



## Certification Overview

Expo holds IECEx & ATEX Certificates to IEC/EN 60079-0 & IEC/EN 60079-31 and EN 61241-1, Zone 21, Ex tb, or Zone 22, Ex tc for the populated Expo Enclosure type PE2E/ PE3E. 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"(SoL).

Expo Dust protection (Ex tb - Ex tc) enclosures are designed to prevent the entry of flammable dust into the enclosure. They are custom designed and engineered for specific application or project.

## Dust Protection by Enclosure

IECEX/ATEX Zone 21 (Ex tb) and Zone 22 (Ex tc)

### IECEX &/or ATEX Zone 21 & 22 Certification with "YOUR EQUIPMENT"

IECEX - ATEX Certified, Expo Dust & Protected by Enclosure,  
Ex tb (Type PE2E) or Ex tc (Type PE3E)  
+  
YOUR Equipment within agreed limits  
+  
Expo Verify the installation is compliant with the SoL  
=  
IECEX &/or ATEX Zone 21 & 22  
Certification to IEC/EN 60079-0 & IEC/EN 60079-31 or EN 61241-1, IP6X, Ex tb/Ex tc

## Advantages

- + No need for a Certified / Notified Body as the Certificate has been issued to Expo
- + Accept orders for your apparatus in hazardous 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
- + Passive operation, no external electric control system or air supply required

## Contents of the Enclosure

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 enclosure must be reviewed by Expo Technologies to determine compliance with the IECEx / ATEX Certificate "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 "PE2E Dust Protection, Zone 21/22 Schedule of Limitations".



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**CERTIFICATION OF THE PE2E/PE3E ENCLOSURE FOR "DUST PROTECTION"**

Ex tb IIIC T135°C Db:	
IECEX: Certificate of Conformity: IECEX ITS 08.0044X	
ATEX: Certificate of Conformity: ITS10ATEX16944X	
Ex tc IIIC T135°C Dc:	
IECEX: Certificate of Conformity No: IECEX ITS11.0042X	
ATEX: Certificate of Conformity No: ITS11ATEX17381X	
Ambient Temp:	-20°C, -4°F to 55°C, 131°F
IEC/EN 60529 &:	IP66
IEC/EN 60079-0	
Compliance to General Conditions	Includes thermal conditioning of Non metallic items, seals, etc
IEC/EN 60079-0	resistance to light testing impact testing 4 -7 Joules
Schedule of Limitations:	Request SoL, Zone 21 (22)
Special Conditions of Safe Use	Before closing the door dust must be removed from the inside of the enclosure and then power can be applied
Instruments & electrical:	Most apparatus installed within the enclosure are normally acceptable
Ex Apparatus:	Permitted subject to internal temperature
Power & Signals:	Must be capable of being manually disconnected
Temperature rating:	T135, T200, T300 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 or Expo premises. Expo will supply the verification document and certificate label(s)

**COMMON SPECIFICATION**

- Model Number: PE2E- - - - or PE3E- - - -**
- 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" D 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
  - + Hinges: Stainless Steel
  - + Seals: Silicone seals fully compliant with IEC/EN 60079-0
  - + Windows: Laminated Clamped Glass Maximum size up to 1m<sup>2</sup>(Approx: 10.76ft<sup>2</sup>)
  - + Control Devices & Actuators: Certified Lamps, Push Buttons etc.
  - + Sub-panel (Chassis): Rear, Sides, Top, Bottom or Door
  - + 19" Rack: Fixed or Swing Frame
  - + Mount Bosses
  - + Lifting Eyes
  - + Gland Plates
  - + Mobile PE2E/PE3E: Anti-Static Wheels
  - + Wall Lugs
  - + Free Standing
  - + Plinths

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



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