

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 (21.1mm to 53.5mm). 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)	#4 to 1/0	b. Under Load (Hot Plug 250 cycles @ 120V)	75A
(mm <sup>2</sup> )	21.1 to 53.5	Avg. Connection/Disconnect (lbs)	35
Maximum Wire Insulation Diameter (inches)	0.75	Operating Temperature Range °C**	-20° to 105°
(mm)	19.05	Flammability Rating of Housing Material	UL94 V-0
AVG Contact Resistance* (micro-ohms)	100		
Insulation Withstanding Test Voltage (Volts AC/DC)	2200		
Contact Retention Force (lbs)	300		

\* UL Rated for 65°C rated 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	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	sq. mm
944	Contact set (2)	1/0	53.5
947	Contact set (2)	#2	33.6
948	Contact set (2)	#4	21.1
948G1	Contact set (2)*	#6	13.3
944G1	Individual	#1	42.4
180BBS	Bus bar contact	N/A	N/A

\* Thin wall

### 3 Pole Housing & 175 amp Contacts

Part Number	Description	Wire	
		AWG	sq. mm
6316	Housing with springs and 3 contacts	1/0	53.5

### 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	Keeps nut for use with Bus bar contact	

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## ORDERING INFORMATION

### accessories continued

Part Number	Description
111197	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 1382	1/0 to #10	53.5/5.1
5663	Use with 1382	1/0 to #6	53.5/13.3
5687	Use with 1382	1/0 to #1	53.5/42.4
5690	Use with 1382	1/0 to #2	53.5/33.6
5693	Use with 1382	1/0 to #4	53.5/21.2

### Tooling

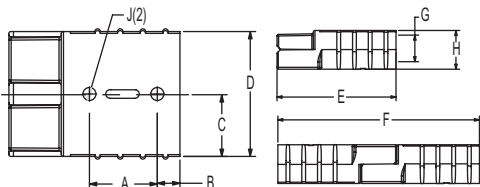
Part Number	Description
1368	Hand tool for 1/0 to #1 (53.5/42.4)
1387G1	Pneumatic tool
1388G3	- die for 1/0 to #1 (53.5/42.4)
1389G3	- locator for 1/0 to #1 (53.5/42.4)

## DIMENSIONS

### SB®175 Housing

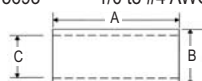
Series	-A-		-B-		-C-		-D-		-E-		-F-	
	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.
SB®175	28.5	1.13	11.0	.44	27.8	1.09	55.6	2.19	79.4	3.13	133.3	5.25

Series	-G-		-H-		-J-	
	mm	in.	mm	in.	mm	in.
SB®175	19.0	.75	35.4	1.0	6.7	0.27



### Bushings - (for use with 944 contact)

Part Number	Reduces From	-A-		-B-		-C-	
		mm	in.	mm	in.	mm	in.
5648	1/0 to #10 AWG	25.4	1.0	10.85	.427	4.75	.188
5663	1/0 to #6 AWG	25.4	1.0	10.85	.427	5.55	.218
5687	1/0 to #1 AWG	25.4	1.0	10.85	.427	9.9	.39
5690	1/0 to #2 AWG	25.4	1.0	10.85	.427	8.7	.343
5693	1/0 to #4 AWG	25.4	1.0	10.85	.427	6.9	.287



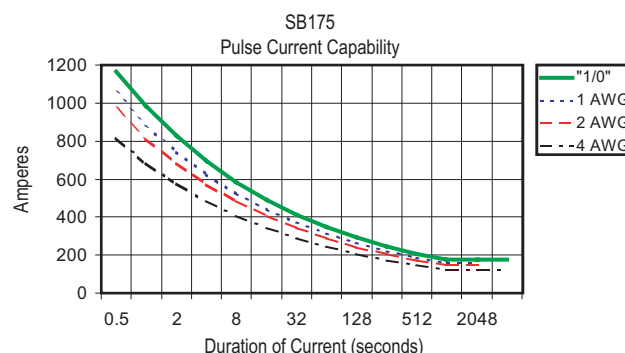
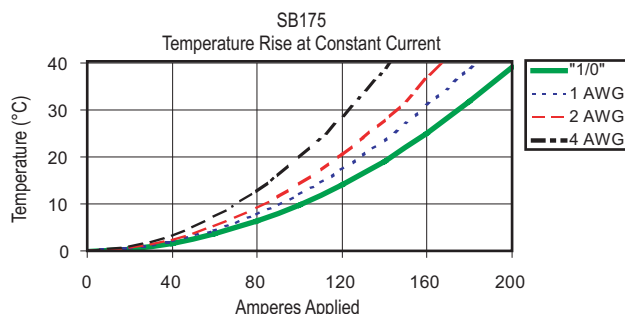
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UL Recognized  
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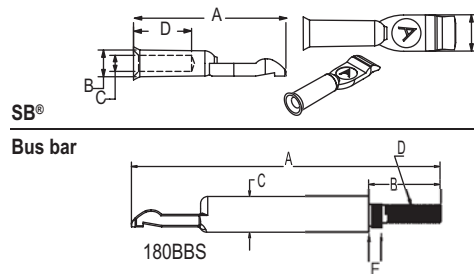
All Data Subject To Change Without Notice

## TEMPERATURE RISE CHARTS



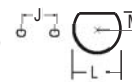
### SB®175 Contacts

Part Number	-A-		-B-		-C-		-D-		-E-		-F-	
	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.
944	59.6	2.35	13	.52	11.2	.44	26.4	1.04	12.7	.5	N/A	N/A
947	59.8	2.35	13	.51	8.9	.35	26.4	1.04	12.7	.5	N/A	N/A
948	59.7	2.35	13	.51	7.5	.3	26.4	1.04	12.7	.5	N/A	N/A
944G1	59.8	2.35	13	.51	9.9	.39	26.4	1.04	12.7	.5	N/A	N/A
948G1	53.3	2.1	9.3	.37	5.6	.22	20.3	.8	12.7	.5	N/A	N/A
180BBS	109.7	4.3	25.4	1.0	12.7	.50	N/A	1/4-20	N/A	N/A	4.6	.18



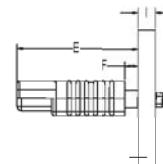
### Bus bar Layout

Series	-J-		-L-		-M-	
	mm	in.	mm	in.	mm	in.
SB175	26.7	1.05	9.5	.38	3.4	0.14



### Bus bar Mounting Table

Series	-E-		-F-	
	mm	in.	mm	in.
SB175	89.8	3.5 ref	9.4	.4 ref



DS-SB175 REV02