



Product Data Sheet

MiniPurge Interface Units

Mains power and small signal isolation for Class I, II, Division 1, Grp B thru G for USA
Ex d IIC T5, Ex tD A21 IP6X T80°C
Zone 1 (21) IECEx Category 2 GD ATEX

**IECEX
& ATEX
Certified!**



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 allows up to 3ph (phase) current and power to be switched. For purged 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 10/100 Ethernet connections. There are also 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 / explosion-proof enclosure. In common with the MiniPurge range, the units carry IECEx, European 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, CAT 5 and others.
- + Alarm switch/status output: 3A/250Vac SPCO.
- + Ex d IIC T5, Category 2 GD
Ex tD A21 IP6X T80°C
Class I, II Division 1 Group 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' certificates 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.

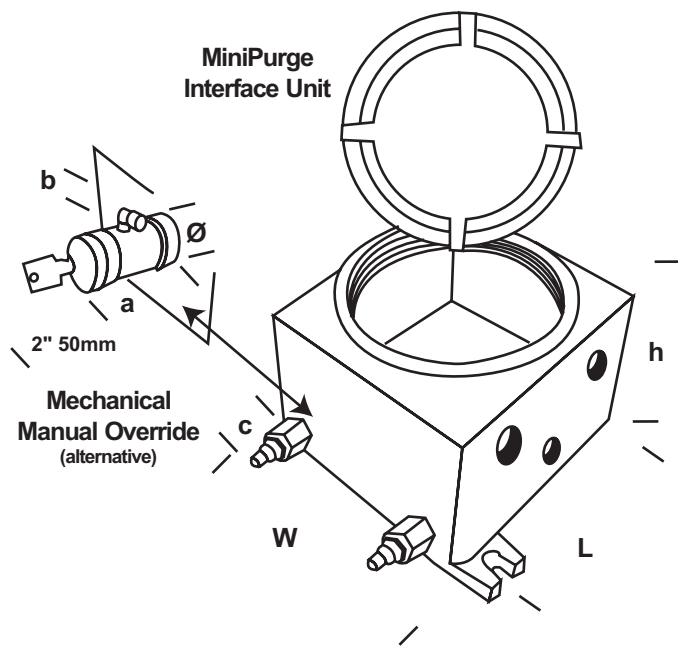
EXTERNAL CONNECTION

The MIU is based on a range of flameproof / explosion-proof 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 for use and the cable or conduit system used. Due to the wide variety of connection systems and cables used, these are not supplied with the units. Expo representatives can offer advice on appropriate devices.

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Technical Specification MiniPurge Interface Units



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		10/32 UNC, M5		

* Distance between fixing points

** h includes lid

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

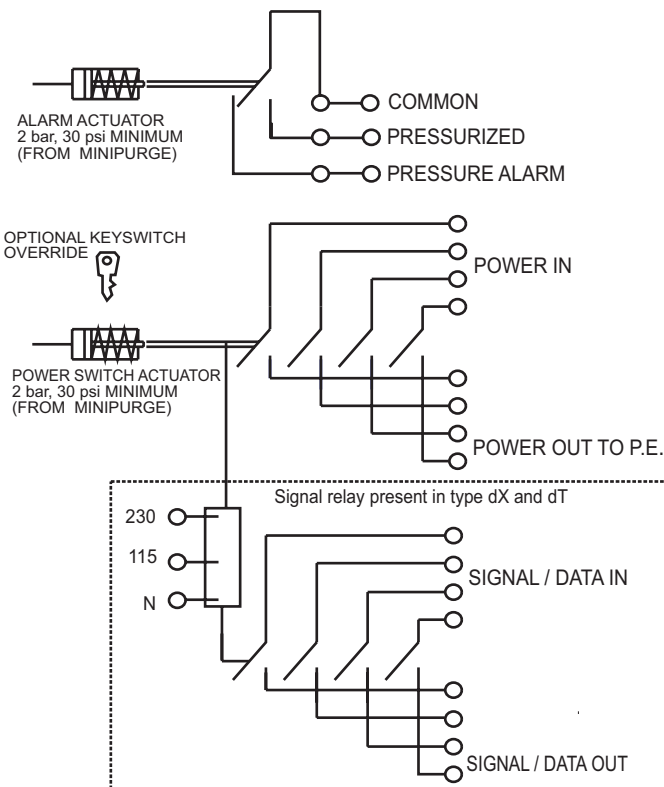
'b' Depends on fittings used

Ø 1.2" 30mm

COMMON SPECIFICATION

- A) Standards & Certificates: IEC / EN 60079-1 & 61241-1, European ATEX II G D 2, American UL, Class I, II Div 1 Grp B thru G. 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)
Class I Div 1 Group 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 wired to terminals CPA.

dA	dX	dT
Power switch: 4PNO/12A/300Vac(UL) 4PNO/20A/440Vac(IEC) for T6 (-20°C<Tamb<+40°C) 4PNO/16A/440Vac(IEC) for T5 (-20°C<Tamb<+55°C)	Power switch: 4PNO/12A/300Vac(UL) 4PNO/20A/440Vac(IEC) for T6 (-20°C<Tamb<+40°C) 4PNO/16A/440Vac(IEC) for T5 (-20°C<Tamb<+55°C) Signal: 4PNO/5A/250Vac	Power switch: 4PNO/35A/600Vac(UL) 4PNO/35A/600Vac(IEC) Signal: 4PNO/5A/250Vac
Entries: 3 x 1/2" NPT	Entries: 3 x 1/2" NPT	Entries: 2 x 1/2" NPT 1 x 3/4" NPT
P/N: AMU-9AA1-510 110V	P/N: AMU-AAA1-610	P/N: AMU-BAA1-610
P/N: AMU-9AA1-511 230V		



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