



1. **EC-TYPE EXAMINATION CERTIFICATE**
2. **Equipment or Protective System Intended for use in
Potentially explosive atmospheres
Directive 94/9/EC**
3. Reference: **VTT 15 ATEX 050 Issue 1**
4. Equipment: **Thermal motor protection system for converter
drive ACS880 series**

Certified types: **ACS880 +L537 +Q971 (FPTC-02)
ACS880 +L537 +Q971 +Q973 (FPTC-02 & FSO-12)
ACS880 +L537 +Q971 +Q972 (FPTC-02 & FSO-21)
ACS880 +L537 +Q971 +Q972 +L521 (FPTC-02 &
FSO-21 & FSE-31)**
5. Applicant: **ABB Oy Drives
Hiomotie 13
FIN-00381 Helsinki
Finland**
6. Manufacturers: **ABB Oy Drives
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FIN-00381 Helsinki
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Malaysia**



**ABB Oy Drives
Drives Service
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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
9. Compliance with the Essential Health and Safety Requirements has been assured by compliance with:
- 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.
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 protective system shall include the following:



II (2) GD

Espoo, 4.3.2016
VTT Expert Services Ltd



Martti Siirola
Senior Expert



Risto Sulonen
Product Manager

13.

Schedule

14.

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15.

Description

Thermal protection is based on temperature monitoring FPTC- 02module. Safe disconnection is achieved by using "Safe Torque Off "(STO)-function which is integrated in the standard drive as an internal hardware-solution. Power that can cause rotation is not applied to the motor. The safety related part of the adjustable speed electrical power drive system PDS (SR) will not provide energy to the motor which can generate torque. FPTC-02 together with the STO-function comprise the "Safe Motor Temperature" (SMT)-function. Safety functions module FSO-12, FSO-21 and FSE-31 can be included in the thermal protection function.

16.

Documents

FPTC-01/-02, CPTC-02 SMT HW description, 3AXD10000387390, rev B
FPTC-01/-02, CPTC-02 Integrated PTC temperature protection module
CONCEPT, 3AXD10000381242, rev B
FPTC and 2xFPTC module for temperature monitoring ACS880 ATEX schedule
drawings, 3AXD10000472110, rev A (4 pages)
FPTC-01/02 Safety data calculation for ACS880, 3AXD10000454332, rev B
Certificate No.SLA-0055/10, V. 1.1 by TÜV Nord
Certificate No.SEBS-A.161334/16 V 1.0 by TÜV Nord
Certificate No.SEBS-A.102621/15 V1.0 by TÜV Nord
Certificate No.SEBS-A.095525/15 V1.0 by TÜV Nord

17.

Special conditions for safe use None

18.

Essential Health and Safety Requirements

Assessment using standard referred in point 9 have confirmed compliance with the Directive 94/9/EC, Annex II and particular point 1.5.

Certificate history

| Issue | Date | Comment |
|-------|-----------|---|
| - | 8.12.2015 | Prime certificate |
| 1 | 4.3.2016 | The introduction of new manufacturing places and a new safety functions module FSO-21 |

Espoo, 4.3.2016

VTT Expert Services Ltd



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Senior Expert



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