



Product Service

(1) **EC – Type Examination Certificate**

(2) Equipment and Protective Systems Intended for use  
in Potentially Explosive Atmospheres – **Directive 94/9/EC**

(3) EC-Type Examination Certificate Number

**TPS 07 ATEX 61951 2 X**



(4) Equipment: **Control cabinet, type A31- P . . . . .**

(5) Manufacturer: **Exepd GmbH**

(6) Address: **Becksteinerstraße 100/23  
97922 Lauda-Königshofen  
Germany**

(7) This equipment and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.

(8) TÜV SÜD Product Service, notified body No. 0123 in accordance with Article 9 of the Council Directive 94/9/EC of March 23<sup>rd</sup> 1994, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres, given in Annex II of the Directive.

The examination and test results are recorded in the confidential report 71318911.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

**EN 60079-0:2004**

**EN 61241-0:2006**

**EN 60079-2:2004**

**EN 61241-4:2007**


**EN 60079-7:2003**

(10) If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the schedule to this certificate.

(11) This EC Type Examination Certificate relates only to the design and the construction of the specified equipment in accordance with Directive 94/9/EC. Further requirements of this Directive apply to the manufacture and supply of this equipment.

(12) The marking of the equipment shall include the following:

 II 2(1) G Ex px [ia/ib] IIB/IIC T3/T4/T5/T6 and/or

 II 2(1) G Ex epx [ia/ib] IIB/IIC T3/T4/T5/T6 or

 II 2 D Ex pD 21 T 80 °C

Office of certification of explosion protection

Klaus Gohlke



Filderstadt, 25.09.2007



(13)

## Schedule

(14) **EC-Type Examination Certificate TPS 07 ATEX 61951 2 X**

(15) Description of equipment:

The control cabinet, type A31- P • - • • • • •, is a non-portable installed, explosion protected electrical equipment for use in explosive areas by zone 1 or zone 21.

It is used for the installation of explosion proof components and/or non-explosion proof components. The control cabinet basically consists of internal fixing plates at the internal rear side for mounting components.

The control cabinet consists of the materials Polyester, coated steel plate or stainless steel. , It contains in category 2G a separate certified monitoring system. The monitoring system has the function of "Ex px" and "Ex pD" in category 2D respectively.

Code of types:

<b>A</b>	<b>3</b>	<b>1</b>	<b>-</b>	<b>P</b>	<b>•</b>	<b>-</b>	<b>•</b>	<b>•</b>	<b>•</b>	<b>•</b>	<b>•</b>
1	2	3		4	5		6	7	8	9	10

- 1: Kind of product: A= Ex product
- 2: Main-building class: 3 = Cabinet or box with type of protection "p"
- 3: max. category: 1 = 2G/2D
- 4: Main protection system: P = Ex p and pD
- 5: Main material: 1 = Polyester; 2 = reserved; 3 = V2A; 4 = V4A; 5 = Steel plate
- 6 to 8: Width of box or variant
- 9 and 10: Depth of box or variant

Technical Data:

- Rated voltage: max. 1500 V AC/DC \*)
- Protective gas: air or inert gas (max temperature; +40 °C)
- IP- protection level: min. IP55
- Ambient temperature: -40 °C ≤ T<sub>a</sub> ≤ +60 °C at temperature class T3, T4 and T5  
-40 °C ≤ T<sub>a</sub> ≤ +40 °C at temperature class T6

\*) depends on rated values of the components

(16) Test report: 71318911

Type Examination Certificate without signature and official stamp shall not be valid.

The certificates may be circulated only without alteration.

Extracts or alterations are subject to approval by TÜV SÜD Product Service GmbH.

In case of dispute, the German text shall prevail.

The document is internally administrated under the following number: EX5 07 09 61951 003



(17) Special conditions for safe use:

1. The pressurized system shall only be operating with the setting values which are given in a acceptance protocol and on the label.
2. The assembling of components and viewing glasses in the door or wall system should only occur by the manufacturer. The verification of mechanical strength according to EN 60079-0, clause 26.4 is additional require.
3. A pneumatical cooling system should only be used within control cabinets with temperature class T4 and T3.
4. By using a cooling system and temperature monitoring, the temperature monitoring must not be enable.
5. The power loss of components has to be dimensioned according following table:

Volume of control cabinet	power loss overall components (without temperature monitoring)	power loss of one component
≤ 50 litre	is to be verify in single case	is to be verify in single case
> 50 litre and ≤ 100 litre	max. 100 Watt	max. 50 Watt
> 100 litre and ≤ 250 litre	max. 250 Watt	max. 120 Watt
> 250 litre and ≤ 500 litre	max. 500 Watt	max. 160 Watt
> 500 litre and ≤ 750 litre	max. 750 Watt	max. 250 Watt
> 750 litre and ≤ 1000 litre	max. 1000 Watt	max. 300 Watt
> 1000 litre	is to be verify in single case	is to be verify in single case

In other cases of power loss or power losses more than 1000 Watt a separate temperature monitoring on the surface of the control cabinet is necessary.

6. By using a temperature monitoring device, the temperature monitoring should only manual reset and have to fulfil following cut-off values:

Temperature class	cut-off value
T3	180 °C
T4	115 °C
T5	80 °C
T6	65 °C

7. The control cabinet should only be used with a separate certified monitoring system.

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Notices for manufacturing and operation:

1. The effectively electrical values will be dimensioned by the installed parts.
2. The respective temperature class will be appoint from the manufacturer after routine testing under observance of the signed rated values, the parts and the ambient conditions according to EN 60079-0 and EN 61241-0 respectively.
3. The final designation of the equipment follows from the used type of protection, data of the parts, ambient conditions and the ascertained temperature class.
4. Inner equipments for intrinsically safe circuits have to be taken place, that necessary distances, creepages and clearances between intrinsically safe and intrinsically safe circuits are strictly adhered.
5. It is not allowed to install retrospectively additional equipments into a control cabinet.
6. The purging volume follows from ten-enclosure-volume.
7. The total volume of all internal components is limited to 10% enclosure-volume.
8. In case of purging flow rate less than 10% enclosure-volume or a total volume of all internal components more than 10% enclosure-volume, it is necessary to verify the sufficient efficiency of purging. The verification occurs of test according to EN 60079-2, clause 16.3.

(18) Essential health and safety requirements:

Fulfilled by conformance of afore mentioned standards.

Office of certification of explosion protection

Filderstadt, 25.09.2007

Klaus Gohlke

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