

CLASS I APPLICATIONS
2 Cubic Feet Maximum

CLASS II APPLICATIONS
10 Cubic Feet Maximum

Description

Model 1001A is an enclosure pressurization or purging system that operates on a supply of compressed instrument air or inert gas. It regulates and monitors pressure within sealed (protected) enclosures, in order to prevent combustible dust accumulation or remove and prevent flammable gas or vapor accumulations. In Class II areas, the system maintains a "safe" (1.0") pressure. In Class I areas, the system accomplishes four air exchanges and maintains a "safe" (0.25") pressure. These processes reduce the hazardous (classified) area rating within the enclosure(s), in accordance with the NEC - NFPA 70, Article 500, NFPA 496 and ISA ds12.4.

Operation

In accordance with detailed instructions on the system, start-up requires air supply to be engaged and enclosure power to be deenergized. In Class II areas, 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. In Class II areas, power can be energized when safe pressure is stable. In Class I areas, the user must perform an exchange cycle (determined by the safe pressure flow rate - five minutes minimum), before power can be energized. Loss of safe pressure in Class I or II areas requires immediate attention, unless power is deenergized. WPS style systems include an explosion proof (EXP) differential pressure switch with form "C" contacts for audible or visual alarm systems.

System Specifications

System Dimensions: See Rear Cover
 Shipping Weight (Lbs.): LPS - 5 / WPS - 10
 Operating Temp. Range: -20° F - 120° F
 Supply Pressure Range: * 5 - 120 PSI max.
 Supply Requirements: Clean Air or Inert Gas
 Safe Press. (CI/CII): 0.25" / 1.0"
 Safe Press. Flowrate: ** 0.1 - 3.5 SCFH / Cu. Ft.
 System Supply Fitting: 1/4" Tube Fitting
 Enclosure Supply Fitting: 1/4" Tube Fitting
 Enclosure Reference Fitting: 1/4" Tube Fitting
 Switch Setting (CI/CII, Decr): 0.15" / 0.5" ± 0.02"
 Switch Conduit Port Size: 1/2" FPT
 Switch Contact Rating: 120 VAC, 15 Amps

* With EPV-1 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 1001A

TYPE Y & Z

PRESSURIZATION / PURGING SYSTEM

EPS® Division Technical Bulletin 1001A-R1.1

09/94



LPS Style
(Less Pressure Switch)



WPS Style
(With Pressure Switch)



CSA Approval applies to
EXP Pressure Switch Only

Standard Model Applications

Model Number: 1001A-CI Type Y
Designation: Purging System
Enclosure Volume: 2 Cubic Feet Maximum

LPS Style

UL & FM Approvals: Cl. I, Div. 1, Group A-D
 Rating Reduction: Division 1 to Division 2

WPS Style

UL & FM Approvals: Cl. I, Div. 1, Group C&D
 Rating Reduction: Division 1 to Division 2

Model Number: 1001A-CI Type Z
Designation: Purging System
Enclosure Volume: 2 Cubic Feet Maximum

LPS Style

UL & FM Approvals: Cl. I, Div. 2, Group A-D
 Rating Reduction: Division 2 to Unclassified

WPS Style

UL & FM Approvals: Cl. I, Div. 2, Group C&D
 Rating Reduction: Division 2 to Unclassified

Model Number: 1001A-CII Type Y
Designation: Pressurization System
Enclosure Volume: 10 Cubic Feet Maximum

LPS Style

UL & FM Approvals: Cl. II, Div. 1, Group F&G
 Rating Reduction: Division 1 to Division 2

WPS Style

UL & FM Approvals: Cl. II, Div. 1, Group F&G
 Rating Reduction: Division 1 to Division 2

Model Number: 1001A-CII Type Z
Designation: Pressurization System
Enclosure Volume: 10 Cubic Feet Maximum

LPS Style

UL & FM Approvals: Cl. II, Div. 2, Group F&G
 Rating Reduction: Division 2 to Unclassified

WPS Style

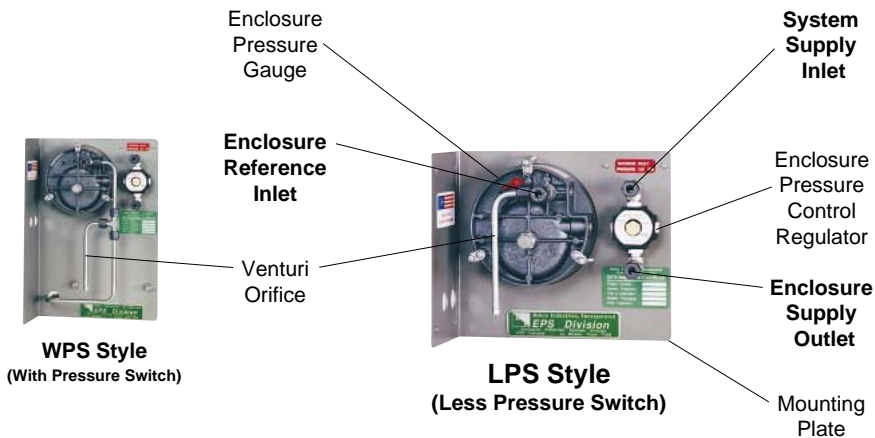
UL & FM Approvals: Cl. II, Div. 2, Group F&G
 Rating Reduction: Division 2 to Unclassified

ISC Sales, Inc.
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Enclosure Protection Systems



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: Silkscreened 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: Silkscreened SS

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Model Number Designations

1001A - LPS - CI - Z - LH

Series Model Number 1001A - LPS - CI - Z - LH

System Style
 LPS - less pressure switch
 WPS - with pressure switch

Area Classification
 CI - Class I Area
 CII - Class II Area

System Type
 Y - Division 1 to Division 2
 Z - Division 2 to Unclassified

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

Model 1001A System Accessories

FACTORY INSTALLED FITTINGS & FILTER		OPTIONAL ENCLOSURE PROTECTION VENTS	
ECK-1001A	Enclosure Connection Kit	EPV-1-PG-00	Straight w/ Perf Guard
ILFK-4	1/4" Filter w/ Clear Bowl	EPV-1-PG-90	Rt Angle w/ Perf Guard
CONNECTION FITTINGS		OPTIONAL HEX KEY REGULATOR HANDLE	
EFC-4	1/4" Flush Connector	TR-10	Tamper-Proof Regulator
EBC-4	1/4" Bulkhead Connector		
EPC-10	1/2" Pipe Connector		
ADDITIONAL ITEMS		WARNING NAMEPLATES	
SMK-1, -4 or -6	System Mounting Kit	EWN-1	Class I Enclosure Warning
EPSK-1 or -2	Explosion Proof Switch Kit	EWN-2	Class II Enclosure Warning
GPSK-1 or -2	General Purpose Switch Kit	ETW	Enclosure Temperature Warning
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		
PIAD	Purgeable Instrument Access Door		
INSTALLATION & OPERATION MANUAL			
		1001A-IOM	Inst. & Operation Manual

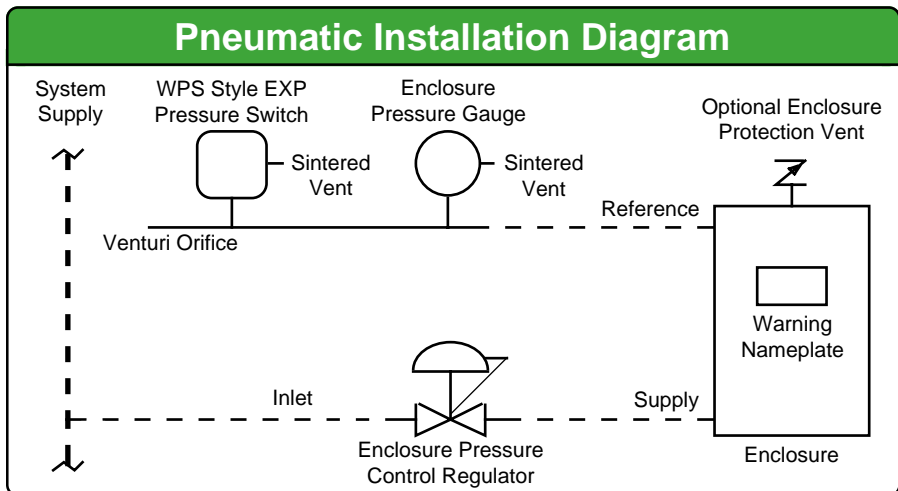
ONE (1) ENCLOSURE WARNING NAMEPLATE & ONE (1) INSTALLATION & OPERATION MANUAL IS PROVIDED WITH EACH SYSTEM

* PM Configuration is not available in WPS Style

Overall System Dimensions	LH - left hand	RH - right hand	TM - top mount	BM - bottom mount	WM - wall mount	FM & PM - surface
Height	7 / 12	7 / 12	7 / 8	7 / 8	7 / 12	9 / 14
Width	8 / 8	8 / 8	8 / 13.375	8 / 13.375	8 / 8	10 / 10
Depth	5.5 / 7.25	5.5 / 7.25	5.5 / 7.25	5.5 / 7.25	7.5 / 9.25	5 / 6.5

Dimensions in inches. Mounting dimensions available upon request. FM & PM panel cutout dimensions: LPS - 8h x 9w WPS - 13h x 9w
 Height & Width dimensions reflect mounting plate measurements. Depth dimension reflects overall measurement of system, including components.

CONSULT FACTORY FOR PANEL MOUNT SYSTEM INSTALLATION DETAILS



Local Sales Representative

IMPORTANT NOTES

All specifications subject to change without notice.
 Warranty & Liability policies available upon request.