


The SPeX is an Ex e rated single pole power connector for use in gas zones 1 & 2 and dust zones 21 & 22. Product marking is  II 2 G/D Ex e II.

Conforms to the ATEX 94/9/EC Directive

## ■ Enhanced Safety

- 'e' protection
- Automatic IP65/IP66 ingress protection
- Control circuit with positive safety

## ■ Reliability

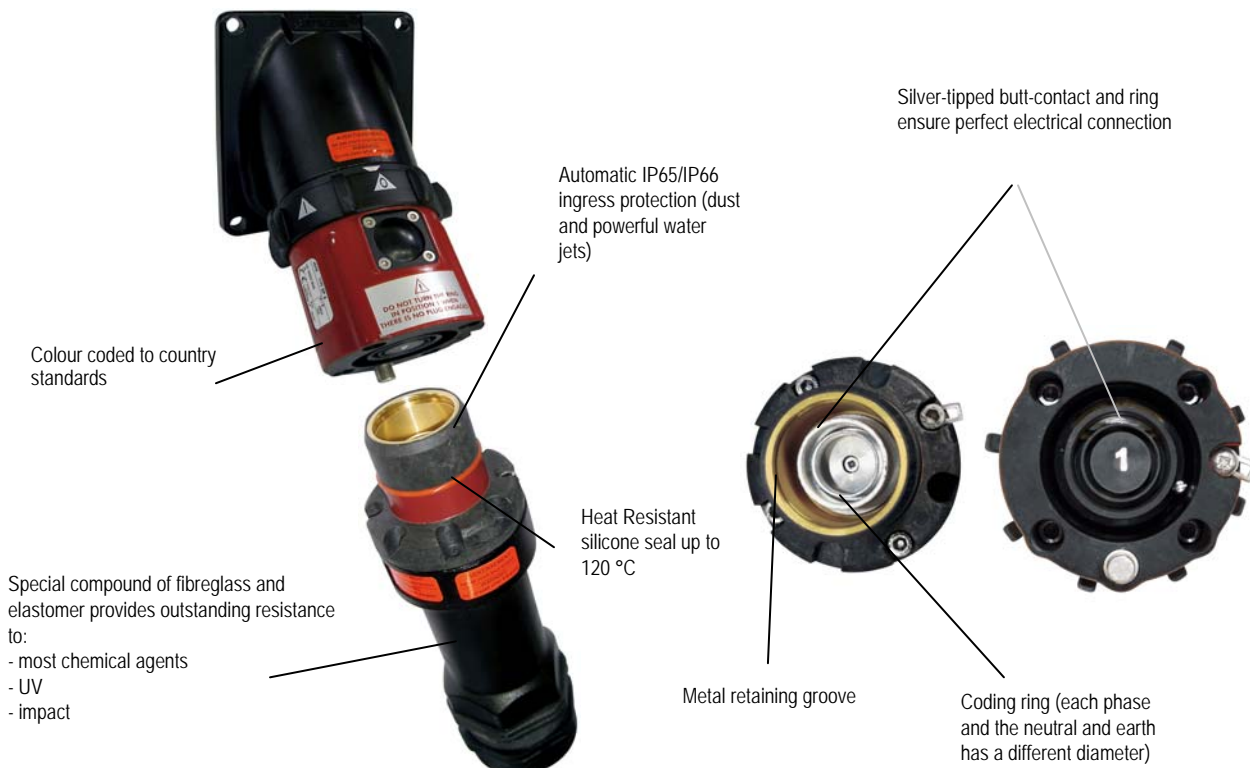
- The auxiliary contacts are closed when the plug is connected and opened when disconnected

## ■ Easy Use

- Plug is inserted directly into socket. No rotation needed to line up plug with socket
- Non-interchangeable key positions for phase, neutral and earth discrimination
- Colour-coded according to country standards



The SPeX ATEX Single-Pole Power Connector can carry **550 A / 1000 V** a.c. continuously with a T5 ATEX classification. The maximum operational working temperature is 40°C. At least 2 000 operations can be performed.

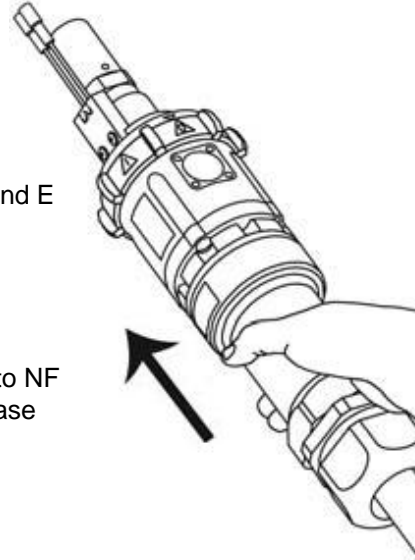


New product

Model 2UK – Rév. : 1 – 06/08

## Electrical Features:

- Max. permanent current: **550 A** (for other load cycles, please contact us)
- Max. operating voltage: **1000 V a.c.** / **1500 V d.c.**
- No access to live parts according to IP2X
- Five different keying positions by means of coding ring for L1, L2, L3, N and E
- Colour coded to country standards
- Short-circuit current **20 000 A** for 250 ms
- Pilot circuit microswitch:  $I_{max}$  6 A /  $U_{max}$  220 V
- Pre-wired microswitch, with insulated crimping lugs
- Power cable: wiring via either straight or angled compression lug. Crimp to NF C 20-130 / IEC 1238-1 or VDE 0220 standards. For other standards, please consult us
- Ex-rated cable gland up to M63, depending on cable outer diameter (48 mm max)



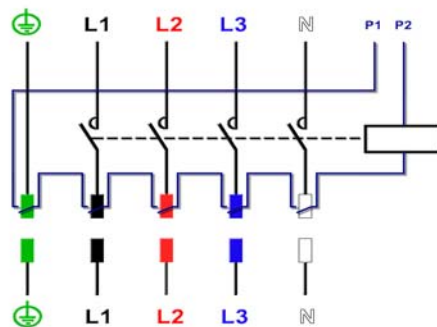
## Mechanical Features:

- Automatic IP65/IP66 ingress protection as soon as the plug is connected
- IP65/IP66 protective caps for the socket and plug
- No need to rotate the plug to insert it in the socket ; once connected, the plug rotation is locked
- Casings made of fibreglass-reinforced thermoplastic material providing excellent resistance to mechanical impact (IK08)
- Operating temperature: -20°C to +40 °C or +60 °C (according to ATEX classification)

### Electromechanical interlocking device with an 'Ex' positive safety microswitch to operate a contactor when the plug is connected / disconnected

To maximise safety each time the plug is connected or disconnected in a potentially explosive environment, an electrical interlock is compulsory.

Typical wiring:

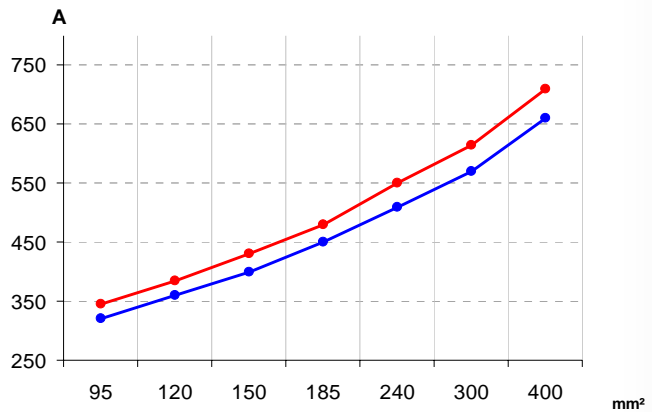


***This circuitry enables the switching of the load under conditions compatible with ATEX increased safety 'e' rules.***



### ATEX ratings of the SPeX

- At T5 up to 40 °C, the current/conductor ratio is shown by the blue curve ;
- At T6 up to 40 °C or at T5 up to 60 °C, the current/conductor ratio is shown by the red curve



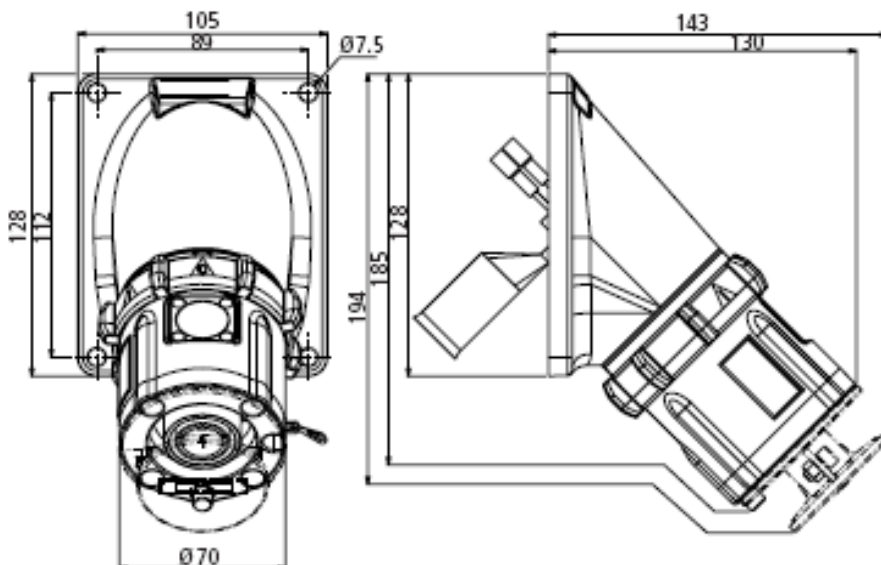
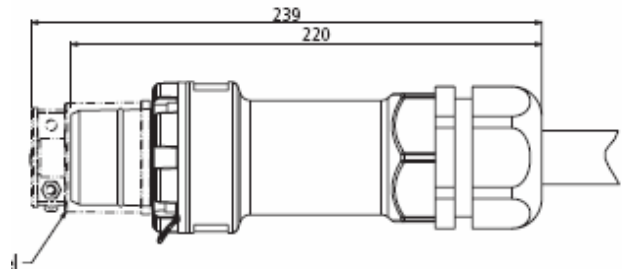
### Regulatory Features:

- Compliance with international and European safety rules and in particular the ATEX 94/9/EC Directive. Marking includes:
  - II 2 G/D Ex e II tD A21 IP65/IP66
- The SPX complies with the following standards:
 

EN 60079-0 (Ed. 2004)	IEC 60079-0 (Ed. 2004)
EN 60079-7 (Ed. 2003)	IEC 60079-7 (Ed. 2001)
EN 61241-0 (Ed. 2006)	IEC 61241-0 (Ed. 2004)
EN 61241-1 (Ed. 2004)	IEC 61241-1 (Ed. 2004)
- Type test certification:
  - LCIE 07 ATEX 6073 X / LCIE Ex 07.012 X

The sign X placed after the certification number indicates that the connector is subject to special conditions for safe use:

The connector must be protected against 4 kV transient overvoltages by means of an appropriate isolation device



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# SPeX ATEX Single Pole Power Connector

MARECHAL ELECTRIC MAROMME  
**Ex** II 2 G/D Ex e II Td a 21 Ip65/66  
 - 20 °C = < Ta = < + 60 °C T5 T88 °C  
 - 20 °C = < Ta = < + 40 °C T6 T68 °C  
 LCIE 07 ATEX 6073 X / LCIE Ex 07.012 X



## Main features:

- Socket with lid closed      IP65/IP66      • Umax      1 000 V a.c./1 500 V d.c.
- Socket + inlet inserted      IP65/IP66      • Wiring accommodated      240-400 mm<sup>2</sup> max flexible
- Shock resistance      IK08      • Safety rating      "e"

Inclined Panel Mounting (female)



Socket-outlet without lug (Europe/Japan)

L1	4647 001
L2	4647 002
L3	4647 003
Neutral	4647 00N
Earth	4647 00T
Positive	4647 00P
Negative	4647 00M

### Other countries

UK/RSA = **Socket# + P40**    Ex : L1 = 4647 001 P40  
 USA = **Socket# + P80**    Ex : L2 = 4647 002 P80  
 Australia = **Socket# + P67**    Ex : L3 = 4647 003 P67

Plug (male)



Plug without lug (Europe/Japan)

Cable Ø	18 to 25 mm	24 to 34 mm	34 to 42 mm	40 to 48 mm
L1	4641 001 32P	4641 001 40P	4641 001 50P	4641 001 63P
L2	4641 002 32P	4641 002 40P	4641 002 50P	4641 002 63P
L3	4641 003 32P	4641 003 40P	4641 003 50P	4641 003 63P
Neutral	4641 00N 32P	4641 00N 40P	4641 00N 50P	4641 00N 63P
Earth	4641 00T 32P	4641 00E 40P	4641 00E 50P	4641 00E 63P
Positive	4641 00P 32P	4641 00P 40P	4641 00P 50P	4641 00P 63P
Negative	4641 00M 32P	4641 00M 40P	4641 00M 50P	4641 00M 63P

### Other countries

UK/RSA = **Socket# + P40**    Ex : L1 = 4649 001 P40  
 USA = **Socket# + P80**    Ex : L2 = 4649 002 P80  
 Australia = **Socket# + P67**    Ex : L3 = 4649 003 P67



Crimping lug	Straight with terminal		Straight threaded*
Flexible wiring (mm <sup>2</sup> )		Diam. (mm)	Diam. 12 mm
95	454 A95 C	12	454 A95 D
120	454 A12 C	12	454 A12 D
150	454 A15 C	12	454 A15 D
185	454 A18 C	14	454 A18 D
240	454 A24 C	14	454 A24 D
300	454 A30 C	16	454 A30 D
400	454 A40 C	16	454 A40 D

Crimping lug	Straight threaded*
Flexible wiring (mm <sup>2</sup> )	Diam. 12 mm
95	454 A95 D
120	454 A12 D
150	454 A15 D
185	454 A18 D
240	454 A24 D
300	454 A30 D
400	454 A40 D

\* Wiring with lugs to crimp in compliance with NFC 20-130 / IEC 1238-1 (for VDE standard, please consult us)

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