



LR Type Approval Certificate Extension

This is to certify that Certificate No. 94/20051 for the undernoted products is extended and renumbered as shown.

PRODUCER

Moeller GmbH
Hein-Moeller-Strasse 7-11
53115 Bonn
Germany

PLACE OF PRODUCTION

Moeller GmbH
Factory Gummersbach
Schemmener Strasse 30
51647 Gummersbach
Germany

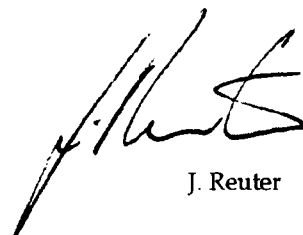
DESCRIPTION

3- and 4-pole contactors without enclosures

TYPES

DIL EEM-10	DIL EEM-10-G
DIL EEM-01	DIL EEM-01-G
DIL EM-10	DIL EM-10-G
DIL EM-01	DIL EM-01-G
DIL EM-4	DIL EM-4-G
02DILEM	02DILE
11DILEM	11DILE
22DILEM	20DILE
	11DDILE
	04DILE
	13DILE
	22DILE
	31DILE
	40DILE
	22DDILE

Certificate No. 94/20051 (E1)
Issue Date 22 May 2000
Expiry Date 21 May 2005
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J. Reuter



Lloyd's Register of Shipping
71 Fenchurch Street, London EC3M 4BS



APPLICATION

Marine, offshore and industrial applications for use in environmental categories ENV1, ENV2 and ENV3 as defined in LR Type Approval System, Test Specification Number 1- 1990, Print Edition 2.

SPECIFIED STANDARD

IEC 60947-4-1 : 1990

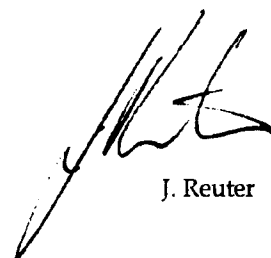
RATINGS

Rated operational voltage: $U_e = 690 \text{ V}$
 Rated impulse withstand voltage: $U_{imp} = 6 \text{ kV}$
 Rated thermal current: $I_{the} = 20 \text{ A}$
 Rated operational frequency: $f = 50/60 \text{ Hz}$
 Utilisation categories: AC 3/AC 4
 Coil operation voltages: AC 12 V - 500 V and DC 12 V - 220 V

DIL EM Type

Operational Voltage U_e/V	Operational Current Utilisation Cat. AC 3 I_e/A	Operational Current Utilisation Cat. AC 4 I_e/A
230	8.8	6.6
400	8.8	6.6
500	6.4	5.0
660	4.8	3.4
690	4.8	3.4

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RATINGS CONTINUED

DIL EEM Type

Operational Voltage U_e/V	Operational Current Utilisation Cat. AC 3 I_e/A	Operational Current Utilisation Cat. AC 4 I_e/A
230	6.6	5.0
400	6.6	5.0
500	5.0	3.7
660	3.5	2.9
690	3.5	2.9

Remarks:

(-G) : d.c. coils

Low temperature of $-25^{\circ}C$ as stated in the catalogue is not supported by documentary evidence.

Contact ratings of the auxiliary contacts are to be obtained from the manufacturer's catalogue.

"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. HPC/HEC 2851-00 and its supplementary Type Approval Terms and Conditions form part of this Certificate.

All other details remain as the previous Certificate No. 94/20051 to which this extension should be attached.

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