

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 53.5mm²). 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 ²) | #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 | <p>* 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.</p> | |

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. |

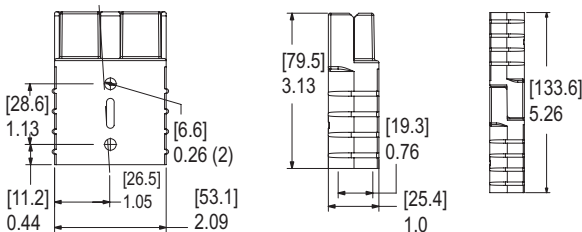
Bushings

| 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) |

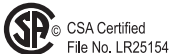
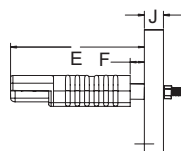
Housing



Bus Bar Mounting Table

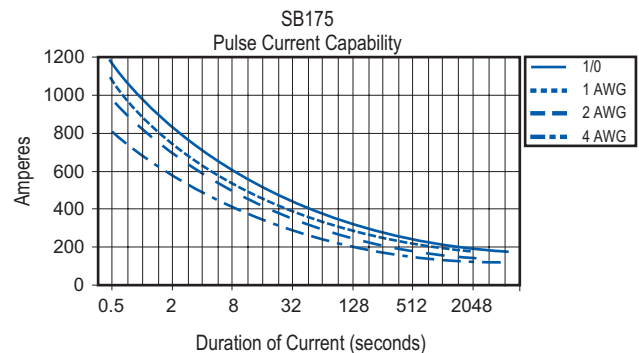
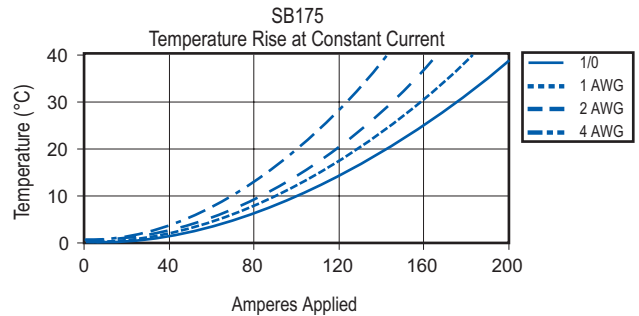
| Part Number | - E - | - F - |
|-------------|-----------|-----------|
| | mm in. | mm in. |
| 180BBS | 88.9 3.50 | 10.2 0.40 |

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



All Data Subject To Change Without Notice

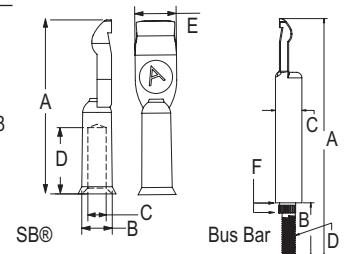
TEMPERATURE RISE CHART



Contacts

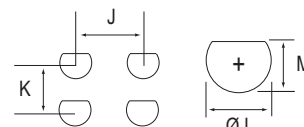
| Part Number | -A- | | -B- | | -C- | | -D- | |
|-------------|-------|------|------|------|------|------|------|------------|
| | mm | in. | mm | in. | mm | in. | mm | in. |
| 944 | 59.7 | 2.35 | 13.1 | 0.52 | 11.1 | 0.44 | 27.4 | 1.08 |
| 947 | 59.7 | 2.35 | 13.1 | 0.52 | 8.9 | 0.35 | 27.4 | 1.08 |
| 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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