

Product Description

Model YZ102 is a Type Y or Z pressurization unit designed to protect electrical equipment in Class I Hazardous Areas. When connected to a supply of protective gas and utilized in conjunction with a Model PV-2 Spark Arresting Purge Vent, the Model YZ102 will supply, regulate and monitor the protective gas supply to a protected electrical enclosure and accomplish purging of the protected enclosure in an expedited manner. Type Z applications reduce the hazardous area rating inside the enclosure from Division 2 / Zone 2 to Unclassified. This allows general purpose equipment to operate in Division 2 / Zone 2 areas. Type Y applications reduce the hazardous area rating inside the enclosure from Division 1 / Zone 1 to Division 2 / Zone 2. This allows Division 2 / Zone 2 equipment to operate in Division 1 / Zone 1 Hazardous Areas.

Unit Operation

Prior to Start-Up: Ensure Protected Enclosure Power is OFF, Protective Gas Supply is ON, Filter Regulator is set to 60 PSI, and alarm system is activated (if utilized). Test Purge Vent for proper operation. **Start-Up:** Close and seal Protected Enclosure. Open Enclosure Pressure Control Valve until a "Safe" reading is shown on the Enclosure Pressure Gauge. Open Purge Control Valve and allow unit to purge protected enclosure for the required time marked on Unit Start Up Instructions or for 5 minutes, minimum and then close Purge Control Valve. Confirm protected enclosure "Safe" pressure is stable. Energize protected enclosure equipment. Loss of "Safe" pressure requires immediate attention. De-energized power if "Safe" pressure cannot be restored within a reasonable amount of time.

Product Specifications

Maximum Enclosure Volume:	15 cubic feet
Universal Unit Weight:	8.5 lbs.
Vertical & Horizontal Unit Weights:	13.5 & 13.5 lbs.
Operating Temp. Range:	-20° F - 120° F
Protective Gas Supply:	* Air or Inert Gas
Unit Supply Pressure:	80 - 125 psi maximum
Unit Supply Connection:	1/4" tube fitting
Enclosure Supply:	1/4" tube fitting
Enclosure Reference:	1/4" tube fitting
Safe Enclosure Pressure:	0.25" w.c.
Safe Pressure Flow Rate:	** 0.1 - 3.5 SCFH per cubic foot
Purging Enclosure Pressure:	** 5" - 8" w.c.
Purging Flow Rate:	4 SCFM / 240 SCFH @ 60 psi
4 Volume Purge Time:	1 minute per 1.0 cubic foot
5 Volume Purge Time:	1 minute per 0.8 cubic foot
Switch Set Point on Decrease:	0.15" w.c. ± 0.02"
Pressure Switch Conduit Port:	1/2" FPT
Pressure Switch Contact Ratings:	See EPSK Bulletin

- * Air must contain no more than trace amounts of flammable vapors.
 ** Enclosure integrity determines safe pressure flow rate and purging enclosure pressure.

Required Accessory

A Model PV-2 Spark Arresting Vent is required for proper operation of the purging cycle and to protect the enclosure from excessive pressure of the protective gas supply in accordance with the requirements of NFPA 496, EN 50016 and IEC 60079-02.

Best Purging Systems Corporation therefore requires the purchase of a Model PV-2 Spark Arresting Purge Vent with this unit for installation on the protected enclosure or the last enclosure of an enclosure array.



Model YZ102 Type Y & Z Purging & Pressurization Unit

**Class I Applications
Up To 15 Cubic Feet**

Technical Bulletin YZ102 TB-R0

© 07.23.2018



**Universal Mount Unit
less Pressure Switch for
any side or panel mounting**



**Vertical Mount Unit
with Pressure Switch for
left or right side mounting**



**Horizontal Mount Unit
with Pressure Switch for
top or bottom side mounting**



Best Purging Systems
Enclosure Purging & Pressurization Solutions

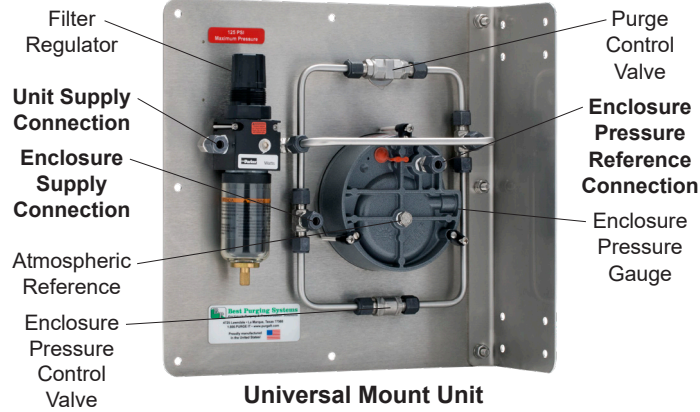
4725 Lawndale • La Marque, Texas 77568

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Rear Views



**Horizontal Mount Unit
with Pressure Switch**

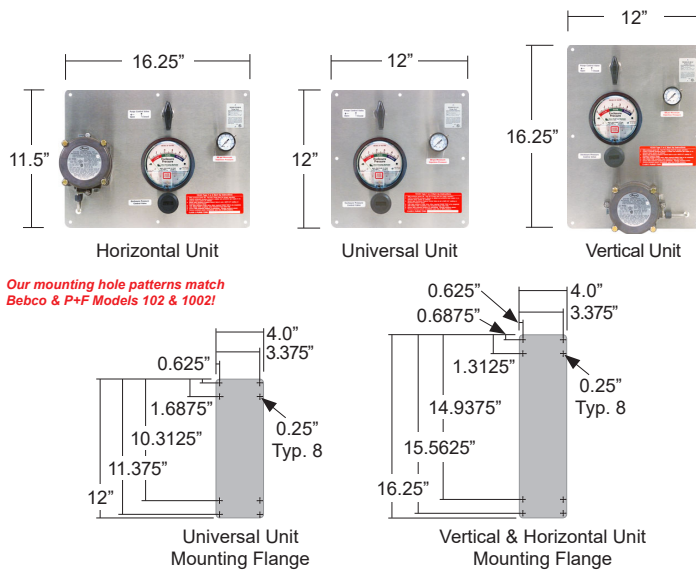


**Universal Mount Unit
less Pressure Switch**



**Vertical Mount Unit
with Pressure Switch**

Unit & Mounting Flange Dimensions



Model Number Matrix

Typical Model Number:

YZ 102-CI-L-U-*

Unit Type _____
Y - Division 1 / Zone 1 to Division 2 / Zone 2
Z - Division 2 / Zone 2 to Unclassified

Unit Series _____
102 - Purging & Pressurization Unit

Area Classification _____
CI - Class I

Pressure Switch Option _____
L - Less Switch
W - Class I, Group C & D Switch
B - Class I, Group A, B, C & D Switch

Mounting Configuration _____
U - Universal V - Vertical H - Horizontal

Group B Switch Voltage (omit if not applicable) _____
24 - 24 VDC 120 - 120 VAC 240 - 240 VAC

*Please contact a Sales Associate for specifications and factory integration of
Model PMGK Panel Mount Gasket Kits for Universal Mounting Configurations*

Material Specifications

Mounting Plate, Flange & Atmospheric Reference: 304 Stainless Steel
Valve & Fitting Bodies, Ferrules & Unit Fasteners: 316 Stainless Steel
Tube Fitting Compression Nut Coating: Molybdenum Disulfide
Enclosure Pressure Gauge Lens: Acrylic w/ Neoprene O-Ring
Enclosure Pressure Gauge Body: Cast Aluminum w/ Epoxy Finish
Fastener Kit Sealing Screws: 316 Stainless Steel w/ Neoprene O-Ring
Fastener Kit Sealing Washers: 18-8 Stainless Steel w/ Neoprene Washer
Fastener Kit Locking Nuts: 316 Stainless Steel w/ Nylon Insert

Atmospheric Reference: 316 Stainless Steel Body & 304 SS Element
Indelible Unit Nameplates: 3M Lexan™ w/ 3M VSB™ Adhesive
Supply Regulator Head & Bowl: Acetal Polymer Plastic
Supply Regulator Body: Zinc w/ Buna N Elastomers
Supply Pressure Gauge: Painted Steel Case, Plastic Lens, Brass Body
Pressure Switch Body: Cast Aluminum w/ Epoxy Finish
Pressure Switch Bolts & Contacts: Zinc Plated Steel & Mica Silver
Enclosure Pressure Gauge & Switch Diaphragms: Fluorosilicone

Unit & Protected Enclosure Accessory Hyperlinks



**Model PV
Spark Arresting
Pressure Vents**

Prevents excessive
enclosure pressure upon
unit regulator failure



**Model BCK
Unit & Bulkhead
Connection Kits**

Connects the unit and
multiple protected
enclosures of an array



**Model RAB & RAH
Remote Alarm
Beacons & Horns**

Signals loss of
protected enclosure
safe pressure



**Model EPSK
Enclosure Pressure
Switch Kits**

Complements universal
mount units to activate
audible or visual alarms



**Model EPWN & ETWN
Pressure & Temperature
Warning Nameplates**

Provides NFPA required
markings for protected
enclosure doors and covers



**Model PMGK
Panel Mount
Gasket Kits**

Converts universal mount
units for panel mounting in
protected enclosures

One (1) Model EPWN Enclosure Warning Nameplate & One (1) Unit Flange or Panel Mount Fastener Kit furnished with all Units.
All specifications subject to change without notice. Warranty & Liability policies available upon request.