



TÜRK LOYDU

İKTİSADİ İŞLETMESİ

TYPE APPROVAL CERTIFICATE

Certificate No: TO/DEB/2008-0651/1

This Certificate consist of 2 Pages

This is to certify that the
SHIPBOARD POWER CABLES

With type designations

MGG, MGCG, MGH, MGCH

Manufactured by

ÜNİKA ÜNİVERSAL KABLO SANAYİ VE TİCARET A.Ş.

Is found to comply with
Türk Loydu Rules for the Classification of Steel Ships,
DIN 89158

Application : Power and lighting cables for ships

Design : Voltage class 0.6/1 kV and Temp. class 85°C

Sizes : acc. to DIN 89158

Address of Manufacturer : Çerkezköy - Türkiye

Place and date
İSTANBUL 07.07.2008

**Subject to the conditions referred to 2nd page,
this certificate is valid until 06.07.2013.**

R. Tansel TİMUR
Head Of Marine Division

S. Taner GÜNDÜZ
Surveyor





TÜRK LOYDU

İKTİSADİ İŞLETMESİ

TYPE APPROVAL CERTIFICATE

Certificate No: TO/DEB/2008-0651/2

This Certificate consist of 2 Pages

This is to certify that the

**SHIPBOARD
INSTRUMENTATION, CONTROL AND COMMUNICATION CABLES**

With type designations

FMGCG, FMGCH

Manufactured by

ÜNİKA ÜNİVERSAL KABLO SANAYİ VE TİCARET A.Ş.

Is found to comply with
Türk Loydu Rules for the Classification of Steel Ships,
DIN 89159

Application : General instrumentation, control and communication
cables for ships


Design : Voltage class 250 V and Temp. class 85°C

Sizes : acc. to DIN 89159

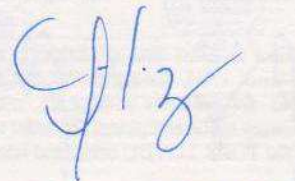
Address of Manufacturer : Çerkezköy - Türkiye

Place and date
İSTANBUL 07.07.2008

Subject to the conditions referred to 2nd page,
this certificate is valid until 06.07.2013.


R. Tansel TİMUR for
Head Of Marine Division




S. Taner GÜNDÜZ
Surveyor

Product description:

Type Designation : FMGCG, FMGCH (con. + ins. + cov. + arm. + she.)

Materials used :

Conductors (con.) : Stranded copper wire

Insulation (ins.) : EPR

Armouring (arm.) : Copper braid

Inner Covering (cov.) : Lapped

Outer Sheath (she.) : SE1 for FMGCG and SHF1 for FMGCH acc. to IEC 60092-359

Application/Limitation(Approval conditions):

Cables with a conductor cross section of 0.75 mm² may only be used for general instrumentation, control and communication with a maximum current consumption of up to 6 ampere.

Type Approval Documentation:

Product test reports

Test carried out(and results):

Type tests according to DIN 89159

Place of test carried out:


ÜNİKA Cable Factory – ÇERKEZKÖY

Marking of product:

ÜNİKA [type] [size] [volt] DIN 89159

Certificate retention survey:

TL surveyor is to be given permission to perform periodical and random product audit for Certification Retention Surveys during the validity period of this certificate.

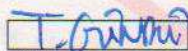




R. Tansel TİMUR
Head Of Marine Division



S. Taner GÜNDÜZ
Surveyor

This certificate is valid if retention/renewal surveys carried out to the satisfaction of TL's surveyor and following entries made:

				
Surveyor	Surveyor	Surveyor	Surveyor	Surveyor
07.2009	07.2010	07.2011	01.2012	-
Survey Date	Survey Date	Survey Date	Survey Date	Survey Date

This certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid. Type Approval Certificate is not valid for equipment, the design or manufacture of which has been varied or modified from the specimen tested. This certificate is not valid for products without TL marking above mentioned. The manufacturer should notify TÜRK LOYDU of any modifications or changes to the equipment in order to obtain valid certificate. This certificate shows that tested specimens, representative of the product complies of the TÜRK LOYDU rules, and relevant international instruments that apply to it.

Product description:

Type Designation : MGG & MGH (con. + ins. + she.)
MGCG & MGCH (con. + ins. + cov. + arm. + she.)

Materials used :
Conductors (con.) : Stranded copper wire
Insulation (ins.) : EPR
Armouring (arm.) : Copper braid
Inner Covering (cov.) : Filled
Outer Sheath (she.) : SE1 for MGG, MGCG and SHF1 for MGH, MGCH acc. to IEC 60092-359

Application/Limitation(Approval conditions):


Type Approval Documentation:
Product test reports


Test carried out(and results):
Type tests according to DIN 89158

Place of test carried out:
ÜNİKA Cable Factory – ÇERKEZKÖY

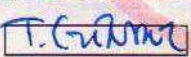


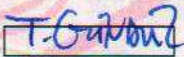
Marking of product:
ÜNİKA [type] [size] [volt] DIN 89158

Certificate retention survey:
TL' surveyor is to be given permission to perform periodical and random product audit for Certification Retention Surveys during the validity period of this certificate.


R. Tansel TIMUR
Head Of Marine Division


S. Taner GÜNDÜZ
Surveyor

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Surveyor	Surveyor	Surveyor	Surveyor	Surveyor
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