

Powertrack

Please refer to the full installation instructions, EL182 available at www.marshall-tufflex.com or by contacting the Technical Team on +44 (0)1424 856688.

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

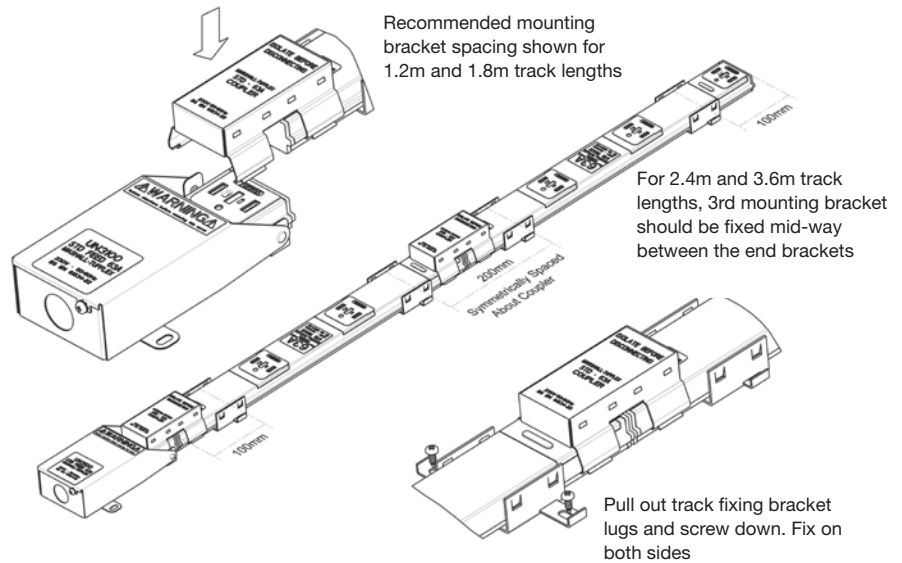
- Snap-fit feed units, couplers and tap-offs are key and colour-coded to avoid assembly errors.



Standard = grey



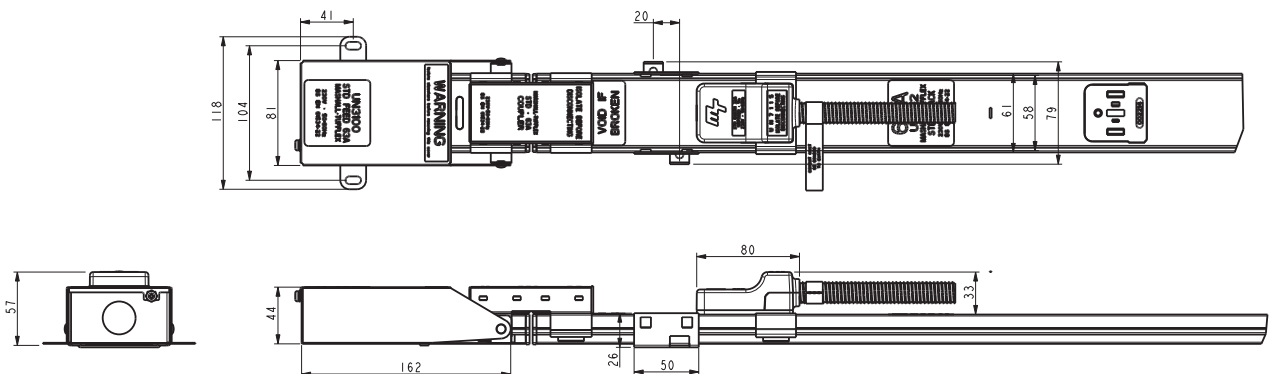
CE = red



- 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.



Electrical Characteristics				
Rated Current		63	Amps	
Rated Voltage		230	Volts	
Frequency		50/60	Hz	
Conditional Short Circuit Rating	(Protection device: BS 1361 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	
	Earth Fault Loop Impedance:	Line to Earth (Casing)	2.8	mΩ/m
		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 <1KN Tensile Load to BS EN 61386-23	Ø20	mm	
Flexible Interlink Cable		16	mm ²	
Flexible Interlink Conduit	Rating: Heavy duty conduit <1KN Tensile Load to BS EN 61386-23	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 BS 6004 H07V-R			
Tap-Off/Coupler Blade	Copper			
Feed Unit Case	Galvanised Steel			
Flexible Interlink Cable	BASEC BS 6004 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 ISO 9001: 2008

MT Powertrack is designed to comply with the current version of the BS 7671 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 7671:2018 Earthing requirements for the installation of equipment having High Protective Conductor currents.

The scope of Reg. 543.7.1.203 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 543.7.1.203.

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 BS7671:2018 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.