

Powertrack

Powertrack is a comprehensive range of underfloor 63Amp powertrack.

Product information

- ⚡ Each length of track comes complete with pre-assembled coupler, end cap and floor mounting brackets.
- ⚡ Maximum 63Amp rating
- ⚡ Tap-offs are key and colour coded for Standard and CE
- ⚡ Tap-offs are 32Amp rated or fused at 13Amp
- ⚡ Adhesive dust covers protect outlets
- ⚡ Compatible with MT32 pre-wired floor boxes



Powertrack and fittings are independently tested by Intertek

Identification	
Standard	CE
Standard = grey	
CE (Clean Earth) = red	



To calculate powertrack lengths required for different floor layouts refer to table on opposite page.

Powertrack
Standard



code	length	Number of outlets	pitch (mm)	pack
UN1112	1.2m	4	300	2
UN1118	1.8m	6	300	2
UN1114	2.4m	8	300	2
UN1116	3.6m	12	300	2

Powertrack
CE (Clean Earth)



code	length	Number of outlets	pitch (mm)	pack
UN1212	1.2m	4	300	2
UN1218	1.8m	6	300	2
UN1214	2.4m	8	300	2
UN1216	3.6m	12	300	2

Standard
Rated current 63Amp



Low Noise (CE)
Rated current 63Amp



Feed unit	Interlink	Interlink	Tap-off units	Tap-off units	Tap-off units	Tap-off units
Female	Length 1.2m	Length 2.4m	Unfused 32Amp	Fused 13Amp	Unfused 32Amp	Fused 13Amp
Pack 1	Pack 1	Pack 1	Length 3m	Length 3m	Length 5m	Length 5m
			Pack 1	Pack 1	Pack 1	Pack 1
						
UN3100	UN5102	UN5104	UN7113	UN7123	UN7115	UN7125
UN3200	UN5202	UN5204	UN7213	UN7223	UN7215	UN7225

Other configurations of tap-off units including fuse options are available on request.

All tap-off units comply with 17th Edition Wiring Regulations Section 543 (High Integrity Earthing).

Mark 1 to Mark 2 Interlink
(for connecting our old style Mark 1 system to this new system).

code	description	length	pack
UN5192	Std Mk1 to Mk2	1.2m	1
UN5292	CE Mk1 to Mk2	1.2m	1
UN5194	Std Mk1 to Mk2	2.4m	1
UN5294	CE Mk1 to Mk2	2.4m	1

When using a Mark 1 to Mark 2 Interlink the system will only comply to the Mark 1 specification, BS EN 60439-1:1999 & BS EN 60439-2:2000

Powertrack – run length component chart

To determine the number and size of track required for a given area, select your total run length (in metres) from the left hand column, then find the correct track combinations along that row.

Total run in metres	Track lengths required			
3.6	3.6			
4.2	1.8	2.4		
4.8	2.4	2.4		
5.4	3.6	1.8		
6.0	3.6	2.4		
6.6	2.4	2.4	1.8	
7.2	3.6	3.6		
7.8	3.6	2.4	1.8	
8.4	3.6	3.6	1.2	
9.0	3.6	3.6	1.8	
9.6	3.6	3.6	2.4	
10.2	3.6	3.6	1.8	1.2
10.8	3.6	3.6	3.6	
11.4	3.6	3.6	2.4	1.8
12.0	3.6	3.6	3.6	1.2

Total run in metres	Track lengths required					
12.6	3.6	3.6	3.6	1.8		
13.2	3.6	3.6	3.6	2.4		
13.8	3.6	3.6	3.6	1.8	1.2	
14.4	3.6	3.6	3.6	3.6		
15.0	3.6	3.6	3.6	2.4	1.8	
15.6	3.6	3.6	3.6	3.6	1.2	
16.2	3.6	3.6	3.6	3.6	1.8	
16.8	3.6	3.6	3.6	3.6	2.4	
17.4	3.6	3.6	3.6	3.6	1.8	1.2
18.0	3.6	3.6	3.6	3.6	3.6	
18.6	3.6	3.6	3.6	3.6	2.4	1.8
19.2	3.6	3.6	3.6	3.6	3.6	1.2
19.8	3.6	3.6	3.6	3.6	3.6	1.8
20.4	3.6	3.6	3.6	3.6	3.6	2.4

Technical Information

Powertrack

Powertrack is an underfloor busbar system rated at 63Amp maximum. It is available in Standard or CE (Clean Earth) versions.

Lengths

- Powertrack lengths of 1.2m, 1.8m, 2.4m and 3.6m with tap-off outlets at 300mm

Safety

- Snap-fit feed units, couplers and tap-offs are key and colour-coded to avoid assembly errors.



Standard = grey



CE = red

- A shutter is operated on insertion to prevent accidental contact.
- Avoid exceeding the maximum power rating of the track. This is ascertained by the maximum power requirement for each floor outlet box

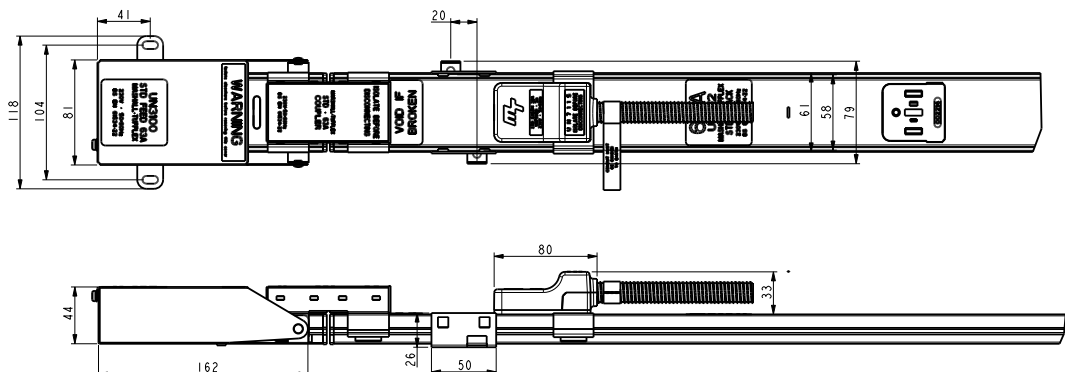
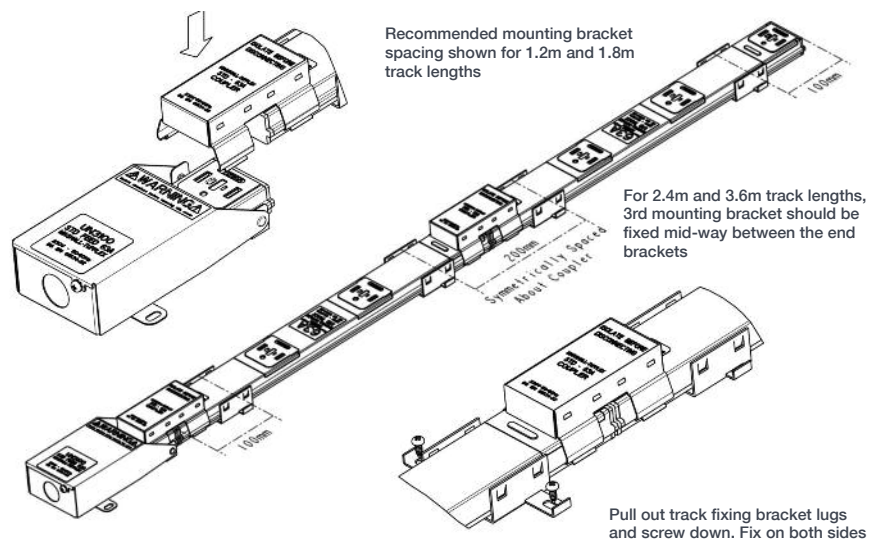
Positioning

- For the most economic format, it is advised that Powertrack is arranged in parallel runs with powertrack feed units orientated to the incoming supply.
- For optimum layout flexibility, spacing should be a maximum of 5.5m between each length of track and 2.5m from the perimeter when using a standard 3m tap-off to a floor box.

Installation

- Lay out track lengths and feed unit as required to suit final assembly
- Position and secure the feed unit in place
- Carefully engage the first track length on to the feed unit socket
- Ensure the clip action is secure at the coupler and unit feed also that alignment is correct in laying the track length to the floor
- Secure the track length in place along its length at recommended spacing shown below using the brackets provided
- Additional track lengths can now be placed as below.
- Ensure the assembly is secure and prepare to make electrical connections

Please refer to the full installation instructions, EL182 available at www.marshall-tufflex.com or by contacting the Technical Team on 01424 856688.



Electrical Characteristics			
Rated Current		63	Amps
Rated Voltage		230	Volts
Frequency		50/60	Hz
Conditional Short Circuit Rating	(Protection device:BS1361 fuse)	16	KA
Conductor Resistance Line & Neutral		4.4	mΩ/m
Volt Drops Line & Neutral	Powertrack	4.4	mV/A/m
	Feed Unit + Coupler	2.2	mv/A
	Tap-Off	0.73	mV/A
	4mm ² Cable	11.0	mV/A/m
	Coupler	1.5	mV/A
	Interlink Unit	4.5	mV/A
	16mm ² Cable (1.2m)	3.9	mV/A/m
	Line to Earth (Casing)	2.8	mΩ/m
Earth Fault Loop Impedance:	Line to Earth (Conductor)	3.2	mΩ/m
	Line to Earth (Conductor + Casing)	2.8	mΩ/m
	Feed Unit + Coupler	2.2	mΩ
	Tap-Off	0.73	mΩ
	4mm ² Cable	11.0	mΩ/m
	Coupler	1.5	mΩ
	Interlink Unit	4.5	mΩ
	16mm ² Cable	3.9	mΩ/m
Mechanical Data			
Number of Copper Conductors		2 or 3	
Conductor Cross-section Area	Nominal	20	mm ²
Powertrack Casing Copper Equivalent	(Where casing is protective Earth)	12	mm ²
Cable Termination Capacity		16	mm ²
Tap-Off Cable 32A		4.0	mm ²
Tap-Off Cable 13A or 16A		4.0	mm ²
Tap-Off Conduit Sizes	Rating: Heavy duty conduit as per BS EN 61386-1:2008	Ø20	mm
Flexible Interlink Cable		16	mm ²
Flexible Interlink Conduit		Ø25	mm
Feed Conduit Entry		1 x Ø25	mm
IP Rating		40	
Minimum void depth (track + tap-off)		59	mm
Materials specification			
Powertrack Casing	Galvanised Steel		
Conductors	High Conductivity Copper/brass		
Powertrack Insulators	PBT		
Sockets/Tap-Off Plug/Joint Mouldings	Polycarbonate		
Shutter	PBT		
Tap-Off/Interlink Flexible Conduit	Galvanised Steel		
Tap-Off Cable	BASEC BS6004 H07V-R		
Tap-Off/Coupler Blade	Copper		
Feed Unit Case	Galvanised Steel		
Flexible Interlink Cable	BASEC BS6004 H07V-R		
Feed/Flexible Interlink Housing	Galvanised Steel		

Technical Specifications

Third party certified and tested to comply with:
BS EN 61534-1: 2011
BS EN 61534-22: 2009
BS 5733: 1995 where applicable.
Marshall-Tufflex is registered by BSI to BS EN ISO9001: 2008
MT Powertrack is designed to comply with the requirements of BS 7671: 2008 (IEE Wiring Regulations).

ASTA Type Test Certification
Powertrack is independently tested by Intertek to BS EN 61534-22:2009 clauses 15.4,18.4.3.2, & 18.4.3.3

Regulation 543.7 Installations to BS 7671:2008 Earthing requirements for the installation of equipment having high protective/ conductor currents.

The scope of Reg. 543.7.1.103 requires that every final circuit intended to supply one or more items of equipment, where the total protective conductor current is likely to exceed 10mA. in normal use, shall have a high protective connection. All MT Powertrack tap-off units conform to the high integrity protective requirement by virtue of using a protective conductor of 4mm² enclosed within a flexible conduit, thus providing additional protection against mechanical damage. Regulation 543.7.1.103.

32Amp 3 metre tap-off unit

The 32Amp tap-off unit comprises of an unfused tap-off* a flexible metal conduit with integral 4mm² conductors. These units are designed to comply with regulation 434.2.1(i) of BS 7671:2008 by virtue of the following:

- 1 Maximum length of cable is <3 metres.
- 2 Minimum risk of faults as the item is factory assembled and fully tested.
- 3 Fully protected by flexible steel conduit located within raised access floor that offers further protection.

*Fused 3 metre tap-offs are available if required.

5 metre tap-off unit

Tap-off units in excess of 3 metres should only be used if they contain a fuse or the powertrack is protected by a 32Amp rated protective device.