

TYPE APPROVAL CERTIFICATE

This is to certify:**That the Thermistor Motor Protection Relay, Series CM**with type designation(s)
CM-MSS.xyS/P

Issued to

ABB Stotz-Kontakt GmbH
Heidelberg, Germany

is found to comply with

DNV GL rules for classification – Ships, offshore units, and high speed and light craft**Application :****Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.****Location classes:**

Temperature	B
Humidity	B
Vibration	B
EMC	B
Enclosure	A

Issued at **Hamburg** on **2020-02-04**for **DNV GL**This Certificate is valid until **2025-02-03**.DNV GL local station: **Augsburg**Approval Engineer: **Dariusz Lesniewski**

Joannis Papanuskas
Head of Section

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.



Product description

Models: CM-MSS.11S/P, CM-MSS.12S/P, CM-MSS.13S/P, CM-MSS.21S/P,
CM-MSS.22S/P, CM-MSS.23S/P, CM-MSS.31S/P, CM-MSS.32S/P,
CM-MSS.33S/P, CM-MSS.41S/P, CM-MSS.51S/P

Functions / Features (model dependent):

- ATEX certified
- 1 Thermistor Sensor Circuit
- 2 Thermistor Sensor Circuit
- Thermistor short circuit detection
- Thermistor cable break detection
- Thermistor single or sum evaluation
- Non-volatile fault storage
- Auto reset
- Remote reset
- Manual reset

Supply voltage: 24V AC/DC, 24-240V AC/DC, 110-130V AC or 220 – 240V AC (model dependent)

Relay Rating: AC 15: 3A / 230V AC; DC 13: 2A / 24V DC

Mounting: DIN rail (IEC/EN 60715)

Degree of protection: IP50 housing, IP20 terminals

For µController based models Firmware Version: 1SVR730712S0200, rev. D

Approval conditions

The Type Approval covers hardware listed under Product description. When the hardware is used in applications to be classed by DNV GL, documentation for the actual application is to be submitted for approval by the manufacturer of the application system in each case. Reference is made to DNV GL rules for classification of ships Pt.4 Ch.9 Control and monitoring systems.

Type Approval documentation

Data sheets: CM-MSS.xxx (model dependent)

TÜV SÜD Certificate TPS 14 ATEX 44254 005 X

TÜV SÜD Test Report No. 713048582 Rev. 0, No. 028-713032340-000 Rev. 00

Circuit diagrams, Construction drawings, Part Lists

Manufacturers dossier with test reports as the reference list:

'Next Generation THERMISTOR-Motor-Protection-Relays CM_MSS_2014'

Software Development Documentation as the reference list:

'Tests for GL: SW-D-AK3, Project CM-MSS.xxx' dated 03.11.2014'

Test record 'PN_CM-MSS_19_305_Series Witnessstest DNVGL CM-MSS_A0.docx', dated 2019-12-05

Type approval assessment report issued at Augsburg on 2019-12-04

Tests carried out

Applicable tests according to class guideline DNVGL-CG-0339, November 2016.

Marking of product

The products to be marked with:

- manufacturer name
- model name
- serial number
- power supply ratings

Periodical assessment

The scope of the periodical assessment is to verify that the conditions stipulated for the type are complied with, and that no alterations are made to the product design or choice of systems, software versions, components and/or materials.

The main elements of the assessment are:

- Ensure that type approved documentation is available

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- Inspection of factory samples, selected at random from the production line (where practicable)
- Review of production and inspection routines, including test records from product sample tests and control routines
- Ensuring that systems, software versions, components and/or materials used comply with type approved documents and/or referenced system, software, component and material specifications
- Review of possible changes in design of systems, software versions, components, materials and/or performance, and make sure that such changes do not affect the type approval given
- Ensuring traceability between manufacturer's product type marking and the type approval certificate

Periodical assessment is to be performed after 2 years and after 3.5 years. A renewal assessment will be performed at renewal of the certificate.