MiniPurge Interface Units

Power and signal isolation

Features

- Local power and signal isolation for purged enclosures and other electrical equipment using Expo MiniPurge
- Capacity up to 40 Amps mains power
- Isolates small incoming signal lines (4-20mA; RS232; Ethernet)
- Ex db IIC T6 Gb, Ex tb IIIC T80°C Db, II 2 G D
- Class I, II Division 1 Groups B, C, D & E, F, G.
- Aluminium screw lid box gives simple access for connection and maintenance.

Overview

The MiniPurge Interface Unit (MIU) provides switching of power to the pressurized enclosure, utilizing the pneumatic or IS output from the MiniPurge. The range of units allow up to 3ph (phase) current and power to be switched. For purge enclosures in a Zone 1 (21) or Class I, II Div 1 hazardous location, it is necessary to isolate all sources of power into the enclosure.

This may also include signals or data such as Ethernet connections. The MIU also provides contacts for a remote alarm / pressurized signal.

Product Range

Expo offers three standard MIU's which cover the most common applications. In addition we can offer customized units if the standard does not suit your particular application.

In common with the MiniPurge range, the units carry UK, IECEx, European, INMETRO and North American approvals, making them ideal for the OEM offering product to a global market. The range is detailed in the technical specifications overleaf.

Installation & Usage

The MIUs 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.

Enclosures are pre-drilled in standard configurations to accept approved glands . Special drilling arrangements are possible.

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 MIU. An optional key operated override switch is available. If required this must be specified at the time of order

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.

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Simplifying Complexity. Delivering Safety.

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Technical Specifications

MIU range:

MIU size	Electrical specification	Expo Part No.
dA	4PNO/12A/300Vac (UL) 4PNO/ 20A/440Vac (IEC-AC1) for T6 (-20°C to +40°C) (-4°F to + 104°F) 4PNO/ 16A/440Vac (IEC-AC1) for T5 (-20°C to +55°C) (-4°F to +131°F) Signals: None Alarm switch: 3A/250Vac SPCO	AMU-9AA1-510 (110V) AMU-9AA1-511 (230V)
dX	4PNO/12A/300Vac (UL) 4PNO/ 20A/440Vac (IEC-AC1) for T6 (-20°C to +40°C) (-4°F to + 104°F) 4PNO/ 16A/440Vac (IEC-AC1) for T5 (-20°C to +55°C) (-4°F to +131°F) Signals: 4PNO/5A/250Vac (AC1) Alarm switch: 3A/250Vac SPCO	AMU-AAA1-610 (110/230V)
dT	4PNO/12A/300Vac (UL) 4PNO/ 40A/690Vac (IEC-AC1) for T6 (-20°C to +40°C) (-4°F to + 104°F) 4PNO/ 40A/440Vac (IEC-AC1) for T5 (-20°C to +55°C) (-4°F to +131°F) Signals: 4PNO/5A/250Vac (AC1) Alarm switch: 3A/250Vac SPCO	AMU-BAA1-610 (110/230V)

For manual override, add /MO to MIU part number eg AMU-AAA1-610 / MO

Hazardous area suitability & certification:

Class I Div1 Group B, C & D

Class II Div1 Group E, F & G

IECEx: IECEx SIR07.0008

ATEX: SIRA 02ATEX1129

UKCA: CSAE 21UKEX1068

INMETRO: TUV 12.1464

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

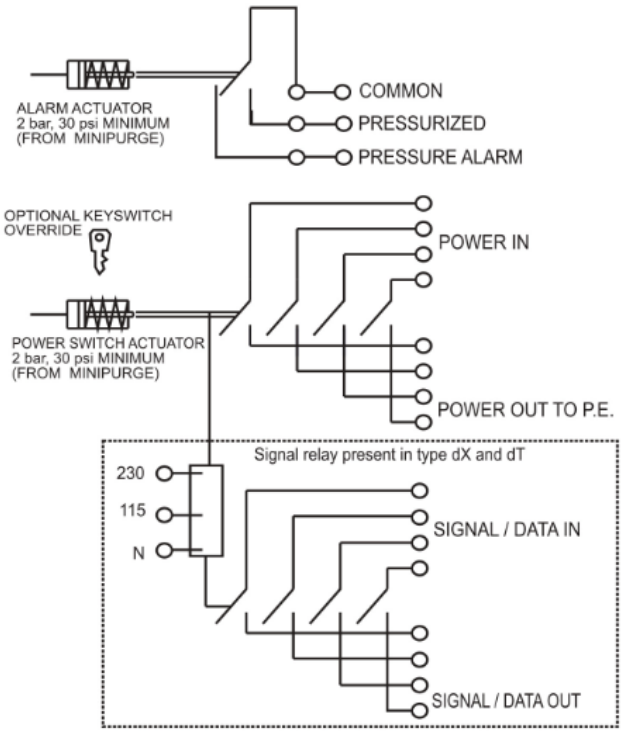
Technical Data

MIU 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"
Entries	4 off 1/2" NPT	6 off 1/2" NPT	4 off 1/2" NPT; 2 off 3/4" NPT

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

Entry drillings above are standard configuration. For custom drillings please discuss with Expo.



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