

Type Approval Certificate Extension

This is to certify that Certificate No. 04/10006(E1) for the undernoted products is extended and renumbered as shown.

This certificate is issued to:

PRODUCER

Hyundai Heavy Industries Co., Ltd.

Electro Electric Systems

1, Cheonha-Dong, Dong-Ku, Ulsan, 682-792, Korea

PLACE OF

Hyundai Heavy Industries Co., Ltd.

PRODUCTION

Electro Electric Systems

1, Cheonha-Dong, Dong-Ku, Ulsan, 682-792, Korea

Hyundai Heavy Industries (China) Electric Co., Ltd.

No.9 Hyundai Road, Xinba Scientific and Technologic Zone,

Yangzhong, Jiangsu, 212212, China

DESCRIPTION

Magnetic Contactors and Control Relays

TYPE

HiMC, HiMX and HiMT

APPLICATION

Marine, offshore and industrial applications for use in environmental categories ENV1, ENV2 and ENV3 as defined in LR Type Approval Test Specification No. 1 -2002 where the Test

Specification is satisfactory for the intended operation.

DESIGN CODE STANDARD

IEC 60947-1 (2001) IEC 60947-4-1 (2001)

IEC 60947-5-1 (1997)

Certificate No.

04/10006(E2)

Issue Date

28 January 2009

Expiry Date

27 January 2014

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S. Nakauma Yokohama Design Support Office Lloyd's Register

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Lloyd's Register, registered office: 71 Fenchurch Street, London EC3M 4BS

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RATINGS

3 phase, 50/60Hz a.c.

Туре	Operational	Operational	Thermal	Utilisation	Standard/
	Voltage Ue	Current Ie	Current Ith	Category	Remarks
	Į ĮVį	[A]	[A]		
HiMC 9		10 to 7	20		
HiMC 12		10 to 7	20		
HiMC 18		18 to 9	25		
HiMC 22	220 to 690	22 to 18	32	AC3	IEC 60947
HiMC 32		32 to 22	50		
HiMC 40		40 to 26	50		
HiMC 50		50 to 31	70		
HiMC 65		70 to 44	100		
HiMC 80	220 to 690	80 to 52	110	AC3	IEC 60947
HiMC 90		90 to 60	135		
HiMC 110		110 to 65	150		
HiMC 130		130 to 70	160		
HiMC 150		150 to 66	200		
HiMC 180		180 to 78	230		
HiMC 220		220 to 96	260		
HiMC 260	220 to 1000	260 to 113	300	AC3	IEC 60947
HiMC 300		300 to 141	350		
HiMC 400		400 to 178	450		
HiMC 500		500 to 192	550		
HiMC 630		630 to 213	<i>7</i> 50		
HiMC 800		800 to 284	900		
Aux. Circuit	220 to 660	6 to 2	16	AC 15	
For HiMC type					
HiMT22, 31, 40	220 to 660	10 to 2	20	AC 11	with d.c. Coil
HiMX22, 31, 40	220 to 660	10 to 2	20	AC 11	with a.c. Coil

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

The attached Design Appraisal Document No. 04/10006(E2) and its supplementary Type Approval Terms and Conditions form part of this Certificate.

All other details remain as the previous Certificate No. 04/10006(E1) to which this extension should be attached.

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