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	09/05/2024 10:36:51
Serial number	Cable03

Test result	
Continuity test	Pass
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=1Ohm

✓	**Passed**	LV1	LV1 S	LV1 Sr	562mOhm
✓	**Passed**	LVreturn1	LVR1 S	LVR1 Sr	560,1mOhm
✓	**Passed**	LV2	LV2 S	LV2 Sr	565,7mOhm
✓	**Passed**	LVreturn2	LVR2 S	LVR2 Sr	556,9mOhm
✓	**Passed**	LV3	LV3 S	LV3 Sr	563,2mOhm
✓	**Passed**	LVreturn3	LVR3 S	LVR3 Sr	561,4mOhm
✓	**Passed**	LV4	LV4 S	LV4 Sr	558,3mOhm
✓	**Passed**	LVreturn4	LVR4 S	LVR4 Sr	556,4mOhm
✓	**Passed**	LV5	LV5 S	LV5 Sr	558,6mOhm
✓	**Passed**	LVreturn5	LVR5 S	LVR5 Sr	556mOhm
✓	**Passed**	LV6	LV6 S	LV6 Sr	548,9mOhm
✓	**Passed**	LVreturn6	LVR6 S	LVR6 Sr	551,6mOhm
✓	**Passed**	LV7	LV7 S	LV7 Sr	569,9mOhm
✓	**Passed**	LVreturn7	LVR7 S	LVR7 Sr	553,6mOhm
✓	**Passed**	LV8	LV8 S	LV8 Sr	546,6mOhm
✓	**Passed**	LVreturn8	LVR8 S	LVR8 Sr	545,3mOhm
✓	**Passed**	LV9	LV9 S	LV9 Sr	567,8mOhm
✓	**Passed**	LVreturn9	LVR9 S	LVR9 Sr	559mOhm
✓	**Passed**	LV10	LV10 S	LV10 Sr	562,9mOhm
✓	**Passed**	LVreturn10	LVR10 S	LVR10 Sr	559mOhm
✓	**Passed**	LV11	LV11 S	LV11 Sr	568,5mOhm
✓	**Passed**	LVreturn11	LVR11 S	LVR11 Sr	562,3mOhm
✓	**Passed**	LV12	LV12 S	LV12 Sr	561,7mOhm
	Passed	LVreturn12	LVR12 S	LVR12 Sr	564,3mOhm

Passed	PH	PH S	PH Sr	572,9mOhm
Passed	PHreturn	PHR S	PHR Sr	558,3mOhm

--> Drains

Passed	Drain	Drain S	Drain r	229,6mOhm

HV channels and Tsensor

Parameters for continuity test

Threshold=15Ohm

Passed	Tsensor1	TS1 S	TS1 Sr	11,72Ohm
Passed	Tsensor2	TS2 S	TS2 Sr	11,72Ohm
Passed	Tsensor3	TS3 S	TS3 Sr	11,77Ohm
Passed	Tsensor4	TS4 S	TS4 Sr	11,68Ohm
Passed	H1	H1 S	H1 Sr	11,6Ohm
Passed	H2	H2 S	H2 Sr	11,84Ohm
Passed	H3	H3 S	H3 Sr	11,56Ohm
Passed	H4	H4 S	H4 Sr	11,72Ohm
Passed	HR1	HR1 S	HR1 Sr	11,62Ohm
Passed	H5	H5 S	H5 Sr	11,72Ohm
Passed	H6	H6 S	H6 Sr	11,5Ohm
Passed	H7	H7 S	H7 Sr	11,89Ohm
Passed	H8	H8 S	H8 Sr	11,82Ohm
Passed	HR2	HR2 S	HR2 Sr	11,71Ohm
Passed	H9	H9 S	H9 Sr	11,9Ohm
Passed	H10	H10 S	H10 Sr	11,8Ohm
Passed	H11	H11 S	H11 Sr	11,45Ohm
Passed	H12	H12 S	H12 Sr	11,52Ohm
Passed	HR3	HR3 S	HR3 Sr	11,59Ohm

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; 2269518058.85569; Ohm; 2,27GOhm
Passed; LVR1; 2162895175.72133; Ohm; 2,163GOhm
Passed; LV2; 1401226353.60733; Ohm; 1,401GOhm
Passed; LVR2; 1669580847.59644; Ohm; 1,67GOhm
Fail; LV3; 25520.4300484219; Ohm; 25,52kOhm
Passed; LVR3; 1482406868.68294; Ohm; 1,482GOhm
Passed; LV4; 1714241515.69537; Ohm; 1,714GOhm
Passed; LVR4; 1925573720.57259; Ohm; 1,926GOhm
Passed; LV5; 1160933188.79219; Ohm; 1,161GOhm
Passed; LVR5; 1026635190.46934; Ohm; 1,027GOhm
Passed; LV6; 1412743436.12474; Ohm; 1,413GOhm
Passed; LVR6; 724573126.59107; Ohm; 724,6MOhm
Passed; LV7; 2421095212.69509; Ohm; 2,421GOhm
Passed; LVR7; 1725441362.69633; Ohm; 1,725GOhm
Passed; LV8; 1482420796.62638; Ohm; 1,482GOhm
Passed; LVR8; 889317386.572085; Ohm; 889,3MOhm
Fail; LV9; 25522.9759832091; Ohm; 25,52kOhm
Passed; LVR9; 1787064770.19207; Ohm; 1,787GOhm
Passed; LV10; 1744350993.1104; Ohm; 1,744GOhm
Passed; LVR10; 1592858870.40412; Ohm; 1,593GOhm
Passed; LV11; 2221480714.9486; Ohm; 2,221GOhm
Passed; LVR11; 1196241230.35542; Ohm; 1,196GOhm
Passed; LV12; 1685634146.56307; Ohm; 1,686GOhm
Passed; LVR12; 2027702230.59625; Ohm; 2,028GOhm

Fail; PH; 25526.313297904; Ohm; 25,53kOhm
Fail; PHR; 25526.6793849381; Ohm; 25,53kOhm
--> HV channels
Parameters for HV isolation test
Voltage=1,2kV; Threshold=1GOhm; Trise=10s; Tmeas=1s

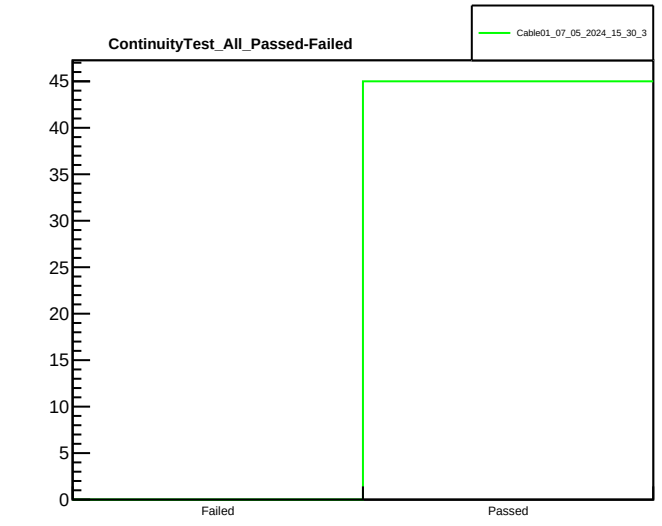
Passed	HV1	H1 F		>98,41GOhm
Passed	HV2	H2 F		>98,41GOhm
Passed	HV3	H3 F		>98,41GOhm
Passed	HV4	H4 F		>98,41GOhm
Passed	HV5	H5 F		>98,41GOhm
Passed	HV6	H6 F		>98,41GOhm
Passed	HV7	H7 F		>98,41GOhm
Passed	HV8	H8 F		>98,41GOhm
Passed	HV9	H9 F		>98,41GOhm
Passed	HV10	H10 F		42,23GOhm
Passed	HV11	H11 F		66,62GOhm
Passed	HV12	H12 F		>98,41GOhm
Passed	HVreturn1	HR1 F		>98,41GOhm
Passed	HVreturn2	HR2 F		>98,41GOhm
Passed	HVreturn3	HR3 F		>98,41GOhm

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

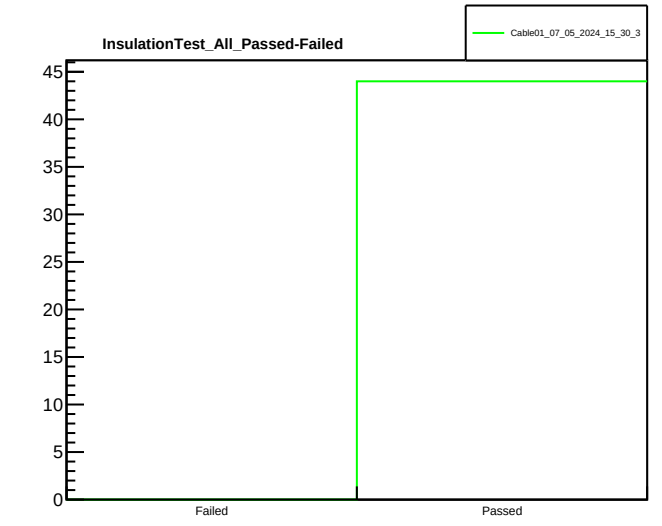
Passed	Tsensor1	TS1 F		>4,101GOhm
Passed	Tsensor2	TS2 F		>4,101GOhm
Passed	Tsensor3	TS3 F		>4,101GOhm
Passed	Tsensor4	TS4 F		>4,101GOhm

INSULATION GROUP TEST
--> LV channels
Parameters for HV isolation test
Threshold=10MOhm
Fail; LV_group; 25534.3050078553; Ohm; 25,53kOhm
--> HV channels
Parameters for HV isolation test
Voltage=1,2kV; Threshold=100MOhm; Trise=10s

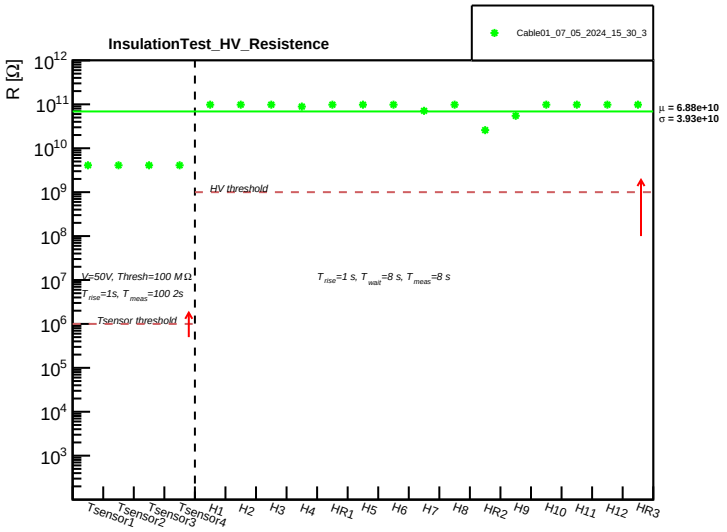
Passed	HV_group	HV	Low group	>4,921GOhm



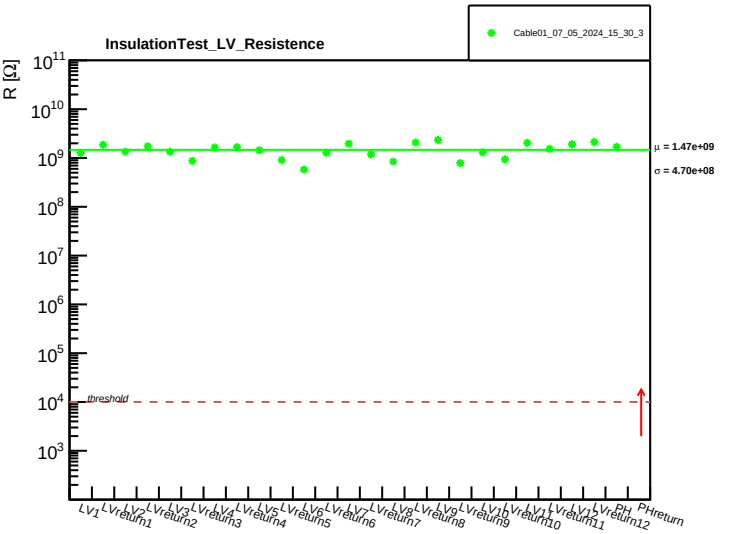
Parameters : i=500, Thresh.= 40, T_{rise} = 2 s, T_{wait} = 2 s, T_{meas} = 1 s, V_{lim} = 48



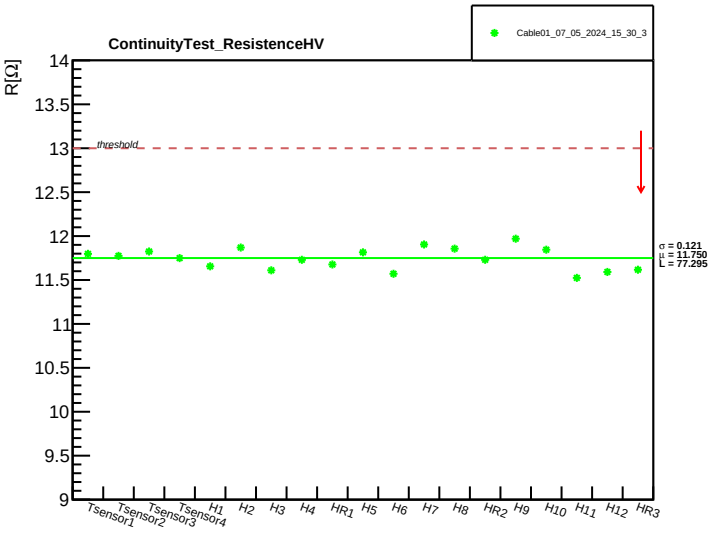
Parameters : V=50 V, Thresh.= 100 MΩ, T_{rise} = 1 s, T_{wait} = 8 s, T_{meas} = 8 s, i_{lim} = 1.95 mA, V_{ramp}=120 V/s



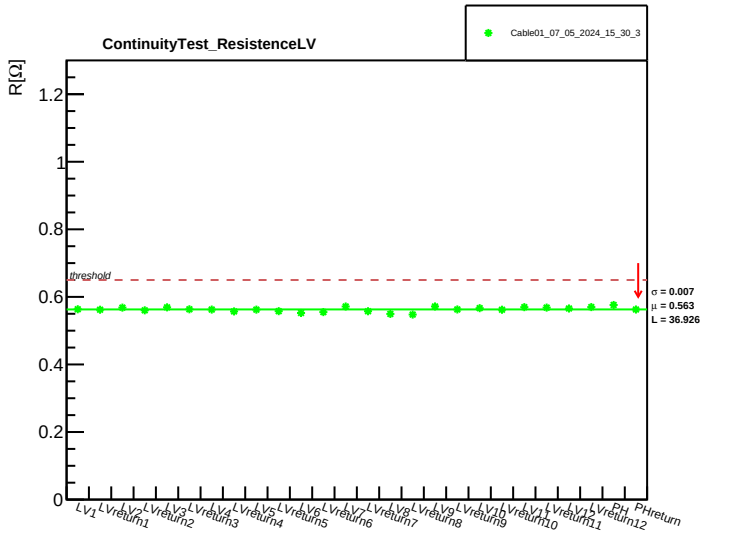
Initial Parameters : V=1.2 kV, Thresh.= 1 GΩ, T_{rise} = 10 s, T_{wait} = 8 s, T_{meas} = 1 s, i_{lim} = 1.95 mA, V_{ramp}=120 V/s



Parameters : V=50 V, Thresh.= 100 MΩ, T_{rise} = 1 s, T_{wait} = 8 s, T_{meas} = 8 s, i_{lim} = 1.95 mA, V_{ramp}=120 V/s



Parameters : i=500, Thresh.= 40, T_{rise} = 2 s, T_{wait} = 2 s, T_{meas} = 1 s, V_{lim} = 48



Parameters : i=500, Thresh.= 40, T_{rise} = 2 s, T_{wait} = 2 s, T_{meas} = 1 s, V_{lim} = 48