



PE3E Certification Ex e ATEX Increased Safety Ex e Enclosures

Ex e Zone 2 (22) Category 3 GD ATEX



**ATEX Zone 2
Certified**

Photo:
ATEX Zone 2 IIC T4 Cat 3
Ex e PE3E
Including door, gland
plate, pushbutton and
lamp holes to
customer requirements

■ Category 3 Certification

Expo ATEX Cat 3 Certificate to EN 60079-0 & 60079-7, Zone 2, Ex e for the completed Expo Increased Safety Enclosure PE3E. 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.

■ Contents of the Increased Safety Enclosure

Ex e terminals, Ex e isolators and other Ex e component certified items can be installed when used with the PE3E Increased Safety Enclosures. The construction and power dissipation of the internal components are critical to ensuring 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.

**ATEX Zone 2 (22)
Certification
with "YOUR Ex e Equipment"**

**ATEX Certified, Increased Safety Ex e
Enclosure, Type PE3E**

+

**YOUR Ex e Certified Equipment - within
agreed limits**

+

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

=

**ATEX Zone 2 (22)
Certification to EN 60079-0 & -7
Ex e**

**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 is issued by Expo Consultancy
- + 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



ISO 9001



Technical Specification Purge & Pressurized Enclosure

■ Certification of the PE3E Enclosure

ATEX	Certificate of Conformity No: Expo10ATEX - - - - Ex px IIC T4 Gb [Zone 2]
Ambient Temperature	-20°C, -4°F to 55°C, 131°F
Pressure & Leakage Test	Test results with each PE3E to <i>validate IP 65/IP 66</i>
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 PE3E, Zone 2 (22)
Instruments & electrical	Most Ex e component certified apparatus installed within the PE3E are normally acceptable
Ex Apparatus	IS terminals and apparatus may also be permitted subject to internal temp
Power & Signals	within current limits
Temperature rating	T4, T3, T2 dependent on internal and external apparatus
Batteries(s)	Check with Expo. Small memory type batteries may be able to be installed if part of component certified Ex e apparatus
Verification	Can be completed at the client's or Expo premises Expo will supply the verification document and certificate label(s)
Cable entries	Cable entries permitted by approved cable entry devices . cable Glands , cable transits and bushings .

■ PE3E – ATEX Zone 2 (22)-

Model Number: PE3E - - - -
PE3E Options:

- 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
- Separate compartment of Ex e HMI
- Lifting Eye's
- Gland Plates
- Cable Entry Holes
- Mobile PE3E : Anti-Static Wheels
- Wall Lugs
- Free Standing or Plinths mounted

Why use an Expo enclosure? The **Expo PE3E** enclosures are fully welded, have sufficient hinges, fasteners on the door to ensure IP rating even after repeated use. All Components, windows mounted in the walls of the enclosure do comply with the relevant standards such as EN 60079-0, impact tests, UV, Optical Radiation, etc.,. The 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!



ISO 9001