Report No.： GT(210)23008

TEST REPORT

Name of sample： Airport Cable 400hz

Model no.： 0.6/1KV Power Cable

7 x 50mm2+6x(4x1mm2)

Applicant： Caledonian Cables Limited

Manufacturer: Caledonian (Shandong) Cables Limited

Address: 39 Chengbohu Road, Jibei Development Zone,
Jiyang District,JinanCity,Shandong,P.R.China

Issue date： 15 Feb. 2023

Deruixin Special Equipment Testing Co., Ltd

Attentions

1. The report is invalid without "special seal for inspection".

2. The copy report is invalid without being stamped with "special seal for testing" again.

3. The report is invalid without the signature of the chief inspector, reviewer and approver.

4. The report is invalid if altered.

5. If you have any objection to the test report, please notify the company in writing within 15 days from the date of receiving the report.

6. This test report is only responsible for the samples submitted for inspection.

7. Without the written approval of the Company, the report shall not be partially copied (except for full copy).

Testing laboratory: Deruixin Special Equipment Testing Co., Ltd

Address: No. 93-5, Huihe Road, Yangting Town, Huancui District, Weihai City, Shandong P.R.China

Telephone: 0631-3809218 Postal code: 264200

Test report

Sample name	Airport Cable 400hz	Model No.	0.6/1KV Power Cable 7 x 50mm2+6x(4x1mm2)
Qty of sample	1	Ref. No. of sample	230037
Test of test	Commission Test	Date received	2023-02-10
Consigner	Caledonian Cables Ltd	Testing date	2023-02-14
Testing standards	Test method for electrical performance of the cable sample ,Ref. no: N23030	Testing items	1、Cable voltage drop test 2、Cable current carrying capacity 3、Cable capacitance test
Purpose of the testing	☐Development test ☐Qualification test ☐Type test ☑ Routine test		
Test result	The measured cable is connected to a three-phase AC power supply with the output frequency of 400Hz. Adjust the output current and measure the voltage drop of the cable; Measure the capacitance of the cable. Please review Appendix C for test records. Issue date: 2023-02-15		
Conclusion	The items tested comply with the requirement.		

Principal auditor: Auditor: Approver:

Appendix A: Testing circumstance

A.1 Test location

Power supply laboratory of Deruixin Special Equipment Testing Co., Ltd

A.2 Test equipment

A.1 Test equipment

No.	Name of equipment	Model No.	Validity of Calibration	Remarks
1	Testing instruments for resistance, capacitance	ZG025	2023-7-8	--
2	Clamp ammeters	LZS-22	2023-3-1	--
3	Multimeter	LZS-23	2023-3-1	--

Appendix B: Cable sample

B.1 Sample information

No.	Name	Manufacturer	Model no.	Sample no.
1	Airport Cable	Caledonian (Shandong) Cables Ltd	0.6/1KV Power Cable 7 x 50mm2+6x(4x1mm2)	230037

Appendix C: Test records

C.1 Test records of cable voltage drop performance

Ambient temperature: 15.0 ℃ Ambient humidity: 66.8 % RH

Atmospheric pressure: 100.8 kPa Power @400hz, φ=0,8, 90kW, 25meter

Load	Phase Current(A)			Phase Voltage of Head (V)			Phase Voltage of End (V)			Voltage drop of End		
	I_a	I_b	I_c	U_{an}	U_{bn}	U_{cn}	U_{an}	U_{bn}	U_{cn}	ΔU_{an}	ΔU_{bn}	ΔU_{cn}
No load	0	0	0	115.51	115.54	115.48	115.51	115.55	115.48	--	--	--
Load-Current 270A	271.7	271.6	276.1	116.89	117.30	117.45	114.62	115.21	115.33	2.27v/ 0.3226mV/ Am	2.09v/ 0.2971mV/ Am	2.12v/ 0.2965mV/ Am
Load-Current 329A	338.7	332.3	339.2	117.18	117.77	117.80	114.59	115.29	115.28	2.59v/ 0.2952mV/ Am	2.48v/ 0.2882mV/ Am	2.52v/ 0.2868mV/ Am

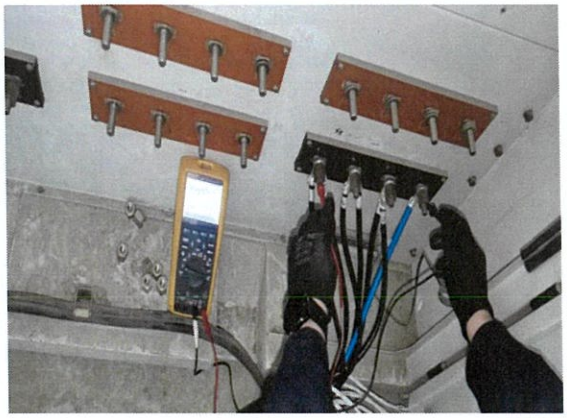
C.2 Test records for cable capacitance

Cable size	Length(m)	2 ends of the testing	Capacitance（nF）	Remarks
7×50mm²	25.9	N—a1	2.37	--
		N—a2	2.27	--
		N—b1	2.38	--
		N—b2	2.36	--
		N—c1	2.53	--
		N—c2	2.50	--
		c1—a1	2.55	--
		a1—a2	1.74	--

Appendix D: Testing pictures

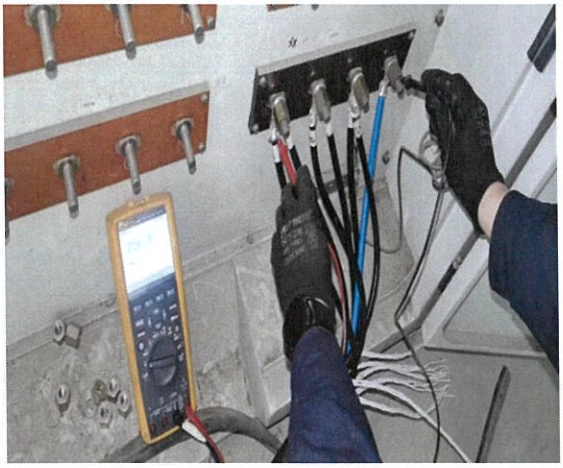
Cable picture before testing

Current capacity1

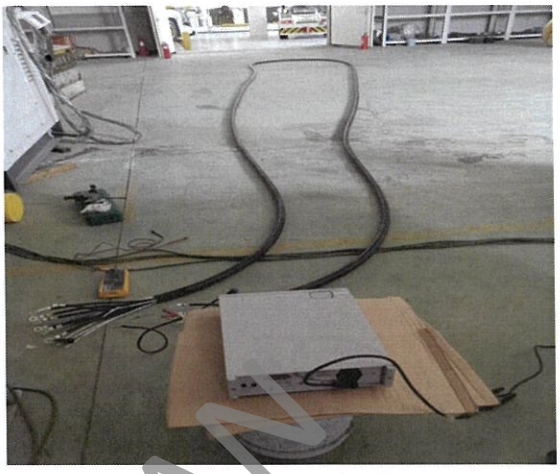


Voltage drop test1

Current capacity2



Voltage drop test2



Capacitance test

Capacitance test

Testing system

400hz power

Load 90kw

Appendix E: Attendance

Deruixin Special Equipment Testing Co., Ltd: Xiaolei Qu、Xiaoming Yu.

Caledonian Cables Ltd: Alice Zhang.

——End of the report——