



DNV

DET NORSKE VERITAS

TYPE APPROVAL CERTIFICATE

CERTIFICATE NO. E-10637

This Certificate consists of 3 pages


This is to certify that the
Overcurrent- and Short-Circuit Relay
with type designation(s)
TF 42 & TA 40

Manufactured by
ABB Stotz-Kontakt GmbH
HEIDELBERG NECKAR, Germany

is found to comply with
Det Norske Veritas' Rules for Classification of Ships, High Speed & Light Craft and Det
Norske Veritas' Offshore Standards
IEC 60947-4-1
IEC 60947-5-1

Application
Electronic overload relay for installations inside switchboard/enclosures onboard ships and
offshore units.

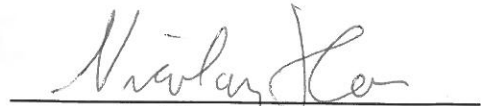
Place and date
Høvik, 2011-01-06
for DET NORSKE VERITAS AS


Marit Laumann
Head of Section



Local Office
DNV Essen

This Certificate is valid until
2015-06-30


Nicolay Horn
Surveyor *Svein*

Notice: This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid.
The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

If any person suffers loss or damage which is proved to have been caused by any negligent act or omission of Det Norske Veritas, then Det Norske Veritas shall pay compensation to such person for his proved direct loss or damage. However, the compensation shall not exceed an amount equal to ten times the fee charged for the service in question, provided that the maximum compensation shall never exceed USD 2 million. In this provision "Det Norske Veritas" shall mean the Foundation Det Norske Veritas as well as all its subsidiaries, directors, officers, employees, agents and any other acting on behalf of Det Norske Veritas.



Cert. No.: E-10637
 File No.: 824.10
 Job Id: 262.1-010717

Product description

Type: Thermal Overload Relay TF42 / TA40 for protection of motors against overload and phase failure.

Type Designation	Current range	Order no.	Short Circuit protection device coord. Type 2
TF42-0.13	0,10...0,13 A	1SAZ721201R1005	0,5 A- Type T
TF42-0.17	0,13...0,17 A	1SAZ721201R1008	1,0 A- Type T
TF42-0.23	0,17...0,23 A	1SAZ721201R1009	1,0 A- Type T
TF42-0.31	0,23...0,31 A	1SAZ721201R1013	1,0 A- Type T
TF42-0.41	0,31...0,41 A	1SAZ721201R1014	2,0 A- Type gG
TF42-0.55	0,41...0,55 A	1SAZ721201R1017	2,0 A- Type gG
TF42-0.74	0,55...0,74 A	1SAZ721201R1021	4,0 A- Type gG
TF42-1.0	0,74...1,0 A	1SAZ721201R1023	6,0 A- Type gG
TF42-1.3	1,0...1,30 A	1SAZ721201R1025	6,0 A- Type gG
TF42-1.7	1,3...1,70 A	1SAZ721201R1028	10,0 A- Type gG
TF42-2.3	1,7...2,30 A	1SAZ721201R1031	10,0 A- Type gG
TF42-3.1	2,30...3,10 A	1SAZ721201R1033	10,0 A- Type gG
TF42-4.2	3,10...4,20 A	1SAZ721201R1035	20,0 A- Type gG
TF42-5.7	4,20...5,70 A	1SAZ721201R1038	20,0 A- Type gG
TF42-7.6	5,70...7,60 A	1SAZ721201R1040	35,0 A- Type gG
TF42-10	7,60 ...10,0 A	1SAZ721201R1043	35,0 A- Type gG
TF42-13	10,0 ...13,0 A	1SAZ721201R1045	40,0 A- Type gG
TF42-16	13,0 ...16,0 A	1SAZ721201R1047	40,0 A- Type gG
TF42-20	16,0...20,0 A	1SAZ721201R1049	63,0 A- Type gG
TF42-24	20,0...24,0 A	1SAZ721201R1051	63,0 A- Type gG
TF42-29	24,0...29,0 A	1SAZ721201R1052	63,0 A- Type gG
TF42-35	29,0 ...35,0 A	1SAZ721201R1053	80,0 A- Type gG
TF42-38	35,0 ...40,0 A*	1SAZ721201R1055	80,0 A- Type gG

* Up to $T_u=50\text{ }^\circ\text{C} \rightarrow 40\text{A}$; $T_u > 50\text{ }^\circ\text{C} \rightarrow 38\text{A}$

Max. insulation voltage U_i : 690 V*
 Max impulse voltage U_{imp} : 6 kV*
 Max. operating voltage U_e : 690V AC* / 600 V*

* See application / limitation

Application/Limitation

Temperature class: D (-25 to 70 °C)
 Humidity class: A (up to 96% humidity)
 Vibration class: A (5-100 Hz)

For products with $U_{imp} = 6\text{ kV}$ the max. rated voltage is 600 V when used in a IT (ship) net. It can be used in applications with directly earthed systems with rated voltage of 400/690 V.



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Type Approval documentation

Test reports: Paconsult Test Report no. 09-2475A rev. 0 dated 2009-07-03
SGS test reports nos. 58293102/00 to 47 dated 2010-07-06
SGS test reports nos. 58293103/00 to 10 dated 2010-07-06

Datasheet: Thermal overload relay TF42 doc no. 2CDC1060 23D 0201 issued 2010

Tests carried out

Type tested according to IEC 60947-4-1 & IEC 60947-5-1.

Marking of product

ABB STOTZ-KONTAKT - Type designation.

Certificate retention survey

The scope of the retention/renewal survey is to verify that the conditions stipulated for the Type approval is complied with and that no alterations are made to the product design or choice of materials.

The main elements of the survey are:

- Inspection on factory samples, selected at random from the production line (where practicable)
- Results from Production Sample Tests (PST) and Routines (RT) checked (if not available tests according to PST and RT to be carried out)
- Review of type approval documentation
- Review of possible change in design, materials and performance
- Ensuring traceability between manufacturer's product type marking and Type Approval Certificate.

Survey to be performed at least every second year.

END OF CERTIFICATE