



1. EC-TYPE EXAMINATION CERTIFICATE

2. Equipment or Protective System Intended for use in Potentially explosive atmospheres

Directive 94/9/EC

3. Reference: VT

VTT 11 ATEX 083X Issue 1

4. Equipment:

Temperature limiter

Certified types:

BT-TL600

5. Manufactured by:

Planray Oy

6. Address:

Syväojankatu 3

FI-87700 KAJAANI

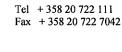
Finland

- 7. This equipment or protective system and any acceptable variations thereto are specified in the schedule and possible supplement(s) to this Certificate and the documents therein referred to.
- 8. VTT Expert Services Ltd, notified body number 0537, in accordance with Article 9 of the Council Directive 94/9/EC of March 1994, certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective system intended for use in potentially explosive atmospheres given in Annex II to the Directive

The examination and test results are recorded in confidential reports no. VTT-R-00754-06 and VTT-S-08623-11.

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

EN 60079-0 (2009) EN ISO 13849-1 (2006) EN ISO 13849-2 (2003) EN 60079- 30-1 (2007) EN 50495 (2010)









- 10. If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.
- 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 protective system shall include the following:



II (2) GD [Ex e]

Espoo, 1.7.2013

VTT Expert Services Ltd

Kari Koskela

Expert

Risto Sulonen

Product Manager



13. Schedule

14. EC-TYPE EXAMINATION CERTIFICATE VTT 11 ATEX 083X Issue 1

15. Description of Equipment

Temperature limiter, type BT- TL600, consist one temperature measuring relay with possibility to connect to temperature sensors (Pt-100). The temperature sensors are not included in this certificate. The measuring relay shall be connected to control main contactor of the supply or another ATEX certified control equipment (e.g. frequency converter's ATEX-certified safety device). Temperature limiting circuit which includes temperature limiter shall be used parallel with another temperature controlling circuit.

Documents:

Circuit diagram; K4070300 rev. 3.00, 4 pages Part list; BILL OF MATERIALS K4070300 rev. 3.00, 2 pages Lay-out and construction of PCB; P4070300, 12 pages (dated 3.3.2011)

- 16. Report No. VTT-R-00754-06 and VTT-S-08623-11
- 17. Special conditions for safe use
 - 1. The installation of used temperature sensors shall fulfil the requirements of EN 60079-14 for the relevant type of protection and hazardous area classification.
 - 2. The main contactors and auxiliary relays which temperature limiter controls shall be over-dimensioned (2 x I_n).
- 18. Essential Health and Safety Requirements

Assessment using standards referred in point 9 have confirmed compliance with the Directive 94/9/EC, Annex II and in particular point 1.5. The device themselves are to be installed outside potentially explosive atmospheres (article 1, section 2 of the Directive).



Certificate history

Issue	Date	Report No.	Comment
-	22.12.2011	VTT-R-00754-06 and VTT-S-8623-11	Prime certificate
2	10.6.2013	-	Reference to the standards EN 60079-0 and EN 60079-30-1 instead of EN 60079-14 and the marking corrected to fulfil EN 50495. Special conditions of use no 1 is generalized.

Espoo, 1.7.2013

VTT Expert Services Ltd

Kari Koskela

Expert

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Product Manager