

## 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.

<b>Manufacturer</b>	<b>Untel Kablolari San. ve Tic. A.S.</b>
<b>Address</b>	15 41455 Dilovası, Makine OSB, 6.Cd. No: 4, 23, Karakoy, Kocaeli, Kocaeli, Turkey
<b>Type</b>	Cables Power
<b>Description</b>	Halogen-free, low smoke, flame retardant / fire resistant (suffix -FFR), insulated power cables (0.6/1 kV)
<b>Trade Name</b>	MGG, MGCG, MGH, MGH-FFR, MGCH, MGCH-FFR, MGCH-EMC, M2XH, M2XH-FFR, M2XCH, M2XCH-FFR, M2XCH-EMC, M2X, M2XY-FR, M2XCY-FR
<b>Application</b>	Marine and Offshore applications
<b>Specified Standard</b>	Construction: IEC 60092-350 IEC 60092-353 IEC 60092-360 Amount of halogen acid gas: IEC 60754-1 IEC 60684-2 Halogen-free: IEC 60754-2 Smoke density: IEC 61034-1 IEC 61034-2 Flame retardance: IEC 60332-1-2 IEC 60332-3 Cat. A Fire resistance: IEC 60331-21

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A member of the Lloyd's Register group

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Conductor resistance: IEC 60228  
LR Test Specification No.3: 2020  
Conductor: Plain or tinned copper, Class 2 or 5  
Fire barrier: Mica tape (for -FFR types)  
Insulation: XLPE, EPR, HEPR, HF90  
Outer sheath: SHF1, SHF2, ST2 or SE

**Ratings** Refer to Appendix

**Other Conditions** Cables with ST2 or SE outer sheath are not allowed for installation in passenger ships and in evacuation areas due to release of harmful fumes

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:** 11/00005(E1)

The Design Appraisal Document LR21351483TA and its supplementary Type Approval Terms and Conditions form part of this Certificate.