



MiniPurge Interface Units

Data Sheet



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 unit 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 a standard is not available for your particular application. The standard MIU range is designed to work with the Pneumatic Output version of the MiniPurge product range. The pneumatic output from the Power and the Alarm outputs drives a pneumatic actuator which operates the switches inside the flameproof / explosive-proof enclosure. In common with the MiniPurge range, the units carry 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.

Features

- + Cost effective installation and maintenance.
- + Local Power Isolation for purged enclosures.
- + Isolates small incoming signals 4 - 20mA, RS232, and others.
- + Alarm switch/status output: 3A/250Vac SPCO.
- + Ex d IIC T5, Category 2 GD
Ex tD A21 IP6X T80°C
Suitable for Class I, II Division 1 Groups B, C, D & E, F, G.

Manual Override

In some cases it is desirable to have a manual override facility. The Expo Mechanical Manual Override option provides a key operated override facility which can turn on the power even if a pneumatic signal for purge complete is not available. This facility is for use in controlled conditions such as maintenance under 'gas free' certificate or Hot Work permits. This option must be ordered with the MIU.



Direct Connection Kit

A direct connection kit (KMP-2600-000) is available to connect a size 1 MiniPurge directly to a 4PNO MIU/dA. This saves both space and installation time. If this kit is selected the Mechanical manual override cannot be used.

External Connection

The MIU is based on a range of flameproof / explosion-proof enclosure. The electrical connections to these units must be made with approved connection devices, such as cable glands or poured seals, according to the local regulation, 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 Expo representative for advice on appropriate devices.



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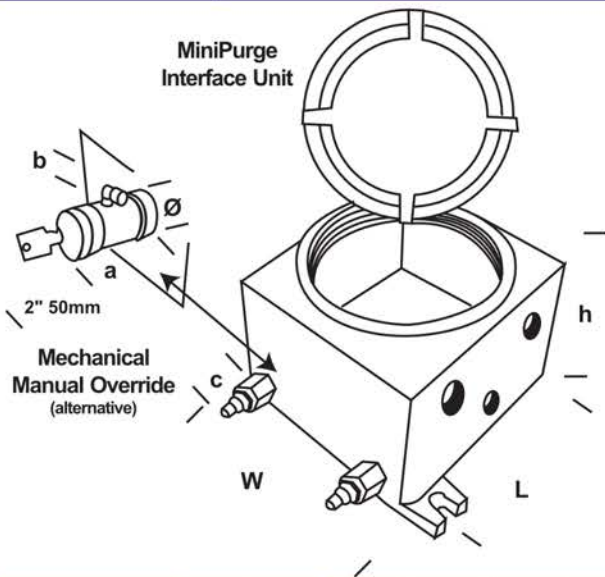


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MiniPurge Interface Units

Technical Specification



Dimensions/Spec.		dA	dX	dT
Width	w *	6 ³ / ₁₆ " 157mm	6 ³ / ₄ " 171mm	7 ³ / ₄ " 197mm
Height	h **	5 ¹ / ₈ " 130mm	5 ¹ / ₂ " 140mm	6 ⁷ / ₁₀ " 170mm
Length	L *	3 ³ / ₄ " 95mm	4 ³ / ₄ " 121mm	6.0" 152mm
Fittings length	a	3.5" 88mm	3.5" 88mm	3.5" 88mm
Fittings length	c	1.8" 45mm	1.8" 45mm	1.8" 45mm
Weight (approx)		6.5 lb 3.0 kg	8.0 lb 3.6 kg	15.0lb 6.7 kg
Fitting Thread		1/8" NPTF adaptor fitted.		

* Distance between fixing points

** h includes lid

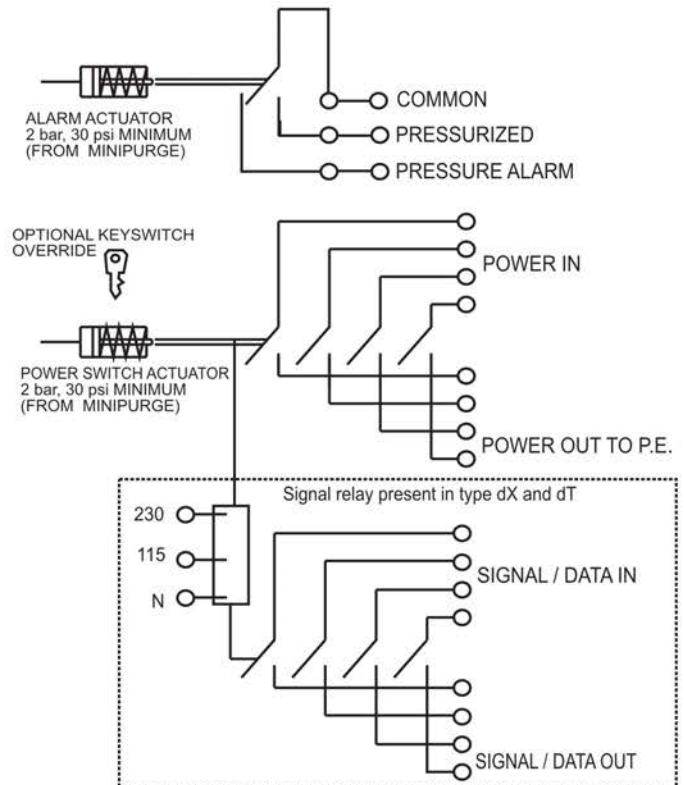
'a' Manual Override Model No: AGM-GM00-016

'b' Depends on fittings used

Ø1.2" 30mm

- A) Standard & Certificates: IEC / EN 60079-1 & 61241-1, European ATEX II G D 2. Suitable for American UL, Class I, II Div 2 Grp B thru G. INMETRO/TUV 12.1464 Requirements of the 'Low Voltage' Directives & CE marking.
- B) Protection Class: II 2 G D
Ex d IIC T5 -20°C(-4°F)<Tamb<+55°C(131°F) or T6 -20°C(-4°F)<Tamb<+40°C(104°F) (Zone 1)
Ex tD A21 IP6X T80°C (Zone 21)
Suitable for Class I Div 1 Groups B, C & D.
- C) Box features: Aluminum, natural, round screw lid construction, mounting lugs, earth screw.
- D) Pneumatic 'power & alarm' switch actuators. Operated by 2-bar / 30-psi supply signal from /PO output on MiniPurge.
- E) Alarm switch: 3A/250Vac SPCO providing "Volt Free/Dry Contact".

dA		dX		dT	
Power switch: 4PNO/12A/300Vac(UL) 4PNO/20A/440Vac(IEC-AC1) for T6 (-20°C<Tamb<+40°C) 4PNO/16A/440Vac(IEC-AC1) for T5 (-20°C<Tamb<+55°C)		Power switch: 4PNO/12A/300Vac(UL) 4PNO/20A/440Vac(IEC-AC1) for T6 (-20°C<Tamb<+40°C) 4PNO/16A/440Vac(IEC-AC1) for T5 (-20°C<Tamb<+55°C)		Power switch: 4PNO/12A/300Vac(UL) 4PNO/40A/690Vac(IEC-AC1) for T6 (-20°C<Tamb<40°C) 4PNO/40A/440Vac(IEC-AC1) for T5 (-20°C<Tamb<+55°C)	
		Signal: 4PNO/5A/250Vac (AC1)		Signal: 4PNO/5A/250Vac (AC1)	
Entries: 3 x 1/2" NPT		Entries: 6 x 1/2" NPT		Entries: 4 x 1/2" NPT 2 x 3/4" NPT	
P/N: AMU-9AA1-510	110V	P/N: AMU-AAA1-610	110 / 230Vac	P/N: AMU-BAA1-610	110 / 230Vac
P/N: AMU-9AA1-511	230V				



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