

**Description**

Model 1001B is an enclosure pressurization system that operates on a supply of compressed instrument air or inert gas. It regulates and monitors pressure within sealed (protected) enclosure(s), in order to prevent combustible dust accumulation by maintaining a "safe" (1.0") pressure. This process reduces the hazardous (classified) area rating within the enclosure(s), in accordance with the NEC - NFPA 70, Article 500, NFPA 496 and ISA 12.4.

**Operation**

In accordance with system instructions, start-up requires air supply to be engaged and enclosure power to be deenergized. Before start-up, all dust must be removed from the enclosure(s). The enclosure protection vent (if used) must be tested and enclosure(s) must be sealed. The enclosure pressure control regulator is then used to set a safe reading on the enclosure pressure gauge. Power can be energized when safe pressure is stable. Loss of safe pressure requires immediate attention, unless power is deenergized. WPS style systems include an explosion proof differential pressure switch with form "C" contacts for audible or visual alarm systems.

**System Specifications**

System Dimensions:	See page 6
Shipping Weight:	LPS - 7 lb / WPS - 12 lb
Temp. Range:	-20 °F to +120 °F
Supply Pressure Range:	* 5 - 120 psi
Supply Requirements:	clean air or inert gas
Safe Press. Setpoint:	1.0"
Safe Press. Flow Rate:	** 0.1 - 3.5 SCFH
System Supply Fitting:	3/8" tube fitting
Enclosure Supply Fitting:	3/8" tube fitting
Enclosure Reference Fitting:	1/4" tube fitting
Switch Setting (Decr):	0.5" $\pm$ 0.02"
Switch Conduit Port Size:	1/2" FPT
Switch Contact Rating:	120 VAC @ 15 A

\* With EPV-3 Vent - 120 psi max. to 5 psi min. Systems installed without Vent must be equipped with redundant regulator set to 5 psi max.

\*\* Enclosure integrity determines actual flow rate

**Model 1001B**



**LPS Style  
(Less Pressure Switch)**



**WPS Style  
(With Pressure Switch)**

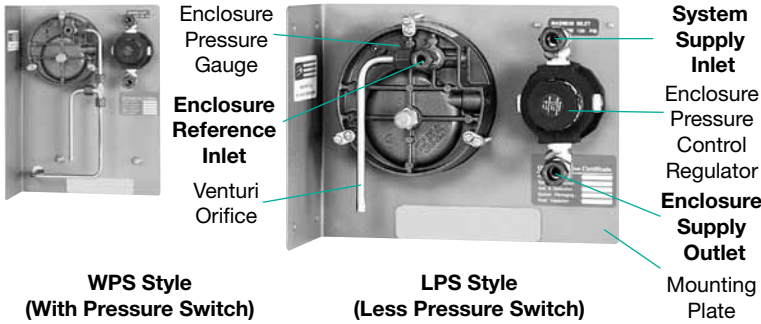


**Standard Model Applications**

<p><b>Model Number: 1001B-CII Type Y</b>                  Designation: Pressurization System                  Enclosure Volume: 50 ft<sup>3</sup> max.</p> <p><b>LPS Style</b>                  UL &amp; FM Certified: Cl. II, Div. 1, Group F&amp;G                  Rating Reduction: Div.1 to Div. 2</p> <p><b>WPS Style</b>                  UL &amp; FM Certified: Cl. II, Div. 1, Group F&amp;G                  Rating Reduction: Div.1 to Div. 2</p>	<p><b>Model Number: 1001B-CII Type Z</b>                  Designation: Pressurization System                  Enclosure Volume: 50 ft<sup>3</sup> max.</p> <p><b>LPS Style</b>                  UL &amp; FM Certified: Cl. II, Div. 2, Group F&amp;G                  Rating Reduction: Div. 2 to Nonhazardous</p> <p><b>WPS Style</b>                  UL &amp; FM Certified: Cl. II, Div. 2, Group F&amp;G                  Rating Reduction: Div. 2 to Nonhazardous</p>
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1000 SERIES

Type Y & Z



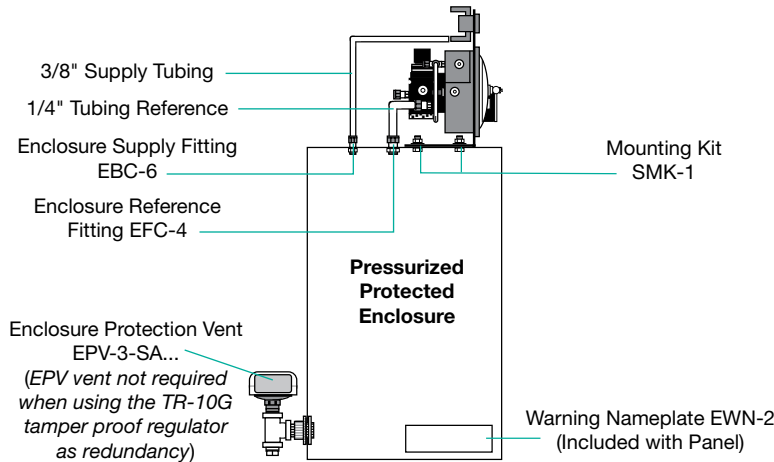
## Material Specifications

Regulator Body:	Zinc w/Enamel Finish
Regulator Handle:	Polycarbonate
Enclosure Pressure Gauge:	Alum. w/Enamel Finish
Tube Fittings:	316 SS Forged Body
Tubing:	316 SS 1/4" .035 Welded
System Nameplates:	Silk screened Lexan® & SS
Fastener Hardware:	Alum. & Stainless Steel
Mounting Plate:	316 14 Ga #3 Brush SS
EXP Pressure Switch Body:	Anodized Cast Alum.
Enclosure Warning Nameplate:	Silk screened SS

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CONNECTION POINTS SHOWN ABOVE IN BOLD TEXT ON SYSTEM DIAGRAM

## System Accessories Diagram



## Model Number Designations

**1001B - LPS - CII - YZ - LH - ##**

**Series Model Number** \_\_\_\_\_

**System Style** \_\_\_\_\_  
 LPS - less pressure switch  
 WPS - with pressure switch

**Area Classification** \_\_\_\_\_  
 CII - Class II Area

**System Type** \_\_\_\_\_  
 YZ - Div. 1 to Div. 2, Div. 2 to Nonhazardous

**Mounting Configuration** \_\_\_\_\_  
 LH - left hand left side of enclosure  
 RH - right hand right side of enclosure  
 TM - top mount top of enclosure  
 BM - bottom mount bottom of enclosure  
 WM - wall mount wall surface  
 FM - frame mount external frame or rack  
 PM - panel mount enclosure surface cutout  
*(Not available in WPS Style)*

**## - See Accessories Page 130 for additional factory installed accessories**

## Model 1001B System Accessories (See accessories page for complete details)

### CONNECTION FITTINGS & FILTER

EFC-4	1/4" Flush Connector
EFC-6	3/8" Flush Connector
EBC-6	3/8" Bulkhead Connector
EPC-13	1" Pipe Connector
ILF-6	3/8" Filter w/Clear Bowl

### ADDITIONAL ITEMS

ILF-6	3/8" Filter
SMK-1, -4 or -6	System Mounting Kit

EPSC-2	Explosion Proof Switch Kit
GPSK-2	General-purpose Switch Kit
RAH	Div. 1 Remote Alarm Horn
RAB-1	Div. 1 Remote Alarm Beacon
RAB-2	Div. 2 Remote Alarm Beacon
LCK	L Fitting Conduit Kit
TCK	T Fitting Conduit Kit

### OPTIONAL ENCLOSURE PROTECTION VENTS

EPV-3-SA-00	Straight w/Spark Arrestor
EPV-3-SA-90	Rt Angle w/Spark Arrestor

### OPTIONAL HEX KEY REGULATOR HANDLE

TR-10G	Tamper Proof Regulator
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### WARNING NAMEPLATES

EWN-2	Class II Enclosure Warning
ETW	Enclosure Temperature Warning

### INSTALLATION & OPERATION MANUAL

129-0201	Inst. & Operation Manual
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ONE (1) ENCLOSURE WARNING NAMEPLATE & ONE (1) INSTALLATION & OPERATION MANUAL ARE PROVIDED WITH EACH SYSTEM

Overall System Dimensions						
LPS / WPS	LH - left hand	RH - right hand	TM - top mount	BM - bottom mount	WM - wall mount	FM & PM - surface
<b>Height</b>	7 / 12	7 / 12	7 / 8	7 / 8	7 / 12	9 / 14
<b>Width</b>	8.875 / 8.875	8.875 / 8.875	8.75 / 14.25	8.75 / 14.25	8.875 / 8.875	10.875 / 10.875
<b>Depth</b>	6 / 7.25	6 / 7.25	6 / 7.25	6 / 7.25	7.5 / 9.25	4.75 / 6.5
Dimensions in inches. Mounting dimensions available upon request. FM & PM panel cutout dimensions: LPS - 8h x 9.875w WPS - 13h x 9.875w Height & width dimensions reflect mounting plate measurements. Depth dimension reflects overall measurement of system, including components.						