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 18:36:57

Serial number Cable03

	Test result
Continuity test	1 error
LV isolation test	No commands
HV isolation test	5 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

	rnresnoia=ronm				
V	Passed	LV1	LV1 S	LV1 Sr	565,9mOhm
V	Passed	LVreturn1	LVR1 S	LVR1 Sr	564,2mOhm
V	Passed	LV2	LV2 S	LV2 Sr	569,5mOhm
V	Passed	LVreturn2	LVR2 S	LVR2 Sr	560,3mOhm
V	Passed	LV3	LV3 S	LV3 Sr	566,9mOhm
V	Passed	LVreturn3	LVR3 S	LVR3 Sr	564,9mOhm
V	Passed	LV4	LV4 S	LV4 Sr	562,1mOhm
V	Passed	LVreturn4	LVR4 S	LVR4 Sr	560,1mOhm
V	Passed	LV5	LV5 S	LV5 Sr	562,3mOhm
V	Passed	LVreturn5	LVR5 S	LVR5 Sr	559,8mOhm
V	Passed	LV6	LV6 S	LV6 Sr	553,1mOhm
V	Passed	LVreturn6	LVR6 S	LVR6 Sr	555,5mOhm
V	Passed	LV7	LV7 S	LV7 Sr	573,9mOhm
V	Passed	LVreturn7	LVR7 S	LVR7 Sr	557,5mOhm
V	Passed	LV8	LV8 S	LV8 Sr	550,3mOhm
V	Passed	LVreturn8	LVR8 S	LVR8 Sr	549,1mOhm
V	Passed	LV9	LV9 S	LV9 Sr	571,6mOhm
V	Passed	LVreturn9	LVR9 S	LVR9 Sr	562,7mOhm
V	Passed	LV10	LV10 S	LV10 Sr	566,7mOhm
V	Passed	LVreturn10	LVR10 S	LVR10 Sr	562,3mOhm
V	Passed	LV11	LV11 S	LV11 Sr	571,9mOhm
V	Passed	LVreturn11	LVR11 S	LVR11 Sr	565,7mOhm
V	Passed	LV12	LV12 S	LV12 Sr	565,5mOhm
	Passed	LVreturn12	LVR12 S	LVR12 Sr	567,6mOhm

V						
√ Passed	PH	PH S	PH Sr	576,8mOhm		
Passed	PHreturn	PHR S	PHR Sr	562mOhm		
> Drains						
💢 Open	Drain	Drain S	Drain r	23,64MOhm		
	HV channels and Tsensor Parameters for continuity test					
Threshold=15	•					
√ Passed	Tsensor1	TS1 S	TS1 Sr	11,76Ohm		
√ Passed	Tsensor2	TS2 S	TS2 Sr	11,76Ohm		
Passed	Tsensor3	TS3 S	TS3 Sr	11,82Ohm		
Passed	Tsensor4	TS4 S	TS4 Sr	11,72Ohm		
Passed	H1	H1 S	H1 Sr	11,64Ohm		
Passed	H2	H2 S	H2 Sr	11,89Ohm		
√ Passed	H3	H3 S	H3 Sr	11,60hm		
√ Passed	H4	H4 S	H4 Sr	11,76Ohm		
Passed	HR1	HR1 S	HR1 Sr	11,67Ohm		
Passed	H5	H5 S	H5 Sr	11,76Ohm		
Passed	H6	H6 S	H6 Sr	11,54Ohm		
Passed	H7	H7 S	H7 Sr	11,93Ohm		
Passed	H8	H8 S	H8 Sr	11,86Ohm		
Passed	HR2	HR2 S	HR2 Sr	11,76Ohm		
Passed	H9	H9 S	H9 Sr	11,95Ohm		
Passed	H10	H10 S	H10 Sr	11,84Ohm		
√ Passed	H11	H11 S	H11 Sr	11,49Ohm		
√ Passed	H12	H12 S	H12 Sr	11,56Ohm		
Passed	HR3	HR3 S	HR3 Sr	11,63Ohm		
	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; 1312108834.73291; Ohm; 1,312GOhm Passed; LVR1; 2195263125.84184; Ohm; 2,195GOhm Passed; LV2; 1873504006.98886; Ohm; 1,874GOhm Passed; LVR2; 2149140619.62779; Ohm; 2,149GOhm

Fail; LV3; 25557.293755328; Ohm; 25,56kOhm Passed; LVR3; 1513685349.12821; Ohm; 1,514GOhm

Passed; LV4; 1229817226.15362; Ohm; 1,23GOhm Passed; LVR4; 2396403667.27578; Ohm; 2,396GOhm Passed; LV5; 1428840128.33909; Ohm; 1,429GOhm

Passed; LVR5; 1044679418.55763; Ohm; 1,045GOhm Passed; LV6; 987312721.78213; Ohm; 987,3MOhm

Passed; LVR6; 1036981072.16575; Ohm; 1,037GOhm Passed; LV7; 1182419332.81792; Ohm; 1,182GOhm

Passed; LVR7; 2178013684.23579; Ohm; 2,178GOhm

Passed; LV8; 1609219166.31552; Ohm; 1,609GOhm Passed; LVR8; 924082071.474165; Ohm; 924,1MOhm

Fail; LV9; 25565.3174245708; Ohm; 25,57kOhm

Passed; LVR9; 1899082671.00596; Ohm; 1,899GOhm Passed; LV10; 1774442902.97819; Ohm; 1,774GOhm

Passed; LVR10; 3175363351.51059; Ohm; 3,175GOhm

Passed; LV11; 1947765239.31649; Ohm; 1,948GOhm Passed; LVR11; 2184239190.59568; Ohm; 2,184GOhm

Passed; LV12; 1677435476.58262; Ohm; 1,677GOhm

Passed; LVR12; 2499376356.74362; Ohm; 2,499GOhm

Fail; PH; 25570.4451068338; Ohm; 25,57kOhm Fail; PHR; 25572.6396658299; Ohm; 25,57kOhm --> HV channels

Parameters for HV isolation test

Voltage=1.2kV	Threshold=1GOhm	: Trise=10s	: Tmeas=1s

V	Passed	HV1	H1 F	>98,08GOhm	
V	Passed	HV2	H2 F	22,4GOhm	
V	Passed	HV3	H3 F	>98,08GOhm	
V	Passed	HV4	H4 F	>98,08GOhm	
V	Passed	HV5	H5 F	>98,08GOhm	
V	Passed	HV6	H6 F	>98,08GOhm	
V	Passed	HV7	H7 F	>98,08GOhm	
V	Passed	HV8	H8 F	>98,08GOhm	
V	Passed	HV9	H9 F	>98,08GOhm	
V	Passed	HV10	H10 F	>98,08GOhm	
V	Passed	HV11	H11 F	38,63GOhm	
V	Passed	HV12	H12 F	>98,08GOhm	
V	Passed	HVreturn1	HR1 F	45,56GOhm	
V	Passed	HVreturn2	HR2 F	47,09GOhm	
V	Passed	HVreturn3	HR3 F	>98,08GOhm	
	Parameters for HV isolation test				

Voltage=50V; Threshold=100MOhm; Trise=1s; Tmeas=2s

🏏 Passed	Tsensor1	TS1 F	>4,087GOhm
🏏 Passed	Tsensor2	TS2 F	>4,087GOhm
🏏 Passed	Tsensor3	TS3 F	>4,087GOhm
🏏 Passed	Tsensor4	TS4 F	>4,087GOhm

INSULATION GROUP TEST

--> LV channels

Parameters for HV isolation test

Threshold=10MOhm

Fail; LV_group; 25577.0512559379; Ohm; 25,58kOhm

--> HV channels

Parameters for HV isolation test

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

Passed HV_group 2,985GOhm Low group