





# **TEST REPORT** IEC 60947-2

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

Report Number....: CN22H288 002

Date of issue....:: 25.09.2022

Total number of pages.....

Name of Testing Laboratory The Low Voltage Apparatus Laboratory of Zhejiang Testing & preparing the Report....:

Inspection Institute for Mechanical and Electrical Products

Quality Co., Ltd. (ZTME)

Applicant's name .....: HIMEL HONG KONG LIMITED

Address....:: 11/F KERRY CTR 683 KING' S RD QUARRY BAY HONG

**KONG** 

Test specification:

Standard....:: IEC 60947-2:2016, AMD1:2019

Test procedure ....:: CB scheme

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

Test Report Form No. ....: IEC60947\_2J

Test Report Form(s) Originator ....: DEKRA Certification B.V.

Master TRF.....: Dated 2020-03-31

Copyright © 2020 IEC System of Conformity Assessment Schemes for Electrotechnical Equipment and Components (IECEE System). 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.

#### General disclaimer:

The test results presented in this report relate only to the object tested.

This report shall not be reproduced, except in full, without the written approval of the Issuing CB Testing Laboratory. The authenticity of this Test Report and its contents can be verified by contacting the NCB, responsible for this Test Report.

Test	item description:	Moulded Ca	se Circuit Breaker					
Trade Mark(s):		A Minustra						
Manı	ıfacturer:	DELIXI ELEC	DELIXI ELECTRIC LTD					
	el/Type reference:	HDM3E-630I	M, HDM3E-630H, HDM3E-80	00M, HDM3E-800H				
Ratir	Ratings							
Resp	onsible Testing Laboratory (as	applicable), to	esting procedure and testing	ng location(s):				
	CB Testing Laboratory:		The Low Voltage Apparatu Testing & Inspection Insti- Electrical Products Quality	tute for Mechanical and				
Testi	ng location/ address	:	Electrical Products Quality Co., Ltd.(ZTME)  No 125 Miaohouwang Road Binjiang District Hangzhou, Zhejiang CHINA  Long Xi(Test Engineer)  Ma Lin(Approver)  Main					
Test	ed by (name, function, signature	):	Long Xi(Test Engineer)	Longxi				
Appr	oved by (name, function, signat	ure) :	Ma Lin(Approver)	Malin				
	Testing procedure: CTF Stage	1:						
Testi	ng location/ address	:						
Test	ed by (name, function, signature	):						
Appr	oved by (name, function, signat	ure) :						
	Testing procedure: CTF Stage 2	2:						
Testi	ng location/ address	:						
Test	ed by (name + signature)	:						
Witn	essed by (name, function, signa	ture).:						
Appr	oved by (name, function, signat	ure) :						
	Testing procedure: CTF Stage 3	3:						
☐ Testing procedure: CTF Stage 4:								
Testing location/ address:								
Tested by (name, function, signature):								
Witnessed by (name, function, signature).:								
Appr	oved by (name, function, signat	ure) :						
Supe	ervised by (name, function, signa	ature) :						

List of A	Attachments	(including a total	number	of pages	in each	attachment)
N/A						

#### Summary of testing:

The products MCCB HDM3 series are series product with several frame sizes – HDM3E-125M frame size, HDM3E-250M frame size, HDM3E-400 frame size, HDM3E-630 frame size and HDM3E-800 frame size.

This report is issued to add additional types: HDM3E-125M, HDM3E-250M, HDM3E-400M, HDM3E-630M, HDM3E-800M based on CB report CN22H288 001 and issued CB certificate HU-004081, dated on 01.09.2022.

#### The ratings of HDM3E-125M frame size see below:

Туре	Num. of Poles	Ue(V)	In(A)	Icu(kA)	Ics(kA)	Icw(kA)
HDM3E- 125M	3P or 4P(3P+N)	AC 400/415V	32/63/100/125	50	50	100/125A: 2,5kA/1s, 63A: 1kA/1s, 32A: 0,5kA/1s, specified by manufacturer
		AC690V	32/63/100/125	20	10	-

#### The ratings of HDM3E-250M frame size see below:

Туре	Num. of Poles	Ue(V)	In(A)	Icu(kA)	Ics(kA)	Icw(kA)
HDM3E- 250M	3P,3P+N or 4P	AC 400/415V	160/250	50	50	3kA/1s, specified by manufacturer
		AC690V		20	10	-

## The ratings of HDM3E-400M frame size see below:

Туре	Num. of Poles	Ue(V)	In(A)	Icu(kA)	Ics(kA)	Icw(kA)
HDM3E- 400M	3P,3P+N or 4P	AC 400/415V	400	50	50	5kA/1s
HDM3E- 400H	3P,3P+N or 4P	AC 400/415V	400	85	65	
		AC690V	400	20	15	

## The ratings of HDM3E-630M frame size see below:

TRF No. IEC60947\_2J

Туре	Num. of Poles	Ue(V)	In(A)	Icu(kA)	Ics(kA)	Icw(kA)
HDM3E- 630M	3P,3P+N or 4P	AC 400/415V	630	50	50	8kA/1s
HDM3E- 630H	3P,3P+N or 4P	AC 400/415V	630	85	65	
		AC690V	630	20	15	

#### The ratings of HDM3E-800M frame size see below:

Туре	Num. of Poles	Ue(V)	In(A)	Icu(kA)	Ics(kA)	Icw(kA)
HDM3E- 800M	3P,3P+N or 4P	AC 400/415V	800	50	50	10kA/1s
HDM3E- 800H	3P,3P+N or 4P	AC 400/415V	800	85	65	
		AC690V	800	30	20	

All type tests were tested refer to CB test report CN22H288 001 which could cover the MCCB HDM3E-125M, HDM3E-250M, HDM3E-400M, HDM3E-400H, HDM3E-630M, HDM3E-630H, HDM3E-800M, HDM3E-800H.

The special rating – Reference Temperature is  $+40^{\circ}$ C or  $+50^{\circ}$ C declared by the manufacture, and for the electronic release MCCB HDM3E series, the tripping limits test was independent on the reference temperature.

All applicable tests were performed and the test items passed the specifications.

This test report is based on and only valid together with the following CB test reports:

CN222SBH 002 / evaluation of standard IEC 60947-2 (ed. 5.1) (testing of HDM3E-125M)

CN22O0IG 002 / evaluation of standard IEC 60947-2 (ed. 5.1) (testing of HDM3E-250M)

CN22S70X 002 / evaluation of standard IEC 60947-2 (ed. 5.1) (testing of HDM3E-400M...H)

CN22ZHM4 002 / evaluation of standard IEC 60947-2 (ed. 5.1) (testing of HDM3E-630M...H)

CN22FB0M 002 / evaluation of standard IEC 60947-2 (ed. 5.1) (testing of HDM3E-800M...H)

## **END of SUMMARY TEST REPORT**