

Power Supply Unit BS 9120

Type of Explosion Protection:

 I M2 EEx em[ib] I

Degree of Enclosure Protection:

min. IP 65

EC-Type Examination

Certificate: IBExU 99 ATEX 1016 X



Use

The power supply unit BS 9120, including the intrinsically safe power supply SVI-12-1400-xx, serves as current supply for intrinsically safe plants and equipment.

The length of the connecting leads is optional, however, it will have to be verified once again in connection with the approval of the plant.

Assembly

The power supply unit may optionally contain one or several power supplies SVI-12-1400-xx which are installed in a certified enclosure.

The power supply unit essentially consists of a non-intrinsically safe primary regulator (DC/DC-converter) and of an intrinsically safe secondary regulator.

In all versions the incoming and outgoing cables are conducted through openings in the lateral walls with led-through bushes or with stuffing box screw fittings.

The live parts are either insulated by a 1 mm thick hard paper plate or by a 2 mm thick sealing compound layer in relation to the housing.

The printed circuit boards are completely sealed with silicone rubber whose thickness around the components is at least 1 mm.

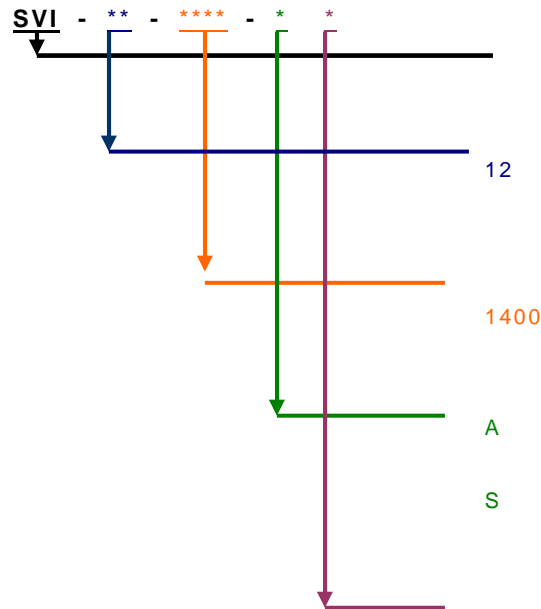
Sealing against ingress of an explosive atmosphere through the connecting leads is provided by an at least 5 mm long blank conductor path within the sealing agent.

Technical Data

Mains Voltage:	AC 42 V to 230 V +/- 20% or DC 35 V to 350 V
Output Voltage:	12 V +/- 2%
Current:	max. 1.4 A
Max. Outside Inductance (at $C_a = 0$):	30 μ H
Max. Outside Capacitance (at $L_a = 0$):	30 μ F
Ambient Temperature:	-20°C to 65°C

Intrinsically Safe Power Supply SVI-12-1400-**
(in connection with power supply unit BS 9120)

Type Identification Key



General Designation

Output Voltage

- DC 12 V (+/- 2%)

Output Current

- 1.4 A

Input Voltage Range

- AC 42...230 V (+/- 20%)

DC 35...350 V (+/- 20%)

- AC 24...42 V (+/- 20%)

DC 18...70 V (+/- 20%)

Make of Enclosure

- 1 - Steel /High-Grade Steel Enclosure
160 x 122 x 65 mm with EEx e-Terminals
and EEx i-Connecting Lead
- 2 - Steel /High-Grade Steel Enclosure
160 x 122 x 65 mm with EEx e/i- Connecting Leads
- 3 - Plastic Enclosure
160 x 122 x 65 mm with EEx e/i- Connecting Leads
- 4 - Steel /High-Grade Steel Enclosure
160 x 122 x 65 mm with EEx e/i- Terminals
- 5 - Steel /High-Grade Steel Enclosure
222 x 60 x 76 mm with EEx e- Terminals
and EEx i- Connecting Lead
- 6 - Steel /High-Grade Steel Enclosure
222 x 60 x 76 mm with EEx e/i- Connecting Leads
- 7 - Steel /High-Grade Steel Enclosure
160 x 122 x 65 mm with EEx e/i- Terminals



Power Supply
SVI-12-1400-xx
(BVS 93.C.1032 U)