

Additional Information

Fuses: Most of our switchfuses come with standard BS88 gG 415VAC fuses with 80kA fault ratings. Where required we can also supply mG motor rated fuses to be fitted into AC-23 switchfuses, please note however the device being selected should always be chosen based on the upper motor rating of the fuse, i.e. a 100A/125A motor rated fuse should be fitted into a 125A switchfuse rather than a 100A switchfuse to better protect the switchgear.



BS88 Fuse Type	Fixing Distance (mm)	Amp capacities available													
		20A	32A	63A	80A	100A	125A	160A	200A	250A	315A	400A	500A	630A	800A
A3	73	✓	✓	✓	✓	✓	✓								
A4	94			✓	✓	✓	✓								
B2	111			✓	✓	✓	✓	✓	✓	✓	✓	✓			
B3/B4	111			✓	✓	✓	✓	✓	✓	✓	✓	✓			
C2	184/133												✓	✓	✓
C3	184/133												✓	✓	✓

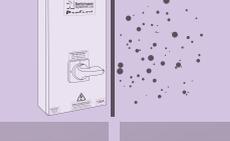
Cylindrical Fuse Size	Amp capacities available				
	20A	32A	63A	80A	100A
(10x38)	✓	✓			
(22x58)			✓	✓	✓



Cylindrical

Additional Information

Ingress Protection: The IP rating is not a guarantee of weather protection. For outdoor applications we can offer rain hoods, GRP or Stainless Steel enclosures.

1		Protected against solid object greater than 50mm such as a hand	Protected against vertically falling drops of water. Limited ingress permitted		1
2		Protected against solid object greater than 12.5mm such as a finger	Protected against vertically falling drops of water with enclosure tilted to 15° from the vertical. Limited ingress permitted		2
3		Protected against solid object greater than 2.5mm such as a screwdriver	Protected against sprays of water up to 60° from the vertical. Limited ingress permitted for three minutes		3
4		Protected against solid object greater than 1mm such as a wire	Protected against water splashed from all directions. Limited ingress permitted		4
5		Dust protected. Limited ingress of dust permitted. Will not interfere with operation of the equipment. Two to eight hours	Protected against jets of water. Limited ingress permitted		5
6		Dust tight. No ingress of dust. Two to eight hours.	Water from heavy seas or water projected in powerful jets shall not enter the enclosure in harmful quantities		6
			Protection against the effects of immersion in water between 15cm and 1m for 30 minutes		7

IP55
*example

Additional Information

Utilisation Categories:

Utilisation categories for Switches, Disconnectors, Switch-Disconnectors and Fuse-Combination Units

Type of Current	Typical Applications	Utilisation Category	
		Frequent Operation	Occasional Operation
IEC Product Standard - 60947-3			
AC	Making and breaking without load	AC-20A	AC-20B
AC	Switching resistive loads including low overloads	AC-21A	AC-21B
AC	Switching mixed resistive and inductive loads, including low overloads	AC-22A	AC-22B
AC	Switching motors and other highly inductive loads	AC-23A	AC-23B
DC	Making and breaking without load	DC-20A	DC-20B
DC	Switching resistive loads including low overloads	DC-21A	DC-21B
DC	Switching mixed resistive and inductive loads, including low overloads (e.g. shunt motors)	DC-22A	DC-22B
DC	Switching highly inductive loads (e.g. series motors)	DC-23A	DC-23B

Category AC-23 includes occasional switching of individual motors. The utilisation categories in the above table do not apply to an equipment normally used to start, accelerate and/or stop individual motors. The utilisation categories for such equipment are dealt with in the following table:

IEC Product Standard - 60947-4-1			
AC	Slip-ring motors: starting, plugging ¹⁾ , switching off	AC-2	
AC	Squirrel-cage motors: starting, switching off running motors	AC-3	
AC	Squirrel-cage motors: starting, plugging ¹⁾ , inching ²⁾	AC-4	
DC	Shunt motors: starting, plugging ¹⁾ , inching ²⁾ , dynamic breaking of d.c. motors	DC-3	
DC	Series motors: starting, plugging ¹⁾ , inching ²⁾ , dynamic breaking of d.c. motors	DC-4	

1) Plugging is understood to mean stopping or reversing the motor rapidly by reversing motor primary connections while the motor is running

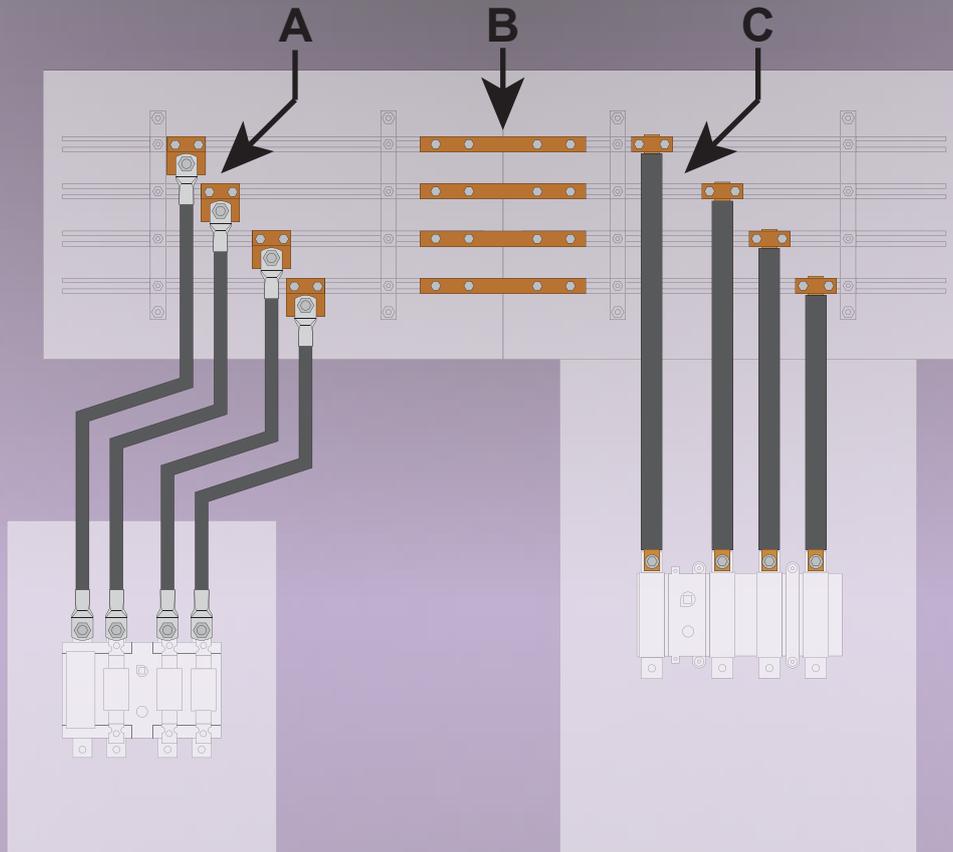
2) Inching is understood to mean energizing a motor once or repeatedly for short periods to obtain small movements of the driven mechanism

Reactive Power:

The switching of rotor circuits, capacitors or tungsten filament lamps shall be subject to special agreements between manufacturer and user; normally a min. of 33% de-rating factor.

Additional Information

Busbar Connections: Our Busbar accessories (P10-11) are designed specifically for the Switchgear Systems Ltd range of Busbar chambers (P10). Here is a diagram showing how each accessory works in conjunction with our Busbar chambers.



- A: Connection - Clamps** These are designed for connecting cables to our Busbar chambers. Clamps starting with the code BCT are for lugged cables. Clamps starting with the code BCE are for direct cables.
- B: Joining Kits -** If you wish to connect two of our Busbar chambers together simply remove the end plates of the enclosures, bolt them together and fit our joining kit to bridge the gap between the copper bars.
- C: Connection - Kits** These are complete 4P kits consisting of 4 flexi-copper bars and 4 connection clamps for flexi-copper. The bars are cut to lengths specifically designed to close couple our enclosed IP55/65 switchgear to our Busbar chambers.
Kits starting with the code BCCKSF are for our Switchfuses.
Kits starting with the code BCCKD are for our Load Break Isolators.

Important: These Busbar accessories are designed specifically for our range of Busbar chambers. The connection kits are cut to lengths specifically to connect to our switches.