



TYPE APPROVAL CERTIFICATE
No. ELE070720XG

This is to certify that the product below is found to be in compliance with the applicable requirement of the RINA type approval system.

<i>Description</i>	Capacitive level switch with capacitive probe
<i>Type</i>	CLS 50; CLS 55
<i>Applicant</i>	BEDIA MOTORENTECHNIK GMBH & CO. KG Gewerbepark An Der A6 - Im Erlet 1 D-90518 Altdorf bei Nurnberg GERMANY
<i>Manufacturer</i>	BEDIA MOTORENTECHNIK GMBH & CO. KG
<i>Place of manufacture</i>	Gewerbepark An Der A6 - Im Erlet 1 D-90518 Altdorf bei Nurnberg GERMANY
<i>Reference standards</i>	Rules for the Classification of Ships- Part C - Machinery, Systems and fire protection - Ch.3 ; Sect. 6, Tab.1

Issued in **HAMBURG** on **April 17, 2020**. *This Certificate is valid until* **April 16, 2025**

RINA Services S.p.A.
Giuseppe Russo

This certificate consists of this page and 1 enclosure

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CLS 50

CLS 55

CLS 50 / 55 sensor operate according to the capacitive principle. It detects the change in capacitance that develops when an electrode surrounded by air is immersed in a liquid medium.

The change in capacitance is then processed by electronics

Features:

Two different kind of mediums are detected:

- 1) Electrically conductive liquid mediums with a dielectric constant value of: $\epsilon_r = 35$ to 85
- 2) Electrically non-conductive liquid mediums with a dielectric constant value of: $\epsilon_r = 1.8$ to 6

Power supply

Version HV for 12V / 24V (CLS 50)

Version LV for 5V / 12V (CLS 55)

Signal Output

Switching signal output to positive (HSS)

Switching signal output to negative (LSS)

Voltage output :

30% of the power supply voltage (not switched)

70% of the power supply voltage (switched)

Outputs are short circuit protected

Technical description

CLS 50/55 Capacitive Level Switch (17/08/2009)

Test report:

ECL- EMC test report n. 08-192 (22/10/2008)

LGA QualiTest GmbH n. E 4.964- I (25/08/2009)

This Certificate supersedes Type Approval Certificate ELE096314XG.

HAMBURG April 17, 2020

