IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.:	**IECEx BVS 17.0074**	Page 1 of 3	Certificate history:
Status:	**Current**	Issue No: 0	
Date of Issue:	2019-12-09		
Applicant:	**ABB STOTZ-KONTAKT GmbH** Eppelheimer Straße 82 69123 Heidelberg **Germany**		
Equipment:	**Thermal overload relay type TF140DU-***		
Optional accessory:			
Type of Protection:	**Flameproof enclosures "d", Protection by enclosure "t", Increased safety "e"**		
Marking:	[Ex]		

Approved for issue on behalf of the IECEx Certification Body:	**Jörg Koch**
Position:	**Head of Certificaton Body**
Signature: (for printed version)	
Date: (for printed version)	

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting www.iecex.com or use of this QR Code.

Certificate issued by:

DEKRA Testing and Certification GmbH
Certification Body
Dinnendahlstrasse 9
44809 Bochum
Germany

DEKRA
On the safe side.

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Date of issue: 2019-12-09

Issue No: 0

Manufacturer: **ABB STOTZ-KONTAKT GmbH**
Eppelheimer Straße 82
69123 Heidelberg
Germany

Manufacturing locations: **Bulgaria EOOD**
1, Varna Street
Petrich 2850
Bulgaria

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements.This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended

STANDARDS :
The equipment and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards

IEC 60079-0:2017 Edition:7.0 — Explosive atmospheres - Part 0: Equipment - General requirements

IEC 60079-1:2014 Edition:7.0 — Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"

IEC 60079-31:2013 Edition:2 — Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"

IEC 60079-7:2017 Edition:5.1 — Explosive atmospheres - Part 7: Equipment protection by increased safety "e"

This Certificate **does not** indicate compliance with safety and performance requirements other than those expressly included in the Standards listed above.

TEST & ASSESSMENT REPORTS:
A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in:

Test Report:

DE/BVS/ExTR19.0078/00

Quality Assessment Report:

DE/BVS/QAR14.0004/11

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EQUIPMENT:
Equipment and systems covered by this Certificate are as follows:

General product information:

The thermal overload relays were tested according to IEC 60947-4-1:2009/A1:2012 and IEC 60947-5-1:2003/A1:2009.

A thermal overload relay (bi-metallic overload relay) has been installed, which has a delaying effect and a phase failure protection, so that the switches of the safety device (protective device for indirect temperature control) can be used to protect motors in order to avoid non-permitted temperatures.

In general they can be used if the electrical engine is protected by indirect temperature monitoring. This should be stated in the Test Report. The thermal overload relay will be erected outside of the hazardous area.

The thermal overload relays are safety devices. They contribute to or are required for the safe functioning of equipment with respect to the hazards of ignition or with respect to the hazard of uncontrolled explosion. The overload relays can be used as overload protective devices for electric motors of type of protection
Ex e 'Increased Safety' or Ex d 'Flameproof Enclosure' e.g.

The type series TF140DU-* consists of 4 modules which differ in their current setting ranges, reaching from 90 A to 142 A. The individual types of each module are of identical electrical construction. In the full labelling, the asterisk (*) will be replaced by the maximum rated operating current which can be set and which stands for the following values:

Table see Annex

Electrical parameters

See Annex

Other parameters

See Annex

SPECIFIC CONDITIONS OF USE: NO

Annex:

BVS_17_0074_ABB STOTZ-KONTAKT_Annex.pdf

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Annex

Type	Order number	Current setting range [A]
TF140DU-90-V1000	1SAZ431301R1001	66 – 90
TF140DU-110-V1000	1SAZ431301R1002	80 – 110
TF140DU-135-V1000	1SAZ431301R1003	100 – 135
TF140DU-142-V1000	1SAZ431301R1004	110 – 142

Electrical parameters

Number of poles: 3

Number of aux. contacts break contact: 1

Number of aux. contacts make contact: 1

Rated insulating voltage (U_i): 690 V

Rated operational voltage (U_e): main circuit 690 V AC
aux. circuit 500 V AC / 440 V DC

Rated operational currents (I_e): depends on type of series TF140DU-*

For each module of the respective current setting range there is an own curve in place that shows the release time in relation to x-time the nominal current (two-poles or three-poles) in compliance with the requirements of explosion protection.

Current type: AC, DC

Rated impulse withstand voltage (U_{imp}): main circuit 8 kV
aux. circuit 6 kV

Trip class: 10
The trip class of all modules is identical.

Other parameters

Contamination class: 3

Degrees of protection: IP20

Terminals: screw-type terminals

Ambient temperature range: -25 °C…+55 °C
The ambient temperature range of all modules and variants is identical. Contrary to IEC60947-4-1 the ambient temperature range has been extended.