Certificate No: LR2011165TA-01
Issue Date: 31/03/2023
Expiry Date: 25/03/2025
Reference: PRJ11100402484

LLOYD'S REGISTER TYPE APPROVAL – DESIGN APPRAISAL DOCUMENT

Issue by: TRIESTE TECHNICAL SUPPORT OFFICE
Issued to: F.LLI GIACOMELLO S.R.L.
For: ELECTROMAGNETIC LEVEL INDICATOR
IEG-TC1/-TC2/-TCMM, IEG-INOX-TC1/-TC2/-TCMM,
IEG-N1F/-N2F/-MMF, IEG-INOX-N1F/-N2F/-MMF,
IEG-MP, IEG-INOX-MP, IEG-N1F+T, IEG-TC1+T

The undernoted documents have been reviewed for compliance with the requirements of the Lloyd's Register Type Approval System Procedure TA14 Version 04 (Dec 2020) and this Design Appraisal Document forms part of the Certificate LR2011165TA-01.

APPROVAL DOCUMENTATION

Type Approval Application checklist	29/11/2022
Form2502TA – Request for Marine Service- Ref. TAC 2022/206 SQ346143	02/12/2022
Form PQA – Production Quality Assessment Form. F.lli Giacomello S.r.l. – Rho (MI)	06/02/2023
TÜV NORD – ISO 9001:2015 cert. n°4410020410002	30/11/2022
Instructions for Use and Installation Mod. IEG-TC1 Cod. R47-82 Rev. 0	07/2019
Instructions for Use and Installation Mod. IEG-TC2 Cod. R47-44 Rev. 0	07/2019
Instructions for Use and Installation Mod. IEG-TCMM Cod. R47-83 Rev. 0	07/2019
Instructions for Use and Installation Mod. IEG-INOX-TC1 Cod. R58-103 Rev.0	07/2019
Instructions for Use and Installation Mod. IEG-INOX-TC2 Cod. R58-103A Rev.0	07/2019
Instructions for Use and Installation Mod. IEG-INOX-TCMM Cod. R58-103B Rev.0	07/2019
Instructions for Use and Installation Mod. IEG-N1F Cod. R48-85 Rev. 0	07/2019
Instructions for Use and Installation Mod. IEG-N2F Cod. R48-87 Rev. 0	07/2019
Instructions for Use and Installation Mod. IEG-MMF Cod. R48-86 Rev. 0	07/2019
Instructions for Use and Installation Mod. IEG-INOX-N1F Cod. R60-104 Rev. 0	07/2019
Instructions for Use and Installation Mod. IEG-INOX-N2F Cod. R60-104A Rev. 0	07/2019
Instructions for Use and Installation Mod. IEG-INOX-MMF Cod. R60-104B Rev.0	07/2019
Instructions for Use and Installation Mod. IEG-MP Cod. R56-102 Rev. 0	07/2019
Instructions for Use and Installation Mod. IEG-INOX-MP Cod. R62-105 Rev. 0	07/2019
Instructions for Use and Installation Mod. IEG-N1F+T Cod. R52-97 Rev.0	07/2019
Instructions for Use and Installation Mod. IEG-TC1+T Cod. R52-98 Rev.0	07/2019

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TEST REPORTS

InLAB S.r.l. Test Report No. 2003021127 Rev. 0 - IEC 60730-1:2010	23/04/2020
InLAB S.r.l. Test Report No. 2003021129 Rev. 0 - IEC 60730-2-15:2008	23/04/2020
REI Lab. S.r.l. Test Report No. RD0507191374 - EN 55011 :2009+A1 :2010	30/07/2019

Maurizio Crucil
Senior Specialist, Electrotechnical Systems
Trieste Technical Support Office

Maurizio Crucil
March-31, 2023
Marine and Offshore
Trieste Technical Support Office
Electrotechnical Systems
Lloyd's Register EMEA
LR032.2022

Supplementary Type Approval Terms and Conditions

Type Approval certifies that a representative sample of the product(s) referred to herein has/have been found to meet the applicable design criteria for the use specified herein. It does not mean or imply approval for any other use, nor approval of any product(s) designed or manufactured otherwise than in strict conformity with the said representative sample.

Type Approval is based on the understanding that the manufacturer's recommendations and instructions and any relevant requirements of the Rules and Regulations are complied with.

Type Approval does not eliminate the need for normal inspection and survey procedures required by the Rules and Regulations.
Lloyd's Register EMEA reserves the right to cancel or withdraw this Type Approval Certificate in accordance with the Lloyd's Register Type Approval System Procedure.

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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.

Manufacturer **F.lli Giacomello Srl.**

Address ,Via Magenta, 77 Cap 15/A, Rho (MI), 20017, Italy

Type Switches - Level

Description Electromagnetic level indicator

Trade Name IEG-TC1 /-TC2 /-TCMM, IEG-INOX-TC1 /-TC2 /-TCMM, IEG-N1F /-N2F /-MMF, IEG-INOX-N1F /-N2F /-MMF, IEG-MP, IEG-INOX-MP, IEG-N1F+T, IEG-TC1+T

Application Marine, Offshore and Industrial use

Specified Standard

- Manufacturer's Specification
- IEC 60730-1:2016
- IEC 60730-2-15: 2019
- EN 55011:2009+A1:2010
- EN 55016-1-2+A1:2018
- EN 55016-2-3+A1:2020
- EN 55016-4-2+A1:2015

Ratings

- IEG-TC1 /-TCMM /-N1F /-MMF:
80 W/VA, 1.3 A, @ 250 VDC/VAC
- IEG-TC2 /-N2F:
60 W/VA, 1 A, @ 230 VDC/VAC

Maurizio Crucil

Electrotechnical Team Leader to Lloyd's Register EMEA
A member of the Lloyd's Register group

71 Fenchurch Street, London, EC3M 4BS, United Kingdom

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Type Approval Certificate

- IEG-MP:
20-60-80 W/VA, 1-1, 3-3 A, @ 150-230-250 VDC/VAC
- IEG-INOX-TC1 /-TC2 /-TCMM /-N1F /-N2F /-MMF /-MP:
60-80 W/VA, 1-3 A, @ 230-250 VDC/VAC; 30 W, 0.5 A @ 500 VDC
Rated pressure: 10 bar
- IEG-N1F+T, IEG-TC1+T:
80 W/VA, 1.3 A, @ 250 VDC/VAC
Rated pressure: 10 bar

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 Lloyd's Register EMEA of any modification or changes to the equipment in order to obtain a valid Certificate.

Previous Version: LR2011165TA, 15/00030.

The Design Appraisal Document LR2011165DA-01 and its supplementary Type Approval Terms and Conditions form part of this Certificate.

71 Fenchurch Street, London, EC3M 4BS, United Kingdom

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