

Busplugs

Introduction:

Busplugs provide an Off-Load link that is disconnectable between the Busbar System and the short circuit protection device.

Advantages of Busplugs:

- Busplugs provide a positive means of isolating, allowing for maintenance and repairs to be safely carried out on a withdrawn unit, even with the power still on.
- Completely withdrawable units provide for visible confirmation that the circuit has been isolated.
- Streamlines the changes made to drives and feeders while the switchboard is being constructed.
- Less labour intensive compared to making solid bolt on connections.
- Withdrawable units can be assembled and tested separately from the switchboard and then fitted at a later stage.
- Less labour intensive when changes are required on site, ensuring quick removal and replacement.

Material Construction:

Contacts are made from high conductivity copper, that is press formed into an integral one piece design which allows for a consistent point of contact onto the Busbars.

Copper contacts are silver plated.

Housings are made from 25% glass filled flame retardant Nylon. Glow wire test reports are available.

Each phase is fully segregated due to the innovative design.

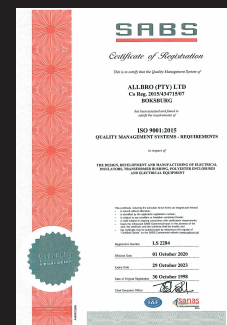
Standards and Type Tests

AS/NZ61439.1:2016 (IEC 61439-1) Low Voltage Switchgear and Control gear Assemblies.

The standards require various type tests which include:

- Glow wire test to 960°C
- Short circuit (ICC)
- Mechanical endurance
- Temperature rise
- Dielectric tests
- Clearance and creepage distances
- * Tests Reports are available on request.

Quality ISO 9001:2015



Material Properties:

The Busplug housings are injection moulded from Glass Filled Nylon.

Properties	Units	Method	Results
Density	g./cm ³	ISO 1183	1,36
Water Absorption (23°C-50% RH 24 hrs saturation)	%	ISO 62	1,00
Mold Shrinkage	%	ISO 2577	0,3-0,5
Tensile Strength	MPa	ISO 527	160
Elongation at Break	%	ISO 527	3
Flexural Strength	MPa	ISO 178	230
Flexural Modulus	MPa	ISO 178	8800
IZOD (Notched 23°C)	J/m	ISO 180/1A	140
HDT A (1.82 MPa)	°C	ISO 75	210
VICAT B50 (49 N)	°C	ISO 306	220
UL94 Flammability (1.5mm)	Rating	UL94	V0
Limit Temperature (20.000H)	°C	IEC216	105
Glow Wire Test (2mm)	°C	IEC 695-2-1	960
CTI	V	IEC 112	500
Dielectric Strength	KV/mm	IEC 243-1	20

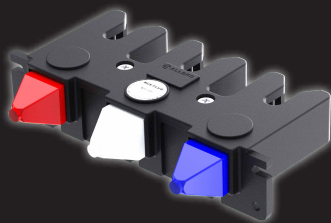
Busplugs for 6.35mm Busbars

Part Number	Description	Rating	Poles	Connection Type	
BP3-63i	BusPlug Connector 3PH 63A Internal	63A	3P	Internal	
BP3-63e	BusPlug Connector 3PH 63A External			External	
BP4-63i	BusPlug Connector 4PH 63A Internal		4P	Internal	
BP4-63e	BusPlug Connector 4PH 63A External			External	
BP1-250e	BusPlug Connector 1PH 250A External	250A	1P	External	
BP3-250i	BusPlug Connector 3PH 250A Internal		3P	Internal	
BP3-250e	BusPlug Connector 3PH 250A External			External	
BP4-250i	BusPlug Connector 4PH 250A Internal		4P	Internal	
BP4-250e	BusPlug Connector 4PH 250A External			External	
BP1-400e	BusPlug Connector 1PH 400A External		400A	1P	External
BP3-400i	BusPlug Connector 3PH 400A Internal			3P	Internal
BP3-400e	BusPlug Connector 3PH 400A External				External
BP4-400i	BusPlug Connector 4PH 400A Internal	4P		Internal	
BP4-400e	BusPlug Connector 4PH 400A External			External	
BP1-800e	BusPlug Connector 1PH 800A External	800A		1P	External
BP3-800e	BusPlug Connector 3PH 800A External		3P		
BP4-800e	BusPlug Connector 4PH 800A External		4P		
BP3-800et	BusPlug Connector 3PH 800A External Threaded		3P	External Threaded	
BP4-800et	BusPlug Connector 4PH 800A External Threaded		4P		
BP3-1000et	BusPlug Connector 3PH 1000A External Threaded		1000A	3P	
BP4-1000et	BusPlug Connector 4PH 1000A External Threaded			4P	
BP3-1200et	BusPlug Connector 3PH 1200A External Threaded		1200A	3P	
BP4-1200et	BusPlug Connector 4PH 1200A External Threaded	4P			

Busplugs for 10mm Busbars

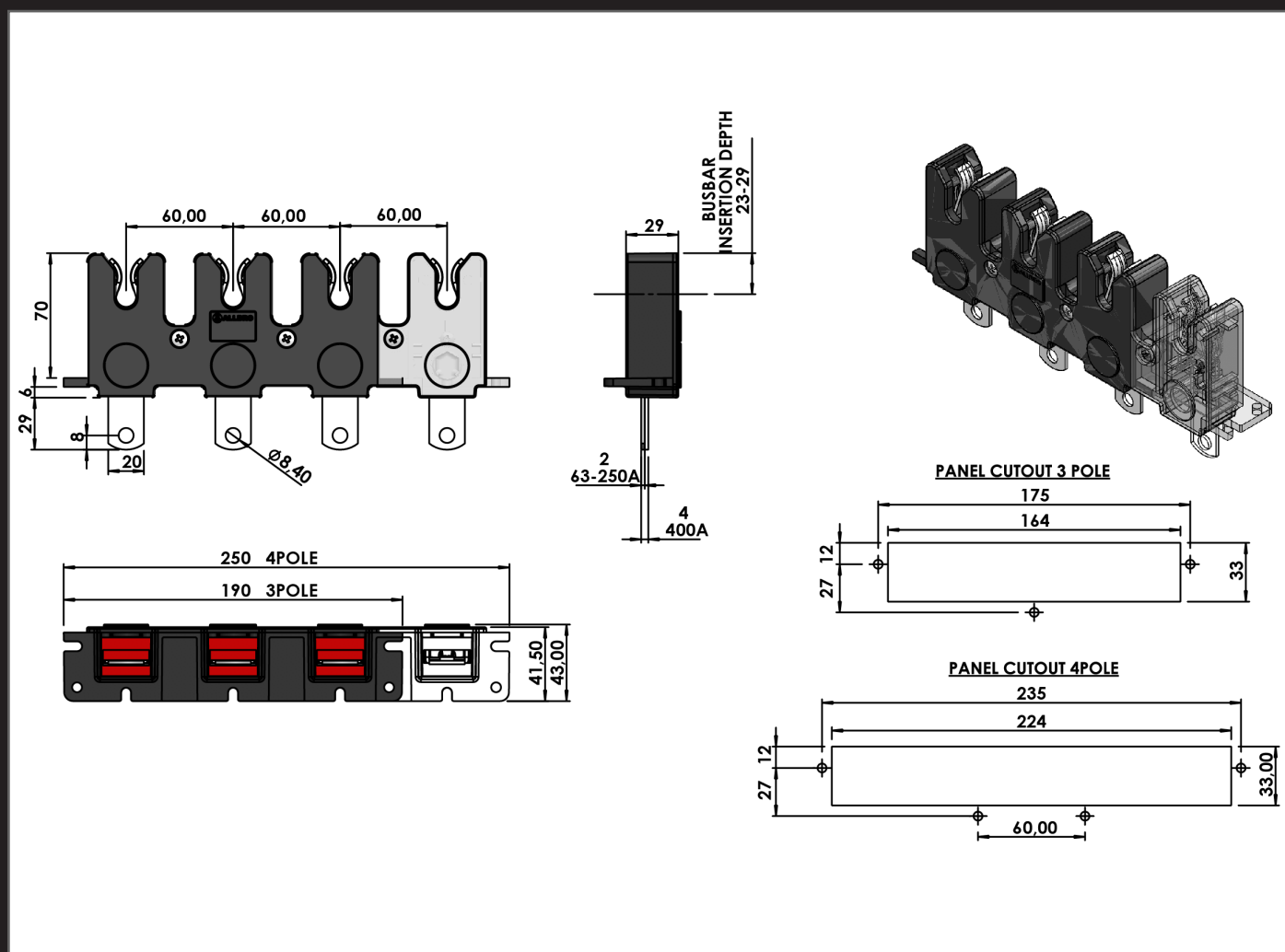
Part Number	Description	Rating	Poles	Connection Type	
BP3-63i-10	BusPlug Connector 3PH 63A -10 Internal	63A	3P	Internal	
BP3-63e-10	BusPlug Connector 3PH 63A - 10 External			External	
BP4-63i-10	BusPlug Connector 4PH 63A - 10 Internal		4P	Internal	
BP4-63e-10	BusPlug Connector 4PH 63A - 10 External			External	
BP1-250e-10	BusPlug Connector 1PH 250A - 10 External	250A	1P	External	
BP3-250i-10	BusPlug Connector 3PH 250A - 10 Internal		3P	Internal	
BP3-250e-10	BusPlug Connector 3PH 250A - 10 External			External	
BP4-250i-10	BusPlug Connector 4PH 250A - 10 Internal		4P	Internal	
BP4-250e-10	BusPlug Connector 4PH 250A - 10 External			External	
BP1-400e10	BusPlug Connector 1PH 400A -10 External		400A	1P	External
BP3-400i-10	BusPlug Connector 3PH 400A - 10 Internal			3P	Internal
BP3-400e-10	BusPlug Connector 3PH 400A - 10 External				External
BP4-400i-10	BusPlug Connector 4PH 400A - 10 Internal	4P		Internal	
BP4-400e-10	BusPlug Connector 4PH 400A - 10 External			External	
BP1-800e-10	BusPlug Connector 1PH 800A - 10 External	800A		1P	External
BP3-800e-10	BusPlug Connector 3PH 800A - 10 External		3P		
BP4-800e-10	BusPlug Connector 4PH 800A - 10 External		4P		
BP3-800et-10	BusPlug Connector 3PH 800A - 10 External Threaded		3P	External Threaded	
BP4-800et-10	BusPlug Connector 4PH 800A - 10 External Threaded		4P		
BP3-1000et-10	BusPlug Connector 3PH 1000A - 10 External Threaded		1000A	3P	
BP4-1000et-10	BusPlug Connector 4PH 1000A - 10 External Threaded			4P	
BP3-1200et-10	BusPlug Connector 3PH 1200A - 10 External Threaded		1200A	3P	
BP4-1200et-10	BusPlug Connector 4PH 1200A - 10 External Threaded	4P			

Busplug Cones



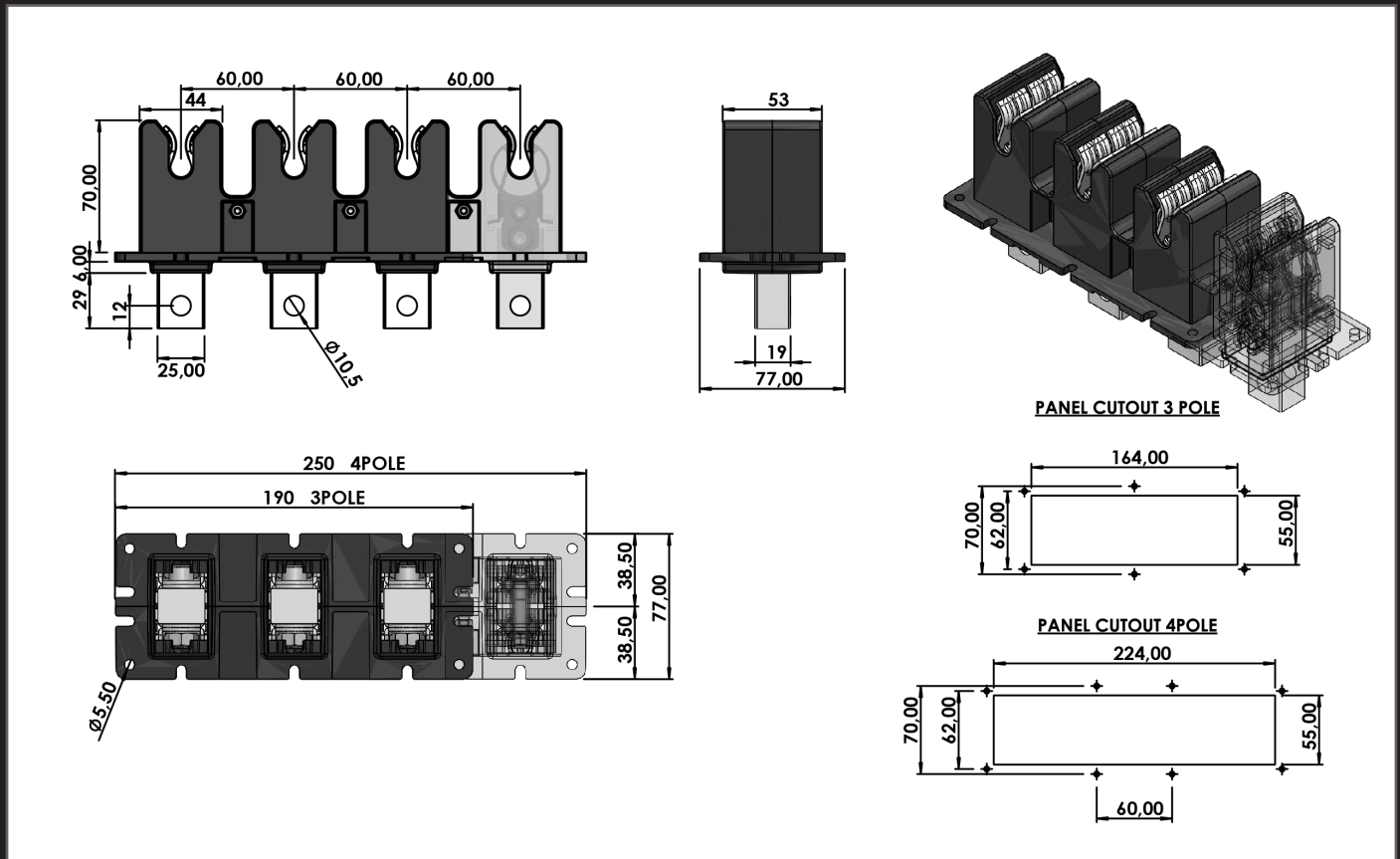
Part Number	Description	Material	Max Cable Size	Max BB Size
BP-CONE/Red	Busplug Cone Red	PVC Flame Retardant (V0)	50mm ²	20 x 6
BP-CONE/White	Busplug Cone White			
BP-CONE/Blue	Busplug Cone Blue			
BP-CONE/Black	Busplug Cone Black			

3/4 Pole - 63A - 400A



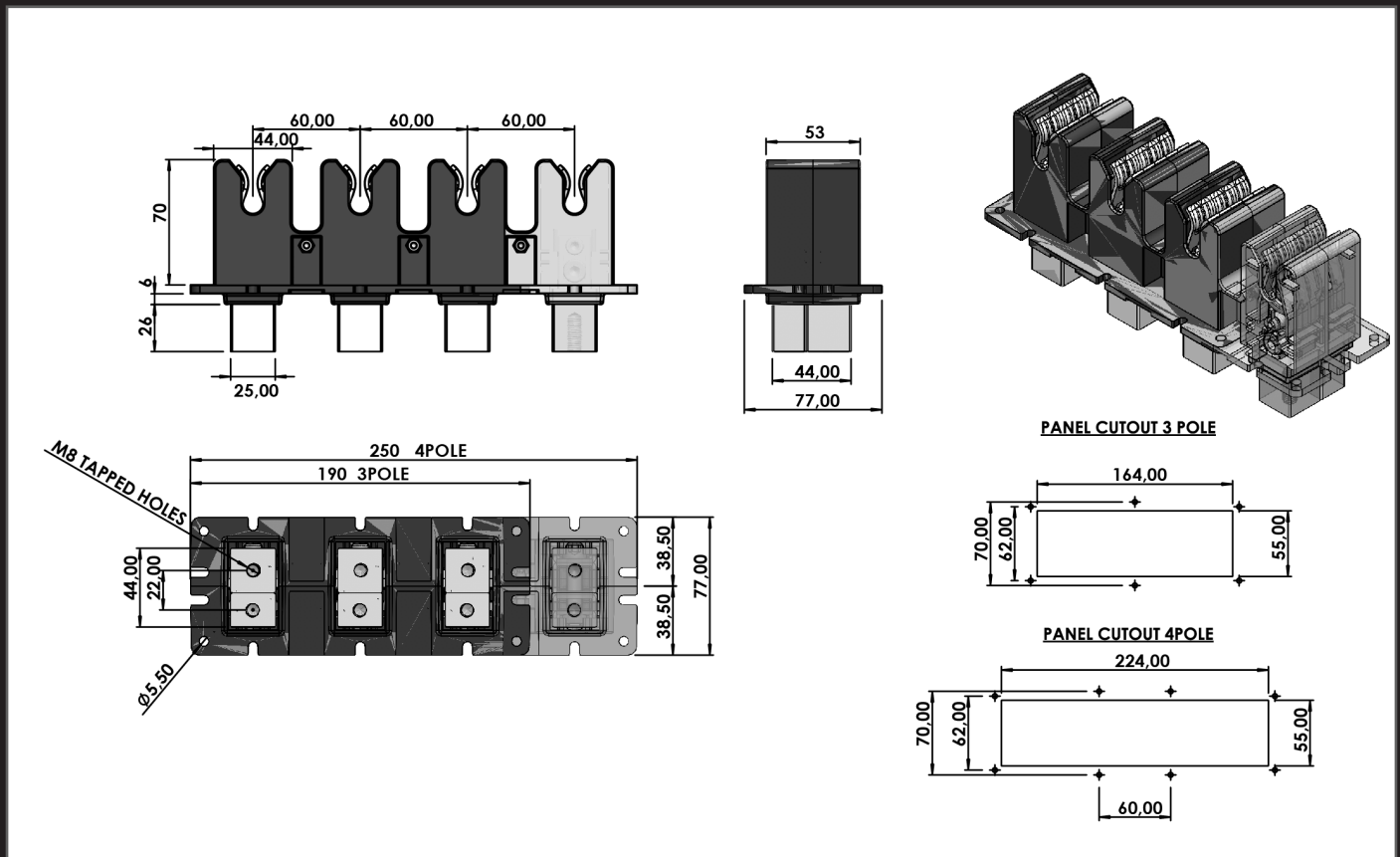
* PDF & 3D drawings are available on request.

3/4 Pole - 800A



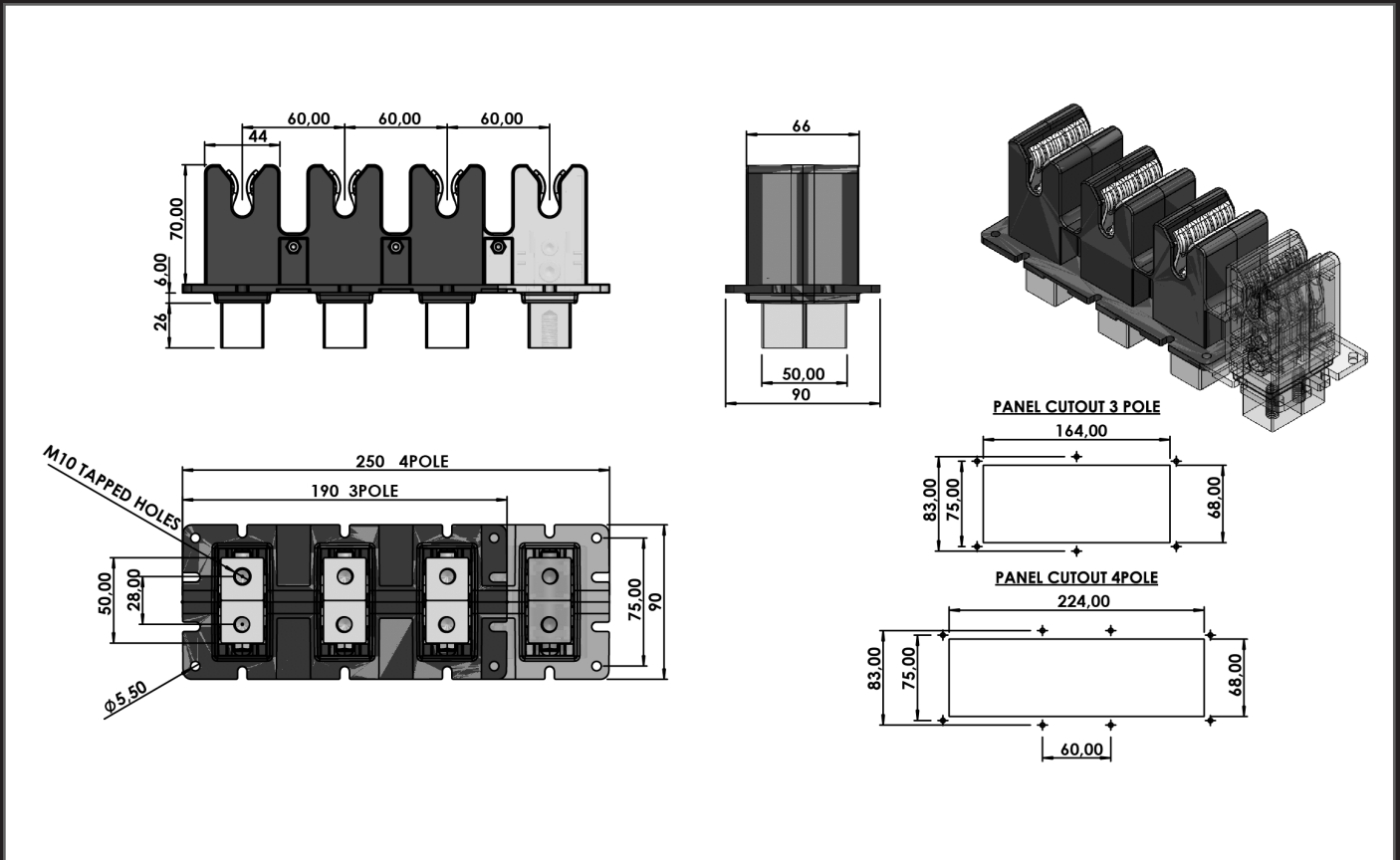
* PDF & 3D drawings are available on request.

3/4 Pole - 1000A



* PDF & 3D drawings are available on request.

3/4 Pole - 1200A



* PDF & 3D drawings are available on request.