

TYPE APPROVAL CERTIFICATE

This is to certify:**That the Instrument for Switchboard**

with type designation(s)

Net Insulation Meter KLY-NI, Synchroscope KLY-S & CP-S

Issued to

Shanghai Complee Instrument Co. Ltd
SHANGHAI, China

is found to comply with

DNV GL rules for classification – Ships, offshore units, and high speed and light craft**Application :****Location classes:****Temperature: A****Humidity: B****Vibration: A****Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.**Issued at **Hamburg** on **2017-12-06**This Certificate is valid until **2022-12-05**.DNV GL local station: **Shanghai**for **DNV GL**Approval Engineer: **Harald Amberger**

Arne Schaarmann
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

Net Insulation Meter

Type designation	Front dimensions (mm)	IP	Supply voltage (V)	Voltage levels (V)
KLY-NI96I	96 x 96	IP 54	DC: 24, AC: 220 / 380	0-500
KLY-NI+KLY-C	120 x 104	IP 54	DC: 24, AC: 220 / 380	0-500
KLY-NI72	72 x 72	IP 54	DC: 24, AC: 220 / 380	0-500
KLY-2NI96	96 x 96	IP 54	DC: 24, AC: 220 / 380	0-500

Synchroscope

Type designation	Front dimensions (mm)	IP	Voltage levels (V)
CP-S72	72 x 72	IP 54	100 / 120 / 150 / 220 / 380-400V / 415-450 / 500
KLY-S72	72 x 72	IP 54	100 / 120 / 150 / 220 / 380-400V / 415-450 / 500
CP-S96	96 x 96	IP 54	100 / 120 / 150 / 220 / 380-400V / 415-450 / 500
KLY-S96	96 x 96	IP 54	100 / 120 / 150 / 220 / 380-400V / 415-450 / 500
KLY-S144	144 x 144	IP 54	100 / 120 / 150 / 220 / 380-400V / 415-450 / 500

Type Approval documentation

Tests carried out

Type tests in accordance with IEC 60051 and Vibration & Damp heat.

Marking of product

Product marking: Shanghai Complee Instrument, type designation

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