



# Betrak® underfloor busbar

Electrical Characteristics				
Rated Current		63	Amps	
Rated Voltage		240/415	Volts	
Frequency		50	Hz	
Conditional Short Circuit Rating	(Protection device Bs88 fuse)	16	KA	
Max withstand current		10 kA Peak		
Short time withstand current		1200A for 0.4 Sec		
Volt Drops (Line & Neutral)	Busbars	3.2	mV/A/m	
	Feed Unit	0.4	mV/A	
	Track Coupler	0.6	mV/A/m	
	Tap off Connection	0.5	mV/A	
	+4mm <sup>2</sup> Cable	11.00	mV/A/m	
	+2.5mm <sup>2</sup>	18.00	mV/A/m	
	Flexible Corner Unit	3.6	mV/A	
	+10mm <sup>2</sup> Cable (1.2m)	4.7	mV/A/m	
	Earth Fault Loop Impedance	Line to Earth (Housing)	3.0	mΩ/m
		Line to Earth (Bar)	3.2	mΩ/m
Line to Earth (Bar + Housing)		2.5	mΩ/m	
Feed Unit		0.8	mΩ	
Track Coupler		0.6	mΩ	
Tap off Connection		0.6	mΩ	
+4m <sup>2</sup> Cable		11.0	mΩ/m	
+2.5mm <sup>2</sup> & 4mm <sup>2</sup> Cable		14.5	mΩ/m	
Flexible Corner Unit		4.0	mΩ	
+10mm <sup>2</sup> Cable		4.7	mΩ/m	

Mechanical Data			
Number of Copper Conductors		2, 3, or 5	
Busbar Cross-section Area		14	mm <sup>2</sup>
Betrak® Basing Copper Equivalent (Where casing is protective Earth)		14	mm <sup>2</sup>
Cable Termination Capacity		16	mm <sup>2</sup>
Tap off Cable 32Amp (BS 7211)		4.0	mm <sup>2</sup>
Tap off Cable 13Amp fused (BS 7211)		2.5	mm <sup>2</sup>
Tap off Conduit Sizes		Ø16 or Ø20	mm
Flexible Corner Unit Cable (BS 7211)		10	mm <sup>2</sup>
Flexible Interlink Conduit		Ø25	mm
Feed Conduit Entry		1 or 2 x Ø25	mm
IP Rating BS EN 60529		4X	
Minimum void depth (track + tap off)		59	mm

Material Specification	
Betrak® Casing	Galvanised Steel
Busbars	High Conductivity Copper
Busbar Insulators & Coupling Mould	Flame Retardant Polycarbonate
Couple Contacts	Copper
Feed Unit Terminals	Brass Silver Plated
Tap off Socket & Plug Mouldings	Flame Retardant Polycarbonate
Tap off Shutter	Polyester
Tap off Plug Ins	Brass
Tap off Cable	LSOH BS 7211
Flexible Corner Cable	Tri Rated BS 6231

Ambient Temperature Control Factors					
Temperature	25C	30C	35C	40C	50C
Factor	1.13	1.07	1.0	0.93	0.75

Betrak product has been independently tested to comply with BS EN 60439-2 2000 & IEC 60439-2: 2000. The product is designed to conform to BS EN 61534-22.

distribution  
**power**