

- (2) **Equipment intended for use in potentially explosive atmospheres
Annex VIII - Directive 94/9/EC**

(1) **TYPE EXAMINATION CERTIFICATE**

- (3) Number of the type examination certificate: **INERIS 10ATEX3012X**

- (4) Equipment:

PRESSURIZED CABINETS TYPE QPS 045/.. OR 060/.. OR 075/.. OR 090/..

- (5) Manufacturer: **QUASAR SERVICE S.r.l.**

- (6) Address: **Via Bergamo, 14
I - 24050 GRASSOBBIO (BG)**

- (7) This equipment 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 certifies that this equipment fulfils the Essential of Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres and submitted to the annex VIII of the Directive. The essential requirements are described in the annex VIII of the Directive 94/9/EC of the 23rd March 1994.

The examinations and the tests are consigned in confidential report No 023914/10.

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

- conformity with:


EN 60079-0 : 2006


EN 60079-2 : 2007

EN 60079-11 : 2007

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

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

 II 3 G

or  II 3 (1) G or II 3 (2) G

Verneuil-en-Halatte, 2010 08 02



Director of the Certifying Body,
By delegation
D. CHARPENTIER
Deputy Manager of Certification

(13)

ANNEX

(14)

TYPE EXAMINATION CERTIFICATE N° INERIS 10ATEX3012X

(15) DESCRIPTION OF THE EQUIPMENT

Electrical control cabinets protected by pressurization. Pressurization control unit contains a flameproof enclosure fitted with intrinsically safe elements when located in hazardous area, permitting pressurization by leakage compensation.

The cabinet contains a set of equipment specified by descriptive documents, in particular one or more certified electrical equipment.

PARAMETERS RELATING TO THE SAFETY


Maximum supply voltage	:	6000 V
Maximum power	:	5000 KW-KVA
Maximum current	:	500 A
Frequency	:	45 to 65 Hz

MARKING

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


QUASAR SERVICE S.r.l.
I - 24050 GRASSOBBIO (BG)
QPS 045/.. or 060/.. or 075/.. or 090/..
(Serial number)
(Year of construction)
INERIS 10ATEX3012X

Pressurized cabinet fitted with associated intrinsically safe apparatus:

 II 3 (1) G


Ex pz [ia] ia IIB T(*) or Ex pz [ia] ia IIC T(*)

or

 II 3 (2) G

Ex pz [ib] ia IIB T(*) or Ex pz [ib] ia IIC T(*)

Pressurized cabinet without associated apparatus:

 II 3 G

Ex pz ia IIB T(*) or Ex pz ia IIC T(*)

(*) T5 or T4 or T3

Tamb. (the indication of the range of ambient temperature when it is different from -20°C to +40°C)

[Ex p] (on the pressurisation control unit)

	QPS 045	QPS 060	QPS 075	QPS 090
Free internal volume	0,3 m ³	0,42 m ³	0,5 m ³	0,65 m ³
Minimum purging flow rate of protective gas	18 Nm ³ /h	20 Nm ³ /h	22,5 Nm ³ /h	23 Nm ³ /h
Minimum purging duration	7,5 mn	9 mn	10 mn	12 mn
Minimum overpressure	1 mbar	1 mbar	1 mbar	1 mbar
Maximum overpressure	5 mbar	5 mbar	5 mbar	5 mbar
Maximum leakage rate	3 Nm ³ /h	3 Nm ³ /h	3 Nm ³ /h	3 Nm ³ /h
Control point of overpressure	Valve			

WARNINGS :

DO NOT OPEN WHEN ENERGIZED

SEE INSTRUCTIONS BEFORE OPENING

PROTECTIVE GAS (if it is not air)

WARNING - THIS ENCLOSURE CONTAINS INERT GAS AND MAY BE AN ASPHYXIATION HAZARD
(if inert gas)

DO NOT OPEN IN EXPLOSIVE ATMOSPHERE (on the automation compartment including battery when installed in pressurised cabinet)

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

The apparatus has also to carry the marking normally stipulated by its construction standards.

ROUTINE EXAMINATIONS AND TESTS

Each exemplar of the equipment defined above, must have undergone successfully prior to delivery:

- According to §17.1 of the standard EN 60079-2, a verification of the performance of safety devices.
- According to §17.2 of the standard EN 60079-2, a leakage test as specified in 16.2.

(16) DESCRIPTIVE DOCUMENTS

The descriptive documents quoted hereafter constitute the technical documentation of the equipment, subject of this certificate.

- DTP-QPS2 rev 0 (10 rubrics) dated 2010.06.15

(17) SPECIAL CONDITIONS FOR SAFE USE

- This equipment is intended to be used in a ambient temperatures range from -40°C to $+60^{\circ}\text{C}$.
- User shall take all convenient precautions before using by-pass system eventually included in the pressurisation control unit.
- User shall connect, on intrinsic safety terminal strip, only elements with electrical characteristics lower or equal to the characteristics defined in any certificates of associated intrinsically safe apparatus.
- All electrical elements associated with this equipment and contributing to his convenient use and safety, when located in hazardous area, must be protected by one or more standardized types of protection, certified and suitable for considered using.
- When equipment is fitting with specific heating resistances : Heating resistances shall be energised only when equipment will be unsupplied.

(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.