

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Test and Calibration Equipment

with type designation(s)
Temperature calibrators T375-M, T650-M

Issued to

Eurotron Instruments (UK) Ltd.
Daventry, United Kingdom

is found to comply with
DNV GL rules for classification – Ships, offshore units, and high speed and light craft

Application :

The instruments are only approved as portable temperature test- and calibration instruments.

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

Issued at **Hamburg** on **2019-06-13**

This Certificate is valid until **2024-06-12**.

DNV GL local station: **Milan**

Approval Engineer: **Marco Rinkel**



for **DNV GL**
Digitally Signed By:
Papanuskas, Joannis

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

Temperature calibrator: **T375-M**
Temperature range: Ambient+10°C to 375°C
Display accuracy: ±0.25°C at 150°C (Pt100 probe Ø6 mm)
±0.50°C at 375°C (Pt100 probe Ø6 mm)
Stability: ±0.15°C (Pt100 probe Ø6 mm)
Display accuracy: ±0.25°C at 150°C (Pt100 probe Ø3 mm)
±0.50°C at 375°C (Pt100 probe Ø3 mm)
Stability: ±0.10°C (Pt100 probe Ø3 mm)

Temperature calibrator: **T650-M**
Temperature range: Ambient+15°C to 650°C
Display accuracy: ±0.90°C (TcN probe Ø4.5 mm)
Stability: ±0.30°C (TcN probe Ø4.5 mm)

Application/Limitation

The Type Approval covers hardware listed under product description.
The instruments are only approved as portable temperature test- and calibration instruments.
The calibrator must hold a valid calibration certificate to be used in conjunction with the E0 notification.

Tests carried out

- Relevant EMC tests according to EN 61326-1:2013, with immunity test level for equipment intended to be used in an industrial electromagnetic environment, and emission limits for Class B equipment (domestic establishments).
- Relevant tests according to EN 62233:2008 (Measurement methods for electromagnetic fields of household appliances and similar apparatus with regard to human exposure).
- Relevant tests according to EN 61010-1:2010-10 (Safety requirements for electrical equipment for measurement, control, and laboratory use – Part 1: General requirements).
- T650-M temperature stability and accuracy tested at 650°C for 24 hours against reference instrument.

Marking of product

Brand name: EiUK
Model name: T375-M or T650-M
Serial No.: Unique
Power rating: 115/230 Vac, 50/60 Hz

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.