

SB[®]120 Plus Connector

The innovative SB® connectors provide cost-effective reliability, design flexibility and safety for your products' manufacture, installation and maintenance.

APP's 2 pole connector is available with a 200 amp rating, 600 Volts continuous AC or DC operation. With the addition of the extended range contact, this robust connector will now accept wire sizes from #1 to #6 AWG (42.4 to 13.3 mm²), giving user more current capability. Mechanical keys ensure connectors will only mate with connectors of the same color. Different color housings are selected to identify voltages, thus preventing mismatching of the power supply system.

FEATURES

Molded Side Grooves

Allows for a secure panel mounting fit

Mechanical Keyed Housings

Prevents accidental mating of components operating at different voltage levels

Single-piece Housing and Unitized Construction

Provides industrial quality and durability



PRODUCT SPECIFICATIONS

Connector Model	SB ®120	Connector Model	SB ®120		
Current Rating (Amperes)*	190*	Life a. No Load (mating cycles)	10.000		
Voltage Ratings (AC/DC)	600*	b. Under Load (Hot Plug 250 mating cycles @ 120V)	60A		
Contact Barrel Wire Size (AWG) #1 to #6 (mm²) 42.4 to 13.3		Average Connection/Disconnect (lbf) (N)	20 89		
Maximum Wire Insulation Diameter (inches) (mm)	0.575 14.6	Operating Temperature (°C)** (°F)	-20° to 105° -4° to 221°		
Average Contact Resistance* (micro-ohms)	136	Flammability Rating of Housing Material	UL94 V-0		
Dielectric Withstanding Voltage (AC)	2,200	* UL Rated for 75°C largest wire or cable size			
Contact Retention Force (lbf)	100	** Contact factory for higher temperature rated connector \$8°, UL and CSA Reference: This equipment is an Underwriters Laboratories Inc® recognized component. It is also listed by the Canadian Standards Association as certified.			

ORDERING INFORMATION

2 Pole Housing & 120 amp Contacts

Part	Housing	Wire	
Number	Color	AWG	sq. mm
6800G1	Gray	#2	33.6
6801G1	Blue	#2	33.6
6802G1	Red	#2	33.6
6800G2	Gray	#4	21.1
6801G2	Blue	#4	21.1
6802G2	Red	#4	21.1
6800G3	Gray	#6	13.3
6801G3	Blue	#6	13.3
6802G3	Red	#6	13.3

Housing Only

Part	
Number	Description
6810G1	Gray housing
6810G2	Blue housing
6810G3	Red housing

Note: For additional colors please contact customer service

120 amp Contacts

Part		Wire	
Number	Description	AWG	sq.mm
6811G1 6811G2 6811G3 120BBS 6811G7	Contact set (2) Contact set (2) Contact set (2) Bus Bar Extended range	#2 #4 #6 N/A #1	33.6 21.1 13.3 N/A 42.4

Bushings

Part		Win	е
Number	Description	AWG	sq. mm
5919	Use with 6811G1	#2 to #4	33.6/21.2
5920	Use with 6811G1	#2 to #6	33.6/13.3
5921	Use with 6811G1	#2 to #8	33.6/8.4

Accessories

Part	
Number	Description
SB120-HDL-RED 981G1	SB handle with hardware-red Cable clamp for 2 single conductor cables
110G57 134G4 1467G1 981G2	Lock nut for use with Bus bar contact Dust cover, black Panel mount bracket, set (2) Twin conduit cable clamp

Tooling

Part	
Number	Description
1368	Hand tool - #1 to #8
1387G1	Pneumatic tool - #1 to #8
1388G4	 die for #2 to #8
1389G4	locator #2 to #8
1388G3	- die for #1
1389G3	- locator for #1

DIMENSIONS

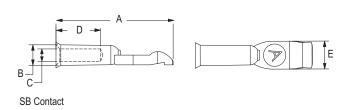
Housing [20.6] 0.81 [35.8] [63.5] 2.50 [19.1] 0.75 [22.2] [14.4] 0.88 [5.1] 0.57 [44.5] 0.20(2)1.75 [104.6] 4.12

Contacts

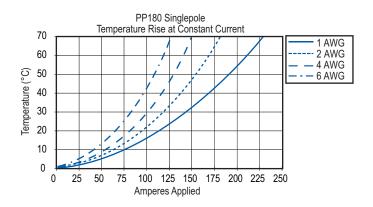
Part	-/-	۸-	-B	}-	-C)-	-D	-
Number	mm	in.	mm	in.	mm	in.	mm	in.
6811G1	50.8	2.00	11.1	0.44	8.7	0.34	21.3	0.84
6811G2	50.8	2.00	11.1	0.44	7.5	0.30	21.3	0.84
6811G3	50.8	2.00	11.1	0.44	5.6	0.22	21.3	0.84
120BBS	77.0	3.03	11.2	0.44	9.5	0.38	N/A	#10-24Thd.
1323G1	50.8	2.00	11.9	0.47	9.9	0.39	21.3	0.84

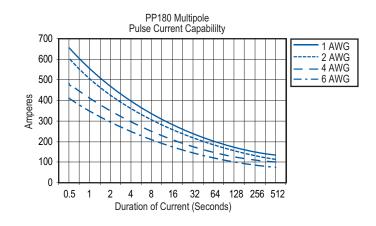
Part	Contact	-E	-	-F	-	-J-		-K-	
Number	Detent	mm	in.	mm	in.	mm	in.	mm	in.
6811G1	Low	10.4	0.41	N/A	N/A	N/A	N/A	N/A	N/A
6811G2	Low	10.4	0.41	N/A	N/A	N/A	N/A	N/A	N/A
6811G3	Low	10.4	0.41	N/A	N/A	N/A	N/A	N/A	N/A
120BBS	N/A	68.6	2.70	5.1	0.20	23.57	0.928	21.08 (min)	0.83(min)

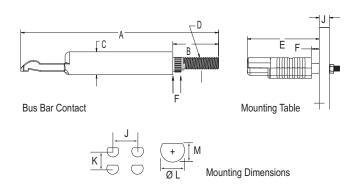
Part	Contact	-L-		-M-		
Number	Detent	mm	in.	mm	in.	
120BBS	N/A	7.37	0.29	6.35	0.25	



TEMPERATURE RISE CHARTS











All Data Subject To Change Without Notice

14867 DS-SB120 REV09

Mouser Electronics

Authorized Distributor

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