | 8 | 5 | 3 | D25 |
| Lamps | 48 | 32 | 21 | 11 | 6 | 3 | 2 | 86 | 57 | 38 | 20 | 11 | 6 | 4 | D32 |
| According | 61 | 40 | 27 | 14 | 8 | 4 | 3 | 110 | 73 | 49 | 25 | 14 | 8 | 6 | D40 |
| P(W) | 77 | 51 | 34 | 17 | 10 | 6 | 4 | 140 | 93 | 62 | 32 | 18 | 11 | 7 | D50, D65 |
|  | 111 | 74 | 49 | 26 | 14 | 8 | 6 | 200 | 133 | 89 | 46 | 26 | 15 | 10 | D80 |


| Low Pressure Sodium Vapour Lamps |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Contactor Size |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Non - Corrected |  |  |  |  |  |  |  | With Parallel Correction |  |  |  |  |  |  | TC1- / TP1- |
| P (W) | 35 | 55 | 90 | 135 | 150 | 180 | 200 | 35 | 55 | 90 | 135 | 150 | 180 | 200 | - |
| IB (A) | 1.2 | 16. | 2.4 | 3.1 | 3.2 | 3.3 | 3.4 | 0.3 | 0.4 | 0.6 | 0.9 | 1 | 1.2 | 1.3 | - |
| C (uF) | - | - | - | - | - | - | - | 17 | 17 | 25 | 36 | 36 | 36 | 36 | - |
|  | 10 | 7 | 5 | 3 | 3 | 3 | 3 | 40 | 30 | - | - | - | - | - | D09, D12 |
| Number | 12 | 9 | 6 | 4 | 4 | 4 | 4 | 50 | 37 | 25 | - | - | - | - | D18 |
| Of | 15 | 11 | 7 | 6 | 5 | 5 | 5 | 63 | 47 | 31 | 21 | 19 | 15 | 14 | D25 |
| Lamps | 21 | 16 | 10 | 8 | 8 | 7 | 7 | 86 | 65 | 43 | 28 | 26 | 21 | 20 | D32 |
| According | 27 | 20 | 13 | 10 | 10 | 10 | 9 | 110 | 82 | 55 | 36 | 33 | 27 | 25 | D40 |
| P(W) | 35 | 26 | 17 | 13 | 13 | 12 | 12 | 140 | 105 | 70 | 46 | 42 | 35 | 32 | D50, D65 |
|  | 50 | 37 | 25 | 19 | 18 | 18 | 17 | 200 | 150 | 100 | 66 | 60 | 50 | 46 | D80 |


| High Pressure Sodium Vapour Lamps |  |  |  |  |  |  |  |  |  |  | Contactor |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Non - Corrected |  |  |  |  |  | With Parallel Correction |  |  |  |  | TC1- / TP1- |
| P (W) | 150 | 250 | 400 | 700 | 1000 | 150 | 250 | 400 | 700 | 1000 | - |
| IB (A) | 1.9 | 3.2 | 5 | 8.8 | 12.4 | 0.84 | 1.4 | 2.2 | 3.9 | 5.5 | - |
| C (uF) | - | - | - | - | - | 20 | 32 | 48 | 96 | 120 | - |
|  | 6 | 3 | 2 | 1 | - | - | - | - | - | - | D09, D12 |
| Number | 7 | 4 | 3 | 1 | 1 | 17 | - | - | - | - | D18 |
| Of | 10 | 5 | 3 | 2 | 1 | 22 | 13 | 8 | - | - | D25 |
| Lamps | 13 | 8 | 5 | 2 | 2 | 30 | 18 | 11 | 6 | - | D32 |
| According | 17 | 10 | 6 | 3 | 2 | 39 | 23 | 15 | 8 | 6 | D40 |
| To | 22 | 13 | 8 | 4 | 3 | 50 | 30 | 19 | 10 | 7 | D50, D65 |
| P(W) | 31 | 18 | 12 | 6 | 4 | 71 | 42 | 27 | 15 | 10 | D80 | values normally quoted by lamp manufacturers.


| Metal lodine Vapour Lamps |  |  |  |  |  |  |  |  | Contactor |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Non - Corrected |  |  |  |  | With Parallel Correction |  |  |  | TC1- / TP1- |
| P (W) | 250 | 400 | 1000 | 2000 | 250 | 400 | 1000 | 2000 | - |
| IB (A) | 2.5 | 3.6 | 9.5 | 20 | 1.4 | 2 | 5.3 | 11.2 | - |
| C (uF) | - | - | - | - | - | - | - | - | - |
|  | 4 | 3 | 1 | - | - | - | - | - | D09, D12 |
| Max <br> Number | 6 | 4 | 1 | - | - | - | - | - | D18 |
| Of | 7 | 5 | 2 | - | 13 | 9 | - | - | D25 |
| Lamps | 10 | 7 | 2 | 1 | 18 | 13 | 4 | - | D32 |
| According | 13 | 9 | 3 | 1 | 23 | 16 | 6 | - | D40 |
| $\begin{gathered} \text { To } \\ \mathrm{P}(\mathrm{~W}) \end{gathered}$ | 16 | 11 | 4 | 2 | 30 | 21 | 7 | - | D50, D65 |
|  | 24 | 16 | 6 | 3 | 42 | 30 | 11 | 5 | D80 |

## Quality Components at Competitive Prices

(i) Contactor Lighting Guides, 9-95A


| Incandescent \& Halogen lamps |  |  |  |  |  |  |  |  |  | $\begin{gathered} \text { Contactor } \\ \text { Size } \\ \hline \text { TC1- / TP1- } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |
| P (W) | 60 | 75 | 100 | 150 | 200 | 300 | 500 | 750 | 1000 | - |
| IB (A) | 0.27 | 0.34 | 0.45 | 0.68 | 0.91 | 1.40 | 2.30 | 3.40 | 4.60 | - |
| Max | 59 | 47 | 35 | 23 | 17 | 11 | 7 | 4 | 3 | D09, D12 |
| Number | 77 | 61 | 46 | 30 | 23 | 15 | 9 | 6 | 4 | D18 |
| Of | 92 | 73 | 55 | 36 | 27 | 18 | 11 | 7 | 5 | D25 |
| Lamps | 129 | 103 | 77 | 51 | 38 | 25 | 15 | 10 | 7 | D32 |
| According | 163 | 129 | 97 | 64 | 48 | 31 | 19 | 13 | 9 | D40 |
| To | 207 | 164 | 124 | 82 | 62 | 40 | 24 | 16 | 12 | D50, D65 |
| P (W) | 296 | 235 | 177 | 117 | 88 | 57 | 34 | 23 | 17 | D80 |


| Fluorescent Lamps With Starter (Single ritting) |  |  |  |  |  |  |  |  |  |  | Contactor Size |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Non - Corrected |  |  |  |  |  | With Parallel Correction |  |  |  |  | TC1- / TP1- |
| P (W) | 20 | 40 | 65 | 80 | 110 | 20 | 40 | 65 | 80 | 110 | - |
| IB (A) | 0.39 | 0.45 | 0.70 | 0.80 | 1.2 | 0.17 | 0.26 | 0.42 | 0.52 | 0.72 | - |
| C (uF) | - | - | - | - | - | 5 | 5 | 7 | 7 | 16 | - |
| Max | 41 | 35 | 22 | 20 | 13 | 94 | 61 | 38 | 30 | 22 | D09, D12 |
| Number | 53 | 46 | 30 | 26 | 17 | 123 | 80 | 50 | 40 | 29 | D18 |
| Of | 66 | 57 | 37 | 32 | 21 | 152 | 100 | 61 | 50 | 36 | D25 |
| Lamps | 89 | 77 | 50 | 43 | 29 | 205 | 134 | 83 | 67 | 48 | D32 |
| According | 112 | 97 | 62 | 55 | 36 | 258 | 169 | 104 | 84 | 61 | D40 |
| To | 143 | 124 | 80 | 70 | 46 | 329 | 215 | 133 | 107 | 77 | D50, D65 |
| P (W) | 205 | 177 | 114 | 100 | 66 | 470 | 367 | 190 | 153 | 111 | D80 |
| Fluor | en | am | W | Ut |  | Sin | Fit |  |  |  | $\begin{gathered} \hline \text { Contactor } \\ \hline \text { Size } \end{gathered}$ |
|  | NO | C | ec |  |  |  | P | \|el | rec |  | TC1- / TP1- |
| P (W) | 20 | 40 | 65 | 80 | 110 | 20 | 40 | 65 | 80 | 110 | - |
| IB (A) | 0.43 | 0.55 | 0.8 | 0.95 | 1.4 | 0.19 | 0.29 | 0.46 | 0.57 | 0.79 | - |
| C (uF) | - | - | - | - | - | 5 | 5 | 7 | 7 | 16 | - |
| Max | 37 | 29 | 20 | 16 | 11 | 84 | 55 | 34 | 28 | 20 | D09, D12 |
| Number | 48 | 38 | 26 | 22 | 15 | 110 | 72 | 45 | 36 | 26 | D18 |
| Of | 60 | 47 | 32 | 27 | 18 | 136 | 89 | 56 | 45 | 32 | D25 |
|  | 97 | 63 | 43 | 36 | 25 | 184 | 101 | 76 | 61 | 44 | D32 |
| According | 102 | 80 | 55 | 46 | 31 | 231 | 151 | 95 | 77 | 55 | D40 |
| To | 130 | 101 | 70 | 58 | 40 | 294 | 193 | 121 | 98 | 70 | D50, D65 |
| P (W) | 186 | 145 | 100 | 84 | 7 | 421 | 275 | 173 | 140 | 101 | D80 |


| Fluorescent Lamps Whthout Starter (Dual Fitting) |  |  |  |  |  |  |  |  |  |  | Contactor |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Non - Corrected |  |  |  |  |  | With Series Correction |  |  |  |  | TC1- / TP1- |
| P (W) | $2 \times 20$ | $2 \times 40$ | $2 \times 65$ | $2 \times 80$ | $2 \times 110$ | $2 \times 20$ | $2 \times 40$ | $2 \times 65$ | $2 \times 80$ | $2 \times 110$ | - |
| IB (A) | $2 \times 0.25$ | $2 \times 0.47$ | $2 \times 0.76$ | $2 \times 0.93$ | $2 \times 1.3$ | $2 \times 0.14$ | $2 \times 0.26$ | $2 \times 0.43$ | $2 \times 0.53$ | $2 \times 0.72$ | - |
|  | $2 \times 32$ | $2 \times 16$ | $2 \times 10$ | $2 \times 8$ | $2 \times 6$ | $2 \times 56$ | $2 \times 30$ | $2 \times 18$ | $2 \times 14$ | $2 \times 10$ | D09, D12 |
| Max | $2 \times 42$ | $2 \times 22$ | $2 \times 12$ | $2 \times 10$ | $2 \times 8$ | $2 \times 74$ | $2 \times 40$ | $2 \times 24$ | $2 \times 18$ | $2 \times 14$ | D18 |
| Number <br> Of | $2 \times 52$ | $2 \times 26$ | $2 \times 16$ | $2 \times 12$ | $2 \times 10$ | $2 \times 92$ | $2 \times 50$ | $2 \times 30$ | $2 \times 24$ | $2 \times 18$ | D25 |
| Lamps | $2 \times 70$ | $2 \times 36$ | $2 \times 22$ | $2 \times 18$ | $2 \times 12$ | $2 \times 124$ | $2 \times 66$ | $2 \times 40$ | $2 \times 32$ | $2 \times 24$ | D32 |
| According | $2 \times 88$ | $2 \times 46$ | $2 \times 28$ | $2 \times 22$ | $2 \times 16$ | $2 \times 156$ | $2 \times 84$ | $2 \times 50$ | $2 \times 40$ | $2 \times 30$ | D40 |
| P (W) | $2 \times 112$ | $2 \times 58$ | $2 \times 36$ | $2 \times 30$ | $2 \times 20$ | $2 \times 200$ | $2 \times 106$ | $2 \times 64$ | $2 \times 52$ | $2 \times 38$ | D50, D65 |
|  | $2 \times 160$ | $2 \times 84$ | $2 \times 52$ | $2 \times 42$ | $2 \times 30$ | $2 \times 234$ | $2 \times 152$ | $2 \times 92$ | $2 \times 74$ | $2 \times 54$ | D80 |



|  | Lamp Data |  | Permissible number of lamps per circuit ( $230 \mathrm{~V}, 50 \mathrm{~Hz}$ ) Contactor type EUC: |  |  |  | Capacitor Load in uF |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lamp Type | Watt | $\ln \mathrm{A}$ | 20A | 25A | 40A | 63A |  |
| Halogen metal-vapour lamps, p.f. uncorrected | $\begin{gathered} 35 \\ 70 \\ 150 \\ 250 \\ 400 \\ 1000 \\ 2000 \end{gathered}$ | $\begin{gathered} 0.53 \\ 1 \\ 1.8 \\ 3 \\ 3.5 \\ 9.5 \\ 16.5 \end{gathered}$ |  | $\begin{gathered} 10 \\ 5 \\ 3 \\ 2 \\ 1 \\ - \end{gathered}$ | $\begin{gathered} 28 \\ 14 \\ 8 \\ 5 \\ 4 \\ 1 \\ 1 \end{gathered}$ | $\begin{gathered} 38 \\ 20 \\ 11 \\ 7 \\ 6 \\ 2 \\ 1 \end{gathered}$ |  |
|  | $\begin{aligned} & 20001 \\ & 35001 \\ & 400 \mathrm{~V} \end{aligned}$ | $\begin{gathered} 10.5 \\ 18 \\ - \end{gathered}$ |  | - | $2$ | $\begin{aligned} & 2 \\ & 1 \end{aligned}$ |  |
| Parallel p.f. correction | $\begin{gathered} 35 \\ 70 \\ 150 \\ 250 \\ 400 \\ 1000 \\ 2000 \end{gathered}$ | 0.25 0.45 0.75 1.5 2.5 5.8 11.5 |  | $5$ | $\begin{gathered} 11 \\ 5 \\ 3 \\ 2 \\ 2 \\ - \end{gathered}$ | $\begin{gathered} 30 \\ 18 \\ 9 \\ 7 \\ 6 \\ 6 \\ 2 \\ 1 \end{gathered}$ | $\begin{gathered} 6 \\ 12 \\ 20 \\ 33 \\ 35 \\ 95 \\ 148 \end{gathered}$ |
|  | $\begin{aligned} & 20001 \\ & 35001 \\ & 400 \mathrm{~V} \end{aligned}$ | $\begin{gathered} 6.6 \\ 11.6 \end{gathered}$ |  | - | 1 | $\begin{aligned} & 2 \\ & 1 \end{aligned}$ | $\begin{gathered} 58 \\ 100 \end{gathered}$ |
| Low-pressure mercury-vapour lamps p.f. uncorrected <br> Parallel p.f. correction | $\begin{aligned} & 35 \\ & 55 \\ & 90 \\ & 135 \\ & 150 \\ & 180 \\ & 200 \end{aligned}$ | $\begin{aligned} & 1.5 \\ & 1.5 \\ & 2.4 \\ & 3.5 \\ & 3.3 \\ & 3.3 \\ & 2.3 \end{aligned}$ | $\begin{aligned} & 5 \\ & 3 \\ & 2 \\ & 2 \\ & 2 \\ & 2 \\ & 3 \end{aligned}$ | $\begin{aligned} & 8 \\ & 5 \\ & 3 \\ & 3 \\ & 3 \\ & 5 \end{aligned}$ | $\begin{aligned} & 22 \\ & 22 \\ & 13 \\ & 10 \\ & 10 \\ & 10 \\ & 14 \end{aligned}$ | $\begin{aligned} & 30 \\ & 30 \\ & 19 \\ & 13 \\ & 14 \\ & 14 \\ & 20 \end{aligned}$ |  |
|  | $\begin{gathered} 35 \\ 55 \\ 90 \\ 135 \\ 150 \\ 180 \\ 200 \end{gathered}$ | $\begin{gathered} 0.31 \\ 0.42 \\ 0.63 \\ 0.94 \\ 1.0 \\ 1.16 \\ 1.32 \end{gathered}$ |  | $\begin{aligned} & 1 \\ & 1 \\ & 1 \\ & - \\ & - \\ & - \\ & 1 \end{aligned}$ | $\begin{aligned} & 4 \\ & 4 \\ & 3 \\ & 2 \\ & 2 \\ & 2 \\ & 3 \end{aligned}$ | $\begin{gathered} 15 \\ 15 \\ 10 \\ 7 \\ 8 \\ 8 \\ 8 \\ 12 \end{gathered}$ | $\begin{aligned} & 20 \\ & 20 \\ & 30 \\ & 45 \\ & 40 \\ & 40 \\ & 25 \end{aligned}$ |
| High-pressure sodium-vapour lamps <br> p.f. uncorrected | $\begin{aligned} & 150 \\ & 250 \\ & 330 \\ & 400 \\ & 1000 \end{aligned}$ | $\begin{aligned} & 1.8 \\ & 3.0 \\ & 3.7 \\ & 4.7 \\ & 10.3 \end{aligned}$ |  | $\begin{aligned} & 3 \\ & 2 \\ & 1 \end{aligned}$ | $\begin{gathered} 15 \\ 9 \\ 8 \\ 6 \\ 3 \end{gathered}$ | $\begin{gathered} 20 \\ 15 \\ 10 \\ 8 \\ 4 \end{gathered}$ |  |
| Parallel p.f. correction | $\begin{gathered} 150 \\ 250 \\ 330 \\ 400 \\ 1000 \end{gathered}$ | $\begin{gathered} 0.83 \\ 1.5 \\ 2.0 \\ 2.4 \\ 6.3 \end{gathered}$ |  | $\begin{aligned} & 1 \\ & 1 \end{aligned}$ | $\begin{aligned} & 3 \\ & 2 \\ & 2 \\ & 1 \end{aligned}$ | $\begin{gathered} 15 \\ 9 \\ 7 \\ 6 \\ 2 \end{gathered}$ | $\begin{gathered} 20 \\ 33 \\ 40 \\ 48 \\ 106 \end{gathered}$ |
| Transformers for halogen low-volt lamps | $\begin{array}{r} \text { Tran } \\ \text { fo } \end{array}$ | ers <br> tt | Permissible number of transformers per circuit ( $230 \mathrm{~V}, 50 \mathrm{~Hz}$ ) |  |  |  |  |
|  |  |  | $\begin{aligned} & 40 \\ & 20 \\ & 13 \\ & 10 \\ & 7 \\ & 5 \\ & 3 \end{aligned}$ | $\begin{gathered} 52 \\ 24 \\ 16 \\ 12 \\ 9 \\ 6 \\ 4 \end{gathered}$ | $\begin{gathered} 110 \\ 50 \\ 35 \\ 27 \\ 19 \\ 14 \\ 9 \end{gathered}$ | $\begin{aligned} & 174 \\ & 80 \\ & 54 \\ & 43 \\ & 29 \\ & 23 \\ & 14 \end{aligned}$ |  |

[^5]
## Quality Components at Competitive Prices

(i) Relpol Relay Comparison Chart See pages 87-89

| Europa Part Number | Schrack | Finder | Omron | Relpol |
| :---: | :---: | :---: | :---: | :---: |
| 8 Pin Octal |  |  |  |  |
| R8R12D2PDT | MT221012 | 60.12.9.012.0040 | MK2P-I 12VDC | R15-2012-23-1012WT |
| R8R24D2PDT | MT221024 | 60.12.9.024.0040 | MK2P-I 24VDC | R15-2012-23-1024-WT |
| R8R24A2PDT | MT226024 | 60.12.8.024.0040 | MK2P-I 24VAC | R15-2012-23-5024-WT |
| R8R110A2PDT | MT226115 | 60.12.8.110.0040 | MK2P-I 110VAC | R15-2012-23-5110-WT |
| R8R230A2PDT | MT226230 | 60.12.8.230.0040 | MK2P-I 230VAC | R15-2012-23-5230-WT |
| 11 Pin Octal |  |  |  |  |
| R11R12D3PDT | MT321012 | 60.13.9.012.0040 | MK3P-I 12VDC | R15-2013-23-1012-WT |
| R11R24D3PDT | MT321024 | 60.13.9.024.0040 | MK3P-I 24VDC | R15-2013-23-1024-WT |
| R11R24A3PDT | MT326024 | 60.13.8.024.0040 | MK3P-I 24VAC | R15-2013-23-5024-WT |
| R11R110A3PDT | MT326115 | 60.13.8.110.0040 | MK3P-I 110VAC | R15-2013-23-5110-WT |
| R11R230A3PDT | MT326230 | 60.13.8.230.0040 | MK3P-I 230VAC | R15-2013-23-5230-WT |
| 8 \& 11 Pin Octal Bases |  |  |  |  |
| RB8R | MT78755 | 90.20SMA | PF083-AE | PZ-8-01 |
| RB11R | MT78750 | 90.21SMA | PF113-AE | PZ-11-01 |
| Plug in PT Series | Schrack | Finder | Omron | Relpol |
| Miniature Industrial 14 Pin Plug In |  |  |  |  |
| R14S12D4PDT | PT570012 | 55.34.9.012.0040 | MY4*12VDC | R4-2014-23-1012-WTL |
| R14S24A4PDT | PT570524 | 55.34.8.024.0040 | MY4*24VAC | R4-2014-23-5024-WTL |
| R14S24D4PDT | PT570024 | 55.34.9.024.0040 | MY4*24VDC | R4-2014-23-1024-WTL |
| R14S110A4PDT | PT570615 | 55.34.8.110.0040 | MY4*110VAC | R4-2014-23-5110-WTL |
| R14S230A4PDT | PT570730 | 55.34.8.230.0040 | MY4*230VAC | R4-2014-23-5230-WTL |
| Miniature Industrial 11 Pin Plug In |  |  |  |  |
| R11S24A3PDT | PT370524 | 55.33.8.024.0040 | MY3*24 VDC | R3-2013-23-5024-WTL |
| R11S24D3PDT | PT370024 | 55.33.9.024.0040 | MY3*24VAC | R3-2013-23-1024-WTL |
| R11S1110A3PDT | PT370615 | 55.33.8.110.0040 | MY3*110VAC | R3-2013-23-5110-WTL |
| R11S230A3PDT | PT370730 | 55.33.8.230.0040 | MY3*230VAC | R3-2013-23-5230-WTL |
| Miniature Industrial 8 Pin Plug in |  |  |  |  |
| R8S12D2PDT | PT270012 | 55.32.9.012.0040 | MY2*12VDC | R2-2012-23-1012-WTL |
| R8S24D2PDT | PT270024 | 55.32.9.024.0040 | MY2*24VDC | R2-2012-23-1024-WTL |
| R8S24A2PDT | PT270524 | 55.32.8.024.0040 | MY2*24VAC | R2-2012-23-5024-WTL |
| R8S110A2PDT | PT270615 | 55.32.8.110.0040 | MY2*110VAC | R2-2012-23-5110-WTL |
| R8S230A2PDT | PT270730 | 55.32.8.230.0040 | MY2*230VAC | R2-2012-23-5230-WTL |
| Plug in PT Series | Schrack | Finder | Omron | Relpol |
| Miniature Inustrial Plug in Bases |  |  |  |  |
| RB8S | PT78722 | 94.72SMA | PYF08AE | GZT2 |
| RB11S | PT78732 | 94.73SMA | PFY11AE | GZT3 |
| RB14S | PT78742 | 94.74SMA | PYF14AE | GZT4 |
| Miniature RT Series | Schrack | Finder | Omron | Relpol |
| Slim Line 8 Pin 16A |  |  |  |  |
| R168M12D1PDT | RTD14012 | 40.61.7.012.0000 | G2R1E 12VDC | RM85-2011-25-1012 |
| R168M24D1PDT | RTD14024 | 40.61.7.024.0000 | G2R1E 24VDC | RM85-2011-25-1024 |
| R168M24A1PDT | RTD14524 | 40.61.8.024.0000 | G2R1E 24VAC | RM85-2011-25-5024 |
| R168M110A1PDT | RTD14615 | 40.61.8.110.0000 | G2R1E 115VAC | RM85-2011-25-5110 |
| R168M230A1PDT | RTD14730 | 40.61.8.230.0000 | G2R1E 230VAC | RM85-2011-25-5230 |
| Base For Slim Line Series |  |  |  |  |
| RB8M | RT78726 | 95.05SPA | P2RF05E | GZM-80 |




## Time Relay 2470001 <br> M T T U A $17 \mathrm{~S} \quad 11.9240$

## Time Functions

E - On Delay: After supply voltage $U$ has been switched on, the set time $T$ is being measured. After the $T$ time has lapsed, the $R$ operating relay shall start operating and remains in operating position until the supply voltage $U$ is switched off.

Wu - Single shot leading edge voltage controlled: After the supply voltage $U$ has been switched on, the operating relay $R$ starts immediately and the set time $T$ is being measured. After the set time $T$ has lapsed, the operating relay R returns to the initial position.

Bp - Flasher pause first: After the supply voltage $U$ has been switched on, the set time $T$ is being measured. After the time has lapsed, the operating relay $R$ starts operating and the $T$ time is being measured again. After the time has lapsed, the operating relay $R$ returns to the initial state, and another cycle of the relay operation commences. The relay operates until the supply voltage is switched off.

Bi - Flasher pulse first: After the supply voltage $U$ has been switched on, the set time $T$ is measured and the operation relay R is switched on. After the time has lapsed, the operating relay R starts operating and the time T is being measured again. After the time has lapsed, the operating relay $R$ returns to the initial state, and another cycle of the relay operation commences. The relay operates until the supply voltage is switched off.


Bi


T - generating the 0.5 s pulse after the T time.

R- OFF Delay: The supply voltage $U$ must be constantly applied to the time relay. After the control contact $S$ has been closed, the operating relay $R$ starts operation immediately. After the control contact $S$ has been opened, the set time T is being measured. After the T time has lapsed, the operating relay R returns to the initial position. When the control contact $S$ is closed again, even before the $T$ time has lapsed, the time measured thus far is reset, and when $S$ is opened, the set time $T$ is being measured again.

Ws - Single shot leading edge with control contact: The supply voltage $U$ must be constantly applied to the time relay. After the control contact $S$ has been closed, the operating relay $R$ starts immediately and the set time T is being measured. After the set time T has lapsed, the operating relay R returns to the initial position. In course of measuring the T time, the control contact S may be closed and opened repeatedly with no impact upon the operating relay $R$. Only after the $T$ time has lapsed, closing $S$ will make the operating relay $R$ operate and the $T$ time will be measured.

Wa - Single shot trailing edge with control contact: The supply voltage $U$ must be constantly applied to the time relay. Closing of the control contact $S$ does not trigger the measurement of the time delay or operation of the operating relay R . Only opening of the control contact $S$ causes the immediate operation of the operating relay R , and the set time $T$ is being measured. After the $T$ time has lapsed, the operating relay R returns to the initial position. In course of measuring the T time, the control contact S may be closed and opened repeatedly with no impact upon the output relay. Only after the $T$ time has lapsed, closing and opening of $S$ will make the operating relay R operate and the T time will be measured.

Esa - ON and OFF delay with control contact: The supply voltage $U$ must be constantly applied to the time relay. After the control contact $S$ has been closed, the set time $T$ is being measured and when it lapses the operating relay R is switched on. On opening of the control contact $S$ the set time $T$ is measured again, and after the time has lapsed, the operating relay $R$ is switched off. In case the time of closing the control contact $S$ is shorter than the set time delay T , the operating relay R shall start operation after the set delay has lapsed, and it will continue to operate for the T time. In course of the operation of the R relay, closing of the control contact S does not affect the function.
$B$ - Bistable relay leading edge with control contact: Each closing of the control contact $S$ changes the operating relay status to the opposite one (a feature of a bistable relay).

Permanent switching ON and OFF. The functions ON and OFF are selected with the TIME potentiometer. In the ON function the normally open contacts are closed all the time whereas in the OFF function they are open. The position of the FUNC potentiometer is of no significance when the ON / OFF function is selected.


Bp


Ws


B


## Multifunction Time Relay 2470001 seppage

Description of Relay: Multifunction time relay 2470001 (MT-TUA-17S-11-9240)

- 10 time functions
- 8 time ranges
- Cadnium - free contacts
- AC/DC input voltages
- Module width: 17.5 mm
- Direct mounting on 35 mm din rail in accordance with PN-EN 60715 (wiring: $1 \times 2.5 \mathrm{~mm}^{2}, 2 \times 1.5 \mathrm{~mm}^{2}$ )
- Application: in low voltage systems
- Compliance with standard PN-EN 61812-1
- Recognition, certification, directives: $\subset \in$

(i) Ingress Protection (IP Ratings)


## 1st Number

Protection Against Solid Objects

(1) For example:

IP65 = Totally protected against dust \& protected against low pressure jets of water sprayed from all directions-

IP67 $=$ Totally protected against dust \& protected against immersion in water

See page 69 for our IP67 fully weather proof range of push buttons and switches. Ideal for use in all outdoor applications and in industries such as, the automotive and food industry where constant washing, salt spray and other substances would ordinarily cause switches to fail.

## 2nd Number

Protection Against Liquids


Protected against low pressure jets of water sprayed from all directions


7
Protected against immersion in water

Protected against long periods of immersion under pressure

Contract: the contract between the Supplier and the Customer for the sale and purchase of the Goods in accordance with these Conditions.
Customer: the person or firm who purchases the Goods from the Supplier
Force Majeure Event: has the meaning given in clause
Goods: the goods (or any part of them) set out in the Orde
Order: the Customer's order for the Goods, as set out in the Customer's purchase order or as placed over the telephone, as the case may be
Specification: any Specification: any specification for the Goods, which has been verified by the Supplier, or which has otherwise been
Supplier: Europa Components \& Equipment Plc (registered in England and Wales with company number 02646133).
Construction
hese Conditions, the following rules apply
A person inclu
A person includes a natural person, corporate or unincorporated body (whether or not having separate legal personality).
A reference to a party includes its personal
A reference
A reference to a statute or statutory provision is a reference to such statute or provision as amended or re-enacted. A reference to a statute or statutory provision includes any subordinate legislat
Any phrase introduced by the terms including, include, in particular or any similar expression shall be construed as illustrative and shall not limit the sense of the words preceding those terms.

2.2 The Order constitutes an offer by the Customer to purchase the Goods in accordance with these Conditions. The Customer shall ensure that the terms of the Order and and any relevant specificication which has been specifically agreed in writing between the Supplier and

receipt), or, if earier, at the time that delivery of the Goods is deemed to take place as referred to in clause 3.2 . After the Contract has come into existence, the Order cannot be cancelled without the Supplier's written consent.
The Contract constitues the entire agreement between the parties. The Customer acknowledges that it has not relied on any statement, promise or representation made or given by or on behalf of the Supplier which is not set
descriptive matter, specification, or advertising issued by the Supplier and any descrintions or illustrations contained in the Supplier's catalogues or brochures are issued or published for the sole purpose of giving an approximate ide Tescriptive matter, specification, or adverisising issued by the supplier and any descriptions or ilustrations contained in the Suppliers catalogues or brochures are issued or published for the sole purpose of givivin an approximate idea of the Goods described in then.
They shall not orm part of the Contract or any other contract between the Supplier and the Customer for the sale of the Goods. All procuct information relating to the Goods' description, specification or ortherwise, must te verified with the Supplier's sales department A quotation for the Gooods given by the Supplier shall not constitute an offer. A quotation shall orly be valid for a period of 30 days from its date of issue.

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Where they are to be delivered by the Supplier's carrier the Supplier shall deliver the Goods to the location set out in the Order or such other location as the parties may agree.
```

3.2 Delivery of the Goods shall be deemed to take place when, a reppesentative of the Customer (or someone purporting to be the same) signs the Supplier's carrier's receipt or the Supplier's despatch note or, the Goods are delivered to the Customer's carrier, as the case may be.
Any dates quoted for delivery are approximate only, and the time of delivery is not of the essence. The Supplier shall not be liable for any delay in delivery of the Goods that is caused by a Force Majeure event, or the Customer's failure to provide the Supplier with
If the Supplier fails to deliver the Goods, its liability shall be limited to the costs and expenses incurred by the Customer in obtaining replacement goods of similar description and quality in the cheapest market available, less the price of the Goods. The Supplier shall
have no liability for any failure to deliver the Goods to the extent that such failure is caused by a Force Majeure Event or the Customer's failure to provide the Supplier with adequate delivery instructions or any other instructions that are relevant to the supply of the Goods.
Unless the Customer clearly specifies otherwise in the Order, the Supplier may deliver the Goods by instalments, which shall be invoiced and paid for separately. Each instalment shall constitute a separate Contract. Any delay in delivery or defect in an instalment shall
Unless the Customer clearly specifies otherwise in the Order, the Supplier may deliver the Goods by instaiments, which shall be invoiced
not entitle the Customer to cancel any other instalment.
Subject to clause 4.2 (a), any query relating to an Order must be raised with the Supplier within 10 Business Days of delivery of the Goods.
${ }_{3.6}^{3.6}$ QuAlity
The Supplier warrants that on delivery and for a period of 12 months from the date of delivery (warranty period), the Goods shall:
conform in all material respects with their description and any applicable Specification; and
be free from material defects in design, material and workmanship.
Subject to clause 4.3 , if: the Customer gives notice in writing to the Supplier, within 10 days from the date of delivery where it would be apparent on a reasonable inspection of the Goods that some or all of them do not comply with the warranty set out in clause 4.1 , and otherwise within a
reasonable
the Supplie
the Custom
the Customer, as required by the Supplier, either, returns such Goods to the Supplier's place of business at the Customer's cost or, where agreed in advance, the Supplier's carrier collects the same at the Supplier's expense. If the Supplier agrees to collect the Goods
and the Customer fails to make the same available to the Supplie's carrier for collection, the charge for subsequently colecting the same will be borne by the Customer. If the Goods are collected, and the Supplier subsequently determines that they do not breach the
warranty set out in clause 4.1, the Customer will reimburse the Supplier on demand the cost of collecting them. Any Goods that are returned or offered for collection must be accompanied by a return number, to be obtained from the Supplier before they are returned or
collected, as the case may be, the Supplier shall, at its option, repair or replace the defective Goods, or refund the price of the defective Goods in full. If any Goods are returned to the Supplier without the Supplier's prior authority, the Supplier will be entitled to charge
the Customer a handling charge of $25 \%$ of the invoice value of the Goods that have been returned. If any good or product is returned to, or collected by, the Supplier, which has not been supplied by it, the Customer will indemnify on demand and keep indemnified on
demand, the Supplier, against all costs, expenses, charges, fees, liabilities, claims or otherwise, relating thereto, including those relating to its collection, storage and/or W.E.E disposal.
The Supplier shall not be liable for Goods' failure to comply with the warranty set out in clause 4.1 it.
the Customer makes any further use of such Goods after giving notice in accordance with clause 4.2 ; or
the defect arises because the Customer failed to follow the Supplier's oral or written instructions (including any manufacturer's instructions) as to the storage, commissioning, installation, use and maintenance of the Goods or (if there are none) good trade practice; or
the defect arises because the Customer failed to follow the Supplier's oral or written instructions (including any manufacturer's instructions) as to the storage, commissioning, instalation
the defect arises as a result of the use of the Goods in any particular design, instalation or configuration, unless the Specification clearly states that they are suitable for such use; or
the Goods are used with incompatible goods or products or outside the permitted tolerances stated in the Specification:
the Goods are used with incompatible goods or products or outside the permitted tolerances stated in the Specification;
the defect arises as a result of the Supplier following any drawing, design or specification supplied by the Customer; or
the defect arises as a result of the Supplier following any drawing, design or specificicatio
the Customer alters or repairs such Goods without the witten consent of the Supplier; or
the defect arises as a result of fair wear and tear, misuse, wifful damage, negligence, or abnormal storage or working conditions,
Except as provided in this clause 4 , the Supplier shall have no liability to the Customer in respect of the Goods' filu
Except as provided mis clause 4, the Suppler shall have no liability to the Customer in respect of the Goods' failure to comply with the warranty set out in clause 4.1.
Excep as set out in these Conditions, al warranties, conditions and other terms implied by sta
These Conditions shall apply to any repaired or replacement Goods supplied by the Supplier.
AND RISK
The risk in the Goods shall pass to the Customer on completion of delivery.
Title to the Goods shall not pass to the Customer until the Supplier has received payment in full (in cash or cleared funds) for:
all other sums which are or which become due to the Supplier for sales of the Goods or any other products to the Customer
Untit tite to the Goods has passed to the Customer, the Custormer shall:
hold the Goods on a fiduciary basis as the Supplier's bailee:
store the Goods separately from all other goods held by the Customer so that they remain readily identifiable as the Supplier's property
not remove, defacee or obscure any identifying mark or packaging on or relating to the Goods;
maintain the Goods in satisfactory condition and keep them insured against all risks for their full price from the date of delivery;
ootify the Supplier immediately if it be shiet to any of the evels
give the Supplier such information relating to the Goods as the Supplier may require from time to time,but the Customer may resell or use the Goods in the ordinary course of its business.
If before titie to the Goods passes to the Customer the Customer becomes subject to any of the events listed in llause 7.2 , or the Supplier reasonably
heveieves that any such event
have not been resold, or irrevocably incorporated into another product, and without limiting any other right or remedy the Supplier may have, the Supplier may at any time require the Customer to deliver up the Goods and, if the Customer fails to do so promptly, enter
any premises of the Customer or of any third party where the Goods are stored in order to recover them.
6. PRICE AND PAYMENT
The price of the Goods shall be the price set out in the Order, or, if no price is quoted, the price set out in the Suppliers published price list in force at the date the Order is placed, or to the extent applicable, in any relevant price arrangement specifically agreed between
the Supplier and the Customer. The Supplier may change the prices in its published catalogues and brochures at any time without notice. The current price for the Goods must be checked with the Supplier before placing the Order. Unless specified, all prices quoted

The price of the Goods is exclusive of the costs of transport.
The price of the Goods is exclusivive of ammunts in respect of value added tax which will be chargeable at the then prevaliing rate (VAT).
The price of the Goods is exclusive of amounts in respect of value aaded tax which wirl be chargeable at the then prevaling rate (VAT).
The Supplier may invoice the Customer for the Goods on or at any time after the completion of delivery. Any queries relating to invoices must be raised with the Supplier within 10 Business Days of the invoice date.
Unless altemative payment arrangements are agreed in writin in advance by the Supplier and the
Unless altermative payment arrangements are gareed in writing in advance by the Supplier and the Customer, the Customer shall pay the invoice in full and in cleared funds within 30 days of the end of the calendar month in which the invoice is issued. Time of
payment is of the essence.
If the Customer fails to make any payment due to the Supplier under the Contract by the due date for payment (due date), then the Customer shall pay interest on the overdue amount at the rate of $8 \%$ per annum. Such interest shall accrue on a daily basis from the due

The Customer shall pay all amounts due under the Contract in full without any deduction or withholding except as required by law and the Customer shall not be entitled to assert any credit, set-off or counterclaim against the Supplier in order to justify with 有lding
payment of any such amount in whole or in part. The Supplier may at any time, without limiting any other rights or remedies it may have, set off any amount owing to it by the Customer against any amount payable by the Supplier to the Customer.
The Supplier shall be entitled to charge the Customer for any expenses reasonably yncurred in connection with the assignment of the Contract (including the preparation of papers, information, and effiecting the assignment) to any third party debt collection person pursuant
to clause 10.1 and in connection with the recovery of the Debt sujject to the provisions of clause 6.5 .
CUSTOMER'S ISSOLVENCY OR INCAPACITY
I.
It the Customer becomes subject to any of the events sisted in clause 7.2 , or the Supplier reasonably believes that the Customer is about to become subject to any of them and notifies the Customer accordingly then, without limiting any other right or remedy available to
the Suppier, the Supplie may cancel or suspend all further deliveries under the Contract or under any other contract between the Customer and the Supplier without incurring any liability to the Customer, and all outstanding sums in respect of Goods delivered to the
Customer shall become immediately due.
Customer shall become immediately due.
For the purposes of clause 7.1 , the relevant events are:
the Customer suspends, or threatens to suspend, payment of its debts or is unable to pay its debts as they fall due or admits inability to pay its debts or (being a company) is deemed unable to pay its debts within the meaning of section 123 of the Insolvency Act 1986 ,
or (being an individual) is deemed either unable to pay it debts or as having no reasonable prospect of so doing, in either case, within the meaning of section 268 of the Insolvency Act 1986 , or (being a partnership) has any partner to whom any of the foregoing apply; or
the Customer commences negotiations with all or any class of its creditors with a view to rescheduling any of its debts, or makes a proposal for or enters into any compromise or arrangement with its creditors; or
(being an individual) the Customer is the subject of a bankuptcy petition or order; or
(being an individual) the Customer is the subject of a bankruptcy petition or order; or
a creditor or encu
within 14 days or or
within 14 days; or
(being a company) an application is made to court, or an order is made, for the appointment of an administrator or if a notice of intention to appoint an administrator is given or if an administrator is appointed over the Customer; or
(being a company) a floating charge holder over the assets of the Customer has become entitled to appoint or has appointed an administrative receiver; or
aperson becomes entitled to appoint a receiver over the assets of the Customer or a receiver is appointed over the assets of the Customer; or an and ,
the Customer suspends, threatens to suspends, ceases or threatens to cease to carry on all or substantially the whole of its business; or
the financial position of the Customer deteriorates to such an extent that in the oing of the
the financial position of th Customer deteriorates to such an extent that in the opinion of the Supplier the capability of the Customer adequately to fuffil its obligations under the Contract has been placed in jeopardy.
* 8. $\begin{aligned} & \text { (k) } \\ & \text { LiIITATION OF LIABILITITY }\end{aligned}$
Nothing in these Conditions shall limit or exclude the Supplier's liability for:
death or personal injury caused by its negligence, or the negligence of its employees, agents or subcontractors (as applicable); or
fraud or frauduluent misrepresentation: or
breach of the terms implied by section 12 of the Sale of Goods Act 1979; or
befective products under the Consumer Protection Act 1987 ; or
dyy matter in respect of which it would be
any matter in respect of which it would pe unlawful for the Supplier to exclude or restrict liability
the Supplier shall not be liable to the Customer, whether in contract, tort (including negligence), breach of statutury duty, or otherwise, for any loss of proft or indirect or consequential loss arising under or in connection with the Contract including any losses that may
the Supplier shall not be liable to the Customer, whether in contract, tort (including negligence), breach of sta
resulf from a deliberate breach of the Contract by the Supplie's employees, agents or subcontractors); and

9. FORCE MAJEURE
The Supplier shall not be liable for any failure or delay in performing its obligations under the Contract to the extent that such failure or delay is caused by a Force Majeure Event. A Force Majeure Event means any event beyond the Supplier's reasonable control, which
by its nature could not have been foreseen, or, if it could have been foreseen, was unavoidable, including strikes, lock-outs or other industrial disputes (whether involving its own workforce or a third party's), failure of energy sources or transport network, acts of God
by its nature could not have been foreseen, or, if ift could have been foreseen, was unavoidable, including strikes, lock-outs or other industrial disputes (whether involving its own workforce or a third varty's), failure eo energy sources or transport network, acts of God,
egulations or embargoes, national or international calamity, armed confict, accident, malicious damage, breakdown of plant or machinery, nuclear, chemical or biological contamination, sonic boom, explosions, collapse of building structures, fires, floods, storms
earthquakes, loss at sea, epidemics or similar events, natural disasters or extreme adverse weather conditions, difficutties in obtaining raw materials, labour, fuel or parts of machinery, material breach of contract or other default of suppliers or subcontractors.
10. General
Assignment and subcontracting
The Supplier may at any time assign, transfer, charge, subcontract or deal in any other manner with all or any of its rights or obligations under the Contract
(a) The Supplier may at any time assign, transfer, charge, subcontract or deal in any other manner with all or any of its rights or obligations under the Contract.
(b) The Customer may not assign, transfer, charge, subcontract or deal in any other manner with all or any of its rights or obligations under the Contract without the prior written consent of the Supplier.
$\begin{array}{ll}\text { (b) The Customer may not assign, transfer, charge, suconract or dealin any other mamer win } \\ \text { 10.2 } & \text { Notices } \\ \text { (a) }\end{array}$
(a) Any notice or other communication given to a party under or in connection with the Contract shall be in writing, addressed to that party at its registered office (ifit is a company) or its principal place of business (in any other case) or such other address as that party may

A notice or other communication shal be deemed to have been received: if delivered personalily, when left at the address referred to in clause 10.2 (a) ; if sent by pre-paid firs
delivered by commercial courier, on the date and at the time that the courier's delivery receipt is signed; or, if sent ty by fax or e-mail, one Business Day after transmission.
The provisions of this clause shall not apply to the service of any proceedings or other documents in any legal action.
(a) If any court or competent authority finds that any provision of the Contract (or part of any provision) is invalid, illegal or unenforceable, that provision or part-provision shall, to the extent required, be deemed to be deleted, and the validity and enforceability of the other
If any court or competent authority finds that any provision of the Contract (or part of any provision) is invalid, illegal or unenforceable, that provision or par--provision shall, to the extent required, be deemed to be deleted, and the validity a
provisions of the Contract shall not e affected
If any invalid, unenforceable or illegal provision of the Contract would be valid, enforceable and legal if some part of it were deleted, the provision shall apply with the minimum modification necessary to make it legal, valid and enforceable.
(b) If any invalid, unenforceable or illegal provision of the Contract would be valid, enforceable and legal if some part of it were deleted, the provision shall apply with the minimum modification necessary to make it legal, valid and enforceable.
10.4
Waiver. A waiver of
Waiver. A waiver of any right or remedy under the Contract is only effective if given in writing and shall not be deemed a waiver of any subsequent breach or default. No failure or delay by a party to exercise any right or remedy provided under the Contract or by law
shall constitute a waiver of that or any other right or remedy, nor shall it preclude or restrict the further exercise of that or any other right or remedy. No single or partial exercise of such right or remedy shall preclude or restrict the further exercise of that or any other right
shall constitu
or remedy.
Third party
$\begin{array}{ll}10.5 & \text { or remedy. } \\ \text { Third party rights. A person who is not a party to the Contract shall not have any rights under or in connection with hit } \\ \text { 10.6 } & \text { Variation. Any variation to the Contract, including the introduction of any additional terms and conditions, shall only be }\end{array}$
$\begin{array}{ll}10.6 & \text { Variation. Any } \\ \text { Governing law and jurisdiction. The Contract, and any dispute or claim arising out of or in connection with it or its subject matter or formation (including non-contractual disputes or claims), shall be governed by, and construed in accordance with, English law, and the } \\ \text { parties irrevechaty submit to the exclusive jurisdiction of the courts of England and Wales. }\end{array}$
Governing law and jurisdiction. The Contract, and any dispute or claim arising out of or
parties irrevocably submit to the exclusive jurisdiction of the courts of England and Wales.

## Turopa components

Europa House, Airport Way Luton, Bedfordshire LU2 9NH

## Catalogue 2015




[^0]:    NB: See page 12 for dimensions

[^1]:    $\checkmark$ Ideal for extending 17th Edition consumer units when used with other split load boards.

[^2]:    (i) Modular Contactor Lighting Guide Page 136

[^3]:    9A-32A Screw fixing or 35 mm din rail mounting 40A - 95A Screw fixing or double width 70 mm din rail ( $2 \times 35 \mathrm{~mm}$ din rail). (See pages 90-91 for din rail),

[^4]:    Choose from 5 mounting options in either black or white with matching cap and 70 mm diameter. The easy to mount modular system means that you can clip and fit any of our modular lamps, alarms and buzzers to the base of your choice.

    70 mm Caps, Brackets \& Bases (with 100 mm tube)

[^5]:    Switching Lamp Loads - the above tables show the number of lamps which can be connected per circuit at $230 \mathrm{~V} / 50 \mathrm{~Hz}$. If the specified capacitor load is exceeded, this may
    result in admissibly high peak inrush currents. Other factors which influence the magnitude of peak inrush currents are as follows:
    Length \& cross section of supply cables, type of electronic ballast units and the make of lamp.

