

# Saf-D-Grid<sup>®</sup>

## DC Power Connection Solutions

- Carrying DC or AC Current up to 32A and 600V • Footprint of an IEC 620 C13/14
- Meets International Safety Requirements for Hazardous, Low Voltage Applications



**APP**  
Anderson Power Products<sup>®</sup>

An IDEAL Company

# SAF-D-GRID®

Anderson Power Products® has led the connector industry in development of DC power connection solutions since the introduction of the SB® electrical connector in 1953. Saf-D-Grid® builds on the proven contact technology used in SB® and Powerpole® connectors by offering features required for connecting Direct Current (DC) for higher voltage DC or hybrid AC/DC systems.

## The APP® Saf-D-Grid® Plug and Receptacle

- Connect devices carrying DC or AC current up to 30A and 600V in the footprint of an IEC 620 C13/C14 and is the only connector system at this size which is UL rated for disconnect up to 400V and 30A
- Meets International safety requirements for hazardous, low voltage applications including UL 950 and IEC 60950
- Enables greater power density by allowing up to 40A and 600V DC or AC within the same space of the IEC 320 C13/14 system that is limited to 10A and 250 VAC
- Saf-D-Grid® 400V series targets DC applications but is also rated for AC current with a single keying configuration
- Saf-D-Grid® 300V series targets AC applications but is also rated for DC current and has multiple mechanical keys



### First Mate, Last Break Ground Contact

- Provides the safety of an earthing path before engagement of the power contacts.

### Integral Latch

- Connectors cannot be accidentally unmated, preventing unwanted power loss to critical equipment.

### Hot Plug Rated

- The connectors are rated for current interruption for both electronic (capacitive) and electrical (resistive) loads.

### Touch Safe / Shock Protection

- Minimizes the risk of personal contact with a hazardous voltage. Passes UL & IEC finger probe (plug & receptacle) and 3mm probe tests (receptacle).

### Arcing Protection

- Housings contain the arc if connectors are mated or unmated while under load minimizing risk to personnel.



Integral Latch  
- T-Latch Straight Plug



First Mate, Last Break Ground Contact  
- Ultra Short Receptacle



Saf-D-Grid® doesn't discriminate. It makes the power connection safely and efficiently in systems using AC or DC. It enables better usage of space by providing more voltage and more current than similar sized IEC 60320 connectors safely and efficiently.

For locations where renewable and alternative energy sources are necessary to maintain system uptime, Saf-D-Grid® keeps the power on. Designers choose a manufacturer that has made power connections for over a hundred years.

Saf-D-Grid® from Anderson Power Products®

### NOMINAL PERFORMANCE CHARACTERISTICS

	Saf-D-Grid® 400V	Saf-D-Grid® 300 VAC
<b>MECHANICAL</b>		
Contact Retention	20lb (89N)	20lb (89N)
Plug Latch Retention	20lb (89N)	20lb (89N)
Panel Latch Retention	60lb (267N)	60lb (267N)
Durability	5000 Cycles (no load)	5000 Cycles (no load)
Receptacle Max Wire Size	10 AWG (4.0mm <sup>2</sup> )	
Creep and Clearance (between live parts of different polarity, earthing circuit and mating surface)	7.0mm min	7.0mm min
Max PCB Thickness (for PCB contacts only) <sup>A</sup>	0.093" (2.4mm)	N/A
Mechanical Shock (IEC 60512-4-6C) <sup>B</sup>	50g	50g
Vibration (IEC 60512-4-6d) <sup>B</sup>	20g	20g

### ELECTRICAL

Voltage AC	600V (UL 1977/CSA 22.2) 400V (IEC)	600V (UL 1977/CSA 22.2)
Voltage DC	600V (UL 1977/CSA 22.2) 400V (IEC)	600V (UL 1977/CSA 22.2)
Current Rating	40A	30A
Wire Range	10AWG to 18AWG (0.75mm <sup>2</sup> to 4.0mm <sup>2</sup> )	10AWG to 18AWG (0.75mm <sup>2</sup> to 4.0mm <sup>2</sup> )
Hot Plug Rating		
• @ 440A in-rush		250 Cycles
• @ 20A load		250 Cycles
Dielectric Withstanding Voltage	3300V	3300V
Operating Temperature	-4 to 176°F (-20 to 105°C)	-4 to 284°F (-20 to 140°C)
Fault Current Withstand (UL 467)	14AWG, 300V, 4s (10AWG, 750V, 4s)	14AWG, 300V, 4s

### MATERIALS

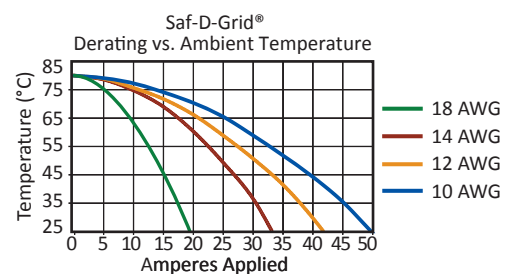
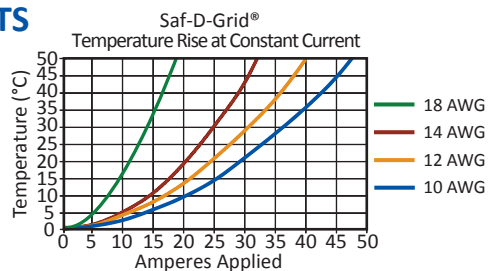
	Saf-D-Grid® 400V	Saf-D-Grid® 300VAC
(2006G and 2007G series receptacle housings)	High Temp Nylon 30% Glass, UL94 V-0, Halogen Free	N/A
All Other Housings (plug and receptacle)	Polycarbonate UL94 V-0	High Temp Nylon 30% Glass, UL94 V-0, Halogen Free
Springs	Stainless Steel	Stainless Steel
Contacts	Copper/Silver Plate	Copper/Silver Plate
Shield	N/A	Copper/Tin Plate
Cable/Strain Relief	Thermoplastic UL94 V-2	Thermoplastic UL94 V-2

**NOTE:** Parts are RoHS compliant

<sup>A</sup> Applicable only to receptacle intended for termination to PCB

<sup>B</sup> Tested with straight plug and flush mount receptacle with #14 AWG wire and 2003G1

## TEMPERATURE CHARTS



## RECEPTACLE CONNECTOR RATINGS AND APPROVALS

			RATED CURRENT					
			Disconnect (600V)			Current Interrupt (300V/400V)		
Receptacle	Wire Size	Series	UL 1977	CNR	IEC 61984	UL 1977	CNR	IEC 61984
SDG 300 Receptacle Key "A"	14 AWG	2316G	35	25	N/A	20	20	N/A
SDG 300 Receptacle Key "A"	12 AWG	2316G	35	25	N/A	20	20	N/A
SDG 300 Receptacle Key "B"	14 AWG	2326G	35	25	N/A	20	20	N/A
SDG 300 Receptacle Key "B"	12 AWG	2326G	35	25	N/A	20	20	N/A
SDG 300 Receptacle Key "C"	10 AWG	2336G	55	38	N/A	32	32	N/A
SDG 400V Flush Mount 18 AWG	18 AWG	2002	18	12	N/A	12	12	N/A
SDG 400V Flush Mount 16 AWG	16 AWG	2002	18	18	N/A	14	14	N/A
SDG 400V Flush Mount 14 AWG	14 AWG	2002	20	20	N/A	20	20	N/A
SDG 400V Flush Mount 12AWG	12 AWG	2002	25	25	N/A	25	25	N/A
SDG 400V Flush Mount 1.5mm <sup>2</sup> H05VV-F	1.5mm <sup>2</sup> H05VV-F	2002	N/A	N/A	16	N/A	N/A	16
SDG 400V Flush Mount 2.5mm <sup>2</sup> H05VV-F	2.5mm <sup>2</sup> H05VV-F	2002	N/A	N/A	25	N/A	N/A	25
SDG 400V Short 18 AWG	18 AWG	2005	18	12	N/A	12	12	N/A
SDG 400V Short 16 AWG	16 AWG	2005	18	18	N/A	14	14	N/A
SDG 400V Short 14 AWG	14 AWG	2005	20	20	N/A	20	20	N/A
SDG 400V Short 12 AWG	12 AWG	2005	25	25	N/A	25	25	N/A
SDG 400V Short 1.5mm <sup>2</sup> H05VV-F	1.5mm <sup>2</sup> H05VV-F	2005	N/A	N/A	16	N/A	N/A	16
SDG 400V Short 2.5mm <sup>2</sup> H05VV-F	2.5mm <sup>2</sup> H05VV-F	2005	N/A	N/A	25	N/A	N/A	25
SDG 400V Ultra Short 18 AWG	18 AWG	2006	35	25	13	12	12	12
SDG 400V Ultra Short 16 AWG	16 AWG	2006	TBD	TBD	N/A	TBD	TBD	N/A
SDG 400V Ultra Short 14 AWG	14 AWG	2006	21	13	25	20	20	20
SDG 400V Ultra Short 12 AWG	12 AWG	2007	25	25	N/A	25	25	N/A
SDG 400V Ultra Short 10 AWG	10 AWG	2007	30	30	N/A	30	30	N/A
SDG 400V Ultra Short 1.5mm <sup>2</sup> H05VV-F	1.5mm <sup>2</sup> H05VV-F	2006	N/A	N/A	16	N/A	N/A	16
SDG 400V Ultra Short 2.5mm <sup>2</sup> H05VV-F	2.5mm <sup>2</sup> H05VV-F	2006	N/A	N/A	25	N/A	N/A	25
SDG 400V Ultra Short 4.0mm <sup>2</sup> H05VV-F	4.0mm <sup>2</sup> H05VV-F	2007	N/A	N/A	30	N/A	N/A	30

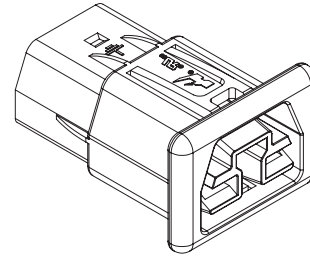
### No IEC 61984 Approvals for 2002N, 2002V, 2005N & 2005V Series Receptacles

- UL1977 ratings are for recognized components under UL1977 file # E26226. Ratings may vary once the final listing category is considered. Do not exceed maximum operating temperature of connector or wire insulation. Ratings are based on an ambient temperature of 25°C.
- CNR- indicates investigation to Canadian National Standards, C22.2 No. 182.3.
- UL817 recognized or listed cord sets under UL file number E 343569.
- IEC 61984 certification by TUV certification number R 7212289.
- **"Disconnect Only"** indicates the devices are not for interrupting current.
- **"Current Interrupt"** indicates the devices have been investigated for the interruption of current.
- APP assembly tooling is required for UL, CSA & other safety agency compliance. Use of unapproved tooling will void connector warranty.

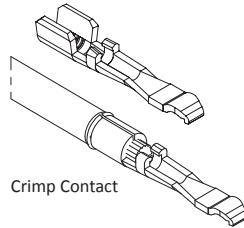


## 400V FLUSH MOUNT RECEPTACLES

Part Number	Panel Mount Thickness	Termination Style	Contacts Loaded
2002G1-BK	0.8mm	Crimp	No
2002G2-BK	1.2mm	Crimp	No
2002G3-BK	1.0mm	Crimp	No
2002G4-BK	1.6mm	Crimp	No
2002G5-BK	2.0mm	Crimp	No
2002G6-BK	2.5mm	Crimp	No

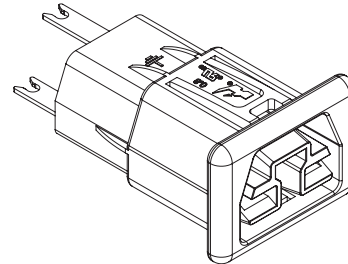


Crimp Contacts	
2003G1-BK	18 AWG to 12 AWG
2003G2-LPBK	10 AWG

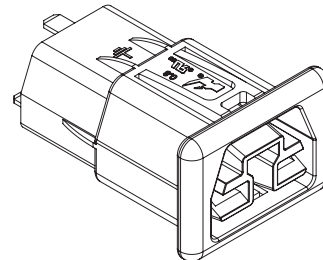


Crimp Contact

Part Number	Panel Mount Thickness	Termination Style	Contacts Loaded
2002N1-BK	0.8mm	"V" Solder	Yes
2002N2-BK	1.2mm	"V" Solder	Yes
2002N3-BK	1.0mm	"V" Solder	Yes
2002N4-BK	1.6mm	"V" Solder	Yes

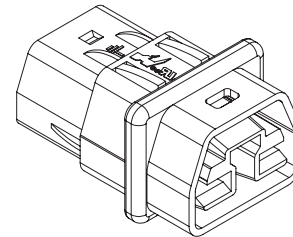


Part Number	Panel Mount Thickness	Termination Style	Contacts Loaded
2002V1-BK	0.8mm	PCB Mount	Yes
2002V2-BK	1.2mm	PCB Mount	Yes
2002V3-BK	1.0mm	PCB Mount	Yes
2002V4-BK	1.6mm	PCB Mount	Yes



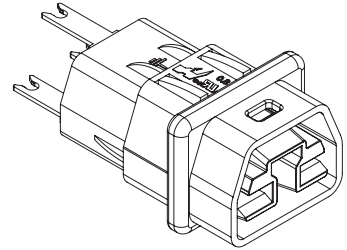
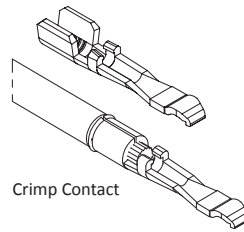
## 400V SHORT MOUNT RECEPTACLES

Part Number	Panel Mount Thickness	Termination Style	Contacts Loaded
2005G1-BK	0.8mm	Crimp	No
2005G2-BK	1.2mm	Crimp	No
2005G3-BK	1.0mm	Crimp	No
2005G4-BK	1.6mm	Crimp	No



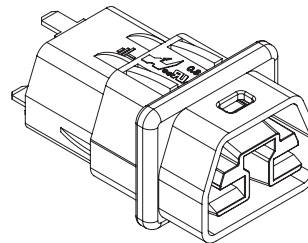
## Short Mount Receptacles Continued

Crimp Contacts	Wire Size
2003G1-BK	18 AWG to 12 AWG
2003G2-LPBK	10 AWG



Part Number	Panel Mount Thickness	Termination Style	Contacts Loaded
2005N1-BK	0.8mm	"V" Solder	Yes
2005N2-BK	1.2mm	"V" Solder	Yes
2005N3-BK	1.0mm	"V" Solder	Yes
2005N4-BK	1.6mm	"V" Solder	Yes

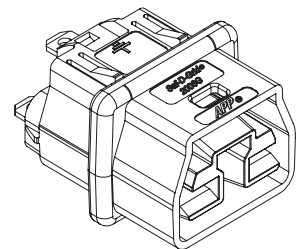
Part Number	Panel Mount Thickness	Termination Style	Contacts Loaded
2005V1-BK	0.8mm	PCB Mount	Yes
2005V2-BK	1.2mm	PCB Mount	Yes
2005V3-BK	1.0mm	PCB Mount	Yes
2005V4-BK	1.6mm	PCB Mount	Yes



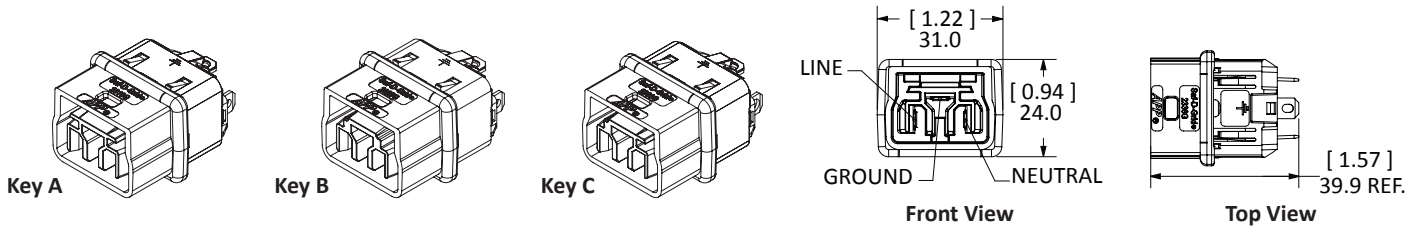
## 400V ULTRA SHORT RECEPTACLES

Part Number	Panel Mount Thickness	Termination Style	Contacts Loaded	Hot plug Current Rating	Disconnect Plug Rating
2006G1-BK	0.8mm	Crimp	Yes	20A UL, CSA - 25A IEC	20A UL, CSA - 25A IEC
2006G2-BK	1.2mm	Crimp	Yes	20A UL, CSA - 25A IEC	20A UL, CSA - 25A IEC
2006G3-BK	1.0mm	Crimp	Yes	20A UL, CSA - 25A IEC	20A UL, CSA - 25A IEC
2006G4-BK	1.6mm	Crimp	Yes	20A UL, CSA - 25A IEC	20A UL, CSA - 25A IEC
2006G1-NC-BK	0.8mm	Crimp	No	20A UL, CSA - 25A IEC	20A UL, CSA - 25A IEC
2006G2-NC-BK	1.2mm	Crimp	No	20A UL, CSA - 25A IEC	20A UL, CSA - 25A IEC
2006G3-NC-BK	1.0mm	Crimp	No	20A UL, CSA - 25A IEC	20A UL, CSA - 25A IEC
2006G4-NC-BK	1.6mm	Crimp	No	20A UL, CSA - 25A IEC	20A UL, CSA - 25A IEC

Part Number	Panel Mount Thickness	Termination Style	Contacts Loaded	Hot Plug Current Rating	Disconnect Plug Rating
2007G1-BK	0.8mm	Crimp	Yes	30A UL, CSA, IEC	30A UL, CSA - 32A IEC
2007G2-BK	1.2mm	Crimp	Yes	30A UL, CSA, IEC	30A UL, CSA - 32A IEC
2007G3-BK	1.0mm	Crimp	Yes	30A UL, CSA, IEC	30A UL, CSA - 32A IEC
2007G4-BK	1.6mm	Crimp	Yes	30A UL, CSA, IEC	30A UL, CSA - 32A IEC
2007G1-NC-BK	0.8mm	Crimp	No	30A UL, CSA, IEC	30A UL, CSA - 32A IEC
2007G2-NC-BK	1.2mm	Crimp	No	30A UL, CSA, IEC	30A UL, CSA - 32A IEC
2007G3-NC-BK	1.0mm	Crimp	No	30A UL, CSA, IEC	30A UL, CSA - 32A IEC
2007G4-NC-BK	1.6mm	Crimp	No	30A UL, CSA, IEC	30A UL, CSA - 32A IEC



## 300V ULTRA SHORT RECEPTACLES

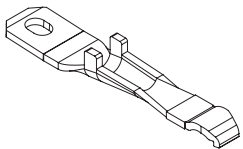


### Mates Only with Saf-D-Grid® 2300 Series, 300V Cables

Part Number	Key Configuration	Panel Mount Thickness	Termination Style	Contacts Loaded	Hot Plug Current Rating	Disconnect Plug Rating
2316G1-BK	A	0.8mm	Crimp	Yes	20A UL, CSA	20A UL, CSA
2316G2-BK	A	1.2mm	Crimp	Yes	20A UL, CSA	20A UL, CSA
2316G3-BK	A	1.0mm	Crimp	Yes	20A UL, CSA	20A UL, CSA
2316G4-BK	A	1.6mm	Crimp	Yes	20A UL, CSA	20A UL, CSA
2326G1-BK	B	0.8mm	Crimp	Yes	20A UL, CSA	20A UL, CSA
2326G2-BK	B	1.2mm	Crimp	Yes	20A UL, CSA	20A UL, CSA
2326G3-BK	B	1.0mm	Crimp	Yes	20A UL, CSA	20A UL, CSA
2326G4-BK	B	1.6mm	Crimp	Yes	20A UL, CSA	20A UL, CSA
2336G1-BK	C	0.8mm	Crimp	Yes	30A UL, CSA, IEC	30A UL, CSA - 32A IEC
2336G2-BK	C	1.2mm	Crimp	Yes	30A UL, CSA, IEC	30A UL, CSA - 32A IEC
2336G3-BK	C	1.0mm	Crimp	Yes	30A UL, CSA, IEC	30A UL, CSA - 32A IEC
2336G4-BK	C	1.6mm	Crimp	Yes	30A UL, CSA, IEC	30A UL, CSA - 32A IEC

#### Solder Contacts For Ultra Short

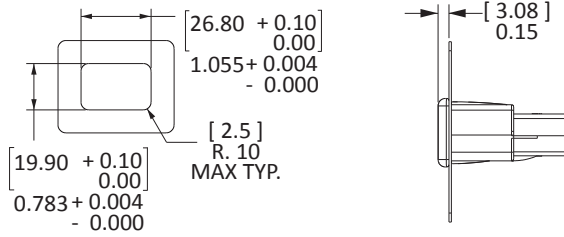
2016P1-LPBK	18 AWG to 12 AWG
2016P2-LPBK	10 AWG



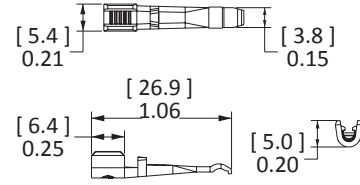
Ultra Short Solder Contact

**DRAWINGS | See Product Drawings on the Website for Additional Information**

**Panel Cut Out For All Receptacle Types**



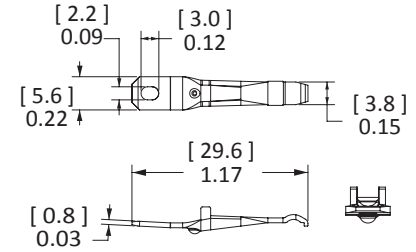
**Flush Mount & Short Contacts**



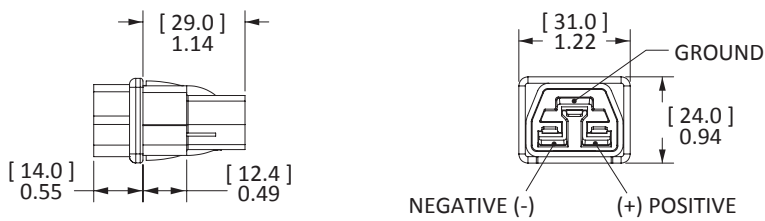
**Ultra Short Depth - For Solder Termination To Wire**



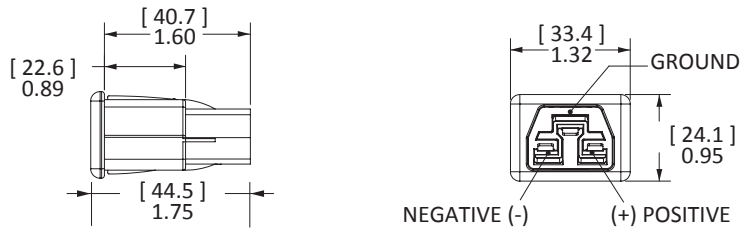
**Ultra Short Contacts**



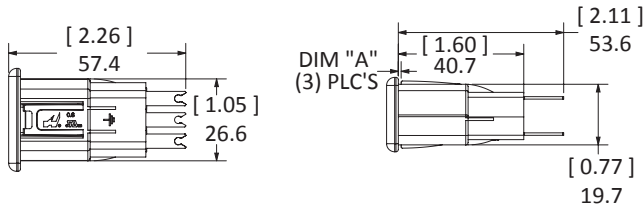
**Short Depth - For Crimp Termination To Wire**



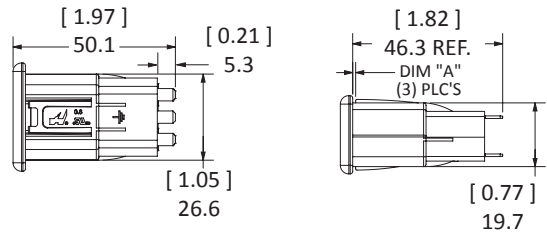
**Flush Mount - For Crimp Termination To Wire**



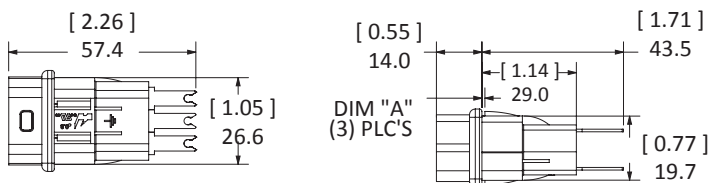
**Flush Mount - For Solder Termination To Wire**



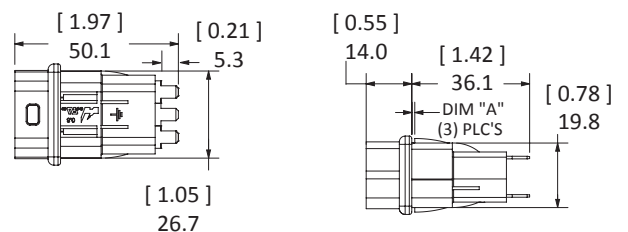
**Flush Mount - For Solder Termination To PCB**



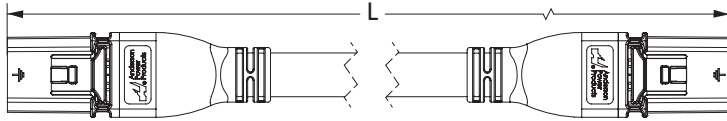
**Short Depth - For Solder Termination To Wire**



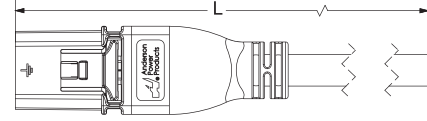
**Short Depth - For Solder Termination To PCB**



# NORTH AMERICAN 600V CABLE CONFIGURATIONS



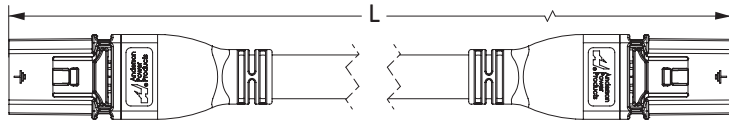
**Top View**  
Double Ended Plug Assembly



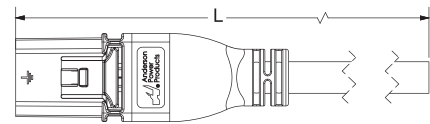
**Top View**  
Single Ended Plug Assembly

Part Number	Connector 1	Cable	Connector 2	Cordset Length	Voltage Rating Disconnect (AC)	Voltage Rating Current Interrupt (AC)	Current Rating	Maximum Temperature
2031KZ1-BK	Saf-D-Grid® 400V	14 AWG ST	None	1m	600V	400V	16A	105°C
2031KZ2-BK	Saf-D-Grid® 400V	14 AWG ST	None	2m	600V	400V	16A	105°C
2031KZ3-BK	Saf-D-Grid® 400V	14 AWG ST	None	3m	600V	400V	16A	105°C
2031KZ6-BK	Saf-D-Grid® 400V	14 AWG ST	None	6m	600V	400V	16A	105°C
2031KK1-BK	Saf-D-Grid® 400V	14 AWG ST	Saf-D-Grid® 400V	1m	600V	400V	16A	105°C
2031KK2-BK	Saf-D-Grid® 400V	14 AWG ST	Saf-D-Grid® 400V	2m	600V	400V	16A	105°C
2031KK3-BK	Saf-D-Grid® 400V	14 AWG ST	Saf-D-Grid® 400V	3m	600V	400V	16A	105°C
2031KK6-BK	Saf-D-Grid® 400V	14 AWG ST	Saf-D-Grid® 400V	6m	600V	400V	16A	105°C
2035KZ1-BK	Saf-D-Grid® 400V	12 AWG ST	None	1m	600V	400V	25A	105°C
2035KZ2-BK	Saf-D-Grid® 400V	12 AWG ST	None	2m	600V	400V	25A	105°C
2035KZ3-BK	Saf-D-Grid® 400V	12 AWG ST	None	3m	600V	400V	25A	105°C
2035KZ6-BK	Saf-D-Grid® 400V	12 AWG ST	None	6m	600V	400V	25A	105°C
2035KK1-BK	Saf-D-Grid® 400V	12 AWG ST	Saf-D-Grid® 400V	1m	600V	400V	25A	105°C
2035KK2-BK	Saf-D-Grid® 400V	12 AWG ST	Saf-D-Grid® 400V	2m	600V	400V	25A	105°C
2035KK3-BK	Saf-D-Grid® 400V	12 AWG ST	Saf-D-Grid® 400V	3m	600V	400V	25A	105°C
2035KK6-BK	Saf-D-Grid® 400V	12 AWG ST	Saf-D-Grid® 400V	6m	600V	400V	25A	105°C
2036KZ1-BK	Saf-D-Grid® 400V	16 AWG ST	None	1m	600V	400V	13A	105°C
2036KZ2-BK	Saf-D-Grid® 400V	16 AWG ST	None	2m	600V	400V	13A	105°C
2036KZ3-BK	Saf-D-Grid® 400V	16 AWG ST	None	3m	600V	400V	13A	105°C
2036KZ6-BK	Saf-D-Grid® 400V	16 AWG ST	None	6m	600V	400V	13A	105°C
2036KK1-BK	Saf-D-Grid® 400V	16 AWG ST	Saf-D-Grid® 400V	1m	600V	400V	13A	105°C
2036KK2-BK	Saf-D-Grid® 400V	16 AWG ST	Saf-D-Grid® 400V	2m	600V	400V	13A	105°C
2036KK3-BK	Saf-D-Grid® 400V	16 AWG ST	Saf-D-Grid® 400V	3m	600V	400V	13A	105°C
2036KK6-BK	Saf-D-Grid® 400V	16 AWG ST	Saf-D-Grid® 400V	6m	600V	400V	13A	105°C
2038KZ1-BK	Saf-D-Grid® 400V	10 AWG ST	None	1m	600V	400V	30A	105°C
2038KZ2-BK	Saf-D-Grid® 400V	10 AWG ST	None	2m	600V	400V	30A	105°C
2038KZ3-BK	Saf-D-Grid® 400V	10 AWG ST	None	3m	600V	400V	30A	105°C
2038KZ6-BK	Saf-D-Grid® 400V	10 AWG ST	None	6m	600V	400V	30A	105°C
2038KK1-BK	Saf-D-Grid® 400V	10 AWG ST	Saf-D-Grid® 400V	1m	600V	400V	30A	105°C
2038KK2-BK	Saf-D-Grid® 400V	10 AWG ST	Saf-D-Grid® 400V	2m	600V	400V	30A	105°C
2038KK3-BK	Saf-D-Grid® 400V	10 AWG ST	Saf-D-Grid® 400V	3m	600V	400V	30A	105°C
2038KK6-BK	Saf-D-Grid® 400V	10 AWG ST	Saf-D-Grid® 400V	6m	600V	400V	30A	105°C

## METRIC CABLE CONFIGURATIONS



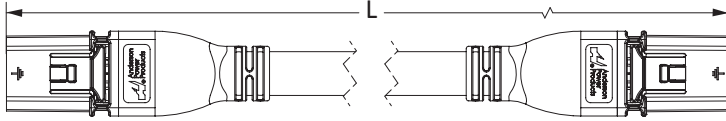
**Top View**  
Double Ended Plug Assembly



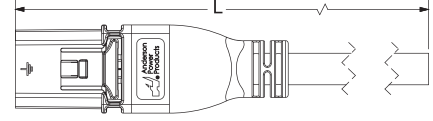
**Top View**  
Single Ended Plug Assembly

Part Number	Connector 1	Cable	Connector 2	Cordset Length	Voltage Rating Disconnect (AC/DC)	Voltage Rating Current Interrupt (AC/DC)	Current Rating	Maximum Temperature
2041KZ1-BK	Saf-D-Grid® 400V	1.5mm <sup>2</sup> H05VV-F	None	1m	300V	300V	16A	70°C
2041KZ2-BK	Saf-D-Grid® 400V	1.5mm <sup>2</sup> H05VV-F	None	2m	300V	300V	16A	70°C
2041KZ3-BK	Saf-D-Grid® 400V	1.5mm <sup>2</sup> H05VV-F	None	3m	300V	300V	16A	70°C
2041KZ6-BK	Saf-D-Grid® 400V	1.5mm <sup>2</sup> H05VV-F	None	6m	300V	300V	16A	70°C
2041KK1-BK	Saf-D-Grid® 400V	1.5mm <sup>2</sup> H05VV-F	Saf-D-Grid® 400V	1m	300V	300V	16A	70°C
2041KK2-BK	Saf-D-Grid® 400V	1.5mm <sup>2</sup> H05VV-F	Saf-D-Grid® 400V	2m	300V	300V	16A	70°C
2041KK3-BK	Saf-D-Grid® 400V	1.5mm <sup>2</sup> H05VV-F	Saf-D-Grid® 400V	3m	300V	300V	16A	70°C
2041KK6-BK	Saf-D-Grid® 400V	1.5mm <sup>2</sup> H05VV-F	Saf-D-Grid® 400V	6m	300V	300V	16A	70°C
2047KZ1-BK	Saf-D-Grid® 400V	2.5mm <sup>2</sup> H05VV-F	None	1m	300V	300V	25A	70°C
2047KZ2-BK	Saf-D-Grid® 400V	2.5mm <sup>2</sup> H05VV-F	None	2m	300V	300V	25A	70°C
2047KZ3-BK	Saf-D-Grid® 400V	2.5mm <sup>2</sup> H05VV-F	None	3m	300V	300V	25A	70°C
2047KZ6-BK	Saf-D-Grid® 400V	2.5mm <sup>2</sup> H05VV-F	None	6m	300V	300V	25A	70°C
2047KK1-BK	Saf-D-Grid® 400V	2.5mm <sup>2</sup> H05VV-F	Saf-D-Grid® 400V	1m	300V	300V	25A	70°C
2047KK2-BK	Saf-D-Grid® 400V	2.5mm <sup>2</sup> H05VV-F	Saf-D-Grid® 400V	2m	300V	300V	25A	70°C
2047KK3-BK	Saf-D-Grid® 400V	2.5mm <sup>2</sup> H05VV-F	Saf-D-Grid® 400V	3m	300V	300V	25A	70°C
2047KK6-BK	Saf-D-Grid® 400V	2.5mm <sup>2</sup> H05VV-F	Saf-D-Grid® 400V	6m	300V	300V	25A	70°C
2049KZ2-BK	Saf-D-Grid® 400V	4.0mm <sup>2</sup> H05V2V2-F	None	2m	300V	300V	32A (Disconnect) 30A Current Interrupt	90°C
2049KZ3-BK	Saf-D-Grid® 400V	4.0mm <sup>2</sup> H05V2V2-F	None	3m	300V	300V	32A (Disconnect) 30A Current Interrupt	90°C
2049KZ6-BK	Saf-D-Grid® 400V	4.0mm <sup>2</sup> H05V2V2-F	None	6m	300V	300V	32A (Disconnect) 30A Current Interrupt	90°C
2049KK2-BK	Saf-D-Grid® 400V	4.0mm <sup>2</sup> H05V2V2-F	Saf-D-Grid® 400V	2m	300V	300V	32A (Disconnect) 30A Current Interrupt	90°C
2049KK3-BK	Saf-D-Grid® 400V	4.0mm <sup>2</sup> H05V2V2-F	Saf-D-Grid® 400V	3m	300V	300V	32A (Disconnect) 30A Current Interrupt	90°C
2049KK6-BK	Saf-D-Grid® 400V	4.0mm <sup>2</sup> H05V2V2-F	Saf-D-Grid® 400V	6m	300V	300V	32A (Disconnect) 30A Current Interrupt	90°C

# UNIVERSAL CABLE CONFIGURATIONS



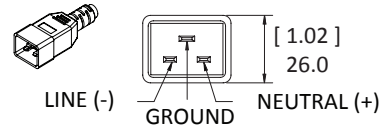
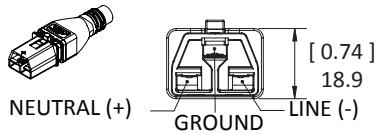
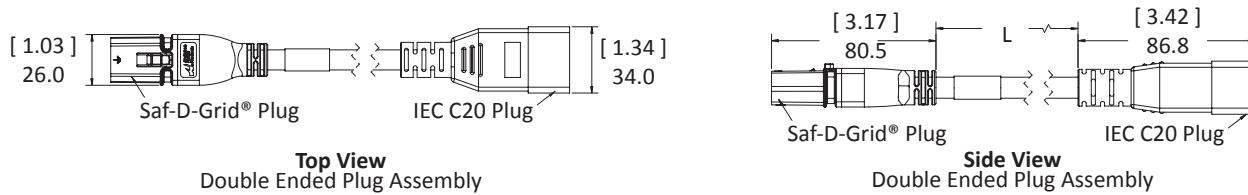
**Top View**  
Double Ended Plug Assembly



**Top View**  
Single Ended Plug Assembly

Part Number	Connector 1	Cable	Connector 2	Cordset Length	Voltage Rating Disconnect (AC/DC)	Voltage Rating Current Interrupt (AC/DC)	Current Rating (UL, CSA / IEC)	Temperature Rating
2050KZ1-BK	Saf-D-Grid® 400V	14 AWG SJT / 1.5mm <sup>2</sup> H05VV-F	None	1m	300V	300V	16A / 16A	90°C UL / 70°C IEC
2050KZ2-BK	Saf-D-Grid® 400V	14 AWG SJT / 1.5mm <sup>2</sup> H05VV-F	None	2m	300V	300V	16A / 16A	90°C UL / 70°C IEC
2050KZ3-BK	Saf-D-Grid® 400V	14 AWG SJT / 1.5mm <sup>2</sup> H05VV-F	None	3m	300V	300V	16A / 16A	90°C UL / 70°C IEC
2050KZ6-BK	Saf-D-Grid® 400V	14 AWG SJT / 1.5mm <sup>2</sup> H05VV-F	None	6m	300V	300V	16A / 16A	90°C UL / 70°C IEC
2050KK1-BK	Saf-D-Grid® 400V	14 AWG SJT / 1.5mm <sup>2</sup> H05VV-F	Saf-D-Grid® 400V	1m	300V	300V	16A / 16A	90°C UL / 70°C IEC
2050KK2-BK	Saf-D-Grid® 400V	14 AWG SJT / 1.5mm <sup>2</sup> H05VV-F	Saf-D-Grid® 400V	2m	300V	300V	16A / 16A	90°C UL / 70°C IEC
2050KK3-BK	Saf-D-Grid® 400V	14 AWG SJT / 1.5mm <sup>2</sup> H05VV-F	Saf-D-Grid® 400V	3m	300V	300V	16A / 16A	90°C UL / 70°C IEC
2050KK6-BK	Saf-D-Grid® 400V	14 AWG SJT / 1.5mm <sup>2</sup> H05VV-F	Saf-D-Grid® 400V	6m	300V	300V	16A / 16A	90°C UL / 70°C IEC
2058KZ1-BK	Saf-D-Grid® 400V	12 AWG SJT / 2.5mm <sup>2</sup> H05VV-F	None	1m	300V	300V	20A / 25A	90°C UL / 70°C IEC
2058KZ2-BK	Saf-D-Grid® 400V	12 AWG SJT / 2.5mm <sup>2</sup> H05VV-F	None	2m	300V	300V	20A / 25A	90°C UL / 70°C IEC
2058KZ3-BK	Saf-D-Grid® 400V	12 AWG SJT / 2.5mm <sup>2</sup> H05VV-F	None	3m	300V	300V	20A / 25A	90°C UL / 70°C IEC
2058KZ6-BK	Saf-D-Grid® 400V	12 AWG SJT / 2.5mm <sup>2</sup> H05VV-F	None	6m	300V	300V	20A / 25A	90°C UL / 70°C IEC
2058KK1-BK	Saf-D-Grid® 400V	12 AWG SJT / 2.5mm <sup>2</sup> H05VV-F	Saf-D-Grid® 400V	1m	300V	300V	20A / 25A	90°C UL / 70°C IEC
2058KK2-BK	Saf-D-Grid® 400V	12 AWG SJT / 2.5mm <sup>2</sup> H05VV-F	Saf-D-Grid® 400V	2m	300V	300V	20A / 25A	90°C UL / 70°C IEC
2058KK3-BK	Saf-D-Grid® 400V	12 AWG SJT / 2.5mm <sup>2</sup> H05VV-F	Saf-D-Grid® 400V	3m	300V	300V	20A / 25A	90°C UL / 70°C IEC
2058KK6-BK	Saf-D-Grid® 400V	12 AWG SJT / 2.5mm <sup>2</sup> H05VV-F	Saf-D-Grid® 400V	6m	300V	300V	20A / 25A	90°C UL / 70°C IEC

## SDG TO IEC 320 CABLE CONFIGURATIONS | C20 SHOWN



Part Number	Connector 1	Cable	Connector 2	Cordset Length	Voltage Rating Disconnect (AC)	Voltage Rating Current Interrupt (AC)	Current Rating (UL, CSA / IEC)	Temperature Rating
2050KN1-BK	Saf-D-Grid® 400V	14 AWG SJT / 1.5mm <sup>2</sup> H05VV-F	IEC 320 C14	1m	250V	250V	15A / 10A	50°C
2050KN2-BK	Saf-D-Grid® 400V	14 AWG SJT / 1.5mm <sup>2</sup> H05VV-F	IEC 320 C14	2m	250V	250V	15A / 10A	50°C
2050KN3-BK	Saf-D-Grid® 400V	14 AWG SJT / 1.5mm <sup>2</sup> H05VV-F	IEC 320 C14	3m	250V	250V	15A / 10A	50°C
2050KH1-BK	Saf-D-Grid® 400V	14 AWG SJT / 1.5mm <sup>2</sup> H05VV-F	IEC 320 C20	1m	250V	250V	16A / 16A	50°C
2050KH2-BK	Saf-D-Grid® 400V	14 AWG SJT / 1.5mm <sup>2</sup> H05VV-F	IEC 320 C20	2m	250V	250V	16A / 16A	50°C
2050KH3-BK	Saf-D-Grid® 400V	14 AWG SJT / 1.5mm <sup>2</sup> H05VV-F	IEC 320 C20	3m	250V	250V	16A / 16A	50°C
2058KH1-BK	Saf-D-Grid® 400V	12 AWG SJT / 2.5mm <sup>2</sup> H05VV-F	IEC 320 C20	1m	250V	250V	20A / 16A	50°C
2058KH2-BK	Saf-D-Grid® 400V	12 AWG SJT / 2.5mm <sup>2</sup> H05VV-F	IEC 320 C20	2m	250V	250V	20A / 16A	50°C
2058KH3-BK	Saf-D-Grid® 400V	12 AWG SJT / 2.5mm <sup>2</sup> H05VV-F	IEC 320 C20	3m	250V	250V	20A / 16A	50°C

## TOOLING

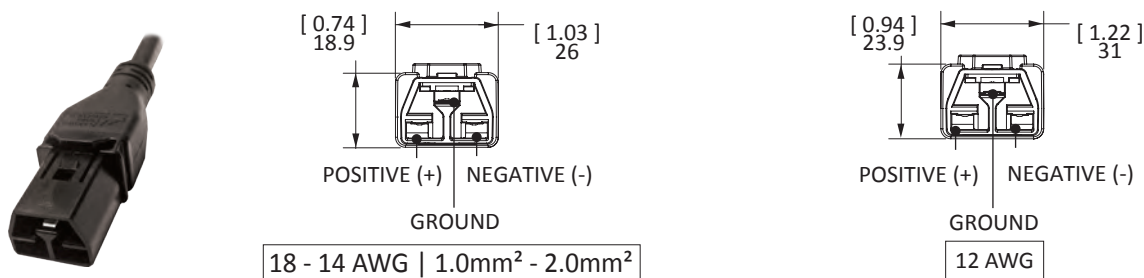
Tooling Available Directly From Anderson (all customers)

Contact Part Number	Description	Hand Tool	Automated Tooling	
			Press	Applicator
2003G1	Receptacle Contact, Reeled	-	115V = TE0101 230V = TE0102	TD0104
2003G1-LPBK	Receptacle Contact, Loose Piece	1309G9	-	-
2003G2-LPBK	Receptacle Contact, Loose Piece, 10AWG	1309G10	-	-

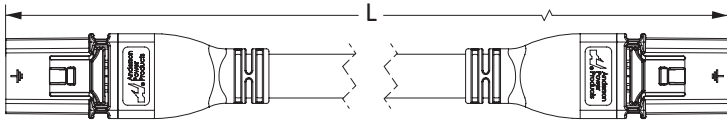
**NOTE:** Tooling recommended by Anderson is required for UL, CSA & other safety agency compliance. Use of unapproved tooling will void connector warranty.

## WIDE "T" LATCH PLUG

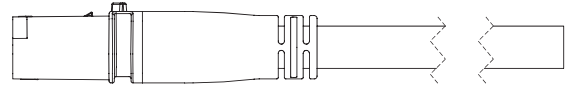
Wide latch release button across the top of the plug body to allow easy latch access around PSU handles or other obstacles.



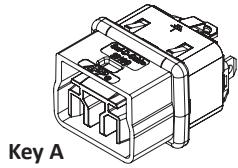
# NORTH AMERICAN 300V CONFIGURATIONS | WITH KEYS FOR AC USAGE



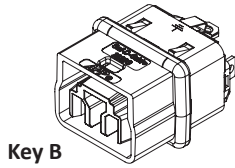
**Top View**  
Double Ended Plug Assembly



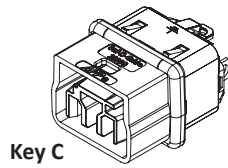
**Side View**  
Double Ended Plug Assembly



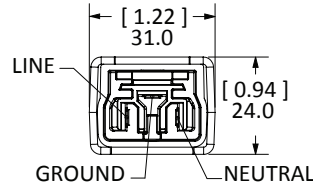
Key A



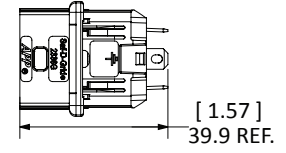
Key B



Key C

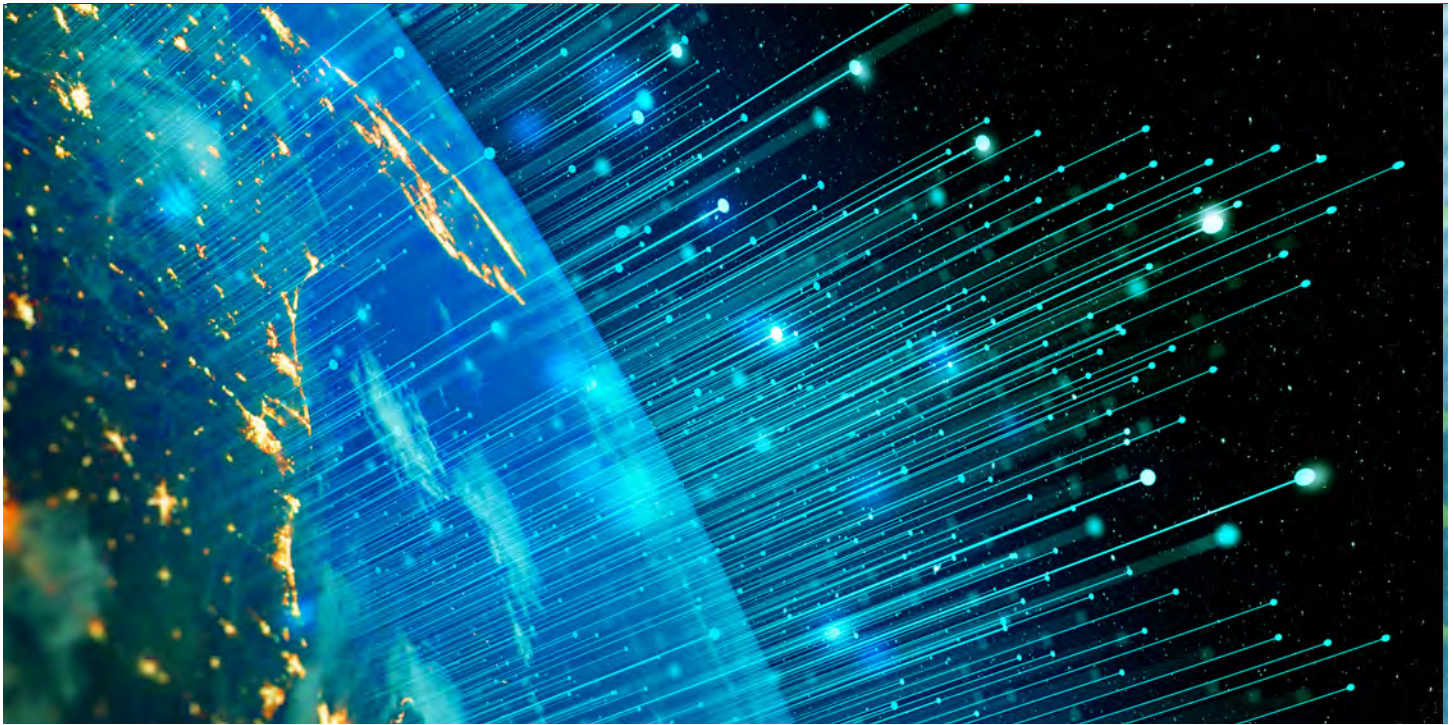


**Front View**



**Top View**

Part Number	Connector 1	Cable	Connector 2	Cordset Length	Voltage Rating Disconnect (AC/DC)	Voltage Rating Current Interrupt (AC/DC)	Current Rating (UL, CSA / IEC)	Temperature Rating
2352-1100-10	Saf-D-Grid® 300V KEY A	14 AWG SJT	None	1m	300V	300V	16A	90°C
2352-1100-20	Saf-D-Grid® 300V KEY A	14 AWG SJT	None	2m	300V	300V	16A	90°C
2352-1100-30	Saf-D-Grid® 300V KEY A	14 AWG SJT	None	3m	300V	300V	16A	90°C
2352-1100-60	Saf-D-Grid® 300V KEY A	14 AWG SJT	None	6m	300V	300V	16A	90°C
2352-1200-20	Saf-D-Grid® 300V KEY B	14 AWG SJT	None	2m	300V	300V	16A	90°C
2352-1200-30	Saf-D-Grid® 300V KEY B	14 AWG SJT	None	3m	300V	300V	16A	90°C
2352-1200-60	Saf-D-Grid® 300V KEY B	14 AWG SJT	None	6m	300V	300V	16A	90°C
2352-1112-10	Saf-D-Grid® 300V KEY A	14 AWG SJT	Saf-D-Grid® 300V KEY B	1m	300V	300V	16A	90°C
2352-1112-20	Saf-D-Grid® 300V KEY A	14 AWG SJT	Saf-D-Grid® 300V KEY B	2m	300V	300V	16A	90°C
2352-1112-30	Saf-D-Grid® 300V KEY A	14 AWG SJT	Saf-D-Grid® 300V KEY B	3m	300V	300V	16A	90°C
2352-1112-60	Saf-D-Grid® 300V KEY A	14 AWG SJT	Saf-D-Grid® 300V KEY B	6m	300V	300V	20A	90°C
2351-1111-20	Saf-D-Grid® 300V KEY A	12 AWG SJT	Saf-D-Grid® 300V KEY A	2m	300V	300V	20A	90°C
2351-1200-10	Saf-D-Grid® 300V KEY B	12 AWG SJT	None	1m	300V	300V	20A	90°C
2351-1200-20	Saf-D-Grid® 300V KEY B	12 AWG SJT	None	2m	300V	300V	20A	90°C
2351-1200-30	Saf-D-Grid® 300V KEY B	12 AWG SJT	None	3m	300V	300V	20A	90°C
2351-1200-60	Saf-D-Grid® 300V KEY B	12 AWG SJT	None	6m	300V	300V	20A	90°C
2351-1112-20	Saf-D-Grid® 300V KEY A	12 AWG SJT	Saf-D-Grid® 300V KEY B	2m	300V	300V	20A	90°C
2351-1112-30	Saf-D-Grid® 300V KEY A	12 AWG SJT	Saf-D-Grid® 300V KEY B	3m	300V	300V	20A	90°C
2351-1112-60	Saf-D-Grid® 300V KEY A	12 AWG SJT	Saf-D-Grid® 300V KEY B	6m	300V	300V	20A	90°C
2350-1300-10	Saf-D-Grid® 300V KEY C	10 AWG SJT	None	1m	300V	300V	30A	90°C
2350-1300-20	Saf-D-Grid® 300V KEY C	10 AWG SJT	None	2m	300V	300V	30A	90°C
2350-1300-30	Saf-D-Grid® 300V KEY C	10 AWG SJT	None	3m	300V	300V	30A	90°C
2350-1300-60	Saf-D-Grid® 300V KEY C	10 AWG SJT	None	6m	300V	300V	30A	90°C



## Why Anderson Power Products®

Anderson Power Products® is provider of mid to high power connectors for both AC and DC applications. Since 1877, Anderson™ has been synonymous with reliable products and has been the chosen power connection for material handling equipment for 40 years. Today, the lessons learned from those demanding applications have propelled our products into a wide number of industries from rail to data communications.

Anderson Power Products® is a subsidiary of IDEAL® INDUSTRIES, INC., a global enterprise with companies serving technicians and workers across a wide rang of industries, from electrical to construction to aerospace to automotive.

A DIVISION OF



IDEAL INDUSTRIES, INC.

IDEAL Corporate | 1375 Park Avenue  
Sycamore, Illinois 60178  
<https://www.idealindustries.com>

*All Data Subject To Change Without Notice*

*Anderson will use reasonable efforts to include accurate and up-to-date content in the data sheet. All product information contained in the data sheet including ordering information, illustrations, specifications, and dimensions, are believed to be reliable as of the date of publishing, but is subject to change without notice. Anderson makes no warranty or representation as to its accuracy. Content in the data sheet may contain technical inaccuracies, typographical errors and may be changed or updated without notice. Anderson™ may also make improvements and/or changes to the products and/or to the programs described in the content at any time without notice. Current sales drawings and specifications are available upon request.*

© 2019 Anderson Power Products, Inc. All rights reserved. APP®, A®, Anderson Power Products®, Saf-D-Grid®, Powerpole®, SB® and the APP Logo are registered trademarks of Anderson Power Products, Inc. Anderson™ is a trademark of Anderson Power Products, Inc.

## CUSTOM CONFIGURATIONS AVAILABLE

The needs of every system are different. If you don't see a configuration that fits your application, contact inside sales to see if a customized offering can address your specific requirements.



### HEADQUARTERS

Anderson Power Products®  
13 Pratts Junction Road  
Sterling, MA 01564-2305 USA  
T: 978-422-3600  
F: 978-422-0128

### EUROPE

Anderson Power Products® Ltd.  
Unit 3 Europa Court  
Europa Boulevard  
Westbrook, Warrington  
Cheshire, WA5 7TN United Kingdom  
T: +44 (0) 1925 428390  
F: +44 (0) 1925 520203

### 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 Western Industrial Park  
Songgang, Baoan District  
Shenzhen, PR. China 518105  
T: +(86) 755 2768 2118/3393 2388  
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



## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [DC Power Cords](#) category:*

*Click to view products by [Anderson Power Products](#) manufacturer:*

Other Similar products are found below :

[172-4000](#) [172-4101](#) [172-7443-E](#) [21033836407](#) [2J-1865A](#) [2R7006A20A120](#) [426055400-3](#) [MN47A4BC01M010](#) [H-OU-2](#) [CA0002](#)  
[420680840-3](#) [426451500-3](#) [P162PT4-36](#) [1-832692-4](#) [FJ-VSP 3M](#) [96CB-POWER-B-1.8M2](#) [426040200](#) [CA0006](#) [H-OU-27](#) [1700019464](#) [FJ-](#)  
[VSP 10M](#) [MN47B4BC01M040](#) [H-OU-20](#) [2-836917-8](#) [867566-1](#) [804001P03M050G](#) [2050KH1-BK](#) [426013710-3](#) [58257-1069](#) [216603-0037](#)  
[1011147](#) [1011324](#) [1012028](#) [862545-5](#) [BXC-10567](#) [172-2555](#) [32102-022800-200-RS](#) [P29000-M2](#) [P29004-M2](#) [DC.CAB.0201.0150](#)  
[DC.CAB.0301.0150](#) [DC.CAB.0610.0150](#) [DC.CAB.0700.0150](#) [DC.CAB.1000.0300](#) [DC.CAB.1100.0150](#) [DC.CAB.1400.0150](#)  
[DC.CAB.1410.0150](#) [DC.CAB.1500.0150](#) [DC.CAB.1811.0150](#) [DC.CAB.1900.0150](#)