



Lloyd's
Register

Type Approval Certificate

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

This certificate is issued to:

PRODUCER	Untel Kablolari Makine Osb 6. Cad. D:4, Demirciler Köyü, Dilovası, Kocaeli (İzmit), Turkey
PLACE OF PRODUCTION	Untel Kablolari Makine Osb 6. Cad. D:4, Demirciler Köyü, Dilovası, Kocaeli (İzmit), Turkey
DESCRIPTION	Halogen free, flame retardant, fire resistant or non-fire resistant, XLPE insulated, LSZH-SHF1 sheathed, individually and overall screened or overall screened communication and signal cables.
TYPES	FM2XAAH FM2XAAH-FFR FM2XAH FM2XAH-FFR Conductor: Plain or tinned copper, Class 2 or 5 Insulation: XLPE / HF-90 Outer Sheath: LSZH-SHF1
APPLICATION	Fixed marine installations
Certificate No.	16/00007
Issue Date	25 January 2016
Expiry Date	24 January 2021
Sheet	1 of 3



LR031.1.2013.12

A. Osborne
Marine Technology & Engineering Services, Southampton
Lloyd's Register EMEA

Lloyd's Register EMEA

Southampton Boldrewood Innovation Campus, Burgess Road, Southampton, SO16 7QF

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**SPECIFIED
STANDARDS**

IEC 60092-376: 2013
IEC 60092-351: 2008
IEC 60092-359: 2005
IEC 60092-360: 2014
IEC 61034-1 & 2: 2005
IEC 60754-1 & 2: 2011
IEC 60332-1-2: 2004
IEC 60332-3-22: 2009 CAT A
IEC 60092-376: 2003
IEC 60331-1 & 2: 2009

RATINGS

FM2XAAH (60/250V) and FM2XAAH-FFR (60/250V)

<u>No of Groups</u>	<u>No of Cores</u>	<u>Cross Sect area [mm2]</u>
1	2	0.5, 0.75, 1.0, 1.5,2.5
1	4	0.5, 0.75, 1.0, 1.5,2.5
2	2	0.5, 0.75, 1.0, 1.5,2.5
4	2	0.5, 0.75, 1.0, 1.5,2.5
7	2	0.5, 0.75, 1.0, 1.5,2.5
10	2	0.5, 0.75, 1.0, 1.5,2.5
14	2	0.5, 0.75, 1.0, 1.5,2.5
19	2	0.5, 0.75, 1.0, 1.5,2.5
24	2	0.5, 0.75, 1.0, 1.5,2.5

FM2XAH-FFR (60/250V)

<u>No of Groups</u>	<u>No of Cores</u>	<u>Cross Sect area [mm2]</u>
1	2	0.5, 0.75, 1.0, 1.5,2.5
1	3	0.5, 0.75, 1.0, 1.5,2.5
2	2	0.5, 0.75, 1.0, 1.5,2.5
3	2	0.5, 0.75, 1.0, 1.5,2.5
4	2	0.5, 0.75, 1.0, 1.5,2.5
5	2	0.5, 0.75, 1.0, 1.5,2.5

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MTES Southampton Office
A. Osborne
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RATINGS (CONT.)

FM2XAH (60/250V)

<u>No of Groups</u>	<u>No of Cores</u>	<u>Cross Sect area [mm2]</u>
1	2	0.5, 0.75, 1.0, 1.5,2.5
1	4	0.5, 0.75, 1.0, 1.5,2.5
2	2	0.5, 0.75, 1.0, 1.5,2.5
4	2	0.5, 0.75, 1.0, 1.5,2.5
5	2	0.5, 0.75, 1.0, 1.5,2.5
6	2	0.5, 0.75, 1.0, 1.5,2.5
7	2	0.5, 0.75, 1.0, 1.5,2.5
8	2	0.5, 0.75, 1.0, 1.5,2.5
10	2	0.5, 0.75, 1.0, 1.5,2.5
12	2	0.5, 0.75, 1.0, 1.5,2.5
14	2	0.5, 0.75, 1.0, 1.5,2.5
16	2	0.5, 0.75, 1.0, 1.5,2.5
18	2	0.5, 0.75, 1.0, 1.5,2.5
19	2	0.5, 0.75, 1.0, 1.5,2.5
20	2	0.5, 0.75, 1.0, 1.5,2.5
24	2	0.5, 0.75, 1.0, 1.5,2.5
37	2	0.5, 0.75, 1.0, 1.5,2.5

"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."

The Design Appraisal Document No. 16/00007 and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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