Class I (\leq 2 ft³) and Class II (\leq 10 ft³)

Description

Model 11 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) enclosure(s), 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 12.4.

Operation

In accordance with system instructions, 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 differential pressure switch with form "C" contacts for audible or visual alarm systems.

Specifications

System Dimensions: See page 18 Shipping Weight: LPS - 5 lb /WPS - 10 lb Temp. Range: 40°F to +120°F Supply Pressure Range: * 5 - 120 psi Supply Requirements: clean air or inert gas Safe Press. (CI/CII): 0.25" / 1.0" ** 0.1 - 3.5 SCFH Safe Press. Flow Rate: 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 A

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- 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 11



LPS Style (Less Pressure Switch)



WPS Style (With Pressure Switch)





Standard Model Applications

	Standard Model Applications									
	Model Number:	11-CI Type Y	Model Number:	11-CI Type Z						
	Designation:	Purging System	Designation:	Purging System						
	Enclosure Volume:		Enclosure Volume:							
	LPS S	Style	LPS Style							
	UL & FM Certified:	Cl. I, Div. 1,	UL & FM Certified:	Cl. I, Div. 2,						
		Group A-D		Group A-D						
	Rating Reduction:	Div. 1 to Div. 2	Rating Reduction:	Div. 2 to						
	WPS	Style		Nonhazardous						
	UL & FM Certified:	Cl. I, Div. 1,	WPS Style							
	OL & Fivi Certilled.	Group C&D	UL & FM Certified:	Cl. I, Div. 2,						
	Rating Reduction:	Div. 1 to Div. 2	OL & Fivi Certified.	Group C&D						
	rialing rioddollon.	DIV. 1 to DIV. 2	Rating Reduction:	Div. 2 to						
			riating ricadotton.	Nonhazardous						
	Model Number:	11-CII Type Y	Model Number:	11-CII Type Z						
	Designation: Press	•	Designation: Pressurization System							
	Enclosure Volume:	10 ft ³ max.	Enclosure Volume:	10 ft ³ max.						
	LPS S	Style	LPS Style							
	UL & FM Certified:	Cl. II, Div. 1,	UL & FM Certified:	Cl. II, Div. 2,						
		Group F&G		Group F&G						
	Rating Reduction:	Div. 1 to Div. 2	Rating Reduction:	Div. 2 to						
WPS Style				Nonhazardous						
	UL & FM Certified:	Cl. II, Div. 1,	WPS Style							
		Group F&G	UL & FM Certified:	Cl. II, Div. 2,						
	Rating Reduction:	Div. 1 to Div. 2		Group F&G						

Nonhazardous

1000

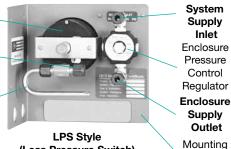
SERIES



Enclosure Pressure Gauge **Enclosure** Reference Inlet Venturi

Orifice

WPS Style (With Pressure Switch)



(Less Pressure Switch)

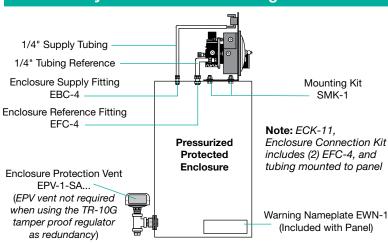
Material Specifications

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

11 - LPS - CI - YZ - LH - ## **Series Model Number** System Style LPS - less pressure switch
WPS - with pressure switch Area Classification -- Class I Area CII - Class II Area System Type - Div. 1 to Div. 2, Div. 2 to Nonhazardous YΖ **Mounting Configuration** left side of enclosure LH left hand right side of enclosure RH - right hand TM top mount top of enclosure BM - bottom mount bottom of enclosure **WM** - wall mount wall surface external frame or rack FΜ - frame mount PM - panel mount enclosure surface cutout (Not available in WPS Style)

- See Accessories Page 130 for additional factory installed accessories

Model 11 System Accessories (See accessories page for complete details)

FACTORY INSTALLED FITTINGS & FILTER

ECK-11 **Enclosure Connection Kit CONNECTION FITTINGS**

EFC-4 1/4" Flush Connector EBC-4 1/4" Bulkhead Connector EPC-10 1/2" Pipe Connector **ADDITIONAL ITEMS**

II F-4 1/4" Filter SMK-1, -4 or -6 System Mounting Kit

EPSK-1 or -2 Explosion Proof Switch Kit GPSK-1 or -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-1-SA-00 Straight w/Spark Arrestor EPV-1-SA-90 Rt Angle w/Spark Arrestor

OPTIONAL HEX KEY REGULATOR HANDLE

TR-10G **Tamper Proof Regulator**

WARNING NAMEPLATES

EWN-1 Class I Enclosure Warning EWN-2 Class II Enclosure Warning FTW **Enclosure Temperature Warning**

INSTALLATION & OPERATION MANUAL 129-0207 Inst. & Operation Manual

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
Height	6.25 / 10.75	6.25 / 10.75	6.25 / 8.5	6.25 / 8.5	6.25 / 10.75	8.25 / 12.75
Width	6 / 7.5	6 / 7.5	7.5 / 13.375	7.5 / 13.375	6 / 7.5	8 / 9.5
Depth	5.5 / 7.25	5.5 / 7.25	5.5 / 7.25	5.5 / 7.25	5.5 / 7.25	4.5 / 7

Dimensions in inches. Mounting dimensions available upon request. FM & PM panel cutout dimensions: LPS - 7.25h x 7w WPS - 11.75h x 8.5w Height & width dimensions reflect mounting plate measurements. Depth dimension reflects overall measurement of system, including components.

