



PE3 Certification Ex pz ATEX Purge & Pressurized Enclosures

Ex pz Zone 2 (22) Category 3 GD ATEX



**ATEX Zone 2
Certified**

Photo:
ATEX Zone 2 IIC T4 Cat 3
Purge & Pressurized PE3
Including O7 1ZLC/pm/IS
MiniPurge™ Certified Ex pz

■ Category 3 Certification

Expo ATEX Cat 3 Certificate to EN 60079-0 & 60079-2, Zone 2, Ex pz for the completed Expo Purge & Pressurized Enclosure PE3. The certificate includes for installation of your instrumentation and / or electrical apparatus when it complies with the Expo "Schedule of Limitations".

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, formerly referred to as Ex pD.

Industries include: Pharmaceutical, Food, Plastic, etc.

Ex e terminals, Ex e isolators can be installed when used with the PE2e Purge & Pressurized Enclosures and MiniPurge™ systems

■ Contents of the Protected 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 ATEX Certificate "Schedule of Limitations" (SoL) 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".

ATEX Zone 2 (22) Certification with "YOUR Equipment"

ATEX Certified, Expo Purge
& Pressurized Enclosure, Type PE3

+

ATEX Certified Expo Purge
& Pressurization System

+

YOUR Equipment - within agreed limits

+

Expo Verify the installation is
compliant with the SoL

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ATEX Zone 2 (22)
Certification to 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 HazLoc locations 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





Technical Specification Purge & Pressurized Enclosure

■ Certification of the PE3 Enclosure

ATEX	Certificate of Conformity No: Expo10ATEX - - - Ex pz IIC T4 Gc [Zone 2] Ex p IIIC T135°C Dc [Zone 22] (formally Ex pD)
Ambient Temperature	-20°C, -4°F to 55°C, 131°F
Pressure & Leakage Test	Test results with each PE3 To EN 60079-2
Over Pressure Test	18mbarg (7"wc) EN 60079-2
Purge Time	5 Volume Changes
Purge Test	Alternatively a Purge Test can be completed to reduce the Purge Time and prove effective purging
Compliance to General Conditions EN 60079-0	Including thermal conditioning of Non metallic items, seal, 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 Purge	Boxed apparatus will require ventilation holes
Power & Signals inputs	Should be disconnects by manual isolation / disconnect.
Temperature rating	T4, T3, T2 dependent on internal and external apparatus
Battery(s)	Check with Expo. Small memory type batteries may be able to be installed!
Internal release of explosive gas	Not normally permitted, please consult Expo, solutions are available
Verification	Can be completed at the clients or Expo premises Expo will supply the verification document, certificate and certificate label(s)
MiniPurge™	See also Mini-Z-Purge systems Data Sheets or go to www.expoworldwide.com "Product Selection Wizard"

■ PE3 – ATEX Zone 2 (22)



Photo
MiniPurge™ 07 1ZLC/bp/IS
Model Number: PE3 - - - - IECEx, ATEX, FM, cULus Certified
PE3 Options: Zone 2, Class I Div 2

- Sizes : Purpose built and designed for the application
- Material : 1.5mm to 3mm dependent on the size of 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 ¼ turn Stainless Steel

- Hinges : Stainless Steel
- Seals : Elastomer seals fully compliant with IEC 60079-0
- Windows: Polycarbonate Weather Strip or Clamped Laminated Glass Weather Strip
Maximum size up to 1m² (Approx: 10.76ft²)
- Control Devices & Actuators : Lamps, Push Buttons, etc Certified
- Sub-panel (Chassis) : Rear, Sides, top, bottom or Door
- 19" Rack : Fixed or Swing Frame
- Mounting Bosses
- Label Slots for Barcode Labels or similar
- Lifting Eye's
- Gland Plates
- Mobile PE3 : Anti-Static Wheels
- Wall Lugs
- Free Standing
- Plinths
- Keyboards, etc

Can I use my own enclosure!

Where there is an existing enclosure it might be suitable for pressurization (Ex pz) and if so, might be certified for ATEX Zone 2, Category 3. The enclosure should be fully welded, have sufficient hinges, fasteners on the door to hold the internal pressure with leakages < 60 NI/min, components, windows mounted in the walls of the enclosure will need to comply with the relevant standards such as EN 60079-0, impact tests, UV, Optical Radiation, etc., contents to comply with the SoL. Expo Consultancy Service will advise on these requirements and recommend solutions for your equipment for compliance with the EN standards and supply an ATEX Category 3 certificate for the complete package.

If you have an application for Hazardous Area (Location) IECEx – ATEX - NEC please feel free to ASK!