



EC Type Examination Certificate

Notified Body 2843

This is to certify that ABS ITALY S.R.L. did undertake the relevant type approval procedures for the type of equipment identified below which was found to be in compliance with the requirements of Marine Equipment Directive (MED) 2014/90/EU, subject to any conditions in the schedule attached hereto.

ITEM NUMBER:	MED/3.26(a)
IMPLEMENTING REGULATIONS	(EU) 2021/1158
USCG CATEGORY NUMBER	164.138
CERTIFICATE NUMBER:	20-1975897-1-EC1
USCG APPROVAL NUMBER	164.138/EC2843/20-1975897-1-EC1
MANUFACTURER:	HILTI AKTIENGESELLSCHAFT
MANUFACTURER'S LOCATION:	Schaan, Liechtenstein
AUTHORIZED REPRESENTATIVE:	N/A
PRODUCT DESIGNATION:	Penetrations through 'A' Class Divisions - electric cable transits Models: "CFS-T SS", "CFS-T SSF", "CFS-T RR", "CFS-T SSR", "CFS-T SSR/R30", "CFS-T SSRF/R30", "CFS-T RRS", "CFS-T EMC", "CFS-T RR EMC", "CFS-T EX"
STANDARDS AND REGULATIONS:	Regulation II-2/9 of SOLAS 74 as amended IMO Resolution MSC.307(88) – 2010 FTP Code as amended IMO MSC.1/Circ. 1488

THIS CERTIFICATE IS ISSUED IN COMPLIANCE WITH CONFORMITY ASSESSMENT **MODULE B** OF THE REGULATIONS AND DIRECTIVES LISTED

ISSUE DATE: 01 March 2022

EXPIRATION DATE: 17 February 2024

ELECTRONICALLY
SIGNED BY: L. Trevisan

This certificate will not be valid if the manufacturer makes any changes or modifications to the approved type of equipment, which have not been notified to, and agreed with the notified body named on this certificate.

Should the specified regulations or standards be amended during the period of validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on the market and on board vessels to which the amended regulations or standards apply.

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-control phase module (D, E, or F) of ANNEX B of the Directive is fully complied with and controlled by a written inspection agreement with a notified body.

The attached document schedule forms part of this Certificate.

This certificate remains valid unless suspended, expired or withdrawn, provided the conditions in the attached schedule are complied with.

Entry Date:

01 March 2022

**Name of Equipment/
Manufacturer:****HILTI AKTIENGESELLSCHAFT**

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Manufacturer site:

N/A

Authorized representative:

N/A

Equipment/Component:

Multi cable transit systems for A-60 steel or aluminium deck and bulkhead penetrations

Model:

Fire Stops "CFS-T SS", "CFS-T SSF", "CFS-T RR", "CFS-T SSR", "CFS-T, SSR/R30", "CFS-T SSRF/R30", "CFS-T RRS", "CFS-T EMC", "CFS-T RR EMC", "CFS-T EX"

Description:

Modular cable transit system consisting of steel frames or plugs in combination with insert blocks, made of halogen-free elastomeric rubber, as well as compression units and anchor plates.

Steel deck and bulkhead penetration details:

Maximum aperture size of the penetration	297x660 mm	"SS" and "SSF"
	270x584	
	205 mm diameter	"RR"
	103 mm diameter	"RRS"
Maximum combination of transit	Multiple	
Maximum cable size	80 mm diameter	
Degree of filling	Maximum 100%	SS, SSF, SSR, SSR/R30, RR, RRS
Spacing between ducted cables	Min. 4 mm	
Insulation	Paroc Marine Fire Slab 100	
In addition to A-60 Bulkhead insulation	100 mm	RR-50-200, RRS 50-100, SS, SSF, SSR, SSR/R30
In addition to A-60 Deck insulation	60 / 100 mm	SS, SSF, SSR, SSR/R30, RRS 50-100, RR 50-200

Installations are to be in accordance with the test arrangement drawings and as follows: No insulation material between cables is required for installations in accordance with test arrangement drawings contained in test reports ZAG P0474/17-530-2, ZAG P1139/17-530-1, ZAG P1139/17-530-3, ZAG P1139/17-530-2 for steel bulkhead and drawings contained in test report ZAG 0474/17-530-1 for steel deck. For deck penetrations of pipes DN50 and copper pipes DN30, additional pipe insulation of 30/60 mm thickness and 300/400 mm length is to be applied on the fire exposed side and the installation is to be in accordance with test arrangement drawing ZAG 0474/17-530-1.

Intended Service:

Sealing of multi cable penetrations in A-60 class steel decks and bulkheads

Ratings:

Class "A60" bulkhead and deck penetrations. Model SS/SSF 8x1 tested water-tight at a pressure of 4.5 bar and gastight at a pressure of 3 bar. Model SS-2x1 tested water-tight at a pressure of 11 bar and gas tight at a pressure of 7 bar. Filler module 60/0 tested for short term chemical resistance to natural gasoline, acc. to ISO 37 and for air tightness (0.5 bar, 10 min) after storage at -60°C for four days.

Standards:

European Union Marine Equipment Directive 2014/90/EU referencing testing requirement of implementing regulations (EU) 2021/1158.

Regulation II-2/9 of SOLAS 74 as amended
IMO Resolution MSC.307(88) – 2010 FTP Code as amended
IMO MSC.1/Circ. 1488

Service Restrictions/Limitations:

Only to be used in tested configuration as under "Description" above.

Not to be used for penetrations of tank boundaries.

Bundling of cables is not permitted in watertight bulkheads.

Comments:

This certification has been carried out in accordance with above listed standards and is not covering any explosion proof or electro- magnetic compatibility protection properties. Should the specified regulations or standards be amended during the validity of this certificate, the products are to be re-approved prior to being placed on board vessels to which the amended regulations or standards apply.

This certificate will not be valid if the manufacturer makes any changes or modifications to the approved equipment, which have not been notified to, and agreed with the Notified Body named on this certificate.

A Manufacturer's Declaration of Conformity shall be compiled and distributed in line with the requirements of Directive 2014/90/EU Article 16.

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-control phase module (D, E, or F) of ANNEX II of the Directive is fully complied with and controlled by a written inspection agreement with a notified body.

This product has been assigned a U.S. Coast Guard Module B number 164.138/EC2843/20-1975897-1-EC1 to note type approval to Module B only as it pertains to obtaining US Coast Guard approval as allowed by the "Agreement between the European Community and the United States of America on Mutual Recognition of Certificates of Conformity for Marine Equipment" signed February 27th 2004, as amended on Feb 18th, 2019.

Revisions:

Certificate N°. 20-1975897-1-EC1, **replaces Certificate N°.** 20-1975897-EC **Dated:** 20 April 2020.

Drawing Schedule:

Drawing No	Description
19-HG1826648-PDA	ABS Product Design Assessment Certificate
71342881	Atex Certificate
P474-17-530-2	Test report ZAG 09/05/2017
P1139-17-530-1	Test Report ZAG 21/11/2017
P1139-17-530-3	Test report ZAG 21/11/2017
P1139-17-530-2	Test Report ZAG 21/11/2017
19039A	Warrington Test Report 21/06/2018
19040A	Warrington Test Report 21/06/2018
19210A	Warrington Test Report 07/08/2018
CFS-T_RR-D_P	Drawings Bulkhead Pipe
CFS-T_RR-RRS	Drawings Bulkhead
CFS-T_RR_RRS-D	Drawings Deck
CFS-T_SS_SSF_SSR_SSR-R30	Drawings Bulkhead
CFS-T_SS_SSF_SSR_SSR-R30	Drawings Deck
CFS-T_SS_SSF_SSR_SSR-R30	Drawings Deck Pipe
CFS-T_SS_SSF_SSR_SSR-R30	Drawings Bulkhead Pipe
EMC Cable Transit	EMC Brochure
EX Cable Transit	EX Brochure
P474-17-530-1	Test Report ZAG 09/05/2017
P1139-17-530-4	Test Report ZAG 21/11/2017
19041A, 19041B	Warrington Test Report 28/06/2018
CFS-T-291018-01	Test Report Water/Gas Tightness 29/10/2018
CFS-T 8x1_070219	Test Report Water/Gas Tightness 07/02/2019
1	FMEA (PHA)_Frames_(SS SSF RR RRS)
2	FMEA (PHA)_Frames_(EX & EMC)