

[1] **EU-Declaration of Conformity**

According EU Directive 2014/34/EU, Annex IX, module G: Conformity based on unit verification



[2] Equipment and Protective Systems intended for use in Potentially Explosive Atmospheres – **Directive 2014/34/EU**

[3] **EU-Declaration of Conformity:**

PTZ 16 ATEX 0014 X

Rev. 0

[4] **Manufacturer: Rubarth Apparate GmbH**

[5] **Adress:** Mergenthalerstr. 8
D-30880 Laatzen
Germany

[6] **Device:** Ex-Refrigeration and heat cabinet with test chamber

[7] This Equipment and any acceptable variation thereto are specified in the annex to this certificate and the documents referred to.

[8] Primara Test- und Zertifizier GmbH, Notified Body No. 2572 in accordance with the Council Directive, dated 26th February 2014 (2014/34/EG), certifies the manufacturer the conformity of the product with the Essential Health and Safety Requirements related to the design and construction of equipment and protective systems intended for use in potentially explosive atmosphere given in Annex IX to the directive. The examination and test results are recorded in the confidential report 16PP308-01

[9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with to following standards:

EN 60079-0:2012
EN 60079-11:2012

EN 60079-1:2014
EN 13463-1:2008

EN 60079-7:2014
EN 13463-5:2011

[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 annex to this certificate.

[11] This EU-Type-Examination Certificate relates only to the design, examination and tests of specified equipment with the serial numbers SN-1604/05.1, SN-1604/05.2, SN-1609/09.1, SN-1609/09.2, SN-1609/11, SN-1610/08.1, SN-1610/08.2, SN-1611/16, SN-1612/07, SN-1701/10, SN-1701/11, SN-1702/07 in accordance to the Directive 2014/34/EU. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by the certificate.

[12] According to Annex IX, number 4. of directive 2014/34/EU the CE marking shall be followed by the identification number 2572 of Primara Test- und Zertifizier-GmbH as the notified body.

[13] The marking of the equipment shall include the following:



II 2/ - G c Ex d e [ib] ib IIC T3 (Marking A)
II 2 G c Ex d e [ib] ib IIB T3 (Marking B)

Kaufbeuren, 2017-06-29

Andreas Aufmuth
Zertifizierstelle

Horst Haug
Fachbereich

EU-Declaration of Conformity Certificates without signature and stamp shall not be valid.
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This document is internally administrated under no: 16PP308.

[14] Annex

[15] EU-Declaration of Conformity PTZ 16 ATEX 0014 X

[16] Description of the equipment:

The Ex-Refrigeration and heat cabinet is for short time temper, the storage of or the test with materials, which produce some time an occasionally explosion capable atmosphere. The storage of the materials takes place in the test chamber. The installation of the chambers of the types 2001/2101/2101XL take places outside the explosion hazard area, cabinets of the type 2401/2501XL can be installed in zone 1.

In the test chamber is a heater and temperature sensors. The heater is made in the ignition protection type "increased safety e", the power supply of the temperature sensors is intrinsic safe. Fan and the drive motor are in the test chamber, both are Ex certified. For the temperature extension to +80°C, the drive for the test chamber ventilation is attached outside the chamber, but it is also ex certified, for this an additional heater is inside the chamber.

The test chamber of the types 2001/2101/2101XL is completely sealed to avoid an abduction of the explosion capable atmosphere. The switch cabinet of the types 2401/2501XL is installed in a flameproof enclosure. By opening the door of the test chamber, a safety switch off is done by a contactless safety switch, all circuits for ventilation, heating and cooling are disconnected. A permanent switch off is done by exceeding the Device limit temperature.

The Control unit and the cold machine are in a separate volume on the top of the Ex-Refrigeration and Cooling cabinet and are at the types 2001/2101/2101XL not explosion protected accomplished. The implementation of the types 2401/2501XL is explosion proof. During the switch off through opening the door, the Control Unit is still working. The explosion protection is achieved at the types 2001/2101/2101XL through separation from the operation display from the control unit, at the types 2401/2501XL through Ex-implementation.

The maximum permissible ambient Temperature of the Ex-Refrigeration and heating cabinet is +30°C. Minimal and maximal Test chamber temperatures are 0°C to +35°C (normal model) or up to +80°C (temperature extension) and -20°C (under temperature extension).

The Versions A can be equipped with an ultrasonic humidification and dehumidification system.

[17] Technical data:

cabinet	type	serial number	voltage	current	power	marking
1	2101	SN-1604/05.1	230V 50Hz	3,2A	0,8kW	(A)
2	2101	SN-1604/05.2	230V 50Hz	3,2A	0,8kW	(A)
3	2501	SN-1609/09.1	400/230V 50Hz	3,3/3,3/13A	4,5kW	(B)
4	2501	SN-1609/09.2	400/230V 50Hz	3,3/3,3/13A	4,5kW	(B)
5	2201	SN-1609/11	230V 50Hz	4,5A	1,1kW	(A)
6	2101	SN-1610/08.1	400/230V 50Hz	1,2/3,7/4,5A	2,2kW	(A)
7	2101	SN-1610/08.2	400/230V 50Hz	1,2/3,7/4,5A	2,2kW	(A)
8	2001	SN-1611/16	230V 50Hz	4,0A	1,0kW	(A)
9	2201	SN-1612/07	400/230V 50Hz	2,5/5,5/9,8A	4,1kW	(A)
10	2101	SN-1701/10	400/230V 50Hz	1,2/5,3/4,1A	2,5kW	(A)
11	2101XL	SN-1701/11	400/230V 50Hz	1,4/5,5/4,5A	2,7kW	(A)
12	T500	SN-1702/07	400/230V 50Hz	1,1/3,1/6,2A	2,4kW	(A)

[18] Test report no.:
16PP308_01

[19] Special conditions:
For all devices:

1. It is to ensure that caused on the stored materials in the test room only an explosion hazard area of the Zone 1 under normal atmospherically conditions is expected. (Air pressure between 88 and 110kPa, oxygen level about 21%)
2. The factory settings at the motor protection switch for the fan must not be changed.

For devices of the type 2001, 2101, 2201, 2101XL and T500 applies additionally:

3. It has to be ensured by the installation of the device, that through a sufficient room volume and a possibly ventilation, a leakage of explosion capable gases of the test chamber, an formation of an explosive atmosphere is avoided.
4. It has to be ensured, that after opening the door an ignition of the possibly explosive gas atmosphere is avoided.
5. The devices may only be operated with a faultless door sealing. The operation of the device with a malfunction is prohibited.
6. It has to be ensured, that the bottom drain is not an open connection to the test room. A ventilation to the outside or an ignition free exhaust system is allowed.

[20] Essential Health and Safety Requirements:
Covered by the standards.