

Power Connector Solutions

AMPERES | 10A up to 550A

Safely Connect Power with Simplicity and Intelligence

- Touch Safe
- Blindmate
- Latching
- Hot Plug



- Power, Signal & Ground
- Environmentally Sealed
- Wire, PCB & Busbar
- Auxiliary Contacts

ANDERSON
POWER™

SPECIFICATIONS	POWERPOLE® & POWERPOLE® PAK	SB®	SB® SMART
Description	Four housing sizes that can be stacked together to create a custom connector from a single position into a multiple position connection. Powerpole PAK allow for a finished look to self-contain Powerpole housings	SB® Connectors are available from 50 up to 500 amps. The SB® connectors are genderless and are both color and mechanically keyed to prevent cross mating different voltages.	Two primary power positions and up to sixteen auxiliary power / signal circuits. Unique to the SB® Smart is it's selective keyed housings that allow only mating between select connector halves.
Sample Applications	<ul style="list-style-type: none"> • Modular Office • LED Lighting • Humidification • Garden Tools • Industrial Ovens • Solar Chargers • Electric Lawn Mower • UPS • Robotics 	<ul style="list-style-type: none"> • Electrical Testing Equipment • Commercial Trucking Charger • Automatic Guided Vehicles • UPS • Material Handling • Motive Power • Electric Vehicles 	<ul style="list-style-type: none"> • Industrial • Process Controls • Smart Storage Batteries • Commercial Vehicles
Product Image <i>(representative photo only)</i>			
Current Rating (Amperes)			
- Power Contacts (UL) ⁽¹⁾	Up to 350	Up to 500	Up to 230
- Auxiliary Contacts (UL) ⁽¹⁾			Up to 15
Voltage Rating (AC / DC)	Up to 600 UL	Up to 600 UL	Up to 600 UL
Contact Barrel Wire Size			
(AWG) - Power Contacts	20 to 3/0	12 to 350 mcm	10 to 1/0
- Auxiliary / Signal Contacts			24 to 12
(mm ²) - Power Contacts	0.52 to 85	2.5 to 185	5.3 to 53.5
- Auxiliary / Signal Contacts			0.5 to 2.5
Dielectric Withstanding Voltage (AC)	2,200	2,200	2,200
Mating Cycles- Assembled Part	5,000	5,000	(No load) 10,000
Mating Cycles- Power	1,500 to 10,000 ⁽⁴⁾	10,000	10,000
Mating Cycles- Signal			10,000
Operating Temperature (°C) ⁽²⁾	-20° to 105°	-20° to 105°	-20° to 105°
- Chemical Resistant	-40° to 105° (CR) ⁽⁶⁾	-40° to 105° (CR) ⁽⁶⁾	-40° to 105° (CR) ⁽⁶⁾
Operating Temperature (°F)	-4° to 221°	-4° to 221°	-4° to 221°
- Chemical Resistant	-40° to 221° (CR) ⁽⁶⁾	-40° to 221° (CR) ⁽⁶⁾	-40° to 221° (CR) ⁽⁶⁾
Housing Style	PCB - Wire - Busbar	PCB - Wire - Busbar	Wire to Wire / Wire to Busbar (power only)
Number of Poles - Power	1+	2 to 3	2
Number of Poles - Auxiliary			Up to 16
Ground	•		
Touch Safety	UL1977 Sec 10.2	IEC 60529	
Flame Resistance	•	•	•
Environmental Protection		•	
Mechanically Keyed		•	•
Latching	• ⁽⁸⁾		
Blind Mate			
Hot Plug	•	•	•
Strain Relief	• ⁽⁸⁾	•	
Handle		•	
Air Supply			

Notes: 1) UL rated for largest wire or cable size up to the maximum operating temperature

2) Contact factory for higher temperature rated connectors



3) Ratings using nickel plated tab

4) 10,000 based on using silver plated contacts

5) E Series is not UL rated

6) On CR (Chemical Resistant) where available

• = Available on select parts

SPECIFICATIONS	SBS®	SBS® X-75A	SBE® / SBX®
Description	An ergonomic housing offering power & signaling with protection against accidental contact with live circuits where voltages can be health threatening.	SBS® X-75A sealed waterproof connectors offer up to 140A of power, 5,000 mating cycles and an IP68 rating makes it ideal for outdoor use.	Can integrate up to 8 auxiliary contacts for use in power / signal applications. SBE® connectors are IEC 60950 touch safe and resistant to chemical resistsants. SBX® are IP20 rated and molded from a PC resin to resist impact.
Sample Applications	<ul style="list-style-type: none"> • Robotics • Roof Top Air Handlers • Electric Vehicles • Lawn/Garden • Electrical Testing Equipment • UPS • Motive Power 	<ul style="list-style-type: none"> • Lawn & Garden Equipment • Industrial/Commercial • Power Equipment • Marine Use • Robotics 	<ul style="list-style-type: none"> • Material Handling • Motor Controls • Traction Batteries • Transportation • Robotics
Product Image <i>(representaive photo only)</i>			
Current Rating (Amperes)			
- Power Contacts (UL) ⁽¹⁾	Up to 110	Up to 140	Up to 550
- Auxiliary Contacts (UL) ⁽¹⁾	Up to 20	Up to 6	Up to 20
Voltage Rating (AC / DC)	Up to 600 UL	Up to 600 UL	Up to 600 UL
Contact Barrel Wire Size			
(AWG) - Power Contacts	12 to 6	10 to 4	16 to 350 mcm
- Auxiliary / Signal Contacts	24 to 12	24 to 14	24 to 10
(mm ²) - Power Contacts	2.5 to 16	6 to 25	1.5 to 185
- Auxiliary / Signal Contacts	0.5 to 2.5	0.5 to 1.5	0.25 to 5.3
Dielectric Withstanding Voltage (AC)	2,200	2,200	2,200
Mating Cycles- Assembled Part	5,000 / SBS Mini 200-8000	(No load) 5,000	
Mating Cycles- Power	1,500 - 10,000	10,000	10,000
Mating Cycles- Signal	10,000	10,000	1,500 - 10,000
Operating Temperature (°C) ⁽²⁾	-20° to 105°	-20° to 105°	(-20° to 105° SBX®)
- Chemical Resistant	-40° to 105° (CR) ⁽⁶⁾		(-40° to 105° SBE®)
Operating Temperature (°F)	-4° to 221°	-4° to 221°	-4° to 221°
- Chemical Resistant	-40° to 221° (CR) ⁽⁶⁾		-40° to 221° (CR) ⁽⁶⁾
Housing Style	PCB - Wire	Wire to Wire / Wire to Panel / Panel to Panel	Wire to Wire
Number of Poles - Power	2 - 3	2	2
Number of Poles - Auxiliary	Up to 4	Up to 6	Up to 8
Ground	•	•	
Touch Safety	IEC 60950 - IEC 60529	UL 60950-1, UL 62368-1, IEC 605293	IEC 60529 IP20
Flame Resistance	•	•	•
Environmental Protection		IP68	•
Mechanically Keyed	•	•	•
Latching		•	
Blind Mate			
Hot Plug	•	•	•
Strain Relief	•	•	•
Handle	•		•
Air Supply			

Notes: 7) Solar SPEC Pak® latch complies with NEC 2008 (requires a tool to release)

8) When used with Powerpole® Pak accessories

9) Female side only

• = Available on select parts

SPECIFICATIONS	EBC A & E Series are NOT Intermateable	POWER CLIP®	POWER DRAWER®
Description	(E) Series connectors comply with DIN 0623-589 & meet UL1977. The design meets or exceeds all the requirements of EN1175:2020. (A) Series is rated up to 450A UL. All materials are RoHS compliant ensure years of reliability.	An interconnection between two perpendicular power busbars. The design enables the connector to be blind mated in the deepest racks.	The 35A & 75A connectors are a mixed power and signal drawer connector. Pin contacts can be for First/Mate and Last/Mate connection. Guide pins correct misalignment during blind mating.
Sample Applications	<ul style="list-style-type: none"> Forklift Trucks Reach Stacker Battery Chargers 	<ul style="list-style-type: none"> N + 1 Rectifier Switching Power Power Supply 	<ul style="list-style-type: none"> Rectifiers Mainframe Computers Telecommunications Network Equipment
Product Image <i>(representative photo only)</i>			
Current Rating (Amperes)			
- Power Contacts (UL) ⁽¹⁾	UL up to 340 nominal (E)	300 ⁽³⁾	Up to 75 per contact
	UL up to 450 (A)		
- Auxiliary Contacts (UL) ⁽¹⁾	20 ⁽⁵⁾		5
Voltage Rating (AC / DC)	E & A Series - UL / CSA - 600V AC / DC E Series - EN1175-1 - 150V AC / DC	Up to 600 UL	Up to 600 UL
Contact Barrel Wire Size			
(AWG) - Power Contacts	8 to 4/0		24 to 12
- Auxiliary / Signal Contacts	18 to 10		
(mm ²) - Power Contacts	10 to 120		0.5 to 2.5
- Auxiliary / Signal Contacts	1.5 to 6		
Dielectric Withstanding Voltage (AC)	2,200	2,200	2,200
Mating Cycles- Assembled Part	E Series (No load) >5,000	(No load) 500	(No load) 250
Mating Cycles- Power	5,000	500	250
Mating Cycles- Signal	5,000		
Operating Temperature (°C) ⁽²⁾	-25° to 75° (E)	-40° to 105°	-40° to 125°
- Chemical Resistant	-25° to 105° (A)		
Operating Temperature (°F)	-13° to 167° (E)	-40° to 221°	-40° to 257°
- Chemical Resistant	-13° to 221° (A)		
Housing Style	Wire	Busbar	Wire
Number of Poles - Power	2	1	Up to 13
Number of Poles - Auxiliary	4		Up to 24
Ground			
Touch Safety	IP20 Female ⁽⁹⁾		
Flame Resistance	•	•	•
Environmental Protection			
Mechanically Keyed	•		•
Latching			
Blind Mate		•	•
Hot Plug		•	
Strain Relief	•		
Handle	•		
Air Supply	• (E only)		

Notes: 1) UL rated for largest wire or cable size up to the maximum operating temperature 4) 10,000 based on using silver plated contacts




2) Contact factory for higher temperature rated connectors

5) E Series is not UL rated

3) Ratings using nickel plated tab

6) On CR (Chemical Resistant) where available

• = Available on select parts

SPECIFICATIONS	SAF-D-GRID®	SPEC PAK® Sealed Power For Environmental Connections	MARC Multi Axial Rotational Connector
Description	The Saf-D-Grid® connector series, offers the same panel footprint as an IEC 60320 C13/ C14. It's UL and IEC rated for both AC and DC for up to 400V and 30A.	SPEC Pak® are IP68 sealed connectors, used anywhere a rugged or waterproof high power, signal and ground interconnect solution is required.	The MARC provides blind mating from 2 rotating axis or straight on. The MARC is UL listed and rated up to 10,000 mating cycles. The housing is a chemically resistant PBT plastic.
Sample Applications	<ul style="list-style-type: none"> • AC and / or DC Rack Power • IT Rack Power Distribution • Power Supply Units 	<ul style="list-style-type: none"> • Solar or Wind Power • Industrial Automation • Marine • Pumps • Transportation 	<ul style="list-style-type: none"> • Medical • Personal Mobility
Product Image <i>(representative photo only)</i>			
Current Rating (Amperes)			
- Power Contacts (UL) ⁽¹⁾	30 (IEC Rating 32)	16 to 80	29
- Auxiliary Contacts (UL) ⁽¹⁾			
Voltage Rating (AC/DC)	600 UL / 400 IEC	Up to 600 UL	Up to 600 UL
Contact Barrel Wire Size			
(AWG) - Power Contacts	18 to 10	20 to 6	20 to 10
- Auxiliary / Signal Contacts		24 to 12	
(mm ²) - Power Contacts	0.75 to 4	0.75 to 16	.50 to 4
- Auxiliary / Signal Contacts		0.50 to 2.5	
Dielectric Withstanding Voltage (AC)	2,200	3,000	2,200
Mating Cycles- Assembled Part	(No load) 5,000	Series Range 250 - 1500	(No load) 10,000
Mating Cycles- Power	5,000	1,500 to 10,000 ⁽⁴⁾	1,500 to 10,000 ⁽⁴⁾
Mating Cycles- Signal		10,000	
Operating Temperature (°C) ⁽²⁾	-20° to 105°	-40° to 105°	-40° to 125°
- Chemical Resistant			
Operating Temperature (°F)	-4° to 221°	-40° to 221°	-40° to 257°
- Chemical Resistant			
Housing Style	Wire to Panel	Wire	Wire
Number of Poles - Power	2	Up to 9	8
Number of Poles - Auxiliary		8	8
Ground	•		•
Touch Safety	IEC 60950	•	
Flame Resistance	•	•	•
Environmental Protection		•	
Mechanically Keyed	•	•	
Latching	•	• ⁽⁷⁾	
Blind Mate			•
Hot Plug	•	•	•
Strain Relief	•		
Handle			
Air Supply			

Notes: 7) Solar SPEC Pak® latch complies with NEC 2008 (requires a tool to release)

8) When used with Powerpole® Pak accessories

9) Female side only

• = Available on select parts

WHY CHOOSE ANDERSON™

Anderson Power Products® is an international leader in the design and development of high quality, cost-effective power interconnect solutions for industries that include: Material Handling, Datacom, Construction, Agriculture, Lawn & Garden and Commercial Industries.

We serve our worldwide customer base from our manufacturing facilities in Sterling, MA, U.S.A., Warrington UK for European customers, as well as three Asia Pacific facilities: Shenzhen, China (manufacturing, sales, and distribution), Shatin N.T., Hong Kong, and Haryana, India (sales and distribution).

Your Best Connection™

THE CONNECTOR EXPERT

Over 100 years as a global leader in designing and manufacturing electrical power products. Anderson offers innovative, state of the art electrical power connector solutions, combined with a long-standing reputation for reliable and rugged connectors.

PARTNERSHIPS

Offering full-service support, ranging from concept sketches, 3D models and working prototypes to full production volumes. As a reliable and responsive partner, you will be guided in selecting the right connector based on your criteria. Engineering expertise, coupled with a safety agency certified team of lab technicians, provide clear and consistent communication and support for the customer's visions.

QUALITY

Exceptional knowledge in understanding safety standards to the markets and global geographic regions. Each region may have different standards & performance requirements for the same application and Anderson can offer advice in understanding which certifications are needed. Exceptionally trained and qualified associates, provide high quality products.

VALUE ADDED

Global customer service, distributors and sales representatives provide exceptional technical and ordering support. Multiple manufacturing and distributor locations allow for a shorter lead time from order placement to receipt of product and helps to control international shipping costs.

Custom Connectors

A leader in Developing and manufacturing high current custom connection systems, built to customer specifications and applications. Our expertise in multiple types of contact technology and molded plastic insulators, allows us to provide reliable and rugged power connectors, built to your needs. [Contact your local Sales Representative](#) or call: +1 978-422-3800.

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