

APP Connectors

is the Worldwide Leader for Power Interconnect Solutions. Our philosophy is to provide high quality, innovative products and exceptional technical support and customer service to our customers around the world. Our innovative high quality products, on-time deliveries, and excellent technical and customer service, is a result of modern manufacturing techniques, rigorous quality control measures and our commitment to respond to the demands of our customers quickly and efficiently regardless of where our customers are located. We currently serve the Global Market place from our customer service and manufacturing facilities located in Sterling, MA, U.S.A., Fermoy, Ireland and our three Asia Pacific facilities: Shenzhen, China, Shatin Hong Kong and Taichung City 407, Taiwan (R.O.C.).

APP is a Leader in Power Interconnect Solutions for the vast Power Electronics Marketplace. APP has developed Power Interconnect Technology for a variety of markets such as Back-up Power, Power Supplies, Telecommunications, DataComm and many others. APP has also set the standard for Power Interconnect Solutions for the Material Handling Industry.

The APP Website is a valuable resource and provides immediate access to information such as Sales and Distribution Contact Information, Product Specifications, Drawings, Assembly and Crimping Instructions and much more. As a Global Company dedicated to Best Environmental Practices, APP meets the RoHS Directive for virtually all of our products.

APP looks forward to the challenges and opportunities to support our customers posed by the new technologies of the future and will continue our tradition of design excellence and outstanding customer support.

The Power Of Choice Is Yours - Connector Features

Powerpole®

- Flat Wiping Contacts
- Color Coded Housings
- Genderless Housings / Contacts

Multipole

- Color Coded (keyed) Housings
- Mechanical Voltage Keys
- Flat Wiping Contacts
- Genderless Housings / Contacts
- Auxiliary Contacts-SBE®, SBO® & SBX®
- Touch Safe - SBE®, SBO®, & SBS®

PowerMod® HP

- Positive Latching
- Available In Straight, Right Angle, Panel Mount, Blind Mate & Bus Bar Styles
- Touch Safe Female Connectors
- Polarized Dual Pole Connectors With Optional Hex Key
- Strain Relief Option
- Low Connector Mating Forces
- Silver Plated, High Conductivity Contacts
- Ease Of Assembly

PowerMod®

- Mechanically Polarized Housings
- PCB, Panel Or Cable Mounting
- Optional Latches & Back Shells
- Optional Sequential Mating Contact

Power Drawer®

- First-Mate & Last-Mate Capability
- Integral Guide Pins
- Optional Floating Mount
- Industry Standard Contacts

Power Clip®

- High 300 Amp Current Rating
- Mates With .125" Flat Bus Bar Blade
- Hot Pluggable Contact

MARC Connector

- Combines Power & Signal In One Blind Mating Connector Housing
- Accommodates From 1 To 8 Power Contacts & Up To 2 Ground Contacts

Euro Battery Connector (EBC)

- 3 Hexagonal Voltage Coding Pins For Wet, Dry / Gel & Air Supply
- 2 Main Contacts, 4 Auxiliary Contacts, Voltage Key & Air Supply
- Optional Air Voltage Key

Global Facility Locations



Headquarters - Sterling East



USA Sterling West



Ireland



Asia / Pacific



China



Taiwan

Visit Us At www.andersonpower.com



Contact Your Local Customer Service Representative For Information On Additional APP Literature



HEADQUARTERS: 13 Pratts Junction Road, P.O. Box 579, Sterling, MA 01564 T:978-422-3600 F:978-422-3700

EUROPE: Rathealy Road, Fermoy Co. Cork, Ireland T:353-(0)25-32277 F:353-(0)25-32296

ASIA / PACIFIC: IDEAL Anderson Asia Pacific Ltd., Unit 922-928 Topsail Plaza, 11 On Sum Street, Shatin N.T., Hong Kong T:852-2636-0836 F:852-2635-9036

CHINA: IDEAL Anderson Technologies (Shenzhen) Ltd., Block A8 Tantou W. Ind. Par, Songgang Baoan District, Shenzhen, PR. China 51810 T: 86-755-2768-2118 F: 86-755-2768-2218

TAIWAN: IDEAL Anderson Asia Pacific Ltd., Taiwan Branch, 4F.-2, No.116, Dadun 20th St., Situn District, Taichung City 407, Taiwan (R.O.C.) T: 886-4-2310-6451 F:886-4-2310-6460

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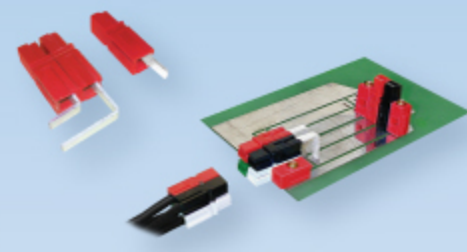
Power Connector Solutions

5 amps up to 700 amps



Powerpole®

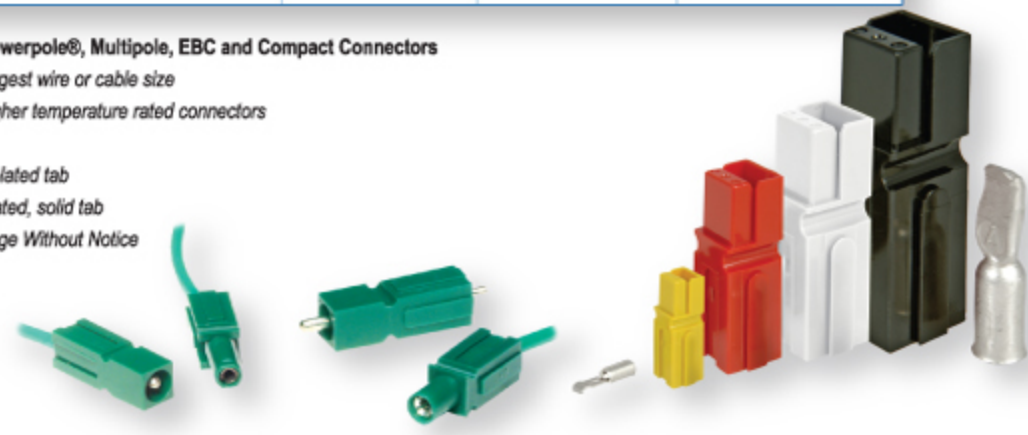
10 amps up to 180 amps



SPECIFICATIONS	Pin & Socket	15 to 180 amps	PCB Series
Current Rating (Amperes) ⁽¹⁾	10 to 30 ⁽³⁾	15 to 180	25 to 55
Voltage Ratings (Volts AC/DC) ⁽¹⁾	600	600	600
Contact Barrel Wire Size (AWG) (mm ²)	#10 to #16 5.3 to 1.3	#20 to 1/0 .5 to 53.5	N/A N/A
Maximum Wire Insulation Diameter (inches) (mm)	.175 to 0.137 4.45 to 3.48	.175 to 0.900 4.45 to 22.86	N/A N/A
Housing Material	Polycarbonate	Polycarbonate	Polycarbonate
Contact Material	Copper Alloy	Copper Alloy	Copper Alloy
Contact Plating	Tin or Silver	Tin or Silver	Tin or Silver
Suggested Board Thickness	N/A	N/A	0.093 to 0.150" max.
AVG Contact Resistance (micro-ohms) ⁽¹⁾	2200 to 600	578 to 100	N/A
Insulation Withstanding	2200	2200	N/A
Contact Retention Force (lbf) (N)	25 111	25 to 170 111 to 758	N/A N/A
Life a. No load (Contact/Disconnect Cycles) b. Under Load (Hot Plug 250 cycles @ 120V)	2,500 N/A	10,000 15A to 75A	10,000 15A to 50A
Insertion / Extraction Force (lbf) (N)	3 to 5 13 to 22	3 to 20 13 to 89	2 to 15 8 to 66
Touch Safe	No	PP15/45	Optional - 25 amp
Operating Temperature ⁽²⁾ °C °F	-20° to 105° -4° to 221°	-20° to 105° -4° to 221°	-20° to 105° -4° to 221°
Flammability Rating of Housing Material	UL94 V-0	UL94 V-0	UL94 V-0

Connector Notes for Powerpole®, Multipole, EBC and Compact Connectors

- (1) UL Rated for 65°C largest wire or cable size
 - (2) Contact factory for higher temperature rated connectors
 - (3) Based on 10 AWG
 - (4) Ratings using nickel plated tab
 - (5) Ratings using gold plated, solid tab
- All Data Subject To Change Without Notice



Multipole & EBC

50 amps up to 700 amps



SPECIFICATIONS	SB®	SBE® / SBO®	SBS®	SBX®	EBC (A & E)
Current Rating (Amperes) ⁽¹⁾	50 to 350 ⁽¹⁾	80 to 700 (SBE) ⁽¹⁾ 60 (SBO)	50	175 to 350 ⁽¹⁾	80 -320 Nominal 155 - 335 Maximum ⁽¹⁾
Voltage Ratings (Volts AC/DC)	600 ⁽¹⁾	150 (SBE) ⁽¹⁾ 600 (SBO) ⁽¹⁾	600 ⁽¹⁾	600 ⁽¹⁾	150
Contact Barrel Wire Size (AWG) (mm ²)	#16 to 300 mcm 1.3 to 152.0	#6 to 300 mcm (SBE) #6 (SBO) 13.3 to 152.0 (SBE) 16 (SBO)	#6 to #16 0.44 to 1.3	1/0 to 300 mcm 53.5 to 152	1/0 to 4/0 at 320A (A) 10 to 35mm ² at 80A (A) 10 to 95mm ² (E)
Maximum Wire Insulation Diameter (inches) (mm)	0.44 to 1.10 11.2 to 27.9	0.44 to 1.10 (SBE) 0.44 (SBO) 11.18 to 27.94 (SBE) 11.12 (SBO)	11.2 200	0.75 to 1.10 19.1 to 27.9	N/A N/A
Housing Material	Polycarbonate	PBT	Polycarbonate	Polycarbonate	PA6 (Nylon) Glass Filled (A) PBT/PC Blend (E)
Contact Material	Copper Alloy	Copper Alloy	Copper Alloy	Copper Alloy	Copper Alloy
Contact Plating	Tin or Silver	Tin or Silver	Tin or Silver	Tin or Silver	Silver
AVG Contact Resistance (micro-ohms) ⁽¹⁾	200 to 50	200 to 50 (SBE) 200 (SBO)	200	100 to 50	30
Insulation Withstanding	2200	2200	2200	2200	2200
Contact Retention Force (lbf) (N)	50 to 500 223 to 2232	50 to 500 223 to 2232	50 223	300 to 500 1339 to 2232	100 446
Life a. No load (Contact/Disconnect Cycles) b. Under Load (Hot Plug 250 cycles @ 120V)	10,000 50A to 100A	10,000 60 to 100A (SBE) ⁽¹⁾ 60A (SBO)	10,000 50A	10,000 75A to 100A ⁽¹⁾	5000 N/A
Insertion / Extraction Force (lbf) (N)	15 to 35 66 to 156	15 to 30 (SBE) 15 (SBO) 66 to 133 (SBE) 66 (SBO)	15 66	25 to 30 111 to 133	12 (320A) 53
Operating Temperature ⁽²⁾ °C °F	-20° to 105° -4° to 221°	-20° to 105° -4° to 221°	-20° to 105° -4° to 221°	-20° to 105° -4° to 221°	-25° to 90° (A) -25° to 105° (E) -13° to 194° (A) -13° to 221° (E)
Flammability Rating of Housing Material	UL94 V-0	UL94 V-0	UL94 V-0	UL94 V-0	UL94 V-0



Compact Connectors

5 amps up to 450 amps



SPECIFICATIONS	Power Clip®	Power Drawer®	PowerMod®	PowerMod®HP A & B Series	MARC
Current Rating (Amperes)	300 ⁽⁴⁾	5 to 75 per contact	30	SP 220 (A) 450 (B) DP 210 (A) 400 (B)	#10 AWG = 30A @ 30° rise #12 AWG = 25A @ 30° rise #18 AWG = 14A @ 30° rise
Voltage Rating (Volts AC/DC)	600	600	600	600	600
Number of Poles	1	29 to 37	3 to 30	1 or 2	8
Wire Size (AWG) (mm ²)	N/A	#8 to #20 3.70 to 0.91	#24 to #12 .5 to 3.31	#6 to 4/0 16mm ² to 95mm ²	#10, #12, #18 5.3, 3.31, 1.02
Dielectric Rating	2200 V	2200 VDC	2200 V	2200 V	2200 V
Hot Pluggable	100 amps @ 48 volts 200 amps @ 42 volts ⁽⁵⁾	N/A	N/A	80A / 120V (A) 150A / 48V (B)	N/A
Insertion Force (lbf) (N)	10.0 maximum 44	2.0 to 0.43 per contact 8 to 2 per contact	0.68 per contact 3 per contact	SP 7.0 (A) 16.5 (B) DP 15.0 (A) 33.0 (B) SP 31 (A) 135 (B) DP 66 (A) 147 (B)	20 89
Extraction Force (lbf) (N)	5.0 minimum 2.3	1.26 to 0.07 per contact 0.57 to 0.03 per contact	0.50 per contact 0.23 per contact	SP 3.0 (A) 8.0 (B) DP 6.0 (A) 16.0 (B) SP 13 (A) 35 (B) DP 26 (A) 71 (B)	18 80
Operating Temperature °C °F	-40° to 130° -40° to 226°	-40° to 125° -40° to 257°	-55° to 180° -65° to 356°	-40° to 130° -40° to 266°	-40° to 125° -40° to 257°
Housing Material	PBT UL94 V-0	PBT UL94 V-0	PPS UL94 V-0	PBT UL94 V-0	PBT UL94 V-0
Contact Material	Beryllium copper alloy per C17200 Contact Holder; Copper alloy C11000	Copper alloy	Copper alloy	Copper alloy	Copper alloy
Contact Plating (mating surface)	Gold	Silver or Gold	Gold	Silver	Silver

