



# MiniPurge Interface Units



## 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 db IIC T6 Gb, Category 2 GD  
Ex tb IIIC T80°C Db  
Suitable for Class I, II Division 1 Groups B, C, D & E, F, G.

## 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.

## 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.



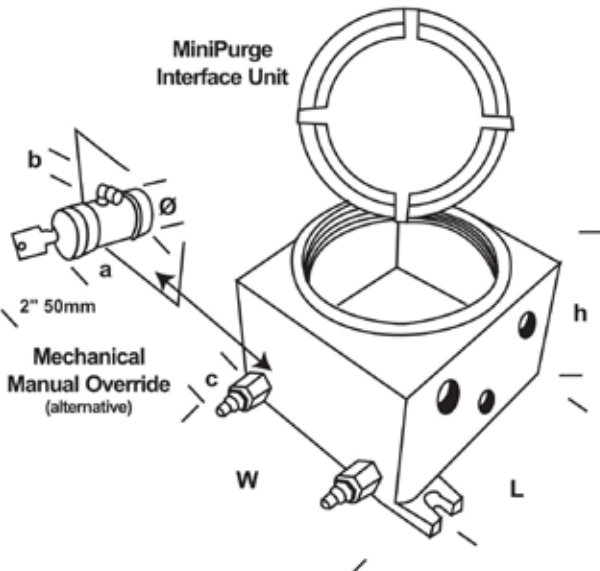
## Direct Connection Kit

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.

# TECHNICAL SPECIFICATION



Dimensions/Spec.		dA		dX		dT
Width	w *	6 <sup>3</sup> / <sub>16</sub> "	157mm	6 <sup>3</sup> / <sub>4</sub> "	171mm	7 <sup>3</sup> / <sub>4</sub> "
Height	h **	5 <sup>1</sup> / <sub>8</sub> "	130mm	5 <sup>1</sup> / <sub>2</sub> "	140mm	6 <sup>7</sup> / <sub>10</sub> "
Length	L *	3 <sup>3</sup> / <sub>4</sub> "	95mm	4 <sup>3</sup> / <sub>4</sub> "	121mm	6.0"
Fittings length a		3.5"	88mm	3.5"	88mm	3.5"
Fittings length c		1.8"	45mm	1.8"	45mm	1.8"
Weight (approx)		6.5 lb	3.0 kg	8.0 lb	3.6 kg	15.0lb
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  
Ø 1.2" 30mm

A) Standard & Certificates: IEC / EN 60079-1 & IEC/EN 60079-31, European ATEX II 2 G D. Suitable for American UL, Class I, II Div 1 Grp B thru G.

Requirements of the 'Low Voltage' Directives & CE marking.  
IECEX SIR 07.0008

Sira 02ATEX1129

INMETRO/TÜV 12.1464

B) Protection Class: II 2 G D

Ex db IIC T5 Gb

Ex tb IIIC T95°C Db - Tamb -20°C to +55°C

Or

Ex db IIC T6 GB

Ex tb IIIC T80°C Db - Tamb -20°C to +40°C

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	
<b>Power switch:</b> 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)		<b>Power switch:</b> 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)		<b>Power switch:</b> 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)	
		<b>Signal:</b> 4PNO/5A/250Vac (AC1)		<b>Signal:</b> 4PNO/5A/250Vac (AC1)	
<b>Entries:</b> 3 x 1/2" NPT		<b>Entries:</b> 6 x 1/2" NPT		<b>Entries:</b> 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					

