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	07/05/2024 12:20:26
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
F A I L E D	

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=1Ohm

✓ **Passed**	LV1	LV1 S	LV1 Sr	585,2mOhm
✓ **Passed**	LVreturn1	LVR1 S	LVR1 Sr	580,2mOhm
✓ **Passed**	LV2	LV2 S	LV2 Sr	585,3mOhm
✓ **Passed**	LVreturn2	LVR2 S	LVR2 Sr	581,6mOhm
✓ **Passed**	LV3	LV3 S	LV3 Sr	588,7mOhm
✓ **Passed**	LVreturn3	LVR3 S	LVR3 Sr	581,4mOhm
✓ **Passed**	LV4	LV4 S	LV4 Sr	583,7mOhm
✓ **Passed**	LVreturn4	LVR4 S	LVR4 Sr	578mOhm
✓ **Passed**	LV5	LV5 S	LV5 Sr	580,5mOhm
✓ **Passed**	LVreturn5	LVR5 S	LVR5 Sr	581,4mOhm
✓ **Passed**	LV6	LV6 S	LV6 Sr	572mOhm
✓ **Passed**	LVreturn6	LVR6 S	LVR6 Sr	574,1mOhm
✓ **Passed**	LV7	LV7 S	LV7 Sr	587,2mOhm
✓ **Passed**	LVreturn7	LVR7 S	LVR7 Sr	581mOhm
✓ **Passed**	LV8	LV8 S	LV8 Sr	571,8mOhm
✓ **Passed**	LVreturn8	LVR8 S	LVR8 Sr	571,1mOhm
✓ **Passed**	LV9	LV9 S	LV9 Sr	587,4mOhm
✓ **Passed**	LVreturn9	LVR9 S	LVR9 Sr	578,8mOhm
✓ **Passed**	LV10	LV10 S	LV10 Sr	585,8mOhm
✓ **Passed**	LVreturn10	LVR10 S	LVR10 Sr	584mOhm
✓ **Passed**	LV11	LV11 S	LV11 Sr	586,6mOhm
✓ **Passed**	LVreturn11	LVR11 S	LVR11 Sr	591,7mOhm
✓ **Passed**	LV12	LV12 S	LV12 Sr	587,2mOhm
Passed	LVreturn12	LVR12 S	LVR12 Sr	587,4mOhm

	Status				
✔					
✔	Passed	PH	PH S	PH Sr	591mOhm
✔	Passed	PHreturn	PHR S	PHR Sr	581,5mOhm
		--> Drains			
✘	*Open*	*Drain*	*Drain S*	*Drain r*	*14,85MOhm*

HV channels and Tsensor
Parameters for continuity test
Threshold=15Ohm

	Status				
✔	Passed	Tsensor1	TS1 S	TS1 Sr	12,32Ohm
✔	Passed	Tsensor2	TS2 S	TS2 Sr	12,37Ohm
✔	Passed	Tsensor3	TS3 S	TS3 Sr	12,12Ohm
✔	Passed	Tsensor4	TS4 S	TS4 Sr	12,2Ohm
✔	Passed	H1	H1 S	H1 Sr	12,05Ohm
✔	Passed	H2	H2 S	H2 Sr	12,39Ohm
✔	Passed	H3	H3 S	H3 Sr	12,06Ohm
✔	Passed	H4	H4 S	H4 Sr	12,2Ohm
✔	Passed	HR1	HR1 S	HR1 Sr	12,15Ohm
✔	Passed	H5	H5 S	H5 Sr	12,13Ohm
✔	Passed	H6	H6 S	H6 Sr	12,01Ohm
✔	Passed	H7	H7 S	H7 Sr	12,37Ohm
✔	Passed	H8	H8 S	H8 Sr	12,24Ohm
✔	Passed	HR2	HR2 S	HR2 Sr	12,41Ohm
✔	Passed	H9	H9 S	H9 Sr	12,21Ohm
✔	Passed	H10	H10 S	H10 Sr	12,18Ohm
✔	Passed	H11	H11 S	H11 Sr	12,03Ohm
✔	Passed	H12	H12 S	H12 Sr	12,05Ohm
✔	Passed	HR3	HR3 S	HR3 Sr	12,19Ohm

INSULATION TEST 1 VS all
--> LV channels

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; 331577325.87747; Ohm; 331,6MOhm
Passed; LVR1; 1162225584.20414; Ohm; 1,162GOhm
Passed; LV2; 1006330287.66697; Ohm; 1,006GOhm
Fail; LVR2; 25568.6886448314; Ohm; 25,57kOhm
Passed; LV3; 1914008496.39068; Ohm; 1,914GOhm
Passed; LVR3; 1035708763.86799; Ohm; 1,036GOhm
Passed; LV4; 2096255701.83383; Ohm; 2,096GOhm
Passed; LVR4; 1256384524.73537; Ohm; 1,256GOhm
Fail; LV5; 25571.1376869431; Ohm; 25,57kOhm
Passed; LVR5; 1626123813.88525; Ohm; 1,626GOhm
Passed; LV6; 1176016584.15394; Ohm; 1,176GOhm
Fail; LVR6; 25572.026972651; Ohm; 25,57kOhm
Fail; LV7; 25573.0088355254; Ohm; 25,57kOhm
Fail; LVR7; 25573.8551381618; Ohm; 25,57kOhm
Passed; LV8; 1340961377.13453; Ohm; 1,341GOhm
Passed; LVR8; 841155409.94705; Ohm; 841,2MOhm
Passed; LV9; 967096987.72358; Ohm; 967,1MOhm
Passed; LVR9; 1805584530.04577; Ohm; 1,806GOhm
Passed; LV10; 905843768.569105; Ohm; 905,8MOhm
Passed; LVR10; 1873555495.47213; Ohm; 1,874GOhm
Passed; LV11; 863537523.97793; Ohm; 863,5MOhm
Passed; LVR11; 969690296.009655; Ohm; 969,7MOhm
Passed; LV12; 1667218839.72905; Ohm; 1,667GOhm
Fail; LVR12; 25576.6533936949; Ohm; 25,58kOhm

Fail; PH; 25575.9577246287; Ohm; 25,58kOhm
Passed; PHR; 535833429.248935; Ohm; 535,8MOhm
--> HV channels
Parameters for HV isolation test
Voltage=1,2kV; Threshold=1GOhm; Trise=10s; Tmeas=1s

✔ **Passed**	HV1	H1 F		8,754GOhm
✔ **Passed**	HV2	H2 F		>98,19GOhm
✔ **Passed**	HV3	H3 F		13,79GOhm
✔ **Passed**	HV4	H4 F		>98,19GOhm
✔ **Passed**	HV5	H5 F		7,675GOhm
✔ **Passed**	HV6	H6 F		26,3GOhm
✔ **Passed**	HV7	H7 F		>98,19GOhm
✔ **Passed**	HV8	H8 F		14,51GOhm
✔ **Passed**	HV9	H9 F		33,88GOhm
✔ **Passed**	HV10	H10 F		72,75GOhm
✔ **Passed**	HV11	H11 F		>98,19GOhm
✔ **Passed**	HV12	H12 F		>98,19GOhm
✔ **Passed**	HVreturn1	HR1 F		>98,19GOhm
✔ **Passed**	HVreturn2	HR2 F		33,35GOhm
✔ **Passed**	HVreturn3	HR3 F		5,123GOhm

Parameters for HV isolation test
Voltage=50V; Threshold=100MOhm; Trise=1s; Tmeas=2s

✔ **Passed**	Tsensor1	TS1 F		>4,091GOhm
✔ **Passed**	Tsensor2	TS2 F		3,413GOhm
✔ **Passed**	Tsensor3	TS3 F		>4,091GOhm
✔ **Passed**	Tsensor4	TS4 F		1,673GOhm

INSULATION GROUP TEST
--> LV channels
Parameters for HV isolation test
Threshold=10MOhm
Fail; LV_group; 25579.4942096601; Ohm; 25,58kOhm
--> HV channels
Parameters for HV isolation test
Voltage=1,2kV; Threshold=100MOhm; Trise=10s

✔ **Passed**	HV_group	HV	Low group	2,078GOhm