



1. **EU-TYPE EXAMINATION CERTIFICATE**
2. **Equipment or Protective System Intended for use in
potentially explosive atmospheres
Directive 2014/34/EU**
3. Reference: **VTT 15 ATEX 051 Issue 2**
4. Equipment: **Thermal motor protection system for converter
drive ACS580, ACH580 and ACQ580 series**

Certified types: **ACS580 +L537 +Q971 (CPTC-02)
ACH580 +L537 +Q971 (CPTC-02)
ACQ580 +L537 +Q971 (CPTC-02)**
5. Applicant: **ABB Oy Drives
Hiomotie 13
FIN-00381 Helsinki
Finland**
6. Manufacturers: **ABB Oy Drives
Hiomotie 13
FIN-00381 Helsinki
Finland**

**ABB AS/LV Drives
Aruküla tee 59
Rae vald
75301 Harjumaa
Estonia**

**ABB Oy Drives
Drives Service
Kiitoradantie 14
FI-01530 Vantaa
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 21 of the Directive 2014/34/EU of February 2014, 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 EU-Type examination certificate relates only to the design, examination and tests of the specified equipment or protective system 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 this certificate.
12. The marking of the equipment or protective system shall include the following:



II (2) GD

Espoo, 30.6.2017
VTT Expert Services Ltd



Kari Koskela
Expert



Risto Sulonen
Product Manager

13.

Schedule

14.

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15.

Description

Thermal protection is based on temperature monitoring CPTC-02 module. 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. CPTC-02 together with the STO-function comprises the "Safe Motor Temperature" (SMT)-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
 ACx580 ATEX schedule drawings with CPTC temperature monitoring, 3AXD10000510416 rev B (4 pages)
 CPTC-02 Safety data calculation for ACS580/ACH580/ACQ580, 3AXD10000473876, rev B
 Certificate No. SEBS-A.082710/15 V.1.0 by TÜV Nord
 Certificate No. SEBS-A.1012331/16 V1.0 by TÜV Nord
 Certificate No. SEBS-A.1012332/16 V1.0 by TÜV Nord
 Certificate No. SEBS-A.1012333/16 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 2014/34/EU, Annex II and particular point 1.5.

Certificate history

Issue	Date	Comment
-	8.6.2016	Prime certificate
1	8.7.2016	The introduction of new converter series type ACQ580
2	30.6.2017	Updating of schedule drawings and other documents

Espoo, 30.6.2017

VTT Expert Services Ltd



Kari Koskela
Expert



Risto Sulonen
Product Manager