Test Report issued under the responsibility of:

TÜVRheinland®

TEST REPORT
IEC 60947-6-1
Low-voltage switchgear and controlgear
Part 6-1: Multiple function equipment – Transfer switching equipment

Report Number.....:	**CN26QF8S 002**
Date of issue .....:	**23.03.2026**
Total number of pages.....:	**7**
Name of Testing Laboratory preparing the Report.....:	Hunan Electric Research Institute Testing Group Co., Ltd.
Applicant's name .....:	HIMEL HONG KONG LIMITED
Address .....:	11/F KERRY CTR, 683 KING'S RD QUARRY BAY, HONG KONG
Test specification:	
Standard.....:	IEC 60947-6-1:2021 for use in conjunction with IEC 60947-1:2020
Test procedure.....:	CB Scheme
Non-standard test method.....:	N/A
TRF template used.....:	IECEE OD-2020-F1:2021, Ed.1.4
Test Report Form No. .....:	IEC60947_6_1D
Test Report Form(s) Originator....:	SGS Fimko Ltd
Master TRF .....:	Dated 2021-11-01

This report is not valid as a CB Test Report unless signed by an approved IECEE 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 NCB. The authenticity of this Test Report and its contents can be verified by contacting the NCB, responsible for this Test Report.

Test item description..... :	Automatic Transfer Switching Equipment
Trade Mark(s)..... :	Himel
Manufacturer..... :	DELIXI ELECTRIC LTD
Model/Type reference..... :	HDQ1S-100/160/250/800/1600/3200
Ratings..... :	Ue: AC230V(2P), AC400V(3P/4P), 50, 50/60Hz; Class PC; AC-32B, AC-33B

Responsible Testing Laboratory (as applicable), testing procedure and testing location(s):			
☒	**CB Testing Laboratory:**	**Hunan Electric Research Institute Testing Group Co., Ltd.**	
Testing location/ address.....:		**199 Xinxiangxi Road, Kunlunqiao Subdistrict, Xiangxiang City Xiangtan City Hunan Province China**	
Tested by (name, function, signature).....:		Jiang Wu, Test Engineer	Wu Jiang
Approved by (name, function, signature)...:		Bin Li, Approver	Li Bin
☐	**Testing procedure: CTF Stage 1:**		
Testing location/ address.....:			
Tested by (name, function, signature).....:			
Approved by (name, function, signature)...:			
☐	**Testing procedure: CTF Stage 2:**		
Testing location/ address.....:			
Tested by (name + signature) .....:			
Witnessed by (name, function, signature)..:			
Approved by (name, function, signature)...:			
☐	**Testing procedure: CTF Stage 3:**		
☐	**Testing procedure: CTF Stage 4:**		
Testing location/ address.....:			
Tested by (name, function, signature).....:			
Witnessed by (name, function, signature)..:			
Approved by (name, function, signature)...:			
Supervised by (name, function, signature) :			

Summary of testing:

The products of HDQ1S are a series of ATSE with several frame size: 100/160/250/800/1600/3200.

All tests passed.

Model designation:

HDQ1S – 100 * * * *
1 2 3 4 5

1. Frame size rating current(A)
2. Number of poles: 2, 3, 4
3. Rated current without A
4. Controller type: Basic type: P; LED type: G; LCD type: D
5. Power top supply: U; Power bottom supply: D

HDQ1S-100

Type designation	HDQ1S-100		
Utilization categories	AC-32B, AC-33B		
Conventional free air thermal current of frame size	100A		
Rated operational current	16A,20A,25A,32A,40A,50A,63A,80A,100A (AC-32B); 16A,20A,25A,32A,40A,50A,63A (AC-33B)		
Number of poles	2P	3P	4P
Number of protection pole	1	3	3
Rated operational voltage	AC230V(2P), AC400V(3P,4P)		
Nature of supply	AC		
Rated insulation voltage	800V		
Rated impulse withstand voltage	8kV		
Rated frequency	50Hz, 50/60Hz		
Rated short-circuit withstand current	5kA/30ms		
Rated short-circuit making capacity	7,65kA		
Electromagnetic compatibility (EMC) Environment A or B	Environment B		
Suitability for isolation	TSE suitable for isolation in the OFF position		
Transfer switching characteristics	Class PC		
The method of controlling the transfer	Automatic transfer switching equipment (ATSE)		
The number of main contact positions	TSE with three positions (position I-OFF position-position II)		
The transition type	Open transition		
Type of interlock	Electrical-and-Mechanical		

HDQ1S-160

Type designation	HDQ1S-160		
Utilization categories	AC-32B, AC-33B		
Conventional free air thermal current of frame size	160A		
Rated operational current	100A, 125A, 140A, 160A (AC-32B); 63A, 125A (AC-33B)		
Number of poles	2P	3P	4P
Number of protection pole	1	3	3
Rated operational voltage	AC230V(2P), AC400V(3P,4P)		
Nature of supply	AC		
Rated insulation voltage	800V		
Rated impulse withstand voltage	8kV		
Rated frequency	50Hz, 50/60Hz		
Rated short-circuit withstand current	10kA/30ms		
Rated short-circuit making capacity	17kA		
Electromagnetic compatibility (EMC) Environment A or B	Environment B		
Suitability for isolation	TSE suitable for isolation in the OFF position		
Transfer switching characteristics	Class PC		
The method of controlling the transfer	Automatic transfer switching equipment (ATSE)		
The number of main contact positions	TSE with three positions (position I-OFF position-position II)		
The transition type	Open transition		
Type of interlock	Electrical-and-Mechanical		

HDQ1S-250

Type designation	HDQ1S-250		
Utilization categories	AC-32B, AC-33B		
Conventional free air thermal current of frame size	250A		
Rated operational current	160A, 180A, 200A, 225A, 250A (AC-32B); 125A (AC-33B)		
Number of poles	2P	3P	4P
Number of protection pole	1	3	3
Rated operational voltage	AC230V(2P), AC400V(3P,4P)		

Nature of supply	AC
Rated insulation voltage	800V
Rated impulse withstand voltage	8kV
Rated frequency	50Hz, 50/60Hz
Rated short-circuit withstand current	10kA/30ms
Rated short-circuit making capacity	17kA
Electromagnetic compatibility (EMC) Environment A or B	Environment B
Suitability for isolation	TSE suitable for isolation in the OFF position
Transfer switching characteristics	Class PC
The method of controlling the transfer	Automatic transfer switching equipment (ATSE)
The number of main contact positions	TSE with three positions (position I-OFF position-position II)
The transition type	Open transition
Type of interlock	Electrical-and-Mechanical

HDQ1S-800

Type designation	HDQ1S-800	
Utilization categories	AC-32B, AC-33B	
Conventional free air thermal current of frame size	800A	
Rated operational current	315A,350A,400A,500A,630A,700A,800A (AC-32B); 160A,200A,250A,315A (AC-33B)	
Number of poles	3P	4P
Number of protection pole	3	3
Rated operational voltage	AC400V(3P,4P)	
Nature of supply	AC	
Rated insulation voltage	800V	
Rated impulse withstand voltage	8kV	
Rated frequency	50Hz, 50/60Hz	
Rated short-circuit withstand current	16kA/60ms	
Rated short-circuit making capacity	32kA	
Electromagnetic compatibility (EMC) Environment A or B	Environment B	
Suitability for isolation	TSE suitable for isolation in the OFF position	
Transfer switching characteristics	Class PC	

The method of controlling the transfer	Automatic transfer switching equipment (ATSE)
The number of main contact positions	TSE with three positions (position I-OFF position-position II)
The transition type	Open transition
Type of interlock	Electrical-and-Mechanical

HDQ1S-1600

Type designation	HDQ1S-1600	
Utilization categories	AC-32B, AC-33B	
Conventional free air thermal current of frame size	Ith:1000A(Ie:630A,700A,800A,1000A); Ith:1250A(Ie:1250A); Ith:1600A(Ie:1600A)	
Rated operational current	630A,700A,800A,1000A,1250A,1600A(AC-32B); 400A,500A,630A,800A(AC-33B)	
Number of poles	3P	4P
Number of protection pole	3	3
Rated operational voltage	AC400V(3P,4P)	
Nature of supply	AC	
Rated insulation voltage	1000V	
Rated impulse withstand voltage	12kV	
Rated frequency	50Hz, 50/60Hz	
Rated short-circuit withstand current	32kA/60ms	
Rated short-circuit making capacity	67,2kA	
Electromagnetic compatibility (EMC) Environment A or B	Environment B	
Suitability for isolation	TSE suitable for isolation in the OFF position	
Transfer switching characteristics	Class PC	
The method of controlling the transfer	Automatic transfer switching equipment (ATSE)	
The number of main contact positions	TSE with three positions (position I-OFF position-position II)	
The transition type	Open transition	
Type of interlock	Electrical-and-Mechanical	

HDQ1S-3200

Type designation	HDQ1S-3200

Utilization categories	AC-32B, AC-33B	
Conventional free air thermal current of frame size	2000A, 2500A, 3200A	
Rated operational current	2000A,2500A,3200A(AC-32B); 1000A,1250A,1600A(AC-33B)	
Number of poles	3P	4P
Number of protection pole	3	3
Rated operational voltage	AC400V(3P,4P)	
Nature of supply	AC	
Rated insulation voltage	1000V	
Rated impulse withstand voltage	12kV	
Rated frequency	50Hz, 50/60Hz	
Rated short-circuit withstand current	50kA/60ms	
Rated short-circuit making capacity	105kA	
Electromagnetic compatibility (EMC) Environment A or B	Environment B	
Suitability for isolation	TSE suitable for isolation in the OFF position	
Transfer switching characteristics	Class PC	
The method of controlling the transfer	Automatic transfer switching equipment (ATSE)	
The number of main contact positions	TSE with three positions (position I-OFF position-position II)	
The transition type	Open transition	
Type of interlock	Electrical-and-Mechanical	

The referred CB Test Report is based on and only valid together with the following CB test reports:
CN26ZKJ6 002 / evaluation of standard IEC 60947-6-1 (ed. 3.0) (testing of HDQ1S-100)
CN26WCV3 002 / evaluation of standard IEC 60947-6-1 (ed. 3.0) (testing of HDQ1S-160)
CN26UZ35 002 / evaluation of standard IEC 60947-6-1 (ed. 3.0) (testing of HDQ1S-250)
CN263EDG 002 / evaluation of standard IEC 60947-6-1 (ed. 3.0) (testing of HDQ1S-800)
CN26CVGT 002 / evaluation of standard IEC 60947-6-1 (ed. 3.0) (testing of HDQ1S-1600)
CN26J4PP 002 / evaluation of standard IEC 60947-6-1 (ed. 3.0) (testing of HDQ1S-3200)