EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No:
MEDB00008HZ

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED), issued as "Forskrift om Skipsutstyr" by the Norwegian Maritime Authority. This Certificate is issued by DNV AS under the authority of the Government of Norway.

This is to certify:

That the Fixed fire detection and fire alarm systems components for control stations, service spaces, accommodation spaces, cabin balconies, machinery spaces and unattended machinery spaces: Power supply equipment

with type designation(s)
T1306 Power supply Equipment

Issued to
Tyco Fire & Security GmbH
Neuhausen am Rheinfall-Schaffhausen, SH, Switzerland

is found to comply with the requirements in the following Regulations/Standards:
Regulation **(EU) 2022/1157,**
item No. MED/3.51a. SOLAS 74 as amended, Regulation II-2/7 & X/3, 1994 HSC Code 7, 2000 HSC Code 7, FSS Code 9, IMO Res. MSC.302(87), IGF Code 11, IMO MSC.1/Circ.1242, IMO MSC.1/Circ.1487 and MSC.1/Circ.1528
item No. MED/3.51b. SOLAS 74 as amended, Regulation II-2/7 & X/3, 1994 HSC Code 7, 2000 HSC Code 7, FSS Code 9, IGF Code 11, IMO MSC.1/Circ.1242 and IMO MSC.1/Circ.1554

Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2028-06-19**.

Issued at **Høvik** on **2023-06-20**

DNV local unit:
UK & Ireland CMC & VMC

Approval Engineer:
Frode Nygård

Notified Body
No.: **0575**

for **DNV AS**

Sverre Olav Bergli
Head of Notified Body

The mark of conformity may only be affixed to the above type approved equipment and a Manufacturer's Declaration of Conformity issued when the production-surveillance module (D, E or F) of Annex B of the MED is fully complied with and controlled by a written inspection agreement with a Notified Body. The product liability rests with the manufacturer or his representative in accordance with Directive 2014/90/EU.
This certificate is valid for equipment, which is conform to the approved type. The manufacturer shall inform DNV AS of any changes to the approved equipment. This certificate remains valid unless suspended, withdrawn, recalled or cancelled.
Should the specified regulations or standards be amended during the validity of this certificate, the product is to be re-approved before being placed on board a vessel to which the amended regulations or standards apply.

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.

Product description

Power supply equipment for T1306 range of addressable marine fire control panel (AC and DC) with battery boxes and AC/DC Repeaters.

Type	Product No.	Description / Ratings
T1306-DC	557.200.114	Addressable Marine DC panel, 2 loops (Mild metal enclosure - IP 32) Main voltage: 24V DC, -15%/+10%, Maximum current drawn: 10A
T1306-AC	557.200.115	Addressable Marine AC panel, 2 loops (Mild metal enclosure - IP 32) Main voltage: 110/230 V AC Maximum current drawn: 0.8A @240VAC
T1306-RDC	557.200.116	Repeater panel (24VDC) (Mild metal enclosure - IP 32) Main voltage: 18 to 32 VDC Maximum current drawn: 132 mA.
T1306-RAC	557.200.117	Repeater panel (240VAC) (Mild metal enclosure - IP 32) Main voltage: 110/230 V AC, -15%/+10% Maximum current drawn: 0.8A @240VAC
T1306-BBS	557.200.118	Small Battery Box for T1306-DC, T1306-AC, T1306-RAC, 24VDC / 17 Ah
T1306-BBL	557.200.119	Large Battery Box for T1306-DC, T1306-AC, T1306-RAC, 24VDC / 38 Ah
T1306-DC	557.200.120	Console Mounted Repeater (24VDC) (Mild metal enclosure - IP 32) Main voltage: 18 to 32 VDC Maximum current drawn: 132 mA.

Main Controller - Renesas, R5F565NEDDFC#30 (U501)
FW version 1.01
Aux Controller - Microchip, PIC32MX575F512L-80I/PT (U9)
FW version 1.01

Place of manufacture

Tyco Fire & Security Czech Republic s.r.o.
Osvobození 363,
Ráječko, 679 02 Rájec – Jestřebí
Czech Republic

Application/Limitation

Ex-certification is not covered by this certificate. Application in hazardous area to be approved in each case according to Ex-Certification/ Special Condition for Safe Use listed in valid Ex-certificate issued by a notified/recognized Certification Body.

The equipment are found to comply with the following location/application dependent requirements (for definition of each of the location classes, see below the table):

MODEL	TEMPERATURE	VIBRATION	EMC	Enclosures
T1306 range of marine panels	TEM-B	VIB-A	EMC-B	IP 32
T1306-BBS and T1306-BBL Battery boxes	TEM-B	VIB-A	EMC-B	IP 55

Definition of the location classes with reference to relevant standards:

TEM-B:	-25°C to +70°C	*(ref. IEC 60092-504:2016) table 1 item 6-7)*
VIB-A:	General applications	(*ref. IEC 60092-504:2016 table 1 item 10)*
EMC-B:	Bridge and open deck zone	*(ref. IEC 60092-504:2016 table 1 item 13-20)*
ENC-A:	Dry accommodation/control rooms (IP32 / IP55)	(*ref. IEC 60092-201:1994 table 5*)

Type Examination documentation

Tests carried out

Applicable tests according to:
- EN 54-2:1997 incl. AC:1999 and A1:2006
- EN 54-4:1997 incl. AC:1999, A1:2002 and A2:2006
- IEC 60092-504:2016
- IEC 60533:2015

Marking of product

For identification to this type examination certificate the products shall be marked with:
- Manufacturer's name or trade mark
- Type designation
- Mark of Conformity (wheel mark), followed by
    - identification number of the NoBo involved in production control (MED D)
    - the year the mark is affixed
    - Example: 0575/2023