



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 050 Issue 3**
4. Equipment: **Thermal motor protection system for converter
drive ACS880/ACS880LC series**

Certified types: **ACS880/ACS880LC +L537 +Q971 (FPTC-02)
ACS880/ACS880LC +L537 +Q971 +Q973 (FPTC-02
& FSO-12)
ACS880/ACS880LC +L537 +Q971 +Q972 (FPTC-02
& FSO-21)
ACS880/ACS880LC +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
Hiomotie 13
FIN-00381 Helsinki
Finland**

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

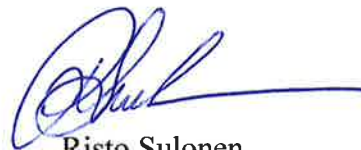


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Espoo, 26.4.2018
VTT Expert Services Ltd



Jenni Hirvelä
Expert



Risto Sulonen
Senior Expert

13.

Schedule

14.

EU-TYPE EXAMINATION CERTIFICATE VTT 15 ATEX 050 Issue 3

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 C
 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, EPLAN doc. 3AXD10000472110, rev B (4 pages)
 FPTC-01/02 Safety data calculation for ACS880, 3AXD10000454332, rev C
 Certificate No. SEBS-A.093457/16 V1.0 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 2014/34/EU, 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
2	30.6.2017	The introduction of a new converter type and deleting one manufacturing place. Updating the certificate according to the new directive.
3	24.4.2018	Minor changes in circuit diagrams and deleting one of the manufacturing sites

Espoo, 26.4.2018
VTT Expert Services Ltd



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 Expert



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 Senior Expert