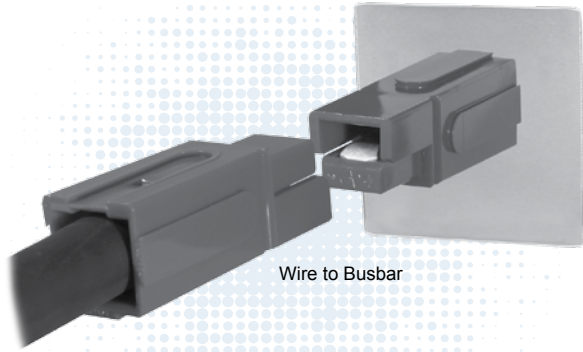


# Powerpole® Connectors - PP180: up to 350 Amps



PP180 are the largest of the Powerpole® series housings. They are designed to accommodate up to 3/0 (70 mm<sup>2</sup>) wires and handle high currents up to 350 amps. Busbar contacts are also available for power inputs and takeoffs. Color-coded housings minimize user confusion and the potential of cross mating circuits.

### Low Resistance Silver Plated Copper Contacts

- Allows currents up to 350 amps

### UL Rated for Hot Plugging up to 75 Amps

- Great for battery or other applications where the ability to interrupt circuits is required

### Busbar Contacts Work with Standard Housings

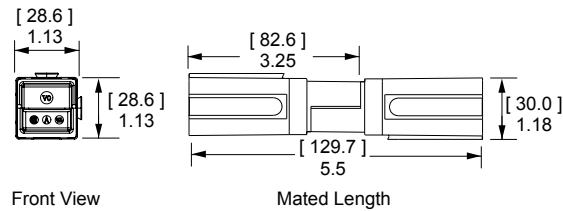
- Provides a hot swappable quick disconnect system for busbar power distribution

## | PP180 ORDERING INFORMATION |

### PP180 Housings

The largest Powerpole® housing can be used with wire contacts for up to 3/0 AWG [85mm<sup>2</sup>] or busbar contacts.

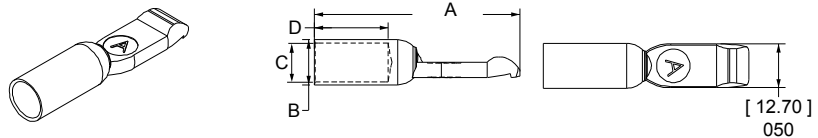
Description	----- Part Numbers -----	
Minimum Quantity ...	250	50
Red	1381G3-BK	1381G3
Green	1381G4-BK	1381G4
Black	1381G1-BK	1381G1
White	1381G2-BK	1381G2
Blue	1381-BK	1381



### PP180 Silver Plated Wire Contacts

Silver plated contacts offer superior electrical performance and durability up to 10,000 mating cycles. New contacts for 2/0 to 3/0 AWG (70 to 85 mm<sup>2</sup>) offer extended capability in the same housings.

AWG	mm <sup>2</sup>	Mating Force	----- Loose Piece Part Numbers -----				Dimensions								
			500	300	250	50	- A -	- B -	- C -	- D -	inches	mm	inches	mm	inches
3/0	85	Low	-	-	1328G2-BK	1328G2	2.35	59.69	0.70	17.78	0.58	14.73	1.04	26.42	
2/0	67.4	Low	-	1328G1-BK	-	1328G1	2.35	59.69	0.64	16.26	0.49	12.45	1.04	26.42	
1/0	53.5	High	1382-BK	-	-	1382	2.35	59.69	0.52	13.21	0.44	11.18	1.04	26.42	
1	42.4	High	1347-BK	-	-	1347	2.35	59.69	0.52	13.21	0.39	9.91	1.04	26.42	
2	33.6	High	1383-BK	-	-	1383	2.35	59.69	0.52	13.21	0.35	8.89	1.04	26.42	
4	21.1	High	1384-BK	-	-	1384	2.35	59.69	0.52	13.21	0.30	7.62	1.04	26.42	
6	13.3	High	1348-BK	-	-	1348	2.10	53.34	0.37	9.40	0.22	5.59	0.80	20.32	

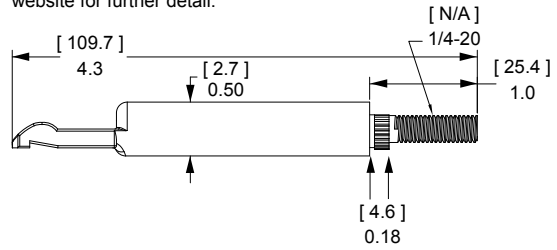


### PP180 Silver Plated Busbar Contacts

Use 2 busbar contacts per housing to provide a quick disconnect input or output busbar connection. Busbar contacts are for mating with wire contacts only. Part number 180BBS includes lock nuts. Locknuts must be ordered separately for 180BBS-BK.

Thread	Mating Force	----- Loose Piece Part Numbers -----			
Minimum Quantity		1,000	120	10	
Busbar 1/4-20	High	180BBS-BK	180BBS	-	
Lock Nut 1/4-20	N/A	H1216P7	110G56	110G55	

See Busbar contact drawing on website for further detail.



## PP180 SPECIFICATIONS

### Electrical

Current Rating Amperes <sup>1</sup>	UL 1977	CSA
Singlepole (wire-wire) (3/0 AWG)	350	230
2x2 Block (wire-wire) (3/0 AWG)	350	
Singlepole (wire-busbar) (1/0 AWG)	180	

Voltage Rating AC/DC	UL 1977
UL 1977	600

Dielectric Withstanding Voltage	Volts AC
Volts AC	2,200

Avg. Mated Contact Resistance Milliohms <sup>1</sup>	6" of 1/0 AWG wire
6" of 1/0 AWG wire	0.100

UL Hot Plug Current Rating Amperes	250 cycles at 120V DC
250 cycles at 120V DC	75A

### Mechanical

Wire Size Range	AWG	mm <sup>2</sup>
Wire Size Range	10 to 3/0	5.3 to 85

Max. Wire Insulation Diameter	in.	mm
Max. Wire Insulation Diameter	0.900	22.860

Operating Temperature <sup>2</sup>	°F	°C
Operating Temperature <sup>2</sup>	-4° to 221°	-20° to 105°

Mating Cycles No Load by Plating	Wire and Busbar Contacts	Silver (Ag)
Mating Cycles No Load by Plating	Wire and Busbar Contacts	10,000

Avg. Mating / Unmating Force	Wire & Busbar Contacts	Lbf.	N
Avg. Mating / Unmating Force	Wire & Busbar Contacts	10	44

Min. Contact / Spring Retention Force	Lbf.	N
Min. Contact / Spring Retention Force	120	534

### Materials

Housing	
Plastic Resin	Polycarbonate
Contact Retention Spring	Stainless Steel

Housing Flammability Rating	
UL94	V-0

Contact	
Base	Copper Alloy
Plating	Silver

Contact Termination Methods	
Crimp <sup>3</sup>	
Hand Solder	
Wrench / Socket*	

\*Busbar Contacts Only

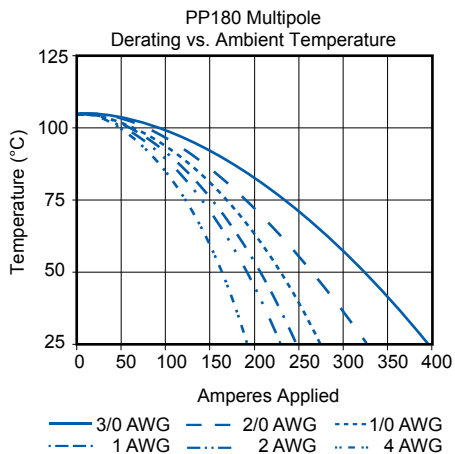
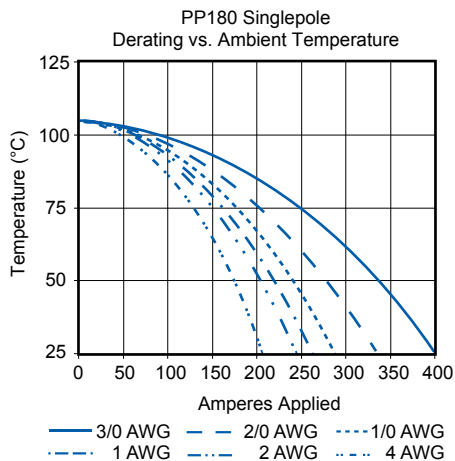
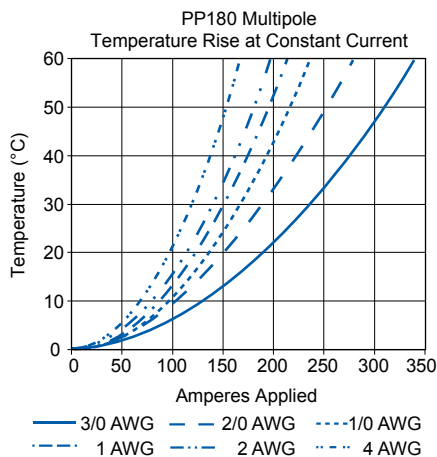
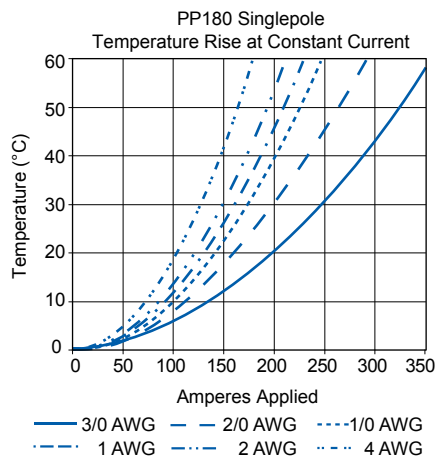
### Protection

Touch Safety with Wire Contacts	
IEC 60529	IP10

<sup>1</sup> Based on: 105°C rated or better cable of the largest size, Properly calibrated APP® recommended tooling, and a 25°C ambient temperature. UL rating not to exceed the maximum operating temperature. CSA rating below a 30°C temperature rise.  
<sup>2</sup> Limited by the thermal properties of the connector plastic housing.  
<sup>3</sup> Use APP® recommended tooling only. Alternate tools may adversely affect the performance of our connectors along with UL and CSA recognition.



# | PP180 TEMPERATURE CHARTS |

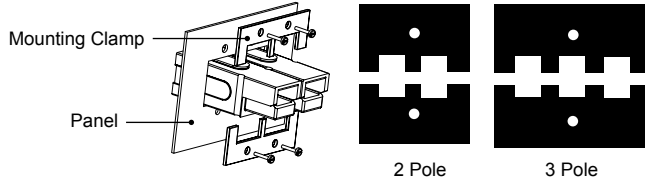


NOTE: Temperature rise charts are based on a 25°C ambient temperature.

# Powerpole® PP180 Accessories |

## Mounting Clamp

Mounting clamps can be used for fastening a block of Powerpole® 180 series housings to a panel. Connector blocks must be a complete square for the clamps to work properly. Fastening hardware not included.

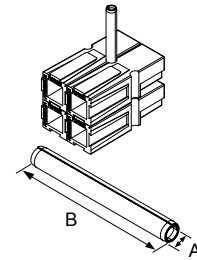


Description	- Part Numbers -
Minimum Quantity ...	20 sets of 2 .....
2 Pole	1465G1
3 Pole	1465G2

## Retaining Pins

Retaining pins are used to keep stacked Powerpole® 180 series housings from separating. Retaining pins are inserted in the circular opening between two housings stacked side by side. Dimension "B" is +/- .015 in or .38 mm.

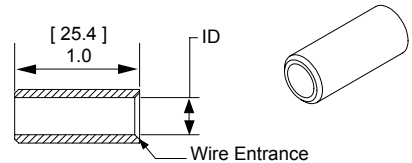
Description	Part Numbers		Dimensions			
			- A - inches		- B - mm	
Minimum Quantity ...	1,000	100				
1 Block High	111812P6	110G18	0.196 / 0.207	4.98 / 5.26	1.000	25.400
2 Block High	111812P8	110G20	0.196 / 0.207	4.98 / 5.26	1.500	38.100



## Reducing Bushings

Use with contact part number 1382-BK to allow a smaller wire to be used with the connector. Electrical capability is derated with smaller wire.

Contact Barrel Size	Wire Size	Part Numbers				Dimensions - ID -	
		1,500	1,000	500	100	inches	mm
Minimum Quantity ...		1,500	1,000	500	100		
1/0 AWG [53.5 mm²]	#1 AWG [42.4 mm²]	-	-	5687-BK	5687	0.39	9.91
1/0 AWG [53.5 mm²]	#2 AWG [33.6 mm²]	5690-BK	-	-	5690	0.34	8.64
1/0 AWG [53.5 mm²]	#4 AWG [21.2 mm²]	-	5693-BK	-	5693	0.27	6.86
1/0 AWG [53.5 mm²]	#6 AWG [13.3 mm²]	-	5663-BK	-	5663	0.22	5.59
1/0 AWG [53.5 mm²]	#10 - 8 AWG [5.3 - 8.4 mm²]	5648-BK	-	-	5648	0.19	4.83



For environmentally sealed connector shells to hold Powerpole® 15-180 connectors, see APP's SPEC Pak® product series on our website, [www.andersonpower.com](http://www.andersonpower.com)



# Powerpole® - Tooling Information

Wire Size		Loose Piece Part Numbers		Loose Piece Contact Crimp Tool					Reeled Part Numbers		Reeled Contact Crimp Tools			
AWG	mm²	Tin Plating	Silver Plating	Hand Tool or	Pneumatic Bench Tool	+ Die	+ Locator	Number of Crimps	Tin Plating	Silver Plating	ATS Applicator	ATS Press	Air Feed Kit*	
<b>PP15 / 45 Flat Wiping Power &amp; Ground</b>														
16 / 20	1.3 / 0.52	N/A	1332	1309G2 or 1309G8	1367G1				N/A	N/A	N/A	N/A	N/A	
12 / 16	3.3 / 1.3	N/A	1331		1309G3 or 1309G8	N/A	N/A	N/A	Single	262G1	262G2	1385519-1	1725900-2 or [3-54500-1]	1424266-1 or [354578-1]
16 / 20	1.3 / 0.52	262G1-LPBK	262G2-LPBK	200G2L						200G4L	TBD			
16 / 20	1.5 / 0.52	200G2L-LPBK	200G4L-LPBK	269G2						N/A	1385519-1			
16 / 20	1.3 / 0.52	269G2-LPBK	N/A	261G1						261G4	1385520-1			
12 / 16	3.3 / 1.3	261G1-LPBK	261G4-LPBK	261G2						261G3	1385458-1			
10 / 14	5.3 / 2.1	261G2-LPBK	261G3-LPBK	269G1						N/A	1385520-1			
12 / 16	3.3 / 1.3	269G1-LPBK	N/A	269G3						N/A	1385458-1			
10 / 14	5.3 / 2.1	269G3-LPBK	N/A	200G1L						200G3L	1385460-1			
10 / 14	6.0 / 2.1	200G1L-LPBK	200G3L-LPBK	201G1H						201G3H	1385460-1			
10 / 14	6.0 / 2.1	201G1H-LPBK	201G3H-LPBK	1830G1						1830G2	1385460-1			
10 / 14	6.0 / 2.1	1830G1-LPBK	1830G2-LPBK											
<b>PP75</b>														
#6	13.3	N/A	1307	1309G4	1387G1	1388G6	1389G6	Single	265G5	N/A	1385523-1	2-565435-2	692655-1	
			5900											
#8	8.4		5952											
#10 / 12	5.3 / 3.3		5953											
			5915											
<b>PP120</b>														
1/0	53.5	N/A	1323G2	1368	1387G1	1388G3	1389G4	Single	N/A	N/A	N/A	N/A	N/A	
#1	42.4		1323G1											
#2	33.6		1319											
#4	21.2		1319G4											
#6	13.3		1319G6											
<b>PP180</b>														
3/0	85	N/A	1328G2	1368	1387G1	1303G12	1304G32	Double	N/A	N/A	N/A	N/A	N/A	
2/0	53.5		1328G1											1387G2
1/0	53.5		1382											
#1	42.4		1347			1387G2	1303G13	1304G32						Double
#2	33.6		1383											
#4	21.1		1384			1387G1	1388G3	1389G3						Single
						1387G2	1303G13	1304G32						Double
						1387G1	1388G4	1389G3						Single
#6	13.3		1348			1387G1	1388G4	1389G3						Single

\* All ATS applicators for APP® contacts are air feed style, (except 1385870) and require the press to have an air feed kit installed.  
NOTE: See website for the most current information.

SECTION 2  
Powerpole® Tooling