



Marine &amp; Offshore

Certificate number: 31673/B0 BV

File number: ACE2/17/17

Product code: 2652H

*This certificate is not valid when presented without the full attached schedule composed of 7 sections*

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## TYPE APPROVAL CERTIFICATE

*This certificate is issued to*

**ABB STOTZ-KONTAKT GmbH**

Heidelberg - GERMANY

*for the type of product*

**OVER-LOAD RELAYS OR RELEASES**

Type: T16, TF42, TA40, TF65 and TF96

**Requirements:**

Bureau Veritas Rules for the Classification of Steel Ships

EC Code: 31

IEC 60947-4-1:2009+A1:2012, IEC 60947-5-1:2003+A1:2009

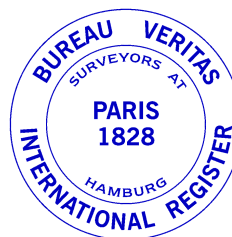
*This certificate is issued to attest that Bureau Veritas Marine & Offshore did undertake the relevant approval procedures for the product identified above which was found to comply with the relevant requirements mentioned above.*

**This certificate will expire on: 30 Nov 2023**

**For Bureau Veritas Marine & Offshore,**

At BV HAMBURG, on 30 Nov 2018,

Dirk Hoepfner



This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with Bureau Veritas Marine & Offshore. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. This certificate is issued within the scope of the General Conditions of Bureau Veritas Marine & Offshore available on the internet site www.veristar.com. Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against Bureau Veritas Marine & Offshore for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.

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BV Mod. Ad.E 530 June 2017

This certificate consists of 3 page(s)

## THE SCHEDULE OF APPROVAL

### **1. PRODUCT DESCRIPTION:**

The **T16**, **TF42**, **TA40**, **TF65** and **TF96** series are thermal overload relays.

#### **1.1 - Main characteristics:**

Rated operational voltage  $U_e$ : 690V AC, 50/60Hz

Trip class: 10

Mounting on contactor: For T16: B6, B7, VB6, VB7 and AS

For TF42: AF

For TA40: A

For TF65: AF

For TF96: AF

Mounting on 35mm DIN rail: With single mounting kit

Degree of protection: IP20

#### **1.2 - Variants:**

##### **T16**

Type	Order code	Setting range
T16-0.13	1SAZ711201R1005	0.10 - 0.13A
T16-0.17	1SAZ711201R1008	0.13 - 0.17A
T16-0.23	1SAZ711201R1009	0.17 - 0.23A
T16-0.31	1SAZ711201R1013	0.23 - 0.31A
T16-0.41	1SAZ711201R1014	0.31 - 0.41A
T16-0.55	1SAZ711201R1017	0.41 - 0.55A
T16-0.74	1SAZ711201R1021	0.55 - 0.74A
T16-1.0	1SAZ711201R1023	0.74 - 1.00A
T16-1.3	1SAZ711201R1025	1.00 - 1.30A
T16-1.7	1SAZ711201R1028	1.30 - 1.70A
T16-2.3	1SAZ711201R1031	1.70 - 2.30A
T16-3.1	1SAZ711201R1033	2.30 - 3.10A
T16-4.2	1SAZ711201R1035	3.10 - 4.20A
T16-5.7	1SAZ711201R1038	4.20 - 5.70A
T16-7.6	1SAZ711201R1040	5.70 - 7.60A
T16-10	1SAZ711201R1043	7.60 - 10.0A
T16-13	1SAZ711201R1045	10.0 - 13.0A
T16-16	1SAZ711201R1047	13.0 - 16.0A

##### **TF42 / TA40**

Type	Order code	Setting range
TF42-0.13	1SAZ721201R1005	0.1 - 0.13A
TF42-0.17	1SAZ721201R1008	0.13 - 0.17A
TF42-0.23	1SAZ721201R1009	0.17 - 0.23A
TF42-0.31	1SAZ721201R1013	0.23...0.31A
TF42-0.41	1SAZ721201R1014	0.31...0.41A
TF42-0.55	1SAZ721201R1017	0.41...0.55A
TF42-0.74	1SAZ721201R1021	0.55...0.74A
TF42-1.0	1SAZ721201R1023	0.74...1A
TF42-1.3	1SAZ721201R1025	1...1.3A
TF42-1.7	1SAZ721201R1028	1.3...1.7A
TF42-2.3	1SAZ721201R1031	1.7...2.3A
TF42-3.1	1SAZ721201R1033	2.3...3.1A
TF42-4.2	1SAZ721201R1035	3.1...4.2A
TF42-5.7	1SAZ721201R1038	4.2...5.7A
TF42-7.6	1SAZ721201R1040	5.7...7.6A
TF42-10	1SAZ721201R1043	7.6...10A
TF42-13	1SAZ721201R1045	10...13A
TF42-16	1SAZ721201R1047	13...16A
TF42-20	1SAZ721201R1049	16...20A
TF42-24	1SAZ721201R1051	20...24A
TF42-29	1SAZ721201R1052	24...29A
TF42-35	1SAZ721201R1053	29...35A
TF42-38	1SAZ721201R1055	35...38.0/40.0A

##### **TF65**

Type	Order code	Setting range
TF65-28	1SAZ811201R1001	22 - 28A
TF65-33	1SAZ811201R1002	25 - 33A
TF65-40	1SAZ811201R1003	30 - 40A
TF65-47	1SAZ811201R1004	36 - 47A
TF65-53	1SAZ811201R1005	44 - 53A
TF65-60	1SAZ811201R1006	50 - 60A
TF65-67	1SAZ811201R1007	57 - 67A

##### **TF96**

Type	Order code	Setting range
TF96-51	1SAZ911201R1001	40 - 51A
TF96-60	1SAZ911201R1002	48 - 60A
TF96-68	1SAZ911201R1003	57 - 68A
TF96-78	1SAZ911201R1004	65 - 78A
TF96-87	1SAZ911201R1005	75 - 87A
TF96-96	1SAZ911201R1006	84 - 96A

**2. DOCUMENTS AND DRAWINGS:**

- 1SAD938501-0187 dated June 30,2014; 1SAZ800401 Rev. zz dated 30.08.2012; 1SAZ801301 Rev. D1 dated 14.10.13;
- 1SAZ801303 Rev. A dated 07.03.2013; 1SAZ900401 Rev. A dated 30.08.2012; 1SAZ901301 Rev. C1 dated 14.10.13;
- 1SAZ901303 Rev. A dated 07.03.2013; 1SBC100173C0201;
- 2CDC106019M6801 dated 10.2010; 2CDC106020D0202 dated 2010; 2CDC106021M6801 dated 10.2010;
- 2CDC106022M6801 dated 06.2010; 2CDC106023D0201 dated 2010; 2CDC106051M6801a dated 02.2013;
- 2CDC106052M6801a dated 02.2013; 2CDC106069D0201 dated 04.2013
- China Quality Certification Centre: CN30523 dated 2014-05-22; CN30524 dated 2014-05-22
- Shanghai Testing &Inspection Institute for Electrical Equipment (STIEE):  
00901-CB2014CQC-057827 dated 2014-04-18; 00901-CB2014CQC-057828 dated 2014-04-18
- SGS Belgium NV-Division SGS CEBEC: Test Certificates: BE-2537 dated 2010-09-07; BE-2538 dated 2010-09-07  
58293101/00 to 58293101/37 dated 06/07/2010; 58293102/00 to 58293102/47 dated 06/07/2010

**3. TEST REPORTS:**

- ABB Stotz-Kontakt GmbH: D2014003 dated 18.03.2014
- Paconsult GmbH: 14-5678 dated 17 March 2014; 09-2475A dated 03 July 2009

**4. APPLICATION / LIMITATION:**

- 4.1 - Bureau Veritas Rules for the Classification of Steel Ships and IEC 60947 series.
- 4.2 - Bureau Veritas Environmental Category, **EC Code: 31.**

**5. PRODUCTION SURVEY REQUIREMENTS:**

- 5.1 - The above mentioned products are to be supplied by **ABB STOTZ-KONTAKT GmbH** in compliance with the type described in this certificate.
- 5.2 - This type of product is within the category HBV of Bureau Veritas Rule Note NR320 and as such does not require a BV product certificate.
- 5.3 - **ABB STOTZ-KONTAKT GmbH** has to make the necessary arrangements to have its works recognised by Bureau Veritas in compliance with the requirements of NR320 for HBV products:

For T16, TF42, TA40 series:

**ABB STOTZ-KONTAKT GmbH**  
**Eppelheimer Str. 82**  
**69123 Heidelberg**  
**GERMANY**

For TF65, TF96 series:

**ABB Xinhui Low Voltage Switchgear Co., Ltd.**  
**Jingguzhou Industrial Development Zone, Xinhui District**  
**529100 Jiangmen City, Guangdong**  
**CHINA**

- 5.4 - Equipment is to be supplied with manual(s) for installation, use and maintenance.

**6. MARKING OF PRODUCT:**

- According to IEC 60947 specifications, as relevant.

**7. OTHERS:**

- 7.1 - It is the responsibility of **ABB STOTZ-KONTAKT GmbH - Germany** to inform shipbuilders or their sub-contractors of the proper methods of fitting, use and general maintenance of the approved equipment and the conditions of this approval.
- 7.2 - This certificate supersedes the Type Approval Certificate N° 31673/A1 BV issued on 19 Jan 2015 by the Society.

\*\*\* END OF CERTIFICATE \*\*\*