



Photo:
ATEX Zone 2 IIC T4 Cat 3
Purge & Pressurized PE3
including 07 1ZLC/pm/IS
MiniPurge™ Certified Ex pz

Certification Overview

Expo holds IECEx & ATEX Category 3 Certificates to IEC / EN 60079-0 & 60079-2, Zone 2, Ex pz for populated Expo Purge & Pressurized Enclosures type PE3. The Certificate includes for installation of the client's instrumentation and / or electrical apparatus when it complies with the Expo "Schedule of Limitations" (SoL).

For applications where there is a potential for hazardous dust as well as gas, certification can include for Zone 2 & Zone 22. The Zone 22 certification is to EN 61241-4 standard Ex p. Industries include: Pharmaceutical, Food, Plastic etc.

PE3 Certification Ex pz

IECEx - ATEX Purge & Pressurized Enclosures
Ex pz Zone 2, (22) IECEx, Category 3 GD ATEX

IECEx & / or ATEX Zone 2 (22) Certification with "YOUR EQUIPMENT"

IECEx - ATEX Certified, Expo Purge & Pressurized
Enclosure, Type PE3

+

IECEx - ATEX certified Expo Purge and
Pressurization System

+

YOUR Equipment within agreed limits

+

Expo Verify the installation is compliant with the
SoL

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IECEx & / or ATEX Zone 2 (22)
Certification to IEC/EN 60079-0 & -2 Ex pz

Where there are Gas & Dust Hazards PE3 can also
be certified for both Zone 2 & 22

Advantages

- + No need for a Certified / Notified Body as the Certificate has been issued to Expo
- + Accept orders for your apparatus in hazardous location and increase your market share
- + Ease of Certification for the OEM and the User
- + Reduced Certification cost
- + Reduced time to market
- + After review, equipment not complying with the SoL may still be certified with a variation to the Expo Certificate

Contents of the Pressurized Enclosure

The construction and power dissipation of the internal components are critical to ensuring effective purging, compliance with Temperature Rating and Safe Operation. Therefore all internal components and details of the PE must be reviewed by Expo Technologies to determine compliance with the IECEx / ATEX "Schedule of Limitations" required for the certificate to apply. Thereafter, the final installation is to be verified by Expo.

Please ask Expo for a copy of the "PE3, Zone 2
Schedule of Limitations".

CERTIFICATION OF THE PE3 ENCLOSURE

IECEX: Certificate of Conformity: IECEX ITS 11.0042X

ATEX: Certificate of Conformity: ITS 11 ATEX17381X

Ex pz IIC T4 Gc [Zone2]
Ex p IIIC T135°C Db [Zone 22]

Ambient Temp: -20°C, -4°F to 55°C, 131°F

Pressure & Leakage Test: Test results with each PE3 To IEC / EN 60079-2

Over Pressure Test: 18 mbarg (7"WC) to IEC / EN 60079-2

Purge Time: 5 Volume Changes

Purge Test: Alternatively a Purge Test can be completed to prove effective purging and reduce the Purge Time

Compliance to General Conditions IEC/EN 60079-0 Includes thermal conditioning of Non metallic items, seals, etc resistance to light testing, impact testing 4 -7 Joules

Schedule of Limitations: Request SoL PE3, Zone 2 (22)

Instruments & electrical: Most apparatus installed within the PE3 are normally acceptable

Ex Apparatus: Permitted subject to internal temp

Effective Purging: Boxed apparatus will require ventilation holes

Power & Signals: Must be capable of being manually disconnected

Temperature Class: T4, T3, T2 dependent on internal and external apparatus

Batteries: Check with Expo. Small memory type batteries may be able to be installed

Verification: Can be completed at the client's or Expo premises. Expo will supply the verification document and certificate label(s)

MiniPurge™: See also MiniPurge Type Z systems Data Sheet or go to www.expoworldwide.com "Product Wizard"

COMMON SPECIFICATION

Model Number: PE3 - - - -
PE3 Options:

- + Sizes: Purpose built and designed for the application
Maximum size: 2.1m H x 1.8m W x 1.0m D Approx: 82" H x 70" W x 39". Larger sizes are available, please ask!
- + Material: 1.5mm to 3mm dependent on the size of the PE
316L Stainless Steel - Finish: NROB
Mild (Carbon) Steel - Finish: Powder Coated RAL7035 (Light Grey)
- + Doors: Front, Back, Side, Top, Bottom or Double doors
- + Door fasteners: Tool Operated 1/4 turn Stainless Steel (does not require a power disconnect door switch) IEC / EN 60079-2
- + Hinges: Stainless Steel
- + Seals: Elastomer seals fully compliant with IEC / EN 60079-0
- + Windows: Polycarbonate Weather Strip or Laminated Glass Weather Strip or Clamped. Maximum size up to 1m² (Approx: 10.76ft²)
- + Control Devices & Actuators: Lamps, Push Buttons, etc Certified
- + Sub-panel (Chassis): Rear, Slides, Top, Bottom or door
- + 19" Rack: Fixed or Swing Frame
- + Mounting Bosses
- + Lifting Eyes
- + Gland Plates
- + Mobile PE3: Anti-Static Wheels
- + Wall Lugs
- + Free Standing
- + Plinths
- + Keyboards, etc



Photo: MiniPurge™ 07 1ZLC/bp/IS
IECEX, ATEX, FM, cULus Certified Zone 2, Class I Div 2

If you have an application for Hazardous Location, IECEX – ATEX - NEC please feel free to ASK!



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