



(2) Equipment and protective systems intended for use in potentially explosive atmospheres

Directive 94/9/EC

# (1) EC-TYPE EXAMINATION CERTIFICATE

- (3) Number of the EC type examination certificate: INERIS 13ATEX0018X
- (4) Equipment or protective system:

#### LIMIT SWITCH BOX TYPE A250 PSX

(5) Manufacturer:

DORUK ENDUSTRI or trademark PROVAL

(6) Address:

Mermerciler San. Sit. 1 Cad. 32 Sok. No:10, Koseler Koyu TURKEY - 41480 Dilovasi Kocaeli

- (7) This equipment or protective system and any other acceptable alternative of this one are described in the annex of this certificate and the descriptive documents quoted in this annex.
- (8) INERIS, notified body and identified under number 0080, in accordance with article 9 of Council Directive 94/9/EC of the 23<sup>rd</sup> March 1994, certifies that this equipment or protective system fulfils the Essential of Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres, described in annex II of the Directive.

The examinations and the tests are consigned in report No 027199.

- (9) The respect of the Essential Health and Safety Requirements is ensured by:
  - conformity with:

EN 60079-0 : 2009 EN 60079-1 : 2007 EN 60079-31 : 2009

- specific solutions adopted by the manufacturer to meet the Essential Health and Safety Requirements described in the descriptive documents.

Only the entire document including annexes may be reprinted. IM1337AC

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- (10) Sign X, when it is placed following the Number of the EC type examination certificate, indicates that this equipment and protective system is subjected to the special conditions for safe use, mentioned in the annex of this certificate.
- (11) This EC type examination certificate relates only to the design, examination and tests of the specified equipment or protective system in accordance to the directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system, these are not covered by this certificate.
- (12) The marking of the equipment or the protective system will have to contain:



Verneuil-en-Halatte, 2013.10.01



The Chief Executive Officer of INERIS,

By delegation

T. HOUEIX

Ex Certification Officer

 $(13) \qquad \qquad A N N E X$ 

## (14) EC TYPE EXAMINATION CERTIFICATE N°INERIS 13ATEX0018X

# (15) DESCRIPTION OF THE EQUIPMENT OR THE PROTECTIVE SYSTEM

Limit switch box protected by flameproof enclosure "Ex d".

The equipment comprises an aluminum diecast body and cover fitted with plastic PC dome indicator.

A250 PSX limit switch box is used on rotary valve actuators to generate open/close signal and monitor the valve position.

# PARAMETERS RELATING TO THE SAFETY

Supply voltage pilot

250 VAC or 110 VAC / DC or 24 VDC or 8 VDC

#### MARKING

Marking has to be readable and indelible; it has to include the following indications:

DORUK ENDUSTRI or PROVAL
TURKEY - 41480 Dilovasi Kocaeli
A250 PSX(\*)
(Serial number)
(Year of construction)
INERIS 13ATEX0018X

Œx⟩<sub>II 2 GD</sub>

Ex d IIB T6 or T5 Gb

Ex tb IIIC T85°C or T100°C Db IP66 T.Amb: -20°C to +75°C or +80°C

WARNING: POTENTIAL ELECTROSTATIC CHARGING HAZARD - SEE INSTRUCTIONS

DO NOT OPEN WHEN AN EXPLOSIVE ATMOSPHERE IS PRESENT

DO NOT OPEN WHEN ENERGIZED

(\*) The dots are replaced by a codification according to the manufacturing variations. The different types are indicated in the descriptive documents.

Marking may be carried out in the language of the country of use.

The protective system or equipment has also to carry the marking normally stipulated by its construction standards.

#### **ROUTINE EXAMINATIONS AND TESTS**

In accordance with clause 16.1 of the EN60079-1 standard, each apparatus defined above has to have successfully passed the following individual tests before delivery an overpressure test of a period comprised between 10 and 60 seconds under 11,4 bar.

#### (16) DESCRIPTIVE DOCUMENTS

The descriptive document quoted hereafter constitutes the technical documentation of the equipment, subject of this certificate.

NER	Installation, Operation and Maintenance Manual	dated and signed on 2013.08.28
- 0	Drawing n°A250PSX.00.00	dated and signed on 2013.05.04
- 2	Drawing n° A250PSX.00.02	dated and signed on 2013.05.04
- 17	Drawing n° A250PSX.00.09	dated and signed on 2013.05.04
10 <b>-</b> 215	Drawing n°A250PSX.00.10	dated and signed on 2013.05.04
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# (17) SPECIAL CONDITIONS FOR SAFE USE

- For the risk of electrostatic discharge, the user will have to read the instructions.
- The yield stress of screws used for the assembly of the lid must be higher or equal to 450 MPa or of a A4-70 property class.
- The gap and diametrical clearance of flameproof joints are less than the values specified in the tables of the EN 60079-1 standard.
- The width of the different flameproof joints is superior to the values specified in tables of the EN 60079-1 standard.
- For an use at +75°C, cables and cable entries must be compatible with a temperature of 80°C.
- For an use at +80°C, cables and cable entries must be compatible with a temperature of 85°C.

### (18) ESSENTIAL SAFETY AND HEALTH REQUIREMENTS

The respect of the Essential Health and Safety Requirements is ensured by:

- Conformity to the standards quoted in clause (9).
- All provisions adopted by the manufacturer and defined in the descriptive documents.