

Type Approval Certificate Extension

This is to certify that Certificate No. 03/10035(E2) for the undernoted products is extended and renumbered as shown.

This certificate is issued to:

PRODUCER	Hyundai Heavy Industries Co., Ltd.
PLACE OF PRODUCTION	Hyundai Heavy Industries Co., Ltd. Electro Electric Systems 1, Cheonha-Dong, Dong-Ku, Ulsan, 682-792, Korea
DESCRIPTION	Low Voltage Air Circuit Breakers (Not environmentally tested)
TYPE	HiAN08, HiAN12, HiAN16, HiAN20, HiAN25, HiAN32
APPLICATION	Protection and switching of generator and distribution circuits
DESIGN CODE STANDARD	IEC 60947-2; 2001-11 CISPR11, IEC61000-4 - 2, 3, 4, 5

Certificate No.	03/10035(E3)
Issue Date	06 June 2008
Expiry Date	05 June 2013
Sheet	1 of 2



S. Nakauma
Yokohama Design Support Office
Lloyd's Register Asia

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

"Lloyd's Register, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as the 'Lloyd's Register Group'. The Lloyd's Register Group assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register Group entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract."

RATINGS

Alternating Current

Type	Current rating at 45°C (A)	Rated voltage (V)	Breaking current (r.m.s.) I _{cu} =I _{cs} (kA)	Making current (peak asymmetric) I _{cm} (kA)	Power factor	Overcurrent release
HiAN08	800	500	70	154	0.19	Electronic Over-current Protection
HiAN12	1200	500	70	154	0.19	
HiAN16	1600	500	70	154	0.19	
HiAN20	2000	500	70	154	0.17	
HiAN25	2500	500	85	187	0.20	
HiAN32	3200	500	85	187	0.20	

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

The attached Design Appraisal Document No. 03/10035(E3) and its supplementary Type Approval Terms and Conditions form part of this Certificate.

All other details remain as the previous Certificate No. 03/10035(E2) to which this extension should be attached.

Certificate No. 03/10035(E3)

Issue Date 06 June 2008

Expiry Date 05 June 2013

Sheet 2 of 2


S. Nakauma
Yokohama Design Support Office
Lloyd's Register Asia

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

Lloyd's Register, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as the 'Lloyd's Register Group'. The Lloyd's Register Group assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register Group entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.