

## **CB TEST** CERTIFICATE

Ref. Certificate No.

NL-18553

## IEC SYSTEM FOR MUTUAL RECOGNITION OF TEST CERTIFICATES FOR ELECTRICAL EQUIPMENT (IECEE) CB SCHEME

Issued by:

KEMA Quality B.V.

Product:

Moulded Case Circuit Breaker

Applicant:

Hyundai Heavy

1, Jeonha-Dong, Dong-

Korea, Republic of

Industries Co. Ltd.

Ku, Ulsan 682-792

Manufacturer:

Hyundai Heavy

1, Jeonha-Dong, Dong-

Korea, Republic of

Industries Co. Ltd.

Ku, Ulsan 682-792

Hyundai Heavy Factory:

Industries Co. Ltd.

1, Jeonha-Dong, Dong-

Korea, Republic of

Ku.

Ulsan 682-792

Rating and principal characteristics:

3 pole MCCB (thermal magnetic)

Uimp= 8 kV Ui = 690 Vac Ue = 440 Vac

In = 15 A, 20 A, 30 A, 40 A, 50 A, 63 A, 80 A,

100 A

Icu = 25 kA at 440 V, 30 kA at 415 V

lcs = 25 % lcu

Rated frequency = 50/60 Hz

Trade mark (if any):

Hyundai

Model/Type reference:

UAB 100 S, UAB 100 R, UAB 100 C, UAB 60 H, UAB 60 S, UAB 60 R, UAB 60 C, UAB 50 H, UAB 50 S, UAB 50 R, UAB 50 C, UAB 30 R, UAB 30 C

Additional information:

Sample of product tested to be in conformity with IEC: 60947-2(ed.4)

Test Report Ref. No:

2126941.52

This CB Test Certificate is issued by the National Certification Body:

KEMA Quality B.V. Utrechtseweg 310 P.O. Box 5185 6802 ED Arnhem The Netherlands

**KEMA** Quality

a DEKRA company

Signed by: A.G.H. Bergervoet

Date of issue: 2010-07-07

1/1



### TEST REPORT IEC 60947-2

# Low-voltage switchgear and controlgear - Part 2: Circuit-breakers

Date of issue ...... 2010-07-06

Total number of pages...... 61

CB Testing Laboratory ...... KEMA Quality B.V.

Address...... Utrechtseweg 310, 6812 AR Arnhem, The Netherlands

Applicant's name ...... Hyundai Heavy Industries Co. Ltd.

Test specification:

Standard ...... IEC 60947-2:2006 (4th Edition)

Test procedure...... CB
Non-standard test method...... N/A

Test Report Form No...... IEC60947\_2E

Test Report Form(s) Originator ......: KEMA

Master TRF...... Dated 2008-12

Copyright © 2008 IEC System for Conformity Testing and Certification of Electrical Equipment (IECEE), Geneva, Switzerland. All rights reserved.

This publication may be reproduced in whole or in part for non-commercial purposes as long as the IECEE is acknowledged as copyright owner and source of the material. IECEE takes no responsibility for and will not assume liability for damages resulting from the reader's interpretation of the reproduced material due to its placement and context.

If this Test Report Form is used by non-IECEE members, the IECEE/IEC logo and the reference to the CB Scheme procedure shall be removed.

This report is not valid as a CB Test Report unless signed by an approved CB Testing Laboratory and appended to a CB Test Certificate issued by an NCB in accordance with IECEE 02:

#### Test item description....:

Trade Mark ..... Hyundai

Manufacturer...... Hyundai Heavy Industries Co. Ltd.

UAB 60 R, UAB 60 C, UAB 50 H, UAB 50 S, UAB 50 R, UAB 50 C,

UAB 30 R. UAB 30 C

Ratings...... le = 15 A, 20 A, 30 A, 40 A, 50 A, 63 A, 80 A, 100 A (UAB 100 S /

UAB 100 R / UAB 100 C)

le = 15 A, 20 A, 30 A, 40 A, 50 A, 63 A (UAB 60 H / UAB 60 S / UAB

60 R / UAB 60 C)

Ie = 15 A, 20 A, 30 A, 40 A, 50 A (UAB 50 H / UAB 50 S / UAB 50 R

/ UAB 50 C)

le = 15 A, 20 A, 30 A (UAB 30 R / UAB 30 C)



## CB TEST CERTIFICATE

Ref. Certificate No.

NL-18861

# IEC SYSTEM FOR MUTUAL RECOGNITION OF TEST CERTIFICATES FOR ELECTRICAL EQUIPMENT (IECEE) CB SCHEME

Issued by:

KEMA Quality B.V.

Product:

MOULDED CASE CIRCUIT BREAKER

Applicant:

Factory:

Manufacturer:

Hyundai Heavy Industries Co. Ltd.

Hyundai Heavy Industries Co. Ltd.

Hyundai Heavy Industries Co. Ltd. 1, Jeonha-Dong,

Dong-Ku, Ulsan, 682-792

1, Jeonha-Dong, Dong-Ku, Ulsan, 682-792

Dong-Ku, Ulsan, 682-78

1, Jeonha-Dong,

Dong-Ku, Ulsan, 682-792

Korea, Republic of

Korea, Republic of

Korea, Republic of

Rating and principal characteristics:

3 pole MCCB (thermal magnetic)

Uimp= 6 kV Ui = 690 Vac Ue = 440 Vac

In = 40 A, 50 A, 63 A, 80 A, 100 A, 125 A

Icu = 50 kA at 440 V Ics = 75 % Icu

Rated frequency = 50/60 Hz

Trade mark (if any):

Hyundai

Model/Type reference:

UCB 100 L, UCB 100 H, UCB 100 V, UCB 100 W, UCB 50 L, UCB 50 H,

UCB 50 V, UCB 50 W.

Additional information:

Sample of product tested to be in conformity with IEC:

60947-2(ed.4);am1

Test Report Ref. No:

2135743.51

This CB Test Certificate is issued by the National Certification Body:

KEMA Quality B.V. Utrechtseweg 310 P.O. Box 5185 6802 ED Arnhem The Netherlands

Signed by: H.R.M. Barends

Date of issue: 2010-08-23

**KEMA** Quality

a DEKRA company



#### TEST REPORT IEC 60947-2

# Low-voltage switchgear and controlgear - Part 2: Circuit-breakers

Report Reference No...... 2135743.51

Date of issue...... 2010-08-16

Total number of pages ...... 54

CB Testing Laboratory..... KEMA Quality B.V.

Address ....... Utrechtseweg 310, 6812 AR Arnhem, The Netherlands

Applicant's name ...... Hyundai Heavy Industries Co. Ltd.

Address ....... 1, Jeonha-Dong, Dong-Ku, Ulsan, Korea, 682-792

Test specification:

Standard ....: IEC 60947-2:2006 (4<sup>th</sup> Edition)

Test procedure ...... CB

Non-standard test method ...... N/A

Test Report Form No...... IEC60947\_2E

Test Report Form(s) Originator ......: KEMA

Master TRF ...... Dated 2008-12

Copyright © 2008 IEC System for Conformity Testing and Certification of Electrical Equipment (IECEE), Geneva, Switzerland. All rights reserved.

This publication may be reproduced in whole or in part for non-commercial purposes as long as the IECEE is acknowledged as copyright owner and source of the material. IECEE takes no responsibility for and will not assume liability for damages resulting from the reader's interpretation of the reproduced material due to its placement and context.

If this Test Report Form is used by non-IECEE members, the IECEE/IEC logo and the reference to the CB Scheme procedure shall be removed.

This report is not valid as a CB Test Report unless signed by an approved CB Testing Laboratory and appended to a CB Test Certificate issued by an NCB in accordance with IECEE 02.

#### Test item description .....:

Trade Mark ..... Hyundai

Manufacturer ...... Hyundai Heavy Industries Co. Ltd.

Model/Type reference...... UCB 100 L, UCB 100 H, UCB 100 V, UCB 100 W,

UCB 50 L, UCB 50 H, UCB 50 V, UCB 50 W

Ratings ...... le = 40 A, 50 A, 63 A, 80 A, 100 A, 125 A

(UCB 100 L, UCB 100 H, UCB 100 V, UCB 100 W)

ie = 40 A, 50 A

(UCB 50 L, UCB 50 H, UCB 50 V, UCB 50 W)