

TYPE APPROVAL CERTIFICATE

Certificate No:
TAA0000182
Revision No:
2

This is to certify:

That the Pressure Switch

with type designation(s)
MP54, MP55

Issued to

Danfoss A/S
Nordborg, Syddanmark, Denmark

is found to comply with

DNV 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.

Location classes:

Temperature B

Humidity B

Vibration B

EMC N/A

Enclosure Required protection according to relevant rules shall be provided upon installation on board

Issued at **Høvik** on **2023-06-20**

This Certificate is valid until **2028-06-19**.

DNV local unit: **Denmark CMC**

Approval Engineer: **Martin Skårværket**

for DNV



Digitally Signed By: Sneen, Ståle

Location: DNV Høvik, Norway

on behalf of

Frederik Tore Elter
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.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.



Form code: TA 251

Revision: 2022-12

www.dnv.com

Page 1 of 2

Product description

Differential Pressure Switch type MP54 and MP 55

Range: -1 to 12 bar

MP 54: fixed switching difference between 0.65 and 0.9 bar available

MP 55: adjustable switching difference between 0.3 and 4.5 bar

Test pressure: 22 bar

Control voltage: 230 or 115V AC or DC

Output contact rating: 2 A, 250 V AC

0.2 A, 250 V DC

Release time / time relay: 45, 60, 90 or 120 s

Place of manufacture

Danfoss Industries Pvt. Ltd., Plot No. A-19/2,
SIPCOT Industrial Growth Center, Oragadam Village,
Sriperumbudur-602105, Kanchipuram District,
Tamil Nadu, India

Approval conditions

The Type Approval covers hardware listed under Product description. When the hardware is used in applications to be classed by DNV, 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 rules for classification of ships Pt.4 Ch.9 Control and monitoring systems.

Type Approval documentation

Test Report: 92-0258 of Danfoss

Technical Report TR 17-969

Datasheet: DKRCC.PD.CG0.C4.22 dated 2020-10, MP 54 and MP 55

Drawings: 060R0411 rev AAMP bellows element assy

060R0383 rev AAMP time release assy

060R0382 rev AAMP pressure switch

027M0024 rev 00 Approval code list

Type approval renewal assessment report for TAA0000182, DNV Chennai, 2023-03-10.

Tests carried out

Applicable tests according to class guideline DNV-CG-0339, August 2021.

Marking of product

The products to be marked with:

- manufacturer name
- model name
- serial number

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)
- 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.

END OF CERTIFICATE