



Marine & Offshore

Certificate number: 42181/B0 BV File number: AP4661 Product code: 3896H

This certificate is not valid when presented without the full attached schedule composed of 7 sections

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## **TYPE APPROVAL CERTIFICATE**

This certificate is issued to ENDRESS+HAUSER CONDUCTA GmbH+Co.KG

Gerlingen - GERMANY

#### for the type of product MEASURING DEVICE TRANSDUCERS

Conductivity measurement sensor Smartec CLD18

**Requirements:** 

Bureau Veritas Rules for the Classification of Steel Ships EC Code: 31

BU

VERITAS

This certificate is issued to attest that Bureau Veritas Marine & Offshore did undertake the relevant approval procedures for the product identified above which was found to comply with the relevant requirements mentioned above.

#### This certificate will expire on: 29 Jan 2026

For Bureau Veritas Marine & Offshore, At BV HAMBURG, on 29 Jan 2021, Dirk Hoepfner

Hoeffor



This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with Bureau Veritas Marine & Offshore. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. This certificate is issued within the scope of the General Conditions of Bureau Veritas Marine & Offshore available on the internet site www.veristar.com. Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against Bureau Veritas Marine & Offshore for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.

The electronic version is available at: http://www.veristarnb.com/veristarnb/jsp/viewPublicPdfTypec.jsp?id=kypcycjmy2 BV Mod. Ad.E 530 June 2017 This certificate consists of 3 page(s)

# THE SCHEDULE OF APPROVAL

#### **<u>1. PRODUCT DESCRIPTION:</u>**

Smartec CLD18 is an inductive conductivity measurement sensor for liquids.

#### 1.1 - Main characteristics:

Rated voltage:	24V DC
Output signal:	0/420mA (conductivity); 0/420mA (temperature)
Degree of protection:	IP69K
Hardware version:	FXSD1 VX.xx.xx
Firmware version:	V2.xx.xx

#### 1.2 - Type: CLD18 - a bbb

<b>a</b> = Housing material / connection:	A (plastic), B (stainless steel), C (plastic with M12 plug),
	D (stainless steel with M12 plug)
<b>bbb</b> = Process connection:	GCP, GGE, LQP, MDK, MEK, MOK, MOP, MQK, MXK,
	MYK, TDK, TSK, TXJ

#### 2. DOCUMENTS AND DRAWINGS:

- TI01080C/07/EN/02.14; BA01149C/07/EN/02.13; 403124-2415 Rev. A dated 25.04.13; TI\_CLD18 Rev. B dated 31.07.14 For A1 version:

- BA01149C/07/DE/05.17; 403124-2415 Rev. D dated: 2016-10-17; BA-L50R5B0F dated 2012-01-27; BA-L11R5C0B dated 2011-11-30

#### 3. TEST REPORTS:

- Phoenix Testlab GmbH: E151998E1 dated 18.08.2015; U151998E1 dated 28 September 2015

- Endress+Hauser GmbH+Co. KG: 970003872 dated 20.06.2013; 970003873 dated 24.06.2013; 970004038 dated 07.10.2013 For B0 version:

- Phoenix Testlab GmbH: E201128E1 dated 01.10.2020

#### 4. APPLICATION/LIMITATION:

4.1 - Bureau Veritas Rules and Regulations for the Classification of Steel Ships

4.2 - Approval valid for ships intended to be granted with the following additional class notations: AUT-UMS, AUT-CCS, AUT-PORT and AUT-IMS.

4.3 - Bureau Veritas Environmental Category, EC Code: 31

4.4 - The equipment fulfils the EMC requirements for installation in General Power Distribution Zone and Deck Zones.

4.5 - Only Hardware and Firmware successfully tested together in compliance with the regulations as referred to in page one, according to the declaration of the manufacturer is covered by this certificate.

4.6 - Equipment covered by this Type Approval certificate has been tested according to requirements of IACS UR E10 rev7.

4.7 - Ex-certification is not covered by this certificate. Applications in hazardous areas are to be approved in each case according to the Rules and Conditions for Safe Use specified in a valid Ex-Certificate issued by a Notified or Recognised Certification Body.

4.8 - The installation shall comply with the Manufacturer's recommendation described in the above-referenced documentation.

## 5. PRODUCTION SURVEY REQUIREMENTS:

5.1 - The above mentioned products are to be supplied by **Endress** + **Hauser Conducta GmbH** + **Co. KG** in compliance with the type described in this certificate.

5.2 - This type of product is within the category HBV of Bureau Veritas Rule Note NR320 and as such does not require a BV product certificate.

5.3 - Endress + Hauser Conducta GmbH + Co. KG has to make the necessary arrangements to have its works recognized by Bureau Veritas in compliance with the requirements of NR320 for HBV products:

Endress + Hauser Conducta GmbH + Co. KG Landsbergerstrasse 28 04736 Waldheim GERMANY

### **<u>6. MARKING OF PRODUCT:</u>**

- Maker's name or trademark

- Equipment type or model identification
- Date of manufacture and/or serial number

- Ex marking, as relevant

### 7. OTHERS:

7.1 - It is the responsibility of Endress + Hauser Conducta GmbH + Co. KG to inform shipbuilders or their sub-contractors of the proper methods of fitting, use and general maintenance of the approved equipment and the conditions of this approval.
7.2 - This certificate supersedes the Type Approval Certificate N° 42181/A1 BV issued on 22 May 2017 by the Society.

\*\*\* END OF CERTIFICATE \*\*\*