

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Electrical Equipment

with type designation(s)

**GT 50R38, GT 50R062, GT 63R062, GT 0R022, GT 70R001.01, GT70R062, GT 70R066,
GT 70R68**

Issued to

Kendrion (Donaueschingen/Engelswies) GmbH
Donaueschingen, 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.**

Temperature B

Humidity B

Vibration B

Issued at **Hamburg** on **2018-01-11**

This Certificate is valid until **2023-01-10**.

for **DNV GL**

DNV GL local station: **Augsburg**

Approval Engineer: **Holger Jansen**

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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

Door Retaining Magnet

Type: GT 50R038

Power: 1.5 W
Holding force: 490 N
Electrical connection: Metal connector box with 2 cable glands PG 13.5
Magnet diameter: 50 mm
Power supply: 24 Vdc
Degree of protection: IP56, connection IP65

Type: GT 50R062

Power: 1.5 W
Holding force: 490 N
Electrical connection: Connector box with 2 cable glands PG 11
Magnet diameter: 50 mm
Power supply: 24 Vdc
Degree of protection: IP65, connection IP42

Type: GT 63R062

Power: 1.5 W
Holding force: 700 N
Electrical connection: Connector box with 2 cable glands PG 11
Magnet diameter: 63 mm
Power supply: 24 Vdc
Degree of protection: IP65, connection IP42

Type: GT 70R022

Power: 1.5 W
Holding force: 1372 N
Electrical connection: Metal connector box with 2 cable glands PG 13.5
Magnet diameter: 70 mm
Power supply: 24 Vdc
Degree of protection: IP56, connection IP65

Type: GT 70R001.01

Power: 1.5 W
Holding force: 1372 N
Electrical connection: Free strands, 200mm long, without mounting plate
Magnet diameter: 70 mm
Power supply: 24 Vdc
Degree of protection: Device IP65, connection IP00

Type: GT 70R062

Power: 1.5 W
Holding force: 1372 N
Electrical connection: Connector box with 2 cable glands PG 11
Magnet diameter: 70 mm
Power supply: 24 Vdc
Degree of protection: Device IP65, connection IP42

Type: GT 70R066

Power: 1.5 W
Holding force: 1372 N
Electrical connection: Magnet with an integrated micro switch for a feedback signal,
Free strands, 400mm long
Magnet diameter: 70 mm
Power supply: 24 Vdc
Degree of protection: Device IP65, connection IP00

Type: GT 70R068

Power: 1.5 W
Holding force: 1372 N
Electrical connection: Nickel plated magnet with a mounting plate
Connection via Hirschmann plug connector GDM2009 with washer GDM3-16,
Socket GSAZ2000 (washer GSAZ40/62)
Magnet diameter: 70 mm
Power supply: 24 Vdc
Degree of protection: IP65, connection IP65

Application/Limitation

Operating instruction of the manufacturer to be observe

Type Approval documentation

Tests carried out

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

Marking of product

The product to be marked with:

- Manufacturer name
- Model type
- Serial number

Periodical assessment

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

The main elements of the assessment are:

- Inspection on factory samples, selected at random from the production line (where practicable)
- Results from Routine Tests (RT) checked (if not available tests according to 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.

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