CERN - Lab. CMS Cables - B15S-012



585,2mOhm

580,2mOhm

586,6mOhm

591,7mOhm 587,2mOhm

587,4mOhm

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	
	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

LV1 Sr

LVR1 Sr

LV11 Sr

LVR11 Sr

LV12 Sr LVR12 Sr

LV1 S

LVR1 S

Parameters for continuity test Threshold=10hm

√ Passed	LV1
√ Passed	LVreturn1
√ Passed	LV2

assed	LV2	LV2 S
assed	LVreturn2	LVR2 S
assed	LV3	LV3 S
assed	LVreturn3	LVR3 S
assed	LV4	LV4 S
assed	LVreturn4	LVR4 S
assed	LV5	LV5 S
assed	LVreturn5	LVR5 S
assed	LV6	LV6 S
assed	LVreturn6	LVR6 S
assed	LV7	LV7 S
assed	LVreturn7	LVR7 S
assed	LV8	LV8 S

Y Passed	LV6	LV6 S
🌱 Passed	LVreturn6	LVR6 S
√ Passed	LV7	LV7 S
√ Passed	LVreturn7	LVR7 S
√ Passed	LV8	LV8 S
√ Passed	LVreturn8	LVR8 S
√ Passed	LV9	LV9 S
🏏 Passed	LVreturn9	LVR9 S
🏏 Passed	LV10	LV10 S
🏏 Passed	LVreturn10	LVR10 S
🏏 Passed	LV11	LV11 S
🏏 Passed	LVreturn11	LVR11 S
🏏 Passed	LV12	LV12 S
Passed	LVreturn12	LVR12 S

LV2 Sr	585,3mOhm
LVR2 Sr	581,6mOhm
LV3 Sr	588,7mOhm
LVR3 Sr	581,4mOhm
LV4 Sr	583,7mOhm
LVR4 Sr	578mOhm
LV5 Sr	580,5mOhm
LVR5 Sr	581,4mOhm
LV6 Sr	572mOhm
LVR6 Sr	574,1mOhm
LV7 Sr	587,2mOhm
LVR7 Sr	581mOhm
LV8 Sr	571,8mOhm
LVR8 Sr	571,1mOhm
LV9 Sr	587,4mOhm
LVR9 Sr	578,8mOhm
LV10 Sr	585,8mOhm
LVR10 Sr	584mOhm

V							
√ 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 for continuity test						
Threshold=15	•						
√ 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	12,20hm			
Passed	H1	H1 S	H1 Sr	12,05Ohm			
Passed	H2	H2 S	H2 Sr	12,390hm			
Passed	H3	H3 S	H3 Sr	12,06Ohm			
Passed	H4	H4 S	H4 Sr	12,20hm			
√ Passed	HR1	HR1 S	HR1 Sr	12,15Ohm			
√ Passed	H5	H5 S	H5 Sr	12,13Ohm			
√ Passed	H6	H6 S	H6 Sr	12,010hm			
√ Passed	H7	H7 S	H7 Sr	12,37Ohm			
Passed	H8	H8 S	H8 Sr	12,24Ohm			
Passed	HR2	HR2 S	HR2 Sr	12,410hm			
Passed	H9	H9 S	H9 Sr	12,210hm			
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 chann	els						

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

Passed; PHR; 535833429.248935; Ohm; 535,8MOhm --> HV channels Parameters for HV isolation test Voltage=1,2kV; Threshold=1GOhm; Trise=10s; Tmeas=1s Passed 8,754GOhm HV1 H₁F **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

Fail; PH; 25575.9577246287; Ohm; 25,58kOhm

✓ Passed HV_group HV Low group 2,078GOhm





