



Glands shown for illustrative purposes only, not included unless specifically ordered.

Features

- Local Power and signal Isolation for purged enclosures and other electrical equipment.
- Capacity up to 32 Amps mains power
- Isolates small incoming signal lines (4-20mA; RS232; Ethernet)
- Ex db IIC T6 Gb, Category 2 GD Ex tb IIIC T80°C Db. Class I, II Division 1 Groups B, C, D & E, F, G.
- Aluminium screw lid box gives simple access for connection and maintenance.

Overview

EXPO's range of SmartPurge Interface Units (SIU's) are designed for use on a wide range of switching applications. Connected to an EXPO SmartPurge Control Unit, and typically mounted on a pressurized enclosure, the SIU Provides isolation of the power applied to equipment housed inside the enclosure, as well as other signal and data connections such as Ethernet.

In line with hazardous area codes and standards, in a Zone 1/21 or Class I, II Div 1 hazardous location, it is necessary to isolate all sources of power and signal into the enclosure in the event of loss of enclosure pressure.

Product Range

Expo offers three standard sizes of SIU's to cover the most common applications. Custom configurations may be possible.

The switched power output from the SIU drives circuits inside a flameproof / explosion proof enclosure to control power and signal switches. Depending on the configuration of the unit selected, mains power up to 32Amps and 2 off 4 pole signal relays can controlled.

Installation & Usage

The SIUs are housed in a range of flame-proof /explosion -proof enclosures. The electrical connections to these units must be made with approved connection devices, such as cable glands or poured seals, according to the local regulations, and the cable or conduit system used.

Due to the wide variety of connection systems and cable used, these are not supplied with the units. Consult Expo or your Expo representative for advice on appropriate devices.

In some operational situations, it is desirable to temporarily override the automatic isolation function of the SIU. This is a password controlled function enabled through the SmartPurge software.

Depending on local regulations, this facility is only for use under controlled conditions, such as maintenance under a 'gas free' certificate or Hot Work permit.

Technical Specifications

SIU range:

SIU size	Ex d box	Power	Signal	Part No.
1	dA	16A	None	SIU-1P00-110
				SIU-1P00-230
1	dA	None	1 x 4 pole	SIU-1S00-110
				SIU-1S00-230
2	dX	32A	None	SIU-2P00-110
				SIU-2P00-230
2	dX	None	2 x 4 pole	SIU-2S00-110
				SIU-2S00-230
2	dX	16A	1 x 4 pole	SIU-2D00-110
				SIU-2D00-230
3	dT	32A	1 x 4 pole	SIU-3D00-110
				SIU-3D00-230

Switch ratings:

16A: 4PNO contactor

IEC/UL /CSA:

AC1: 20A 440Vac T_≤40°C, 16A 440Vac T_≤55°C

AC3: 4kW 400Vac T_≤55°C, AC3: 9A 400Vac T_≤55°C

32A: 4PNO contactor

IEC/UL /CSA:

AC1: 32A ≤440Vac T_≤60°C

AC3: 18A ≤440Vac T_≤60°C

Signal: 4PNO: 5A 250Vac / 30Vdc

Technical Data

SIU box dimensions:

	dA	dX	dT
Width	157mm 6.2"	171mm 6.7"	197mm 7.8"
Length	95mm 3.7"	121mm 4.8"	152mm 6"
Height	130mm 5"	140mm 5.5"	170mm 6.7"
Drillings	Incoming: 3 off, for M20 glands		
	Outgoing: 3 off, for M20 glands		

Note that only approved glands may be used for connection to the SIU. Unused drillings must be sealed with approved plugs.

Hazardous area suitability & certification:

Class I Div1 Group B, C & D, UL Compliance

Class II Div1 Group E, F & G NEMA 4, 7 & 9

SIRA 02ATEX1129 II 2 GD

Zone 1 Gas Group IIC Ex d IIC T6 (Tamb -20°C TO +40°C) or T5 (Tamb -20°C to +55°C)

Zone 21 Dust Ex tD A21 IP6X T80°C or T95°C (Tamb -20°C to +55°C)

IECEX SIR07.0008

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INMETRO: TUV 12.1464

KOSHA: 14-AV4BO-0261 (Size dX only)