

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


APP's 2 & 3 pole connectors are available with a 175 amp rating, 600 Volts continuous AC or DC operation. There are SB® connectors for many applications and wire sizes, #4 to 1/0 AWG (21.1 to 53.5mm<sup>2</sup>). 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

- Mechanical keyed housings**  
*Prevents accidental mating of components operating at different voltage levels*
- Flat wiping contact system**  
*Allows for minimal contact resistance at high current, wiping action cleans contact surface during disconnection*
- Genderless design**  
*Makes assembly quick and easy and reduces number of parts stocked*



## PRODUCT SPECIFICATIONS

Connector Model	SB®175	Connector Model	SB®175
UL Current Rating (Amperes)*	175*	Life	
UL Voltage Ratings (Volts)	600*	a. No load (Contact/Disconnect Cycles)	To 10,000
Contact Barrel Wire Size (AWG) (mm <sup>2</sup> )	#4 to 1/0 21.1 to 53.5	b. Under Load (Hot Plug 250 cycles @ 120V)	75A
Maximum Wire Insulation Diameter (inches) (mm)	0.75 19.01	Avg. Connection/Disconnect (lbf)	25 (SB 2 Pole) 35 (SB 3 Pole)
AVG Contact Resistance* (micro-ohms)	100	Operating Temperature Range °C** °F	-20° to 105° -4° to 221°
Insulation Withstanding Test Voltage (Volts AC/DC)	2200	Flammability Rating of Housing Material	UL94 V-0
Contact Retention Force (lbf)	300	 * UL Rated for 65°C largest wire or cable size ** Contact factory for higher temperature rated connector SB®, 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 & 175 amp Contacts

Part Number	Housing Color	Wire AWG	Wire sq. mm
6325G1	Gray	1/0	53.5
6326G1	Blue	1/0	53.5
6327G1	Orange	1/0	53.5
6328G1	Yellow	1/0	53.5
6329G1	Red	1/0	53.5
6325G5	Gray	#2	33.6
6326G5	Blue	#2	33.6
6327G5	Orange	#2	33.6
6328G5	Yellow	#2	33.6
6329G5	Red	#2	33.6
6325G6	Gray	#4	21.1
6326G6	Blue	#4	21.1
6327G6	Orange	#4	21.1
6328G6	Yellow	#4	21.1
6329G6	Red	#4	21.1

### Housings Only

Part Number	Description
940	Gray
941	Blue
942	Orange
943	Yellow
949	Red
2-7252G11	Black, no voltage key

### 175 amp Contacts

Part Number	Description	Wire AWG	Wire sq. mm
944	Contact set (2)	1/0	53.5
1382	Individual	1/0	53.5
947	Contact set (2)	#2	33.6
1383	Individual	#2	33.6
948	Contact set (2)	#4	21.1
1384	Individual	#4	21.2
948G1*	Contact set (2)	#6	13.3
1348*	Individual	#6	13.3
944G1	Contact set (2)	#1	42.4
1347	Individual	#1	42.4
180BBS	Bus bar contact	N/A	N/A

### 3 Pole Housing & 175 amp Contacts

Part Number	Housing Color	Wire AWG	Wire sq. mm
6316	Gray	1/0	53.5
6316G9	Gray	#1	42.4
6316G10	Gray	#2	33.6

### 3 Pole Housing Only

Part Number	Description
902	Gray, springs & hardware

\* Thin wall  
 Note: For additional colors please contact customer service

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## ORDERING INFORMATION & DIMENSIONS

### Accessories

Part Number	Description
995G1	Handle, hardware & lock washers - Gray
995G3	Handle, hardware & lock washers - Red
923	Manual release, locking half with clamps and hardware
924	Manual release, mounting half with clamps and hardware
110G56	Lock nut for use with Bus bar contact
SB175-lockout	Safety lockout
111197G1	Charger key
134G2	Dust cover
945	Cable clamps
945G3	Cable clamps-2 single conductor with hardware. Use with "A" frame only.
946G1	Cable clamps-1 twin conductor with hardware. Use with "A" frame only.

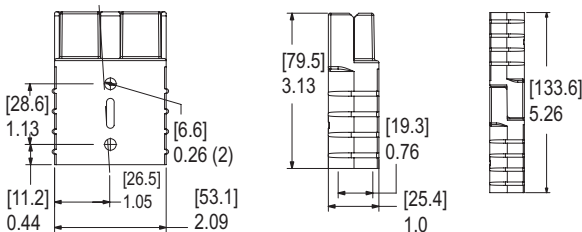
### Bushings

Part Number	Description	Wire	
		AWG	sq. mm
5648	Use with 944	1/0 to #10	53.5 to 5.1
5663	Use with 944	1/0 to #6	53.5 to 13.3
5687	Use with 944	1/0 to #1	53.5 to 42.4
5690	Use with 944	1/0 to #2	53.5 to 33.6
5693	Use with 944	1/0 to #4	53.5 to 21.2

### Tooling

Part Number	Description
1368	Hand tool for 1/0 to #1 (53.5/42.4)
1387G1	Pneumatic tool
1388G3	- die for 1/0 to #1 (53.5/42.4)
1388G5	- die for #4
1389G5	- locator for #4
1389G3	- locator for 1/0 to #1 (53.5/42.4)
1303G4	- die for 1/0 to #4 (53.5/21.1)
1304G4	- locator for 1/0 to #4 (53.5/21.1)

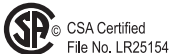
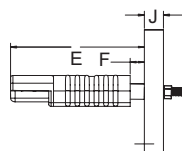
### Housing



### Bus Bar Mounting Table

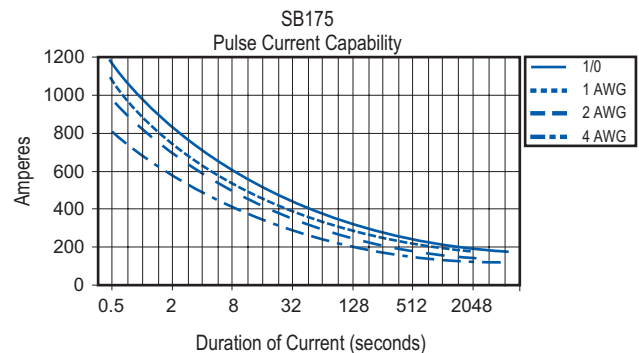
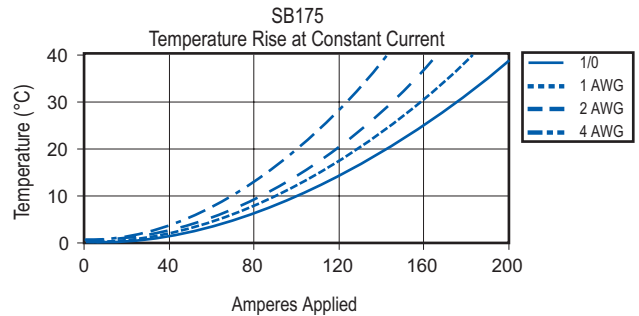
Part Number	- E -	- F -
	mm in.	mm in.
180BBS	88.9 3.50	10.2 0.40

Part Number	- J -
	mm in.
180BBS	5.0 -19.0 0.20 -0.75



All Data Subject To Change Without Notice

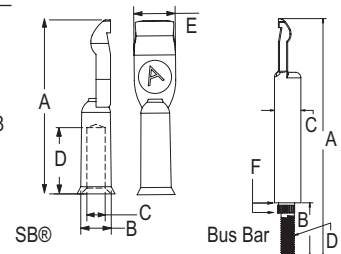
## TEMPERATURE RISE CHART



### Contacts

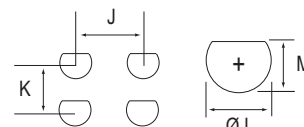
Part Number	-A-		-B-		-C-		-D-	
	mm	in.	mm	in.	mm	in.	mm	in.
944	59.7	2.35	13.1	0.52	11.1	0.44	27.4	1.08
947	59.7	2.35	13.1	0.52	8.9	0.35	27.4	1.08
948	59.7	2.35	13.1	0.52	7.5	0.30	25.9	1.02
944G1	59.7	2.35	13.1	0.52	9.9	0.39	27.4	1.08
948G1	53.3	2.10	9.3	0.37	11.7	0.46	21.3	0.84
180BBS	109.0	4.29	25.4	1.00	12.7	0.50	N/A	1/4-20Thd.

Part Number	-E-		-F-	
	mm	in.	mm	in.
944	12.7	0.5	N/A	
947	12.7	0.5	N/A	
948	12.7	0.5	N/A	
944G1	12.7	0.5	N/A	
948G1	12.7	0.5	N/A	
180BBS	N/A		4.6	0.18



### Bus Bar Layout

Part Number	- J -	- K -	- L -	- M -
	mm in.	mm in.	mm in.	mm in.
180BBS	26.8 1.05	26.8(min) 1.05(min)	9.53 0.375	3.43 0.135



Mounting Dimensions

DS-SB175 REV05

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