PURGE AND PRESSURIZATION SYSTEMS

Purge and Pressurization is a protection method used with Type 4, 4X and 12 (IP54 recommended minimum) enclosures. The enclosure is initially purged to remove any internal explosive gases or dust. Once this is accomplished, the enclosure is pressurized with a protective air or inert gas supply. This provides a positive internal enclosure pressure which keeps any external explosive gases or dust from entering the enclosure. The two methods of purge and pressurization offered are Leak Compensation and Continuous Flow.

Leak Compensation maintains positive pressure by compensating for losses. System consists of Control Unit and Relief Valve. Certification Type Y and Z models: • Flush (internal) or external mount models • Local visual alarm indicator and dry contact output for remote alarm • Typically recommended for enclosures with volume of 60 Ft3 or less. Certification Type X Model: • Provides power disconnect when pressurization is lost or not attained • Provides automatic purge process • External mount • Local visual alarm indicator and dry contact output for remote alarm • Typically recommended for enclosures with volume of 60 Ft3 or less.

Continuous Flow provides positive pressure via continuous protective air flow through the enclosure. System consists of Control Unit, Calibrated Outlet Orifice and Relief Valve. Certification Type Y and Z Models: • Flush (internal) or external mount models • Local visual alarm indicator and dry contact output for remote alarm • Typically recommended for enclosures with volume of 17 Ft3 or less

INDUSTRY STANDARDS

Type X

Ex [px] Ex [p]

IECEx SIR.0019X [Gb, Db]

Europe, ATEX Category 2 GD

Cert no Sira 14ATEX1045X

USA/Canada NFPA496 Cl I Div 1 Groups A, B, C & D

UL E466718

Type Y

Ex [py] Ex [p]

North America Cl I Div 1 Groups A, B, C & D

For protecting Cl I Div 2 equipment

Type Z

Ex [pz] Ex [p]

IECEx SIR.0019X [Gc, Dc]

Europe, ATEX Category 3 GD

North America Cl I Div 2 Groups A, B, C & D

FEATURES

All exterior components are 316 stainless steel or corrosion-resistant composite

Space-saving flush or exterior mounted models available

Local visual indicators provide system status

Leak compensation models are equipped with rapid purge valve and visual purge status indicator

All models utilize dry, clean inert gas supply of 60 PSI (4 bar) to 115 PSI (8 bar)

Ambient operating temperature -4°F (-20°C) to 131°F (55°C)

Type X models provide automatic purge cycle and 4PNO/20A/440VAC power contactor with 115 VAC or 230 VAC coil

SPECIFICATIONS

Finish: Brushed

Material: Stainless Steel 316L

Table 1/1					
Catalog Number	**Thickness**	**Operation Type**	**Mounting**	**Certification Type**	**Quick Ship**
PCFB1YZ	3.18mm	Continuous Flow	Exterior	Y and Z	No
PCFF1YZ	3.18mm	Continuous Flow	Flush	Y and Z	No
PLCB1YZ	3.18mm	Leak Compensation	Exterior	Y and Z	No
PLCF1YZ	3.18mm	Leak Compensation	Flush	Y and Z	No
PLCS1X1	3.18mm	Leak Compensation	Exterior	X (120 VAC)	No
PLCS1X2	3.18mm	Leak Compensation	Exterior	X (230 VAC)	No
PCFSKIT					No
PLCSKIT					No

ADDITIONAL PRODUCT DETAILS

For all IEC and ATEC applications, the final or complete integrated assembly must be submitted to a notified body for certification.

See Specification Sheet for Purge and Pressurization Systems and Certifications table.

WARNING

nVent products shall be installed and used only as indicated in nVent's product instruction sheets and training materials. Instruction sheets are available at www.nvent.com and from your nVent customer service representative. Improper installation, misuse, misapplication or other failure to completely follow nVent's instructions and warnings may cause product malfunction, property damage, serious bodily injury and death and/or void your warranty.