

## EU-TYPE EXAMINATION CERTIFICATE

Equipment or Protective System Intended for use in Potentially explosive atmospheres  
Directive 2014/34/EU

EU-Type Examination Certificate Number: **EESF 20 ATEX 050 Issue 1**

Product: **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)**

Manufacturer: **ABB Oy Drives**

Address: **Hiomotie 13, 00380 Helsinki, Finland**

Additional manufacturing locations:

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

This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

Eurofins Electric & Electronics Finland Oy, Notified Body number 0537, in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential report No. EUFI29-23003290-T1.

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

**EN 50495:2010**

If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Specific Conditions of Use specified in the schedule to this certificate.

This EU-Type Examination Certificate relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.

The marking of the product shall include the following:



**II (2) GD**

Espoo, 20.12.2023

**Eurofins Electric & Electronics Finland Oy**

Kari Koskela  
Senior Expert

Jenni Hirvelä  
Senior Expert

This document is digitally signed.

13. **Schedule**

14. **EU-Type Examination Certificate EESF 20 ATEX 050 Issue 1**

15. **Description of Product**

Thermal protection is based on temperature monitoring FPTC- 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. 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. **Report Number**

EUFI29-23003290-T1

17. **Specific Conditions of 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.

19. **Drawings and Documents**

FPTC-01/-02, CPTC-02 SMT HW description, 3AXD10000387390, rev D  
FPTC-01/-02, CPTC-02 Integrated PTC temperature protection module concept, 3AXD10000381242, rev D  
FPTC and 2xFPTC module for temperature monitoring ACS880 ATEX schedule drawings, 3AXD10000472110, rev C  
FPTC-01/02 Safety data calculation for ACS880, 3AXD10000454332, rev J  
Certificate No. SEBS-A.093457/16 V2.0 by TÜV Nord  
Certificate No. 1435.IM.153902/19 V1.0 by TÜV Nord  
Certificate No. SEBS-A.095525/15 V2.0 by TÜV Nord

20. **Certificate History**

Issue	Date	Change
VTT 15 ATEX 050	8.12.2015	Prime certificate
VTT 15 ATEX 050 Issue 1	4.3.2016	The introduction of new manufacturing places and a new safety functions module FSO-21
VTT 15 ATEX 050 Issue 2	30.6.2017	The introduction of a new converter type and deleting one manufacturing place. Updating the certificate according to the new directive.
VTT 15 ATEX 050 Issue 3	26.4.2018	Minor changes in circuit diagrams and deleting one of the manufacturing sites.
EESF 20 ATEX 050	30.10.2020	Updates to documents, improvements to FPTC-module thermistor input, FSO-12 and FSO-21 TÜV Nord certificates have been combined into one certificate. FPTC-02 TÜV Nord certificate has been renewed.
EESF 20 ATEX 050 Issue 1	20.12.2023	Update to the safety data calculation. STO certificate by TÜV Nord has been renewed.