

PEX7250 Explosion proof Alarm Annunciator

Introduction

This manual provides the information necessary to install, connect, test and maintain the PEX7250 flameproof annunciator.

Description

The PEX7250 Explosion proof Alarm Annunciator offers a vast range of features and benefits normally reserved for use in safe area annunciators only.

The heart of the system is our field proven P725 Alarm Annunciator which is available in 3 individual window sizes 30 mm x 30 mm, 30 mm x 60 mm or 60 mm x 60 mm

Reliability of the system is enhanced over conventional systems with the use of ASIC (Application Specific Integrated Circuits) for each pair of alarms removing any reliance on common control cards.

The standard enclosure is cast iron and is finished in a light grey two-part epoxy paint, making it ideal for offshore applications.

Systems are available in a range of formats and sizes and all carry the same approval to internationally recognised Zone 1 standards.

Installation

This product has been certified to be mounted in zone 1 or 2 (equipment category 2) hazardous area. Equipment must be installed in accordance to IEC60079-14 (Electrical installation in hazardous areas).

Safety Instructions

These instructions are addressed to qualified personnel in compliance with the national laws. The equipment should be installed to local codes of practise and also IEC60079-14 and IEC60079-17 (when applicable) concerning the electrical equipment for potentially explosive atmospheres.

- The enclosure will only be installed in the designated hazardous area as stated in the equipment certificate.
- All data indicated on the enclosure will be complied with
- The enclosure will only be installed if it is wholly intact
- Use exclusively spare part from RTK.
- Routine maintenance and servicing will be carried out exclusively by qualified electricians with the supervision of "expert" personnel.

Connection detail

Refer to wiring diagram supplied for terminal connections. All wiring inside the box must be carried out in compliance with the characteristics of the components.

Use and Service

All the operations of installation and service will be carried out when the circuit is not powered. Take care in not damaging the coupling joints; always reapply the silicone grease to the flanges before re-closing the box, and ensure all closing screws have been returned and fully tightened. Use screws of quality A2-70 according UNI 7323 with ultimate tensile strength of at least 700N/mm²

Any threaded hole of the top or of the body not being used must be closed with certified plugs.

NOTE: Cable entries shall also be suitably sealed if the enclosure is to be used in dust atmospheres.

Mounting

Unit is supplied with wall mounting brackets for vertical or horizontal mounting.

P725 Instructions

For full detailed operating instructions refer to P725 manual supplied with unit.

Location

The PEX7250 has been certified to:

 II 2GD EEx d IIB T85°C T_{amb} = 40°C and T100°C T_{amb} = 55°C

When connected to an approved system it may be installed in:

- Zone 1 Explosive gas air mixture likely to occur, in normal operation.
- Zone 2 Explosive gas air mixture not likely to occur, and if it does, it will only exist for a short time.

Be used with gases in groups:

- Group A Propane
- Group B Ethylene

Labelling

The PEX7250 are shipped with the following labels:-

- Certification label (figure 1) showing all relevant certification information.

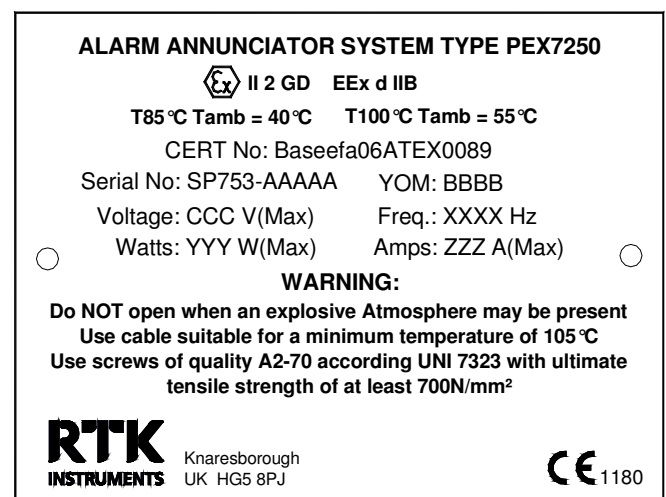



Figure 1: Certification label.

Specification

Standards: BS EN50014 AND BS EN50018

Approved for :  II 2GD
EEx d IIB T85°C_{Tamb} = 40°C
T100°C_{Tamb} = 55°C

Certificate No : Baseefa06ATEX0089

Max Power Dissipation: 75W@70% efficiency
(Based On Largest sized P725 with LED's and repeat relays)

Current

Max Size System: 2.2A

Connections

Terminals for 2.5mm² cable.

Protection

IP65

EMC Compliance

Immunity to EN61000-6-2 : 2001
Emissions to EN6100-6-4 : 2001

Ambient Temperature

Operating: -20°C to +40°C for T85
Operating: -20°C to +55°C for T100
Storage: -20°C to +80°C

Humidity

0-95% RH, non condensing

System

Largest P725 Annunciator – 5 Modules wide x 3
Modules High (max dimensions 324W x 204H x 145D)

Largest Power Supply Unit 60W/24VDC @ 2.5 AMPS
(max dimensions 159W x 97H x 38D)

Cable Entries

Five M20 cable entries are included as standard.
Alternative quantity and size of metric or NPT threads
can be provided on request.

Outputs

Units are equipped with dual group relays and horn
relays as standard. Individual repeat relays and RS485
serial interface are available on request.

RTK Instruments Limited
St James Business Park,
Knaresborough, North Yorkshire,
England. HG5 8PJ

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Email: enquiry@rtkinstruments.com

RTK
INSTRUMENTS

EC DECLARATION OF CONFORMITY

This is to certify that the PEX7250 Explosion Proof Alarm Annunciator

Manufactured by:-

**RTK INSTRUMENTS LTD
ST JAMES BUSINESS PARK
KNARESBOROUGH
NORTH YORKSHIRE
HG5 8PJ**


Conforms to the protection requirements of the following directives:

- Council directive 89/336/EEC (EMC Directive) to BS EN 61000-6-4 and BS EN 61000-6-2
- Council Directive 94/9/EC (ATEX Directive) to BS EN 50014 and BS EN 50018

The equipment has been reviewed and maintains compliance with the Essential Health and Safety Requirements of the following harmonized standards:

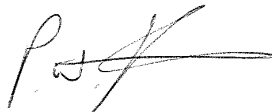
- EN60079-1:2004 and EN60079-0:2006

The product is certified to:

 II 2 GD Ex d IIB T85°C Tamb = 40°C and T100°C Tamb = 55°C
Certificate No: Baseefa06ATEX0089

The Quality System is certified and monitored by Baseefa (2001) Limited
Notified Body number 1180,

Rockhead Business Park, Staden Lane, Buxton, Derbyshire, SK17 9RZ



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PAUL HARTLEY - MANAGING DIRECTOR

Date: 10th March 2008