

Page 1 of 2

Certificate No: LR2408217TA Issue Date: 24/01/2024 Expiry Date: 23/01/2029

Type Approval Certificate

This is to certify that the undernoted product(s) has/have been tested with satisfactory results in accordance with the relevant requirements of the Lloyd's Register Type Approval System.

Address 15-17 AKTI KOUNTOURIOTOU, PIRAEUS, 185 34, Greece

Type PID Controller and Data Acquisition Recorder

Description ECO 11 EDIT-99/141 is a multichannel unit which allows a simultaneous

measurement, visualisation and control

Trade Name ECO 11 EDIT-99/141

Application Marine applications in environmental categories ENV2 and ENV3 as defined in

Lloyd's Register Type Approval System Test Specification Number 1, December

2021.

Other Conditions Documentation for the actual application is to be submitted by the

manufacturer of the application system in each case.

The cable installation has to be carried out according to the Rules for

classification for ships with respect to routing, fixing, protection, penetration

of the decks/ bulkheads and the use of cables pipes.

Ex-certification is not covered by this certificate. Application in hazardous area

to be approved in each case according to class requirements and Ex-

Certification/ Special Condition for Safe Use listed in valid Ex-Certificate issued

by a notified/recognized Certification Body.

Stamatis Agelopoulos

Electrical & Control - Lead Specialist to Hellenic Lloyd's SA

A member of the Lloyd's Register group

348 Syggrou Avenue, 176 74, Kalithea, Athens, Greece

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Page 2 of 2

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Type Approval Certificate

This certificate is not valid for equipment, the design, ratings or operating parameters of which have been varied from the specimen tested. The manufacturer should notify Hellenic Lloyd's SA of any modification or changes to the equipment in order to obtain a valid Certificate.

The Design Appraisal Document LR2408217DA and its supplementary Type Approval Terms and Conditions form part of this Certificate.

348 Syggrou Avenue, 176 74, Kalithea, Athens, Greece

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Certificate Of Conformance

This is to certify that the Quality Management System of:

E.D.I.T Automation Ltd

15 & 17, AKTI KOUNTOURIOTOU STR.,
Piraeus - Attiki
185 34
Greece

has been assessed by ABS Quality Evaluations, Inc. and found to be in conformance with the requirements set forth by:

ISO 9001:2015

The Quality Management System is applicable to:

MANUFACTURE, REPAIRS AND SALES OF MARINE & INDUSTRIAL AUTOMATION SYSTEMS. SALES, MAINTENANCE AND CALIBRATION OF MARINE ENVIRONMENTAL PROTECTION SYSTEMS. TRAINING ON THE USE OF AUTOMATION AND ENVIRONMENTAL PROTECTION SYSTEMS.

Certificate No: 42956

Certification Date: 15 FEB 2019

Effective Date: 29 MAY 2024
Expiration Date 27 JUN 2027

Revision Date: 30 JUL 2024

Dominic Towner

Dominic Townsend, President













Certificate Of Conformance

This is to certify that the Environmental Management System of:

E.D.I.T Automation Ltd

15 & 17, AKTI KOUNTOURIOTOU STR., Piraeus - Attiki 185 34 Greece

has been assessed by ABS Quality Evaluations, Inc. and found to be in conformance with the requirements set forth by:

ISO 14001:2015

The Environmental Management System is applicable to:

MANUFACTURE, REPAIRS AND SALES OF MARINE & INDUSTRIAL AUTOMATION SYSTEMS. SALES, MAINTENANCE AND CALIBRATION OF MARINE ENVIRONMENTAL PROTECTION SYSTEMS. TRAINING ON THE USE OF AUTOMATION AND ENVIRONMENTAL PROTECTION SYSTEMS.

57133 Certificate No:

Certification Date: 29 MAY 2024 29 MAY 2024 Effective Date: 24 MAY 2027 **Expiration Date** 30 JUL 2024 **Revision Date:**

Dominic Townsend, President













TYPE APPROVAL CERTIFICATE

Certificate No: TAA00001T7 Revision No:

This is to certify:			
That the Flow Sensor			
with type designation(s) SI0521, SI0557			
Issued to			
ifm electro Essen, Germa	_		
Losen, Germa	illy		
is found to comply with DNV rules for classification – Ships, offshore units, and high speed and light craft			
Application:			
Product(s) appro	ved by this certificate is/are accepte	d for installation on all vessels classed by DNV.	
Location classes	:		
Humidity Vibration EMC	D B B A C		
Issued at Hamburg on 2023-04-11 for DNV			
This Certificate is valid until 2028-04-16 . DNV local unit: Augsburg		IOI DIVV	
Approval Engineer: Dariusz Lesniewski		Joannis Papanuskas Head of Section	

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 300,000 USD.

Form code: TA 251

Revision: 2022-12

www.dnv.com

Page 1 of 3



Page 1 of 3

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.



Job Id: **262.1-027764-4** Certificate No: **TAA00001T7**

Revision No: 4

Product description

Application: liquids

Medium temperature: - 15°C...70°C Power supply: 24V DC (18...32 VDC) Output: 2x switching outputs (PNP) SI0521: 2x no / nc (programmable) SI0557: 1x no, 1x nc (programmable) Measuring and setting range: 3...300 cm/s

Switch point accuracy: +-10cm/s

HMI: display 10 LED (three-colour), push-buttons Process connection: internal thread M18x1.5 for adapter

Probe length: 45mm

Electrical connection: M12 connector Degree of protection: IP 56, IP 67

Place of manufacture

ifm prover s.r.l. Str. L(50) Nr. 3

557085 Com. Cristian, jud. Sibiu

Romania

Approval conditions

The Type Approval covers hardware listed under Product description. When the hardware is used in applications to be classed by DNV, documentation for the actual application is to be submitted for approval by the manufacturer of the application system in each case. Reference is made to DNV rules for classification of ships Pt.4 Ch.9 Control and monitoring systems.

Tests carried out

Applicable tests according to class guideline DNV-CG-0339, August 221.

Type Approval documentation

Test Report: ifm prover internal 'project no. 810250' dated 26.11.2012

Test Report: TÜV NORD CERT No. 12/12173-1

Test Report: ZAMM No. 418-0313

Test Report: Aucoteam No. 9436.01/12 (08-10-2012)

Test Report: TREO No. 097-18 (2018-03-28)

Test Report: EMCE No. 22-0291RP50-001 (2022-12-13)
Data sheets: SI0521(Ed. 23-11-2012), SI0557 (Ed. 23-11-2012)

Wiring diagrams Supplement 02/2020:

- Ifm Modification Description Tettnang, 20.02.2020
- Drawing no.1121765, Ver. 00
- Ifm Test Protocol: EMV Prüfung nach IEC61000-4-3 (GTEM), dated 05.12.2018
- Ifm Test Protocol: EMV Prüfung nach IEC61000-4-4, dated 30.11.2018
- Ifm Test Protocol: EMV Prüfung nach IEC61000-4-6, dated 30.11.2018

Supplement 2023:

- Modification description Tettnang 15.12.2022
- Test Report: EMCE No. 22-0291RP50-001 (2022-12-13)

Type approval renewal assessment report issued at Essen on 2023-01-18 Type approval assessment report issued at Sibu, Romania on 2023-03-31

Marking of product

The products to be marked with:

- manufacturer name
- model name
- production code
- power supply ratings

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

Form code: TA 251 Revision: 2022-12 www.dnv.com Page 2 of 3



Job Id: **262.1-027764-4** Certificate No: **TAA00001T7**

Revision No: 4

- 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.

END OF CERTIFICATE

Form code: TA 251 Revision: 2022-12 www.dnv.com Page 3 of 3