

## SPeX SINGLE POLE CONNECTORS COMPLY WITH:

- ATEX European Directive (affixing "Ex" symbol and CE marking),
- RoHS Directive (affixing CE marking),
- REACH European Regulation,
- IEC/EN 60079-0, IEC/EN 60079-7 and IEC/EN 60079-31 international and European standards,
- BUREAU VERITAS Marine specifications.

## SPeX CERTIFICATION BODIES

SPeX are certified by LCIE (ATEX and IECEX), NANIO (TR CU EAC), cCSAus (french, russian and americano-canadian\* notified bodies) and by BUREAU VERITAS MARINE.

\* for North American market.



## SPeX SINGLE POLE CONNECTOR



**Ex** II 2 G D Ex e IIC Gb, Ex tb IIIC Db

IP65/IP66

Temperature rating -20 °C to +60 °C

Electromechanical interlocking system

Mechanic and visual keying

## THE HIGHEST POSSIBLE SAFETY

- IP2X socket-outlet when cap removed,
- Automatic IP65/IP66 when plug is connected.

## AN EASY-TO-USE CONNECTOR

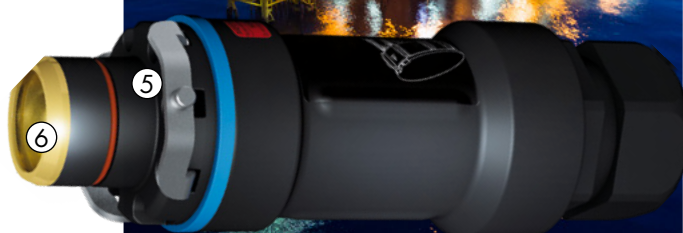
- Straight insertion of the plug into the socket-outlet,
- Different mechanical keying for L1, L2, L3, N and E, positive and negative (DC)
- Visual identification by standard colours.

## SPeX Ex CLASSIFICATION ACCORDING TO CABLE CROSS-SECTION AND AMBIENT TEMPERATURE

	-20 °C ≤ Ta ≤ +40 °C G D T5/T56 °C	-20 °C ≤ Ta ≤ +40 °C G D T6/T56 °C	-20 °C ≤ Ta ≤ +60 °C G D T5/T76 °C
70 mm <sup>2</sup>	290 A	235 A	235 A
95 mm <sup>2</sup>	415 A	335 A	335 A
120 mm <sup>2</sup>	456 A	376 A	376 A
150 mm <sup>2</sup>	493 A	415 A	415 A
185 mm <sup>2</sup>	530 A	450 A	450 A
240 mm <sup>2</sup>	570 A	497 A	497 A
300 mm <sup>2</sup>	620 A	540 A	540 A
400 mm <sup>2</sup>	680 A	600 A	600 A

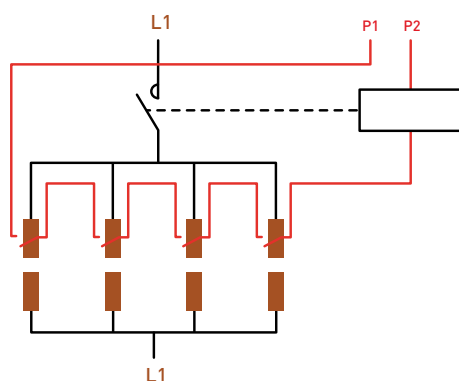
### Performances

With 240 mm<sup>2</sup> wiring, the SPeX accepts a permanent current up to 570 A/1000 V AC with T5 EX classification at 40 °C ambient temperature.



- ❶ Colour coding system according to country standard.
- ❷ Operating ring of the electromechanical interlocking system.
- ❸ Release button.
- ❹ Closing lever, this can be fitted to the socket or plug.
- ❺ Automatically IP66 when connected (dust and water hose down).
- ❻ Mechanical colored keying ring of L1, L2, L3, N and E.

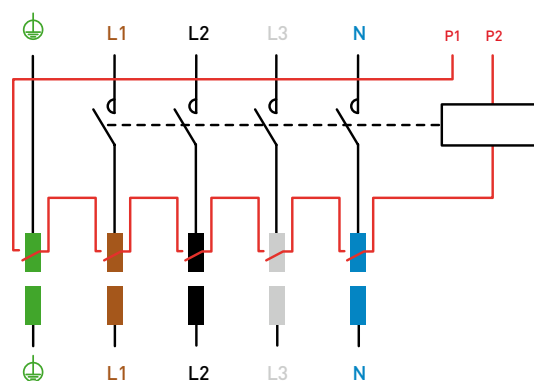
## INTERLOCKING ELECTRICAL WIRING DIAGRAM: INCREASED POWER WITH PARALLEL CONNECTION



Pilot wiring is mandatory to break and mate on load

## ENERGY DISTRIBUTION SYSTEM WITH SEPARATE CONNECTION OF CONTACTS

The pilot contact breaks the circuit in conformity with Ex Directive (increased safety "e"). **External control contactor not supplied by MARECHAL.**



# 680 A

## SINGLE POLE POWER CONNECTOR SPeX

**U MAX**  
1 000 V AC  
1 000 V DC

MARECHAL ELECTRIC FRANCE

Ex II 2 G D

Ex e IIC Gb  
Ex tb IIIC Db

IECEx LC1 12.0005X/LCIE 07 ATEX 6073 X

INSTRUCTIONS FOR USE



IP65  
IP66



SEE  
TABLE



GRP



IK08



-20 °C  
+60 °C



ATEX



1, 2,  
21, 22



### LEVER MECHANISM TO BE ORDERED SEPARATELY

Compatible with socket  
or inlet since 2018  
Lever mechanism :  
454A876  
Draw base : 454A396



### OTHER FEATURES

Rated current	According to temperature class and section of cable
Number of operations	2000
Pre-wired pilot circuit	6 A/250 V
Short-circuit current Icc	20 kA during 250 ms

### STANDARDS

International and European IEC/EN standards	60079-0, 60079-7, 60079-31
Protection mode	e, tb

### COLOR coding INCLINED socket female SPeX WITHOUT LUG

### PLUG male SPeX WITHOUT LUG

Type	Europe*	Reference	Reference 16-25 mm	Reference 22-32 mm	Reference 28-38 mm	Reference 40-43 mm
L1	Brown	4647001	464100132P	464100140P	464100150P	464100163P
L2	Black	4647002	464100232P	464100240P	464100250P	464100263P
L3	Grey	4647003	464100332P	464100340P	464100350P	464100363P
Neutral	Blue	464700N	464100N32P	464100N40P	464100N50P	464100N63P
Earth	Green	464700T	464100T32P	464100T40P	464100T50P	464100T63P
Positive	Red	464700P	464100P32P	464100P40P	464100P50P	464100P63P
Negative	Black	464700M	464100M32P	464100M40P	464100M50P	464100M63P

\* The indicated references are valid for Europe and Japan.  
For mobile socket-outlets or wall-mounted inlet references, contact us.


**COLOR coding**  
**INCLINED socket female**  
**SPeX WITHOUT LUG**
**PLUG male**  
**SPeX WITHOUT LUG**

Type	Australia and New Zealand	Reference	Reference 16-25 mm	Reference 22-32 mm	Reference 28-38 mm	Reference 40-43 mm
L1	Red	4347001	434100132P	434100140P	434100150P	434100163P
L2	White	4347002	434100232P	434100240P	434100250P	434100263P
L3	Blue	4347003	434100332P	434100340P	434100350P	434100363P
Neutral	Black	434700N	434100N32P	434100N40P	434100N50P	434100N63P
Earth	Green	434700T	434100T32P	434100T40P	434100T50P	434100T63P
Positive	Red	434700P	434100P32P	434100P40P	434100P50P	434100P63P
Negative	Black	434700M	434100M32P	434100M40P	434100M50P	434100M63P

For the UK, South Africa and India, replace the first two digits by 44.

Type	USA	Reference	Reference 16-25 mm	Reference 22-32 mm	Reference 28-38 mm	Reference 40-43 mm
L1	Black	4247001*	424100132P	424100140P	424100150P	424100163P
L2	Red	4247002*	424100232P	424100240P	424100250P	424100263P
L3	Blue	4247003*	424100332P	424100340P	424100350P	424100363P
Neutral	White	424700N*	424100N32P	424100N40P	424100N50P	424100N63P
Earth	Green	424700T*	424100T32P	424100T40P	424100T50P	424100T63P
Positive	Red	424700P*	424100P32P	424100P40P	424100P50P	424100P63P
Negative	Black	424700M*	424100M32P	424100M40P	424100M50P	424100M63P

\* cCSAus certified products.

For mobile socket-outlets or wall-mounted inlet references, contact us.

## 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 <sup>2</sup> )	Straight with hole	Straight threaded M12	Internal diameter (mm)	External diameter (mm)*	Crimping die
	Reference	Reference			
70	454A50C	454A50D	11	15	HCU/70
95	454A70C	454A70D	13.1	18	HCU/95
120	454A95C	454A95D	14.5	19	HCU/120
150	454A12C	454A12D	16.2	21	HCU/150
185	454A15C	454A15D	18	24	HCU/185
240	454A18C	454A18D	20.6	26	HCU/240
300	454A24C	454A24D	23.1	29	HCU/300
400	454A30C	454A30D	26.1	32	HCU/400
500	454A40C	454A40D	29.2	40	HCU/500
630	454A500C	454A500D	33.2	42	HCU/630
/	/	454A63D	37.6	52	HCU/800

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

\*Select the crimping tool according to the outside diameter of your lug.

## ACCESSORIES

### Reference

**LOCKING PIN FOR 2 PADLOCKS Ø 4 TO 8 mm  
(PADLOCKS NOT SUPPLIED)**



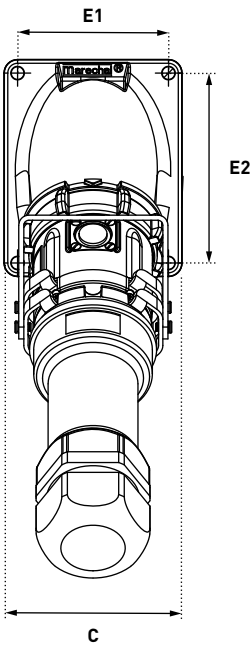
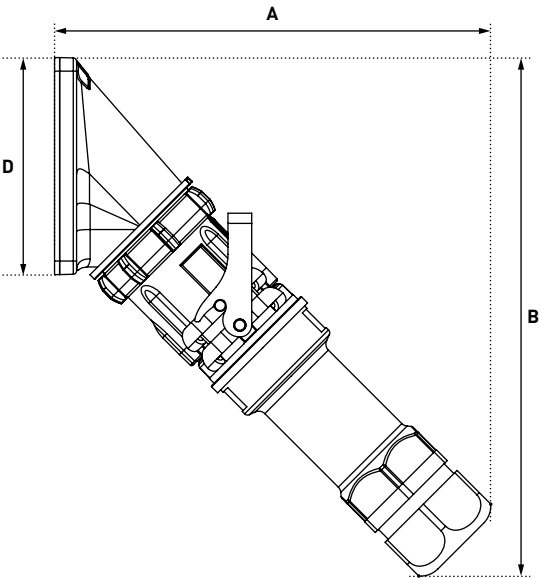
454A843

DRAWINGS  
AND DIMENSIONS



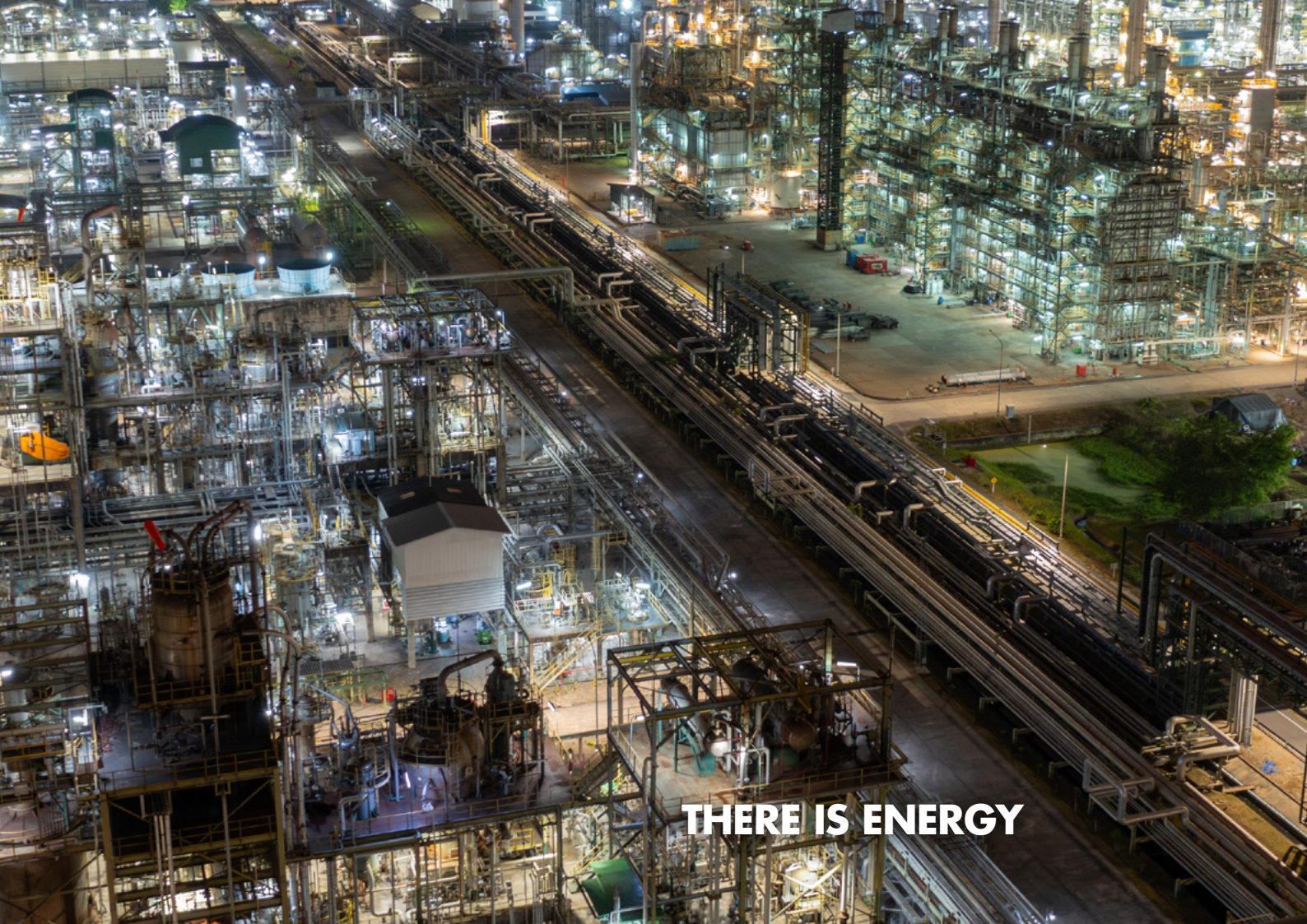
DOWNLOAD  
THE DRAWINGS  
ON OUR WEBSITE  
[marechal.com](http://marechal.com)

PLUG ON 30° ANGLED SOCKET-OUTLET



	A	B	C	D	E1	E2
SP M50	254	306	105	128	89	112





**THERE IS ENERGY**



## **BEYOND CONNECTIONS**

SPeX is a secure and reliable single-pole connector designed for applications requiring high power, with a substantial capacity to withstand frequent overcurrent conditions, up to  $10 \cdot I_n$ . It is intended for use in explosive atmospheres (zones 1, 2, 21, 22).