

Type Y & Z purge and pressurization system

1001A



- NFPA 70, NFPA 496, ISA 12.4 standards
- Optional alarm output indicates air lock failure
- Type Y system certified for Class I and Class II, Division 1 to Division 2
- Type Z system certified for Class I and Class II, Division 2 to nonhazardous area
- Class I enclosure volume up to 2 ft³
- Class II enclosure volume up to 10 ft³

1001A Series purge and pressurization system



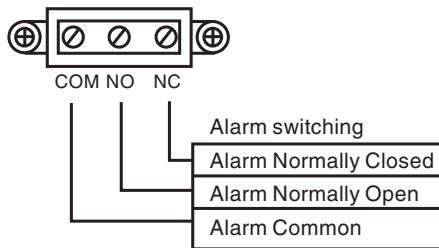
Function

The model 1001A is an enclosure pressurization or purging system that operates on a supply of compressed instrument air or inert gas. The system 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.

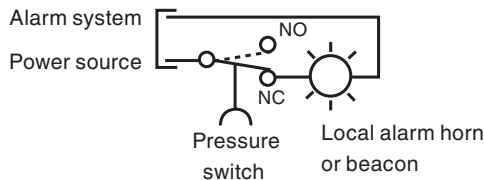
Connection

WPS

Terminal block connections

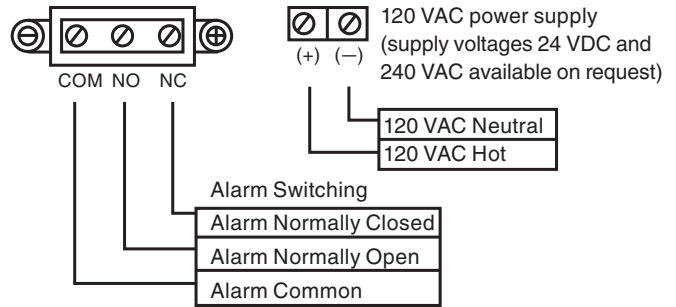


Wiring configuration

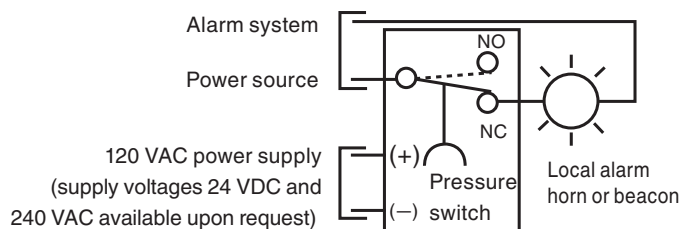


WPSA

Terminal block connections



Wiring configuration



Technical Data

General specifications

Series	1001A
Hazardous environment	gas or dust

Release date: 2022-10-10 Date of issue: 2022-10-10 Filename: t156381_eng.pdf

Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

Technical Data

Electrical specifications	
Connection	Terminal blocks
Output	
Output I	-WPS-
Output type	Switch contacts
Contact loading	120 VAC @ 15 A
Output II	-WPSA-
Output type	Switch contacts
Contact loading	120/220 VAC; 24 VDC @ 10 A; 125 VDC @ 50 mA power requirements: 24 / 120 / 240 VDC @ 3 / 4 / 11 watts
Pneumatic parameters	
Protective gas supply	instrument grade air or inert gas
Pressure requirement	5 - 120 psi (With EPV-1 vent. Systems installed without vent must be equipped with redundant regulator set to 5 psi max.)
Safe pressure	Setpoint: Class I: 0.25" (6.35 mm); Class II: 1.0" (25.4 mm) Flow rate: 0.1 - 3.5 SCFH (2.8 - 99 l/hr)
Ambient conditions	
Ambient temperature	-29 ... 49 °C (-20.2 ... 120.2 °F)
Mechanical specifications	
Connection type	System supply fitting: 1/4" tube fitting Enclosure supply fitting: 1/4" tube fitting Enclosure reference fitting: 1/4" tube fitting Switch conduit port size: 1/2" FPT
Material	Regulator body: zinc w/enamel finish Regulator handle: polycarbonate Enclosure pressure gauge: alum. w/enamel finish Tube fitting: 316 ss forged body Tubing: 316 ss 1/4" .035 welded System nameplate: silk screened Lexan® & ss Fastener hardware: alum. & stainless steel Mounting plate: 316 14 ga #3 brush ss EXP pressure switch body: anodized cast aluminum Enclosure warning nameplate: silk screened ss
Mass	1001A-LPS* 2.3 kg (5 lb) 1001A-WPS* 4.5 kg (10 lb)
International approvals	
FM approval	Type Y LPS: Class I, Division 1, Groups A, B, C, D; Class II, Division 1, Groups E, F, and G WPS: Class I, Division 1, Groups C, D; Class II, Division 1, Groups E, F, and G WPSA: Class I, Division 1, Groups A, B, C, D Type Z LPS: Class I, Division 2, Groups A, B, C, D; Class II, Division 2, Groups E, F, and G WPS: Class I, Division 2, Groups C, D; Class II, Division 2, Groups E, F, and G WPSA: Class I, Division 2, Groups A, B, C, D
UL approval	
cULus	Type Y LPS: Class I, Division 1, Groups A, B, C, D; Class II, Division 1, Groups E, F, and G WPS: Class I, Division 1, Groups C, D; Class II, Division 1, Groups E, F, and G WPSA: Class I, Division 1, Groups A, B, C, D Type Z LPS: Class I, Division 2, Groups A, B, C, D; Class II, Division 2, Groups E, F, and G WPS: Class I, Division 2, Groups C, D; Class II, Division 2, Groups E, F, and G WPSA: Class I, Division 2, Groups A, B, C, D

Release date: 2022-10-10 Date of issue: 2022-10-10 Filename: t156381_eng.pdf

Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

Pepperl+Fuchs Group
www.pepperl-fuchs.comUSA: +1 330 486 0002
pa-info@us.pepperl-fuchs.comGermany: +49 621 776 2222
pa-info@de.pepperl-fuchs.comSingapore: +65 6779 9091
pa-info@sg.pepperl-fuchs.com

PEPPERL+FUCHS

Assembly



Release date: 2022-10-10 Date of issue: 2022-10-10 Filename: t156381_eng.pdf

Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

Pepperl+Fuchs Group
www.pepperl-fuchs.com

USA: +1 330 486 0002
pa-info@us.pepperl-fuchs.com

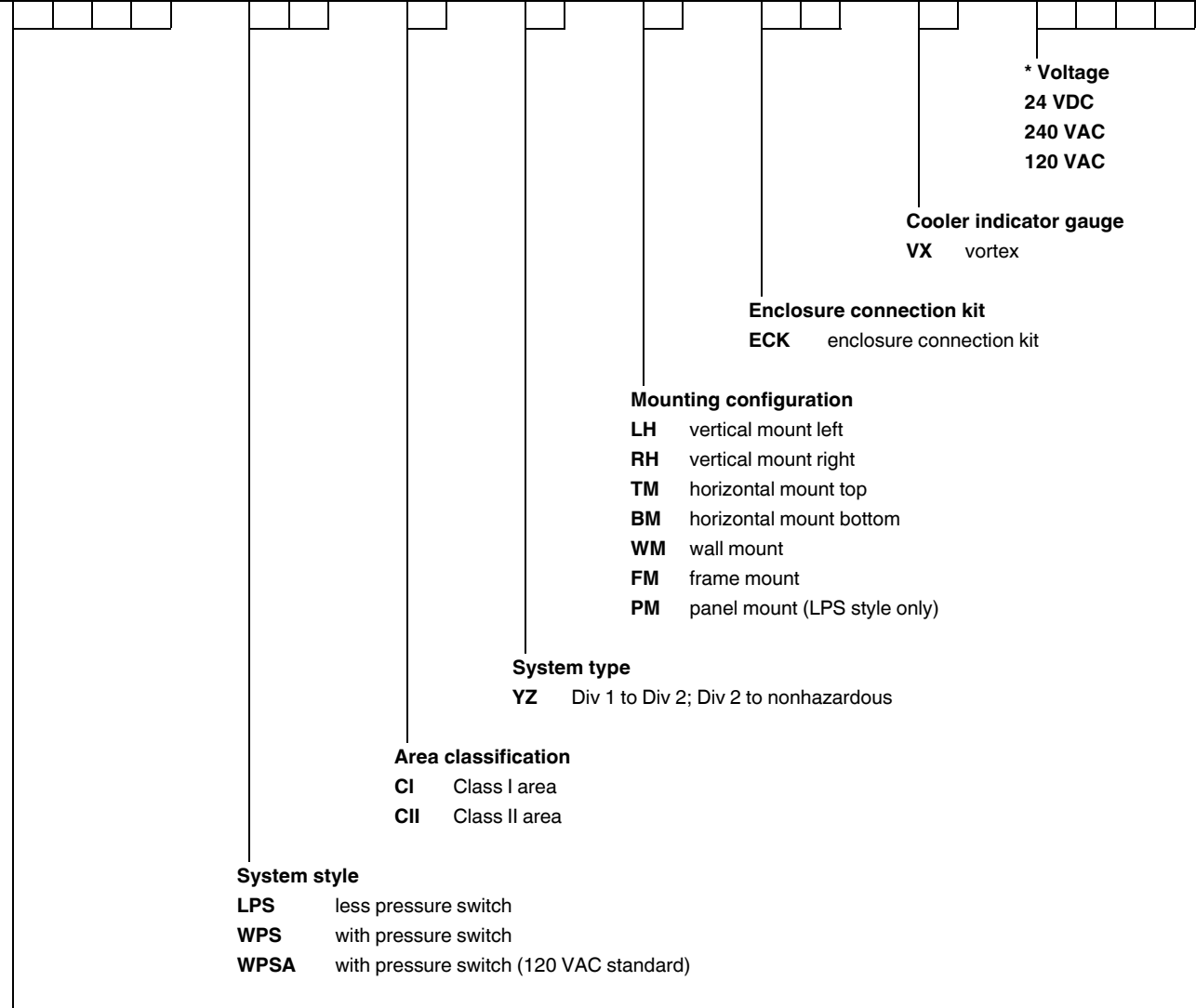
Germany: +49 621 776 2222
pa-info@de.pepperl-fuchs.com

Singapore: +65 6779 9091
pa-info@sg.pepperl-fuchs.com

 PEPPERL+FUCHS

Type Code

1 0 0 1 A - L P S - C I - Y Z - L H - E C K - V X - 2 4 V D C



1001A series model number

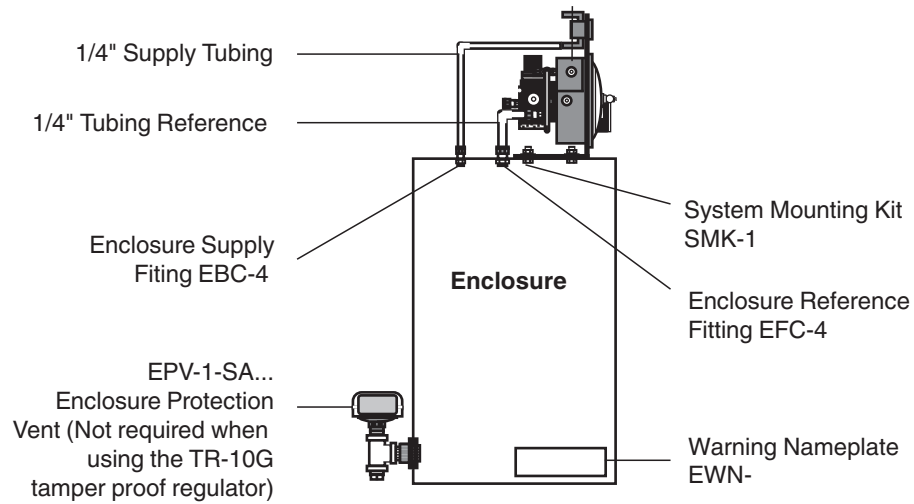
* only for WPSA option

Additional Information

Assembly

Release date: 2022-10-10 Date of issue: 2022-10-10 Filename: t156381_eng.pdf

Refer to "General Notes Relating to Pepperl+Fuchs Product Information".



Dimensions

Overall system dimensions			
LPS / WPS	LH - left hand	RH - right hand	TM - top mount
Height	7 / 12	7 / 12	7 / 8
Width	8 / 8	8 / 8	8 / 13.375
Depth	5.5 / 7.25	5.5 / 7.25	5.5 / 7.25
LPS / WPS	BM - bottom mount	WM - wall mount	FM & PM - surface
Height	7 / 8	7 / 12	9 / 14
Width	8 / 13.375	8 / 8	10 / 10
Depth	5.5 / 7.25	7.5 / 9.25	5 / 6.5
<p>Dimensions in inches. Mounting dimensions available upon request. FM & PM panel cutout dimensions: LPS - 8 h x 9 w WPS - 13 h x 9 w.</p> <p>Height & Width dimensions reflect mounting plate measurements. Depth dimension reflects overall measurement of system, including components.</p>			

Release date: 2022-10-10 Date of issue: 2022-10-10 Filename: t156381_eng.pdf

System Accessories

Factory installed fittings	
Part	Description
ECK-1001A	Enclosure Connection Kit26
Connection fittings	
Part	Description
EFC-4	1/4" flush connector
EBC-4	1/4" bulkhead connector
EPC-10	1/2" pipe connector
Additional items	
Part	Description
ILF-4	1/4" In-Line Filter Kit
SMK-1	Surface Mounting Kit (-LH-, -RH-, -TM-, -BM-, -WM- models)
SMK-4	Surface Mounting Kit (-FM-, -PM- models)
SMK-6	Surface Mounting Kit (-FM-, -PM- models)
PMK-1	Pipe Mounting Kit
GCK	Gauge Conversion Kit
EPSK-1	Explosion Proof Switch Kit (Class I areas)
EPSK-1A	Explosion Proof Switch Kit (Class I areas)
EPSK-2	Explosion Proof Switch Kit (Class II areas)
EPSK-2A	Explosion Proof Switch Kit (Class II areas)
GPSK-1	General-purpose Switch Kit (Class I areas)
GPSK-2	General-purpose Switch Kit (Class II areas)
RAH	Remote Alarm Horn
RAB-1	Div. 1 Remote Alarm Beacon
RAB-2	Div. 2 Remote Alarm Beacon
LCK	"L" style conduit fitting kit
TCK	"T" style conduit fitting kit
Hex key regulator handles	
Part	Description
TR-10G	Tamper proof regulator with gauge
Warning nameplates	
Part	Description
EWN-1	Class I enclosure warning
EWN-2	Class II enclosure warning
ETW	Enclosure temperature warning
Installation & Operation Manual	
Part	Description
DOCT-1352	Installation and Operation Manual

Release date: 2022-10-10 Date of issue: 2022-10-10 Filename: t156381_eng.pdf

Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

Pepperl+Fuchs Group
www.pepperl-fuchs.comUSA: +1 330 486 0002
pa-info@us.pepperl-fuchs.comGermany: +49 621 776 2222
pa-info@de.pepperl-fuchs.comSingapore: +65 6779 9091
pa-info@sg.pepperl-fuchs.com
 **PEPPERL+FUCHS**