

Type Approval Certificate Extension

This is to certify that Certificate No. 03/30028(E1) the undernoted products is extended and renumbered as shown.

This certificate is issued to:

APPLICANT	Kabelbedrijven Draka Nederland B.V. Postbus 1117 1000 BC AMSTERDAM The Netherlands
PLACES OF PRODUCTION	Draka Kabel BV Hamerstraat 2- 4 1021 JV Amsterdam The Netherlands Draka Kabel BV Abel Tasmanstraat 1 7821 AN Emmen The Netherlands
DESCRIPTION	Fire resistant, halogenfree, low smoke, flame retardant power and control cable.
TYPE	HUSK-FR BFXI power cable 0,6/1 kV, stranded circular conductors (class 2 and class 5), XLPE/mica insulated, filler or polyester tape wrapping, SHF1 sheathed. HUSO-FR BIOI power cable 0,6/1 kV, stranded circular conductors (class 2 and class 5), XLPE/mica insulated, filler or polyester tape wrapping, SHF1 inner sheath, armour/screen braiding of plain or tinned copper wires, galvanised steel wires, phosphor bronze wires, SHF1 outer sheathed.
Certificate No.	03/30028(E2)
Issue Date	24 February 2009
Expiry Date	13 November 2013
Sheet	1 of 2

APPLICATION

Fixed wiring on ships and offshore installations.

SPECIFIED STANDARD

IEC 60092-350 ed 3.0/-351 ed 3.0/-353 ed 2.0/-359 ed 1.2
IEC 60332-1, ed 1.0
IEC 60332-3-22, Cat. A , ed 1.0
IEC 60754, ed 2.0
IEC 61034, ed 3.0
IEC 60228, ed 3.0
IEC 60331 part 21 ed 1.0

RATINGS

- Rated voltage 600/1000 V

- Maximum continuous conductor temperature 90°C

<u>Conductor cross section</u>	<u>Number of cores</u>
1,5 - 300 mm ²	1
1,5 - 35 mm ²	2
1,5 - 240 mm ²	3
1,5 - 25 mm ²	4
1,5 - 2,5 mm ²	5 up to 12, 19
1,5 mm ²	16, 24

Note: The class 5/2 conductor is a flexible conductor according to IEC 60228 class 5 but with a conductor resistance according to IEC 60228 class 2.

"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 attached Design Appraisal Document No. ROT.TA.0990321/3 and its supplementary Type Approval Terms and Conditions form part of this Certificate.

All other details remain as the previous Certificate No. 03/30028(E1) to which this extension should be attached.

This certificate is no longer valid when standards or rules are changed.

Certificate No. 03/30028(E2)
Issue Date 24 February 2009
Expiry Date 13 November 2013
Sheet 2 of 2


E.J. Vromans
Type Approval Department
Lloyd's Register EMEA/Rotterdam Office

Type Approval Certificate Extension

This is to certify that Certificate No. 03/30028 the undernoted products is extended and renumbered as shown.

This certificate is issued to:

APPLICANT	DRAKA Marine, Oil & Gas International 1610 Greens Road, Suite 200 Houston, TX 77032 USA
PLACES OF PRODUCTION	Draka Kabel BV Hamerstraat 2- 4 1021 JV Amsterdam The Netherlands Draka Kabel BV Abel Tasmanstraat 1 7821 AN Emmen The Netherlands
DESCRIPTION	Fire resistant, halogenfree, low smoke, flame retardant power and control cable.
TYPE	HUSK-FR BFXI power cable 0,6/1 kV, stranded circular conductors (class 2 and class 5), XLPE/mica insulated, filler or polyester tape wrapping, SHF1 sheathed. HUSO-FR BIOI power cable 0,6/1 kV, stranded circular conductors (class 2 and class 5), XLPE/mica insulated, filler or polyester tape wrapping, SHF1 inner sheath, armour/screen braiding of plain or tinned copper wires, galvanised steel wires, phosphor bronze wires, SHF1 outer sheathed.
Certificate No.	03/30028(E1)
Issue Date	14 November 2005
Expiry Date	13 November 2008
Sheet	1 of 2

APPLICATION Fixed wiring on ships and offshore installations.

SPECIFIED STANDARD IEC 60092-350/-351/-353/-359, ed.2
IEC 60332-1, ed.1
IEC 60332-3-22, Cat. A , ed. 1
IEC 60754, ed.1
IEC 61034, ed.1
IEC 60228, ed.1
IEC 60331 part 21 ed.1

RATINGS - Rated voltage 600/1000 V
- Maximum continuous conductor temperature 90°C

<u>Conductor cross section</u>	<u>Number of cores</u>
1,5 - 300 mm ²	1
1,5 - 35 mm ²	2
1,5 - 240 mm ²	3
1,5 - 25 mm ²	4
1,5 - 2,5 mm ²	5 up to 12, 19
1,5 mm ²	16, 24


Note: The class 5/2 conductor is a flexible conductor according to IEC 60228 class 5 but with a conductor resistance according to IEC 60228 class 2.

"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 attached Design Appraisal Document No. ROT.TA.0590337 and its supplementary Type Approval Terms and Conditions form part of this Certificate.

All other details remain as the previous Certificate No. 03/30028 to which this extension should be attached.

Certificate No. 03/30028(E1)
Issue Date 14 November 2005
Expiry Date 13 November 2008
Sheet 2 of 2


W.J. Dijke
Type Approval Department
Lloyd's Register EMEA/ Rotterdam Office

LR 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 LR Type Approval System.

This certificate is issued to:

PRODUCER	Kabelbedrijven Draka Nederland BV Hamerstraat 2-4 1021 JV Amsterdam The Netherlands
DESCRIPTION	Fire resistant, halogenfree, low smoke, flame retardant power and control cable.
TYPE	HUSK-FR BFXI power cable 0,6/1 kV, XLPE/mica insulated, filler or polyester tape wrapping, SHF1 sheathed. HUSO-FR BIOI power cable 0,6/1 kV, XLPE/mica insulated, filler or polyester tape wrapping, SHF1 inner sheath, tinned copper wire braid, SHF1 outer sheathed.
APPLICATION	Fixed wiring on ships and offshore installations.
SPECIFIED STANDARD	IEC 60092-350/-351/-353/-359, ed.2 IEC 60332-1, ed.1 IEC 60332-3-22, Cat. A , ed. 1 IEC 60754, ed.1 IEC 61034, ed.1 IEC 60228, ed.1 IEC 331 part 21 ed.1
Certificate No.	03/30028
Issue Date	14 November 2003
Expiry Date	13 November 2008
Sheet	1 of 2


G.J. Vromans
Type Approval Department
Rotterdam

RATINGS

- Rated voltage 600/1000 V

- Maximum continuous conductor temperature 85°C

<u>Conductor cross section</u>	<u>Number of cores</u>
1,5 - 300 mm ²	1
1,5 - 35 mm ²	2
1,5 - 240 mm ²	3
1,5 - 25 mm ²	4
1,5 - 2,5 mm ²	5 up to 12, 19
1,5 mm ²	16, 24

"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 LR of any modification or changes to the equipment in order to obtain a valid certificate."

The attached Design Appraisal Document No. ROT.TA/0390316 and its supplementary Type Approval Terms and Conditions form part of this Certificate.

Certificate No. 03/30028
Issue Date 14 November 2003
Expiry Date 13 November 2008
Sheet 2 of 2


G.J. Vromans
Type Approval Department
Rotterdam