expo Technologies

MiniEPS

Environmental Pressurization System

Prevents contamination of enclosure contents in dirty or corrosive atmospheres

Features

- **Simple order code** One model number defines complete system

- **Compact size** Maximum usage of internal space within the enclosure

- **Direct mounting to enclosure** No interconnecting pipework, saving time and money

- **Easy installation** Simple fitting for new or existing enclosure

- **Clear indication for pressurization status** RED / GREEN flag

- **Integral overpressure protection** Built-in relief valve, automatic activation & reset

- **Compliance with UL50e, NEMA 4X and IP66** Installation does not degrade enclosure rating

Overview

The MiniEPS is an environmental pressurization system, designed for harsh environments that may contain non-explosive dusty, dirty and/or corrosive atmospheres. It requires a supple of compressed air, instrument air, or an inert has to regulate the pressure within the enclosure. This prevents the accumulation of damaging gases and/or dusts, extending the life of the enclosure's expensive electrical equipment and instrumentation. Due to the positive pressure inside the enclosure, corrosive or harmful elements remain outside.

The system is designed for typical industrial-grade enclosures of up to 7m³ (250 cu ft), with achieved pressure dependent on enclosure quality. It is easily set to maintain enclosure pressure slightly above external ambient level, with both local and remote status indications. Simply connect to a regulated supply, open the flow adjuster until the indicator shores GREEN, add a 1/4 turn more then lock & seal that adjuster. They system will automatically regulate enclosure pressure and protect your equipment.
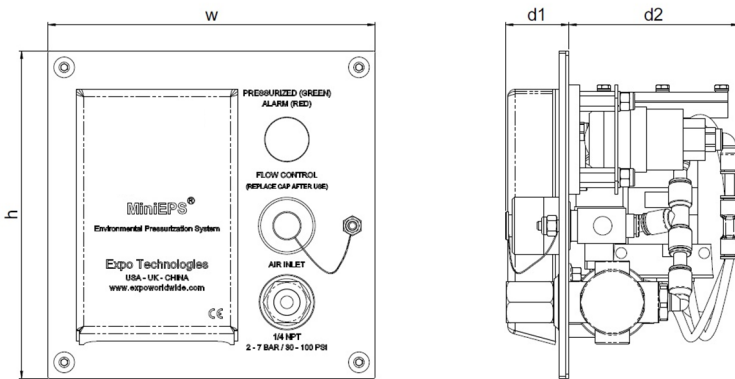
Components

The system is a self-contained unit. It includes an adjustable flow restrictor, sensor for monitoring of enclosure pressure, integrated relief valve, and a clear RED/GREEN flag for unambiguous status indication, avoiding interpretation issues. Additionally, a set of volt-free contacts are provided for external alarms.
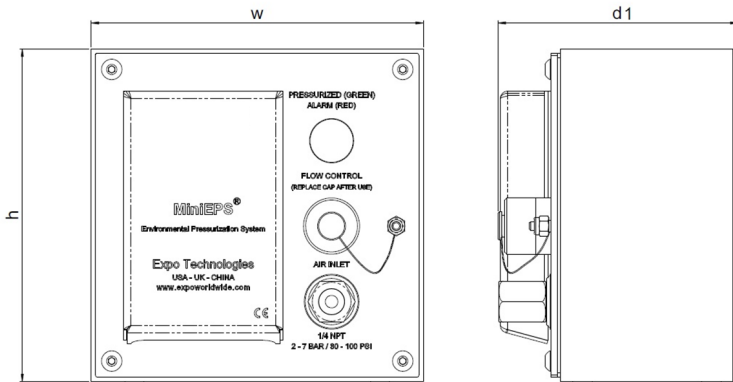
Specification

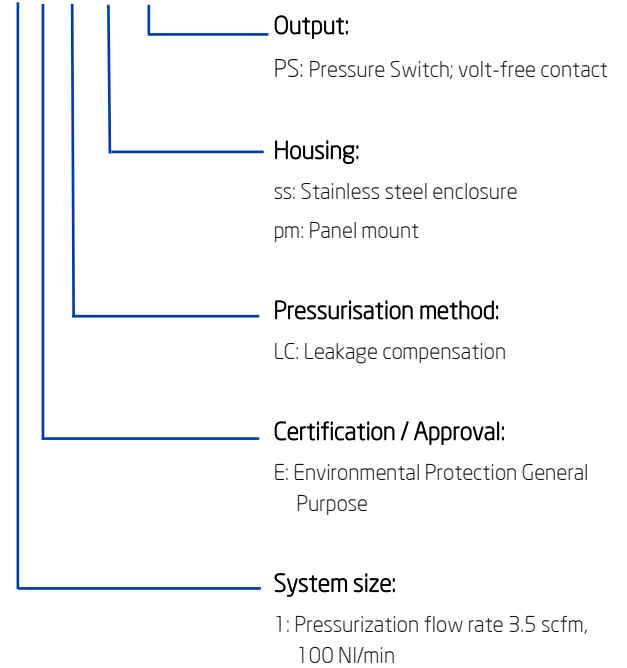|	
Pressurization Medium:	Compressed Air or Inert Gas. Clean, dry, free of corrosive gases.
Temperature Range:	-20 to +60 °C (-4 to +140 °F)
Supply Pressure:	2 - 7 barg (30 - 100 psig)
Supply Connection:	1/4" NPT front (rear - optional)
Maximum Flow Rate:	100 Nl/min (3.5 scfm)
Low Pressure Alarm:	Nominal setting 1.25 mbar (0.5" wc)
Local Indication:	GREEN = Pressure OK RED = Low Pressure / Off
Alarm Contact:	SPNO volt-free contact rated 375VA @ 120/240Vac 2A @ 24Vac/dc
Overpressure Relief:	Fully integrated, automatic. Maximum opening pressure 10mbarg (4" wc)
Panel Material:	316 Stainless steel

Simplifying Complexity. Delivering Safety.

MiniEPS

Environmental Pressurization System

Dimensions

Panel Mount:

Stainless Steel Housing:

Dimensions	1ELC/pm/PS		1ELC/ss/PS	
Width (w)	150mm	5.9"	154mm	6.1"
Height (h)	150mm	5.9"	154mm	6.1"
Depth d1	29mm	1.1"	111mm	4.4"
Depth d2	78mm	3.1"		
Weight	2kg	4.4lbs	3kg	6.6lbs

Ordering Information

1 E LC/pm/PS

Output:

PS: Pressure Switch; volt-free contact

Housing:

ss: Stainless steel enclosure
pm: Panel mount

Pressurisation method:

LC: Leakage compensation

Certification / Approval:

E: Environmental Protection General Purpose

System size:

1: Pressurization flow rate 3.5 scfm, 100 Nl/min

Panel Mount

Model No   1ELC/pm/PS

Location of System   Side or Front of Pressurized Enclosure

Stainless Steel Housing

Model No   1ELC/ss/PS

Location of System   Top or Side of Pressurized Enclosure

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