



PE2 Certification Ex px

IECEX - ATEX

Purge & Pressurized Enclosures

Ex px Zone 1 (21) IECEX, Category 2 G D ATEX



**IECEX &
ATEX Certified**

Photo:
ATEX Zone 1 IIC T4 Cat 2
Purge & Pressurized PE2,
316L St/St
Including 07 1XLC/ss/PO
+MIU/dA
MiniPurge™ Certified Ex px

■ Certification Overview

Expo holds IECEX & ATEX Certificates to IEC/EN 60079-0 & 60079-2, Zone 1, Ex px for the completed Expo Purge & Pressurized Enclosure PE2. The certificate includes for installation of your instrumentation and / or electrical apparatus without further reference to the certification body 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 1 & Zone 21.

The Zone 21 certification is to IEC/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 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 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 "PE2, Zone 1 Schedule of Limitations".

**IECEX &/or ATEX Zone 1 (21)
Certification
with "YOUR Equipment"**

**IECEX - ATEX Certified, Expo Purge
& Pressurized Enclosure, Type PE2**

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**IECEX - ATEX Certified Expo Purge
& Pressurization System**

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YOUR Equipment - within agreed limits

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**Expo Verify the installation is
compliant with the SoL**

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**IECEX &/or ATEX Zone 1 (21)
Certification to IEC/EN 60079-0 & -2
Ex px**

**Where there are Gas & Dust Hazards PE2 can
also be certified for both Zone 1 & 21**

■ 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 with a variation to the Expo certificate





Technical Specification Purge & Pressurized Enclosure

■ Certification of the PE2 Enclosure

IECEX	Certificate of Conformity No: IECEX ITS 08.0044X
ATEX	Certificate of Conformity No: ITS10ATEX16944X Ex px IIC T4 Gb [Zone 1] Ex p IIIC T135°C Db [Zone 21] (formerly Ex pD)
Ambient Temperature	-20°C, -4°F to 55°C, 131°F
Pressure & Leakage Test	Test results with each PE2 To IEC/EN 60079-2
Over Pressure Test	18mbarg (7"wc) To IEC/EN 60079-2
Purge Time	10 Volume Changes
Purge Test	Alternatively a Purge Test can be completed to prove effective purging & 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 PE2, Zone 1 (21)
Instruments & electrical	Most apparatus installed within the PE2 are normally acceptable
Ex Apparatus	Permitted subject to internal temp
Effective Purge	Boxed apparatus will require ventilation holes
Power & Signals inputs	Must be disconnected by the MiniPurge™ system.
Temperature rating	T4, T3, T2 dependent on internal and external apparatus
Batteries	Check with Expo. Small memory type batteries may be able to be installed!
Internal release of flammable gas	Not normally permitted, please consult Expo. Solutions are available
Verification	Can be completed at the client's or Expo premises Expo will supply the verification document and certificate label(s)
MiniPurge™	See also Mini-X-Purge systems Data Sheets or go to www.expoworldwide.com "Product Selection Wizard"

■ PE2 – IECEX and ATEX Zone 1 (21)

Model Number: PE2 - - -

PE2 Options:

- Sizes : Purpose built and designed for the application
- Maximum Size : 2.1m H x 1.6m W x 1.0m D
Approx: 82" H x 63" W x 39" D
Larger sizes are available, please ask!
- 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
(does not require a power disconnect door switch) IEC/EN 60079-2
- 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
- Mounting Bosses
- Label Slots for Barcode Labels or similar
- Lifting Eye's
- Gland Plates
- Mobile PE2: Anti-Static Wheels
- Wall Lugs
- Free Standing
- Plinths
- Keyboards, etc



Photo
Barcode Label Pinter
ATEX Certified
Zone 1 and 21
PE2 + 07 1XCF/pm/PO + Printer