



Certificate no.:  
**TAE000053J**

# TYPE APPROVAL CERTIFICATE

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**This is to certify:**

**that the Light Fitting**

with type designation(s)  
**Multi series**

issued to

**Glamox AS**  
**Molde, Norway**

is found to comply with

**DNV rules for classification – Ships, offshore units, and high speed and light craft**

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**Application:**

**Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV.**

Issued at **Høvik** on **2025-09-05**

This Certificate is valid until **2030-08-06**.

for **DNV**

DNV local unit: **Mid-North Norway CMC**

Approval Engineer: **Qiang William Guo**

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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 USD 300 000.

## Product description

Multi series is the type of light fittings intended to marine and offshore applications, there are multi variants as below :

| MULTI variant | LENGHT(cm) | IP    | Lumen out         | Power comsump. | Voltage area                 | Control gear   | Total variants |
|---------------|------------|-------|-------------------|----------------|------------------------------|----------------|----------------|
| MIR           | 400        | 66/67 | 1000/1300/2000 lm | 7/9/14 W       | 24 VDC, 110-127, 220-240 VAC | ON/OFF or DALI | 6              |
| MAX           | 400        | 66/67 | 1300/2000 lm      | 9/14 W         | 110-127, 220-240 VAC         | ON/OFF or DALI | 4              |
| MIRN          | 400        | 66/67 | 1300/2000 lm      | 9/14 W         | 24 VDC, 110-240 VAC          | ON/OFF or DALI | 4              |
| MIX           | 400        | 66/67 | 1300/2000 lm      | 9/14 W         | 110-127, 220-240 VAC         | ON/OFF or DALI | 4              |
| MIR           | 600        | 66/67 | 2500/3500/4500 lm | 18/24/31 W     | 24 VDC, 110-127, 220-240 VAC | ON/OFF or DALI | 6              |
| MIL           | 600        | 66/67 | 2500/3500/4500 lm | 18/24/31 W     | 220-240 VAC                  | ON/OFF or DALI | 6              |
| MAX           | 600        | 66/67 | 2500/3500/4500 lm | 18/24/31 W     | 110-127, 220-240 VAC         | ON/OFF or DALI | 6              |
| MIRN          | 600        | 66/67 | 2500/3500/4500 lm | 18/24/31 W     | 24 VDC, 110-240 VAC          | ON/OFF or DALI | 6              |
| MIX           | 600        | 66/67 | 2500/3500/4500 lm | 18/24/31 W     | 110-127, 220-240 VAC         | ON/OFF or DALI | 6              |
| MIR           | 1200       | 66/67 | 5000/6500/8500    | 34/49/61       | 24 VDC, 110-127, 220-240 VAC | ON/OFF or DALI | 6              |
| MIL           | 1200       | 66/67 | 5000/6500/8500    | 34/49/61       | 220-240 VAC                  | ON/OFF or DALI | 6              |
| MAX           | 1200       | 66/67 | 5000/6500/8500    | 34/49/61       | 110-127, 220-240 VAC         | ON/OFF or DALI | 6              |
| MIRN          | 1200       | 66/67 | 5000/6500/8500    | 34/49/61       | 24 VDC, 110-240 VAC          | ON/OFF or DALI | 6              |
| MIX           | 1200       | 66/67 | 5000/6500/8500    | 34/49/61       | 110-127, 220-240 VAC         | ON/OFF or DALI | 6              |
| MIR           | 1500       | 66/67 | 7500/11000        | 54/83          | 110-127, 220-240 VAC         | ON/OFF or DALI | 4              |
| MIL           | 1500       | 66/67 | 7500/11000        | 54/83          | 220-240 VAC                  | ON/OFF or DALI | 4              |
| MAX           | 1500       | 66/67 | 7500/11000        | 54/83          | 220-240 VAC                  | ON/OFF or DALI | 4              |
| MIX           | 1500       | 66/67 | 7500/11000        | 54/83          | 110-127, 220-240 VAC         | ON/OFF or DALI | 4              |

## Application/Limitation

End users are responsible for correcting ingress protection wrt. Location and maker's instructions should be observed.

| MULTI variant | LENGHT (cm) | IP    | Temp. class | Vibration class | EMC class | Humidity class | Enclourse |
|---------------|-------------|-------|-------------|-----------------|-----------|----------------|-----------|
| MIR           | 400         | 66/67 | C           | A               | B         | B              | C         |
| MAX           | 400         | 66/67 | C           | A               | B         | B              | C         |
| MIRN          | 400         | 66/67 | C           | A               | B         | B              | C         |
| MIX           | 400         | 66/67 | C           | A               | B         | B              | C         |
| MIR           | 600         | 66/67 | C           | A               | B         | B              | C         |
| MIL           | 600         | 66/67 | C           | A               | B         | B              | C         |
| MAX           | 600         | 66/67 | D           | A               | B         | B              | C         |

|      |      |       |   |   |   |   |   |
|------|------|-------|---|---|---|---|---|
| MIRN | 600  | 66/67 | C | A | B | B | C |
| MIX  | 600  | 66/67 | D | A | B | B | C |
|      |      |       |   |   |   |   |   |
| MIR  | 1200 | 66/67 | C | A | B | B | C |
| MIL  | 1200 | 66/67 | C | A | B | B | C |
| MAX  | 1200 | 66/67 | C | A | B | B | C |
| MIRN | 1200 | 66/67 | C | A | B | B | C |
| MIX  | 1200 | 66/67 | C | A | B | B | C |
|      |      |       |   |   |   |   |   |
| MIR  | 1500 | 66/67 | C | A | B | B | C |
| MIL  | 1500 | 66/67 | C | A | B | B | C |
| MAX  | 1500 | 66/67 | D | A | B | B | C |
| MIX  | 1500 | 66/67 | D | A | B | B | C |

## Type Approval documentation

### Tests carried out

Type testing had been performed in accordance with DNV-CG-0339 Aug. 2021, i.e. performance ,electrical power supply failure ,power supply variation ,vibration ,dry heat ,Damp heat ,cold ,salt mist , insulation resistance, high voltage ,EMC test.

### Marking of product

The products to be marked with:

- Manufacturer name
- Model name
- Serial number
- Power supply ratings
- Degree of protection

### 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.

Assessment shall be performed at 2 and 3.5 year and at renewal.

END OF CERTIFICATE