

Powerpole® connectors provide cost-effective reliability, design flexibility and safety for your products' manufacture, installation and maintenance. Powerpoles are stackable and color-coded for easy customization into multipole blocks.

The housings are modular and genderless. Powerpole® connectors provide 600 Volts continuous, AC or DC operation. Wire sizes range from #1/0 to #10 AWG (53.5 to 5.3 mm<sup>2</sup>).

## FEATURES

- **Flat wiping contact system**

*Minimal contact resistance at high current, wiping action cleans contact surface during connection/disconnection*

- **Colored modular housings**

*Provides visual identification of proper mating connector*

- **Molded-in dovetails**

*Secures individual connectors into "keyed" assemblies which prevents misconnection with similar configurations*



## PRODUCT SPECIFICATIONS

| Connector Model                                    | PP180       | Connector Model                            | PP180        |
|--|-------------|--|--------------|
| UL Current Rating (Amperes)*                       | 180*        | Life                                       |              |
| UL Voltage Ratings (Volts)**                       | 600*        | a. No load (Contact/Disconnect Cycles)     | To 10,000    |
| Contact Barrel Wire Size (AWG)                     | 1/0 to #10  | b. Under Load (Hot Plug 250 cycles @ 120V) | 75A          |
| (mm <sup>2</sup> )                                 | 53.5 to 5.3 | Avg. Connection/Disconnect (lbs)           | 20           |
| Maximum Wire Insulation Diameter (inches)          | 0.900       | Operating Temperature Range °C***          | -20° to 105° |
| (mm)   | 22.86       | 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)                      | 170         |  |              |

\* UL Rated for 65°C rated wire or cable size  
 \*\* Both AC & DC Voltage  
 \*\*\* Contact factory for higher temperature rated connectors

## ORDERING INFORMATION

### Housing & 180 amp Contact

| Part Number | Housing Color | Wire |        |
|-------------|---------------|------|--------|
|             |               | AWG  | sq. mm |
| 1380        | Blue          | 1/0  | 53.5   |
| 1380G1      | Black         | 1/0  | 53.5   |
| 1328G2      | White         | 1/0  | 53.5   |
| 1380G3      | Red           | 1/0  | 53.5   |
| 1380G4      | Green         | 1/0  | 53.5   |

### 180 amp Contacts

| Part Number | Description           | Wire |        |
|-------------|-----------------------|------|--------|
|             |                       | AWG  | sq. mm |
| 1347        | Individual-low detent | #1   | 42.4   |
| 1348*       | Individual-low detent | #6   | 13.3   |
| 1382        | Individual-low detent | 1/0  | 53.5   |
| 1383        | Individual-low detent | #2   | 33.6   |
| 1384        | Individual-low detent | #4   | 21.2   |
| 180BBS      | Bus bar 180 amp       | NA   | NA     |

\* thin wall contact

### Housings Only

| Part Number | Description   |
|-------------|---------------|
| 1381        | Blue housing  |
| 1381G1      | Black housing |
| 1381G2      | White housing |
| 1381G3      | Red housing   |
| 1381G4      | Green housing |

### 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 |

### Accessories

| Part Number | Description                                 |
|-------------|---|
| 110G18      | Retaining Pins - 2 high block of connectors |
| 110G19      | Retaining Pins - 1 high block of connectors |
| 110G20      | Retaining Pins - 2 high block of connectors |
| 10G56       | Keys nut for use with Bus bar contact       |

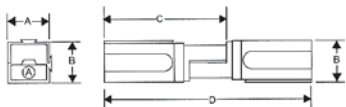
### Tooling

| Part Number | Description                     |
|-------------|---------------------------------|
| 1368        | Hand tool                       |
| 1387G1      | Pneumatic tool - #10 to 1/0     |
| 1388G3      | - die for #10 to 1/0            |
| 1388G5      | - die for #4 (1382 contact)     |
| 1389G3      | - locator for #10 to 1/0        |
| 1389G5      | - locator for #4 (1382 contact) |

## DIMENSIONS

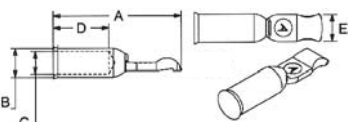
### Powerpole® Housing

| Series | -A-  |      | -B-  |      | -C-  |      | -D-   |      |
|--------|------|------|------|------|------|------|-------|------|
|        | mm   | in.  | mm   | in.  | mm   | in.  | mm    | in.  |
| PP180  | 28.6 | 1.13 | 28.6 | 1.13 | 82.6 | 3.25 | 139.7 | 5.50 |



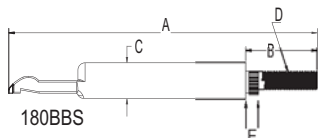
### Contacts

| Part Number | -A-   |      | -B-   |     | -C-  |     | -D-   |      | -E-  |     | -F- |     |
|-------------|-------|------|-------|-----|------|-----|-------|------|------|-----|-----|-----|
|             | mm    | in.  | mm    | in. | mm   | in. | mm    | in.  | mm   | in. | mm  | in. |
| 1347        | 53.35 | 2.1  | 12.95 | .51 | 9.9  | .39 | 26.42 | 1.04 | 12.7 | .5  | N/A | N/A |
| 1348        | 59.7  | 2.35 | 9.4   | .37 | 5.6  | .22 | .32   | .82  | 12.7 | .5  | N/A | N/A |
| 1382        | 59.7  | 2.35 | 12.95 | .51 | 11.2 | .44 | 27.18 | 1.07 | 12.7 | .5  | N/A | N/A |
| 1383        | 59.7  | 2.35 | 12.95 | .51 | 8.9  | .35 | 26.42 | 1.04 | 12.7 | .5  | N/A | N/A |
| 1384        | 59.7  | 2.35 | 12.95 | .51 | 7.6  | .3  | 26.42 | 1.04 | 12.7 | .5  | N/A | N/A |
| 180BBS      | 109.7 | 4.3  | 25.4  | 1.0 | 12.7 | .50 | N/A   | ¼-20 | N/A  | N/A | 4.6 | .18 |



Powerpole®

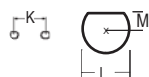
### Bus bar



180BBS

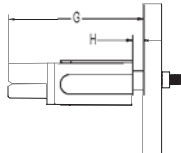
### Bus bar Layout

| Series | -K-  |      | -L- |     | -M- |      |
|--------|------|------|-----|-----|-----|------|
|        | mm   | in.  | mm  | in. | mm  | in.  |
| PP180  | 28.6 | 1.13 | 9.5 | .38 | 3.4 | 0.14 |



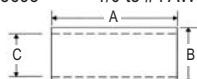
### Bus bar Mounting Table

| Series | -G-  |         | -H- |        |
|--------|------|---------|-----|--------|
|        | mm   | in.     | mm  | in.    |
| PP180  | 89.8 | 3.5 ref | 3.9 | .2 ref |

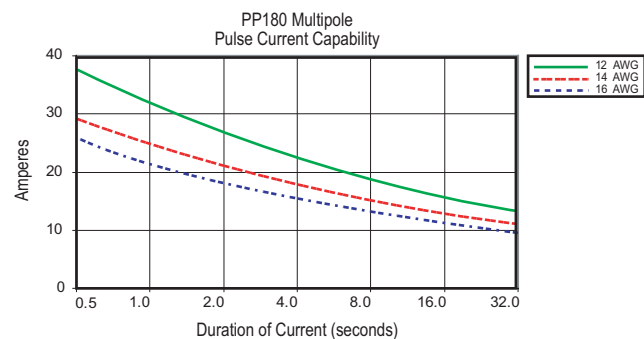
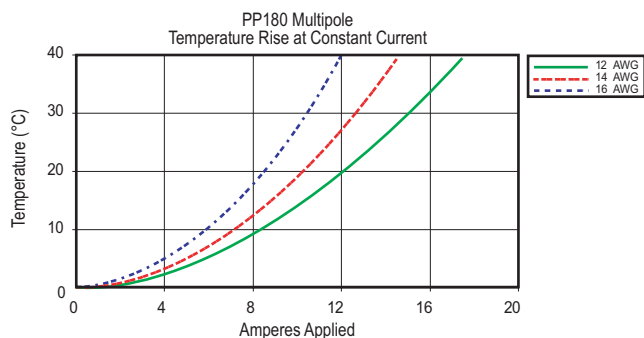
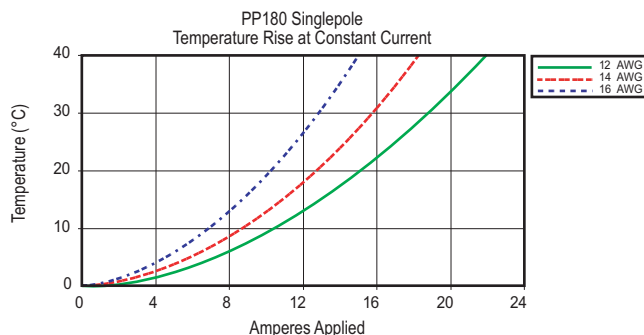


### Bushings - (for use with 1382 contact)

| 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 |



## TEMPERATURE RISE CHARTS



### Mounting Clamps

| Part Number | Poles | -A-    |      | -B-   |      | -C-   |      | -D-   |      |
|-------------|-------|--------|------|-------|------|-------|------|-------|------|
|             |       | mm     | in.  | mm    | in.  | mm    | in.  | mm    | in.  |
| 1465G1      | 2     | 71.37  | 2.81 | 55.37 | 2.18 | 42.67 | 1.68 | 28.45 | 1.12 |
| 1465G1      | 3     | 100.84 | 3.97 | 55.37 | 2.18 | 42.67 | 1.68 | 57.15 | 2.25 |

| Part Number | Poles | -DIA- |       |
|-------------|-------|-------|-------|
|             |       | mm    | in.   |
| 1465G1      | 2     | 4.826 | 0.190 |
| 1465G1      | 3     | 4.826 | 0.190 |

