



ABS

CERTIFICATE NUMBER

03-BK363824/2-PDA

DATE

20 September 2010

ABS TECHNICAL OFFICE

Busan Engineering Services

CERTIFICATE OF DESIGN ASSESSMENT

This is to Certify that a representative of this Bureau did, at the request of
HYUNDAI HEAVY INDUSTRIES CO., LTD. - ULSAN

assess design plans and data for the below listed product. This assessment is a representation by the Bureau as to the degree of compliance the design exhibits with applicable sections of the Rules. This assessment does not waive unit certification or classification procedures required by ABS Rules for products to be installed in ABS classed vessels or facilities. This certificate, by itself, does not reflect that the product is Type Approved. The scope and limitations of this assessment are detailed on the pages attached to this certificate. It will remain valid as noted below or until the Rules or specifications used in the assessment are revised (whichever occurs first).

PRODUCT: Molded Case Circuit Breaker

MODEL: Hi Series & U Series

ABS RULE: 2010 Steel Vessel Rules 1-1-4/7.7 & 4-8-3/5.3.3

OTHER STANDARD: IEC 60947-2 (2001);

AMERICAN BUREAU OF SHIPPING

Jong-Tae Goh

Engineering Type Approval Co-ordinator

AB258(01/10)

NOTE: This certificate evidences compliance with one or more of the Rules, Guides, standards or other criteria of ABS or a statutory, industrial or manufacturer's standards. It is issued solely for the use of ABS, its committees, its clients or other authorized entities. Any significant changes to the aforementioned manufacturing process without approval from ABS will result in this certificate becoming null and void. This certificate is governed by the terms and conditions as contained in ABS Rule 1-1-A3/5.9 Terms and Conditions of the Request for Product Type Approval and Agreement (2010).



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ABS

CERTIFICATE NUMBER

11-BK751313-PDA

ABS TECHNICAL OFFICE

Busan Ship Engineering

DATE

17 May 2011

CERTIFICATE OF DESIGN ASSESSMENT

This is to Certify that a representative of this Bureau did, at the request of
HHI ELECTRO ELECTRIC SYSTEM - ULSAN

assess design plans and data for the below listed product. This assessment is a representation by the Bureau as to the degree of compliance the design exhibits with applicable sections of the Rules. This assessment does not waive unit certification or classification procedures required by ABS Rules for products to be installed in ABS classed vessels or facilities. This certificate, by itself, does not reflect that the product is Type Approved. The scope and limitations of this assessment are detailed on the pages attached to this certificate.

PRODUCT: **Molded Case Circuit Breaker**

MODEL: **UAB50S, UAB50H, UAB100R, UAB100S, UCB100H, UCB100L,
UCB250H, UCB250L**

This Product Design Assessment (PDA) Certificate 11-BK751313-PDA, dated 17/May/2011 remains valid until 16/May/2016 or until the Rules or specifications used in the assessment are revised (whichever occurs first).

This PDA is intended for a product to be installed on an ABS classed vessel, MODU or facility which is in existence or under contract for construction on the date of the ABS Rules or specifications used to evaluate the Product.

Use of the Product on an ABS classed vessel, MODU or facility which is contracted after the validity date of the ABS Rules and specifications used to evaluate the Product, will require re-evaluation of the PDA.

Use of the Product for non ABS classed vessels, MODUs or facilities is to be to an agreement between the manufacturer and intended client.

AMERICAN BUREAU OF SHIPPING

Kyu-Siek Lee

Engineer

AB258(01/10)

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ABS

CERTIFICATE NUMBER

10-BK587577/1-PDA

DATE

18 May 2011

ABS TECHNICAL OFFICE

Busan Engineering Services

CERTIFICATE OF DESIGN ASSESSMENT

This is to Certify that a representative of this Bureau did, at the request of
HHI ELECTRO ELECTRIC SYSTEM - ULSAN

assess design plans and data for the below listed product. This assessment is a representation by the Bureau as to the degree of compliance the design exhibits with applicable sections of the Rules. This assessment does not waive unit certification or classification procedures required by ABS Rules for products to be installed in ABS classed vessels or facilities. This certificate, by itself, does not reflect that the product is Type Approved. The scope and limitations of this assessment are detailed on the pages attached to this certificate.

PRODUCT: Molded Case Circuit Breaker

**MODEL: HiBE 403/603/803, HiBS 403/603/803, HiBH 403/603/803, HiBL
403/603/803, HBD52D, UCB400R/S/H/L, UCB630R/S/H/L,
UCB800R/S/H/L**

This Product Design Assessment (PDA) Certificate 10-BK587577/1-PDA, dated 18/May/2011 remains valid until 17/May/2016 or until the Rules or specifications used in the assessment are revised (whichever occurs first).

This PDA is intended for a product to be installed on an ABS classed vessel, MODU or facility which is in existence or under contract for construction on the date of the ABS Rules or specifications used to evaluate the Product.

Use of the Product on an ABS classed vessel, MODU or facility which is contracted after the validity date of the ABS Rules and specifications used to evaluate the Product, will require re-evaluation of the PDA.

Use of the Product for non ABS classed vessels, MODUs or facilities is to be to an agreement between the manufacturer and intended client.

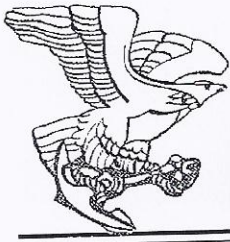
AMERICAN BUREAU OF SHIPPING

Sung-Moon Kim

Engineer

AB258(01/10)

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CERTIFICATE NUMBER

10-BK617828-PDA

DATE

19 August 2010

ABS TECHNICAL OFFICE

Busan Engineering Services

CERTIFICATE OF Design Assessment

This is to Certify that a representative of this Bureau did, at the request of
HYUNDAI HEAVY INDUSTRIES CO., LTD. - ULSAN

assess design plans and data for the below listed product. This assessment is a representation by the Bureau as to the degree of compliance the design exhibits with applicable sections of the Rules. This assessment does not waive unit certification or classification procedures required by ABS Rules for products to be installed in ABS classed vessels or facilities. This certificate, by itself, does not reflect that the product is Type Approved. The scope and limitations of this assessment are detailed on the pages attached to this certificate. It will remain valid as noted below or until the Rules or specifications used in the assessment are revised (whichever occurs first).

PRODUCT: Molded Case Circuit Breaker

MODEL: Hyundai U-Series; UPB100S, UPB100H, UPB100L, UPB100X, UPB250S, UPB250H, UPB250L, UPB250X, UPB400S, UPB400H, UPB400L, UPB400X, UPB630S, UPB630H, UPB630L, UPB630X

ABS RULE: 1-1-4/7.7, 4-1-1/Table 3 & 4-8-3/5.3.3 of the 2010 Steel Vessels Rules and 4-3-4/11.1 of the 2008 MODU Rules

OTHER STANDARD IEC 60947-2;

AMERICAN BUREAU OF SHIPPING

Sung-Moon Kim

Engineering Type Approval Co-ordinator

AB258(01/10)

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