CERN - Lab. CMS Cables - B15S-012



Software version 4.14-00

Unit under test FULL_TEST_su_cavo_ps_pp1_V3

Filename C:\Users\Public\Documents\CEETIS\Projects\FULL_TEST_su_cavo_ps_pp1_V3.project

Date/Time 08/05/2024 11:10:02

Serial number Cable02

	Test result		
Continuity test	1 error		
LV isolation test	No commands		
HV isolation test	8 errors		
Test of electrical components	No commands		
Voltage and Current	No commands		
Other tests	Pass		
	FAILED		

Ambient Temperature: °C Ambient Rel. Humidity: %

CONTINUITY AND RESISTANCE MEASUREMENTS

-->LV channels

Parameters for continuity test

Current=500mA; Threshold=40Ohm; Trise=2ms; Twait=2s; Tmeas=1ms; Auto ranging=On; Voltage limit=48V

Parameters for continuity test

Threshold=10hm

Passed	LV1	LV1 S	LV1 Sr	584,4mOhm
√ Passed	LVreturn1	LVR1 S	LVR1 Sr	578,9mOhm
Passed	LV2	LV2 S	LV2 Sr	584,1mOhm
Passed	LVreturn2	LVR2 S	LVR2 Sr	581mOhm
Passed	LV3	LV3 S	LV3 Sr	587,9mOhm
√ Passed	LVreturn3	LVR3 S	LVR3 Sr	580,2mOhm
√ Passed	LV4	LV4 S	LV4 Sr	582,6mOhm
√ Passed	LVreturn4	LVR4 S	LVR4 Sr	577,5mOhm
√ Passed	LV5	LV5 S	LV5 Sr	580,3mOhm
√ Passed	LVreturn5	LVR5 S	LVR5 Sr	580,2mOhm
√ Passed	LV6	LV6 S	LV6 Sr	571,4mOhm
√ Passed	LVreturn6	LVR6 S	LVR6 Sr	573,3mOhm
√ Passed	LV7	LV7 S	LV7 Sr	586,9mOhm
√ Passed	LVreturn7	LVR7 S	LVR7 Sr	579,9mOhm
√ Passed	LV8	LV8 S	LV8 Sr	571,2mOhm
√ Passed	LVreturn8	LVR8 S	LVR8 Sr	570,4mOhm
√ Passed	LV9	LV9 S	LV9 Sr	587,7mOhm
√ Passed	LVreturn9	LVR9 S	LVR9 Sr	578,3mOhm
√ Passed	LV10	LV10 S	LV10 Sr	589,5mOhm
√ Passed	LVreturn10	LVR10 S	LVR10 Sr	583,2mOhm
√ Passed	LV11	LV11 S	LV11 Sr	586mOhm
√ Passed	LVreturn11	LVR11 S	LVR11 Sr	586,5mOhm
Passed	LV12	LV12 S	LV12 Sr	586,6mOhm
Passed	LVreturn12	LVR12 S	LVR12 Sr	586,6mOhm

√				
Passed	PH	PH S	PH Sr	590,4mOhm
Passed	PHreturn	PHR S	PHR Sr	580,6mOhm
> Drains				
💢 Open	Drain	Drain S	Drain r	14,84MOhm
	s and Tsensor s for continuity test			
Threshold=	_			
Passed	Tsensor1	TS1 S	TS1 Sr	12,29Ohm
Passed	Tsensor2	TS2 S	TS2 Sr	12,35Ohm
Passed	Tsensor3	TS3 S	TS3 Sr	12,10hm
Passed	Tsensor4	TS4 S	TS4 Sr	12,18Ohm
Passed	H1	H1 S	H1 Sr	12,03Ohm
Passed	H2	H2 S	H2 Sr	12,37Ohm
Passed	H3	H3 S	H3 Sr	12,04Ohm
Passed	H4	H4 S	H4 Sr	12,17Ohm
Passed	HR1	HR1 S	HR1 Sr	12,13Ohm
Passed	H5	H5 S	H5 Sr	12,11Ohm
Passed	H6	H6 S	H6 Sr	11,98Ohm
Passed	H7	H7 S	H7 Sr	12,35Ohm
Passed	H8	H8 S	H8 Sr	12,22Ohm
Passed	HR2	HR2 S	HR2 Sr	12,39Ohm
Passed	H9	H9 S	H9 Sr	12,19Ohm
Passed	H10	H10 S	H10 Sr	12,16Ohm
Passed	H11	H11 S	H11 Sr	120hm
Passed	H12	H12 S	H12 Sr	12,03Ohm
Passed	HR3	HR3 S	HR3 Sr	12,17Ohm
	N TEST 1 VS all			
> LV chan	nels			

Parameters for HV isolation test

Voltage=50V; Threshold=100MOhm; Trise=10s; Twait=3s; Tmeas=1s; Auto ranging=On; Current limit=1,95mA; Tmeas red.=Off; Tmeas fact.=1; Voltage ramp=120V/s

Parameters for HV isolation test

Trise=1s; Twait=8s; Tmeas=8s

Passed; LV1; 1618096854.70697; Ohm; 1,618GOhm Passed; LVR1; 2301013383.57437; Ohm; 2,301GOhm Passed; LV2; 1130586881.12164; Ohm; 1,131GOhm Fail; LVR2; 25550.7383001655; Ohm; 25,55kOhm Passed; LV3; 2022580908.64412; Ohm; 2,023GOhm Passed; LVR3; 1867756422.08795; Ohm; 1,868GOhm Passed; LV4; 1000412131.64249; Ohm; 1GOhm Passed; LVR4; 2089418211.3311; Ohm; 2,089GOhm Fail; LV5; 25560.0536578136; Ohm; 25,56kOhm Passed; LVR5; 1823593160.97098; Ohm; 1,824GOhm Passed; LV6; 1060368007.62877; Ohm; 1,06GOhm Fail; LVR6; 25565.0689719853; Ohm; 25,57kOhm Fail; LV7; 25567.0194440486; Ohm; 25,57kOhm Fail; LVR7; 25568.7416281727; Ohm; 25,57kOhm Passed; LV8; 1890806630.70418; Ohm; 1,891GOhm Passed; LVR8; 1354211590.14025; Ohm; 1,354GOhm Passed; LV9; 2414432166.09083; Ohm; 2,414GOhm Passed; LVR9; 1361704656.66947; Ohm; 1,362GOhm Passed; LV10; 1492161037.01526; Ohm; 1,492GOhm Passed; LVR10; 1372427161.69321; Ohm; 1,372GOhm Passed; LV11; 1347985709.74115; Ohm; 1,348GOhm Passed; LVR11; 2951841953.77263; Ohm; 2,952GOhm Passed; LV12; 1946534639.37715; Ohm; 1,947GOhm Fail; LVR12; 25569.5802499232; Ohm; 25,57kOhm

--> HV channels Parameters for HV isolation test Voltage=1,2kV; Threshold=1GOhm; Trise=10s; Tmeas=1s **Passed** H1 F HV1 >98,1GOhm **Passed** HV2 H2 F 39,7GOhm **Passed** HV3 H₃ F 95,4GOhm Passed HV4 H4 F >98,1GOhm Passed HV5 H5 F >98,1GOhm **Passed** HV6 H6 F >98,1GOhm **Passed** HV7 H7 F >98,1GOhm **Passed** HV8 H8 F >98,1GOhm Passed HV9 H9 F >98,1GOhm **Passed** HV10 H10 F >98,1GOhm **Passed** HV11 H11 F >98,1GOhm **Passed** HV12 H12 F >98,1GOhm Passed HVreturn1 HR1 F >98,1GOhm 🌠 Passed HVreturn2 HR2 F >98,1GOhm Passed HVreturn3 HR3 F >98,1GOhm Parameters for HV isolation test Voltage=50V; Threshold=100MOhm; Trise=1s; Tmeas=2s Passed Tsensor1 TS1 F >4,087GOhm **Passed** Tsensor2 TS2 F 3,081GOhm Passed Tsensor3 TS3 F 3,82GOhm Passed Tsensor4 TS4 F 2,806GOhm **INSULATION GROUP TEST** --> LV channels Parameters for HV isolation test Threshold=10MOhm Fail; LV_group; 25575.1994049287; Ohm; 25,58kOhm --> HV channels

Fail; PH; 25570.9554103832; Ohm; 25,57kOhm Passed; PHR; 1642210744.04129; Ohm; 1,642GOhm

Parameters for HV isolation test

Passed

Voltage=1,2kV; Threshold=100MOhm; Trise=10s

HV_group

HV

Low group

>4,918GOhm