

SP High Amperage Plug and Receptacle



Main Advantages

- ▶ Safety features provide maximum protection
- ▶ Silver, butt-style contact technology maximizes durability
- ▶ IP66/IP67 environmental protection when mated
- ▶ Mechanical coding prevents intermating of phases

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PRODUCT FEATURES

Pilot Connections

Integral pilot circuit for controlling the power circuit.

Latch Release Button

Enables disconnection of the plug from the receptacle.

Silver Contact Material

Enables maximum performance and durability – withstands at least 2000 operations.

Color Coding

Enables quick visual identification of matching plugs/receptacles.

Mechanical Interlock

Twist ring closes/opens the pilot circuit and locks/unlocks the latching mechanism to prevent connection or disconnection under load.

Phase Label

Indicates phase of receptacle.

Protective Caps

Protects contacts when disconnected.

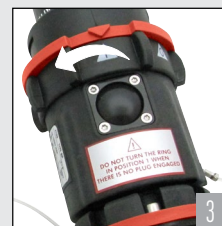
Operating Instructions



To connect, insert the plug into the receptacle until a click is heard. Rotation of the plug in either direction engages a locking finger, which prevents further rotation.



To close the pilot circuit and mechanically lock the plug into the receptacle, turn the ring on the receptacle until the "1" lines up with the arrow. This turns the power on.



To disconnect, open the pilot circuit and unlock the plug by turning the ring until the "0" is aligned with the arrow. The power is now off.



Press firmly on the latch release button and simultaneously pull on the inlet. A slight rotation of the plug may also be required.

HIGH AMPACITY

General Ratings

Listing	CSA	IEC
Amperage	600 A	700 A
Voltage	600 VAC	1000 VAC / 1500 VDC Max
Frequency	50-400 Hz	50-400 Hz
Horsepower	500 hp	-
Environmental	IP66/IP67	IP66/IP67
Temperature	min -40°F/max 140°F	min -40°F/max 140°F

NOM ratings available upon request.

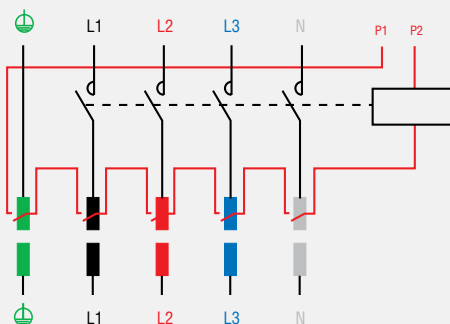
Highlighted Feature

Pilot Circuit



SP plugs and connectors are designed with safety and durability in mind. Each device is mechanically interlocked with an integral pilot circuit switch for controlling the power circuit in order to prevent connection and disconnection under load.

A typical pilot circuit wiring diagram



SP Single Pole Plugs & Receptacles – 600 A

CSA Ratings

- Max Amperage & Voltage**
 600 A, 600 VAC
 To order devices for international applications and for IEC listings up to 700 A, 1000 VAC/1500 VDC, refer to international CE devices catalog.
- Current Interruption Capability**
 Not for Current Interrupting
- Horsepower Ratings**

480 V	3Ø	500 hp
600 V	3Ø	500 hp

 CSA HP rated when auxiliary pilots are wired to control motor control circuit.
- Environmental Ratings** IP66/
IP67
- Temperature Range**
 Min -40°F / Max 140°F
- Wiring Capacity**
 Min 2/0 Max 777 MCM
- Applicable Standards**
 CSA 182.1
 (Listing applies to AC devices only)
- Pilot Wiring**
 1A, 240 VAC, 14 AWG (Prewired)

! Don't forget to add installation accessories to your order

**Receptacle
(replacement)
(female)
without lug**



**Receptacle
(female) on
angle adapter
(sold as a set)**



**Connector*
(female) on
handle
(sold as a set)**



North American Configurations

North American Color Code	Polarity	Part # without lug	Part # on angle adapter	Part # on handle
	L1	45-44001-P80	45-47001-P80	45-43001-P80
	L2	45-44002-P80	45-47002-P80	45-43002-P80
	L3	45-44003-P80	45-47003-P80	45-43003-P80
	NEUTRAL	45-4400N-P80	45-4700N-P80	45-4300N-P80
	GROUND	45-4400T-P80	45-4700T-P80	45-4300T-P80
	POSITIVE	45-4400P	45-4700P	45-4300P
	NEGATIVE	45-4400M	45-4700M	45-4300M

**Inlet
(replacement)
(male)
without lug**



**Inlet
(male) on
angle adapter
(sold as a set)**



**Plug*
(male) on
handle
(sold as a set)**



North American Configurations

Suffix	Range	North American Color Code	Polarity	Part # without lug	Part # on angle adapter	Part # on handle
-5B	.875 - 1.000"		L1	45-48001-P80	45-49001-P80	45-41001-P80
-5C	1.000 - 1.125"		L2	45-48002-P80	45-49002-P80	45-41002-P80
-5D	1.125 - 1.250"		L3	45-48003-P80	45-49003-P80	45-41003-P80
-5E	1.250 - 1.375"		NEUTRAL	45-4800N-P80	45-4900N-P80	45-4100N-P80
-8A	1.250 - 1.375"		GROUND	45-4800T-P80	45-4900T-P80	45-4100T-P80
-8B	1.312 - 1.437"		POSITIVE	45-4800P	45-4900P	45-4100P
-8C	1.438 - 1.562"		NEGATIVE	45-4800M	45-4900M	45-4100M
-8D	1.562 - 1.688"					

Contact MELTRIC for IEC/CE Part Numbers

*Note: Plugs and Connectors come standard with .750-.875 cable range. For other sizes please refer to table to the left.

INSTALLATION ACCESSORIES – SIZE S

Use with angle 45° or direct mount



(Bolt Included)

Use with handle for cord mounting



CRIMPING LUGS

Internal Diameter		Straight w/terminal	Straight Threaded	Flexible Wiring*	Coarse Wiring
in	mm	Part #	Part #	AWG	AWG
.43	11	45-4A50C	45-4A50D	1/0	2/0
.51	13.1	45-4A70C	45-4A70D	2/0, 3/0	3/0, 4/0
.57	14.5	45-4A95C	45-4A95D	4/0	250
.64	16.2	45-4A12C	45-4A12D	262	300
.71	18	45-4A15C	45-4A15D	300, 313	350
.81	20.6	45-4A18C	45-4A18D	350*, 373	400, 500
.91	23.1	45-4A24C	45-4A24D	444*, 500, 535	600
1.03	26.1	45-4A30C	45-4A30D	646	750
1.15	29.2	45-4A40C	45-4A40D	750, 777*	800

Notes: * Class H & I. UL listing performed with Greenlee EK6IDL11 dieless tool and Dewalt DCE300M2 with Greenlee KC12 dies. *Only for use with Greenlee EK6IDL11 dieless tool.

HANDLES

HANDLE	Cable Outside Diameter	Part #
	.750-.875 in	45-4A753-A
	.875-1.000 in	45-4A753-B
	1.000-1.125 in	45-4A753-C
	1.125-1.250 in	45-4A753-D
	1.250-1.375 in	45-4A753-E
	1.250-1.375 in	45-4A783-A
	1.312-1.437 in	45-4A783-B
	1.438-1.562 in	45-4A783-C
	1.562-1.688 in	45-4A783-D

ACCESSORIES

METAL ANGLE	Part #
45°	45-4A027
DRAWBAR	Part #
handle	45-4A876
plate	45-4A396
handle + plate	45-4A376

HIGH AMPACITY

Dimensions Inlet/Receptacle – Provided in inches

Dimensions do not show drawbar, are for reference only and may change depending on accessories used. For precise dimensions contact MELTRIC Engineering.

