

Europa components

Catalogue

2014



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*** Due to the volatile nature of the market in raw materials price changes may occur at very short notice.**

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Quality Components at Competitive Prices

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E&OE 01/14



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DC 4 Pole Door Interlock Isolator Switch

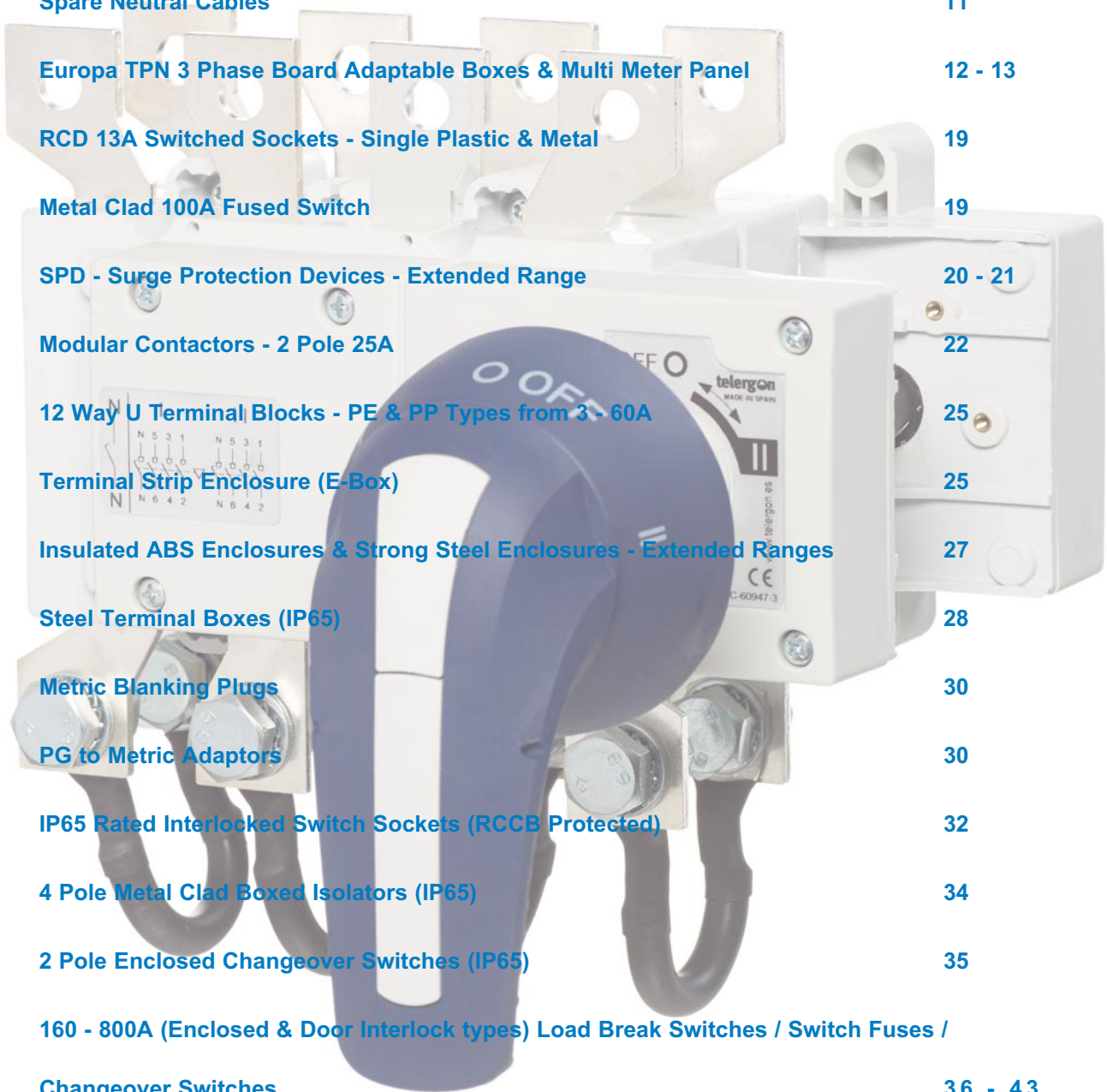
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Integrated 22.5mm Push Buttons, Switches and Control Station Enclosures

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✓ **Product Display Boards** - Ideal for your P.O.S



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✓ **UPS Tracking** - Automatic real time e-mail updates



✓ **Direct to Site Deliveries**

✓ **Carriage Paid Orders** - for orders over £100 net

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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**!



Extended Range

Part Number	Description	Price	Per
CENL110	JUNCTION BOX IP67 C/W Din Rail 110x110x110 CP	£11.00	1
CMC254P	MODULAR CONTACTOR 4 POLE 25A 230V CP	£36.23	1
CMC404P	MODULAR CONTACTOR 4 POLE 40A 230V CP	£48.52	1
CMC634P	MODULAR CONTACTOR 4 POLE 63A 230V CP	£53.91	1
CET2	24HR TIME CLOCK 15MIN SEG 1MODULE CP	£42.99	1
CET6	TIME CLOCK 2CHAN N/O 7 DAY CP	£72.99	1
CET5	TIME CLOCK 1CH 16AMP 7 DAY CP	£29.99	1
CET3	STAIRCASE 230V TIMER CP	£17.75	1
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
CBLMVR	XENON BEAC L/P 2W 10-72V AC/DC RED CP	£35.00	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
CRCDFSP	RCD SINGLE 13AMP SPUR OUTLET CP	£23.10	1



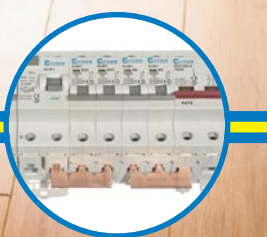
Part Number	Description	Price	Per
COL10	TC1 OVERLOAD RELAY 1.00-1.65A CP	£25.74	1
COL20	TC1 OVERLOAD RELAY 1.60-2.50A CP	£25.74	1
COL30	TC1 OVERLOAD RELAY 2.5-4.0A CP	£25.74	1
COL40	TC1 OVERLOAD RELAY 4.0-6.0A CP	£25.74	1
COL50	TC1 OVERLOAD RELAY 5.5-8.0A CP	£29.16	1
COL60	TC1 OVERLOAD RELAY 7.0-10.0A CP	£29.16	1
COL70	TC1 OVERLOAD RELAY 9.0-13.0A CP	£29.16	1
COL80	TC1 OVERLOAD RELAY 12.0-18.0A CP	£30.59	1
COL90	TC1 OVERLOAD RELAY 17.0-25.0A CP	£30.59	1
CAUX22	AUX CONT BLOCK F/MTG 4P 2N/O+2N/C CP	£14.67	1
CTK410	10 X 4MM SCREW TERMINAL KIT CP	£6.40	1
CTK45	5 X 4MM SCREW TERMINAL KIT CP	£6.10	1
CTK510	5 X 10MM SCREW TERMINAL KIT CP	£5.79	1
CTK525	5 X 25MM SCREW TERMINAL KIT CP	£7.16	1
CRLY10	RELAY 8 PIN OCTAL 2PCO 10A 24V DC CP	£8.35	1
CRLY15	RELAY 8 PIN OCTAL 2PCO 10A 24V AC CP	£8.35	1
CRLY20	RELAY 8 PIN OCTAL 2PCO 10A 110V AC CP	£8.35	1
CRLY25	RELAY 8 PIN OCTAL 2PCO 10A 230V AC CP	£8.89	1
CRLY30	RELAY 11 PIN OCTAL 3PCO 10A 24V DC CP	£8.89	1
CRLY35	RELAY 11 PIN OCTAL 3PCO 10A 24V AC CP	£8.89	1
CRLY40	RELAY 11 PIN OCTAL 3PCO 10A 110V AC CP	£9.30	1
CRLY45	RELAY 11 PIN OCTAL 3PCO 10A 230V AC CP	£9.30	1
CRLY50	RELAY 14 PIN 4PCO 6A 24V DC CP	£9.50	1
CRLY55	RELAY 14 PIN 4PCO 6A 24V AC CP	£9.50	1
CRLY60	RELAY 14 PIN 4PCO 6A 110V AC CP	£9.99	1
CRLY65	RELAY 14 PIN 4PCO 6A 230V AC CP	£9.99	1
CRB10	RELAY BASE 8 PIN OCTAL CP	£5.75	1
CRB30	RELAY BASE 11 PIN OCTAL CP	£5.75	1
CRB50	RELAY BASE 14 PIN PLUG IN CP	£5.90	1
CLD30B	LED LAMP 24V AC/DC GREEN CP	£5.88	1
CLD30F	LED LAMP 110V AC GREEN CP	£5.88	1
CLD30P	LED LAMP 230V AC GREEN CP	£5.88	1
CLD40B	LED LAMP 24V AC/DC RED CP	£5.88	1
CLD40F	LED LAMP 110V AC RED CP	£5.88	1
CLD40P	LED LAMP 230V AC RED CP	£5.88	1
CLD50B	LED LAMP 24V AC/DC AMBER CP	£5.88	1
CLD50F	LED LAMP 110V AC AMBER CP	£5.88	1
CLD50P	LED LAMP 230V AC AMBER CP	£5.88	1
CFB30	FLUSH PUSH BUTTON HEAD GREEN CP	£5.10	1
CFB40	FLUSH PUSH BUTTON HEAD RED CP	£5.10	1
CES10	EM STOP HEAD RED TWIST REL 40MM CP	£8.85	1
CES20	EM STOP HEAD KEY REL RED + M/B 40MM CP	£14.50	1
CSW20	SEL SW 2POS CP	£6.97	1
CSW30	SEL SW 3 POS CP	£6.97	1
CKS20	KEY SELECTOR SWITCH 2 POS CP	£9.00	1
CKS30	KEY SELECTOR SWITCH 3 POS CP	£9.50	1
CCBNC	CONTACT BLOCK N/C CP	£4.50	1
CCBNO	CONTACT BLOCK N/O CP	£4.50	1
CRC1P	PUSH BUTT STN 1POS CP	£13.78	1
CRC1PY	PUSH BUTT STN 1POS YELLOW CP	£13.78	1
CRC2P	PUSH BUTT STN 2 POS EMPTY + LABELS CP	£17.49	1
CRC3P	PUSH BUTT STN 3 POS EMPTY CON + LABELS CP	£20.12	1
CC123N	CONTACTOR 12A 5.5KW 1N/O AUX 415V CP	£21.85	1
CC123P	CONTACTOR 12A 5.5KW 1N/O AUX 230V CP	£21.85	1
CC124P	CONTACTOR 4 POLE 25A AC1 230V COIL CP	£25.11	1
CC253N	CONTACTOR 25A 11KW 1N/O AUX 415V CP	£30.30	1
CC253P	CONTACTOR 25A 11KW 1N/O AUX 230V CP	£30.30	1
CC254P	CONTACTOR 4 POLE 40A AC1 230V COIL CP	£35.59	1
CMC202P	MODULAR CONTACTOR 20A 230V CP	£22.8	1
CLB204	ISOLATOR ENC 20A 4P CP	£14.00	1
CLB254	ISOLATOR ENC 25A 4P CP	£16.00	1
CLB324	ISOLATOR ENC 32A 4P CP	£18.00	1
CLB404	ISOLATOR ENC 40A 4P CP	£20.00	1
CMFT	CRM-91H MULTI-FUNCTION 12-230 TIMER CP	£38.28	1
CET1	16A TIME CLOCK ANALOGUE 24 HR 15MIN SEG CP	£26.50	1
CET4	16A 7 DAY DIGITAL TIMER 1 CHANNEL 16 PERIOD CP	£29.50	1
CSDIN	1/2 METER SLOTTED DIN RAIL 35MM X 17.5MM CP	£1.25	1
LE1-D123U7	DOL STARTER 12A 240V NO OVERLOAD CP	£26.93	1
LE1-D123N7	DOL STARTER 12A 415V NO OVERLOAD CP	£26.93	1
LE1-D253U7	DOL STARTER 25A 240V NO OVERLOAD CP	£38.8	1
LE1-D253N7	DOL STARTER 25A 415V NO OVERLOAD CP	£38.8	1
BE1-D123U7	DOL M/CLAD STARTER 12A 240V NO O/LOAD CP	£36.78	1
BE1-D253N7	DOL M/CLAD STARTER 25A 415V NO O/LOAD CP	£52.92	1
PB25C	IP67 CONTACTOR ENC C/W BACKPLATE & DINRAIL CP	£27.56	1
DISPLAY STAND	DISPLAY STAND, CHARTS, BANNER + 50 HOOKS	£200	1

Europa components High Integrity and Flexibility....



See pages **20-21** for our extended range of **SPD** Surge Protection Devices

- ✓ Ferruled cable ends
- ✓ Multiple knock-outs (located top & bottom) for trunking
- ✓ Flexible wiring for easy removal of gear tray



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

Consumer Units



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

**Fully
Loaded**
boards available
Please ask

ABS Consumer Units

Extended Range

17th Edition (BS7671)

Box Qty 8 (4 for 21 & 24SP)



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CE & SEMKO Certified BS 7671 17th Edition Boards

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

Part Number	Description	Price	Per
ECU14SP17/63	14 Module 8 Free Ways 100A Switch + 2 x 63A RCCB	£74.85	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 x 80A RCCB	£86.68	1
ECU16SP17/80	16 Module 10 Free Ways 100A Switch + 2 x 80A RCCB	£92.90	1
ECU18SP17/80	18 Module 12 Free Ways 100A Switch + 2 x 80A RCCB	£99.12	1
ECU21SP17/80	21 Module 15 Free Ways 100A Switch + 2 x 80A RCCB	£127.51	1
ECU24SP17/80	24 Module 18 Free Ways 100A Switch + 2 x 80A RCCB	£140.25	1

Switched Incomer

Box Qty 8 (4 for 21M)



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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

- ✓ For use with **RCBOs** to meet 17th edition requirements.

RCCB Incomer

Box Qty 8



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components

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
ECU8R	80A RCD 6 Free Ways	£49.17	1
ECU10R	80A RCD 8 Free Ways	£55.01	1
ECU14R	80A RCD 12 Free Ways	£59.68	1
ECU10R63	63A RCD 8 Free Ways	£51.58	1
ECU14R63	63A RCD 12 Free Ways	£54.45	1

- ✓ Ideal for **extending 17th Edition consumer units** when used with other split load boards.



① See pages 10-11 for **Spare Busbars, Blanking modules and Blanking Plates....**

Split Load

Box Qty 8



Europa
components

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

✓ 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	230.50mm	215.60mm	120mm
ECU-10	230.50mm	253.60mm	120mm
ECU-14	230.50mm	327.50mm	120mm
ECU-16	254mm	362.50mm	120mm
ECU-18	230.50mm	397.50mm	120mm
ECU-21	230.50mm	451mm	120mm
ECU-24	460mm	290mm	120mm

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

Metal Clad 17th Edition (BS 7671)

Box Qty 4



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
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)



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IP40 Rating / Earth & Neutral Terminal Bars 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



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components

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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)



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components

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 3 + 3 Split	£81.40	1
MECU14SP/80	100A Switch + 80A RCCB 5 + 5 Split	£92.18	1

Metal Clad Consumer Unit Empty Enclosures

New Product



Europa
components

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

Part Number	Description	Price	Per
MECU8	8 Way Empty Enclosure	£38.00	1
MECU10	10 Way Empty Enclosure	£43.00	1
MECU14	14 Way Empty Enclosure	£50.00	1

Other Europa products ideal for **Photovoltaic** installations....



AC Boxed
Isolators
Page 33



DC Boxed
Isolators
Page 44



PV 10 x 38
Fuses & Holders
Page 90

Shower Units (4 Module Enclosure)

Box Qty 20



Please Note: We can offer
Garage & Shower Units with other
variations of RCCBs & MCBs on
request. Price on application.



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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 112mm / Depth 92mm

Part Number	Description	Price	Per
SU40E	40A RCBO	£38.30	1
SU50E	50A MCB + 63A RCCB	£38.30	1

Garage & Shower Units

Garage Units (5 Module Enclosure)

Box Qty 12



Perfect for
Photovoltaic
(PV) Installations



Europa
components



CE Approved & SEMKO Certified

IP55 Rating / EN 60898 & EN 61008 Compliant / ABS Enclosure with
Polycarbonate Lid / Earth & Neutral Terminals Included

Dimensions: Height 175mm / Width 130mm / Depth 115mm

Part Number	Description	Price	Per
GRG16E	40A RCCB + 6A & 16A MCB	£45.38	1
GRG32E	63A RCCB + 6A & 32A MCB	£45.38	1

Distribution Enclosures

Insulated Open Front Enclosures (IP20 Rating)



Europa
components

CE Approved

ABS Enclosure

Part Number	Description	Price	Per
EC2	2 Module Open Front Enclosure	£1.93	1
EC4	4 Module Open Front Enclosure	£2.49	1
EC6	6 Module Open Front Enclosure	£4.36	1

Open Front Enclosure Dimensions Table (mm)

Part Number	Description	Height	Width	Depth
EC2	2 Module	130mm	52mm	60mm
EC4	4 Module	130mm	87mm	60mm
EC6	6 Module	160mm	122mm	60mm

Metal Clad Modular Enclosures



MEC4C
with lid



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

CE Approved

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

MEC4: IP20 Rating
2 x 20mm + 2 x 25mm Knock-outs (top & bottom)
Complete with Earth Terminal & Din Rail

MEC4C: IP40 Rating
2 x 20mm + 2 x 25mm Knock-outs (top & bottom)
Complete with Earth Terminal, Neutral Terminal, Neutral Cable & Din Rail

Part Number	Description	Price	Per
MEC2	2 Module (open front)	£11.02	1
MEC4	4 Module (open front)	£13.79	1
MEC4C	4 Module (with lid)	£24.00	1

Insulated Distribution Enclosures (IP65)



ECW24



CE Approved

- ✓ IP65 Rating / ABS Flame Retardant Enclosure with Polycarbonate Lid
- ✓ Earth and Neutral Terminals Included
- ✓ Can be used with RCBOs / Complete with Din Rail

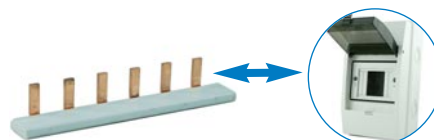
Part Number	Description	Price	Per
ECW4	4 Module Distribution Box	£11.00	1
ECW5	5 Module Distribution Box	£13.20	1
ECW6	6 Module Distribution Box	£14.69	1
ECW8	8 Module Distribution Box	£18.17	1
ECW12	12 Module Distribution Box	£21.78	1
ECW18	18 Module Distribution Box	£29.79	1
ECW24	24 Module Distribution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

listed in
LUCKINSlive

Insulated Distribution Enclosure Dimensions (mm)

Part Number	Description	Height	Width	Depth
ECW4	4 Module	210mm	125mm	100mm
ECW5	5 Module	210mm	145mm	100mm
ECW6	6 Module	210mm	160mm	100mm
ECW8	8 Module	210mm	215mm	100mm
ECW12	12 Module	215mm	270mm	100mm
ECW18	18 Module	230mm	380mm	100mm
ECW24	24 Mod. Double Height	340mm	285mm	100mm

Spare Busbars For Distribution Enclosures



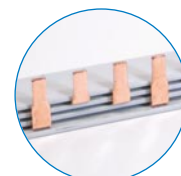
- ✓ For use with the ECW range of Distribution Enclosures.
- NB:** Use 2 x ECWBB12 for the ECW24 double height 24 module enclosure.

Part Number	Description	Price	Per
ECWBB4	100A 4 Way Busbar	£1.33	1
ECWBB6	100A 6 Way Busbar	£2.01	1
ECWBB8	100A 8 Way Busbar	£2.67	1
ECWBB12	100A 12 Way Busbar	£3.85	1
ECWBB18	100A 18 Way Busbar	£5.65	1

1000mm Busbars



Extended Range



- ✓ Can be cut to any length

Part Number	Description	Price	Per
BB1PP80/1000	Bus Bar 1P Pin 80A 1000mm	£17.25	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 Unit - Spare Part (See pages 7-9)



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

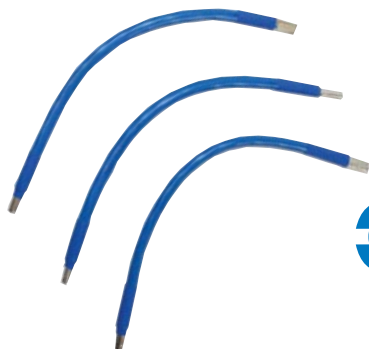
Part Number	Description	Price	Per
ECUBB10S	100A Spare Busbar 6 MCB Ways	£2.76	1
ECUBB14S	100A Spare Busbar 10 MCB Ways	£3.93	1
ECUBB18S	100A Spare Busbar 14 MCB Ways	£4.20	1

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	ECU14SP17/80 / ECU10M / ECU24SP17/80 (x2)
ECUBB18S (14 MCB Ways)	Can be used with	ECU16SP/80 / ECU18SP/80 ECU14M / ECU14R

Neutral Cables - Spare Part

New Product



Europa
components

✓ Spare cables to suit IP65 ECW Distribution Enclosures

Part Number	Description	Price	Per
ECWNT10230	Neutral cable 10 x 230mm	£2.50	1
ECWNT16230	Neutral cable 16 x 230mm	£3.50	1

Europa Despatch Details

Free standard delivery (2-3 days) 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:
www.europacomponents.com

Blanks for Consumer Units, Garage Units & Shower Units

1 Module Blank (Din Rail Mount)



Includes ventilation slots designed to dissipate heat when used to separate modular contactors.



Europa
components

1 Module Blank
Din Rail Mounting
Will fit most Modern Boards

Part Number	Description	Price	Per
ECUBPD	1 Module Blank	£0.84	1

Blanking Modules



Blanking plates for use in Consumer Units, Garage Units & Shower Units.

Part Number	Description	Price	Per
ECUBP	Module Blanks 2 x 4 Strips	£0.84	1

See pages 7-9 for Consumer Units, Garage and Shower Units....



Europa 3 Phase Distribution Boards....

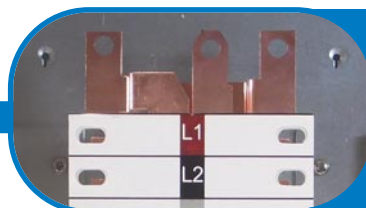


Scan me for instruction
sheet....

Europa **TPN 3 Phase Boards** have been designed exclusively by Europa Components to give you a safer and more reliable board with key features making installation simple, quick and easy.



Part Number: **TPNEB**



New Feature

Extended Busbar Lugs



Part Number: **TPNA16W**



Key Features

- ✓ IP20 rated incomer and neutral bar connections
- ✓ 125A 4 pole isolator fitted as standard giving isolation to 3 phase and neutral
- ✓ Robust epoxy coated steel enclosure (RAL 7035)
- ✓ Available up to 54 ways
- ✓ Half din rail for simple fast fitting and removal of breakers
- ✓ Can accommodate either 6kA or 10kA Europa breakers
- ✓ Easily removeable top and bottom 2mm thick gland plates
- ✓ Incoming isolator capacity: 50mm²
- ✓ M8 earth bolts suitable for lugs
- ✓ Earth and neutral termination on both the left and right hand side of board for ease of wiring and clearer identification of cable runs



Part Number: **TPNMM**



- ✓ Price includes pre-wired **125A 4P Isolator!**
Maximum incomer terminal capacity 50mm²



For Surge Protection
See Pages 20-21

3 Phase Distribution Boards

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



CE Approved

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	£265.17	1
TPN12	36 Way 125A Switch	£291.56	1
TPN14	42 Way 125A Switch	£318.85	1
TPN16	48 Way 125A Switch	£345.74	1
TPN18	54 Way 125A Switch	£372.63	1

3 Phase Board Accessories

TPN Board Adaptable Boxes



New Product

Part Number	Description	Price	Per
TPNEB	TPN extension box	£29.50	1
TPNA16W	TPN type A 16 way enc	£48.00	1
TPNMM	TPN multi meter panel	£360.00	1

i TPN Board Adaptable Boxes

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.

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



The kit includes:

Warning labels x 2

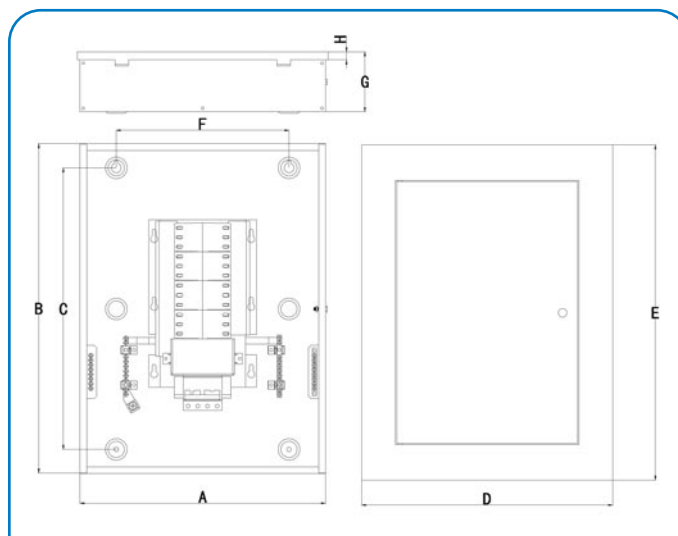
Numbered way ID labels 1-54 (x2)

Busbar (x1)

Busbar Strap (x1)



Part Number	Description	Price	Per
TPN1P	Single phase kit for TPN Board	£15.38	1



Europa components TPN 3 Phase Board Dimensions (mm)

	A	B	C	D	E	F	G	H
12 Way	455	492	392	465	507	320	130	15
18 Way	455	546	446	465	561	320	130	15
24 Way	455	600	500	465	615	320	130	15
30 Way	455	654	554	465	669	320	130	15
36 Way	455	708	608	465	723	320	130	15
42 Way	455	762	662	465	777	320	130	15
48 Way	455	816	716	465	831	320	130	15
54 Way	455	870	770	465	885	320	130	15

NB: For extension boxes and the multi meter panel add **200mm** to the height. The width and depth are the same as the TPN Board.



Miniature Circuit Breakers & Accessories

6kA MCB B - Curve

1 Pole MCB 6kA B Curve

Box Qty 12



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

listed in
LUCKINSlive



See pages 7-9 for Consumer Units

New Part Numbers for 10kA MCBs

The 10kA range of Europa MCBs have been re-designed to match the aesthetics and dimensions of our 6kA range.

This ensures compatibility when installing these devices into Europa Consumer Units and TPN 3 Phase Boards.

Our range of 6kA and 10kA breakers have been fully tested and conform to the relevant standards to ensure the safety, protection and reliability you require. A cross reference between the new and previous part numbers is available on request.

10kA MCB B Curve

1 Pole B Curve 10kA

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 B Curve 10kA

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

1 Pole C Curve 10kA

Box Qty 12



CE & SEMKO Certified
10kA Rated / EN 60898

Europa
components

Part Number	Description	Price	Per
EUC1P1C	1 Amp	£7.00	1
EUC1P2C	2 Amps	£7.00	1
EUC1P4C	4 Amps	£7.00	1
EUC1P6C	6 Amps	£7.00	1
EUC1P10C	10 Amps	£7.00	1
EUC1P16C	16 Amps	£7.00	1
EUC1P20C	20 Amps	£7.00	1
EUC1P25C	25 Amps	£7.00	1
EUC1P32C	32 Amps	£7.00	1
EUC1P40C	40 Amps	£7.00	1
EUC1P50C	50 Amps	£7.00	1
EUC1P63C	63 Amps	£7.00	1

3 Pole C Curve 10kA

Box Qty 4



CE & SEMKO Certified
10kA Rated / EN 60898

Europa
components

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

2 Pole C Curve 10kA

Box Qty 6



CE & SEMKO Certified
10kA Rated / EN 60898

Europa
components

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 D Curve 10kA

Box Qty 12



CE & SEMKO Certified
10kA Rated / EN60898

Europa
components

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

Abbreviations explained....

MCB = Miniature Circuit Breaker
RCCB = Residual Current Circuit Breaker *also referred to as an RCD*
RCBO = Residual Current Circuit Breaker with Overload Protection
 An RCBO is a combination of an MCB & RCCB

For More **Information**
sales@europacomponents.com

2 Pole D Curve 10kA

Box Qty 6



Europa
components

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 D Curve 10kA

Box Qty 4



Europa
components

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

Abbreviations explained....

MCB = Miniature Circuit Breaker
RCCB = Residual Current Circuit Breaker *also referred to as an RCD*
RCBO = Residual Current Circuit Breaker with Overload Protection
 An RCBO is a combination of an MCB & RCCB

MCB Accessories

MCB Lock Device

(3 Per Pack)



Europa
components

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)



Can also
be used to lock
off Isolators!
See pages
33-45



Europa
components

Padlock Ideal for securing MCB lock device.

Part Number	Description	Price	Per
EUBPADLOCK	Padlock (3 per pack)	£9.27	Pack

Auxiliary Switch 1P C/O

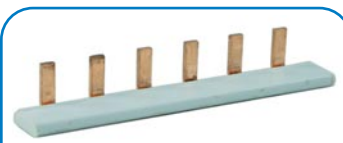


Europa
components

CE Approved

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

Part Number	Description	Price	Per
EUCA11	Aux Sw 1 Pole Changeover	£7.75	1



See pages 10-11 for Spare Busbars

Mainswitch / Isolator

Mainswitch / Isolator



Europa
components

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 50mm²

Residual Current Devices



RCBOs

RCBO B - Curve 1 Pole 6kA

Europa
components



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

CE & SEMKO Certified
EN 61009 110-230V

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

Terminal Capacity: Cable up to 16mm²

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 10kA



Europa
components

CE & SEMKO Certified
EN 61009 230V

Part Number	Description	Price	Per
EUC7R.6/1B	6A 30mA Trip 1 Pole	£41.20	1
EUC7R.10/1B	10A 30mA Trip 1 Pole	£41.20	1
EUC7R.16/1B	16A 30mA Trip 1 Pole	£41.20	1
EUC7R.20/1B	20A 30mA Trip 1 Pole	£41.20	1
EUC7R.32/1B	32A 30mA Trip 1 Pole	£41.20	1

RCBO C - Curve 1 Pole 10kA



Europa
components

CE & SEMKO Certified
EN 61009 230V

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 1 Pole	£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

Europa Despatch Details

Free standard delivery (2-3 days) 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:
www.europacomponents.com

RCBO B - Curve 2 Pole 6kA



CE & SEMKO Certified
EN 61009 110-230V

Part Number	Description	Price	Per
EUBLM6B30	6A 30mA Trip 2 Pole	£44.19	1
EUBLM16B30	16A 30mA Trip 2 Pole	£44.19	1
EUBLM20B30	20A 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 25mm²

RCBO C - Curve 2 Pole 6kA



CE & SEMKO Certified
EN 61009 110-230V

Part Number	Description	Price	Per
EUBLM6C30	6A 30mA Trip 2 Pole	£42.77	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

Terminal Capacity: Cable up to 25mm²



Visit europacomponents.com on your pc, tablet or smart phone for the mobile friendly experience!

RCCB / RCD

RCCB 2 Pole 6kA



CE & SEMKO Certified
EN 61008 110-230V

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	£29.82	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

Terminal Capacity: Cable up to 35mm²

RCCB 4 Pole 6kA



CE & SEMKO Certified
EN 61008 400-415V

Residual Current Circuit Breaker (RCCB) providing Earth fault safety protection.

Part Number	Description	Price	Per
EUR125.30/4	25A 30mA Trip	£51.08	1
EUR125.100/4	25A 100mA Trip	£51.08	1
EUR140.30/4	40A 30mA Trip	£51.08	1
EUR140.100/4	40A 100mA Trip	£51.08	1
EUR163.30/4	63A 30mA Trip	£51.08	1
EUR163.100/4	63A 100mA Trip	£51.08	1
EUR180.30/4	80A 30mA Trip	£59.38	1
EUR180.100/4	80A 100mA Trip	£59.38	1
EUR180.100/4S	80A 100mA Trip Time Delay	£69.74	1
EUR180.300/4	80A 300mA Trip	£64.47	1

Terminal Capacity: Cable up to 35mm²

RCD Sockets

13A RCD Sockets



Extended Range



BS7288 / CE Approved

Rated Voltage: 230V 50Hz

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	£33.11	1
RCD13ASS	Plastic RCD 13A Double Socket	£26.24	1
RCD13AP1GS	Plastic RCD 13A Single Socket Switched	£24.00	1
RCD13AMC1GS	Metal Clad RCD 13A Single Socket Switched	£31.50	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

30mA Trip / Test Facility / On / Off Indicator / Rated Voltage 240V, 50Hz

Rated Current 13A / Typical trip Time less than 30mS / Mechanically Latching

Part Number	Description	Price	Per
RCDFSP	13A Single RCD Spur Outlet	£23.10	1

Single Phase Fused Switch

Insulated 80A Fused Switch



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 84

Part Number	Description	Price	Per
SPSF80	80A Single Phase Fused Switch	£27.96	1
SPSF8	Switch Fuse Cable Entry Shroud	£3.00	1

Metal Clad 100A Fused Switch

New Product



4 Module metal clad enclosure

Fused switch rated at 100A (fuse not inc)

Incoming terminal capacity 2.5 to 50mm²

Use **ME house service cut out** fuses - see page 84

Part Number	Description	Price	Per
SPSF100M	100A Single Phase Fused Switch	£50.00	1



SPDs Surge Protection

(to BS7671: 2008 Incorporating Amendment No.1: 2011)

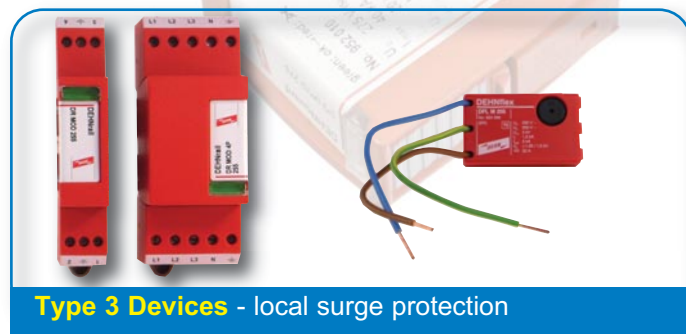
Europa Components has chosen **Dehn UK Ltd** as their supplier of **Surge protection modules**. With over 100 years experience in surge protection and their comprehensive range we are confident to be able to offer the correct product and advice to all of our customers.

In the **17th Edition (amendment 1)**, of the wiring regulations, surge protection is now required to protect buildings and equipment against lightning strikes and transient over voltages transmitted by the supply distribution system. The following consequential risk assessments must be protected against over voltage, i.e. surge protection.(section 443.2.4)

- I Consequences related to human life, e.g. hospital medical equipment and safety services.
- II Consequence related to public services, e.g. loss of public services, IT centres and museums.
- III Consequences to commercial or industrial activity, e.g. Hotels, banks, industries and farms.

For other applications a risk assessment calculation has to be made depending on the underground and overhead distribution supply to the premises as explained in section 443.2.4. of the regulations.

TT devices can also be used in TNS / TNCS and PME earthing applications. (A wider range is available on request).



Boxed Type 1
Boxed Type 2

ESB12PA240	ESB12PF240	ESB12P415	ESB12PA415	ESB12PF415	① Help with SPD Selection
ESB2P240	ESB2PA240	ESB2PF240	ESB2P415	ESB2PA415	ESB2PF415

SPD Surge Protection Devices

Type 1 Devices

Type 1 Devices (to EN61643-11)

Extended Range

① Protection against lightning

Part Number	Description	Price	Per
941110	2 Module Type 1 Single Phase TT	£310.00	1
941400	4 Module Type 1 Three Phase TNS	£515.00	1
951110	4 Module Type 1/2 SPN Single Phase TT	£522.06	1
951115	4 Module Type 1/2 SPN Single Phase TT + Alarm	£563.64	1
951200	4 Module Type 1/2 SPN Single Phase TN	£374.88	1
951205	4 Module Type 1/2 SPN Single Phase TN + Alarm	£408.15	1
951310	8 Module Type 1/2 TPN Three Phase TT	£983.14	1
951315	8 Module Type 1/2 TPN Three Phase TT + Alarm	£1066.30	1
951400	8 Module Type 1/2 TPN Three Phase TNS	£950.00	1
951405	8 Module Type 1/2 TPN Three Phase TNS + Alarm	£786.73	1

Type 2 Devices

Type 2 Devices (to EN 61643-11)

Extended Range

① Protection against surge

Part Number	Description	Price	Per
952070	1 Module Type 2 Single Phase TNCS	£58.03	1
952090	1 Module Type 2 Single Phase + Alarm	£69.12	1
952110	2 Module Type 2 Single Phase for TT	£122.06	1
952115	2 Module Type 2 Single Phase SPN TT + Alarm	£133.15	1
952200	2 Module Type 2 Single Phase TNS	£81.50	1
952205	2 Module Type 2 Single Phase SPN TN + Alarm	£99.04	1
952310	4 Module Type 2 Three Phase TT	£227.03	1
952315	4 Module Type 2 Three Phase TPN TT + Alarm	£259.83	1
952400	4 Module Type 2 Three Phase TNS	£162.66	1
952405	4 Module Type 2 Three Phase TPN TNS + Alarm	£198.15	1
952510	3 Module Type 2 1000V DC PV	£183.29	1
952511	3 Module Type 2 600V DC PV	£177.50	1

Type 3 Devices

Type 3 Devices (to EN61643-11)

Extended Range

① Local surge protection

Part Number	Description	Price	Per
924396	Flush Mount Type 3 2 Pole + Buzzer	£64.00	1
953200	1 Module Type 3 Single Phase 25A	£55.30	1
953200/S	1 Module Type 3 SPN Single Phase 32A	£72.50	1
953205	1 Module Type 3 Single Phase SPN + Alarm 25A	£64.17	1
953205/S	1 Module Type 3 Single Phase SPN + Alarm 32A	£86.50	1
953400	2 Module Type 3 Three Phase TPN	£135.00	1
953405	2 Module Type 3 Three Phase TPN + Alarm	£146.08	1

Boxed Type 1 Devices

Boxed Type 1 Devices

① Protection against lightning

New Product

Part Number	Description	Price	Per
ESB12PA240	Boxed SPN Type 1/2 TNS + Alarm	£425.00	1
ESB12PF240	Boxed SPN Type 1/2 TNS + Fuse	£412.00	1
ESB12PA415	Boxed TPN Type 1/2 TNS	£965.00	1
ESB12PA415	Boxed TPN Type 1/2 + Alarm	£796.00	1
ESB12PF415	Boxed TPN Type 1/2 TNS + Fuses	£1050.00	1

Boxed Type 2 Devices

Boxed Type 2 Devices

① Protection against surge

New Product

Part Number	Description	Price	Per
ESB2P240	Boxed SPN Type 2 TNS	£100.00	1
ESB2PA240	Boxed SPN Type 2 TNS + Alarm	£115.00	1
ESB2PF240	Boxed SPN Type 2 TNS + 63A MCB	£110.00	1
ESB2P415	Boxed TPN Type 2 TNS	£185.00	1
ESB2PA415	Boxed TPN Type 2 TNS + Alarm	£220.00	1
ESB2PF415	Boxed TPN Type 2 TNS + 63A MCB	£215.00	1

SPD Accessories

Extended Range

SPD Accessories

Part Number	Description	Price	Per
952010	Type 2 Spare L Plug	£46.02	1
952050	Type 2 Spare N Plug TT	£58.49	1
952589	1 Pole STAK25 terminal	£6.28	1
953010	Type 3 Spare Plug SPN	£56.83	1
953020	Type 3 Spare Plug TPN	£111.27	1

Modular Contactors

2 Pole Modular Contactor (Din Rail Mounting)



Extended Range

Modular
Contactor
Lighting Guide
Page
116



Width 18mm
Rated Insulation Voltage (Ui) 400V AC
Terminal Capacity: 1.5 - 10mm²



i Modular contactors should be separated from other components using blanking modules to allow for heat dissipation. See page 11 for ECUBPD din mounting 1 module blanks.

Part Number	Description	Price	Per
EUC1-20-2P	2 Pole N/O 20A 230V AC	£21.26	1
EUC1-20-2NOB	2 Pole 2 N/O 24V AC	£22.81	1
EUC1-20-2NCB	2 Pole N/C 20A 24V AC	£22.81	1
EUC1-20-2NC	2 Pole N/C 20A 230V AC	£22.81	1
EUC1-25-2P	2 Pole 2 N/O 25A 230V AC	£28.00	1
EUC1-25-2NCP	2 Pole 2 N/C 25A 230V AC	£29.50	1

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 - 25mm²

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

Modular Contactor Spec.	EUC1-20-2P	EUC1-25-2P	EUC2-25-4P	EUC3-40-4P	EUC3-63-4P
Width	18mm	18mm	36mm	54mm	54mm
Rated current (In)	20A	25A	25A	40A	63A
Rated Insulation Voltage (Ui)	400VAC	400VAC	500VAC	500VAC	500VAC
Rated Operating Voltage (Un)	240VAC	240VAC	400VAC	400VAC	400VAC
Rated Operation Current AC1 (Ie)	20A	25A	25A	40A	63A
Rated Operation Current AC3 (Ie)	9A	9A	9A	25A	32A
Rated Power AC1	4KW (230VAC)	4KW (230VAC)	16KW	28KW	40KW
Rated power AC3	-	-	4KW	12KW	15KW
Rated Terminal Capacity	1.5-10mm ²	1.5-10mm ²	1.5-10mm ²	2.5-25mm ²	2.5-25mm ²
Rated Terminal Capacity (Coil)	0.75-2.5mm ²	0.75-2.5mm ²	0.75-2.5mm ²	0.75-2.5mm ²	0.75-2.5mm ²

Bell Transformer

230V Bell Transformer (Din Rail Mounting)



	8V	12V	24V
	1A	1.5A	3A

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

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

Kilo Watt Hour Meter

32A Kilo Watt Hour Meter (Din Rail Mounting)



EN 62052
Single phase kilo watt hour meter / 3 colour LED / Display 6 + 1 digits
50 / 60Hz

Part Number	Description	Price	Per
DDS-1Y-M	Digital 32A (1 Module)	£35.50	1



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



A 3 module 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.

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



A 1 module 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.

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



A 3 module 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.

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



A 2 module / 2 channel timer with up to 44 memory settings. 24Hr (1 minute) ON/OFF periods can be set for each day of the week. Ideal for switching lighting or alarm systems

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



A 2 module 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.

16A Staircase Timer (Din Rail Mount) : ET16STCA



A 1 Module 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 ϕ).
IP20 rating.
1 N/O switch contact.



- Remove lid by undoing the fixing screws
- Cut panel hole: 67 x 67 x 67 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	Description	Price	Per
ET1624HDPM	7 Day Digital 1 Channel 16 Period (1 Minute Segments) (Panel Mount)	£30.57	1
ET1624HAPM	24 Hour Analogue 15 Minute Segments (Panel Mount)	£29.22	1

Panel Mount Versions

16A 24 Hour (Din Rail Mounting)



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CE Approved

Contact Capacity: 16A 230V AC

Part Number	Description	Price	Per
ET1624HA	24 Hour Analogue (15 Minute Segments)	£29.22	1
ET1624HEA	24 Hour Analogue (15 Minute Segments 1 Module)	£43.14	1

16A 7 Day (Din Rail Mounting)



50/60Hz / 10VA / LCD Display / Width: 35mm
Lithium Battery Back Up / Operating Temp: -10°C to +50°C

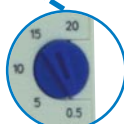
Part Number	Description	Price	Per
ET1624HD	7 Day Digital 1 Channel 16 Period (1 Minute Segments)	£30.57	1
ET167D2C	7 Day Digital 2 Channel N/O	£52.00	1
ET167DYD	7 Day Digital 1 Channel Daily 16 On/Off	£33.06	1

16A Staircase Timer (Din Rail Mounting)



ⓘ Please Note:

Not suitable for inductive or LED lighting - please refer to the 2470001 multifunction timer below



CE Approved

Time Range: 0.5, 5, 10, 15, 20 Minutes / Minimum Setting 0.5 Minutes
Operating Temperature -40 to +50°C

Part Number	Description	Price	Per
ET16STCA	230V 0.5 - 20 Minutes	£19.57	1

Multi Function Timer

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



1) Fine time adjust dial



2) Coarse time adjust dial



3) Function adjust dial

Manufactured by Relpol

CE Approved

EN 61812

IP20 Rating

1P Changeover contact

10 Time Functions

8 Time Ranges

Module width: 17.5mm

Din Rail Mounting

For technical data please refer to pages 118-119



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

listed in
LUCKINSlive

Enclosures and Accessories



Insulated Socket Enclosures (IP65)



IP65 outdoor gang boxes / accommodates standard socket, spur, switches & RCDs / 20mm knock-outs located top, bottom, side and back / grey enclosure / corrosion resistant / padlockable for added security. The ECWSK1 & SK2 have a **new improved design** to accommodate most styles of 13A sockets and moulded plugs.

Part Number	Description	Price	Per
ECWSK1	1 Gang Socket Enclosure	£6.22	1
ECWSK2	2 Gang Socket Enclosure	£9.58	1
ECWSK21	2 x 1 Gang Socket Enclosure	£12.23	1

ⓘ IP65 ECW Insulated Socket Enclosure Dimensions (mm)

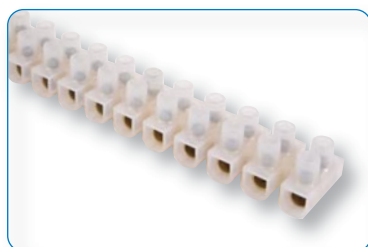
Part Number	Height	Width	Depth
ECWSK1	155mm	110mm	83mm
ECWSK2	155mm	170mm	83mm
ECWSK21	140mm	210mm	83mm

12 Way Terminal Blocks

PE 12 Way Terminal Blocks

(Sold in packs of 10)

New Product



12 way polyethylene U blocks



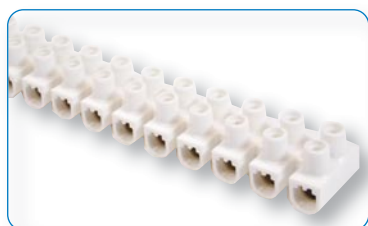
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Part Number	Description	Price	Per
TBU03PE	3A PE 12 Way	£3.50	Pack
TBU06PE	6A PE 12 Way	£4.00	Pack
TBU10PE	10A PE 12 Way	£5.50	Pack
TBU16PE	16A PE 12 Way	£7.30	Pack
TBU20PE	20A PE 12 Way	£8.00	Pack
TBU30PE	30A PE 12 Way	£10.80	Pack
TBU60PE	60A PE 12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

PP 12 Way Terminal Blocks

(Sold in packs of 10)

New Product



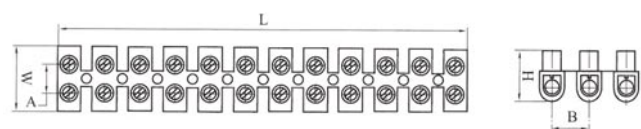
12 way polypropylene U blocks / flame retardant material



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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

U PE & PP Terminal Block Dimensions



	L	W	H	A	B	mm²	Volt	Amp
3A	90.3	15.5	11.5	6	7.7	4	400V	3A
6A	110.5	15.5	12.4	6.5	9.5	6	400V	6A
10A	116.7	20	14.9	8	10	10	400V	10A
16A	136.8	21.5	16.7	10	11.7	12	400V	16A
20A	153.5	24.5	17.4	11.5	13.2	14	400V	20A
30A	165	25	20	12	14.1	16	400V	30A
60A	187.6	29	23.5	12	16	25	400V	60A

Terminal Strip Enclosure

E-Box Terminal Strip Enclosure

(Sold in packs of 20)

New Product



The new **E-Box** has 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 1.5mm² to 4mm² including 2 x 2.5mm² cable
- Fixing lugs for secure fixing
- * **Unique top securing lid** for easy inspection of terminals

Part Number	Description	Price	Per
ECT010	Terminal Strip Enclosure	£17.60	Pack

Insulated Junction Boxes (IP55)



els spelsberg

VDE Approved

Thermoplastic Boxes (Terminal not included)
Halogen Free / IEC 60998
Snap-on-lid / Suited to cramped environments
External fixings

Part Number	Description	Price	Per
JB25	H: 89 x W: 43 x D: 37mm	£1.03	1
JBSD7	H: 75 x W: 75 x D: 37mm	£0.76	1

All of our products are available to order by phone so why not give us a call on **01582 692 440** to place your order.

Low
Minimum Order
Value Only
£20 nett
(+ Carriage)

Insulated Junction Boxes (IP65)



els spelsberg

VDE Approved

Thermoplastic Boxes (Including Terminal Strip)
Halogen Free / IEC 60998 / Soft sealing entry membranes

Part Number	Description	Price	Per
JBAB025	H: 80 x W: 80 x D: 52mm	£3.55	1
JBAB040	H: 93 x W: 93 x D: 55mm	£4.13	1
JBAB060	H: 110 x W: 110 x D: 67mm	£8.58	1

① Terminal sizes for IP65 Junction Boxes:

JBAB025: 2.5 - 4mm (5 Terminals)

JBAB040: 2.5 - 4mm (5 Terminals)

JBAB060: 6.0mm (5 Terminals)

Insulated Junction Boxes (IP54 & IP55)



Elastic membrane →

Thermoplastic Enclosures (Terminal not included) / Halogen Free
Non Flammable

Part Number	Description	Price	Per
PB5757540	IP55 H: 80 x W: 80 x D: 40mm	£1.26	1
PB5858545	IP54 H: 85 x W: 85 x D: 45mm	£1.39	1
PB510010050	IP54 H: 100 x W: 100 x D: 55mm	£1.58	1
PB570D	IP55 H: 70mm Diameter x D: 40mm	£1.26	1
PB590D	IP55 H: 85mm Diameter x D: 45mm	£1.31	1
PB5757545EM	IP55 H: 75 x W: 75 x D: 45mm (with elastic membrane)	£3.20	1
PB5909055EM	IP55 H: 90 x W: 90 x D: 55mm (with elastic membrane)	£4.25	1



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Insulated Junction Boxes (IP67)



Thermoplastic Enclosures (Terminal not included)
Halogen Free / Non Flammable

Part Number	Description	Price	Per
PB6757540	IP67 H: 75 x W: 75 x D: 50mm	£1.85	1
PB6858545	IP67 H: 85 x W: 85 x D: 45mm	£1.88	1
PB690D	IP67 H: 90mm Diameter x D: 55mm	£1.91	1
PB610010050	IP67 H: 100 x W: 100 x D: 60mm	£1.93	1
PB611011070	IP67 H: 110 x W: 110 x D: 70mm	£3.26	1
PB6110110110	IP67 H: 110 x W: 110 x D: 110mm	£6.95	1

The **PB6110110110** is an ideal size for housing
power & control relays (see pages 67-68).

Din rail sold separately.



Insulated Adaptable Boxes (IP55)



IP55 Rated ABS Boxes / Quick Turn Screws
Hinged Lid / * Mounting Plate Available

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

MNX Polycarbonate Enclosure

TC1-D Range Contactor Enclosures (IP67)



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

Manufactured by Fibox

Adaptable enclosure for use with **TC1-D range contactors** (up to 65A) and accessories (see from page 57). The back plate and din rail is pre-fitted in the enclosure for easy installation of contactors and accessories.

Part Number	Description	Price	Per
PB25C	Contacteur Enclosure for 9-32A	£27.25	1
PB65C	Contacteur 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 110 for further details.

Insulated ABS Plastic Enclosures

Insulated ABS Plastic Enclosures (IP65)



Extended Range



RAL: 7035

Strong ABS Enclosure

Back Plate and Fixing Brackets Included

Part Number	Description	Price	Per
PBE2821013	H: 280 x W: 210 x D: 130mm	£31.50	1
PBE332513	H: 330 x W: 250 x D: 130mm	£36.00	1
PBE4030016	H: 400 x W: 300 x D: 165mm	£43.00	1
PBE403019	H: 400 x W: 300 x D: 195mm	£53.00	1
PBE503519	H: 500 x W: 350 x D: 195mm	£60.00	1
PBE504017	H: 500 x W: 400 x D: 175mm	£62.00	1
PBE604020	H: 600 x W: 400 x D: 200mm	£75.50	1
PBE605022	H: 600 x W: 500 x D: 220mm	£125.00	1
PBE705024	H: 700 x W: 500 x D: 245mm	£174.50	1
PBE806026	H: 800 x W: 600 x D: 260mm	£236.25	1

For more detailed enclosure dimensions please see page 109

Strong Steel Enclosures

Epoxy Coated Strong Steel Enclosure (*IP65)

Extended Range



RAL: 7035 / 1.2mm Thick Steel

External Dimensions Shown

Earth Studs Included

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 x W: 250 x D: 150mm	£29.30	1
STB302515	H: 300 x W: 250 x D: 150mm	£33.50	1
STB303015	H: 300 x W: 300 x D: 150mm	£39.92	1
STB303020	H: 300 x W: 300 x D: 200mm	£43.43	1
STB403015	H: 400 x W: 300 x D: 150mm	£43.15	1
STB403020	H: 400 x W: 300 x D: 200mm	£47.52	1
STB403025	H: 400 x W: 300 x D: 250mm	£56.86	1
STB404015	H: 400 x W: 400 x D: 150mm	£50.40	1
STB404020	H: 400 x W: 400 x D: 200mm	£55.24	1
STB504020	H: 500 x W: 400 x D: 200mm	£62.72	1
STB504025	H: 500 x W: 400 x D: 250mm	£67.10	1
STB505025	H: 500 x W: 500 x D: 250mm	£78.50	1
STB604020	H: 600 x W: 400 x D: 200mm	£71.17	1
STB604030	H: 600 x W: 400 x D: 300mm	£85.17	1
STB605020	H: 600 x W: 500 x D: 200mm	£80.23	1
STB605025	H: 600 x W: 500 x D: 300mm	£88.35	1
STB605030	H: 600 x W: 500 x D: 300mm	£91.70	1
STB606020	H: 600 x W: 600 x D: 200mm	£94.10	1
STB606025	H: 600 x W: 600 x D: 250mm	£99.15	1
STB804030	H: 800 x W: 400 x D: 300mm	£116.83	1
STB806020	H: 800 x W: 600 x D: 200mm	£115.26	1
STB806030	H: 800 x W: 600 x D: 300mm	£138.47	1
STB1006030	H: 1000 x W: 600 x D: 300mm	£180.00	1
STB1008030	H: 1000 x W: 800 x D: 300mm	£226.00	1
STB1206030	H: 1200 x W: 600 x D: 300mm	£262.00	1
STB1208030	H: 1200 x W: 800 x D: 300mm	£318.00	1
STBRACKET	Fixing Brackets x 4	£4.65	1
STBKEYLOCK	Key Lock (all keys alike)	£5.30	1

Europa Despatch Details

Free standard delivery (2-3 days) for orders over £100 nett

Under £100 delivery charge only £8.50

Next day and special deliveries available

Minimum order value only £20



Stainless Steel Enclosures

Brushed Stainless Steel Enclosure (*IP65)



Grade 304

Earth studs & galvanised back plate included.

* IP65 rated enclosure when fully sealed.



Part Number	Description	Price	Per
SSTB302015	H: 300 x W: 200 x D: 150mm	£120.00	1
SSTB303015	H: 300 x W: 300 x D: 150mm	£135.00	1
SSTB403020	H: 400 x W: 300 x D: 200mm	£165.00	1
SSTB404020	H: 400 x W: 400 x D: 200mm	£172.00	1
SSTB504020	H: 500 x W: 400 x D: 200mm	£213.00	1
SSTB604020	H: 600 x W: 400 x D: 200mm	£230.00	1
SSTB606020	H: 600 x W: 600 x D: 200mm	£315.00	1
SSTB806030	H: 800 x W: 600 x D: 300mm	£515.00	1
SSTB808030	H: 800 x W: 800 x D: 300mm	£650.00	1

Strong Steel Terminal Boxes

Steel Terminal Boxes (*IP65)

New Product



RAL: 7035

* IP65 rated when fully sealed / 1.2mm thick steel

Complete with earth studs and galvanised back plate as standard.

Part Number	Description	Price	Per
STBT151580	H: 150 x W: 150 x D: 80mm	£18.00	1
STBT151512	H: 150 x W: 150 x D: 120mm	£19.00	1
STBT201580	H: 200 x W: 150 x D: 80mm	£19.50	1
STBT201512	H: 200 x W: 150 x D: 120mm	£21.50	1
STBT202080	H: 200 x W: 200 x D: 80mm	£20.00	1
STBT202012	H: 200 x W: 200 x D: 120mm	£22.50	1
STBT301512	H: 300 x W: 150 x D: 120mm	£27.00	1
STBT302080	H: 300 x W: 200 x D: 80mm	£28.00	1
STBT302012	H: 300 x W: 200 x D: 120mm	£30.00	1

Enclosure Inspection Windows

IP67 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



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

Part Number	Description	Price	Per
STBE220	220mm x 4Sqmm	£0.75	1

For Din Rail Lengths please see page 70



Top hat slotted and plain types available

Cable Management

PVC Electrical Insulation Tape

PVC Tape (Sold in packs of 10 rolls)



Thickness: 0.13mm / Tensile Strength: 20 N/cm / Elongation: 200%
Adhesion Strength: 1.5 N/cm / Maximum Operating Temperature: 80°C

Part Number	Description	Price	Per
PVCT20BLK	Black 19mm x 20m	£0.99	Roll
PVCT20RED	Red 19mm x 20m	£0.99	Roll
PVCT20BLU	Blue 19mm x 20m	£0.99	Roll
PVCT20GRY	Grey 19mm x 20m	£0.99	Roll
PVCT20WHT	White 19mm x 20m	£0.99	Roll
PVCT20BRN	Brown 19mm x 20m	£0.99	Roll
PVCT20G/Y	Green & Yellow 19mm x 20m	£1.15	Roll
PVCT33BLK	Black 19mm x 33m	£1.59	Roll
PVCT33RED	Red 19mm x 33m	£1.59	Roll
PVCT33BLU	Blue 19mm x 33m	£1.59	Roll
PVCT33GRY	Grey 19mm x 33m	£1.59	Roll
PVCT33WHT	White 19mm x 33m	£1.59	Roll
PVCT33BRN	Brown 19mm x 33m	£1.59	Roll
PVCT33G/Y	Green & Yellow 19mm x 33m	£1.70	Roll

Insulated Cable Glands

PG Cable Glands



CE Approved

IP65 Rating / Manufactured from Nylon / Low Smoke / Halogen Free
Locking Nut Included / Dynamic state -20°C to +80°C, short time to +100°C

Part Number	Description	Price	Per
PG7DG	PG7 ▲ Grey 3-6.5mm	£3.80	10
PG9DB	PG9 ▲ Black 4-8mm	£4.71	10
PG9DG	PG9 ▲ Grey 4-8mm	£4.71	10
PG9DW	PG9 △ White 4-8mm	£4.71	10
PG11DG	PG11 ▲ Grey 5-10mm	£5.29	10
PG13.5DB	PG13.5 ▲ Black 6-12mm	£5.29	10
PG13.5DG	PG13.5 ▲ Grey 6-12mm	£5.29	10
PG13.5DW	PG13.5 △ White 6-12mm	£5.29	10
PG16DB	PG16 ▲ Black 10-14mm	£6.68	10
PG16DG	PG16 ▲ Grey 10-14mm	£6.68	10
PG16DW	PG16 △ White 10-14mm	£6.68	10
PG21DB	PG21 ▲ Black 13-18mm	£7.90	10
PG21DG	PG21 ▲ Grey 13-18mm	£7.90	10
PG21DW	PG21 △ White 13-18mm	£7.90	10
PG29DG	PG29 ▲ Grey 18-25mm	£16.03	10

Metric Cable Glands



CE Approved

IP68 Rating (with washer sold separately) / Manufactured from Nylon
Low Smoke / Halogen Free / Locking Nut Included
Dynamic state -20°C to +80°C, short time to +100°C

Part Number	Description	Price	Per
M12DG	M12 ▲ Grey 3-6.5mm	£3.30	10
M12DB	M12 ▲ Black 3-6.5mm	£3.30	10
M16DB	M16 ▲ Black 4-8mm	£3.90	10
M16DBL	M16 ▲ Black (Large) 5-10mm	£4.59	10
M16DG	M16 ▲ Grey 4-8mm	£3.90	10
M16DR	M16 ▲ Red 4-8mm	£3.90	10
M16DW	M16 △ White 4-8mm	£3.90	10
M16DWL	M16 △ White (Large) 5-10mm	£4.59	10
M20DB	M20 ▲ Black 6-12mm	£4.37	10
M20DBL	M20 ▲ Black (Large) 10-14mm	£8.01	10
M20DBS	M20 ▲ Black (Small) 5-9mm	£4.37	10
M20DG	M20 ▲ Grey 6-12mm	£4.37	10
M20DGL	M20 ▲ Grey (Large) 10-14mm	£8.01	10
M20DGS	M20 ▲ Grey (Small) 5-9mm	£4.37	10
M20DR	M20 ▲ Red 6-12mm	£4.37	10
M20DRL	M20 ▲ Red (Large) 10-14mm	£8.01	10
M20DRS	M20 ▲ Red (Small) 5-9mm	£4.37	10
M20DW	M20 △ White 6-12mm	£4.37	10
M20DWL	M20 △ White (Large) 10-14mm	£8.01	10
M20DWS	M20 △ White (Small) 5-9mm	£4.37	10
M25DB	M25 ▲ Black 13-18mm	£8.01	10
M25DBS	M25 ▲ Black (Small) 9-16mm	£8.01	10
M25DG	M25 ▲ Grey 13-18mm	£8.01	10
M25DGS	M25 ▲ Grey (Small) 9-16mm	£8.01	10
M25DR	M25 ▲ Red 13-18mm	£8.01	10
M25DRS	M25 ▲ Red (Small) 9-16mm	£8.01	10
M25DW	M25 △ White 13-18mm	£8.01	10
M25DWS	M25 △ White (Small) 9-16mm	£8.01	10
M32DB	M32 ▲ Black 14-21mm	£10.36	10
M32DG	M32 ▲ Grey 14-21mm	£10.36	10
M32DR	M32 ▲ Red 14-21mm	£10.36	10
M32DW	M32 △ White 14-21mm	£10.36	10
M40DB	M40 ▲ Black 22-32mm	£40.27	10
M40DG	M40 ▲ Grey 22-32mm	£40.27	10
M40DW	M40 △ White 22-32mm	£40.27	10
M50DB	M50 ▲ Black 32-38mm	£65.25	10
M50DG	M50 ▲ Grey 32-38mm	£65.25	10
M50DW	M50 △ White 32-38mm	£65.25	10
M63DB	M63 ▲ Black 37-44mm	£74.91	10

① Cable Gland Dimensions	Gland Size	Dimension GL (mm)	Dimension H (mm)
	M16	8	26
	M20	9	28
	M25	10	35
	M32	11	34
	M40	14	48
	M50	14	48
	M63	15	48
	PG7	8	22
	PG9	8	26
	PG11	8	27
	PG13.5	9	28
	PG16	10	30
	PG21	10	35
	PG29	12	40

Cable Gland Accessories

Washers for Metric Cable Glands



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	£6.01	100
M32W	M32 Rubber Washer	£6.75	100
M40W	M40 Rubber Washer	£13.97	100
M50W	M50 Rubber Washer	£23.27	100

Metric Blanking Plugs



CE Approved

IP68 Rating (with washer sold separately)

Temperature Range: -20°C to +80°C, intermittent 100°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 Blanking 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

① Plug Dimensions mm	Type	D	L	TL
	M12	M12 x 1.5	6	8
	M16	M16 x 1.5	6	9
	M20	M20 x 1.5	6	9.5
	M25	M25 x 1.5	8	11.5
	M32	M32 x 1.5	8	12

PG to Metric Adaptors



New Product



IP68 Rating (with washer sold separately)

Temperature range -20°C to +80°C, intermittent +100°C

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 Dimensions mm	Type	Da	Di	L	SW	TL
	7-12	PG7	M12 x 1.5	9	16	27
	9-16	PG9	M16 x 1.5	9	20	27
	11-20	PG11	M20 x 1.5	9	24	27
	13.5-20	PG13	M20 x 1.5	10	24	28
	16-25	PG16	M25 x 1.5	10	29	28
	21-25	PG21	M25 x 1.5	12	33	30
	29-40	PG29	M40 x 1.5	12	46	30

Industrial Plugs & Sockets

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



CE & SEMKO Certified

IEC 60309 / IP44 Rated / Easy Installation / Long Life / High Reliability
Suited to Extreme Conditions / High Quality Housing

Part Number	Description	Price	Per
IP163F	110V 2P + E 16A	£2.58	1
IP163P	230V 2P + E 16A	£2.58	1
IP164N	415V 3P + E 16A	£2.68	1
IP165N	415V 3P + N + E 16A	£3.31	1
IP323F	110V 2P + E 32A	£3.68	1
IP323P	230V 2P + E 32A	£3.94	1
IP324N	415V 3P + E 32A	£4.19	1
IP325N	415V 3P + N + E 32A	£4.73	1

IP44 Industrial Sockets



CE & SEMKO Certified

IEC 60309 / IP44 Rated / 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	415V 3P + N + 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	415V 3P + N + E 32A In-line	£4.99	1
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	230V 2P + E 32A Surface	£6.83	1
ISS324N	415V 3P + E 32A Surface	£6.98	1
ISS325N	415V 3P + N + E 32A Surface	£7.88	1

Surface Sockets with PG21 Cable Entry

IPS163F	110V 2P + E 16A Panel	£3.62	1
IPS163P	230V 2P + E 16A Panel	£3.62	1

IP67 Weather Proof Industrial Plugs

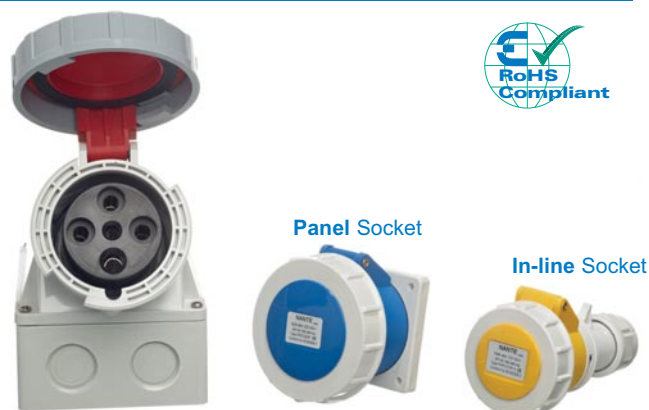


CE & SEMKO Certified

IEC 60309 / IP67 Rated / Easy Installation / Long Life / High Reliability
Suited to Extreme Conditions / High Quality Housing

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

IP67 Weather Proof Industrial Sockets



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

CE & SEMKO Certified

IEC 60309 / IP67 Rated / 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	415V 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	415V 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 2P + E 16A	£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

Voltage Colour Codes:

- Yellow = 110V
- Blue = 230V
- Red = 415V



IP44 Interlocked Switch Sockets (RCCB Protected)



**Unique
Removeable
Aluminium Key!**

Once removed the control lever can no longer be activated

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 (25A 30mA 2P RCD)	£125.00	1
SISR163P	230V 2P+E 16A 6h (25A 30mA 2P RCD)	£130.00	1
SISR164V	400V 3P+E 16A 6h (25A 30mA 4P RCD)	£145.00	1
SISR165V	400V 3P+N+E 16A 6h (25A 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	400V 3P+E 32A 6h (40A 30mA 4P RCD)	£160.00	1
SISR325V	400V 3P+N+E 32A 6h (40A 30mA 4P RCD)	£165.00	1
SISKEY	Spare Keys (Pack of 10)	£13.78	10

IP44 Interlocked Switched Sockets (with key)



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	110V 2P+E 16A 4h	£71.00	1
SIS163P	230V 2P+E 16A 6h	£71.00	1
SIS164V	400V 3P+E 16A 6h	£76.00	1
SIS165V	400V 3P+N+E 16A 6h	£78.00	1
SIS323F	110V 2P+E 32A 6h	£75.00	1
SIS323P	230V 2P+E 32A 6h	£75.00	1
SIS324V	400V 3P+E 32A 6h	£78.00	1
SIS325V	400V 3P+N+E 32A 6h	£80.00	1

IP67 Weather Proof Switched Interlock Sockets



**Robust
Enclosure**



CE & SEMKO Approved

IP67 Rated Polycarbonate Enclosure / 3 x M25 + 1 x M32 cable entries
Quick Turn Screws

Part Number	Description	Price	Per
SISW163P	230V 3P 16A	£52.00	1
SISW165N	415V 5P 16A	£56.00	1
SISW323P	230V 3P 32A	£57.00	1
SISW325N	415V 5P 32A	£62.00	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	240V 3P 16A	£38.00	1
SIS165VK	400V 5P 16A	£44.00	1
SIS325VK	400V 5P 32A	£56.00	1

IP65 Interlocked Switch Sockets (RCCB Protected)



New Product



**Unique
Removeable
Aluminium Key!**

Once removed the control lever can no longer be activated

IP65 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
SISRW163P	230V 2P+E 16A 6h (40A 30mA 2P RCD)	£170.00	1
SISRW165V	400V 3P+N+E 16A 6h (40A 30mA 2P RCD)	£180.00	1
SISRW323P	230V 2P+E 32A 6h (40A 30mA 2P RCD)	£190.00	1
SISRW325V	400V 3P+N+E 32A 6h (40A 30mA 2P RCD)	£200.00	1
SISKEY	Spare Keys (Pack of 10)	£13.78	10

Load Break (Isolator) Switches

3 Pole Boxed Isolators (IP65)



Europa 3 & 4 Pole AC Rotary
Isolators are ideal for the AC side of
the inverter in photovoltaic installations.

CB, CE, SEMKO, UL508

IEC & EN 60947-1 and 3

20mm Knock-outs up to 40A / 25mm on 63 & 80A

Easy Access & Switch Removal / Flame Retardant Material

Padlockable for Added Security / All Switch Ratings at **AC21**

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	125	100	74	118
LB633P	175	125	90	134
LB803P	175	125	90	134

4 Pole Boxed Isolators (IP65)



CB, CE, SEMKO, UL508

IEC & EN 60947-1 and 3

20mm Knock-outs up to 40A / 25mm on 63 to 125A

Easy Access & Switch Removal / Flame Retardant Material

Padlockable for Added Security / All Switch Ratings at **AC21**

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	125	100	74	118
LB324P	125	100	74	118
LB404P	125	100	74	118
LB634P	175	125	90	134
LB804P	175	125	90	134
LB1004P	280	190	130	190
LB1254P	280	190	130	190

Larger Enclosure Version (IP65)



More
wiring
space

① Ideal for armoured cable



CB, CE, SEMKO, UL508

IEC & EN 60947-1 and 3

20mm Knock-outs / Easy Access & Switch Removal / Flame Retardant Material

Padlockable for Added Security / All Switch Ratings at **AC21**

Part Number	Description	Price	Per
LB254PBB	25A 4 Pole (Insulated Enclosure)	£19.50	1
LB324PBB	32A 4 pole (Insulated Enclosure)	£23.09	1
LB404PBB	40A 4 Pole (Insulated Enclosure)	£25.92	1

① Larger Enclosure 4 Pole Boxed Isolator Switch (IP65) Dimensions (mm)

Part Number	Height	Width	Depth	Depth (Inc Switch)
LB254PBB	175	125	90	134
LB324PBB	175	125	90	134
LB404PBB	175	125	90	134

3 Pole Metal Clad Boxed Isolator (IP54)



CB, CE, SEMKO, UL508

IEC & EN 60947-1 and 3

Metal Clad Enclosure: Epoxy Coated Steel / Padlockable for Added Security

Box Lid **RAL: 7032** / Back Box **RAL:7043** / All Switch Ratings at **AC21**

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

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

Part Number	Height	Width	Depth	Depth (Inc Switch)
LB253PSTB	220	145	90	134
LB323PSTB	220	145	90	134
LB403PSTB	220	145	90	134
LB633PSTB	270	215	122	182
LB803PSTB	270	215	122	182

① Boxed Isolator Data - See Pages 103-105

As standard 4 Pole Isolators are supplied with 4 main poles, all opening & closing at the same time. Some applications require that the neutral pole is Early Make Late Break. For these applications the 4th pole should be replaced with the required amperage from our range of Neutral Contacts - please see page 40.

4 Pole Metal Clad Boxed Isolator (IP54)



CB, CE, SEMKO, UL508

IEC & EN 60947-1 and 3

Metal Clad Enclosure: Epoxy Coated Steel / Padlockable for Added Security
Box Lid **RAL: 7032** / Back Box **RAL:7043** / All Switch Ratings at **AC21**

Part Number	Description	Price	Per
LB254PSTB	25A 4 Pole (Steel Enclosure)	£26.41	1
LB324PSTB	32A 4 Pole (Steel Enclosure)	£29.54	1
LB404PSTB	40A 4 Pole (Steel Enclosure)	£34.86	1
LB634PSTB	63A 4 Pole (Steel Enclosure)	£36.36	1
LB804PSTB	80A 4 Pole (Steel Enclosure)	£41.48	1
LB1004PSTB	100A 4 Pole (Steel Enclosure)	£72.70	1
LB1254PSTB	125A 4 Pole (Steel Enclosure)	£72.36	1

4 Pole Stainless Steel Boxed Isolator (IP65)



CB, CE, SEMKO, UL508

IEC & EN 60947-1 and 3

Fully Earth Bonded

Grade 304 Brushed Stainless Steel

Particularly Suitable for Pharmaceutical & Food Preparation Areas

All Switch ratings at **AC22**

Part Number	Description	Price	Per
LB254PSS	25A 4 Pole (Stainless Steel Enclosure)	£139.18	1
LB324PSS	32A 4 Pole (Stainless Steel Enclosure)	£142.14	1
LB404PSS	40A 4 pole (Stainless Steel Enclosure)	£144.55	1
LB634PSS	63A 4 pole (Stainless Steel Enclosure)	£171.42	1
LB804PSS	80A 4 pole (Stainless Steel Enclosure)	£176.37	1

① 4 Pole Metal Clad Boxed Isolator Switch (IP54) Dimensions (mm)

Part Number	Height	Width	Depth	Depth (Inc Switch)
LB254PSTB	220	145	90	134
LB324PSTB				
LB404PSTB				
LB634PSTB				
LB804PSTB	270	215	122	182
LB1004PSTB				
LB1254PSTB				

① 4 Pole Stainless Steel Boxed 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				

4 Pole Metal Clad Boxed Isolator (IP65)



New Product



CB, CE, SEMKO, UL508

IEC & EN 60947-1 and 3

Metal Clad Enclosure: Epoxy Coated Steel / **RAL: 7035**

Padlockable for Added Security

All Switch Ratings at **AC22**

Part Number	Description	Price	Per
LB254PST	25A 4 Pole (Steel Enclosure)	£58.99	1
LB324PST	32A 4 Pole (Steel Enclosure)	£61.37	1
LB404PST	40A 4 Pole (Steel Enclosure)	£65.25	1
LB634PST	63A 4 Pole (Steel Enclosure)	£69.57	1
LB804PST	80A 4 Pole (Steel Enclosure)	£77.40	1

4 Pole Die Cast Boxed Isolators (IP65)



CB, CE, SEMKO, UL508

IEC & EN 60947-1 and 3

Robust Die Cast Enclosure

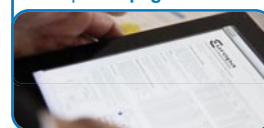
Padlockable for Added Security

Box Lid **RAL: 7032** /

Back Box **RAL:7043**

All Switch Ratings at **AC21**

① Technical data & auxiliary
look up table **page 105**



Part Number	Description	Price	Per
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 Metal Clad Boxed Isolator Switch (IP65) Dimensions (mm)

Part Number	Height	Width	Depth	Depth (Inc Switch)
LB254PST	173	100	120	164
LB324PST				
LB404PST				
LB634PST				
LB804PST	178	178	135	179

① 4 Pole Die Cast Boxed Isolator Switch (IP65) Dimensions (mm)

Part Number	Height	Width	Depth	Depth (Inc Switch)
LB254PAL	152	140	100	144
LB324PAL				
LB404PAL				
LB634PAL				

6 Pole Boxed Isolator (IP65)



CB, CE, SEMKO, UL508
IEC & EN 60947-1 and 3

Insulated Enclosure

25mm Knock-outs

Easy Access & Switch Removal / Flame Retardant Material

All Switch ratings at **AC22**

Metal Enclosure:

Epoxy Coated Strong Steel / **RAL: 7035** / All Switch ratings at **AC22**

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 (Steel Enclosure)	£145.18	1

There is room to add 1 extra auxiliary block either side of the switch if required

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

Part Number	Height	Width	Depth	Depth (Inc Switch)
LB256P	280	190	130	190
LB326P				
LB406P				
LB636P				
LB806P	400	300	200	260
LB1256P				

8 Pole Boxed Isolator (IP65)



CB, CE, SEMKO, UL508
IEC & EN 60947-1 and 3

Insulated Enclosure

25mm Knock-outs

Easy Access & Switch Removal / Flame Retardant Material

All Switch ratings at **AC22**

Metal Enclosure:

Epoxy Coated Strong Steel / **RAL: 7035** / All Switch ratings at **AC22**

Part Number	Description	Price	Per
LB258P	25A 8 Pole (Insulated Enclosure)	£45.80	1
LB328P	32A 8 Pole (Insulated Enclosure)	£49.99	1
LB408P	40A 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 Boxed Isolator Switch (IP65) Dimensions (mm)

Part Number	Height	Width	Depth	Depth (Inc Switch)
LB258P	280	190	130	190
LB328P				
LB408P				
LB638P				
LB808P	400	300	200	260
LB1258P				

2 Pole Enclosed Changeover Switches (IP65)



New Product



Bureau Veritas Lloyds Registered and CE Approved

EN 60947-1 & 3 Compliant / All Switch ratings **AC-21A**

Part Number	Description	Price	Per
LBC252P	25A 2 Pole (Insulated Enclosure)	£55.98	1
LBC632P	63A 2 Pole (Insulated Enclosure)	£143.64	1
LBC1002P	100A 2 Pole (Insulated Enclosure)	£228.26	1

① 2 Changeover Switch (IP65) Dimensions (mm)

Part Number	Height	Width	Depth	Depth (Inc Switch)
LBC252P	175	151	95	129
LBC632P	180	182	137	178
LBC1002P	254	180	137	178

4 Pole Changeover Switches



CB, CE, SEMKO, UL508

IEC & EN 60947-1 and 3 / All Switch ratings at **AC22**

Insulated Enclosure: (IP65)

25mm Knock-outs / Easy Access & Switch Removal / Flame Retardant Material

Metal Clad Enclosure (STB) : Epoxy Coated Steel / (IP54)

Box Lid **RAL: 7032** / Back Box **RAL:7043**



Metal Enclosure: Epoxy Coated Steel / (IP65) / **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
LBC324PSTB	32A 4 Pole (Steel Enclosure)	£75.79	1
LBC404PSTB	40A 4 Pole (Steel Enclosure)	£82.30	1
LBC634PSTB	63A 4 Pole (Steel Enclosure)	£104.28	1
LBC634P	63A 4 Pole (Steel Enclosure)	£144.15	1
LBC804P	80A 4 Pole (Steel Enclosure)	£227.66	1
LBC1254P	125A 4 Pole (Steel Enclosure)	£265.26	1

① 4 Pole Changeover Switch Dimensions (mm)

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

New! for 2014 - Load Break Switches 160 - 800A



New Range



Full range of accessories available

1



2



3



Europa Components are delighted to announce a complete new range of load break switches with ratings ranging from **160 to 800A** offering you greater choice and flexibility.

This fantastic new range is available in three switch formats:

- ❶ Load Break Switches
- ❷ BS88 Switch Fuses
- ❸ Changeover Switches

A supporting range of terminal shrouds and auxiliary contacts are also available to cater for a wide variety of applications.

The 160 to 800A switches are an ideal extension to the successful range of Europa load break switches and compliments the high capacity **LC1-F range** of Europa Contactors.

Available in either Europa's popular high quality **IP65 STB** steel enclosures or as a door interlock version.



Features of 160-800A Load Break Switches

Top & bottom
gland plates

① Enclosed Switch Fuse Shown

Door earth lead fitted as
standard

IP65 Steel Enclosure

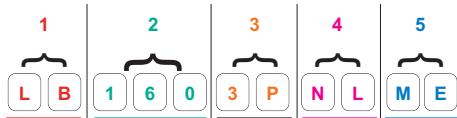
Shrouded and fully rated
neutral link
(where fitted)

BS88 fuses and fuse shrouds
fitted as standard

IP20 incoming terminal
shrouds fitted as standard

Generous wiring space

① Product Configurator



1. Switch type: **LB** = Load Break **LBF** = Switch Fuse **LBC** = Changeover Switch

2. Current Rating **160** = 160A up to **800** = 800A

3. No of Poles: **3P** = 3 Pole

4. Neutral Connection **NL** = Neutral Link **SN** = Switched Neutral

5. Enclosure type **ME** = IP65 Metal Enclosure

① Door Interlock Changeover Switch Shown

Fully rated early make / late
break neutral contact
(where fitted)

Bridging links supplied
as standard on the
LBC160-250A switches

IP65 panel mounted door
interlock handle & shaft
supplied as standard

Modern, ergonomic and
aesthetic handle
(red/ yellow available on request)

Quick make-break switch action
with spring loaded energy
mechanism which ensures
independent operation
of the handle

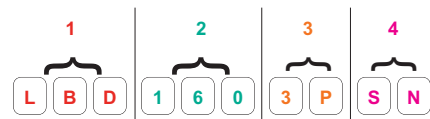
Auxiliary contacts available

Positive indication of switch
position

Handle padlockable in the off
position for up to 3 padlocks

Door interlock with defeat mechanism
for authorised personnel only

① Product Configurator



1. Switch type: **LBD** = Load Break **LBFD** = Switch Fuse **LBCD** = Changeover Switch

2. Current Rating **160** = 160A up to **800** = 800A

3. No of Poles: **3P** = 3 Pole

4. Neutral Connection **SN** = Switched Neutral **Blank** = No Neutral

IP65 Enclosed Door Interlocked Load Break Switches 160-800A



See Page
106 for
Technical
Data



Bureau Veritas, KEMA Certified and CE Approved

EN 60947-1 & 3 Compliant

Handle padlockable in the off position for up to 3 padlocks

IP20 protection on incoming 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 Switch ratings AC-22

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

New Product

Part Number	Description	Price	Per
LB1603PNLME	160A Enclosed 3P + Neutral Link Load Break Switch	£280.77	1
LB2003PNLME	200A Enclosed 3P + Neutral Link Load Break Switch	£332.87	1
LB2503PNLME	250A Enclosed 3P + Neutral Link Load Break Switch	£347.17	1
LB3153PNLME	315A Enclosed 3P + Neutral Link Load Break Switch	£502.48	1
LB4003PNLME	400A Enclosed 3P + Neutral Link Load Break Switch	£580.46	1
LB6303PNLME	630A Enclosed 3P + Neutral Link Load Break Switch	£867.46	1
LB8003PNLME	800A Enclosed 3P + Neutral Link Load Break Switch	£1320.52	1

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

New Product

Part Number	Description	Price	Per
LB1603PSNME	160A Enclosed 3P + Sw. Neutral Load Break Switch	£280.77	1
LB2003PSNME	200A Enclosed 3P + Sw. Neutral Load Break Switch	£332.87	1
LB2503PSNME	250A Enclosed 3P + Sw. Neutral Load Break Switch	£347.17	1
LB3153PSNME	315A Enclosed 3P + Sw. Neutral Load Break Switch	£502.48	1
LB4003PSNME	400A Enclosed 3P + Sw. Neutral Load Break Switch	£580.46	1
LB6303PSNME	630A Enclosed 3P + Sw. Neutral Load Break Switch	£867.46	1
LB8003PSNME	800A Enclosed 3P + Sw. Neutral Load Break Switch	£1320.52	1

IP65 Enclosed Door Interlocked Switch Fuses 160-800A



See Page
107 for
Technical
Data



KEMA Certified and CE Approved

EN 60947-1 & 3 Compliant

Handle padlockable in the off position for up to 3 padlocks

IP20 protection on incoming 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) / Top & bottom gland plates

Door interlock with defeat mechanism (for authorised personnel only)

Removable door for easier installation

AC-23A rated (AC-22A for 800A)

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

New Product

Part Number	Description	Price	Per
LBF1603PNLME	160A Enclosed 3P + Neutral Link BS88 Switch Fuse	£521.74	1
LBF2003PNLME	200A Enclosed 3P + Neutral Link BS88 Switch Fuse	£544.45	1
LBF3153PNLME	315A Enclosed 3P + Neutral Link BS88 Switch Fuse	£849.71	1
LBF4003PNLME	400A Enclosed 3P + Neutral Link BS88 Switch Fuse	£1046.48	1
LBF6303PNLME	630A Enclosed 3P + Neutral Link BS88 Switch Fuse	£1725.49	1
LBF8003PNLME	800A Enclosed 3P + Neutral Link BS88 Switch Fuse	£2393.66	1

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

New Product

Part Number	Description	Price	Per
LBF1603PSNME	160A Enclosed 3P + SW. Neutral BS88 Switch Fuse	£599.77	1
LBF2003PSNME	200A Enclosed 3P + SW. Neutral BS88 Switch Fuse	£637.85	1
LBF3153PSNME	315A Enclosed 3P + SW. Neutral BS88 Switch Fuse	£880.61	1
LBF4003PSNME	400A Enclosed 3P + SW. Neutral BS88 Switch Fuse	£1149.52	1
LBF6303PSNME	630A Enclosed 3P + SW. Neutral BS88 Switch Fuse	£1987.29	1
LBF8003PSNME	800A Enclosed 3P + SW. Neutral BS88 Switch Fuse	£2619.96	1

IP65 Enclosed Door Interlocked Changeover Switches 160-800A

3 Pole Enclosed Changeover Switches (IP65)

New Product



See Page
106 for
Technical
Data

KEMA Certified and CE Approved
EN 60947-1 & 3 Compliant

Handle padlockable in the off position for up to 3 padlocks
IP20 protection on incoming terminals
Neutral switch contact early make / late break
Top & bottom gland plates
Door interlock with defeat mechanism (for authorised personnel)
Removable door for easier installation / All Switch ratings **AC-22**

Part Number	Description	Price	Per
LBC1603PSNME	160A Enclosed 3P + SW. Neutral Changeover Switch	£517.26	1
LBC2003PSNME	200A Enclosed 3P + SW. Neutral Changeover Switch	£614.12	1
LBC2503PSNME	250A Enclosed 3P + SW. Neutral Changeover Switch	£710.31	1
LBC3153PSNME	315A Enclosed 3P + SW. Neutral Changeover Switch	£955.89	1
LBC4003PSNME	400A Enclosed 3P + SW. Neutral Changeover Switch	£1143.78	1
LBC6303PSNME	630A Enclosed 3P + SW. Neutral Changeover Switch	£1545.98	1
LBC8003PSNME	800A Enclosed 3P + SW. Neutral Changeover Switch	£1962.42	1

160-800A Switch Enclosure Dimensions (mm)

With Neutral Link	Switched Neutral	Height (mm)	Width (mm)	Depth (mm)	Depth inc. Handle (mm)
Load Break Switches					
LB1603PNLME	LB1603PSNME	500	400	200	245
LB2003PNLME	LB2003PSNME				
LB2503PNLME	LB2503PSNME	800	600	200	245
LB3153PNLME	LB3153PSNME				
LB4003PNLME	LB4003PSNME	1000	800	300	360
LB6303PNLME	LB6303PSNME				
LB8003PNLME	LB8003PSNME				
BS88 Switch Fuses					
LBF1603PNLME	LBF1603PSNME	600	400	200	245
LBF2003PNLME	LBF2003PSNME				
LBF3153PNLME	LBF3153PSNME	800	600	300	360
LBF4003PNLME	LBF4003PSNME				
LBF6303PNLME	LBF6303PSNME	1000	800	300	360
LBF8003PNLME	LBF8003PSNME				
Changeover switches					
For Accessories including terminal shrouds and bridging links see pages 42-43	LBC1603PSNME	500	400	200	260
	LBC2003PSNME				
	LBC2503PSNME	800	600	300	360
	LBC3153PSNME				
	LBC4003PSNME	1000	800	300	360
	LBC6303PSNME				
LBC8003PSNME					

Door Interlock Load Break Switches 25-125A

Door Interlock with Metal Shaft



Europa
components

CB, CE, SEMKO, UL508

IEC & EN 60947-1 and 3 / Padlockable for Added Security
Din Rail Mount (Metal Shaft 282mm 3P / 94mm 6P)
All Switch Ratings At **AC22**

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

Shaft 8mm across flats (hexagonal)

Door Interlock Change Over Switches

Door Interlock Change Over

Europa
components



CB, CE, SEMKO, UL508

IEC & EN 60947-1 and 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 **AC22**

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 Busbars / Metal Shaft 98mm - Shaft 8mm across flats (hexagonal)
A 282mm shaft is available on request.

Panel Mount (Padlockable)



CB, CE, SEMKO, UL508
IEC & EN 60947-1 and 3
All Switch Ratings At AC22



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 & Door Interlocked Isolators

Neutral Contact (Early Make Late Break)



CB, CE, SEMKO, UL508 / IEC & EN 60947-1 and 3
Neutral switch auxiliary block / Rear mount for door interlock and boxed isolators
All switch ratings at AC22

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	125A Neutral Contact R/M	£8.45	1

Volt Free Contact



1NC & 1NO



2N/O



CB, CE, SEMKO, UL508 / IEC & EN 60947-1 and 3
Rear Mount For Door Interlocked & Boxed Isolators

Part Number	Description	Price	Per
* LBAC16RM	20-63A Aux Switch 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 2N/O R/M	£5.81	1

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

Main Pole Contacts



CB, CE, SEMKO, UL508 / IEC & EN 60947-1 and 3
Main pole for when an additional pole is required / Rear mount for door interlock and boxed isolators
All switch ratings at AC22

Part Number	Description	Price	Per
LB263MAINPOLE	25A-63A Main Pole Cont R/M	£3.38	1
LB280MAINPOLE	80A Main Pole Cont R/M	£8.45	1
LB2125MAINPOLE	125A Main Pole Cont R/M	£8.45	1

Extended Auxiliaries



New Product



Neutral contact is early make /
late break. Volt free contacts
rated at 6A 230V / 4A 400V



CB, CE, SEMKO, UL508 / IEC & EN 60947-1 and 3
Combined main or neutral pole with volt free contacts (1NO+1NC)
Allows for additional 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 AC22 (25-63A)

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

Front Mounting Auxiliaries for Panel Mount Isolators



CB, CE, SEMKO, UL508 / IEC & EN 60947-1 and 3
All Switch ratings at AC22

Part Number	Description	Price	Per
LB263AUXEMFM	25A-63A Neutral Contact (Early Make Late Break)	£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	Price	Per
LBGASKET	Gasket Providing IP65 Protection	£1.30	1

Door Interlocked Load Break Switches 160-800A



See Page
106 for
Technical
Data

Bureau Veritas KEMA Certified and CE Approved

EN 60947-1 & 3 Compliant

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)

AC-22 Rated

3 Pole Door Interlocked Load Break Switches

New Product

Part Number	Description	Price	Per
LBD1603P	160A Door Interlock 3P Load Break Switch & Handle	£110.92	1
LBD2003P	200A Door Interlock 3P Load Break Switch & Handle	£129.55	1
LBD2503P	250A Door Interlock 3P Load Break Switch & Handle	£141.52	1
LBD3153P	315A Door Interlock 3P Load Break Switch & Handle	£190.98	1
LBD4003P	400A Door Interlock 3P Load Break Switch & Handle	£266.35	1
LBD6303P	630A Door Interlock 3P Load Break Switch & Handle	£321.65	1
LBD8003P	800A Door Interlock 3P Load Break Switch & Handle	£536.35	1

3 Pole + Sw. Neutral Door Interlocked Load Break Switches

New Product

Part Number	Description	Price	Per
LBD1603PSN	160A Door Interlock 3P + SW. Neutral LB Switch & Handle	£119.28	1
LBD2003PSN	200A Door Interlock 3P + SW. Neutral LB Switch & Handle	£138.83	1
LBD2503PSN	250A Door Interlock 3P + SW. Neutral LB Switch & Handle	£151.22	1
LBD3153PSN	315A Door Interlock 3P + SW. Neutral LB Switch & Handle	£203.35	1
LBD4003PSN	400A Door Interlock 3P + SW. Neutral LB Switch & Handle	£282.81	1
LBD6303PSN	630A Door Interlock 3P + SW. Neutral LB Switch & Handle	£345.09	1
LBD8003PSN	800A Door Interlock 3P + SW. Neutral LB Switch & Handle	£568.78	1

Door Interlocked BS88 Switch Fuses 160-800A



See Page
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Technical
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KEMA Certified and CE Approved

EN 60947-1 & 3 Compliant

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

Fuses supplied separately (Bolted Type)

Neutral switch contact early make / late break (where fitted)

AC-23 Rated (AC22 for 800A)

3 Pole Door Interlocked BS88 Switch Fuses

New Product

Part Number	Description	Price	Per
LBFD1603P	160A Door Interlock 3P BS88 Switch Fuse & Handle	£321.98	1
LBFD2003P	200A Door Interlock 3P BS88 Switch Fuse & Handle	£333.61	1
LBFD3153P	315A Door Interlock 3P BS88 Switch Fuse & Handle	£452.75	1
LBFD4003P	400A Door Interlock 3P BS88 Switch Fuse & Handle	£502.66	1
LBFD6303P	630A Door Interlock 3P BS88 Switch Fuse & Handle	£912.13	1
LBFD8003P	800A Door Interlock 3P BS88 Switch Fuse & Handle	£1086.62	1

3 Pole + Sw. Neutral Door Interlocked BS88 Switch Fuses

New Product

Part Number	Description	Price	Per
LBFD1603PSN	160A Door Interlock 3P + SW. Neutral BS88 S/Fuse & Handle	£402.36	1
LBFD2003PSN	200A Door Interlock 3P + SW. Neutral BS88 S/Fuse & Handle	£409.13	1
LBFD3153PSN	315A Door Interlock 3P + SW. Neutral BS88 S/Fuse & Handle	£527.63	1
LBFD4003PSN	400A Door Interlock 3P + SW. Neutral BS88 S/Fuse & Handle	£557.67	1
LBFD6303PSN	630A Door Interlock 3P + SW. Neutral BS88 S/Fuse & Handle	£1018.89	1
LBFD8003PSN	800A Door Interlock 3P + SW. Neutral BS88 S/Fuse & Handle	£1216.15	1

Door Interlocked Changeover Switches 160-800A

3P Door Interlocked Changeover Switches

New Product



See Page
107 for
Technical
Data



Europa
components

KEMA Certified and CE Approved

EN 60947-1 & 3 Compliant

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)

AC-22 Rated

Part Number	Description	Price	Per
LBCD1603PSN	160A Door Interlock 3P + SW. Neutral C/O Switch & Handle	£328.92	1
LBCD2003PSN	200A Door Interlock 3P + SW. Neutral C/O Switch & Handle	£409.68	1
LBCD2503PSN	250A Door Interlock 3P + SW. Neutral C/O Switch & Handle	£490.17	1
LBCD3153PSN	315A Door Interlock 3P + SW. Neutral C/O Switch & Handle	£562.79	1
LBCD4003PSN	400A Door Interlock 3P + SW. Neutral C/O Switch & Handle	£636.22	1
LBCD6303PSN	630A Door Interlock 3P + SW. Neutral C/O Switch & Handle	£923.64	1
LBCD8003PSN	800A Door Interlock 3P + SW. Neutral C/O Switch & Handle	£1255.22	1

Europa Despatch Details

Free standard delivery (2-3 days) for orders over £100 nett

Under £100 delivery charge only £8.50

Next day and special deliveries available

Minimum order value only £20



Accessories for 160-800A Switches

Terminal Shrouds

New Product



Europa
components

CE Approved

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

Part Number	Description	Price	Per
LBTS010	Shroud for LB200-250A, LBC160-250A (input / output)	£6.78	1
LBTS020	Shroud for LB315A (input / output)	£8.44	1
LBTS030	Shroud for LB400A (input / output)	£15.10	1
LBTS040	Shroud for LB630-800A (input / output)	£10.40	1
LBTS050	Shroud for LBF160-200A 3P (input)	£10.77	1
LBTS060	Shroud for LB160-200A 3P (output)	£10.77	1
LBTS070	Shroud for LBF160-200A 3PSN, LBC315-400A (input)	£16.43	1
LBTS080	Shroud for LBF315-400A 3P (input)	£23.75	1
LBTS090	Shroud for LBF315-400A 3P (output)	£23.75	1
LBTS100	Shroud for LBF315-400A 3PSN, LBC630-800A (input)	£29.19	1
LBTS110	Shroud for LBF630-800A 3P (input)	£29.19	1
LBTS120	Shroud for LBF630-800A 3P (output)	£29.19	1
LBTS130	Shroud for LBF630-800A 3PSN (input / output)	£31.73	1
LBTS140	Shroud for LBC315-400A 3PSN (output)	£15.64	1
LBTS150	Shroud for LBC630-800A 3PSN (output)	£25.41	1

① To order the required terminal shroud configuration please refer to the table opposite on page 43 →

For example: for an LBD2003P you will need to order: 1 x LBTS010 to cover the input & 1 x LBTS010 to cover the output

① A red / yellow handle is available on request.



Auxiliary Contacts

New Product



Europa
components

CE Approved

Complete with fixings

16A resistive loads / 4A inductive loads at 240V AC

Part Number	Description	Price	Per
LBAC010	1NO+1NC aux. contact for LB, LBF160A-800A, LBC315-800A	£11.48	1
LBAC020	2NO + 2NC aux. contact for LB, LBF160A-800A, LBC315-800A	£28.28	1
LBAC030	1NO+1NC aux. contact for LBC160-250A	£12.31	1
LBAC040	2NO+2NC aux. contact for LBC160-250A	£32.06	1

160-250A Bridging Links

New Product



Europa
components

CE Approved

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 LBC160-250A	£33.19	1

① 160-800A Switch Accessory Selection Table

Part Number (Enclosed)	Part Number (Door Interlock)	Input Terminal Shroud	Output Terminal Shroud	Auxiliary Contact 1NO & 1NC	Auxiliary Contact 2NO & 2NC
3 Pole Load Break Switches					
LB1603PNLME	LBD1603P	-	-	LBAC010	LBAC020
LB2003PNLME	LBD2003P	LBTS010	LBTS010		
LB2503PNLME	LBD2503P				
LB3153PNLME	LBD3153P	LBTS020	LBTS020		
LB4003PNLME	LBD4003P	LBTS030	LBTS030		
LB6303PNLME	LBD6303P	LBTS040	LBTS040		
LB8003PNLME	LBD8003P				
3 Pole + Switched Neutral Load Break Switches					
LB1603PSNME	LBD1603PSN	-	-	LBAC010	LBAC020
LB2003PSNME	LBD2003PSN	LBTS010	LBTS010		
LB2503PSNME	LBD2503PSN				
LB3153PSNME	LBD3153PSN	LBTS020	LBTS020		
LB4003PSNME	LBD4003PSN	LBTS030	LBTS030		
LB6303PSNME	LBD6303PSN	LBTS040	LBTS040		
LB8003PSNME	LBD8003PSN				
BS88 3 Pole Switch Fuse					
LB1603PNLME	LBFD1603P	LBTS050	LBTS060	LBAC010	LBAC020
LB2003PNLME	LBFD2003P				
LB3153PNLME	LBFD3153P	LBTS080	LBTS090		
LB4003PNLME	LBFD4003P				
LB6303PNLME	LBFD6303P	LBTS110	LBTS120		
LB8003PNLME	LBFD8003P				
BS88 3 Pole + Switched Neutral Switch Fuse					
LB1603PSNME	LBFD1603PSN	LBTS070	LBTS070	LBAC010	LBAC020
LB2003PSNME	LBFD2003PSN				
LB3153PSNME	LBFD3153PSN	LBTS100	LBTS100		
LB4003PSNME	LBFD4003PSN				
LB6303PSNME	LBFD6303PSN	LBTS130	LBTS130		
LB8003PSNME	LBFD8003PSN				
3 Pole + Switched Neutral Changeover Switches					
LBC1603PSNME	LBCD1603PSN	LBTS010	LBTS010	LBAC030	LBAC040
LBC2003PSNME	LBCD2003PSN				
LBC2503PSNME	LBCD2503PSN	LBTS070	LBTS140	LBAC010	LBAC020
LBC3153PSNME	LBCD3153PSN				
LBC4003PSNME	LBCD4003PSN	LBTS100	LBTS150		
LBC6303PSNME	LBCD6303PSN				
LBC8003PSNME	LBCD8003PSN				

DC Load Break Switches



Switch Rated at **1000V DC**

Perfect for Photovoltaic (PV) Installations - Key Features:

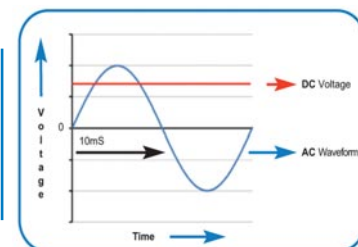
- ✓ IP65 rated enclosure (for boxed version)
- ✓ Ample internal space for easier wiring
- ✓ Polycarbonate flame retardant RoHS compliant plastic
- ✓ 16A, 25A & 32A all rated up to 1000V DC
- ✓ Unique spring loaded mechanism for high speed switching (5ms max)
- ✓ Knife edge self-cleaning contacts for increased switch life
- ✓ Long arc chambers to help rapid arc suppression
- ✓ 16mm² rising clamp terminals for easy wiring
- ✓ 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 1000Volts. 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 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 5ms thereby reducing the arcing time to a minimum.

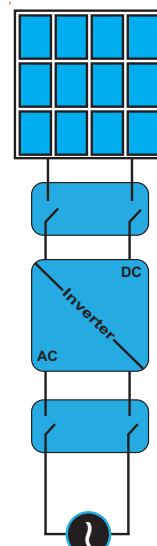
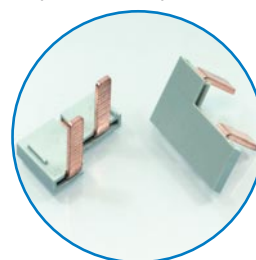
In order to reduce the chances of an arc propagating, the Europa switch employs rotary contact technology. This is designed to make and break the circuit through a revolving double break contact assembly that wipes as it moves. The wiping action has the added advantage of keeping the contact faces clean 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**. as per *** fig 1**.

- The switch has 4 separate poles.
- Links can be used to change the way the poles are connected (2 insulated links are supplied)
- Poles can be connected in series parallel or a variation of both series and parallel.
- Interconnection of the poles dictates the load that the switch can make and break.
- As the number of poles used increases so the total load switching capacity of the device increases.

Refer to the electrical connection diagrams on **page 45** ➔



* Fig 1

DC 4 Pole Isolator Switches

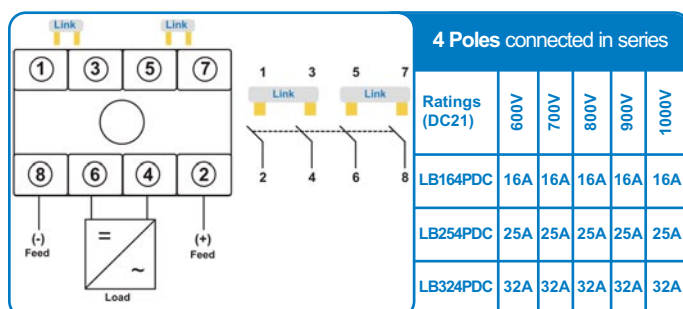
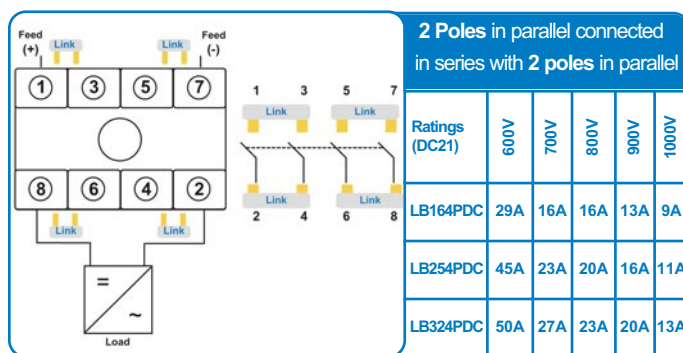
DC 4 Pole Boxed Isolator (IP65)



Europa
components

CE Approved / TUV Certified / Padlockable for Added Security

Part Number	Description	Price	Per
LB164PDC	16A DC 4 Pole	£45.00	1
LB254PDC	25A DC 4 Pole	£59.00	1
LB324PDC	32A DC 4 Pole	£70.00	1



DC 4 Pole Door Interlocked Isolator

New Product



Europa
components

CE Approved / TUV Certified / Padlockable for Added Security
Complete with 130mm shaft

Part Number	Description	Price	Per
LBDI164PDC	16A DC 4 Pole	£45.00	1
LBDI254PDC	25A DC 4 Pole	£59.00	1
LBDI324PDC	32A DC 4 Pole	£70.00	1

Cam Switches

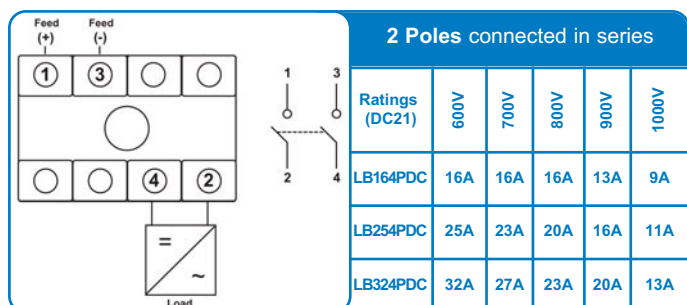
4 Hole Fixing 16 Amp (AC21A / AC1)



UL CSA & CE approved / Degree of Protection: IP 55 (From front)
Operating temp -25°C to +55°C / 48 x 48mm 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 2Pole	£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

Electrical Connection Options....



Single Hole Fixing 16 Amp (AC21A / AC1)



UL CSA & CE approved / Degree of Protection: IP 65 (From front)
Operating temp -25°C to +55°C / 48 x 48mm 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

Indicator Lamps & Holders

LED BA9 Bayonet



AC / DC
IP55 Rated
Long Life: 30,000 Hours
Operating Temperature: -25°C to + 55°C
10 x 23mm

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 Holder (BA9 Type) + Collar



Manufactured by RAAS Controls
UL and CSA Approved

*LP6 & LP7 lamp holders are suitable for use with illuminated push buttons and selector switches.

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

Lamps Heads

Lamp Lens Only



Manufactured by RAAS Controls
UL & CSA Approved

Part Number	Description	Price	Per
RAS-LP001	White	£0.80	1
RAS-LP003	Green	£0.80	1
RAS-LP004	Red	£0.80	1
RAS-LP005	Amber	£0.80	1
RAS-LP006	Blue	£0.80	1
RAS-LP007	Clear	£0.80	1

Lamp Head Only



Manufactured by RAAS Controls
UL & 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



① See pages 54-55

Control Stations & Empty Enclosures
Including Shrouded Emergency Stop Enclosures

16mm LED Pilot Lamps (IP65)



Europa
components

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 20mA

Part Number	Description	Price	Per
RAD161B	White 24V	£3.55	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	£3.55	1

22mm LED with Lamp Test Facility (IP65)



Europa
components

CE Approved / EN 60947

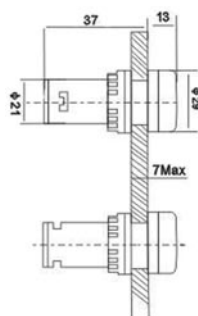
Multi segment / Long life: 30,000 hours / Low temperature
24V & 110V AC/DC / 230V AC / Complete with locking nut / Current rating 20mA

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.

22mm LED Pilot Lamps (IP65)

Europa
components



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 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	£3.55	1
RAD-ADD22	Spanner (tightening tool)	£6.50	1

LED with Sounder Sound Output ((80DB))



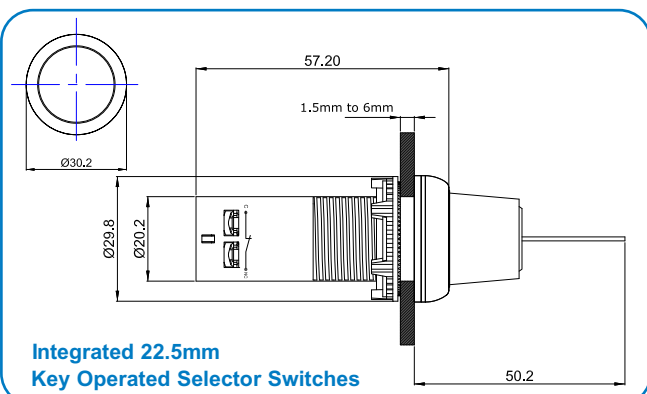
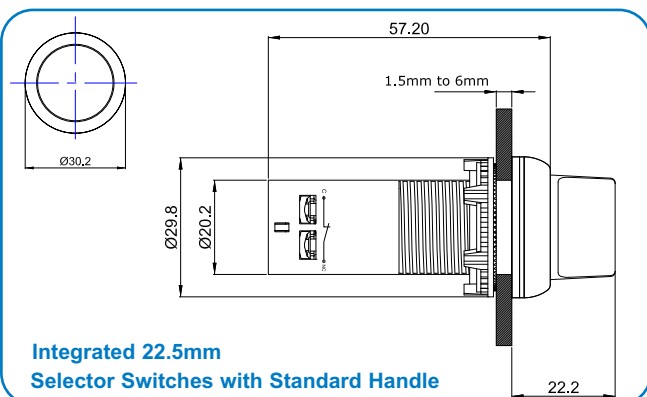
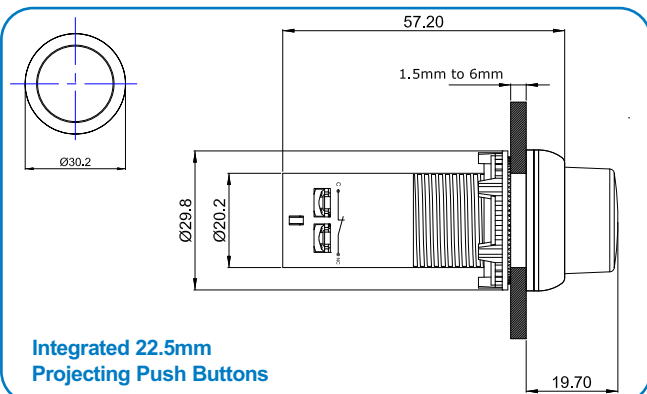
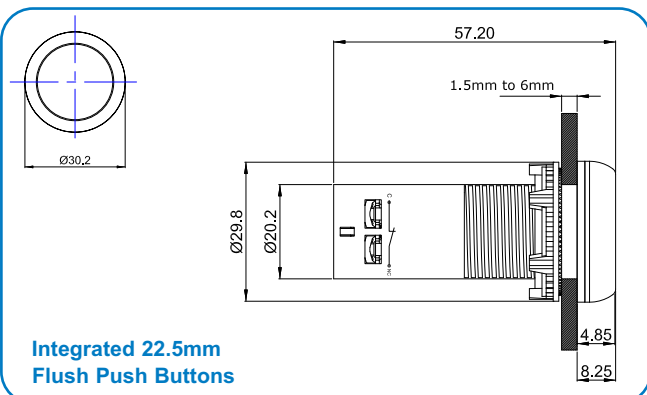
Europa
components

**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

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

New! for 2014 - Integrated 22.5mm Push Buttons and Switches



Integrated 22.5mm Push Buttons and Switches

Integrated 22.5mm Flush Push Buttons



New Product

Part No.
Configurator
& Product Data
Page
108



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 EE—FAA enclosures only).

Part Number	Description	Price	Per
EE1GFD1	Green 1 N/O Contact	£3.62	1
EE2RFD1	Red 1 N/C Contact	£3.62	1
EE3AFD1	Amber 1 N/O + 1 N/C Contact	£5.24	1
EE3RFD1	Green 1 N/O + 1 N/C Contact	£5.24	1
EE3CFD1	Black 1 N/O + 1 N/C Contact	£5.24	1
EE3GFD1	Green 1 N/O + 1 N/C Contact	£5.24	1
EE4GFD1	Green 2 N/O Contacts	£5.24	1
EE4AFD1	Amber 2 N/O Contacts	£5.24	1
EE4CFD1	Black 2 N/O Contacts	£5.24	1
EE5RFD1	Red 2 N/C Contacts	£5.24	1

Integrated 22.5mm Projecting Push Buttons



New Product



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 EE—FAA enclosures only).

Part Number	Description	Price	Per
EE2RPD1	Red 1 N/C Contact	£3.62	1
EE2GPD1	Green 1 N/C Contact	£3.62	1
EE3RPD1	Red 1 N/O + 1 N/C Contact	£5.24	1
EE3GPD1	Green 1 N/O + 1 N/C Contact	£5.24	1
EE3APD1	Amber 1 N/O + 1 N/C Contact	£5.24	1
EE3CPD1	Black 1 N/O + 1 N/C Contact	£5.24	1
EE5RPD1	Red 2 N/C Contacts	£5.24	1

Integrated 22.5mm Key Operated Selector Switches



New Product



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 EE—FAA enclosures only).

2 Position Selector Switches

Part Number	Description	Price	Per
EE3CKK1	2 Pos Black 1 N/O + 1 N/C Contact	£9.79	1
EE3CKI1	2 Pos Spring Ret Black 1 N/O + 1 N/C Contact	£9.79	1
EE4CKK1	2 Pos Black 2 N/O Contacts	£9.79	1
EE4CKI1	2 Pos Spring Ret Black 2 N/O Contacts	£9.79	1
EE5CKK1	2 Pos Black 2 N/C Contacts	£9.79	1
EE5CKI1	2 Pos Spring Ret Black 2 N/C Contacts	£9.79	1

3 Position Selector Switches

EE3CKL1	3 Pos Black 1 N/O + 1 N/C Contact	£10.02	1
EE3CKJ1	3 Pos Spring Ret Black 1 N/O + 1 N/C Contact	£10.02	1
EE4CKL1	3 Pos Black 2 N/O Contacts	£10.02	1
EE4CKJ1	3 Pos Spring Ret Black 2 N/O Contacts	£10.02	1
EE5CKL1	3 Pos Black 2 N/C Contacts	£10.02	1
EE5CKJ1	3 Pos Spring Ret Black 2 N/C Contacts	£10.02	1

Integrated 22.5mm Selector Switches with Standard Handle



New Product



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 EE—FAA enclosures only).

2 Position Selector Switches

Part Number	Description	Price	Per
EE3CSK1	2 Pos Black 1 N/O + 1 N/C Contact	£7.99	1
EE3CSI1	2 Pos Spring Ret Black 1 N/O + 1 N/C Contact	£7.99	1
EE4CSK1	2 Pos Black 2 N/O Contacts	£7.99	1
EE4CSJ1	2 Pos Spring Ret Black 2 N/O Contacts	£7.99	1
EE5CSK1	2 Pos Black 2 N/C Contacts	£7.99	1
EE5CSJ1	2 Pos Spring Ret Black 2 N/C Contacts	£7.99	1

3 Position Selector Switches

EE3CSL1	3 Pos Black 1 N/O + 1 N/C Contact	£8.35	1
EE3CSJ1	3 Pos Spring Ret Black 1 N/O + 1 N/C Contact	£8.35	1
EE4CSL1	3 Pos Black 2 N/O Contacts	£8.35	1
EE4CSJ1	3 Pos Spring Ret Black 2 N/O Contacts	£8.35	1
EE5CSL1	3 Pos Black 2 N/C Contacts	£8.35	1
EE5CSJ1	3 Pos Spring Ret Black 2 N/C Contacts	£8.35	1

Empty Control Station Enclosures for Integrated 22.5mm Push Buttons



New Product



UL Approved

IP65 Rating
Quick Installation
For use with integrated 22.5mm switches (EE range only)
① Legend plates for EP enclosures available on request

Part Number	Description	Price	Per
EP1FAA	P/Button Stn 1 Pos Empty	£8.50	1
EP2FAA	P/Button Stn 2 Pos Empty	£9.50	1
EP3FAA	P/Button Stn 3 Pos Empty	£10.50	1

22.5mm Push Buttons & Selector Switches



Flush Push Buttons

Standard Push-Button Head + Collar (IP65)



Manufactured by RAAS Controls
UL & CSA Approved (IP65)

Part Number	Description	Price	Per
RCAS-PBF1	White	£2.00	1
RCAS-PBF2	Black	£2.00	1
RCAS-PBF3	Green	£2.00	1
RCAS-PBF4	Red	£2.00	1
RCAS-PBF5	Amber	£2.00	1
RCAS-PBF6	Blue	£2.00	1
* RB2-BA334	White Button Black Arrow	£1.30	1
* RB2-BA335	Black Button White Arrow	£1.30	1

* **Please Note:** Both RB2 parts do NOT include the mounting collar.
Please refer to page 52.

Booted Push-Button + Collar (IP65)



Manufactured by RAAS Controls
UL & CSA Approved (IP65)

Part Number	Description	Price	Per
RCAS-PBB2	Black	£2.72	1
RCAS-PBB3	Green	£2.72	1
RCAS-PBB4	Red	£2.72	1
RCAS-PBB5	Yellow	£2.72	1
RCAS-PBB6	Blue	£2.72	1



Visit europacomponents.com on your pc, tablet or smart phone for the mobile friendly experience!

Illuminated Push-Button Head Only (IP65)



Manufactured by RAAS Controls
UL & CSA Approved (IP65)

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

① Please refer to our range of LED BA9 bulbs on page 46

Twin Push-Button (IP40)



Manufactured by RAAS Controls
UL & CSA Approved (IP40)

Part Number	Description	Price	Per
RAS-PB1534	Off-On (Illuminated)	£3.96	1
RCAS-PBF34	Off-On	£3.65	1

Plastic Push-Buttons (IP65)



Supplied Complete with Mounting Clip
IP65
Plastic Buttons for Plastic Control Stations or panel mount.

Part Number	Description	Price	Per
RP2 BA1	Flush P/B Head White	£2.31	1
RP2 BA2	Flush P/B Head Black	£2.31	1
RP2 BA3	Flush P/B Head Green	£2.31	1
RP2 BA4	Flush P/B Head Red	£2.31	1
RP2 BA5	Flush P/B Head Yellow	£2.31	1
RP2 BA6	Flush P/B Head Blue	£2.31	1
RP2-BL4	Projecting P/B Head Red	£3.98	1

Plastic Weather Proof Push-Button (IP67)



* Part number RAP2-BHZ is also required

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

* Mounting clip sold separately.

Projecting Push-Buttons

Projecting Push-Button + Collar (IP65)



Manufactured by RAAS Controls
UL & CSA Approved (IP65)

Part Number	Description	Price	Per
RCAS-PBP1	White	£2.00	1
RCAS-PBP2	Black	£2.00	1
RCAS-PBP3	Green	£2.00	1
RCAS-PBP4	Red	£2.00	1
RCAS-PBP5	Yellow	£2.00	1
RCAS-PBP6	Blue	£2.00	1

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.



Selector Switches

Plastic Key Operated



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

Key Operated (IP65)



Manufactured by RAAS Controls
UL & CSA Approved (IP65)

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 (IP65)



Manufactured by RAAS Controls
UL & CSA Approved (IP65)

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	Centre off Spring Ret from Left & Right (Long Handle)	£5.91	1

Weather Proof Stay Put (IP67)



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

Legend Plates



Manufactured by RAAS Controls

Suitable for use with all 22mm 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	£0.95	1
RB2-PY3303	White Arrow Down	£0.95	1
RB2-PY9330	60mm Emergency Stop	£1.12	1

Illuminated Stay Put (IP65)



Manufactured by RAAS Controls

UL & CSA Approved (IP65)

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

22mm Push Button Accessories

Spare Key (No 455)



Spare key for key operated selector switches (page 51)

Part Number	Description	Price	Per
RB2-K455	Spare Key No 455	£1.54	1

Mounting Collar



Manufactured by RAAS Controls

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

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



Manufactured by **RAAS Controls**
UL and CSA Approved
Rated Thermal Current 10A

Part Number	Description	Price	Per
RAS-BCBNC	N/C for Plastic Control Stations	£1.62	1
RAS-BCBNO	N/O for Plastic Control Stations	£1.62	1
RAS-CBNC	N/C	£1.62	1
RAS-CBNO	N/O	£1.62	1

When assembling control stations:

- **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

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



Manufactured by **RAAS Controls**
UL & CSA Approved (IP65)

Part Number	Description	Price	Per
RAS-ES54B	40mm Spring Return (Black) (mounting collar sold separately)	£3.49	1

Emergency Stops

Emergency Stop Buttons + Collar (Latching) (IP65)



Manufactured by **RAAS Controls**
UL and CSA Approved (IP65) / 40mm mushroom head

Part Number	Description	Price	Per
RCAS-ES14	Key Release	£8.66	1
RCAS-ES142	Key Release + 1 N/C	£10.32	1
RCAS-ES54	Twist Release	£4.37	1
RCAS-ES541	Twist Release + 1 N/O	£6.03	1
RCAS-ES542	Twist Release + 1 N/C	£6.03	1
RCAS-EST4	Push/Pull	£4.37	1

Plastic Emergency Stop Buttons (Latching) (IP65)



Manufactured by **RAAS Controls**
UL & CSA Approved / 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
RP2-BS54	Twist Release (Plastic Body)	£3.96	1
RP2-ES14	Key Release (Plastic Body)	£8.26	1

Plastic Boxed Emergency Stop Stations (IP65)



Manufactured by **RAAS Controls**
UL and CSA Approved (IP65)

Part Number	Description	Price	Per
RCAS-ESB141NC	Key Release + 1 N/C	£15.35	1
RCAS-ESB541NC	Twist Release + 1N/C	£12.34	1
RCAS-ESBC41NC	Spring Release + 1N/C	£12.34	1
RCAS-ESBT42NC	Pull Release + 2N/C	£14.84	1

Metal Boxed Emergency Stop (IP65)



Manufactured by RAAS Controls
UL and CSA Approved (IP65)

Part Number	Description	Price	Per
RM1BS142	Key Release + 1 N/C	£40.50	1
RM1BS542	Twist Release + 1 N/C	£35.62	1

2 Position Plastic (IP65)



Manufactured by RAAS Controls
UL and CSA Approved (IP65)

Part Number	Description	Price	Per
RC2PGES55	Green/Emstop + 1N/O+1N/C	£16.35	1
RC2PGG	Green/Green + 2N/O	£13.98	1
RC2PGR	Green/Red + 1N/O+1N/C	£13.98	1
RC2PWB	White/Black + 2N/O	£13.98	1

Pre-assembled Control Stations

1 Position Plastic (IP65)



Manufactured by RAAS Controls
UL and CSA Approved (IP65)

Part Number	Description	Price	Per
RC1PBG4	Key On / Off + 1N/O	£11.21	1
RC1PG	Green + 1N/O	£10.75	1
RC1PR	Red + 1N/C	£10.75	1

2 Position Metal (IP65)



Manufactured by RAAS Controls
UL and CSA Approved (IP65)

Part Number	Description	Price	Per
RM2GES55	Green/ Emstop + 1N/O+1N/C	£46.86	1
RM2GG	Green/Green + 2N/O	£44.96	1
RM2GR	Green/Red + 1N/O+1NC	£44.96	1

1 Position Metal (IP65)



Manufactured by RAAS Controls
UL and CSA Approved (IP65)

Part Number	Description	Price	Per
RM1BG4	Key On / Off + 1N/O	£33.96	1
RM1G	Green + 1N/O	£24.58	1
RM1R	Red + 1N/C	£24.58	1

3 Position Plastic (IP65)



Manufactured by RAAS Controls
UL and CSA Approved (IP65)

Part Number	Description	Price	Per
RC3PGRG	Green/Red/Green +2N/O+1N/C	£21.27	1
RC3PWBS	Black/White/SW2 + 2N/O+1N/C	£24.02	1
RC3PWRB	White/Red/Black +2N/O+1N/C	£21.27	1

listed in
LUCKINSlive™

3 Position Metal (IP65)



Manufactured by RAAS Controls
UL and CSA Approved (IP65)

Part Number	Description	Price	Per
RM3GRG	Green/Red/Green 2N/O+1N/C	£68.28	1

Metal Empty Control Stations (IP65)



Manufactured by RAAS Controls
UL and CSA Approved (IP65) / for Customer Assembly

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

Empty Control Station Enclosures

Plastic Empty Control Stations (IP65)



Manufactured by RAAS Controls
UL and CSA Approved (IP65) / for Customer Assembly

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

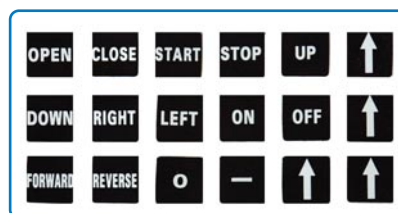
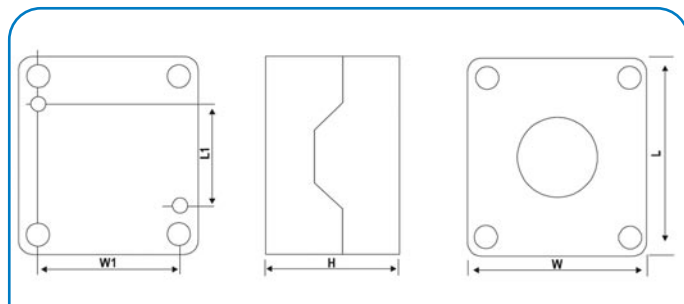
Use with back mounting contact blocks (RAS-BCBNO or RAS-BCBNC)
Only suitable for use with plastic flush push buttons and selector switches

Metal Empty 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 x 1 Cable entry (on top).

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



C&S Control Station Dimensions

Plastic					Metal			
Measurement	1 Hole	2 Hole	3 Hole	4 Pole	1 Hole	2 Hole	3 Hole	4 Hole
H	51mm	51mm	51mm	51mm	51mm	51mm	51mm	51mm
W	68mm	68mm	68mm	68mm	68mm	68mm	68mm	68mm
L	74mm	104mm	134mm	164mm	74mm	105mm	134mm	164mm
W 1	54mm	54mm	54mm	54mm	54mm	54mm	54mm	54mm
L 1	38mm	68mm	68mm	128mm	46mm	78mm	108mm	138mm

TC1-D Range 3 & 4 Pole Contactors



LC1- F Range Page 60

Contactor Fact File

- ✓ IEC 60947-4-1 / EN 60947-4-1
- ✓ CE Approved
- ✓ IP20 Rated
- ✓ DIN Rail or Screw Mounting
- ✓ Operating Temperature up to 55°C
- ✓ Clearly Marked Power and Auxiliary Terminals
- ✓ Blank Identification Tag for Marking
- ✓ Common Coils for Same Frame Size Contactors
- ✓ Easy Front Accessibility of Coils

View the Europa **contactor heating and lighting guide** at:
www.europacomponents.com / Technical Help or pages 112-115



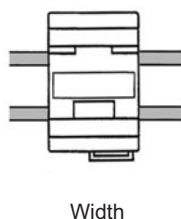
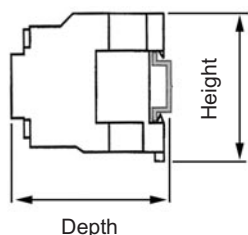
Average AC Coil Consumption 50 / 60Hz

Contactor 50/60Hz	TCA2 Control Relay	TC1-D09 to D18	TC1-D25 to D38	TC1-D40 to D95
Pull In / Holding	70/8 VA	70 / 8VA	100 / 8.5 VA	245 / 26 VA

For more technical data including heating and lighting guides see **pages 112-115** or visit us on-line at: www.europacomponents.com

Please refer to pages **63-64** for our complete range of accessories

TC1-D Range Contactor Dimensions

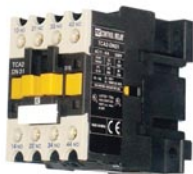


Amp	Height	3 Pole Width	4 Pole Width	Depth AC	Depth DC
9-12A	74mm	45mm	45mm	80mm	115mm
18A	74mm	45mm	-	85mm	120mm
25A	84mm	56mm	56mm	93mm	130mm
32A	84mm	56mm	-	98mm	135mm
38A	84mm	56mm	-	98mm	135mm
40-65A	127mm	75mm	85mm	114mm	171mm
80A	127mm	85mm	96mm	125mm	181mm
95A	127mm	85mm	-	125mm	-

Contactors

Control Relays (AC)

Control Relays (Ith: 10A)



See Page 27
for Contactor
Enclosures!



CE, EN 60947-4-1

Please note: the control relays are compatible with the **TA1 & 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 (AC) 3 Pole Contactors with Coils

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

CE, 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



Mounting for TC1 & TP1 Contactors

9A - 32A Screw fixing or 35mm din rail mounting
40A - 95A Screw fixing or double width 70mm din rail
(2 x 35mm din rail). (See page 70 for din rail).



5.5KW 12A AC3 (25A AC1) 3 Pole

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

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

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

15KW 32A AC3 (50A AC1) 3 Pole

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



Spare (AC) coils TX1D**7
* 24V, 48V, 110V, 230V, 415V & 380V



Page 61

18.5KW 38A AC3 (50A AC1) 3 Pole

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-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

22KW 40A AC3 (60A AC1) 3 Pole

Part Number	Description	Price	Per
TC1-D4011B7	24V AC 1N/O + 1N/C Aux	£62.50	1
TC1-D4011E7	48V AC 1N/O + 1N/C Aux	£62.50	1
TC1-D4011F7	110V AC 1N/O + 1N/C Aux	£62.50	1
TC1-D4011P7	230V AC 1N/O + 1N/C Aux	£62.50	1
TC1-D4011N7	415V AC 1N/O + 1N/C Aux	£62.50	1

25KW 50A AC3 (80A AC1) 3 Pole

Part Number	Description	Price	Per
TC1-D5011B7	24V AC 1N/O + 1N/C Aux	£75.66	1
TC1-D5011E7	48V AC 1N/O + 1N/C 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

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

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 1N/O + 1N/C Aux	£102.14	1
TC1-D6511N7	415V AC 1N/O + 1N/C Aux	£102.14	1

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

Part Number	Description	Price	Per
TC1-D8011B7	24V AC 1N/O + 1N/C Aux	£123.14	1
TC1-D8011E7	48V AC 1N/O + 1N/C Aux	£123.14	1
TC1-D8011F7	110V AC 1N/O + 1N/C Aux	£123.14	1
TC1-D8011P7	230V AC 1N/O + 1N/C Aux	£123.14	1
TC1-D8011N7	415V AC 1N/O + 1N/C Aux	£123.14	1

45KW 95A AC3 (125A AC1) 3 Pole

Part Number	Description	Price	Per
TC1-D9511B7	24V AC 1N/O + 1N/C Aux	£145.28	1
TC1-D9511F7	110V AC 1N/O + 1N/C Aux	£145.28	1
TC1-D9511P7	230V AC 1N/O + 1N/C Aux	£145.28	1
TC1-D9511N7	415V AC 1N/O + 1N/C Aux	£145.28	1

TP1 (DC) 3 Pole Contactors with Coils

CE, EN 60947-4-1

Maximum Rated Operational Voltage 690V



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

Part Number	Description	Price	Per
TP1-D0901JD	12V DC 1N/C Aux	£30.14	1
TP1-D0901BD	24V DC 1N/C Aux	£30.14	1
TP1-D0901ED	48V DC 1N/C Aux	£30.14	1
TP1-D0901FD	110V DC 1N/C Aux	£30.14	1
TP1-D0910JD	12V DC 1N/O Aux	£30.14	1
TP1-D0910BD	24V DC 1N/O Aux	£30.14	1
TP1-D0910ED	48V DC 1N/O Aux	£30.14	1
TP1-D0910FD	110V DC 1N/O Aux	£30.14	1

5.5KW 12A AC3 (25A AC1) 3 Pole

Part Number	Description	Price	Per
TP1-D1201JD	12V DC 1N/C Aux	£30.86	1
TP1-D1201BD	24V DC 1N/C Aux	£30.86	1
TP1-D1201ED	48V DC 1N/C Aux	£30.86	1
TP1-D1201FD	110V DC 1N/C Aux	£30.86	1
TP1-D1210JD	12V DC 1N/O Aux	£30.86	1
TP1-D1210BD	24V DC 1N/O Aux	£30.86	1
TP1-D1210ED	48V DC 1N/O Aux	£30.86	1
TP1-D1210FD	110V DC 1N/O Aux	£30.86	1

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

Part Number	Description	Price	Per
TP1-D1801JD	12V DC 1N/C Aux	£40.88	1
TP1-D1801BD	24V DC 1N/C Aux	£40.88	1
TP1-D1801ED	48V DC 1N/C Aux	£40.88	1
TP1-D1801FD	110V DC 1N/C Aux	£40.88	1
TP1-D1810JD	12V DC 1N/O Aux	£40.88	1
TP1-D1810BD	24V DC 1N/O Aux	£40.88	1
TP1-D1810ED	48V DC 1N/O Aux	£40.88	1
TP1-D1810FD	110V DC 1N/O Aux	£40.88	1



See Page 27
for Contactor
Enclosures!



Average DC Coil Consumption

DC Contactor	TP1-D09 to D18	TP1-D25 to D38	TP1-D40 to D80
Pull In / Holding	9 / 9W	11 / 11W	22 / 22W

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

Part Number	Description	Price	Per
TP1-D2501JD	12V DC 1N/C Aux	£55.11	1
TP1-D2501BD	24V DC 1N/C Aux	£55.11	1
TP1-D2501ED	48V DC 1N/C Aux	£55.11	1
TP1-D2501FD	110V DC 1N/C Aux	£55.11	1
TP1-D2510JD	12V DC 1N/O Aux	£55.11	1
TP1-D2510BD	24V DC 1N/O Aux	£55.11	1
TP1-D2510ED	48V DC 1N/O Aux	£55.11	1
TP1-D2510FD	110V DC 1N/O Aux	£55.11	1

15KW 32A AC3 (50A AC1) 3 Pole

Part Number	Description	Price	Per
TP1-D3201JD	12V DC 1N/C Aux	£86.79	1
TP1-D3201BD	24V DC 1N/C Aux	£86.79	1
TP1-D3201ED	48V DC 1N/C Aux	£86.79	1
TP1-D3201FD	110V DC 1N/C Aux	£86.79	1
TP1-D3210JD	12V DC 1N/O Aux	£86.79	1
TP1-D3210BD	24V DC 1N/O Aux	£86.79	1
TP1-D3210ED	48V DC 1N/O Aux	£86.79	1
TP1-D3210FD	110V DC 1N/O Aux	£86.79	1

22KW 40A AC3 (60A AC1) 3 Pole

Part Number	Description	Price	Per
TP1-D4011JD	12V DC 1N/O + 1N/C Aux	£99.14	1
TP1-D4011BD	24V DC 1N/O + 1N/C Aux	£99.14	1
TP1-D4011ED	48V DC 1N/O + 1N/C Aux	£99.14	1
TP1-D4011FD	110V DC 1N/O + 1N/C Aux	£99.14	1

25KW 50A AC3 (80A AC1) 3 Pole

Part Number	Description	Price	Per
TP1-D5011JD	12V DC 1N/O + 1N/C Aux	£126.37	1
TP1-D5011BD	24V DC 1N/O + 1N/C Aux	£126.37	1
TP1-D5011ED	48V DC 1N/O + 1N/C Aux	£126.37	1
TP1-D5011FD	110V DC 1N/O + 1N/C Aux	£126.37	1

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

Part Number	Description	Price	Per
TP1-D6511JD	12V DC 1N/O + 1N/C Aux	£150.34	1
TP1-D6511BD	24V DC 1N/O + 1N/C Aux	£150.34	1
TP1-D6511ED	48V DC 1N/O + 1N/C Aux	£150.34	1
TP1-D6511FD	110V DC 1N/O + 1N/C Aux	£150.34	1

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

Part Number	Description	Price	Per
TP1-D8011JD	12V DC 1N/O + 1N/C Aux	£184.34	1
TP1-D8011BD	24V DC 1N/O + 1N/C Aux	£184.34	1
TP1-D8011ED	48V DC 1N/O + 1N/C Aux	£184.34	1
TP1-D8011FD	110V DC 1N/O + 1N/C Aux	£184.34	1



Spare (DC) coils TX & LX
12V, 24V, 48V, 110V

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TC1 (AC) 4 Pole Contactors with Coils

CE, EN 60947-4-1
Maximum Rated Operational Voltage 690V

4KW 9A AC3 (25A AC1) 4 Pole

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	£19.70	1
TC1-D09008E7	48V AC 2N/O + 2N/C	£19.70	1
TC1-D09008F7	110V AC 2N/O + 2N/C	£19.70	1
TC1-D09008P7	230V AC 2N/O + 2N/C	£19.70	1
TC1-D09008N7	415V AC 2N/O + 2N/C	£19.70	1

5.5KW 12A AC3 (25A AC1) 4 Pole

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	£20.62	1
TC1-D12006F7	110V AC 4N/C	£20.62	1
TC1-D12006P7	230V AC 4N/C	£20.62	1
TC1-D12006N7	415V AC 4N/C	£20.62	1
TC1-D12008B7	24V AC 2N/O + 2N/C	£20.62	1
TC1-D12008E7	48V AC 2N/O + 2N/C	£20.62	1
TC1-D12008F7	110V AC 2N/O + 2N/C	£20.62	1
TC1-D12008P7	230V AC 2N/O + 2N/C	£20.62	1
TC1-D12008N7	415V AC 2N/O + 2N/C	£20.62	1

Contactor Loads



AC3 = Motor Load (Inductive)

AC1 = Heating Load (Resistive)

View our contactor heating and lighting guide pages [112-115](#) or at:
www.europacomponents.com Technical help

11KW 25A AC3 (40A AC1) 4 Pole

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	£35.30	1
TC1-D25006F7	110V AC 4N/C	£35.30	1
TC1-D25006P7	230V AC 4N/C	£35.30	1
TC1-D25006N7	415V AC 4N/C	£35.30	1
TC1-D25008B7	24V AC 2N/O + 2N/C	£35.30	1
TC1-D25008E7	48V AC 2N/O + 2N/C	£35.30	1
TC1-D25008F7	110V AC 2N/O + 2N/C	£35.30	1
TC1-D25008P7	230V AC 2N/O + 2N/C	£35.30	1
TC1-D25008N7	415V AC 2N/O + 2N/C	£35.30	1

22KW 40A AC3 (60A AC1) 4 Pole

Part Number	Description	Price	Per
TC1-D40004B7	24V AC 4N/O	£70.00	1
TC1-D40004E7	48V AC 4N/O	£70.00	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	£70.00	1
TC1-D40008B7	24V AC 2N/O + 2N/C	£70.00	1
TC1-D40008E7	48V AC 2N/O + 2N/C	£70.00	1
TC1-D40008F7	110V AC 2N/O + 2N/C	£70.00	1
TC1-D40008P7	230V AC 2N/O + 2N/C	£70.00	1
TC1-D40008N7	415V AC 2N/O + 2N/C	£70.00	1

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

Part Number	Description	Price	Per
TC1-D65004B7	24V AC 4N/O	£103.10	1
TC1-D65004E7	48V AC 4N/O	£103.10	1
TC1-D65004F7	110V AC 4N/O	£103.10	1
TC1-D65004P7	230V AC 4N/O	£103.10	1
TC1-D65004N7	415V AC 4N/O	£103.10	1
TC1-D65008B7	24V AC 2N/O + 2N/C	£103.10	1
TC1-D65008E7	48V AC 2N/O + 2N/C	£103.10	1
TC1-D65008F7	110V AC 2N/O + 2N/C	£103.10	1
TC1-D65008P7	230V AC 2N/O + 2N/C	£103.10	1
TC1-D65008N7	415V AC 2N/O + 2N/C	£103.10	1

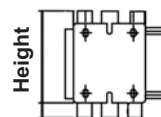
45KW 80A AC3 (125A AC1) 4 Pole

Part Number	Description	Price	Per
TC1-D80004B7	24V AC 4N/O	£200.38	1
TC1-D80004F7	110V AC 4N/O	£200.38	1
TC1-D80004N7	415V AC 4N/O	£200.38	1
TC1-D80004P7	230V AC 4N/O	£200.38	1
TC1-D80008B7	24V AC 2N/O + 2N/C	£200.38	1
TC1-D80008F7	110V AC 2N/O + 2N/C	£200.38	1
TC1-D80008N7	415V AC 2N/O + 2N/C	£200.38	1
TC1-D80008P7	230V AC 2N/O + 2N/C	£200.38	1

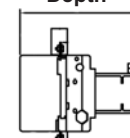
LC1-F Range Contactors



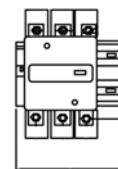
3 Pole / 3 Normally Open (without Coil)



Height



Depth



Width

Refer to
3 & 4 Pole
dimensions
table below

CE Approved / Maximum Operational Voltage 690V

Part Number	Description	Price	Per
LC1-F115A-A65	59KW 115A AC3 (200A AC1)	£161.22	1
LC1-F150A-A65	80KW 150A AC3 (250A AC1)	£255.62	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 (400A AC1)	£484.97	1
LC1-F400A-A65	220KW 400A AC3 (500A AC1)	£579.50	1
LC1-F500A-A65	280KW 500A AC3 (700A AC1)	£929.29	1
LC1-F630A-A65	355KW 630A AC3 (1000A AC1)	£1479.42	1
LC1-F780A-A65	425KW 780A AC3 (1600A AC1)	£2029.18	1

4 Pole / 4 Normally Open (without coil)



① F range contactors are supplied without a coil. The required coil voltage must be ordered separately. A supporting range of auxiliaries and accessories are available including spare terminal shrouds.

CE Approved / Maximum Operational Voltage 690V

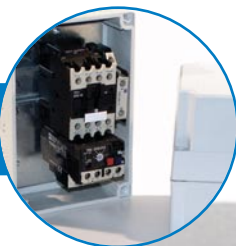
Part Number	Description	Price	Per
LC1-F1154A-A65	59KW 115A AC3 (200A AC1)	£228.77	1
LC1-F1504A-A65	80KW 150A AC3 (250A AC1)	£340.91	1
LC1-F1854A-A65	100KW 185A AC3 (275A AC1)	£443.40	1
LC1-F2254A-A65	110KW 225A AC3 (315A AC1)	£490.02	1
LC1-F2654A-A65	140KW 265A AC3 (350A AC1)	£577.34	1
LC1-F3304A-A65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

AC3 Rating	3 Pole Height	3 Pole Width	3 Pole Depth	4 Pole Height	4 Pole Width	4 Pole Depth
F115A	162mm	164mm	171mm	162mm	200.5mm	171mm
F150A	170mm	164mm	171mm	170mm	200.5mm	171mm
F185A	174mm	169mm	181mm	174mm	208.5mm	181mm
F225A	197mm	169mm	181mm	197mm	208.5mm	181mm
F265A	203mm	202mm	213mm	203mm	244.5mm	213mm
F330A	206mm	213mm	219mm	206mm	261mm	219mm
F400A	206mm	213mm	219mm	206mm	261mm	219mm
F500A	238mm	233mm	232mm	238mm	288mm	232mm
F630A	304mm	309mm	255mm	304mm	389mm	255mm
F780A	435mm	704mm	255mm	435mm	864mm	255mm

Spare Coils for TC1 (AC) Contactors



See Page 27
for Contactor
Enclosures!



TC1D09-D18 (AC)

CE Approved / 50/60Hz

Part Number	Description	Price	Per
TX1D2B7	24V AC	£6.29	1
TX1D2E7	48V AC	£6.29	1
TX1D2F7	110V AC	£6.29	1
TX1D2P7	230V AC	£6.29	1
TX1D2Q7	380V 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	380V AC	£10.37	1
TX1D4N7	415V AC	£10.37	1

TC1D40-D95 (AC)



CE Approved / 50/60Hz

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	380V AC	£19.27	1
TX1D6N7	415V AC	£19.27	1

Spare Coils for TP1 (DC) Contactors

TP1D09-D18 (DC)



CE Approved

Part Number	Description	Price	Per
TX4D2JD	12V DC	£9.02	1
TX4D2BD	24V DC	£9.02	1
TX4D2FD	110V 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	48V DC	£30.14	1

TP1-D80 (DC)



CE Approved

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

LC1-F400A (AC)

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

LC1-F500A (AC)

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

LC1-F630A (AC)

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

LC1-F780A (AC) 2 Per Set

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

Coils for LC1 (AC) Contactors

LC1-F115-F150A (AC)



Simple **Click Fitting**
Instructions Included

CE Approved / 50Hz / 60Hz available on request

Part Number	Description	Price	Per
LX1-FFB	24V AC	£37.00	1
LX1-FFE	48V AC	£35.06	1
LX1-FFF	110V AC	£37.00	1
LX1-FFU	240V AC	£37.00	1
LX1-FFN	415V 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	24V AC	£57.08	1
LX1-FHE	48V AC	£57.08	1
LX1-FHF	110V AC	£57.08	1
LX1-FHU	240V AC	£57.08	1
LX1-FHQ	380V AC	£57.08	1
LX1-FHN	415V AC	£57.08	1

Coils for LC1 (DC) Contactors

LC1-F115-F150A (DC)



Simple **Click Fitting**
Instructions Included

CE Approved

Part Number	Description	Price	Per
LX4FFB	24V DC	£54.08	1
LX4FFE	48 VDC	£54.08	1
LX4FFF	110V DC	£54.08	1

LC1-F185-F225A (DC)

Part Number	Description	Price	Per
LX4FGB	24V DC	£70.24	1
LX4FGE	48V DC	£70.24	1
LX4FGF	110V DC	£70.24	1

LC1-F265-F330A (DC)

Part Number	Description	Price	Per
LX4FHB	24V DC	£90.74	1
LX4FHE	48V DC	£90.74	1
LX4FHF	110V DC	£90.74	1

LC1-F400A (DC)

Part Number	Description	Price	Per
LX4FJF	110V DC	£147.68	1

LC1-F500A (DC)

Part Number	Description	Price	Per
LX4FKF	110V DC	£193.29	1

LC1-F630A (DC)

Part Number	Description	Price	Per
LX4FLF	110V DC	£203.86	1

LC1-F780A (DC)

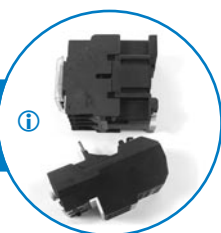
Part Number	Description	Price	Per
LX4FXF	110V DC	£425.69	1

Contactor Accessories

TC1-D Range Contactor Overload Relays



For help with
overload selection
see page 111



CE Approved

Part Number	Description	Price	Per
TR2-D09301	0.10 - 0.16A	£17.81	1
TR2-D09302	0.16 - 0.25A	£17.81	1
TR2-D09303	0.25 - 0.40A	£17.81	1
TR2-D09304	0.40 - 0.63A	£17.81	1
TR2-D09305	0.63 - 1.00A	£17.81	1
TR2-D09306	1.00 - 1.65A	£17.81	1
TR2-D09307	1.60 - 2.50A	£17.81	1
TR2-D09308	2.5 - 4.00A	£17.81	1
TR2-D09310	4.00 - 6.00A	£17.81	1
TR2-D09312	5.50 - 8.00A	£17.81	1
TR2-D09314	7.00 - 10.0A	£17.81	1
TR2-D12316	9.00 - 13.0A	£18.74	1
TR2-D18321	12.0 - 18.0A	£22.79	1
TR2-D25322	17.0 - 25.0A	£25.31	1
TR2-D32353	23.0 - 32.0A	£33.29	1
TR2-D32355	28.0 - 36.0A	£33.29	1
TR2-D40353	23.0 - 32.0A	£37.97	1
TR2-D40355	30.0 - 40.0A	£37.97	1
TR2-D65357	37.0 - 50.0A	£47.80	1
TR2-D65359	48.0 - 65.0A	£50.10	1
TR2-D65361	55.0 - 70.0A	£52.13	1
TR2-D80363	63.0 - 80.0A	£59.63	1
TR2-D95365	80.0 - 93.0A	£63.68	1

LC1-F Range Contactor Overload Relay



Same Day
Despatch

CE Approved

Part Number	Description	Price	Per
LR1-FM105	65 - 105A	£100.00	1
LR1-FM125	80 - 125A	£100.00	1
LR1-F160	100-160A	£128.29	1
LR1-F200	125 - 200A	£128.29	1
LR1-F250	160 - 250A	£128.29	1
LR1-F315	200 - 315A	£168.96	1
LR1-F400	250 - 400A	£205.60	1
LR1-F500	315 - 500A	£213.58	1
LR1-F630	400-630A	£222.05	1

Front Mounting Auxiliary Contact Block



Front Mount 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

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 NO + 2 NC	£7.20	1
TA1-DN31	3 NO + 1 NC	£7.20	1
TA1-DN40	4 NO	£7.20	1
TA1-DN04	4 NC	£7.20	1

Side Mounting Auxiliary Contact Blocks



Side Mount Auxiliary Contact Block

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

*** Not suitable** for use with F Range contactors.

Manufactured by Controls & Switchgear Contactors Ltd
CE UL & CSA Approved

Part Number	Description	Price	Per
TA8-DN11	1 NO + 1 NC	£4.04	1
TA8-DN20	2 NO	£4.04	1

TC On Delay



Simple **Click Fitting**
Front Mounting Device

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

Part Number	Description	Price	Per
TA2-DT0	0.1 - 3 Sec	£16.79	1
TA2-DT2	1 - 30 Sec	£16.79	1
TA2-DT4	0 - 180 Sec	£16.79	1

TC Off Delay



Simple **Click Fitting**
Front Mounting Device

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

Part Number	Description	Price	Per
TA3-DR0	0.1 - 3 Sec	£16.79	1
TA3-DR2	1 - 30 Sec	£16.79	1
TA3-DR4	10 - 180 Sec	£16.79	1

Star Delta 0.1 - 30 Seconds



Simple **Click Fitting**
Front Mounting Device

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

Part Number	Description	Price	Per
TA2-DS2	Star Delta 0.1 - 30 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



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

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



- 3 Pole F-Range Contactors: 6pcs
- 4 Pole F-Range Contactors: 8pcs

Part Number	Description	Price	Per
LA9-F701	LC1-F115A	£5.65	1
LA9-F702	LC1-F150A-F185A	£7.73	1
LA9-F703	LC1-F225A to F500A	£9.95	1
LA9-F704	LC1-F630A	£9.95	1

Suppressor Block



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

Motor Starters

Direct On Line Motor Starters



i The required **overload relays** must be purchased separately - see page 63

i DOL Overload Selection Table

Overload Part Number	Relay Range	Price Each	Useable with 12A DOL	Useable with 25A DOL
TR2-D09301	0.10 - 0.16A	£17.81	✓	✓
TR2-D09302	0.16 - 0.25A	£17.81	✓	✓
TR2-D09303	0.25 - 0.40A	£17.81	✓	✓
TR2-D09304	0.40 - 0.63A	£17.81	✓	✓
TR2-D09305	0.63 - 1.00A	£17.81	✓	✓
TR2-D09306	1.00 - 1.65A	£17.81	✓	✓
TR2-D09307	1.60 - 2.50A	£17.81	✓	✓
TR2-D09308	2.5 - 4.00A	£17.81	✓	✓
TR2-D09310	4.00 - 6.00A	£17.81	✓	✓
TR2-D09312	5.50 - 8.00A	£17.81	✓	✓
TR2-D09314	7.00 - 10.0A	£17.81	✓	✓
TR2-D12316	9.00 - 13.0A	£18.74	✓	✓
TR2-D18321	12.0 - 18.0A	£22.79	-	✓
TR2-D25322	17.0 - 25.0A	£25.31	-	✓

i LE1 DOLs will accept TA1 front mounted auxiliaries

i BE1 DOLs will accept TA8 side mounted auxiliaries

ABS Enclosure 2 Button 110V DOL (IP65)

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

ABS Enclosure 2 Button 240V DOL (IP65)

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

ABS Enclosure 2 Button 415V DOL (IP65)

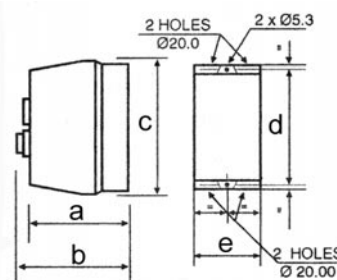
Part Number	Description	Price	Per
LE1-D123N7	12A 5.5Kw 415V No Overload	£26.93	1
LE1-D253N7	25A 11Kw 415V No Overload	£38.80	1

Metal Enclosure 2 Button 240V DOL (IP55)

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

Metal Enclosure 2 Button 415V DOL (IP55)

Part Number	Description	Price	Per
BE1-D123N7	12A 5.5Kw 415V No Overload	£36.78	1
BE1-D253N7	25A 11Kw 415V No Overload	£52.92	1



Please Note:

For all DOLs **never** use an overload that exceeds the rating of the contactor!

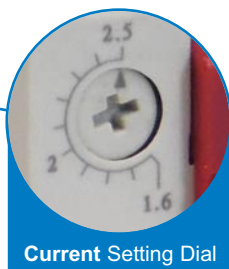
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data sheet



Measurement	Metal Clad 12A	Metal Clad 25A	ABS 12A	ABS 25A
a	116mm	135mm	120mm	135mm
b	128mm	147mm	140mm	155mm
c	214mm	252mm	166mm	185mm
d	134mm	162mm	150mm	165mm
e	123mm	156mm	88mm	101mm

Manual Motor Starters

MMS Range up to 32A 15kW



Current Setting Dial

Main application:

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

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

Manual Motor Starter Accessories

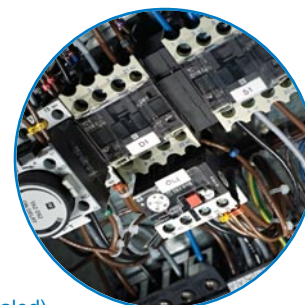
MMS Range Accessories



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

Metal Clad Enclosure (IP65)



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	Description	Price	Per
SDS11EIP7	11kW 230V Coil (with Isolator)		
	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	37kW 415V 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	55kW 415V 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. **110V** version available on request.

① SDS Enclosure Dimensions

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



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Relays

Phase Failure Relays

Phase Failure Relays



Part Number	Description	Price	Per
TPNC	Phase Loss / Sequence	£24.20	1
TPN201	Phase Loss / Sequence Unbalanced Supply	£42.95	1
TPNG	Over / Under Voltage Phase Failure	£54.48	1

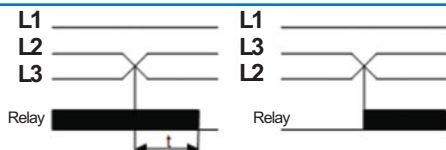
Star Delta Timer Relays

Star Delta Timer Relays



Part Number	Description	Price	Per
TAY230	230V	£36.98	1
TAY400	400V	£35.26	1

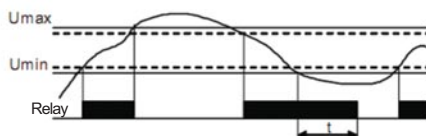
Phase
Sequence:
TPNC - TPN201
TPNG



Phase Loss:
TPNC - TPN201
TPNG



Unbalance over /
under voltage:
TPN201 - TPNG



Power & Control Relays

Octal 8 Pin Relays (10A 2PCO)



Base
Sold
Separately

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

Part Number	Description	Price	Per
R8R12A2PDT	12V AC	£7.00	1
R8R12D2PDT	12V DC	£7.00	1
R8R24A2PDT	24V AC	£7.00	1
R8R24D2PDT	24V DC	£7.00	1
R8R110A2PDT	110V AC	£7.50	1
R8R230A2PDT	230V AC	£7.50	1
RB8R	8 Pin Octal Base	£3.50	1

Octal 11 Pin Relays (10A 3PCO)



Base
Sold
Separately

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

Part Number	Description	Price	Per
R11R12D3PDT	12V DC	£7.95	1
R11R24A3PDT	24V AC	£7.95	1
R11R24D3PDT	24V DC	£7.95	1
R11R110A3PDT	110V AC	£8.84	1
R11R230A3PDT	230V AC	£8.84	1
RB11R	11 Pin Octal Base	£3.50	1

Miniature Industrial 8 Pin (8A 2PCO)



Base
Sold
Separately

UL, CSA, VDE, CE Approved
Lloyds Registered

Part Number	Description	Price	Per
R88M12A2PDT	12V AC	£6.00	1
R88M12D2PDT	12V DC	£3.00	1
R88M24A2PDT	24V AC	£3.25	1
R88M24D2PDT	24V DC	£3.25	1
R88M110A2PDT	110V AC	£3.75	1
R88M230A2PDT	230V AC	£5.10	1
RB8M	8 Pin Slim Line Base	£3.95	1

Miniature Industrial 11 Pin (10A 3PCO)



Base
Sold
Separately

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
R11S110A3PDT	110V AC	£6.50	1
R11S230A3PDT	230V AC	£6.50	1
RB11S	11 Pin Plug In Base	£4.32	1

Miniature Industrial 8 Pin (12A 2PCO)



Base
Sold
Separately

UL, CSA, VDE, CE Approved
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	£6.14	1
R8S230A2PDT	230V AC	£6.50	1
RB8S	8 Pin Plug in Base	£2.95	1

Miniature Industrial 14 Pin (6A 4PCO)



Base
Sold
Separately

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

Slim Line 8 Pin (16A 1PCO)



Base
Sold
Separately

UL, CSA, VDE, CE Approved
Lloyds Registered

Part Number	Description	Price	Per
R168M12D1PDT	12V DC	£3.75	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



1) Fine time adjust dial



2) Coarse time adjust dial



3) Function adjust dial

See page 24 for 2470001
Multifunction Timer

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	55mm bezel for HM632 range	£0.92	1
C7272	72mm bezel for HM632 range	£0.93	1

Motor Starter Capacitors

Metallic Case with Spade Terminals 450V



Manufactured by Ducati

Part Number	Description	Price	Per
4.16.26.09.64	8 uF 40 x 72	£6.26	1
4.16.26.10.64	10 uF 40 x 72	£6.20	1
4.16.26.11.64	12 uF 40 x 98	£7.87	1
4.16.26.15.64	15 uF 40 x 98	£8.56	1
4.16.26.19.64	20uF 45 x 98	£9.48	1
4.16.26.20.64	25uF 45 x 122	£11.41	1
4.16.26.24.64	40uF 55 x 122	£16.36	1

Plastic Case with Spade Terminals 450V



Manufactured by Ducati

Part Number	Description	Price	Per
4.16.15.69.64	1 uF 28 x 55	£2.17	1
4.16.15.01.64	2 uF 28 x 55	£2.23	1
4.16.10.03.64	3 uF 28 x 55	£2.55	1
4.16.10.06.64	4 uF 28 x 55	£2.41	1
4.16.10.08.64	5 uF 28 x 55	£2.86	1
4.16.10.13.64	8 uF 32 x 55	£3.41	1
4.16.10.15.64	10 uF 36 x 58	£4.21	1
4.16.10.17.64	12 uF 36 x 70	£4.59	1
4.16.10.22.64	15 uF 36 x 70	£5.08	1
4.16.10.24.64	18 uF 40 x 70	£6.14	1
4.16.10.25.64	20 uF 40 x 70	£6.45	1
4.16.10.26.64	25 uF 40 x 92	£7.81	1
4.16.10.70.64	30 uF 40 x 92	£8.74	1
4.16.10.29.64	40 uF 45 x 92	£11.22	1
4.16.10.30.64	50 uF 45 x 117	£11.64	1
4.16.10.61.64	60 uF 45 x 92	£15.00	1

Plastic Case with Leads 450V



Manufactured by Ducati

Part Number	Description	Price	Per
4.16.15.69.14	1 uF 28 x 55	£2.60	1
4.16.15.01.14	2 uF 28 x 55	£2.29	1
4.16.15.28.14	2.5 uF 28 x 55	£2.79	1
4.16.10.03.14	3 uF 28 x 55	£2.79	1
4.16.10.06.14	4 uF 28 x 55	£2.91	1
4.16.10.08.14	5 uF 28 x 55	£3.72	1
4.16.10.13.14	8 uF 32 x 55	£3.97	1
4.16.10.15.14	10 uF 36 x 58	£4.71	1
4.16.10.17.14	12 uF 36 x 70	£5.34	1
4.16.10.22.14	15 uF 36 x 70	£5.83	1
4.16.10.24.14	18 uF 40 x 70	£6.82	1
4.16.10.25.14	20 uF 40 x 70	£6.82	1
4.16.10.26.14	25 uF 40 x 92	£8.13	1
4.16.10.70.14	30 uF 40 x 92	£9.48	1
4.16.10.29.14	40 uF 45 x 92	£11.91	1
4.16.10.30.14	50 uF 45 x 117	£17.54	1

Din Rail Terminals & Accessories



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



A versatile range of universal (35mm) din rail mounting terminal blocks taking wire from 0.5 to 95mm 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 6.3A 5x20mm glass fuse. A wider range complete with an LED fuse blown indicator are also available. Please ask sales for details.

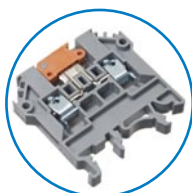
Double level terminals: **CDL4U**



The ideal solution for applications with high wiring density. Useful features include:

- ✓ Double level wiring density.
- ✓ Interconnection / shorting at both levels.
- ✓ 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.

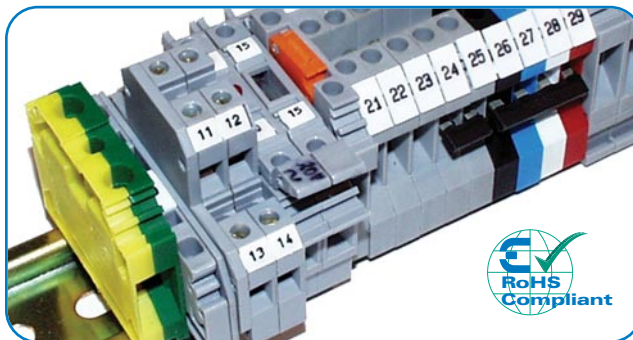
Earth terminals: **CGT4U - CGT35U**



Green and yellow earth terminals taking wire from 0.5 to 35mm sq. Other features include:

- ✓ Tin plated brass foot for low contact resistance.
- ✓ Vibration proof grounding (tighten central screw).
- ✓ High torque clamping yokes accept a wide range of wires.

Din Rail Terminals



UR, CSA & VDE Certified

Part Number	Description	Price	Per
CTS2.5UN	2.5mm	£35.98	100
CTS2.5UNBLUE	2.5mm Blue	£43.49	100
CTS4UN	4mm	£41.24	100
CTS4UNBLUE	4mm Blue	£49.83	100
CTS6U	6mm	£49.18	100
CTS6UNBLUE	6mm Blue	£59.43	100
CTS10U	10mm	£64.38	100
CTS16U	16mm (with built in end plate)	£95.26	100
CTS25U	25mm	£110.15	100
CTS35U	35mm	£184.13	100
CTS50U	50mm	£11.64	1
CTS95U	95mm	£19.07	1
CSFL4U	4mm fuse term (use 5x20mm fuse)	£129.79	100
CDL-4U	4mm Double Decker Terminal	£113.79	100
CKT4U	4mm Knife Disconnect Terminal	£162.15	100
CGT4U	4mm Earth Terminal	£138.08	100
CGT6U	6mm 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

① A variety of coloured terminals are available please ask sales for further details

Slotted Top Hat Din Rail 35mm (10 lengths per pack)

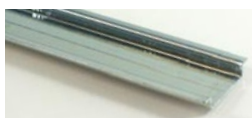


Europa
components

Slotted 35mm x 7.5mm Top Hat Din Rail

Part Number	Description	Price	Per
STBDR0.5M	35mm Top Hat 0.5 metre	£9.39	Pack
STBDR1M	35mm Top Hat 1 metre	£16.90	Pack
STBDR2M	35mm Top Hat 2 metre	£31.88	Pack

Plain Top Hat Din Rail 35mm (10 lengths per pack)



Europa
components

Plain 35mm x 7.5mm Din Rail / Top Hat

Part Number	Description	Price	Per
STBDR2MP	Plain 35mm Top Hat Din Rail	£31.88	Pack

End Plates



End Plates

are used to cover the live parts of the last terminal block making the assembly finger safe.

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

Partition Plates



An Extended Range of Terminals

and accessories are available on request. Please ask for details

Part Number	Description	Price	Per
CTSP5U	2.5 - 4mm	£32.48	100
CTSP2U	6 - 10mm	£36.03	100
CTSP3U	25mm	£53.86	100
CTSP4U	35mm	£53.86	100

Partition plates identify & segregate terminal block groups & can be used to electrically isolate adjacent cross connection sets. The partition plate also maintains the required creepage and clearance values in the assembly.

Blank Terminal Markers



Numbered markers are available from stock

Part Number	Description	Price	Per
CA509/K2	* Blank for 4-35mm (1/2 Height)	£3.62	100
CA509/K5	Blank 2.5mm	£3.62	100
CA509/K6	Blank 4mm	£3.62	100
CA509/K8	Blank 6mm	£3.62	100
CA509/K10	Blank 10mm	£3.62	100
CA509/K12	Blank 25mm	£3.62	100
CA509/K15	Blank 35mm	£3.62	100

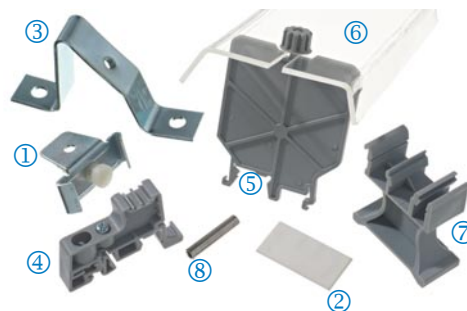
① The CA509/K2 should also be used with the CDL-4U double decker terminal.

Jumper Bars (10 Way Insulated Shorting Links)



Part Number	Description	Price	Per
CA741/10	2.5mm 10 Way Ins Shorting Link	£4.85	1
CA742/10	4mm 10 Way Ins Shorting Link	£4.85	1
CA743/10	6mm 10 Way Ins Shorting Link	£4.85	1
CA744/10	10mm 10 Way Ins Shorting Link	£5.47	1
CA761/10	16mm 10 Way Ins Shorting Link	£6.83	1
CA745/10	25mm 10 Way Ins Shorting Link	£7.37	1
CA746/10	35mm 10 Way Ins Shorting Link	£8.27	1

Din Rail Terminal Accessories



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

	CTS2.5UN	CTS4UN	CTS6U	CTS10U	CTS16U	CTS25U	CTS35U	CTS50U	CTS95U
Terminal Block Pitch	5mm	6mm	8mm	10mm	12mm	12mm	15mm	20.5mm	25mm
Connection Via Stranded Wire (sq. mm)	0.5 to 2.5	0.5 to 4	1.5 to 6	1.5 to 10	2.5 to 16	6 to 25	10 to 35	16 to 50	16 to 95
Connection Via Solid Wire (sq. mm)	0.5 to 4	0.5 to 6	1.5 to 10	1.5 to 16	2.5 to 25	6 to 35	10 to 50	16 to 70	16 to 120
Voltage Rating	800V	800V	800V	800V	800V	800V	800V	1000V	1000V
Current Rating	24A	32A	41A	57A	76A	101A	125A	150A	232A

Warning Beacons



Warning Tower Beacons

70mm LED Modules



50mm
range also
available



Manufactured by Delta Design



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 24V or 85~275V AC

5 mounting options



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

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.

70mm Standard 4 Bolt Bases



Our most
popular
bases....



Manufactured by Delta Design

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

Choose from 5 mounting options in either black or white with matching cap and 70mm 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.

70mm Caps, Brackets & Bases (with 100mm tube)



Manufactured
by Delta Design

Part Number	Description	Price	Per
DIS7311	1 70mm Black Cap + L Bracket	£16.11	1
DIS7312	1 70mm White Cap + L Bracket	£20.96	1
DIS7321	2 70mm Black Cap + Rotating Bracket	£25.62	1
DIS7322	2 70mm White Cap + Rotating Bracket	£33.30	1
DIS7331	3 70mm Black Cap + Threaded Bracket	£12.43	1
DIS7332	3 70mm White Cap + Rotating Threaded Bracket	£16.17	1
DIS7341	4 70mm Black Cap + Standard Base	£11.69	1
DIS7342	4 70mm White Cap + Standard Base	£15.23	1

70mm Buzzer for Tower Beacons (((120dB)))



60-80 beeps
per minute

Manufactured by Delta Design

Continuous / intermittent buzzer

Part Number	Description	Price	Per
DIS7122X	70mm Buzzer Black 120dB 24V DC	£36.55	1

LED Beacons

LED High Profile Beacons



Manufactured by Delta Design

IP67 (When installed) CE Approved

Height: 95mm Width: 76mm

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 10-100V DC Amber	£38.55	1

LED Low Profile Beacons



Manufactured by Delta Design

IP67 (When installed) CE Approved

Height: 44mm Width: 76mm

Flash Rate 65 per Min / Flashing and Continuously Lit Modes

Clear Lens with Coloured LED / Low Power Consumption

Part Number	Description	Price	Per
447002	LED 110V / 230V Amber	£36.50	1
LP-LED110/230RED	LED 110V / 230V 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



Manufactured by Delta Design

IP67 (when installed) CE Approved / Height: 45mm / Width: 76mm

LP1 Flash Rate 60 per Min / LP4 Flash Rate 75 per Min

Part Number	Description	Price	Per
LP4XMV/2	2W Multi-volt 10-100V DC / 20-72V AC Amber	£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 Beacons 72dB 12-24V AC/DC	£49.72	1

High Profile Xenon Beacons



Manufactured by Delta Design

IP67 (When installed) CE Approved /

Height: 95mm / Width: 76mm / Flash Rate 75 per Min

Part Number	Description	Price	Per
LT4XMV/2	2W Multi-volt 10-100V DC / 20-72V AC Amber	£33.86	1
LT4XMV/2RED	2W Multi-volt 10-100V DC / 20-72V AC Red	£33.86	1

Delta Star Beacons

Delta Star RB Series



IP65
CE Approved
Height: 120mm / Width: 148mm
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 1000s 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 - Ultra rapid
- 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 uR - Ultra Rapid
- gL/gG - General Line
- aM - Motor Rated
- gF/gTF - Transformer / Cable protection
- gB - Mining Fuses



BS88 Industrial Fuse Comparison Chart

BS88 Ref.	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

BS88 J Type Fuse Cross Reference Chart

Lawson	GE Power (GE)	Brush	Bussmann	MEM
JHU	96TY	MJ29	JHDS	JW6 / JWS6
JPU	95TY / 95TJ / 171TN	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

Quick Reference Fuse Index

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BS88 HRC Fuses

Industrial

NIT NTD SA2

Box Qty 20



MERSEN

LAWSON
power safe solutions

Manufactured by Mersen / Lawson

Rated at 550V AC 80KA

Fixing Centres: 44.5mm Diameter 14.5mm (Size A1)

ASTA 20 Certified

Part Number	Description	Price	Per
50-085-01/2A	2A	£2.70	1
50-085-01/4A	4A	£2.70	1
50-085-01/6A	6A	£2.70	1
50-085-01/10A	10A	£2.70	1
50-085-01/16A	16A	£2.70	1
50-085-01/20A	20A	£2.85	1
50-085-01/25A	25A	£2.85	1
50-085-01/32A	32A	£2.85	1

Also available in a Motor Rated version

TIA AAO SB3

Box Qty 10



MERSEN

LAWSON
power safe solutions

Manufactured by Mersen / Lawson

Rated at 550V AC 80KA

Fixing Centres: 73mm Diameter: 16mm (Size A2C)

ASTA 20 Certified

Part Number	Description	Price	Per
50-001-01/2A	2A	£3.20	1
50-001-01/4A	4A	£3.20	1
50-001-01/6A	6A	£3.20	1
50-001-01/10A	10A	£3.20	1
50-001-01/16A	16A	£3.20	1
50-001-01/20A	20A	£3.20	1
50-001-01/25A	25A	£3.20	1
50-001-01/32A	32A	£3.20	1

Also available in a Motor Rated version

TIS BAO SB4

Box Qty 10



MERSEN

Manufactured by Mersen

Rated at 415V AC 80KA

Fixing Centres: 73mm Diameter: 18.5mm (Size A3C)

ASTA 20 Certified

Part Number	Description	Price	Per
50-002-01/35A	35A	£4.80	1
50-002-01/40A	40A	£4.80	1
50-002-01/50A	50A	£4.80	1
50-002-01/63A	63A	£4.80	1

Also available in a Motor Rated version

TIS BAO OS OSD SB4

Box Qty 10



LAWSON
power safe solutions

Manufactured by Lawson

Fixing Centres: 73mm Diameter 26mm 415V 80KA

Part Number	Description	Price	Per
TIS80A	80A	£12.30	1
TIS100A	100A	£12.70	1
TIS125A	125A	£16.50	1

Other values available on request

TCP CEO SD5

Box Qty 10



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

MERSEN

LAWSON
power safe solutions

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
50-003-01/63A	63A	£10.25	1
50-003-01/80A	80A	£11.00	1
50-003-01/100A	100A	£11.00	1

① Also available in a **Motor Rated** version / Other values available on request

TFP DEO SD6

Box Qty 3



MERSEN

LAWSON
power safe solutions

Manufactured by Mersen / Lawson

Rated at 415V 80KA

Fixing Centres: 94mm Diameter: 38mm

ASTA 20 Certified

Part Number	Description	Price	Per
50-004-01/125A	125A	£16.00	1
50-004-01/160A	160A	£16.50	1
50-004-01/200A	200A	£17.20	1

① Also available in a **Motor Rated** version / please note we also offer the Lawson **CTFP Compact** range with 30mm diameter

SS SSD

Box Qty 10



LAWSON
power safe solutions

Manufactured by Lawson

Rated at 240V 20KA / 12.7 x 51mm

Part Number	Description	Price	Per
SS2	2A	£2.60	1
SS4	4A	£2.60	1
SS6	6A	£2.60	1
SS10	10A	£2.60	1
SS16	16A	£2.60	1
SS20	20A	£2.80	1
SS25	25A	£2.80	1
SS32	32A	£2.80	1

NS NSD SN2

Box Qty 20



MERSEN

LAWSON
power safe solutions

Manufactured by Mersen / Lawson

Rated at 415V AC 80KA

Overall length: 61mm Diameter: 14mm (Size F1)

Part Number	Description	Price	Per
50-086-01/2A	2A	£2.70	1
50-086-01/4A	4A	£2.70	1
50-086-01/6A	6A	£2.70	1
50-086-01/10A	10A	£2.70	1
50-086-01/16A	16A	£2.70	1
50-086-01/20A	20A	£2.85	1
50-086-01/25A	25A	£2.85	1
50-086-01/32A	32A	£3.30	1

MES ES ESD SP

Box Qty 10



LAWSON
power safe solutions

Manufactured by Lawson

Rated at 415V 80KA / 69 x 17.5mm

Part Number	Description	Price	Per
MES10	10A	£5.60	1
MES16	16A	£5.60	1
MES20	20A	£5.90	1
MES32	32A	£5.90	1
MES40	40A	£6.50	1
MES50	50A	£7.10	1
MES63	63A	£7.60	1

TB AC SE4

Box Qty 10



MERSEN

LAWSON
power safe solutions

Manufactured by Mersen / Lawson

Rated at 415V 80KA / Fixing Centres: 97mm Diameter: 22mm

ASTA 20 Certified

Part Number	Description	Price	Per
50-006-01/20A	20A	£8.40	1
50-006-01/32A	32A	£8.40	1
50-006-01/40A	40A	£8.50	1
50-006-01/50A	50A	£8.50	1
50-006-01/63A	63A	£8.50	1

① Also available in a **Motor Rated** version

TBC AD SF4

Box Qty 10



MERSEN

LAWSON
POWER SAFE SOLUTIONS

Manufactured by Mersen / Lawson

Rated at 415V 80KA / Fixing Centres: 111mm Diameter: 22mm
(Size B1)

Part Number	Description	Price	Per
50-007-01/16A	16A	£8.40	1
50-007-01/20A	20A	£8.40	1
50-007-01/25A	25A	£8.40	1
50-007-01/32A	32A	£8.40	1
50-007-01/40A	40A	£8.50	1
50-007-01/50A	50A	£8.50	1
50-007-01/63A	63A	£8.50	1

Also available in a Motor Rated version

TKF ED SF7

Box Qty 3



MERSEN

LAWSON
POWER SAFE SOLUTIONS

Manufactured by Mersen / Lawson

Rated at 415V 80KA / Fixing Centres: 111mm Diameter: 41mm
ASTA 20 Certified (Size B3)

Part Number	Description	Price	Per
50-010-01/250A	250A	£31.50	1
50-010-01/315A	315A	£34.50	1

Also available in a Motor Rated version

TKM SG7

Box Qty 3



MERSEN

LAWSON
POWER SAFE SOLUTIONS

Manufactured by Mersen / Lawson

Rated at 415V 80KA
Fixing Centres: 133mm Diameter: 41mm / ASTA 20 Certified
(Size C1)

Part Number	Description	Price	Per
TKM200	200A	£27.80	1
50-011-01/250A	250A	£31.50	1
50-011-01/315A	315A	£34.50	1

Other values available on request

TC CD SF5

Box Qty 12



MERSEN

LAWSON
POWER SAFE SOLUTIONS

Manufactured by Mersen / Lawson

Rated at 415V 80KA
Fixing Centres: 111mm Diameter: 26mm / ASTA 20 Certified / (Size B1)

Part Number	Description	Price	Per
50-008-01/80A	80A	£13.50	1
50-008-01/100A	100A	£13.50	1

Also available in a Motor Rated version

TF DD SF6

Box Qty 3



MERSEN

LAWSON
POWER SAFE SOLUTIONS

Manufactured by Mersen / Lawson

Rated at 415V 80KA
Fixing Centres: 111mm Diameter: 35mm / ASTA 20 Certified / (Size B2)

Part Number	Description	Price	Per
50-009-01/125A	125A	£18.50	1
50-009-01/160A	160A	£19.40	1
50-009-01/200A	200A	£20.50	1

Also available in a Motor Rated version

TMF ED SF8

Box Qty 3



MERSEN

LAWSON
POWER SAFE SOLUTIONS

Manufactured by Mersen / Lawson

Rated at 415V 80KA
Fixing Centres: 111mm Diameter: 51mm / ASTA 20 Certified
(Size B4)

Part Number	Description	Price	Per
50-110-01/355A	355A	£47.10	1
50-110-01/400A	400A	£49.00	1

Other values available on request

TM EF SH8

Box Qty 3



MERSEN

LAWSON
power safe solutions

Manufactured by Mersen / Lawson

Rated at 415V 80KA

Fixing Centres: 133mm inner holes / 184mm outer holes

Diameter: 51mm / ASTA 20 Certified

(Size C1)

Part Number	Description	Price	Per
50-039-01/355A	355A	£47.10	1
50-039-01/400A	400A	£49.00	1

TTM FF SH9

Box Qty 1



MERSEN

LAWSON
power safe solutions

Manufactured by Mersen / Lawson

Rated at 415V 80KA

Fixing Centres: 133mm inner holes / 184mm outer holes

Diameter: 61mm / ASTA 20 Certified / (Size C2)

Part Number	Description	Price	Per
50-040-01/500A	500A	£78.50	1
50-040-01/560A	560A	£81.80	1
50-040-01/630A	630A	£83.00	1

TLM GF SH10

Box Qty 1



MERSEN

LAWSON
power safe solutions

Manufactured by Mersen / Lawson

Rated at 415V 80KA

Fixing Centres: 133mm inner holes / 184mm outer holes

Diameter: 73mm / ASTA 20 Certified / (Size C3)

Part Number	Description	Price	Per
50-041-01/710A	710A	£138.00	1
50-041-01/800A	800A	£145.00	1

JPU JP JCS MJ30

Box Qty 5



MERSEN

LAWSON
power safe solutions

Manufactured by Mersen / Lawson

Fixing Centres: 82mm 415V

Part Number	Description	Price	Per
JPU63	63A	£23.60	1
JPU100	100A	£23.60	1
JPU125	125A	£23.60	1
JPU160	160A	£23.60	1
JPU200	200A	£27.80	1
JPU250	250A	£27.80	1
JPU315	315A	£27.80	1
JPU400	400A	£33.00	1

ⓘ Please Note: The JHU range with 72mm fixing is also available on request

JSU JS JCS MJ31

Box Qty 5



MERSEN

LAWSON
power safe solutions

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
JSU630	630A	£67.00	1

ⓘ Please refer to page 74 for a cross reference / selection chart for J type fuses.



LST STD LS 240V

Box Qty 10



Manufactured by Lawson

Fixing Centres: 38.5mm / 48 x 12.7mm 240V

Part Number	Description	Price	Per
LST2	2A	£2.40	1
LST4	4A	£2.40	1
LST6	6A	£2.40	1
LST10	10A	£2.40	1
LST16	16A	£2.40	1
LST20	20A	£2.60	1
LST25	25A	£2.60	1
LST32	32A	£2.60	1

TIA AAO SB2 aM

Box Qty 10



Manufactured by Mersen / Lawson

Rated at 415V 80KA

Fixing Centres: 73mm Diameter: 22mm

Part Number	Description	Price	Per
50-001-16/40A	32M40A	£6.90	1
50-001-16/50A	32M50A	£6.90	1
50-001-16/63A	32M63A	£6.90	1

Other values available on request

MD SMD 415V

Box Qty 10



Manufactured by Lawson

Rated at 415V 80KA / 29 x 12.7mm / ASTA 20 Certified

Part Number	Description	Price	Per
MD2	2A	£3.50	1
MD4	4A	£3.50	1
MD6	6A	£3.50	1
MD8	8A	£3.50	1
MD10	10A	£3.50	1
MD16	16A	£3.50	1
MD20	20A	£3.50	1
MD25	25A	£3.50	1
MD32	32A	£3.50	1

TIS BAO SB4 aM

Box Qty 10



Manufactured by Mersen / Lawson

Rated at 415V 80KA

Fixing Centres: 73mm Diameter: 26mm

Part Number	Description	Price	Per
50-002-16/80A	63M80A	£11.80	1
50-002-16/100A	63M100A	£12.20	1

Other values available on request

Motor Rated

NIT NITD SA2 aM

Box Qty 10



Manufactured by Lawson

Rated at 415V 80KA

Fixing Centres: 44.5mm Diameter: 14mm (16mm 32M40-M63A)

Part Number	Description	Price	Per
NIT20M25	20M25A	£3.60	1
NIT20M32	25M32A	£3.60	1
NIT32M40	32M40A	£7.20	1
NIT32M50	32M50A	£7.70	1
NIT32M63	32M63A	£7.70	1

TIS OS OSD aM

Box Qty 10



Manufactured by Lawson

Rated at 415V AC 80KA

Fixing Centres: 73mm Diameter: 26mm

Part Number	Description	Price	Per
TIS100M125	100M125A	£18.30	1

TCP CEO SD5 aM

Box Qty 10



MERSEN

LAWSON
power safe solutions

Manufactured by Mersen / Lawson
Rated at 415V 80KA
Fixing Centres: 94mm Diameter: 35mm

Part Number	Description	Price	Per
50-003-16/125A	100M125A	£19.70	1
50-003-16/160A	100M160A	£20.30	1
50-003-16/200A	100M200A	£21.90	1

TF DD SF aM

Box Qty 3



MERSEN

LAWSON
power safe solutions

Manufactured by Mersen / Lawson
Rated at 415V 80KA
Fixing Centres: 111mm Diameter: 41mm

Part Number	Description	Price	Per
50-009-16/250A	200M250A	£27.85	1
50-009-16/315A	200M315A	£30.10	1

NS NSD SN2 aM

Box Qty 10



MERSEN

LAWSON
power safe solutions

Manufactured by Mersen / Lawson
Rated at 415V AC 80KA
Overall Length: 62mm Diameter 13.5mm (17.5mm 32M40-M63)

Part Number	Description	Price	Per
NS20M25	20M25A	£3.60	1
NS20M32	20M32A	£3.60	1
NS32M40	32M40A	£7.10	1
NS32M50	32M50A	£7.60	1
NS32M63	32M63A	£7.60	1

① 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



MERSEN

LAWSON
power safe solutions

Manufactured by Mersen / Lawson
Rated at 415V 80KA
Fixing Centres: 111mm Diameter: 51mm

Part Number	Description	Price	Per
50-010-16/400A	315M400A	£49.40	1

Semi Conductor Fuses to BS88

LCT GSA

Box Qty 10



Please Note!
GEC part numbers
given are for reference
purposes only - Please
do check with technical
sales for specific cross
references.

SIBA
SICHERUNGEN/FUSES

Manufactured by Siba
Fixing Centres: 38.1mm
8 x 47.6mm 250V

Part Number	Description	Price	Per
50-076-06/5A	5A	£5.80	1
50-076-06/10A	10A	£5.80	1
50-076-06/16A	16A	£5.80	1
50-076-06/20A	20A	£5.80	1

① Indicator kit available on request

TC CD SF5 aM

Box Qty 12



MERSEN

LAWSON
power safe solutions

Manufactured by Mersen / Lawson
Rated at 415V 80KA
Fixing Centres: 111mm Diameter: 35mm

Part Number	Description	Price	Per
50-008-16/125A	100M125A	£19.50	1
50-008-16/160A	100M160A	£20.10	1

LET GSA GSD

Box Qty 10



Manufactured by Siba
Fixing Centres: 41.8mm
17.5 x 58mm 250V

Part Number	Description	Price	Per
50-053-06/16A	16A	£8.50	1
50-053-06/20A	20A	£8.50	1
50-053-06/25A	25A	£8.50	1
50-053-06/32A	32A	£8.50	1
50-053-06/35A	35A	£8.50	1
50-053-06/50A	50A	£8.50	1
50-053-06/63A	63A	£8.50	1
50-053-06/75A	75A	£8.50	1
50-053-06/80A	80A	£8.50	1
50-053-06/100A	100A	£8.95	1
50-053-06/125A	125A	£9.80	1
50-053-06/160A	160A	£9.80	1
50-053-06/180A	180A	£9.80	1
LET-KIT	Trip Indicator & Clips	£10.55	1

① Indicator kit available on request

LMT GSA GSD

Box Qty 2



Manufactured by Siba
Fixing Centres: 60.3mm
34.6 x 85mm 250V

Part Number	Description	Price	Per
50-054-06/200A	200A	£26.30	1
50-054-06/250A	250A	£26.30	1
50-054-06/300A	300A	£29.60	1
50-054-06/350A	350A	£30.40	1
LMT-KIT	Trip Indicator & Clips	£10.90	1

① Indicator kit available on request

listed in
LUCKINSlive™

CT GSB

Box Qty 10



Manufactured by Siba
Fixing Centres: 64mm / 8 x 73mm / 690V

Part Number	Description	Price	Per
50-077-06/10A	10A	£6.75	1
50-077-06/16A	16A	£6.75	1
50-077-06/20A	20A	£6.75	1

① Indicator kit available on request

ET GSGB

Box Qty 10



Manufactured by Siba
Fixing Centres: 63mm / 17.5 x 77mm / 690V

Part Number	Description	Price	Per
50-073-06/16A	16A	£7.95	1
50-073-06/20A	20A	£7.95	1
50-073-06/25A	25A	£7.95	1
50-073-06/32A	32A	£7.95	1
50-073-06/35A	35A	£8.35	1
50-073-06/40A	40A	£9.95	1
50-073-06/45A	45A	£9.95	1
50-073-06/50A	50A	£9.95	1
50-073-06/56A	56A	£10.25	1
50-073-06/63A	63A	£10.25	1
50-073-06/75A	75A	£10.25	1
50-073-06/80A	80A	£10.25	1
50-073-06/100A	100A	£10.70	1
ET-KIT	Trip Indicator & Clips	£11.60	1

① Indicator kit available on request

EET

Box Qty 6



Manufactured by Siba
Fixing Centres 70mm / 690V

Part Number	Description	Price	Per
20-559-20/110A	110A	£19.15	1
20-559-20/125A	125A	£19.15	1
20-559-20/160A	160A	£20.10	1
20-559-20/250A	250A	£22.60	1
20-559-20/315A	315A	£23.80	1

MT GSGB

Box Qty 3



Manufactured by Siba

Fixing Centres: 81.7mm / 34.6 x 107mm / 690V

Part Number	Description	Price	Per
50-074-06/100A	100A	£21.10	1
50-074-06/160A	160A	£21.80	1
50-074-06/180A	180A	£23.00	1
50-074-06/200A	200A	£23.00	1
50-074-06/250A	250A	£28.80	1
MT-KIT	Trip Indicator & Clips	£12.00	1

① Indicator kit available on request

MMT GSGB

Box Qty 1



Manufactured by Siba

Twin Bodied Fuse: Fixing Centres: 81.7mm / 2 x 34.6 x 107mm / 690V

Part Number	Description	Price	Per
50-075-06/200A	200A	£47.70	1
50-075-06/225A	225A	£47.70	1
50-075-06/250A	250A	£47.70	1
50-075-06/300A	300A	£47.70	1
50-075-06/350A	350A	£47.70	1
50-075-06/400A	400A	£51.50	1
50-075-06/450A	450A	£51.50	1
50-075-06/500A	500A	£55.25	1

XS Safe Clip

Box Qty 10



GE Power Controls

Manufactured by GE Power Controls

80 x 26.4mm

Part Number	Description	Price	Per
XS10	10A	£11.62	1
XS20	20A	£13.98	1
XS32	32A	£13.98	1
XS40	40A	£13.98	1
XS50	50A	£13.98	1
XS63	63A	£13.98	1
XS80	80A	£15.09	1
XS100	100A	£16.54	1
XS125	125A	£20.17	1

Solid / Neutral Links for BS88 Fuses

BS88 Compact Dimension Type

Box Qty 10



Manufactured by Lawson

Part Number	Description	Price	Per
SLE120	Solid Link E1 (SS fuse) Rated 20A	£8.00	10
SLF132	Solid Link F1 (NS fuse) Rated 32A	£8.00	10
SLF263	Solid Link F2 (MES fuse) Rated 63A	£17.00	10

BS88 Bolted Type

* Box Qty Shown Below



Manufactured by Lawson

* Box Qty 10: SLA120 / SLA232 / SLA363

* Box Qty 5: SLA4100 / SLB2200

* Box Qty 3: SLB3315 / SLB4400

Part Number	Description	Price	Per
SLA120	Solid Link A1 (NIT fuse) Rated 20A	£1.50	1
SLA232	Solid Link A2 (TIA fuse) Rated 32A	£1.60	1
SLA363	Solid Link A3 (TIS fuse) Rated 63A	£2.00	1
SLA4100	Solid Link A4 (TCP fuse) Rated 100A	£2.20	1
SLA4200	Solid Link A4 (TFP fuse) Rated 200A	£2.80	1
SLB2200	Solid Link B2 (TF fuse) Rated 200A	£2.90	1
SLB3315	Solid Link B3 (TKF fuse) Rated 315A	£3.00	1
SLB4400	Solid Link B4 (TMF fuse) Rated 400A	£6.40	1



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Fuse Holders for BS88 Fuses

① **Colour: Black** - White is available on request.
(Substitute BK with WH on part number. A surcharge of 20% applies)

LBI20 for NIT Fuses (Bolt In) Box Qty 10



*An Extended Range
is available upon request*



Manufactured by Lawson
Bolt In 660 / 690V / Comply with BS88: Part 2 ASTA Certified

Part Number	Description	Price	Per
LBI20FC/BCBK	Front / Back Connected	£10.10	1
LBI20FC/FCBK	Front Connected	£9.20	1

LBI32 for TIA / GTIA Fuses (Bolt In) Box Qty 10

Manufactured by Lawson
Bolt In 660 / 690V / Comply with BS88: Part 2 ASTA Certified

Part Number	Description	Price	Per
LBI32BC/BCBK	Back Connected	£14.10	1
LBI32FC/BCBK	Front / Back Connected	£13.10	1
LBI32FC/FCBK	Front Connected	£12.10	1

LBI63 for TIS Fuses (Bolt In) Box Qty 10

Manufactured by Lawson
Bolt In 660 / 690V / Comply with BS88: Part 2 ASTA Certified

Part Number	Description	Price	Per
LBI63FC/BCBK	Front / Back Connected	£15.70	1
LBI63FC/FCBK	Front Connected	£14.60	1

LBI100 for TCP Fuses (Bolt In) Box Qty 5

Manufactured by Lawson
Bolt In 660 / 690V / Comply with BS88: Part 2 ASTA Certified

Part Number	Description	Price	Per
LBI100BC/BCBK	Back Connected	£30.50	1
LBI100FC/BCBK	Front / Back Connected	£28.50	1
LBI100FC/FCBK	Front Connected	£26.00	1

LBI200 for TF Fuses (Bolt In) Box Qty 2

Manufactured by Lawson
Bolt In 660 / 690V / Comply with BS88: Part 2 ASTA Certified

Part Number	Description	Price	Per
LBI200FC/FCBK	Front Connected	£76.00	1

LCF20 for SS Fuses (Clip Fit) Box Qty 10



*An Extended Range
is available upon request*



Manufactured by Lawson
Clipfit 240 / 415V / ASTA Certified

Part Number	Description	Price	Per
LCF20FC/FCBK	Front Connected	£5.10	1

LCF32 for NS Fuses (Clip Fit) Box Qty 10

Manufactured by Lawson
Clipfit 240 / 415V / ASTA Certified

Part Number	Description	Price	Per
LCF32BC/BCBK	Back Connected	£8.30	1
LCF32FC/BCBK	Front / Back Connected	£6.60	1
LCF32FC/FCBK	Front Connected	£5.10	1

LCF63 for MES Fuses (Clip Fit) Box Qty 10

Manufactured by Lawson
Clipfit 240 / 415V / ASTA Certified

Part Number	Description	Price	Per
LCF63FC/BCBK	Front / Back Connected	£12.30	1
LCF63FC/FCBK	Front Connected	£9.80	1

Domestic Fuses

Plug Top Fuses

Plug Top (BS1362) TDC180 Box Qty 10



Part Number	Description	Price	Per
50-030-04/1A	1A	£58.43	100
50-030-04/2A	2A	£58.43	100
50-030-04/3A	3A	£30.75	100
50-030-04/5A	5A	£30.75	100
50-030-04/7A	7A	£58.43	100
50-030-04/10A	10A	£30.75	100
50-030-04/13A	13A	£30.75	100

For Plugs & Outlet Adaptors to BS646 (TDC17) Box Qty 10



Conforms to BS646 / 5 x 19mm / 250V AC
Breaking Capacity 1000A at 0.6 lagging power factor - 250V

Part Number	Description	Price	Per
BL1	1A	£0.75	1
BL2	2A	£0.75	1
BL3	3A	£0.75	1
BL5	5A	£0.75	1

Consumer Unit Fuses

LA D55 C55 (BS1361/ BS88-3) Box Qty 10



Manufactured by Lawson
6.35 x 23mm 240V

Part Number	Description	Price	Per
LA3	3A	£1.10	1
LA5	5A	£1.10	1

LC D15 C15 (BS1361) Box Qty 10



Manufactured by Lawson
10.32 x 26mm 240V

Part Number	Description	Price	Per
LC5	5A ● Black	£2.10	1
LC10	10A ● Black	£2.10	1
LC15	15A ● Blue	£2.10	1
LC20	20A ● Yellow	£2.10	1

LD C30 (BS1361) Box Qty 10



Manufactured by Lawson
12.7 x 29mm 240V

Part Number	Description	Price	Per
LD6	6A ● Black	£2.40	1
LD10	10A ● Black	£2.40	1
LD16	16A ● Black	£2.40	1
LD20	20A ● Black	£2.40	1
LD25	25A ● Black	£2.40	1
LD30	30A ● Red	£2.40	1

LK C45 LCS (BS1361) Box Qty 10



Manufactured by Lawson
16.67 x 35mm 240V

Part Number	Description	Price	Per
LK35	35A ● Black	£4.80	1
LK45	45A ● Green	£4.80	1

House Service Cut Out Fuses

ME RHF KR85 Box Qty 10



Manufactured by Mersen / Lawson
22.23 x 57mm 415V



Part Number	Description	Price	Per
ME5	5A	£6.50	1
ME10	10A	£6.50	1
ME15	15A	£6.50	1
ME20	20A	£6.50	1
ME30	30A	£6.50	1
ME40	40A	£6.50	1
ME45	45A	£6.50	1
ME50	50A	£6.50	1
ME60	60A	£6.50	1
ME80	80A	£6.50	1
ME100	100A	£6.50	1

ⓘ Can be used with our Single Phase
Switch Fuse on page 19.



MF RHLF LR85 Box Qty 10



Manufactured by Mersen / Lawson
30.16 x 57mm 415V

Part Number	Description	Price	Per
MF50	50A	£8.30	1
MF60	60A	£8.30	1
MF80	80A	£8.30	1
MF100	100A	£8.30	1

① **Slydlock Fuses & Holders** are available on request....



Miniature Fuses

5 x 20mm Miniature Fuses

5 x 20mm (F) Quick Blow Glass

Box Qty 10



Manufactured by Siba
250V



Part Number	Description	Price	Per
70-001-34/0.032A	32mA	£20.20	100
70-001-34/0.05A	50mA	£20.20	100
70-001-34/0.063A	63mA	£20.20	100
70-001-34/0.08A	80mA	£20.20	100
70-001-34/0.125A	125mA	£20.20	100
70-001-34/0.16A	160mA	£20.20	100
70-001-34/0.1A	100mA	£20.20	100
70-001-34/0.25A	250mA	£11.75	100
70-001-34/0.2A	200mA	£11.75	100
70-001-34/0.315A	315mA	£11.75	100
70-001-34/0.4A	400mA	£11.75	100
70-001-34/0.5A	500mA	£11.75	100
70-001-34/0.63A	630mA	£11.75	100
70-001-34/0.8A	800mA	£11.75	100
70-001-34/1A	1A	£11.75	100
70-001-34/1.25A	1.25A	£11.75	100
70-001-34/1.6A	1.6A	£11.75	100
70-001-34/2A	2A	£11.75	100
70-001-34/2.5A	2.5A	£11.75	100
70-001-34/3A	3A	£11.75	100
70-001-34/3.15A	3.15A	£11.75	100
70-001-34/4A	4A	£11.75	100
70-001-34/5A	5A	£11.75	100
70-001-34/6.3A	6.3A	£11.75	100
70-001-34/7A	7A	£11.19	100
70-001-34/8A	8A	£11.75	100
70-001-34/10A	10A	£11.75	100

Many more specialist fuses
are available.

Our X-reference database has over 25,000 entries.
Please call sales for details.

5 x 20mm (M) Medium Blow Glass

Box Qty 10



Manufactured by Siba
250V

Part Number	Description	Price	Per
70-001-02/0.25A	250mA	£27.40	100
70-001-02/0.5A	500mA	£27.40	100
70-001-02/1A	1A	£27.40	100
70-004-02/1.6A	1.6A	£26.10	100
70-004-02/2A	2A	£26.10	100
70-004-02/2.5A	2.5A	£26.10	100
70-004-02/3.15A	3.15A	£26.10	100
70-004-02/4A	4A	£26.10	100
70-004-02/5A	5A	£26.10	100
70-004-02/6.3A	6.3A	£26.10	100
70-004-02/8A	8A	£26.10	100
70-004-02/10A	10A	£26.10	100

① **Other values** available on request

5 x 20mm (T) Slow Blow Glass

Box Qty 10



Manufactured by Siba
250V

Part Number	Description	Price	Per
70-001-35/0.1A	100mA	£21.55	100
70-001-35/0.25A	250mA	£21.55	100
70-001-35/0.315A	315mA	£21.55	100
70-001-35/0.4A	400mA	£21.55	100
70-001-35/0.5A	500mA	£13.10	100
70-001-35/0.63A	630mA	£13.10	100
70-001-35/0.8A	800mA	£13.10	100
70-001-35/1A	1A	£13.10	100
70-001-35/1.25A	1.25A	£13.10	100
70-001-35/1.6A	1.6A	£13.10	100
70-001-35/2A	2A	£13.10	100
70-001-35/2.5A	2.5A	£13.10	100
70-001-35/3.15A	3.15A	£13.10	100
70-001-35/4A	4A	£13.10	100
70-001-35/5A	5A	£13.10	100
70-001-35/6.3A	6.3A	£13.10	100
70-001-35/8A	8A	£13.10	100
70-001-35/10A	10A	£13.10	100
70-001-35/12.5A	12.5A	£26.10	100
70-001-35/16A	16A	£39.20	100

① **Other values** available on request

5 x 20mm (F) Quick Blow Ceramic Box Qty 10



Manufactured by Siba
250V



Part Number	Description	Price	Per
70-007-33/0.25A	250mA	£28.75	100
70-007-33/0.315A	315mA	£28.75	100
70-007-33/0.5A	500mA	£20.25	100
70-007-33/0.63A	630mA	£20.25	100
70-007-33/0.8A	800mA	£20.25	100
70-007-33/1A	1A	£20.25	100
70-007-33/1.25A	1.25A	£20.25	100
70-007-33/1.6A	1.6A	£20.25	100
70-007-33/2.5A	2.5A	£20.25	100
70-007-33/2A	2A	£20.25	100
70-007-33/3.15A	3.15A	£20.25	100
70-007-33/4A	4A	£20.25	100
70-007-33/5A	5A	£20.25	100
70-007-33/6.3A	6.3A	£20.25	100
70-007-33/8A	8A	£20.25	100
70-007-33/10A	10A	£20.25	100
70-007-33/12.5A	12.5A	£20.25	100
70-007-33/16A	16A	£20.25	100

Other values available on request

5 x 20mm (T) Slow Blow Ceramic Box Qty 10



Manufactured by Siba
250V



Part Number	Description	Price	Per
70-007-65/0.25A	250mA	£20.25	100
70-007-65/0.315A	315mA	£20.25	100
70-007-65/0.5A	500mA	£20.25	100
70-007-65/0.8A	800mA	£20.25	100
70-007-65/1A	1A	£20.25	100
70-007-65/1.25A	1.25A	£20.25	100
70-007-65/1.6A	1.6A	£20.25	100
70-007-65/2A	2A	£20.25	100
70-007-65/2.5A	2.5A	£20.25	100
70-007-65/3.15A	3.15A	£20.25	100
70-007-65/4A	4A	£20.25	100
70-007-65/5A	5A	£20.25	100
70-007-65/6.3A	6.3A	£20.25	100
70-007-65/8A	8A	£23.50	100
70-007-65/10A	10A	£23.50	100
70-007-65/12.5A	12.5A	£28.00	100
70-007-65/16A	16A	£28.00	100

Other values available on request

5 x 20mm (FF) Ultra Rapid Ceramic Box Qty 10



Manufactured by Siba
250V



Part Number	Description	Price	Per
70-001-40/0.63A	0.63A	£80.22	100
70-001-40/1A	1A	£94.30	100
70-001-40/1.6A	1.6A	£94.30	100
70-001-40/2A	2A	£94.30	100
70-001-40/3.15A	3.15A	£94.30	100
70-001-40/5A	5A	£94.30	100
70-001-40/6.3A	6.3A	£94.30	100
70-001-40/8A	8A	£94.30	100
70-001-40/10A	10A	£94.30	100

Other values available on request

6 x 32mm Miniature Fuses

6 x 32mm (F) Quick Blow Glass Box Qty 10



Manufactured by Siba
250V



Part Number	Description	Price	Per
70-059-60/0.1A	100mA	£125.00	100
70-059-60/0.25A	250mA	£95.50	100
70-059-60/0.315A	315mA	£25.40	100
70-059-60/0.5A	500mA	£22.20	100
70-059-60/0.63A	630mA	£22.20	100
70-059-60/0.8A	800mA	£22.20	100
70-059-60/1A	1A	£22.20	100
70-059-60/1.25A	1.25A	£22.20	100
70-059-60/1.6A	1.6A	£22.20	100
70-059-60/2A	2A	£22.20	100
70-059-60/2.5A	2.5A	£22.20	100
70-059-60/3.15A	3.15A	£22.20	100
70-059-60/4A	4A	£22.20	100
70-059-60/5A	5A	£22.20	100
70-059-60/6.3A	6.3A	£22.20	100
70-059-60/7A	7A	£22.20	100
70-059-60/8A	8A	£22.20	100
70-059-60/10A	10A	£22.20	100
70-059-60/12.5A	12.5A	£22.20	100
70-059-60/16A	16A	£22.20	100
70-059-60/20A	20A	£22.20	100

Other values available on request

6 x 32mm (T) Slow Blow Glass

Box Qty 10



Manufactured by Siba
250V

Part Number	Description	Price	Per
70-059-61/0.25A	250mA	£83.60	100
70-059-61/0.5A	500mA	£23.50	100
70-059-61/0.63A	630mA	£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

Other values available on request

6 x 32mm (F) Quick Blow Ceramic

Box Qty 10



Manufactured by Siba
500V 250mA -16A / 400V 20-25A

Part Number	Description	Price	Per
70-065-63/0.5A	500mA	£44.40	100
70-065-63/1A	1A	£44.40	100
70-065-63/1.6A	1.6A	£44.40	100
70-065-63/2A	2A	£44.40	100
70-065-63/3A	3A	£44.40	100
70-065-63/4A	4A	£44.40	100
70-065-63/5A	5A	£44.40	100
70-065-63/6.3A	6.3A	£44.40	100
70-065-63/8A	8A	£44.40	100
70-065-63/10A	10A	£44.40	100
70-065-63/12.5A	12.5A	£44.40	100
70-065-63/16A	16A	£44.40	100
70-065-63/20A	20A	£58.80	100
70-065-63/25A	25A	£58.80	100
70-065-63/1.25A	1.25A	£44.40	100

Other values available on request

6 x 32mm (T) Slow Blow Ceramic

Box Qty 10



Manufactured by Siba
500V 500mA-16A / 400V 20-25A / 250V 32A

Part Number	Description	Price	Per
70-065-65/0.5A	500mA	£48.30	100
70-065-65/1A	1A	£48.30	100
70-065-65/1.6A	1.6A	£48.30	100
70-065-65/2.5A	2.5A	£48.30	100
70-065-65/2A	2A	£48.30	100
70-065-65/3A	3A	£46.02	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

Other values available on request

6 x 32mm (FF) Ultra Rapid Ceramic

Box Qty 10



Manufactured by Siba
700V 250mA-2A / 600V 2.5-10A (500V from 12.5A)

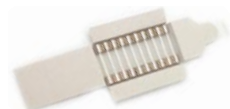
Part Number	Description	Price	Per
70-125-40/0.5A	500mA	£215.50	100
70-125-40/1A	1A	£215.50	100
70-125-40/1.6A	1.6A	£215.50	100
70-125-40/2A	2A	£215.50	100
70-125-40/3.15A	3.15A	£215.50	100
70-125-40/5A	5A	£215.50	100
70-125-40/6.3A	6.3A	£215.50	100
70-125-40/8A	8A	£215.50	100
70-125-40/10A	10A	£215.50	100
70-125-40/12.5A	12.5A	£215.50	100
70-125-40/16A	16A	£215.50	100
70-125-40/20A	20A	£215.50	100

Other values available on request

5 x 25mm Miniature Fuses

5 x 25mm (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	£103.20	100
70-002-34/1.6A	1.6A	£103.20	100
70-002-34/2A	2A	£103.20	100
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	£103.20	100
70-002-34/8A	8A	£103.20	100
70-002-34/10A	10A	£103.20	100

① Other values available on request

5 x 25mm (M) Medium Blow Glass

Box Qty 10



Manufactured by Siba
250V 1.6-10A Sand Filled



Part Number	Description	Price	Per
70-002-02/0.5A	500mA	£156.70	100
70-002-02/1A	1A	£156.70	100
70-005-02/1.6A	1.6A	£156.70	100
70-005-02/2A	2A	£156.70	100
70-005-02/3.15A	3.15A	£156.70	100
70-005-02/4A	4A	£156.70	100
70-005-02/5A	5A	£156.70	100
70-005-02/6.3A	6.3A	£156.70	100
70-005-02/8A	8A	£156.70	100
70-005-02/10A	10A	£156.70	100

① Other values available on request

5 x 25mm (F) Quick Blow Ceramic

Box Qty 10



Manufactured by Siba
250V / with indicator



Part Number	Description	Price	Per
70-010-04/1.6A	1.6A	£199.80	100
70-010-04/2A	2A	£199.80	100
70-010-04/3.15A	3.15A	£199.80	100
70-010-04/4A	4A	£199.80	100
70-010-04/5A	5A	£199.80	100
70-010-04/6.3A	6.3A	£199.80	100
70-010-04/8A	8A	£199.80	100
70-010-04/10A	10A	£199.80	100

5 x 25mm (M) Medium Blow Ceramic Box Qty 10



Manufactured by Siba
250V / with indicator



Part Number	Description	Price	Per
70-010-05/0.25A	250mA	£319.30	100
70-010-05/0.5A	500mA	£319.30	100
70-010-05/1A	1A	£319.30	100
70-010-05/1.6A	1.6A	£205.00	100
70-010-05/2A	2A	£205.00	100
70-010-05/2.5A	2.5A	£205.00	100
70-010-05/3.15A	3.15A	£205.00	100
70-010-05/4A	4A	£205.00	100
70-010-05/5A	5A	£205.00	100
70-010-05/6.3A	6.3A	£205.00	100
70-010-05/10A	10A	£205.00	100
70-010-05/8A	8A	£205.00	100

5 x 30mm Miniature Fuses

5 x 30mm (F) Quick Blow Glass

Box Qty 10



Manufactured by Siba
500V Sand Filled



Part Number	Description	Price	Per
70-003-34/0.5A	500mA	£141.00	100
70-003-34/1A	1A	£141.00	100
70-003-34/1.6A	1.6A	£141.00	100
70-003-34/2A	2A	£141.00	100
70-003-34/3.15A	3.15A	£141.00	100
70-003-34/4A	4A	£141.00	100
70-003-34/5A	5A	£141.00	100
70-003-34/6.3A	6.3A	£141.00	100
70-003-34/10A	10A	£141.00	100
70-003-34/8A	8A	£141.00	100

① Other values available on request

Many more specialist fuses
are available. Please ask....

5 x 30mm (M) Medium Blow Glass Box Qty 10



Manufactured by Siba
500V 1.6-10A Sand Filled



Part Number	Description	Price	Per
70-003-02/0.5A	500mA	£141.00	100
70-003-02/1A	1A	£141.00	100
70-003-02/1.25A	1.25A	£141.00	100
70-006-02/1.6A	1.6A	£143.70	100
70-006-02/2A	2A	£143.70	100
70-006-02/2.5A	2.5A	£143.70	100
70-006-02/3.15A	3.15A	£143.70	100
70-006-02/4A	4A	£143.70	100
70-006-02/5A	5A	£143.70	100
70-006-02/6.3A	6.3A	£143.70	100
70-006-02/8A	8A	£143.70	100
70-006-02/10A	10A	£143.70	100

① Other values available on request

1000V Multi Meter Fuses

6 x 32mm uR 1000V for Multi Meters Box Qty 10



Manufactured by Siba
1000V AC / DC

Part Number	Description	Price	Per
70-172-40/0.315A	315mA	£4.10	1
70-172-40/0.4A	400mA	£4.10	1
70-172-40/0.5A	500mA	£4.10	1
70-172-40/0.8A	800mA	£4.10	1
70-172-40/1A	1A	£4.10	1
70-172-40/1.6A	1.6A	£4.10	1
70-172-40/2A	2A	£4.10	1



10 x 38mm uR 1000V for Multi Meters Box Qty 10



Manufactured by Siba
1000V AC



Part Number	Description	Price	Per
50-199-06/0.44A	440mA	£10.25	1
50-199-06/11A	11A	£10.25	1

Cylindrical Fuses & Accessories

8 x 31mm Cylindrical Fuses

8 x 31mm gL (General Line) Box Qty 10



Manufactured by Ferraz
Rated at 400V 20KA

Part Number	Description	Price	Per
15011	1A	£0.68	1
15013	2A	£0.45	1
15019	4A	£0.45	1
15023	6A	£0.45	1
15031	10A	£0.45	1
15035	16A	£0.45	1
15037	20A	£0.45	1
15039	25A	£0.65	1

① Other values available on request

8 x 31mm aM (Motor Rated) Box Qty 10



Manufactured by Ferraz
Rated at 400V 20KA

Part Number	Description	Price	Per
15511	1A	£0.75	1
15513	2A	£0.65	1
15519	4A	£0.65	1
15523	6A	£0.65	1
15531	10A	£0.65	1

① Other values available on request

10 x 35mm uR 1000V for Multi Meters Box Qty 10



Manufactured by Siba
1000V AC / DC Equivalent to DMM 0.4



Part Number	Description	Price	Per
50-210-06/0.44A	440mA	£6.00	1

8 x 31mm Fuse Holders (Din Rail Mounting)



MERSEN

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
24014	MS 3P	£13.62	1

10 x 38 Cylindrical Fuses

10 x 38mm uR gPV 600V DC Box Qty 10



SIBA
SICHERUNGEN/FUSES

Fuse-links for Photovoltaic Applications
gPV (IEC) / gR (UL) / IEC 60 269-6 / UL 248-13
Rated at 600V DC / Rated Breaking Capacity 30kA

Part Number	Description	Price	Per
50-225-26/10A	10A	£6.30	1
50-225-26/15A	15A	£6.30	1
50-225-26/20A	20A	£6.30	1

10 x 38mm uR gPV 1000V DC Box Qty 10



SIBA
SICHERUNGEN/FUSES

Fuse-links for Photovoltaic Applications
gPV (IEC) / gR (UL) / IEC 60 269-6 / UL 248-13
Rated at 1000V DC / Rated Breaking Capacity 30kA

Part Number	Description	Price	Per
50-215-26/10A	10A	£8.30	1
50-215-26/12A	12A	£8.30	1
50-215-26/15A	15A	£8.30	1
50-215-26/16A	16A	£8.30	1
50-215-26/20A	20A	£8.30	1



DC Boxed
Isolators
Page 45



10 x 38mm gL (General Line)

Box Qty 10



MERSEN

Manufactured by Mersen
Rated at 500V 120KA up to 25A (400V 120KA 32A)

Part Number	Description	Price	Per
16011	1A	£0.82	1
16013	2A	£0.47	1
16019	4A	£0.47	1
16023	6A	£0.47	1
16027	8A	£0.47	1
16031	10A	£0.47	1
16033	12A	£0.60	1
16035	16A	£0.47	1
16037	20A	£0.52	1
16039	25A	£0.52	1
16043	32A	£0.52	1

Other values available on request

10 x 38mm aM (Motor Rated)

Box Qty 10



MERSEN

Manufactured by Ferraz
Rated at 500V 120KA up to 20A (400V 120KA 25A & 32A)

Part Number	Description	Price	Per
16511	1A	£0.87	1
16513	2A	£0.54	1
16519	4A	£0.54	1
16523	6A	£0.54	1
16527	8A	£0.54	1
16531	10A	£0.54	1
16533	12A	£0.54	1
16535	16A	£0.54	1
16537	20A	£0.56	1
16539	25A	£0.56	1
16543	32A	£0.75	1

Other values available on request

With our fuse data base we can cross reference over 25,000 fuses at the touch of a button. Contact sales with any fuse queries for an immediate solution.



10 x 38mm 600V uR (Ultra Rapid)

Box Qty 10



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

① 660V version available on request

10 x 38mm 660V uR (Ultra Rapid)

Box Qty 10



Manufactured by Siba
660V

Part Number	Description	Price	Per
50-179-06/2A	2A	£5.50	1
50-179-06/4A	4A	£5.50	1
50-179-06/6A	6A	£5.50	1
50-179-06/10A	10A	£5.50	1
50-179-06/16A	16A	£5.50	1
50-179-06/20A	20A	£5.50	1
50-179-06/25A	25A	£5.50	1
50-179-06/30A	30A	£5.50	1

10 x 38mm Fuse Holders (Din Rail Mounting)



Manufactured by Mersen
MSC Modular Fuse Base

Part Number	Description	Price	Per
24202	MSC 1P	£3.66	1
24206	MSC 1P + Neutral (single module)	£4.08	1
24212	MSC 2P	£9.37	1
24214	MSC 3P	£13.29	1

10 x 38mm Fuse Holder for uR gPV 1000V DC String Fuses

New Product



Manufactured by Mersen

UL512 / IEC 60947-3 / Din Rail Mounting
17.5mm width / for PV and DC Applications

Part Number	Description	Price	Per
D1009979	Single Module Fuse Holder for 10 x 38mm UR gPV 1000V DC	£6.70	1

14 x 51mm Cylindrical Fuses

14 x 51mm gL (General Line)

Box Qty 10



Manufactured by Mersen

Rated at 690V 80KA up to 25A (500V 120KA 32A & 40A / 400V 120KA 50A)

Part Number	Description	Price	Per
17031	10A	£1.14	1
17035	16A	£1.14	1
17037	20A	£1.14	1
17039	25A	£1.14	1
17043	32A	£1.22	1
17047	40A	£1.22	1
17051	50A	£1.26	1

① Other values available on request

14 x 51mm aM (Motor Rated)

Box Qty 10



Manufactured by Ferraz

Rated at 690V 80KA up to 25A (500V 120KA 32A & 40A / 400V 120KA 50A)

Part Number	Description	Price	Per
17535	16A	£1.14	1
17537	20A	£1.14	1
17539	25A	£1.14	1
17543	32A	£1.28	1
17547	40A	£1.28	1
17551	50A	£1.28	1

① Other values available on request

14 x 51mm 690V (uR) Ultra Rapid (aR) Box Qty 10



Manufactured by Siba

Part Number	Description	Price	Per
50-124-06/4A	4A	£7.00	1
50-124-06/6A	6A	£7.00	1
50-124-06/8A	8A	£7.00	1
50-124-06/10A	10A	£7.00	1
50-124-06/16A	16A	£7.00	1
50-124-06/20A	20A	£7.15	1
50-124-06/25A	25A	£7.15	1
50-124-06/32A	32A	£7.40	1
50-124-06/40A	40A	£7.40	1
50-124-06/50A	50A	£8.00	1

14 x 51mm 690V uR (Ultra Rapid + Striker) Box Qty 10



Manufactured by Siba

Part Number	Description	Price	Per
50-126-06/20A	20A	£11.70	1
50-126-06/25A	25A	£11.70	1
50-126-06/32A	32A	£11.70	1
50-126-06/40A	40A	£11.70	1
50-126-06/50A	50A	£13.45	1

14 x 51mm 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	£29.40	1

22 x 58mm Cylindrical Fuses

22 x 58mm 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	32A	£2.55	1
18047	40A	£2.55	1
18051	50A	£2.55	1
18055	63A	£2.55	1
18059	80A	£2.55	1
18063	100A	£2.78	1
18065	125A	£2.78	1

Other values available on request

22 x 58mm aM (Motor Rated)

Box Qty 10



Manufactured by Mersen

Rated at 690V 80KA up to 80A (500V 120KA 100A / 400V 120KA 125A)

Part Number	Description	Price	Per
18543	32A	£2.55	1
18547	40A	£2.55	1
18551	50A	£2.55	1
18555	63A	£2.88	1
18559	80A	£2.88	1
18563	100A	£2.97	1
18565	125A	£2.97	1

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 x 58mm 690V uR (Ultra Rapid)

Box Qty 10



Manufactured by Siba

Part Number	Description	Price	Per
50-140-06/32A	32A	£9.05	1
50-140-06/40A	40A	£12.45	1
50-140-06/50A	50A	£12.45	1
50-140-06/63A	63A	£12.75	1
50-140-06/80A	80A	£12.75	1
50-140-06/100A	100A	£15.20	1

Neutral Links



Manufactured by Mersen

Part Number	Description	Price	Per
19000	8X31	£0.87	1
19100	10X38	£0.81	1
19200	14X51	£1.21	1
19300	22X58	£2.35	1

Bottle Fuses (D-Type) D01 (E14) gL (Neozed)

22 x 58mm 690V uR (Ultra Rapid + Striker) Box Qty 10



Manufactured by Siba

Part Number	Description	Price	Per
50-142-06/25A	25A	£12.65	1
50-142-06/32A	32A	£12.65	1
50-142-06/40A	40A	£15.20	1
50-142-06/50A	50A	£15.20	1
50-142-06/63A	63A	£16.40	1
50-142-06/80A	80A	£16.40	1
50-142-06/100A	100A	£17.35	1

D01 (E14) gL 11mm x 36mm (Neozed) Box Qty 10



Manufactured by ETI
400V AC / 250V DC

Part Number	Description	Price	Per
D01/2A/GL	2A	£0.72	1
D01/4A/GL	4A	£0.72	1
D01/6A/GL	6A	£0.70	1
D01/10A/GL	10A	£0.67	1
D01/16A/GL	16A	£0.67	1

D02 (E18) gL (Neozed)

22 x 58mm Fuse Holders (Din Rail Mounting)



Manufactured by Mersen

Part Number	Description	Price	Per
29202	MS 1P	£12.95	1
29214	MS 3P	£41.20	1

D02 (E18) gL 15.3mm x 36mm (Neozed) Box Qty 10



Manufactured by ETI
400V AC / 250V DC

Part Number	Description	Price	Per
D02/20A/GL	20A	£0.76	1
D02/25A/GL	25A	£0.76	1
D02/35A/GL	35A	£0.84	1
D02/50A/GL	50A	£1.10	1
D02/63A/GL	63A	£1.10	1

DI ND (E16) gL (Diazed)

DI ND (E16) gL 12.5mm x 50mm (Diazed) Box Qty 10



Manufactured by ETI
500V AC

Part Number	Description	Price	Per
DI/2A/GL	2A	£0.97	1
DI/4A/GL	4A	£0.97	1
DI/6A/GL	6A	£0.97	1
DI/10A/GL	10A	£0.82	1
DI/16A/GL	16A	£0.82	1
DI/20A/GL	20A	£1.03	1
DI/25A/GL	25A	£1.03	1

DIII (E33) gL (Diazed)

DIII (E33) gL 27mm x 50mm (Diazed) Box Qty 5



Manufactured by ETI
500V AC

Part Number	Description	Price	Per
DIII/35A/GL	35A	£1.32	1
DIII/50A/GL	50A	£1.64	1
DIII/63A/GL	63A	£1.64	1

DII (E27) gL (Diazed)

DII (E27) gL 22mm x 50mm (Diazed) Box Qty 5



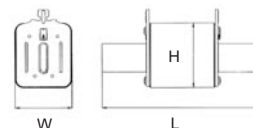
Manufactured by ETI
500V AC

Part Number	Description	Price	Per
DII/2A/GL	2A	£0.78	1
DII/4A/GL	4A	£0.78	1
DII/6A/GL	6A	£0.78	1
DII/10A/GL	10A	£0.57	1
DII/16A/GL	16A	£0.57	1
DII/20A/GL	20A	£0.82	1
DII/25A/GL	25A	£0.82	1

NH Blade Type Fuses

NH Size 00 Blade Type Fuses

NHc00 Compact (000) gL 500V Box Qty 10 or 3



Manufactured by Siba
With Combiindicator
Dimensions: W 20.5 / H 40.5 / L 78

Part Number	Description	Price	Per
20-000-13/6A	6A	£7.94	1
20-000-13/10A	10A	£3.97	1
20-000-13/16A	16A	£3.97	1
20-000-13/20A	20A	£3.97	1
20-000-13/25A	25A	£3.97	1
20-000-13/32A	32A	£3.97	1
20-000-13/35A	35A	£3.97	1
20-000-13/40A	40A	£3.97	1
20-000-13/50A	50A	£3.97	1
20-000-13/63A	63A	£3.97	1
20-000-13/80A	80A	£3.97	1
20-000-13/100A	100A	£3.97	1

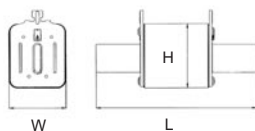


A full range of **ETI** Bases, Gauge
Pieces & Screw Caps are available
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listed in
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NH00 gL (General Line) 500V Box Qty 10 or 3

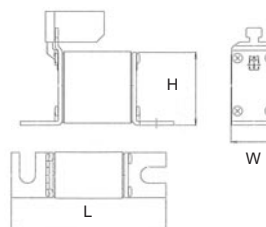


Manufactured by Siba
With Combiindicator
Dimensions: W 29.5 / H 46 / L 78

Part Number	Description	Price	Per
20-001-13/125A	125A	£5.02	1
20-001-13/160A	160A	£5.18	1

NH00 80mm Fixing Centres

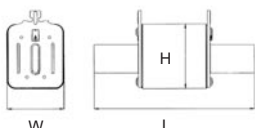
NH00 uR (Ultra Rapid) 690 / 700V Box Qty 3



Manufactured by Siba
Dimensions: W 29.5 / H 39 / L 105

Part Number	Description	Price	Per
20-412-20/35A	35A	£32.30	1
20-412-20/50A	50A	£32.30	1
20-412-20/63A	63A	£32.30	1
20-412-20/80A	80A	£32.30	1
20-412-20/100A	100A	£39.10	1
20-412-20/125A	125A	£39.10	1
20-412-20/160A	160A	£46.50	1
20-412-20/200A	200A	£46.50	1
20-412-20/250A	250A	£56.20	1
20-412-20/315A	315A	£58.70	1

NH000 / NH00 aM (Motor Rated) 690V Box Qty 3



Manufactured by Siba
With Combiindicator
20-477-08 Dimensions: W 20.5 / H 47 / L 78
Other amperages available on request

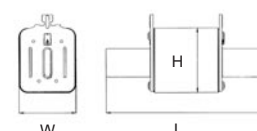
Part Number	Description	Price	Per
20-477-08/35A	35A NH000 aM	£9.35	1
20-477-08/40A	40A NH000 aM	£9.35	1
20-477-08/50A	50A NH000 aM	£9.35	1

20-209-08 Dimensions: W 29.5 / H 47 / L 78

20-209-08/63A	63A NH00 aM	£10.67	1
20-209-08/80A	80A NH00 aM	£10.67	1
20-209-08/100A	100A NH00 aM	£11.50	1
20-209-08/125A	125A NH00 aM	£11.50	1
20-209-08/160A	160A NH00 aM	£12.10	1

NH Size 0 Blade Type Fuses

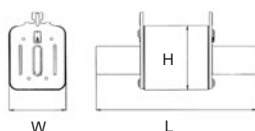
NH0 gL (General Line) 500V Box Qty 3



Manufactured by Siba
With Combiindicator
Dimensions: W 29.5 / H 46 / L 125

Part Number	Description	Price	Per
20-002-13/80A	80A	£8.55	1
20-002-13/100A	100A	£8.55	1
20-002-13/125A	125A	£9.95	1
20-002-13/160A	160A	£9.95	1
20-002-13/200A	200A	£14.72	1

NH00 uR (Ultra Rapid) 500V Box Qty 3



Manufactured by Siba
With Combiindicator
Dimensions: W 28 / H 42 / L 78

Part Number	Description	Price	Per
20-001-04/100A	100A	£21.50	1
20-001-04/125A	125A	£23.30	1
20-001-04/160A	160A	£24.45	1

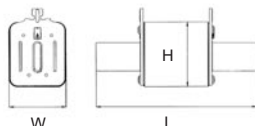


We have an extensive range of square body fuses available, we can also offer a range of DC & High Voltage fuses (up to 36KV). Please contact sales for details.



NH0 aM (Motor rated) 660 / 690V

Box Qty 3

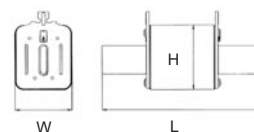


Manufactured by Siba
With Combiindicator
Dimensions: W 29 / H 42 / L 125

Part Number	Description	Price	Per
20-210-08/125A	125A	£14.50	1
20-210-08/160A	160A	£14.60	1

NH1 aM (Motor Rated) 660 / 690V

Box Qty 3



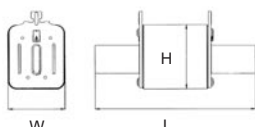
Manufactured by Siba
With Combiindicator / Dimensions: W 29 / H 42 / L 135
Dimensions: 200A + W 42 / H 51.5 / L 150

Part Number	Description	Price	Per
20-211-08/63A	63A	£13.55	1
20-211-08/80A	80A	£13.55	1
20-211-08/100A	100A	£13.55	1
20-211-08/125A	125A	£14.50	1
20-211-08/160A	160A	£14.50	1
20-211-08/200A	200A	£15.25	1
20-211-08/250A	250A	£16.75	1

NH Size 1 Blade Type Fuses

NH1 gL (General Line) 500V

Box Qty 3

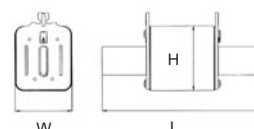


Manufactured by Siba
With Combiindicator
Dimensions: 50A to 160A: W 29.5 / H 46 / L 135
200A to 250A: W 42 / H 51.5 / L 135

Part Number	Description	Price	Per
20-003-13/50A	50A	£9.65	1
20-003-13/63A	63A	£9.65	1
20-003-13/80A	80A	£9.65	1
20-003-13/100A	100A	£9.65	1
20-003-13/125A	125A	£9.65	1
20-003-13/160A	160A	£9.65	1
20-003-13/200A	200A	£10.05	1
20-003-13/224A	224A	£10.05	1
20-003-13/250A	250A	£10.05	1

NH1 uR (Ultra Rapid) 500V

Box Qty 3



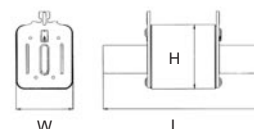
Manufactured by Siba
With Combiindicator / Dimensions: W 29 / H 42 / L 135
Dimensions: 200A + W 42 / H 51.5 / L 135

Part Number	Description	Price	Per
20-003-04/125A	125A	£49.30	1
20-003-04/160A	160A	£53.75	1
20-003-04/200A	200A	£53.75	1
20-003-04/250A	250A	£59.10	1
20-003-04/400A	400A	£85.95	1

NH Size 2 Blade Type Fuses

NH2 gL (General Line) 500V

Box Qty 3



Manufactured by Siba
With Combiindicator / Dimensions: W 53 / H 59 / L 150

Part Number	Description	Price	Per
20-004-13/100A	100A	£12.30	1
20-004-13/125A	125A	£12.30	1
20-004-13/160A	160A	£12.30	1
20-004-13/200A	200A	£12.30	1
20-004-13/250A	250A	£12.30	1
20-004-13/315A	315A	£16.25	1
20-004-13/355A	355A	£16.25	1
20-004-13/400A	400A	£16.25	1

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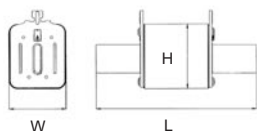
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NH2 aM (Motor Rated) 660 / 690V

Box Qty 3



Manufactured by Siba

With Combiindicator

Dimensions: 250A W 53 / H 59 / L 150

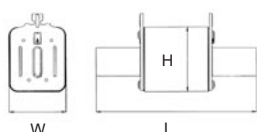
Part Number	Description	Price	Per
20-212-08/250A	250A	£17.50	1
20-212-08/315A	315A	£22.25	1
20-212-08/355A	355A	£22.40	1
20-212-08/400A	400A	£22.50	1

① An Ultra Rapid version is also available

NH Size 3 Blade Type Fuses

NH3 gL (General Line) 500V

Box Qty 3



Manufactured by Siba

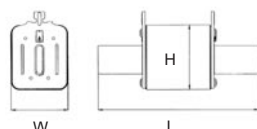
With Combiindicator

Dimensions: W 65 / H 73.5 / L 150

Part Number	Description	Price	Per
20-005-13/500A	500A	£33.90	1
20-005-13/630A	630A	£33.90	1

NH3 aM (Motor Rated) 660 / 690V

Box Qty 3



Manufactured by Siba

With Combiindicator

Dimensions: W 75 / H 75 / L 150

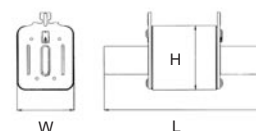
Part Number	Description	Price	Per
20-213-08/500A	500A	£57.40	1
20-213-08/630A	630A	£57.40	1

① An Ultra Rapid version is also available

NH Size 4 Blade Type Fuses

NH4 gL (General Line) 500V

Box Qty 3



Manufactured by Siba

Dimensions: W 102 / H 110 / L 200

Part Number	Description	Price	Per
20-006-13/800A	800A	£104.50	1

NH Blade Type Fuse Holders

Ceramic Fuse Base



Manufactured by Siba

Screw Mounting

Part Number	Description	Price	Per
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



Manufactured by Mersen

Screw & Din Rail Mounting

Part Number	Description	Price	Per
42002	Size 00 1P	£11.27	1
40502KIT	Size 00 3P	£15.50	1
42302	Size 0 1P	£18.37	1
42402	Size 1 1P	£24.52	1
42414	Size 1 3P	£93.48	1

Separator (Size 1 & 2)

Box Qty 2



MERSEN

Manufactured by Mersen

Part Number	Description	Price	Per
44610	Size 1 & 2	£3.60	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

Separating Plate

Box Qty 2



MERSEN

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 Disconnect

NH Fuse Load Switches



MERSEN

Jung

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

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	£3.20	1

Fork Lift Truck Fuse

60mm Enclosed 80V Fork Lift Truck Fuse Box Qty 20



SIBA
SICHERUNGEN/FUSES

Manufactured by Siba

Part Number	Description	Price	Per
90-058-05/35A	35A	£2.40	1
90-058-05/50A	50A	£2.40	1
90-058-05/63A	63A	£2.40	1
90-058-05/80A	80A	£2.40	1
90-058-05/100A	100A	£2.40	1
90-058-05/125A	125A	£2.40	1
90-058-05/160A	160A	£2.40	1
90-058-05/175A	175A	£2.40	1
90-058-05/200A	200A	£2.40	1
90-058-05/225A	225A	£2.40	1
90-058-05/250A	250A	£2.80	1
90-058-05/275A	275A	£2.80	1
90-058-05/300A	300A	£2.80	1
90-058-05/325A	325A	£2.80	1
90-058-05/355A	355A	£2.80	1
90-058-05/375A	375A	£2.80	1
90-058-05/400A	400A	£2.80	1
90-058-05/425A	425A	£2.80	1
90-058-05/500A	500A	£2.80	1

Cover Shield (use with Poly Bases) Box Qty 6



MERSEN

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

American Fuses

Midget Fuses

ATDR

Box Qty 10



merseN

Manufactured by Mersen

Class CC
Time Delay
10.3 x 38mm
200KA IR

Part Number	Description	Price	Per
ATDR1	1A	£13.76	1
ATDR2	2A	£13.76	1
ATDR3	3A	£13.76	1
ATDR4	4A	£13.76	1
ATDR5	5A	£13.76	1
ATDR6	6A	£14.76	1
ATDR10	10A	£13.76	1
ATDR15	15A	£13.76	1
ATDR20	20A	£14.18	1
ATDR25	25A	£14.75	1
ATDR30	30A	£13.76	1

Other values available on request

ATM

Box Qty 10



merseN

Manufactured by Mersen

Fast Acting
10.3 x 38mm
600V AC, 500V DC

Part Number	Description	Price	Per
ATM1/2	1/2A	£8.56	1
ATM1	1A	£8.11	1
ATM2	2A	£8.11	1
ATM3	3A	£8.11	1
ATM4	4A	£8.11	1
ATM5	5A	£8.11	1
ATM6	6A	£7.67	1
ATM10	10A	£8.11	1
ATM15	15A	£8.11	1
ATM20	20A	£7.97	1
ATM30	30A	£7.97	1

Other values available on request

ATMR

Box Qty 10



merseN

Manufactured by Mersen

Class CC
10.3 x 38mm
600V AC 200KA IR

Part Number	Description	Price	Per
ATMR1/4	1/4A	£11.18	1
ATMR1/2	1/2A	£8.90	1
ATMR1	1A	£8.51	1
ATMR2	2A	£8.51	1
ATMR3	3A	£8.51	1
ATMR5	5A	£8.51	1
ATMR6	6A	£8.90	1
ATMR8	8A	£9.10	1
ATMR10	10A	£8.51	1
ATMR12	12A	£8.66	1
ATMR15	15A	£8.51	1
ATMR20	20A	£8.51	1
ATMR25	25A	£9.10	1
ATMR30	30A	£8.51	1

Other values available on request

ATQ

Box Qty 10



merseN

Manufactured by Mersen

Time Delay
10.3 x 38mm
500V AC

Part Number	Description	Price	Per
ATQ1/2	1/2A	£6.60	1
ATQ1	1A	£6.34	1
ATQ2	2A	£6.34	1
ATQ3	3A	£6.34	1
ATQ5	5A	£6.34	1
ATQ6	6A	£6.34	1
ATQ10	10A	£6.34	1
ATQ15	15A	£6.34	1
ATQ20	20A	£6.34	1
ATQ25	25A	£6.34	1
ATQ30	30A	£6.34	1

Other values available on request

ATQR

Box Qty 10



merSEN

Manufactured by Mersen

Class CC / Time Delay / 10.3 x 38mm 200KA IR

Part Number	Description	Price	Per
ATQR1	1A	£9.89	1
ATQR2	2A	£10.05	1
ATQR3	3A	£10.04	1
ATQR4	4A	£10.80	1
ATQR5	5A	£10.04	1
ATQR10	10A	£10.78	1
ATQR20	20A	£10.59	1
ATQR25	25A	£10.59	1

① Other values available on request

Class G

Box Qty 10



merSEN

Manufactured by Mersen

Class G / 480V AC / 100KA IR

Part Number	Description	Price	Per
AG15	15A	£11.27	1
AG20	20A	£12.02	1
AG30	30A	£15.74	1

① Other values available on request

TRM

Box Qty 10



merSEN

Manufactured by Mersen

Time Delay / 10.3 x 38mm / 250V AC

Part Number	Description	Price	Per
TRM1	1A	£4.50	1
TRM2	2A	£4.10	1
TRM5	5A	£4.10	1
TRM6	6A	£4.67	1
TRM10	10A	£4.10	1
TRM12	12A	£4.67	1
TRM15	15A	£4.10	1
TRM20	20A	£4.33	1
TRM30	30A	£4.33	1

① Other values available on request

Power Fuses

Class J

Box Qty 10



merSEN

Manufactured by Mersen

Class J

Time Delay

600V AC

200KA IR

Part Number	Description	Price	Per
AJT10	10A	£16.15	1
AJT15	15A	£16.15	1
AJT20	20A	£16.15	1
AJT30	30A	£16.15	1
AJT50	50A	£27.44	1
AJT100	100A	£56.76	1
AJT200	200A	£113.53	1

① Other values available on request

① American Fuse Comparison Chart

merSEN	Bussmann	Littlefuse
ATM	KTK	KLK
TRM	FNH	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

Comparison Chart for American Semiconductor Fuses

Voltage	Ferraz Shawmut	Bussmann	Littlefuse
150V AC	A13X	KAA/KAH/KAW	L15S
250V AC	A25X	KAB/KAX	L25S
500V AC	A50P	KBH/KLH	L50S
500V AC	A50P	FWH	-
600V AC	A60X	KBC	L60S
700V AC	A70P	FWP	L70S
500V AC	A50QS	XL50F (Brush)	-
700V AC	A70Q	XL70F (Brush)	-
1000V AC	A100P	XL100F (Brush)	-

Look Up Table for Solid / Neutral Links (Type SL)

BS88 Reference (And Fixing Centres)	Catalogue No:	Current Rating	Box Qty	Fixing Centres (mm)	Replaces Fuse Type 415V 660V
BS88 Bolted Type					
A1 (44.5mm)	SLA1	20	10	44.5	NIT SSA1
A2 (73mm)	SLA2	32	10	73	TIA/GTIA SSA2
A3 (73mm)	SLA3	63	10	73	TIA/TIS SSA3
A4 (94mm)	SLA4	100	5	94	TCP SSA4
(As A4) (94mm)	SLA4	200	5	94	TFP SSFP
BS88 Compact Dimension Type					
E1	SLE1	20	10	N/A	SS
F1	SLF1	32	10	N/A	NS
F2	SLF2	63	10	N/A	MES

Comparison Chart for Boltin Fuse Holders

Lawson Reference	Bussmann Hawker	GEC Alsthom	Bill	MEM	Dorman Smith	To Fit Fuse
LBI20FC/FCBK	32NF CM32FC	RS20H	-	20MFB	32NNF	NIT
LBI20FC/BCBK	32NFBS	RS20PH	-	20MFD	32NNFBS	NIT
LBI20BC/BCBK	32NBS	RS20P	-	20MFC	32NNBS	NIT
LBI32FC/FCBK	32AF CM32F	RS32H	-	32MFB	2AF	GTIA/TIA
LBI32FC/BCBK	32AFBS	RS32PH	-	32MFD	32AFBS	GTIA/TIA
LBI32BC/BCBK	32ABS	RS32P	-	32MFC	32ABS	GTIA/TIA
LBI63FC/FCBK	63BF CM63F	RS63H	-	63MFB	63BF	TIS
LBI63FC/BCBK	63BFBS	RS63PH	-	63MFD	63BFBS	TIS
LBI63BC/BCBK	63BBS	RS63P	-	63MFC	63BBS	TIS
LBI100FC/FCBK	100CF CM100F	RS100H	V100FF	100MF	100CF	TCP
LBI100FC/BCBK	100CFBS	RS100PH	V100FB	100CFB	100CFBS	TCP
LBI100BC/BCBK	100CBS	RS100P	V100BB	100MFC	100CBS	TCP
LBI200FC/FCBK	200DF	RS200H	V200FF	200MFB	200DF	TF
LBI200FC/BCBK	200DFBS	RS200PH	V200FB	200MFD	200DFBS	TF
LBI200BC/BCBK	200DBS	RS200P	V200BB	200MFC	200DBS	TF

Comparison Chart for Clipfit Fuse Holders

Lawson Reference	Bussmann Hawker	GEC Alsthom	Bill	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

BS88 Industrial Fuse Comparison Chart with Fixing Centres

Fixing Centres	Rating Amps	BS88 Ref	Europa Order Code	GE Power (GEC)	Lawson	Cooper Bussmann	MEM	Brush
Off Set Tags	-	-	-	-	-	-	-	-
44.5mm	2-32A	A1	50-085-01 Page 75	NIT	NIT	NITD	SA2	F21
73mm	2-32A	A2	50-001-01 Page 75	TIA	TIA	AAO	SB3	HO7
73mm	32-63A	A3	50-002-01 Page 75	TIS	TIS	BAO	SB4	KO7
94mm	80-100A	A4	50-003-01 Page 76	TCP	TCP	CEO	SD5	L14
94mm	125-200A	-	50-004-01 Page 76	TFP	TFP	DEO	SD6	M14
Central Tags	-	-	-	-	-	-	-	-
97mm	40-63A	-	50-006-01 Page 76	TB	TB	BC	SE4	KO8
111mm	6-63A	B1	50-007-01 Page 77	TBC	TBC	AD/BD	SF5	
111mm	80-100A	B1	50-008-01 Page 77	TC	TC	CD	SF5	LO9
111mm	125-200A	B2	50-009-01 Page 77	TF	TF	DD	SF6	MO9
111mm	250-315A	B3	50-010-01 Page 77	TKF	TKF	ED	SF7	NO9
133mm	250-315A	C1	50-011-01 Page 77	TKM	TKM	EFS	SG7	N11
111mm	355-400A	B4	50-110-01 Page 77	TMF	TMF	ED	SF8	PO9
133 / 184mm	355-400A	C1	50-039-01 Page 78	TM	TM	EF	SH8	P11
134 / 184mm	450-630A	C2	50-040-01 Page 78	TTM	TTM	FF	SH9	R11
165 / 229mm	450-630A	-	-	TT	TT	FG	SY9	R12
133 / 184mm	670-800A	C3	50-041-01 Page 78	TLM	TLM	GF	SH10	S11
165 / 229mm	670-800A	-	-	TLT	TLT	GG	SY10	S12

① Technical Specifications for **Boxed 3 & 4 Pole Load break Switches** (excluding Stainless Steel 4 Pole Isolator Switches) **(AC-21)** (See Pages 33-35)

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	100A	125A	
Rated operational voltage Ue											
IEC & EN	Volts	V	690	690	690	690	690	690	690	690	
UL	Volts	V	600	600	600	600	600	600	600	600	
Main switch: Isolating voltage up to	Volts	V	750	750	750	750	750	750	750	750	
Rated impulse withstand voltage Uimp	Volts	kV	6	6	6	6	6	6	6	6	
Rated uniinterrupted current Iu	Amps	A	16	20	25	32	40	63	100	125	
Rated operational current Ie											
IEC & EN	AC-22A	Up to 690V	A	16	20	25	32	40	63	100	125
	AC-21A	Up to 690V	A	20	25	32	40	63	80	100	125
	AC-1	Up to 690V	A	20	25	32	40	63	80	100	125
Rated operational power AC-23A (50-60Hz)											
IEC & EN	3 Phase	220-240V	kW	7.5	7.5	11	15	22	30	44	60
		380 - 440V	kW	15	15	22	22	45	45	90	90
		500 - 690V	kW	15	15	22	22	45	45	90	90
Rated operational power AC-3 (50-60Hz)											
IEC & EN	3 Phase	220-240V	kW	4	5.5	8	11	15	22	37	44
		440V	kW	5.5	11	15	15	30	30	55	55
		690V	kW	11	11	15	15	30	30	55	55
UL Power Rating											
DOL	3 Phase	120V	hp	1.5	1.5	3	3	5	7.5	7.5	7.5
		240V	hp	3	3	7.5	7.5	10	15	20	30
		480V	hp	7.5	7.5	15	20	20	25	30	40
		600V	hp	10	10	20	25	30	30	40	50
	1 Phase	120V	hp	0.5	0.5	1.5	2	3	3	3	3
		240V	hp	1.5	1.5	2	3	5	7.5	7.5	7.5
UL Short Circuit Ratings											
Fuse rating, class J	Amps	A	-	-	45	45	70	70	125	125	
Fuse rating, class RK5	Amps	A	20	20	-	-	-	-	-	-	
Rated Fused short circuit current	Amps	kA	10	10	10	10	10	10	10	10	
Short Circuit Capacity (IEC)											
Max fuse size (Type gl)	Amps	A	20	20	32	32	63	63	125	125	
Rated Fused short circuit current	Amps	kA	5	5	30	30	30	30	30	30	
Terminal Specification											
Single/ Multiple strand wire		Min-mm ²	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	
		Max-mm ²	10	10	10	10	25	25	50	50	
Fine strand with sleeve		Min-mm ²	0.75	0.75	0.75	0.75	2.5	2.5	4	4	
		Max-mm ²	6	6	6	6	10	10	50	50	
American wire gauge		AWG	10	10	10	10	6	6	1	1	
Recommended Tightening Torque		Nm	1.7	1.7	1.7	1.7	2.0	2.0	2.5	2.5	

① Technical Specifications for: **Boxed 6 & 8 Pole Isolator Switches / Boxed 4 Pole Metal/Clad / Boxed Changeover Switches**
Stainless Steel 4 Pole Isolator Switches / Door Interlock and Panel Mount Loadbreak Switches (AC-22) (See Pages 34-40)



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	100A	125A	
Rated operational voltage Ue											
IEC & EN	Volts	V	690	690	690	690	690	690	690	690	
UL	Volts	V	600	600	600	600	600	600	600	600	
Main switch: Isolating voltage up to	Volts	V	750	750	750	750	750	750	750	750	
Rated impulse withstand voltage Uimp	Volts	kV	6	6	6	6	6	6	6	6	
Rated uniinterrupted current Iu	Amps	A	20	25	32	40	63	80	100	125	
Rated operational current Ie											
IEC & EN	AC-22A	Up to 690V	A	20	25	32	40	63	80	100	125
	AC-21A	Up to 690V	A	25	32	40	63	80	80	100	125
	AC-1	Up to 690V	A	25	32	40	63	80	80	100	125
Rated operational power AC-23A (50-60Hz)											
IEC & EN	3 Phase	220-240V	kW	7.5	11	15	22	30	37	44	60
		380 - 440V	kW	15	22	22	45	45	90	90	90
		500 - 690V	kW	15	22	22	45	45	90	90	90
Rated operational power AC-3 (50-60Hz)											
IEC & EN	3 Phase	220-240V	kW	5.5	8	11	15	22	30	37	44
		440V	kW	11	15	15	30	30	55	55	55
		690V	kW	11	15	15	30	30	55	55	55
UL Power Rating											
DOL	3 Phase	120V	hp	1.5	3	3	5	7.5	7.5	7.5	7.5
		240V	hp	3	7.5	7.5	10	15	20	20	30
		480V	hp	7.5	15	20	20	25	30	30	40
		600V	hp	10	20	25	30	30	40	40	50
	1 Phase	120V	hp	0.5	1.5	2	3	3	3	3	3
		240V	hp	1.5	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	20	-	-	-	-	-	-	-	
Rated Fused short circuit current	Amps	kA	10	10	10	10	10	10	10	10	
Short Circuit Capacity (IEC)											
Max fuse size (Type gl)	Amps	A	20	32	32	63	63	125	125	125	
Rated Fused short circuit current	Amps	kA	5	30	30	30	30	30	30	30	
Terminal Specification											
Single/ Multiple strand wire		Min-mm ²	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	
		Max-mm ²	10	10	10	25	25	50	50	50	
Fine strand with sleeve		Min-mm ²	0.75	0.75	0.75	2.5	2.5	4	4	4	
		Max-mm ²	6	6	6	10	10	50	50	50	
American wire gauge		AWG	10	10	10	6	6	1	1	1	
Recommended Tightening Torque		Nm	1.7	1.7	1.7	2.0	2.0	2.5	2.5	2.5	

① Europa Load Break Enclosure / Add on Auxiliary Table

Load Break Enclosure / Switch Size	Potential No. of Additional Auxiliaries
3P Boxed 32-80A	1 Auxiliary
4P Boxed 20-40A	-
4P Boxed 63-80A	1 Auxiliary
4P Boxed 100-125A	-
4P Large Enclosure 25-40A	1 Auxiliary
3P Metal Clad 25-80A	1 Auxiliary
4P Metal Clad 25-125A	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 Auxiliaries (1 either side)
6P Boxed 63-125A	2 Auxiliaries (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	-

See Pages 33-40

① Load Break Switch - Operating Temperatures

Temperature	Derating %	20A	25A	32A	40A	63A	80A	100A	125A
40°C	100%	20A	25A	32A	40A	63A	80A	100A	125A
45°C	95%	19A	24A	30A	38A	60A	76A	95A	119A
50°C	90%	18A	23A	29A	36A	57A	72A	90A	113A
55°C	85%	17A	21A	27A	34A	54A	68A	85A	106A
60°C	80%	16A	20A	26A	32A	50A	64A	80A	100A
65°C	75%	15A	19A	24A	30A	47A	60A	75A	94A
70°C	70%	14A	18A	22A	28A	44A	56A	70A	88A
75°C	65%	13A	16A	21A	26A	41A	52A	65A	81A
80°C	60%	12A	15A	19A	24A	38A	48A	60A	75A

The normal operating temperature range for our switch disconnectors is from -25°C to + 40°C. For higher ambient temperatures of more than + 40°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°C.

① Duty Category Information Table

Current	Category	Typical applications	Relevant IEC Product Standard
AC	AC 1	Non-inductive or slightly inductive loads, resistance furnaces.	947-4
	AC-3	Squirrel-cage motors: Starting, switching off motors during running.	947-3
	AC-15	Control of AC electromagnetic Loads.	947-5-1
	AC-21	Switching of resistive loads, including moderate overloads.	947-3
	AC-22	Switching of mixed resistive & inductive loads.	947-3
	AC-23	Switching of motor loads or other highly inductive loads.	947-3
DC	DC-1	Non-inductive or slightly inductive loads, resistance furnaces.	947-4
	DC-13	Control of DC electromagnets	947-5-1

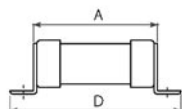
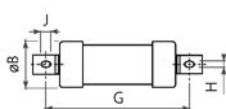
Technical Specifications for Enclosed & Door Interlock Loadbreak Switches 160-800A			Switch Codes (See pages 38 & 41)						
			LB1603PNLME	LB2003PNLME	LB2503PNLME	LB3153PNLME	LB4003PNLME	LB6303PNLME	LB8003PNLME
			LB1603PSNME	LB2003PSNME	LB2503PSNME	LB3153PSNME	LB4003PSNME	LB6303PSNME	LB8003PSNME
Data	Range	Units	LBD1603P	LBD2003P	LBD2503P	LBD3153P	LBD4003P	LBD6303P	LBD8003P
Rated thermal current at 50°C	Amps	A	160	200	250	315	400	630	800
Rated insulation voltage Ui	Volts	V	1000	1000	1000	1000	1000	1000	1000
Rated dielectric strength	Volts	kV	4	4	5	5	5	8	8
Rated impulse voltage Uimp	Volts	kV	8	8	8	8	8	12	12
Rated operational current Ie at 400V AC-22	Amps	A	160	200	250	315	400	630	800
Rated operational current Ie at 400V AC-23	Amps	A	160	160	160	315	400	630	630
Rated operational power Pe at 400V AC-23	Watts	kW	89	89	89	175	222	349	349
Rated breaking capacity	Amps	A	1280	1280	1280	2520	3200	5000	5000
Rated making capacity	Amps	A	1600	16000	1600	3150	4000	6300	6300
Rated short circuit making capacity (peak value) Icm	Amps	kA	13	13	13	20	20	26	26
Rated short-time withstand current (1 sec) rms Icw	Amps	kA	7	7	7	12	12	16	16
Minimum number of mechanical operations	-	Cycles	30,000	30,000	30,000	20,000	20,000	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
Terminal Capacity (rigid copper cable)	-	mm²	95	120	120	185	240	2x240	2x240
Lug bolt size	-	-	-	M10	M10	M10	M10	M10	M10
Maximum size of busbar connection	-	mm	-	5x30	5x30	7x25	7x40	2x5x40	2x5x40

Technical Specifications for Enclosed & Door Interlock Changeover Switches 160-800A			Switch Codes (See pages 39 & 42)						
			LBC1603PSNME	LBC2003PSNME	LBC2503PSNME	LBC3153PSNME	LBC4003PSNME	LBC6303PSNME	LBC8003PSNME
			LBCD1603PSN	LBCD2003PSN	LBCD2503PSN	LBCD3153PSN	LBCD4003PSN	LBCD6303PSN	LBCD8003PSN
Rated thermal Ith current at 40°C	Amps	A	160	200	250	315	400	630	800
Rated insulation voltage Ui	Volts	V	1000	1000	1000	1000	1000	1000	1000
Rated dielectric strength	Volts	kV	4	5	5	6	6	8	8
Rated impulse voltage Uimp	Volts	kV	8	8	8	8	8	12	12
Rated operational current Ie at 400V AC-22	Amps	A	160	200	250	315	400	630	800
Rated operational current Ie at 400V AC-23	Amps	A	160	160	160	200	250	500	630
Rated operational power Pe at 400V AC-23	Watts	kW	89	89	89	100	125	250	315
Rated breaking capacity	Amps	A	1280	1280	1280	1600	2000	4000	4000
Rated making capacity	Amps	A	1600	16000	1600	2000	2500	5000	5000
Rated short circuit making capacity (peak value) Icm	Amps	kA	13	13	13	12	12	20	20
Rated short-time withstand current (1 sec) rms Icw	Amps	kA	7	7	7	8	8	13	13
Minimum number of mechanical operations	-	Cycles	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
Terminal Capacity (rigid copper cable)	-	mm²	120	120	120	240	240	2x240	2x240
Lug bolt size	-	-	M10	M10	M10	M10	M10	M12	M12
Maximum size of busbar connection	-	mm	5x30	5x30	5x30	2x5x30	2x5x30	2x6x45	2x6x45

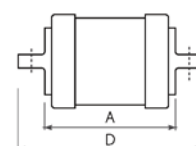
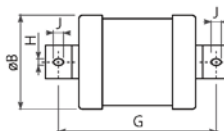
Technical Specifications for Enclosed & Door Interlock Switch Fuses 160-800A			Switch Codes (See pages 38 & 41)					
			LBF1603PNLME	LBF2003PNLME	LBF3153PNLME	LBF4003PNLME	LBF6303PNLME	LBF8003PNLME
			LBF1603PSNME	LBF2003PSNME	LBF3153PSNME	LBF4003PSNME	LBF6303PSNME	LBF8003PSNME
Data	Range	Units	LBFD1603PSN	LBFD2003PSN	LBFD3153PSN	LBFD4003PSN	LBFD6303PSN	LBFD8003PSN
BS88 Fuse size	-	-	A4	B1-B2	B1-B3	B1-B4	C1-C2	C1-C3
Rated thermal current at 40°C	Amps	A	160	200	315	400	630	800
Rated insulation voltage Ui	Volts	V	800	800	1000	1000	1000	1000
Rated dielectric strength	Volts	kV	6	6	8	8	8	8
Rated impulse voltage Uimp	Volts	kV	8	8	12	12	12	12
Rated operational current Ie at 400V AC-22	Amps	A	160	200	315	400	630	800
Rated operational current Ie at 400V AC-23	Amps	A	160	200	315	400	630	630
Rated operational power Pe at 400V AC-23	Watts	kW	90	110	160	220	355	355
Rated breaking capacity	Amps	A	1280	1600	2600	3200	5100	5100
Rated making capacity	Amps	A	1600	2000	3150	4000	6300	6300
Rated short circuit making capacity (peak value) Icm	Amps	kA	100	100	100	100	100	100
Rated short-time withstand current (1 sec) rms Icw	Amps	kA	100	100	100	100	100	100
Minimum number of mechanical operations	-	Cycles	10,000	10,000	10,000	10,000	5,000	5,000
Minimum number of electrical @ 400V AC-23	-	Cycles	1,000	1,000	1,000	1,000	1,000	500
Terminal Capacity (rigid copper cable)	-	mm²	120	120	240	240	2x185	2x240
Lug bolt size	-	-	M8	M8	M10	M10	M12	4xM8
Maximum size of busbar connection	-	mm	5x25	5x25	6x40	6x40	2x7x50	2x7x50

Maximum BS88 Fuse Sizes

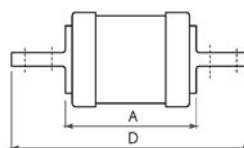
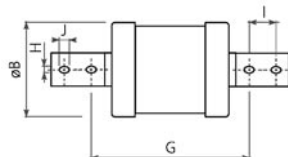
A4 Fuse



B1-B4 Fuse



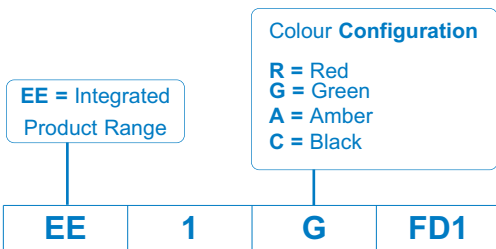
C1-C4 Fuse



Dimensions	A	Ø B	D	G	H	J	L
Fuse	Max	Max	Max	Nom	Nom	Min	Min
A4	70	37	111	94	8,7	9,5	
B1	70	37	138	111	8,7	11	
B2	77	42					
B3							
B4	83	66					
C1	83	66	212	133	10,3	11	25,4
C2	85	77					
C3	89	84				12,5	

New! for 2014 - Integrated 22.5mm Push Buttons and Switches

① Integrated 22.5mm Push Buttons & Switches Part Number Configuration



Contact Configuration

- 1** = 1 NO Contact
- 2** = 1 NC Contact
- 3** = 1 NO + 1NC Contact
- 4** = 2 NO Contacts
- 5** = 2 NC Contacts

Switch Type

- 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)



① Integrated 22.5mm Empty Control Station Dimensions mm



See pages 48-49
for product details

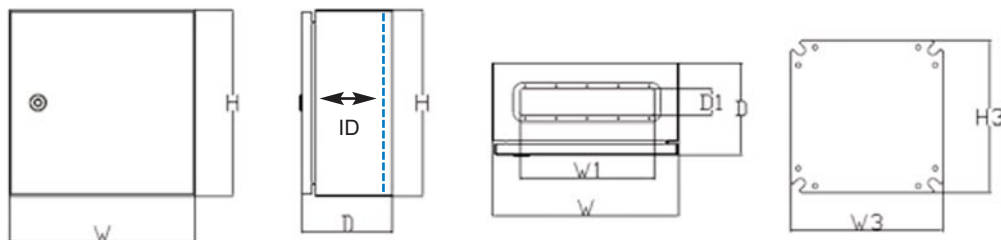
Part Number	Description	Height	Width	Depth
EP1FAA	1 Hole	65	55	53.5
EP2FAA	2 Hole	100		
EP3FAA	3 Hole	134		

❗ Europa Enclosures Dimensions Table - See Pages 27 - 28

Dimensions provided are for guidance purposes only

Part number	External Dimensions			Internal Depth	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	1 Lock, GPTB
STB504025	500	400	250	225	317	120	345	445	1 Lock, GPTB
STB505025	500	500	250	225	415	120	454	450	1 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
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	150	530	730	940	2 locks, 4 Gland Plates (2 top / 2 bottom)
STB1206030	1200	600	300	275	415	120	534	1135	2 locks, 4 Gland Plates (2 top / 2 bottom)
STB1208030	1200	800	300	275	315	120	730	1135	2 locks, 4 Gland Plates (2 top / 2 bottom)
PBE2821013	280	210	130	106			150	230	1 Δ Lock, No Glandplate
PBE332513	330	250	130	108			190	280	1 Δ Lock, No Glandplate
PBE4030016	400	300	165	139			240	350	2 Δ Locks, No Glandplate
PBE403019	400	300	195	165			240	350	2 Δ Locks, No Glandplate
PBE503519	500	350	195	168			288	450	2 Δ Locks, No Glandplate
PBE504017	500	400	175	145			345	340	2 Δ Locks, No Glandplate
PBE604020	600	400	200	170			345	340	2 Δ Locks, No Glandplate
PBE605022	600	500	220	185			445	530	2 Δ Locks, No Glandplate
PBE705024	700	500	245	205			450	630	2 Δ Locks, No Glandplate
PBE806026	800	600	260	225			540	725	3 Δ 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
SSTB806020	800	600	200	180			545	745	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

* key: = back plate



① TC1-D & LC1-F Range Contactor Comparison Chart

TC Contactors	AC3 Amps	AC3 KW 415V	AEG	GE	SPRECHER & SCHUH	ABB	SQUARE 'D'	SIEMENS OLD NO.	LOVATO	SCHNEIDER ELECTRIC	TIAN TECO	MOELLER ELECTRIC
TC1-D09	9.0	4.0	LS4	CL00A310T	CA3-9	A9-30	PD2	3TF30	BF9	LC1-D09	CN6	DIL00M10
TC1-D12	12.0	5.5	LS7	CL01A310T	CA3-12	A12-30	PD3	3TF31	BF12	LC1-D12	CN11	DIL00AM10
TC1-D18	18.0	9	LS17	CL02A310T	CA3-16	A16-30	PE4	3TF32	BF16	LC1-D18	CN16	DIL0M+11DILM
TC1-D25	25.0	11.0	LS27	CL25A310M	CA3-23	A25-30	PE5	3TF33	BF25	LC1-D25	CN18	DIL0AM+11DILM
TC1-D32	32.0	15.0	LS37	CL04A310M	CA3-30	A30-30	PF1	3TF34	BF32	LC1-D32	CN25	DIL1M+11DILM
TC1-D40	40.0	22.0	LS47	CL45A300M	CA3-37	A40-30	-	3TF35	BF38	LC1-D40	CN35	DIL1AM+11DILM
TC1-D50	50.0	25.0	LS47	CL06A311M	-	A50-30	PF3	3TF46	BF50	LC1-D50	CN50	DIL2M+11DILM
TC1-D65	65.0	37.0	LS77	CL07A311M	CA3-60	A63-30	PG3	3TF47	BF65	LC1-D65	CN65	DIL2AM+11DILM
TC1-D80	80.0	45.0	LS107	CL08A311M	CA6-85	A80-30	PJ1	3TF48	BF80	LC1-D80	-	DIL3M-22
TC1-D95	95.0	45.0	LS107	CL08A311M	-	A95-30	PJ1	3TF49	BF95	LC1-D95	CN100	DIL3AM-22
LC1-F115A	115.0	59.0	LS107	CL10A311M	CA1-60	A110-30	PJ3	3TF50	BF115	LC1-F115	CN125	DIL4M-22
LC1-F150A	150.0	80.0	LS177	CK75CA311	CA1-100	EH145-30	PJ5	3TF51	B145	LC1-F150	CN150	DIL4AM-22
LC1-F185A	185.0	100.0	LS177	CK08CA311	CA1-150	EH175-30	PK1	3TF52	B180	LC1-F185	CN180	DIL6M-22
LC1-F225A	225.0	110.0	LS247	CK85BA311	CA1-250	EH250-30	PK3	3TF54	-	LC1-F225	CN220	-
LC1-F265A	265.0	140.0	LS307	CK09BE311	CA1-250	EH250-30	-	3TF55	B250	LC1-F265	CN300	DIL6AM-22
LC1-F330A	330.0	180.0	LS307	CK95BE311	CA1-480	EH250-30	DLS451	3TF55	-	LC1-F330	-	-
LC1-F400A	400.0	200.0	LS407	CK10BE311	CA1-480	EH370-30	DLS451	3TF56	-	LC1-F400	-	DIL8AM-22
LC1-F500A	500.0	220.0	LS507	CK10BE311	CA1-480	EH370-30	DLS451	3TF56	B400	LC1-F500	-	DIL10AM-22
LC1-F630A	630.0	355.0	LS637	CK12BE311	CA1-480	EH700-30	DLS651	3TF68	B630	LC1-F630	-	DIL12AM-44

* This comparison chart is for guidance only and we do not guarantee identical performance for the comparative types shown

① Motor Current Selection Table

Three Phase Motor Approximate Full Load Current at Line Voltage

-	-	-	-	Motor Rating		-
220V	240V	380V	415V	550V	Kw	HP
-	-	-	-	-	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

① Fibox Enclosure External Dimensions See page 27

- Degree of protection: **IP67**
- 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°C to +120°C (Short Term)
 - 40°C to +80°C (Long Term)
- Flammability rating: UL94-5V



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



① Contactor Operating Times

	Closing Times (milliseconds)	Opening Times (milliseconds)
TC1-D09 / D12 / D18	12....22	4....12
TC1-D25 / D32 / D38	15....24	5....19
TC1-D40 / D50 / D65	20....26	8....12
TC1-D80 / D95	20....35	6....20

① 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	5.50-8.00A	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 ① 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

① Contactor & Overload Ratings

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 (resistive load) then an overload upto 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.



① Contactor Coil Look Up Table



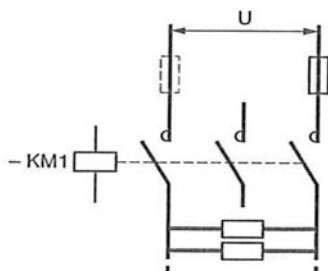
	Volts	12	24	48	72	110	120	125	208	220	230	240	250	277	380	400	415	440	480	575	600
AC	50 Hz		B5	E5		F5				M5	P5	U5			Q5	V5	N5	R5			
	60 Hz		B6	E6		F6	G6		L6	M6		U6		W6	Q6			R6	T6	S6	X6
	50/60 Hz		B7	E7		F7	G7			M7	P7	U7			Q7	V7	N7	R7			
DC		JD	BD	ED	SD	FD		GD		MD			UD					RD			

① The following information is for guidance purposes only!

① Contactor Heating Guides, 9-95A

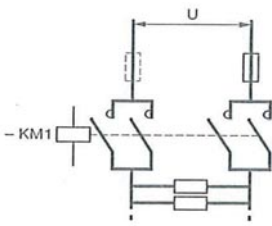
Component Selection according to power switched

The combinations suggested below are given for an ambient temperature of 55°C and for powers at the rated voltage, but they also ensure switching in the event of prolonged overloads at 1.05 Un.

Scheme	Maximum Power (kW)			Contactor Reference
	220 / 240V	380 / 415V	660 / 690V	
Single-Phase 2 Pole Switching 	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**

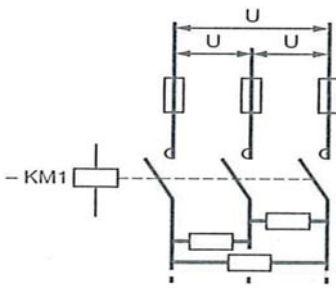
Component Selection according to power switched

The combinations suggested below are given for an ambient temperature of 55°C and for powers at the rated voltage, but they also ensure switching in the event of prolonged overloads at 1.05 Un.

Scheme	Maximum Power (kW)			Contactor Reference
	220 / 240V	380 / 415V	660 / 690V	
Single-Phase 4 Pole Switching 	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°C and for powers at the rated voltage, but they also ensure switching in the event of prolonged overloads at 1.05 Un.

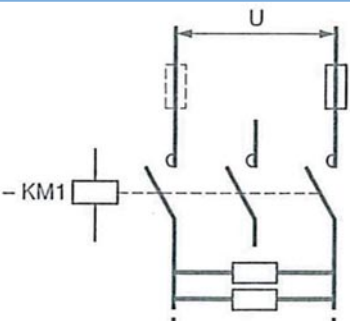
Scheme	Maximum Power (kW)			Contactor Reference
	220 / 240V	380 / 415V	660 / 690V	
3 Phase Switching 	6	11	20.5	TC1-D1210**
	8	15.5	27	TC1-D1810**
	11	19	33	TC1-D2510**
	15	26	44	TC1-D3210**
	19	32	57	TC1-D4011**
	24	41	72	TC1-D6511**
	34	59	105	TC1-D8011**

① Replace ** for the required coil voltage eg: P7 (230V 50/60Hz)

① Contactor Heating Guides, 115-780A

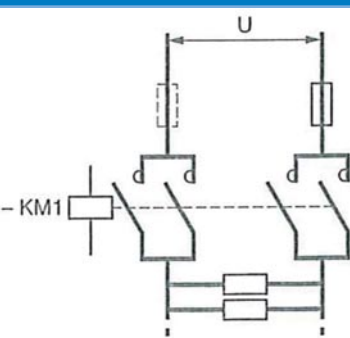
Component Selection according to power switched

The combinations suggested below are given for an ambient temperature of 55°C and for powers at the rated voltage, but they also ensure switching in the event of prolonged overloads at 1.05 Ue.

Scheme	Maximum Power (kW)				Contactor Reference
	220 / 240V	380 / 415V	660 / 690V	1000V	
Single-Phase 2 Pole Switching – KM1 	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

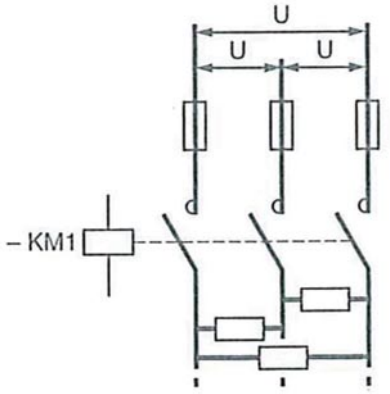
Component Selection according to power switched

The combinations suggested below are given for an ambient temperature of 55°C and for powers at the rated voltage, but they also ensure switching in the event of prolonged overloads at 1.05 Ue.

Scheme	Maximum Power (kW)				Contactor Reference
	220 / 240V	380 / 415V	660 / 690V	1000V	
Single-Phase 4 Pole Switching – KM1 	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°C and for powers at the rated voltage, but they also ensure switching in the event of prolonged overloads at 1.05 Ue.

Scheme	Maximum Power (kW)				Contactor Reference
	220 / 240V	380 / 415V	660 / 690V	1000V	
3 Phase Switching – KM1 	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

The following information is for guidance purposes only and can be effected by the length & cross section of supply cables, type of electronic ballast units and the make of lamp. 

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	-
Max Number Of Lamps According To P (W)	22	14	9	5	2	1	1	40	26	17	9	-	-	-	D09, D12
	27	18	12	6	3	2	1	50	33	22	11	6	-	-	D18
	35	23	15	8	4	2	1	63	42	28	14	8	5	3	D25
	48	32	21	11	6	3	2	86	57	38	20	11	6	4	D32
	61	40	27	14	8	4	3	110	73	49	25	14	8	6	D40
	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	-
Max Number Of Lamps According To P (W)	10	7	5	3	3	3	3	40	30	-	-	-	-	-	D09, D12
	12	9	6	4	4	4	4	50	37	25	-	-	-	-	D18
	15	11	7	6	5	5	5	63	47	31	21	19	15	14	D25
	21	16	10	8	8	7	7	86	65	43	28	26	21	20	D32
	27	20	13	10	10	10	9	110	82	55	36	33	27	25	D40
	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 Size
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			-
Max Number Of Lamps According To P (W)	6	3	2	1	-			-	-	-	-	-			D09, D12
	7	4	3	1	1			17	-	-	-	-			D18
	10	5	3	2	1			22	13	8	-	-			D25
	13	8	5	2	2			30	18	11	6	-			D32
	17	10	6	3	2			39	23	15	8	6			D40
	22	13	8	4	3			50	30	19	10	7			D50, D65
	31	18	12	6	4			71	42	27	15	10			D80

 The values given in the tables are based on an ambient temperature of 55°C. (For 40°C, multiply the number shown by 1.2)
 IB: Value of current drawn by each lamp at its rated operational voltage. / C: Unit capacitance for each lamp. / IB & C correspond to values normally quoted by lamp manufacturers.

Metal Iodine Vapour Lamps															Contactor Size
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)	-	-	-	-				-	-	-	-				-
Max Number Of Lamps According To P (W)	4	3	1	-				-	-	-	-				D09, D12
	6	4	1	-				-	-	-	-				D18
	7	5	2	-				13	9	-	-				D25
	10	7	2	1				18	13	4	-				D32
	13	9	3	1				23	16	6	-				D40
	16	11	4	2				30	21	7	-				D50, D65
	24	16	6	3				42	30	11	5				D80

① Contactor Lighting Guides, 9-95A

Mixed Lighting Lamps						Contactor Size
						TC1- / TP1-
P (W)	100	160	250	500	1000	-
IB (A)	0.45	0.72	1.10	2.3	4.5	-
Max Number Of Lamps According To P (W)	35	22	14	7	3	D09, D12
	46	29	18	9	4	D18
	55	36	23	11	5	D25
	77	48	30	15	7	D32
	97	61	38	19	9	D40
	124	77	49	24	12	D50, D65
	177	111	70	34	17	D80

Incandescent & Halogen lamps										Contactor Size
										TC1- / TP1-
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 Number Of Lamps According To P (W)	59	47	35	23	17	11	7	4	3	D09, D12
	77	61	46	30	23	15	9	6	4	D18
	92	73	55	36	27	18	11	7	5	D25
	129	103	77	51	38	25	15	10	7	D32
	163	129	97	64	48	31	19	13	9	D40
	207	164	124	82	62	40	24	16	12	D50, D65
	296	235	177	117	88	57	34	23	17	D80

Fluorescent Lamps With Starter (Single Fitting)											Contactor Size
											TC1- / TP1-
Non - Corrected						With Parallel Correction					
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 Number Of Lamps According To P (W)	41	35	22	20	13	94	61	38	30	22	D09, D12
	53	46	30	26	17	123	80	50	40	29	D18
	66	57	37	32	21	152	100	61	50	36	D25
	89	77	50	43	29	205	134	83	67	48	D32
	112	97	62	55	36	258	169	104	84	61	D40
	143	124	80	70	46	329	215	133	107	77	D50, D65
	205	177	114	100	66	470	367	190	153	111	D80

Fluorescent Lamps Without Starter (Single Fitting)											Contactor Size
											TC1- / TP1-
Non - Corrected						With Parallel Correction					
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 Number Of Lamps According To P (W)	37	29	20	16	11	84	55	34	28	20	D09, D12
	48	38	26	22	15	110	72	45	36	26	D18
	60	47	32	27	18	136	89	56	45	32	D25
	97	63	43	36	25	184	101	76	61	44	D32
	102	80	55	46	31	231	151	95	77	55	D40
	130	101	70	58	40	294	193	121	98	70	D50, D65
	186	145	100	84	7	421	275	173	140	101	D80

Fluorescent Lamps Without Starter (Dual Fitting)											Contactor Size
											TC1- / TP1-
Non - Corrected						With Series Correction					
P (W)	2 x 20	2 x 40	2 x 65	2 x 80	2 x 110	2 x 20	2 x 40	2 x 65	2 x 80	2 x 110	-
IB (A)	2 x 0.25	2 x 0.47	2 x 0.76	2 x 0.93	2 x 1.3	2 x 0.14	2 x 0.26	2 x 0.43	2 x 0.53	2 x 0.72	-
Max Number Of Lamps According To P (W)	2 x 32	2 x 16	2 x 10	2 x 8	2 x 6	2 x 56	2 x 30	2 x 18	2 x 14	2 x 10	D09, D12
	2 x 42	2 x 22	2 x 12	2 x 10	2 x 8	2 x 74	2 x 40	2 x 24	2 x 18	2 x 14	D18
	2 x 52	2 x 26	2 x 16	2 x 12	2 x 10	2 x 92	2 x 50	2 x 30	2 x 24	2 x 18	D25
	2 x 70	2 x 36	2 x 22	2 x 18	2 x 12	2 x 124	2 x 66	2 x 40	2 x 32	2 x 24	D32
	2 x 88	2 x 46	2 x 28	2 x 22	2 x 16	2 x 156	2 x 84	2 x 50	2 x 40	2 x 30	D40
	2 x 112	2 x 58	2 x 36	2 x 30	2 x 20	2 x 200	2 x 106	2 x 64	2 x 52	2 x 38	D50, D65
	2 x 160	2 x 84	2 x 52	2 x 42	2 x 30	2 x 234	2 x 152	2 x 92	2 x 74	2 x 54	D80

Lamp Type	Lamp Data		Permissible number of lamps per circuit (230V, 50Hz) Contactor type EUC :				Capacitor Load in uF
	Watt	In A	20A	25A	40A	63A	
Incandescent lamps	60	0.26	21	25	54	83	
	100	0.43	13	15	32	50	
	200	0.87	7	7	16	25	
	300	1.30	4	5	11	16	
	500	2.17	3	3	6	10	
	1000	4.35	1	1	3	5	
Fluorescent lamps, p.f. uncorrected & series p.f. correction	15	0.33	25	30	100	155	
	20	0.37	22	26	85	135	
	40	0.43	17	20	65	105	
	58	0.67	10	12	40	65	
	65	0.67	10	12	40	65	
	115	1.5	4	5	18	28	
Lead-lag circuit	140	1.5	4	5	18	28	
	2 x 20	2 x 0.13	2 x 22	2 x 26	2 x 85	20 x 140	
	2 x 40	2 x 0.22	2 x 17	2 x 20	2 x 65	2 x 105	
	2 x 58	2 x 0.32	2 x 10	2 x 12	2 x 40	2 x 65	
	2 x 65	2 x 0.34	2 x 10	2 x 12	2 x 40	2 x 65	
	2 x 115	2 x 0.65	2 x 4	2 x 5	2 x 18	2 x 28	
Parallel p.f. correction	2 x 140	2 x 0.75	2 x 4	2 x 5	2 x 18	2 x 28	
	15	0.11	6	8	16	67	4.5
	20	0.13	6	8	16	67	4.5
	40	0.22	6	8	16	67	4.5
	58	0.32	4	5	10	43	7
	65	0.34	4	5	10	43	7
High-pressure mercur-vapour lamps p.f. uncorrected	115	0.65	1	2	4	17	18
	140	0.75	1	2	4	17	18
	50	0.61	12	14	36	50	
	80	0.8	7	10	27	38	
	125	1.15	5	7	19	26	
	250	2.15	3	4	10	14	
Parallel p.f. correction	400	3.25	1	2	7	10	
	700	5.40	-	1	4	6	
	1000	7.5	-	1	3	4	
	2000 / 400V	8	-	1	3	4	
	50	0.28	4	5	10	43	7
	80	0.41	3	4	8	37	8
Parallel p.f. correction	125	0.65	2	3	6	26	10
	250	1.22	1	2	3	15	18
	400	1.95	-	1	3	10	25
	700	3.45	-	-	1	5	45
	1000	4.8	-	-	1	4	60
	2000 / 400V	5.45	-	1	2	3	35
Lamps with electronic ballast units (EVG)	EVG for Watt		Permissible number of electronic ballast units per circuit (230V, 50 Hz)				
	1 x 18 -		15	24	55	76	
	2 x 18 -		8	18	34	48	
	1 x 36 -		12	16	34	47	
	2 x 36 -		7	11	20	29	
	1 x 58 -		11	14	32	46	
Lamps with electronic ballast units (EVG)	2 x 58 -		6	8	17	24	

Lamp Type	Lamp Data		Permissible number of lamps per circuit (230V, 50Hz) Contactor type EUC :				Capacitor Load in uF
	Watt	In A	20A	25A	40A	63A	
Halogen metal-vapour lamps, p.f. uncorrected	35	0.53	-	10	28	38	
	70	1	-	5	14	20	
	150	1.8	-	3	8	11	
	250	3	-	2	5	7	
	400	3.5	-	1	4	6	
	1000	9.5	-	-	1	2	
Parallel p.f. correction	2000	16.5	-	-	1	1	
	2000 / 3500 / 400V	10.5	-	-	2	2	
		18	-	-	1	1	
		-	-	-	-	-	
	35	0.25	-	5	11	30	6
	70	0.45	-	3	5	18	12
Low-pressure mercury-vapour lamps p.f. uncorrected	150	0.75	-	1	3	9	20
	250	1.5	-	1	2	7	33
	400	2.5	-	1	2	6	35
	1000	5.8	-	-	-	2	95
	2000	11.5	-	-	-	1	148
	2000 / 3500 / 400V	6.6	-	-	1	2	58
Parallel p.f. correction		11.6	-	-	-	1	100
		-	-	-	-	-	
	35	1.5	5	8	22	30	
	55	1.5	5	8	22	30	
	90	2.4	3	5	13	19	
	135	3.5	2	3	10	13	
High-pressure sodium-vapour lamps p.f. uncorrected	150	3.3	2	3	10	14	
	180	3.3	2	3	10	14	
	200	2.3	3	5	14	20	
	35	0.31	-	1	4	15	20
	55	0.42	-	1	4	15	20
	90	0.63	-	1	3	10	30
Parallel p.f. correction	135	0.94	-	-	2	7	45
	150	1.0	-	-	2	8	40
	180	1.16	-	-	2	8	40
	200	1.32	-	1	3	12	25
	150	1.8	-	4	15	20	
	250	3.0	-	3	9	15	
High-pressure sodium-vapour lamps p.f. uncorrected	330	3.7	-	2	8	10	
	400	4.7	-	1	6	8	
	1000	10.3	-	-	3	4	
	150	0.83	-	1	3	15	20
	250	1.5	-	1	2	9	33
	330	2.0	-	-	2	7	40
Parallel p.f. correction	400	2.4	-	-	1	6	48
	1000	6.3	-	-	-	2	106
Transformers for halogen low-volt lamps	Transformers for Watt		Permissible number of transformers per circuit (230V, 50Hz)				
	20		40	52	110	174	
	50		20	24	50	80	
	75		13	16	35	54	
	100		10	12	27	43	
	150		7	9	19	29	
Transformers for halogen low-volt lamps	200		5	6	14	23	
	300		3	4	9	14	

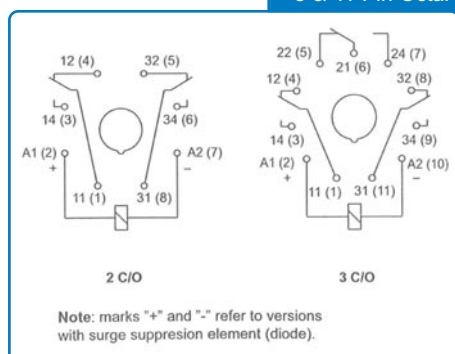
Switching Lamp Loads - the above tables show the number of lamps which can be connected per circuit at 230V / 50Hz. If the specified capacitor load is exceeded, this may result in admissibly high peak inrush currents. Other factors which influence the magnitude of peak inrush currents are as follows:
Length & cross section of supply cables, type of electronic ballast units and the make of lamp.

All information is for guidance purposes only! ①

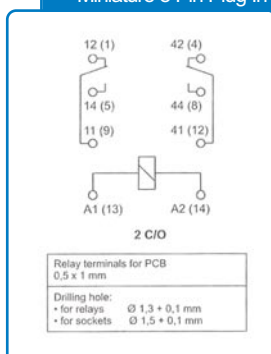
① Relpol Relay Comparison Chart See pages 67-68

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
R11S110A3PDT	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 Industrial 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

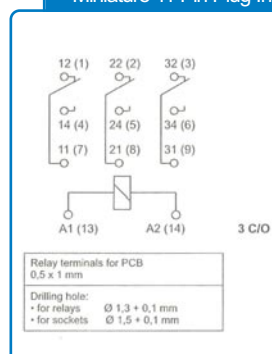
8 & 11 Pin Octal



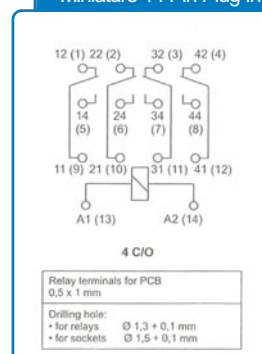
Miniature 8 Pin Plug In



Miniature 11 Pin Plug In



Miniature 14 Pin Plug In





Time Relay 2470001

Programme
settings should be
set before
switching the unit
on!



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.

T - generating the 0.5s 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.

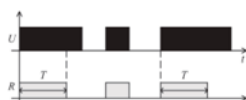
B - Bistable relay leading edge with control contact: Each closing of the control contact S changes the operating relay status to the opposite one (a feature of a bistable relay).

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.

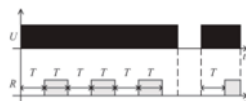
E



Wu



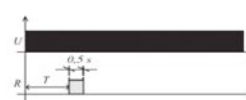
Bp



Bi



T



R



Ws



Wa



Esa



B



Multifunction Time Relay 2470001 See page 24

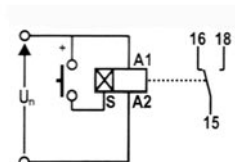
Description of Relay: Multifunction time relay 2470001 (MT-TUA-17S-11-9240)

- 10 time functions
- 8 time ranges
- Cadmium - free contacts
- AC/DC input voltages
- Module width: 17.5mm
- Direct mounting on 35mm din rail in accordance with PN-EN 60715 (wiring: 1 x 2.5mm², 2 x 1.5mm²)
- Application: in low voltage systems
- Compliance with standard PN-EN 61812-1
- Recognition, certification, directives:



2470001 Connection Diagram

Supply voltage:
12.....240V AC/DC
AC: 50/60Hz



2470001 Features

Green LED (U) ON
Indication of supply voltage U

Yellow LED (R)
ON/OFF
Output relay status

Supply terminals (A1, A2)
and control contact
terminal (S)

Time adjusting dial
Coarse time setting

Function adjusting dial

Output terminals
(15, 16, 18)

2470001 Technical Data

Output Circuit - Contact Data

Number and type of contacts	1P / 1CO (Changeover)
Contact material	AgNi
Max. switching voltage	400V AC / 300V DC
Rated Load	AC1: 16A / 250V AC
Min. breaking capacity	0.3W 5V, 5mA

Input Control Circuit

Rated Voltage	12...240V AC/DC AC 50/60 Hz terminals (+) A1 - (-) A2
Overvoltage category	II
Insulation pollution degree	1
Dielectric strength	Input - output: 2 500V AC ^① Contact clearance: 1 000 V AC ^②

General Data

Dimensions (L x W x H)	90 ^③ x 17.5 x 63.5mm (weight: 64g)
Storage / operating temperature	- 40 to + 70°C / - 20 to + 45°C
Cover protection category	IP20 PN-EN 60529

Time Module Data

Functions	E, Wu, Bp, Bi, T, R, Ws, Wa, Esa, B, (ON/OFF ^④)
Time ranges	1s ^⑤ ; 10s; 1 min.; 1 h; 10h; 1 d; 10 d
Setting accuracy	+ 5% ^{⑥ ⑤}
Repeatability	+ 5% ^⑤

- ① Type of insulation: Basic
- ② Type of clearance: micro-disconnection
- ③ Length with 35mm rail taps: 98.8mm
- ④ Permanent switching ON and OFF
- ⑤ For first range set point (1s) setting accuracy and repeatability are smaller than the given ones in technical parameters (significant influence of the operational relay operating time, processor start time, and at the moment of supply switching as referred to the AC supply course).
- ⑥ For the minimum to maximum direction of the time adjust dial.

① Ingress Protection (IP Ratings)

1st Number

Protection Against **Solid Objects**

0

No protection

1

Protection against solid objects over 50mm

2

Protection against solid objects over 12mm

3

Protection against solid objects over 2.5mm

4

Protection against solid objects over 1mm

5

Protection against dust (no harmful deposit)

6

Totally protected against dust

2nd Number

Protection Against **Liquids**

0

No protection

1

Protected against vertically falling drops of water

2

Protected against direct sprays of water up to 15° from the vertical

3

Protected against direct sprays of water up to 60° from the vertical

4

Protected against water sprayed from all directions

5

Protected against low pressure jets of water sprayed from all directions

6

Protected against strong pressure jets of water

7

Protected against immersion in water

8

Protected against long periods of immersion under pressure

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 51](#) 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.

1. **INTERPRETATION**
- 1.1 **Definitions**
- In these Conditions, the following definitions apply:
- Business Day:** a day (other than a Saturday, Sunday or public holiday) when banks in London are open for ordinary business.
- Conditions:** the terms and conditions set out in this document as amended from time to time in accordance with clause 10.6.
- 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 9.
- Goods:** the goods (or any part of them) set out in the Order.
- 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 for the Goods, which has been verified by the Supplier, or which has otherwise been specifically agreed in writing between the Supplier and the Customer, as referred to in clause 2.4.
- Supplier:** Europa Components & Equipment Plc (registered in England and Wales with company number 026461133).
- 1.2 **Construction**
- In these Conditions, the following rules apply:
- (a) A person includes a natural person, corporate or unincorporated body (whether or not having separate legal personality).
- (b) A reference to a party includes its personal representatives, successors or permitted assigns.
- (c) 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 legislation made under that statute or statutory provision, as amended or re-enacted.
- (d) 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.
- (e) A reference to **writing** or **written** includes faxes and e-mails.
2. **BASIS OF CONTRACT**
- 2.1 These Conditions apply to the Contract to the exclusion of any other terms that the Customer seeks to impose or incorporate, or which are implied by trade, custom, practice or course of dealing.
- 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 any relevant Specification which has been specifically agreed in writing between the Supplier and the Customer are complete and accurate.
- 2.3 Unless the Order has been previously rejected by the Supplier, the Contract shall come into existence at, 0900 hours GMT on the second Business Day after the date the Supplier receives the Order (the first such Business Day, being the Business Day after the date of receipt), or, if earlier, 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.
- 2.4 The Customer shall make the same available to the Supplier's carrier for collection, the charge for subsequently collecting the same will be borne by the Customer. If the Goods are collected, and the Supplier subsequently determines that they do not breach the descriptive matter, specification, or advertising issued by the Supplier and any descriptions or illustrations contained in the Supplier's catalogues or brochures are issued or published for the sole purpose of giving an approximate idea of the Goods described in them. They shall not form part of the Contract or any other contract between the Supplier and the Customer for the sale of the Goods. All product information relating to the Goods' description, specification or otherwise, must be verified with the Supplier's sales department before placing the Order, or specifically agreed in writing between the Supplier and the Customer, and specifically set out, or referred to, in the Order. The Supplier may discontinue or replace at any time without notice any Goods which appear in its catalogues or brochures.
- 2.5 A quotation for the Goods given by the Supplier shall not constitute an offer. A quotation shall only be valid for a period of 30 days from its date of issue.
3. **DELIVERY**
- 3.1 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 representative 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.
- 3.3 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 adequate delivery instructions or any other instructions that are relevant to the supply of the Goods and any costs or expenses incurred by the Supplier in respect thereof will be charged to the Customer.
- 3.4 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.
- 3.5 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 not entitle the Customer to cancel any other instalment.
- 3.6 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.
4. **QUALITY**
- 4.1 The Supplier warrants that on delivery and for a period of 12 months from the date of delivery (**warranty period**), the Goods shall:
- (a) conform in all material respects with their description and any applicable Specification; and
- (b) be free from material defects in design, material and workmanship.
- 4.2 Subject to clause 4.3, if:
- (a) 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 period (which in any event must be during the warranty period) after it becomes apparent that some or all of the Goods do not comply with the warranty set out in clause 4.1; and
- (b) the Supplier is given a reasonable opportunity of examining such Goods; and
- (c) 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 Supplier's carrier for collection, the charge for subsequently collecting the same will be borne by the Customer. If 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.
- 4.3 The Supplier shall not be liable for Goods' failure to comply with the warranty set out in clause 4.1, if:
- (a) the Customer makes any further use of such Goods after giving notice in accordance with clause 4.2; or
- (b) 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
- (c) the defect arises as a result of the use of the Goods in any particular design, installation or configuration, unless the Specification clearly states that they are suitable for such use; or
- (d) the Goods are used with incompatible goods or products or outside the permitted tolerances stated in the Specification; or
- (e) the defect arises as a result of the Supplier following any drawing, design or specification supplied by the Customer; or
- (f) the Customer alters or repairs such Goods without the written consent of the Supplier; or
- (g) the defect arises as a result of fair wear and tear, misuse, wilful damage, negligence, or abnormal storage or working conditions.
- 4.4 Except as provided in this clause 4, the Supplier shall have no liability to the Customer in respect of the Goods' failure to comply with the warranty set out in clause 4.1.
- 4.5 Except as set out in these Conditions, all warranties, conditions and other terms implied by statute or common law are, to the fullest extent permitted by law, excluded from the Contract.
- 4.6 These Conditions shall apply to any repaired or replacement Goods supplied by the Supplier.
5. **TITLE AND RISK**
- 5.1 The risk in the Goods shall pass to the Customer on completion of delivery.
- 5.2 Title to the Goods shall not pass to the Customer until the Supplier has received payment in full (in cash or cleared funds) for:
- (a) the Goods; and
- (b) all other sums which are or which become due to the Supplier for sales of the Goods or any other products to the Customer.
- 5.3 Until title to the Goods has passed to the Customer, the Customer shall:
- (a) hold the Goods on a fiduciary basis as the Supplier's bailee;
- (b) store the Goods separately from all other goods held by the Customer so that they remain readily identifiable as the Supplier's property;
- (c) not remove, deface or obscure any identifying mark or packaging on or relating to the Goods;
- (d) maintain the Goods in satisfactory condition and keep them insured against all risks for their full price from the date of delivery;
- (e) notify the Supplier immediately if it becomes subject to any of the events listed in clause 7.2; and
- (f) 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.
- 5.4 If before title to the Goods passes to the Customer the Customer becomes subject to any of the events listed in clause 7.2, or the Supplier reasonably believes that any such event is about to happen and notifies the Customer accordingly, then, provided that the Goods 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**
- 6.1 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 Supplier's 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 are in Pounds Sterling. For the avoidance of any doubt, any relevant settlement discount that has been agreed between the Supplier and the Customer will only apply to the extent that settlement is made by the Customer within the agreed period.
- 6.2 The price of the Goods is exclusive of the costs of transport.
- 6.3 The price of the Goods is exclusive of amounts in respect of value added tax which will be chargeable at the then prevailing rate (**VAT**).
- 6.4 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.
- 6.5 Unless alternative payment arrangements are agreed 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.
- 6.6 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 date until the date of payment in full of the overdue amount, whether before or after judgment. The Customer shall pay the interest together with the overdue amount.
- 6.7 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 withholding 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.
- 6.8 If payment is not made by the Due Date the Supplier may assign the overdue amount.
- 6.9 The Supplier shall be entitled to charge the Customer for any expenses reasonably incurred in connection with the assignment of the Contract (including the preparation of papers, information, and effecting the assignment) to any third party debt collection person pursuant to clause 10.1 and in connection with the recovery of the Debt subject to the provisions of clause 6.5.
7. **CUSTOMER'S INSOLVENCY OR INCAPACITY**
- 7.1 If the Customer becomes subject to any of the events listed 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 Supplier, the Supplier 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.
- 7.2 For the purposes of clause 7.1, the relevant events are:
- (a) 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 its 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
- (b) 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
- (c) (being an individual) the Customer is the subject of a bankruptcy petition or order; or
- (d) a creditor or encumbrancer of the Customer attaches or takes possession of, or a distress, execution, sequestration or other such process is levied or enforced on or sued against, the whole or any part of its assets and such attachment or process is not discharged within 14 days; or
- (e) (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
- (f) a receiver is charged with the management of the assets of the Customer has become entitled to appoint or has appointed an administrative receiver; or
- (g) a person becomes entitled to appoint a receiver over the assets of the Customer or a receiver is appointed over the assets of the Customer; or
- (h) any event occurs, or proceeding is taken, with respect to the Customer in any jurisdiction to which it is subject that has an effect equivalent or similar to any of the events mentioned in clause 7.2(a) to clause 7.2 (g) (inclusive); or
- (i) the Customer suspends, threatens to suspend, ceases or threatens to cease to carry on all or substantially the whole of its business; or
- (j) the financial position of the Customer deteriorates to such an extent that in the opinion of the Supplier the capability of the Customer adequately to fulfil its obligations under the Contract has been placed in jeopardy.
- (k) (being an individual) the Customer dies or, by reason of illness or incapacity (whether mental or physical), is incapable of managing his or her own affairs or becomes a patient under any mental health legislation.
- * 8. **LIMITATION OF LIABILITY**
- 8.1 Nothing in these Conditions shall limit or exclude the Supplier's liability for:
- (a) death or personal injury caused by its negligence, or the negligence of its employees, agents or subcontractors (as applicable); or
- (b) fraud or fraudulent misrepresentation; or
- (c) breach of the terms implied by section 12 of the Sale of Goods Act 1979; or
- (d) defective products under the Consumer Protection Act 1987; or
- (e) any matter in respect of which it would be unlawful for the Supplier to exclude or restrict liability.
- 8.2 Subject to clause 8.1:
- (a) the Supplier shall not be liable to the Customer, whether in contract, tort (including negligence), breach of statutory duty, or otherwise, for any loss of profit or indirect or consequential loss arising under or in connection with the Contract including any losses that may result from a deliberate breach of the Contract by the Supplier's employees, agents or subcontractors; and
- (b) the Supplier's total liability to the Customer in respect of all other losses arising under or in connection with the Contract, whether in contract, tort (including negligence), breach of statutory duty, or otherwise, including losses caused by a deliberate breach of the Contract by the Supplier's employees, agents or subcontractors shall not exceed £5,000,000.
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, war or threat of war, terrorism, sabotage, riot, civil commotion, insurrection, interference by civil or military authorities, requisition, restrictions, regulations, by laws, prohibitions or measures of any kind on the part of any government or authority, import or export regulations or embargoes, national or international calamity, armed conflict, 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, difficulties in obtaining raw materials, labour, fuel or parts of machinery, material breach of contract or other default of suppliers or subcontractors.
10. **GENERAL**
- 10.1 **Assignment and subcontracting**
- (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.
- 10.2 **Notices**
- (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 (if it is a company) or its principal place of business (in any other case) or such other address as that party may have specified to the other party in writing in accordance with this clause, and shall be delivered personally, sent by pre-paid first-class post, recorded delivery, commercial courier, fax or e-mail.
- (b) A notice or other communication shall be deemed to have been received: if delivered personally, when left at the address referred to in clause 10.2(a); if sent by pre-paid first-class post or recorded delivery, at 9.00 am on the second Business Day after posting; if delivered by commercial courier, on the date and at the time that the courier's delivery receipt is signed; or, if sent by fax or e-mail, one Business Day after transmission.
- (c) The provisions of this clause shall not apply to the service of any proceedings or other documents in any legal action.
- 10.3 **Severance**
- (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 provisions of the Contract shall not be affected.
- (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 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 or remedy.
- 10.5 **Third party rights.** A person who is not a party to the Contract shall not have any rights under or in connection with it.
- 10.6 **Variation.** Any variation to the Contract, including the introduction of any additional terms and conditions, shall only be binding when agreed in writing and signed by the Customer and by an authorised representative of the Supplier.
- 10.7 **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 parties irrevocably submit to the exclusive jurisdiction of the courts of England and Wales.

Terms & Conditions

* The customer's attention is drawn in particular to the provisions of clause 8



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