

# TYPE APPROVAL CERTIFICATE

**This is to certify:****That the electronic 3-phase measuring and monitoring relays**

with type designation(s)

**CM-PVS.xyz, CM-PSS.xyz, CM-MPS.xyz, CM-PAS.xyz, CM-MPN.xyz, CM-PFS.z**

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:**

<b>Temperature</b>	<b>B</b>
<b>Humidity</b>	<b>B</b>
<b>Vibration</b>	<b>B</b>
<b>EMC</b>	<b>B, A*</b>
<b>Enclosure</b>	<b>B</b>

**\*EMC location class 'A' for CM-MPS.23z and CM-MPS.43z**Issued at **Hamburg** on **2017-05-17**for **DNV GL**This Certificate is valid until **2022-05-16**.DNV GL local station: **Augsburg**Approval Engineer: **Dariusz Lesniewski**

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**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

### Dimensions:

Series CM-..S: 22,5 mm width  
Series CM-..N: 45 mm width

### Supply / Monitoring Voltage 'x':

1 - 90-170Vac (L-N)  
2 - 180-280Vac (L-N)  
3 - 160-300Vac (L-L), 324-418Vac(L-L)  
4 - 300-500Vac (L-L), 360-440Vac (L-L)  
5 - 350-580Vac (L-L)  
6 - 450-720Vac (L-L)  
7 - 530-820Vac (L-L)  
Blank - for Type CM-PFS.z: 200-500 Vac (L-L)  
Mains frequency: 50...60Hz  
Time Range: 0.1...30s

### Output 'y':

1 - 2 SPDT contacts in one relay  
2, 3 - 2x1 SPDT contacts in two relays  
Blank - for Type CM-PFS.z: 50...60Hz; 2 SPDT contacts in one relay

### Kind of terminal 'z':

S - screw  
P - push-in-spring-force

## Application/Limitation

CM-PV Over- and Undervoltage Monitoring Relay  
CM-PS Over- and Undervoltage Monitoring Relay with fixed thresholds  
CM-PF Phase sequence / Phase loss Monitoring Relay with fixed thresholds  
CM-MP Multi-Functional Monitoring Relay  
CM-PA Phase Unbalance Monitoring Relay

## Type Approval documentation

EMV Rhein-Neckar Test Report No. 3893-382b  
ABB STOTZ-KONTAKT Technical Documents and Test Reports as filed:  
08/09 (GL-File 70.70 6028609), 01/12 (GL-Pr. 12-004331), 05/12 (GL-Pr. 12-069609)  
VDE Test Report No. 606800-9020-0001/84202); Software Documentation  
Type approval renewal assessment report issued at Hornberg on 2017-05-09

## 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
- Inspection of factory samples, selected at random from the production line (where practicable)



Job Id: **262.1-025271-1**  
Certificate No: **TAA000017D**

- 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 at least every second year and at renewal of this certificate.

END OF CERTIFICATE