

SP

SINGLE-POLE POWER CONNECTORS 700 A / 1 000 V

- ▶ UP TO 700 A
- ▶ AUTOMATIC IP66/IP67 WATER- AND DUST-TIGHT
- ▶ ELECTROMECHANICAL INTERLOCKING SYSTEM

The highest possible safety

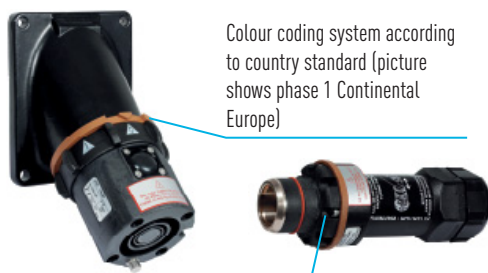
- Reliable mechanical and electrical interlocking with pilot-contact circuit.
- IP2X socket-outlet when cap removed.
- Automatic IP66/IP67 watertightness when plug is connected.

An easily operable connector

- Straight insertion of the plug into the socket-outlet without any rotation.
- Different mechanical keying of L1, L2, L3, N and E.
- Visual identification by standard colours.
- Screwed crimping lugs facilitate cable replacement.

Performances

Thanks to the butt-contact principle, the SP withstands continuously up to 700A / 1000 V a.c. or 1500V d.c. (70 mm² to 400 mm² conductors), withstands at least 2000 operations.



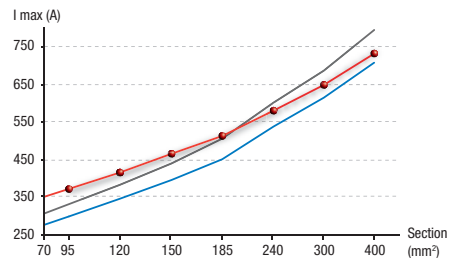
Colour coding system according to country standard (picture shows phase 1 Continental Europe)

Automatically IP66/IP67 when connected (dust and water hose down)

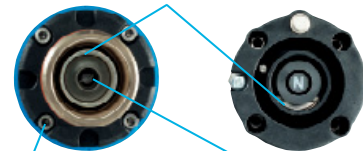
SP Characterisation

Permissible current according to conductor cross-section at 30 °C ambient temperature

- Maximum permanent permissible current in the SP after 2 000 operations depending on cable cross-section
- Maximum intensity of permanent current specified by the cable manufacturers to maintain a conductor core temperature < 85 °C
- Maximum intensity of permanent current specified by the NFC 15-100 or the IEC 60 364-5-52 standards to maintain a conductor core temperature < 70 °C



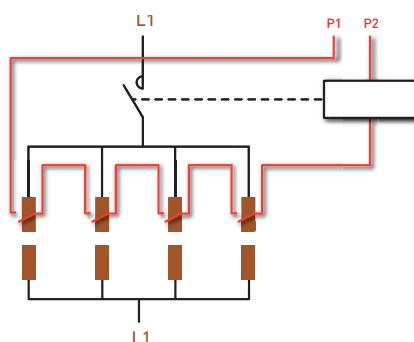
Silver-tipped butt-contact ensure perfect and durable electrical connection



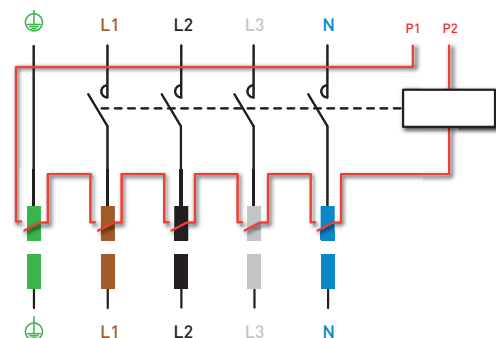
Metal retaining groove (wear resistant)

Coding ring (each phase, neutral and earth has a different diameter)

Interlocking electrical wiring diagram: increased power with parallel connection



Interlocking electrical wiring diagram: last connection close all the circuit





MAIN FEATURES

| | | | |
|---|---------------------------------------|----------------------------------|---------------------------|
| Rated current | 700 A | Shock resistance | IK08 |
| | For higher current, please contact us | Ambient temperature | -40 °C to +60 °C |
| Maximum voltage a.c. | 1000 V | Flexible wiring (min-max) | 50 - 400 mm ² |
| Maximum voltage d.c. | 1500 V | Keying positions | mechanical (5) and visual |
| Short-circuit current I_{cc} | 20 kA during 250 ms | Number of operations | 2000 |
| IP protection lid closed | IP66/IP67 | Pre-wired pilot circuit | 6 A / 250 V |

SOCKET-OUTLET female SP (700 A) Without lug



INLET male SP (700 A) Without lug



| Type | European color coding* | Part no. | Part no. |
|----------|------------------------|----------|----------|
| L1 | Brown | 4544001 | 4548001 |
| L2 | Black | 4544002 | 4548002 |
| L3 | Grey | 4544003 | 4548003 |
| Neutral | Blue | 454400N | 454800N |
| Earth | Green | 454400T | 454800T |
| Positive | Red | 454400P | 454800P |
| Negative | Black | 454400M | 454800M |

* Part-numbers valid for Europe and Japan.
For other countries: add the suffix : P80 for the USA / P67 for Australia / P40 for UK and South-Africa

LUGS

Lug choice depends on the cable: the cross-section of the flexible cable mentioned in the table below is for information only.

Please check dimensions as these may vary according to cable types and manufacturers.

| Wiring (mm ²) | | Straight with hole | Straight threaded M12* | Internal diameter (mm) |
|---------------------------|----------|--------------------|------------------------|------------------------|
| Flexible | Stranded | Part no. | Part no. | |
| 50 | 70 | 454A50C | 454A50D | 11 |
| 70 | 95 | 454A70C | 454A70D | 13,1 |
| 95 | 120 | 454A95C | 454A95D | 14,5 |
| 120 | 150 | 454A12C | 454A12D | 16,2 |
| 150 | 185 | 454A15C | 454A15D | 18 |
| 185 | 240 | 454A18C | 454A18D | 20,6 |
| 240 | 300 | 454A24C | 454A24D | 23,1 |
| 300 | 400 | 454A30C | 454A30D | 26,1 |
| 400 | 500 | 454A40C | 454A40D | 29,2 |

SLEEVE* Inclined metal 45°



454A027

* The inclined sleeve is recommended to reduce cable weight effect.

HANDLE Straight



| | | |
|---------|----------|-----|
| 454A753 | 17-38 mm | M50 |
| 454A783 | 35-48 mm | M63 |

* Wiring with crimping lugs, according to NF C20-130 standard (for VDE 0220 standard, please contact us) **Crimping:** Double hexagonal crimping is recommended.