



缆慧检测



中国认可
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检测
TESTING
CNAS L9930

Report No.: TN20-1713E

Sample No.: CN19-4674

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Contract No.: ISTCW19-2282

Test Report

Consigner SHENZHEN WOER HEAT-SHRINKABLE MATERIAL CO., LTD.
Wall Industrial Park, Lanjing North Road, Longtian Street, Pingshan District, SHENZHEN

Sample Name Copper Connecting Terminal

Type and Size DTM-400mm²

Kind of test Type test

Sample Received Date December 26th, 2019

Test Duration December 26th, 2019 — June 12th, 2020

Test Conclusion
1. The samples have been subjected to the series tests in accordance with GB/T 9327—2008. The results comply with the type tests requirements (Class A) of GB/T 9327—2008.
2. The surface and dimension of the sample has been tested according to GB/T 14315—2008. The results comply with the requirements of GB/T 14315—2008.

Authorized by
Shanghai Intelligent Service and Technology Co., Ltd.

李骥 Li Ji

Issue date

2020-06-17

Testing Engineer: 贾欣 Jia Xin

Genuine statement: This test report is only valid for the tested sample. Disclaimer: For the information provided by the consigner, ISTCW asserts that we can not be held responsible for its authenticity and consequences. This test report is only valid in paper version with authorized signature, issue date and dedicated inspection stamp of our company. Without the written permission of ISTCW, the test report shall be reproduced in full. Its electronic version (such as PDF format or scanned version) is allowed to use, whatever with "only for information". If the consigner has any objection to the test report, the consigner shall submit it to ISTCW in writing within 15 days after receiving the report.

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DTM-400mm ²

1 Sample Description

Manufacturer	SHENZHEN WOER HEAT-SHRINKABLE MATERIAL CO., LTD. Wall Industrial Park, Lanjing North Road, Longtian Street, Pingshan District, SHENZHEN
Type and Size	DTM-400mm ²
Quantity	10 sets
Marking	WORE DTM-400mm ²
Color	/
Source	Sent by the consigner
Status	Normal appearance

2 Testing and Verdict Standards

2.1 Testing Standards

- 1) GB/T 9327—2008 Compression and mechanical connectors for power cables for rated voltages up to 35kV ($U_m=40.5kV$) — Test methods and requirements
- 2) IEC 61238—1—3: 2018 Compression and mechanical connectors for power cables — Part 1—3: Test methods and requirements for compression and mechanical connectors for power cables for rated voltages above 1kV ($U_m=1.2kV$) up to 30kV ($U_m=36kV$) tested on non-insulated conductors
- 3) GB/T 14315—2008 Compression type terminal lugs and ferrules with copper or aluminum for power cables conductors

2.2 Verdict Standards

- 1) GB/T 9327—2008 Compression and mechanical connectors for power cables for rated voltages up to 35kV ($U_m=40.5kV$) — Test methods and requirements
- 2) GB/T 14315—2008 Compression type terminal lugs and ferrules with copper or aluminum for power cables conductors

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3 Other Information

3.1 Description of the testing party

This report is the English version of test report of TN20-1713, the Chinese version shall prevail if any inconsistencies between Chinese version and English version.

3.2 Illustration

- 1) The sample's name, type and manufacturer are provided by the consigner.
- 2) The connecting terminals are tested altogether, including the cylinder part and the connecting plate.
- 3) The short-circuit test is subcontracted, because this test is not included in our testing scope approved by CNAS and CMA. The subcontractor is Machinery Industry High-voltage Transmission and Distribution Equipment Quality Inspection & Testing Center. The certificate number of CNAS for the center is CNAS L2550 and the qualification certificate number of CMA for the center is 160008223396, the short-circuit test report number is No.20200035B.
- 4) The short-circuit test was carried out with Sample No. CN19-4678 at the same time.

3.3 Testing Location

The all testing items are tested at No.458, Haixiang Road, Fengxian Area, Shanghai, China, except the subcontracted testing item.

- Heat cycle tests and electrical resistance measurements in electrical test;
- Mechanical test, Surface and dimension check.

3.4 Symbol definition

Requirement: / not required by standard

Verdict: P complying with requirement/Pass

F not complying with requirement/Fail

N not required

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4 Test Item

4.1 Electrical Test

4.1.1 The 1st electrical resistance measurement (before the 1st heat cycle test)

According to GB/T 9327—2008, clause 6.3.3.

Test method: GB/T 9327—2008, clause 6.2

Test parameters

Ambient temperature: 17 °C

Measurement Item	Unit	Measurement Results						
		Reference conductor	Connecting Terminal					
			1#	2#	3#	4#	5#	6#
Electrical resistance (20°C)								
- Between the two equalizers	mΩ	0.0214	/	/	/	/	/	/
- Equalizer—Terminal top	mΩ	/	0.0195	0.0201	0.0220	0.0211	0.0194	0.0199
- Connecting terminal	mΩ	/	0.00593	0.00656	0.00833	0.00732	0.00586	0.00617

Test Item	Unit	Requirement	Test Results						Verdict
			1#	2#	3#	4#	5#	6#	
Resistance factor k - before the 1st heat cycle	/	/	0.788	0.876	1.120	0.978	0.783	0.824	N
Initial scatter δ - initial scatter	/	≤0.30	0.24						P

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4.1.2 The 1st heat cycle test

According to GB/T 9327—2008, clause 6.3.1.

Test method: GB/T 9327—2008, clause 6.3.1

Test parameters

Ambient temperature: 18 °C

Required reference conductor temperature (°C)	Reference conductor temperature (°C)	Heat current for steady reference conductor temperature (A)	Median connecting terminal temperature (°C)
120~140	120	1160	113

Test Results	The test is finished successfully. The 1st heat cycle temperature curve is shown in Figure 1.
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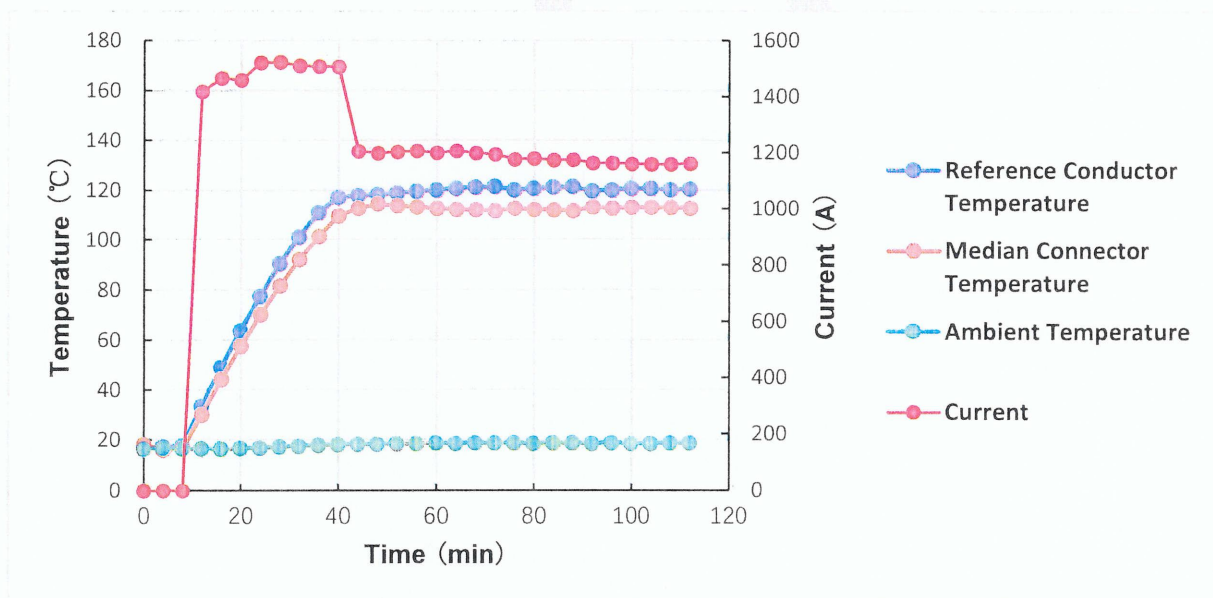


Figure 1 1st heat cycle temperature curve

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4.1.3 The 2nd heat cycle test

According to GB/T 9327—2008, clause 6.3.2.

Test method: GB/T 9327—2008, clause 6.3.2

Test parameters

Ambient temperature: 16 °C

Required reference conductor steady temperature (°C)	Heat current for steady reference conductor temperature (A)	Reference conductor temperature (°C)	Median connecting terminal		Heat cycle time	
			Steady temperature (°C)	Steady time (min)	Heating time (min)	Cooling time (min)
120~126	1160	120~124	113~115	12	56	80

Test Results	The test is finished successfully. The 2nd heat cycle temperature curve is shown in Figure 2.
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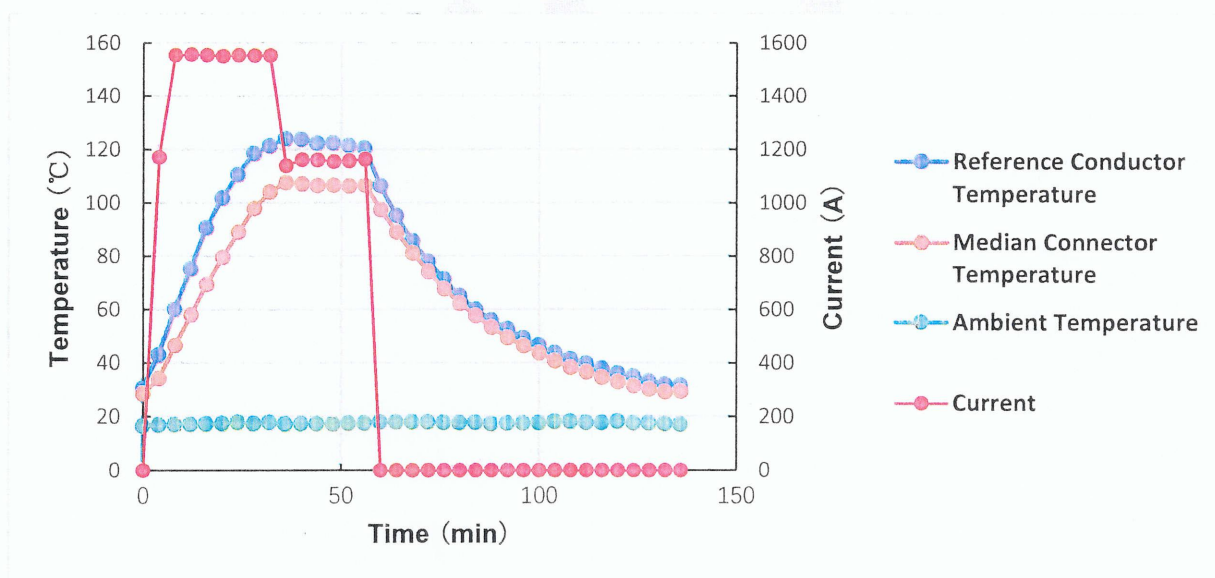


Figure 2 2nd heat cycle temperature curve

The following heat cycle according to the heating current and time.

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4.1.4 The 2nd electrical resistance measurement (after the 200th heat cycle, before short-circuit)

According to GB/T 9327—2008, clause 6.3.3.

Test method: GB/T 9327—2008, clause 6.2

Test parameters

Ambient temperature: 17 °C

Measurement Item	Unit	Measurement Results						
		Reference conductor	Connecting Terminal					
			1#	2#	3#	4#	5#	6#
Electrical resistance (20°C)								
- Between the two equalizers	mΩ	0.0216	/	/	/	/	/	/
- Equalizer—Terminal top	mΩ	/	0.0203	0.0201	0.0229	0.0214	0.0193	0.0206
- Connecting terminal	mΩ	/	0.00662	0.00646	0.00924	0.00751	0.00564	0.00671

Test Item	Unit	Requirement	Test Results						Verdict
			1#	2#	3#	4#	5#	6#	
Resistance factor k - After the 200th heat cycle (before short-circuit)	/	/	0.873	0.857	1.234	0.997	0.749	0.891	N
Resistance factor ration λ - Resistance factor ration λ ₁	/	≤2.0	1.1	1.0	1.1	1.0	1.0	1.1	P

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4.1.5 Short-circuit test

According to GB/T 9327—2008, clause 6.3.4.

Test method: GB/T 9327—2008, clause 6.3.4

Test parameters

Ambient temperature: 15 °C

Required short-circuit current: 37.4 (kA) Duration: 4(s)		Short-circuit	Short-circuit current valid value (kA)	Duration (s)
Current applied	Short-circuit mode	1st	37.7	4.01
Conductor and Connecting Terminal	1 phase	2nd	37.7	4.01
		3rd	37.8	4.02
		4th	37.8	4.01
		5th	37.8	4.01
		6th	37.8	4.02

Test Item	Requirement	Test Result	Verdict
Short-circuit test	/	There is no any sign of damage or deformation for the samples. The waveform and duration of short-circuit are shown in subcontractor test report.	N

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4.1.6 The 3rd electrical resistance measurement (after the 200th heat cycle, after short-circuit test)

According to GB/T 9327—2008 clause 6.3.3.

Test method: GB/T 9327—2008, clause 6.2

Test parameters

Ambient temperature: 17 °C

Measurement Item	Unit	Measurement Results						
		Reference conductor	Connecting Terminal					
			1#	2#	3#	4#	5#	6#
Electrical resistance (20°C)								
- Between the two equalizers	mΩ	0.0216	/	/	/	/	/	/
- Equalizer—Terminal top	mΩ	/	0.0199	0.0200	0.0227	0.0215	0.0198	0.0205
- Connecting terminal	mΩ	/	0.00622	0.00631	0.00901	0.00764	0.00619	0.00664

Test Item	Unit	Requirement	Test Results						Verdict
			1#	2#	3#	4#	5#	6#	
Resistance factor k - After the 200th heat cycle (after short-circuit)	/	/	0.819	0.835	1.201	1.012	0.820	0.879	N
Resistance factor ration λ - Resistance factor ration λ ₂	/	≤2.0	1.0	1.0	1.1	1.0	1.0	1.1	P

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4.1.7 The 4th electrical resistance measurement (after 250th heat cycle)

According to GB/T 9327—2008 clause 6.3.3.

Test method: GB/T 9327—2008, clause 6.2

Test parameters

Ambient temperature: 16 °C

Measurement Item	Unit	Measurement Results						
		Reference conductor	Connecting Terminal					
			1#	2#	3#	4#	5#	6#
Electrical resistance (20°C)								
- Between the two equalizers	mΩ	0.0217	/	/	/	/	/	/
- Equalizer—Terminal top	mΩ	/	0.0200	0.0200	0.0225	0.0216	0.0197	0.0206
- Connecting terminal	mΩ	/	0.00628	0.00627	0.00875	0.00772	0.00606	0.00667

Test Item	Unit	Requirement	Test Results						Verdict
			1#	2#	3#	4#	5#	6#	
Resistance factor k - After the 250th heat cycle	/	/	0.825	0.828	1.163	1.020	0.801	0.881	N
Resistance factor ration λ - Resistance factor ration λ ₃	/	≤2.0	1.0	0.9	1.0	1.0	1.0	1.1	P

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4.1.8 The 5th electrical resistance measurement (after the 325th heat cycle)

According to GB/T 9327—2008 clause 6.3.3.

Test method: GB/T 9327—2008, clause 6.2

Test parameters

Ambient temperature: 19 °C

Measurement Item	Unit	Measurement Results						
		Reference conductor	Connecting Terminal					
			1#	2#	3#	4#	5#	6#
Electrical resistance (20°C)								
- Between the two equalizers	mΩ	0.0216	/	/	/	/	/	/
- Equalizer—Terminal top	mΩ	/	0.0200	0.0200	0.0226	0.0217	0.0195	0.0208
- Connecting terminal	mΩ	/	0.00628	0.00635	0.00892	0.00781	0.00585	0.00690

Test Item	Unit	Requirement	Test Results						Verdict
			1#	2#	3#	4#	5#	6#	
Resistance factor k - After the 325th heat cycle	/	/	0.828	0.842	1.191	1.036	0.776	0.916	N
Resistance factor ration λ - Resistance factor ration λ ₄	/	≤2.0	1.1	1.0	1.1	1.1	1.0	1.1	P

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4.1.9 The 6th electrical resistance measurement (after the 400th heat cycle)

According to GB/T 9327—2008 clause 6.3.3.

Test method: GB/T 9327—2008, clause 6.2

Test parameters

Ambient temperature: 16 °C

Measurement Item	Unit	Measurement Results						
		Reference conductor	Connecting Terminal					
			1#	2#	3#	4#	5#	6#
Electrical resistance (20°C)								
- Between the two equalizers	mΩ	0.0215	/	/	/	/	/	/
- Equalizer—Terminal top	mΩ	/	0.0199	0.0197	0.0225	0.0216	0.0199	0.0204
- Connecting terminal	mΩ	/	0.00626	0.00615	0.00887	0.00779	0.00638	0.00656

Test Item	Unit	Requirement	Test Results						Verdict
			1#	2#	3#	4#	5#	6#	
Resistance factor k - After the 400th heat cycle	/	/	0.830	0.819	1.188	1.039	0.850	0.874	N
Resistance factor ratio λ - Resistance factor ratio λ ₅	/	≤2.0	1.1	0.9	1.1	1.1	1.1	1.1	P

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4.1.10 The 7th electrical resistance measurement (after the 475th heat cycle)

According to GB/T 9327—2008 clause 6.3.3.

Test method: GB/T 9327—2008, clause 6.2

Test parameters

Ambient temperature: 18 °C

Measurement Item	Unit	Measurement Results						
		Reference conductor	Connecting Terminal					
			1#	2#	3#	4#	5#	6#
Electrical resistance (20°C)								
- Between the two equalizers	mΩ	0.0216	/	/	/	/	/	/
- Equalizer—Terminal top	mΩ	/	0.0199	0.0197	0.0226	0.0218	0.0201	0.0204
- Connecting terminal	mΩ	/	0.00622	0.00603	0.00883	0.00786	0.00647	0.00647

Test Item	Unit	Requirement	Test Results						Verdict
			1#	2#	3#	4#	5#	6#	
Resistance factor k									
- After the 475th heat cycle	/	/	0.817	0.797	1.175	1.039	0.856	0.855	N
Resistance factor ration λ									
- Resistance factor ration λ ₆	/	≤2.0	1.0	0.9	1.0	1.1	1.1	1.0	P

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4.1.11 The 8th electrical resistance measurement (after the 550th heat cycle)

According to GB/T 9327—2008 clause 6.3.3.

Test method: GB/T 9327—2008, clause 6.2

Test parameters

Ambient temperature: 17 °C

Measurement Item	Unit	Measurement Results						
		Reference conductor	Connecting Terminal					
			1#	2#	3#	4#	5#	6#
Electrical resistance (20°C)								
- Between the two equalizers	mΩ	0.0216	/	/	/	/	/	/
- Equalizer—Terminal top	mΩ	/	0.0200	0.0197	0.0227	0.0218	0.0198	0.0205
- Connecting terminal	mΩ	/	0.00637	0.00605	0.00900	0.00796	0.00618	0.00664

Test Item	Unit	Requirement	Test Results						Verdict
			1#	2#	3#	4#	5#	6#	
Resistance factor k									
- After the 550th heat cycle	/	/	0.840	0.802	1.201	1.057	0.820	0.881	N
Resistance factor ration λ									
- Resistance factor ration λ ₇	/	≤2.0	1.1	0.9	1.1	1.1	1.0	1.1	P

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4.1.12 The 9th electrical resistance measurement (after the 625th heat cycle)

According to GB/T 9327—2008 clause 6.3.3.

Test method: GB/T 9327—2008, clause 6.2

Test parameters

Ambient temperature: 17 °C

Measurement Item	Unit	Measurement Results						
		Reference conductor	Connecting Terminal					
			1#	2#	3#	4#	5#	6#
Electrical resistance (20°C)								
- Between the two equalizers	mΩ	0.0215	/	/	/	/	/	/
- Equalizer—Terminal top	mΩ	/	0.0199	0.0195	0.0226	0.0217	0.0199	0.0203
- Connecting terminal	mΩ	/	0.00628	0.00590	0.00890	0.00789	0.00634	0.00653

Test Item	Unit	Requirement	Test Results						Verdict
			1#	2#	3#	4#	5#	6#	
Resistance factor k									
- After the 625th heat cycle	/	/	0.831	0.784	1.192	1.049	0.844	0.869	N
Resistance factor ration λ									
- Resistance factor ration λ _B	/	≤2.0	1.1	0.9	1.1	1.1	1.1	1.1	P

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4.1.13 The 10th electrical resistance measurement (after the 700th heat cycle)

According to GB/T 9327—2008 clause 6.3.3.

Test method: GB/T 9327—2008, clause 6.2

Test parameters

Ambient temperature: 17 °C

Measurement Item	Unit	Measurement Results						
		Reference conductor	Connecting Terminal					
			1#	2#	3#	4#	5#	6#
Electrical resistance (20°C)								
- Between the two equalizers	mΩ	0.0216	/	/	/	/	/	/
- Equalizer—Terminal top	mΩ	/	0.0200	0.0199	0.0225	0.0216	0.0197	0.0201
- Connecting terminal	mΩ	/	0.00627	0.00624	0.00881	0.00777	0.00609	0.00622

Test Item	Unit	Requirement	Test Results						Verdict
			1#	2#	3#	4#	5#	6#	
Resistance factor k - After the 700th heat cycle	/	/	0.826	0.827	1.174	1.029	0.806	0.824	N
Resistance factor ration λ - Resistance factor ration λ ₉	/	≤2.0	1.0	0.9	1.0	1.1	1.0	1.0	P

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4.1.14 The 11th electrical resistance measurement (after the 775th heat cycle)

According to GB/T 9327—2008 clause 6.3.3.

Test method: GB/T 9327—2008, clause 6.2

Test parameters

Ambient temperature: 20 °C

Measurement Item	Unit	Measurement Results						
		Reference conductor	Connecting Terminal					
			1#	2#	3#	4#	5#	6#
Electrical resistance (20°C)								
- Between the two equalizers	mΩ	0.0217	/	/	/	/	/	/
- Equalizer—Terminal top	mΩ	/	0.0204	0.0199	0.0227	0.0216	0.0199	0.0203
- Connecting terminal	mΩ	/	0.00663	0.00625	0.00891	0.00771	0.00626	0.00642

Test Item	Unit	Requirement	Test Results						Verdict
			1#	2#	3#	4#	5#	6#	
Resistance factor k - After the 775th heat cycle	/	/	0.870	0.826	1.183	1.018	0.826	0.848	N
Resistance factor ration λ - Resistance factor ration λ ₁₀	/	≤2.0	1.1	0.9	1.1	1.0	1.1	1.0	P

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4.1.15 The 12th electrical resistance measurement (after the 850th heat cycle)

According to GB/T 9327—2008 clause 6.3.3.

Test method: GB/T 9327—2008, clause 6.2

Test parameters

Ambient temperature: 18 °C

Measurement Item	Unit	Measurement Results						
		Reference conductor	Connecting Terminal					
			1#	2#	3#	4#	5#	6#
Electrical resistance (20°C)								
- Between the two equalizers	mΩ	0.0216	/	/	/	/	/	/
- Equalizer—Terminal top	mΩ	/	0.0202	0.0197	0.0226	0.0218	0.0202	0.0201
- Connecting terminal	mΩ	/	0.00652	0.00607	0.00884	0.00791	0.00654	0.00621

Test Item	Unit	Requirement	Test Results						Verdict
			1#	2#	3#	4#	5#	6#	
Resistance factor k									
- After the 850th heat cycle	/	/	0.857	0.803	1.178	1.047	0.865	0.822	N
Resistance factor ration λ									
- Resistance factor ration λ ₁₁	/	≤2.0	1.1	0.9	1.1	1.1	1.1	1.0	P

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4.1.16 The 13th electrical resistance measurement (after the 925th heat cycle)

According to GB/T 9327—2008 clause 6.3.3.

Test method: GB/T 9327—2008, clause 6.2

Test parameters

Ambient temperature: 19 °C

Measurement Item	Unit	Measurement Results						
		Reference conductor	Connecting Terminal					
			1#	2#	3#	4#	5#	6#
Electrical resistance (20°C)								
- Between the two equalizers	mΩ	0.0216	/	/	/	/	/	/
- Equalizer—Terminal top	mΩ	/	0.0205	0.0200	0.0225	0.0217	0.0201	0.0203
- Connecting terminal	mΩ	/	0.00687	0.00637	0.00882	0.00788	0.00642	0.00647

Test Item	Unit	Requirement	Test Results						Verdict
			1#	2#	3#	4#	5#	6#	
Resistance factor k - After the 925th heat cycle	/	/	0.906	0.845	1.177	1.045	0.852	0.858	N
Resistance factor ratio λ - Resistance factor ratio λ ₁₂	/	≤2.0	1.1	1.0	1.1	1.1	1.1	1.0	P

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4.1.17 The 14th electrical resistance measurement (after the 1000th heat cycle)

According to GB/T 9327—2008 clause 6.3.3.

Test method: GB/T 9327—2008, clause 6.2

Test parameters

Ambient temperature: 22 °C

Measurement Item	Unit	Measurement Results						
		Reference conductor	Connecting Terminal					
			1#	2#	3#	4#	5#	6#
Electrical resistance (20°C)								
- Between the two equalizers	mΩ	0.0216	/	/	/	/	/	/
- Equalizer—Terminal top	mΩ	/	0.0204	0.0201	0.0228	0.0217	0.0202	0.0201
- Connecting terminal	mΩ	/	0.00674	0.00647	0.00908	0.00782	0.00658	0.00626

Test Item	Unit	Requirement	Test Results						Verdict
			1#	2#	3#	4#	5#	6#	
Resistance factor k									
- After the 1000th heat cycle	/	/	0.888	0.858	1.211	1.037	0.872	0.830	N
Resistance factor ratio λ									
- Resistance factor ratio λ ₁₃	/	≤2.0	1.1	1.0	1.1	1.1	1.1	1.0	P
Mean scatter β	/	≤0.30	0.26						P
Change in resistance factor D	/	≤0.15	0.13	0.08	0.03	0.03	0.13	0.12	P
Maximum temperature θ_{ref}									
- Reference conductor	°C	120~126	125	125	125	125	125	125	P
Maximum temperature θ_{max}									
- Connecting terminal maximum temperature	°C	≤θ _{ref}	118	113	116	118	119	113	P

3 samples experienced with 1000 heat cycles were tested for mechanical tests.

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4.2 Mechanical test

According to GB/T 9327—2008 clause 7.

Test method: IEC 61238—1—3: 2018, clause 7.2

Test parameters

Total tensile force: 20000 N

Load rate: ≤10 N/(s·mm²)

Duration: 1 min

Test Item	Requirement	Test Result	Verdict
Mechanical tests	No slipping shall occur during the last minute of the test.	There is no slipping for the 3 samples in the tests.	P

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4.3 Surface and dimension check

4.3.1 Surface check

According to GB/T 14315—2008 Table 10, No.1.

Test method: GB/T 14315—2008, Table 10

Test parameter

Ambient temperature: 18 °C

Test Item	Requirement	Test Result	Verdict
Surface check	Sample surface shall be bright, clean and smooth. There shall be no burr formation, crack, sharp edge, overlap, the plate shall be smooth. The cladding layer shall be well-distributed, no desquamated. There shall be no sharp angle and edge roll on the compression cylinder part of the terminal.	By visual checking, the surface is smooth, there is no burr, or crack, or sharp edge, or overlap. The cladding layer is no desquamated. There is no sharp angle, or edge roll on the compression cylinder part.	N

4.3.2 Dimension check

According to GB/T 14315—2008 Table 10, No.2.

Test method: GB/T 14315—2008, Table 10

Test parameter

Ambient temperature: 18 °C

Test Item	Unit	Requirement	Test Result	Verdict
Dimension check				
- ΦH	mm	/	21	N
- d	mm	26.0 ^{+0.52} ₀	26.30	P
- D	mm	34 ^{+0.4} _{-0.20}	34.24	P
- L1	mm	≥70	72	P
- C	mm	33 ^{+0.62} _{-0.62}	33.31	P
- N	mm	25 ^{+0.52} _{-0.52}	25.21	P
- W	mm	54 ^{+0.5} _{-0.5}	54.1	P
- S	mm	9.0 ^{+0.9} ₀	9.3	P
- L	mm	165 ^{+2.0} _{-2.0}	165.4	P
- e	mm	≥2.0	2.4	P

DTM-400mm²

Appendix A: Conductor structure for the tests and installation information

Appendix A.1 Conductor structure

Nominal section area	Material	Type	Outer diameter	The number of single wires	Structure
400	Cu	Compacted circle, stranded	Φ23.9	61	5 layers 1+6+12+18+24

Appendix A.2 Parameters of the pressure clamp

Terminal type & size	Clamp type	Working pressure	Stamper type & size	Diagonal line length	Shape of stamper
DTM-400mm ²	EZ-400	120kN	Cu400	33.5mm	Hexagon confining pressure

Appendix A.3 Distance between the compressions

There are 5 compressions in the center part of the terminal cylinder. The impression width is 8mm, the distance is 5mm between the impressions. The distance between the last impression and the terminal cylinder end is 5mm.

Appendix A.4 Requirements of bolts, nuts, washer and torque for connecting the terminal

Terminal type & size	Outer hexagon bolt	Effective length of the helical burr	Thickness of the connection	Recommended torque	Note
DTM-400mm ²	M18×55	35mm	10mm	110N·m	Including spring washer, ping pads, nut

Appendix B: Samples length

Item	Length (mm)						
	Reference conductor	Connecting Terminal					
		1#	2#	3#	4#	5#	6#
Between two equalizers	475	/	/	/	/	/	/
Equalizer—Terminal end (I _a)	/	301	300	302	305	300	305
Terminal end—Terminal top (I _j)	/	167	166	165	166	166	166