

Test report

IONIO B.V.

DeStanderd10C

3774SC Kootwijkerbroek



Test system	SCHLEICH MTC2-6kV 12488
Test program	Demo 1 EN
Result	PASS
Test date	17.02.2021 13:04:41

Summary

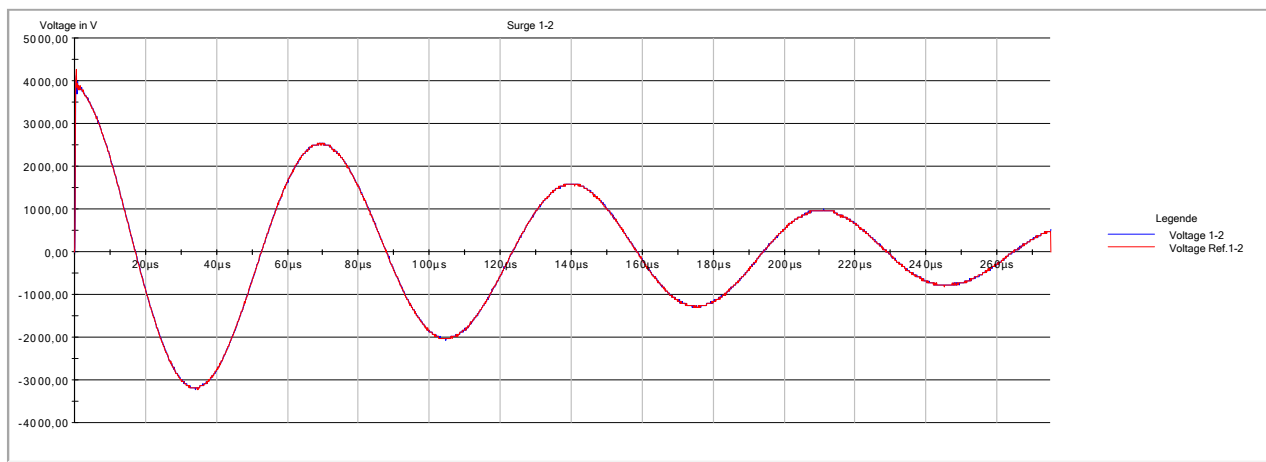
Resistance 1-2	76.27 mOhm (20.0°C), Ambient temperature=25.3°C	PASS
Resistance 2-3	76.27 mOhm (20.0°C), Ambient temperature=25.3°C	PASS
Resistance 3-1	76.18 mOhm (20.0°C), Ambient temperature=25.3°C	PASS
Deviation	0.124 % (20.0°C)	PASS
Surge 1-2	3855V, Cor.=0.1%, Attenuate=0.1%	PASS
Surge 2-3	3844V, Cor.=0.1%, Attenuate=0.5%	PASS
Surge 3-1	3844V, Cor.=0.0%, Attenuate=0.1%	PASS
Compare	3850V, Cor.=0.2%, Attenuate=0.5%	PASS
Surge 1-2 TE	PDIV: 1518V, RPDIV: 2036V, RPDEV: 1929V, PDEV: 1683V, Background noise signal: 37,50mV, Detection system noise signal: 43,75mV	Tested
Surge 2-3 TE	PDIV: 1416V, RPDIV: 2555V, RPDEV: 2528V, PDEV: 2421V, Background noise signal: 37,50mV, Detection system noise signal: 50,00mV	Tested
Surge 3-1 TE	PDIV: 1357V, RPDIV: 3014V, RPDEV: 2768V, PDEV: 2581V, Background noise signal: 37,50mV, Detection system noise signal: 50,00mV	Tested
Insulation test	1005V, >100.000 GOhm, I _{max1} =1.100μA, I _{max2} =0.008μA	PASS

Resistance test

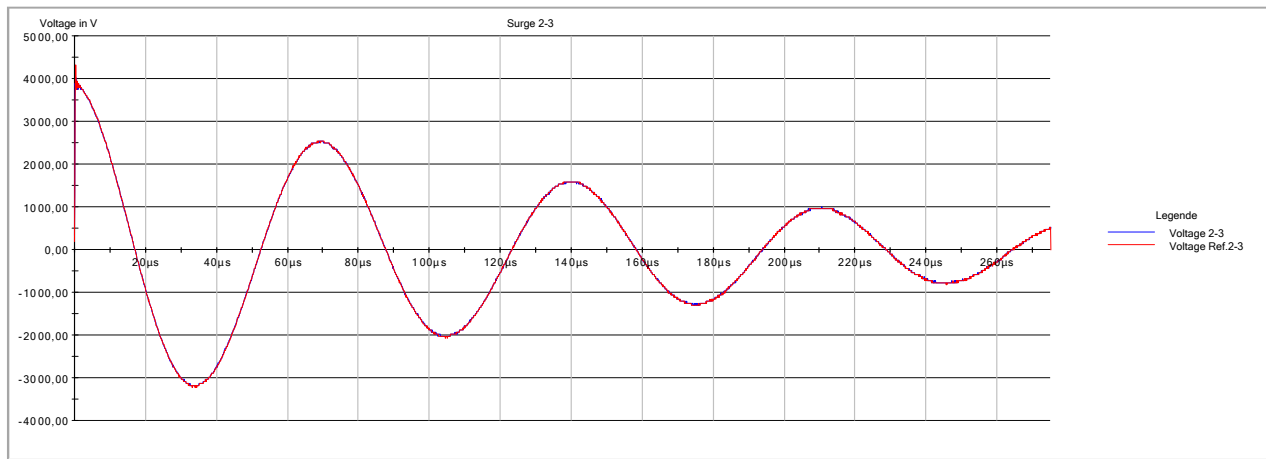
Test step	Set value(s)	Real value(s)	
Resistance 1-2	75.00, (67.50 - 82.50) mOhm	76.27 mOhm (20.0°C), Ambient temperature=25.3°C	PASS
Resistance 2-3	75.00, (67.50 - 82.50) mOhm	76.27 mOhm (20.0°C), Ambient temperature=25.3°C	PASS
Resistance 3-1	75.00, (67.50 - 82.50) mOhm	76.18 mOhm (20.0°C), Ambient temperature=25.3°C	PASS
Deviation	10.000 %	0.124 % (20.0°C)	PASS

Surge test

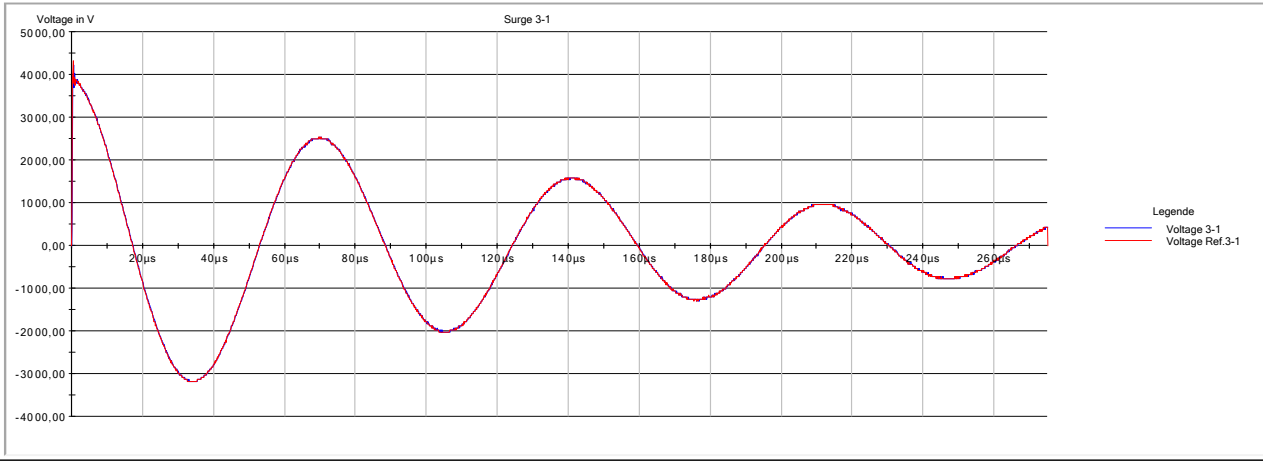
Test step	Set value(s)	Real value(s)	
Surge 1-2	4000V, Cor.=5.0%, Att.=10.0%	3855V, Cor.=0.1%, Attenuate=0.1%	PASS



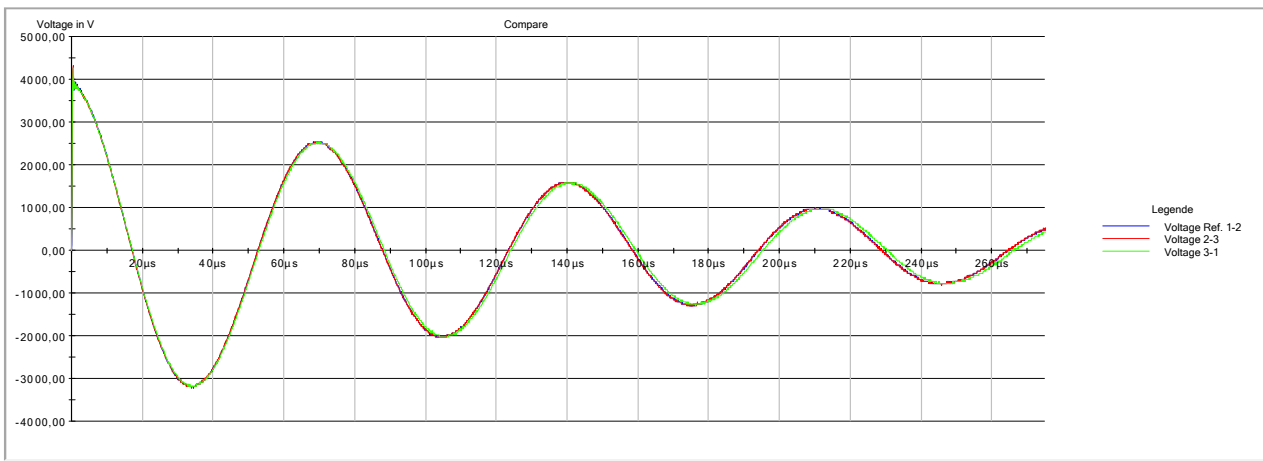
Surge 2-3	4000V, Cor.=5.0%, Att.=10.0%	3844V, Cor.=0.1%, Attenuate=0.5%	PASS
-----------	---------------------------------	-------------------------------------	-------------



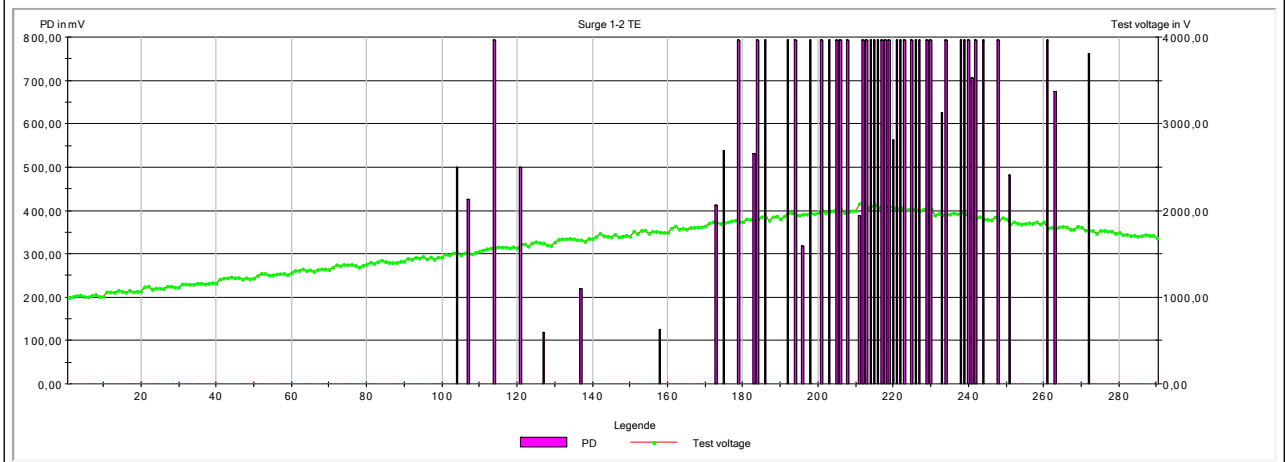
Test step	Set value(s)	Real value(s)	
Surge 3-1	4000V, Cor.=11.0%, Att.=10.0%	3844V, Cor.=0.0%, Attenuate=0.1%	PASS



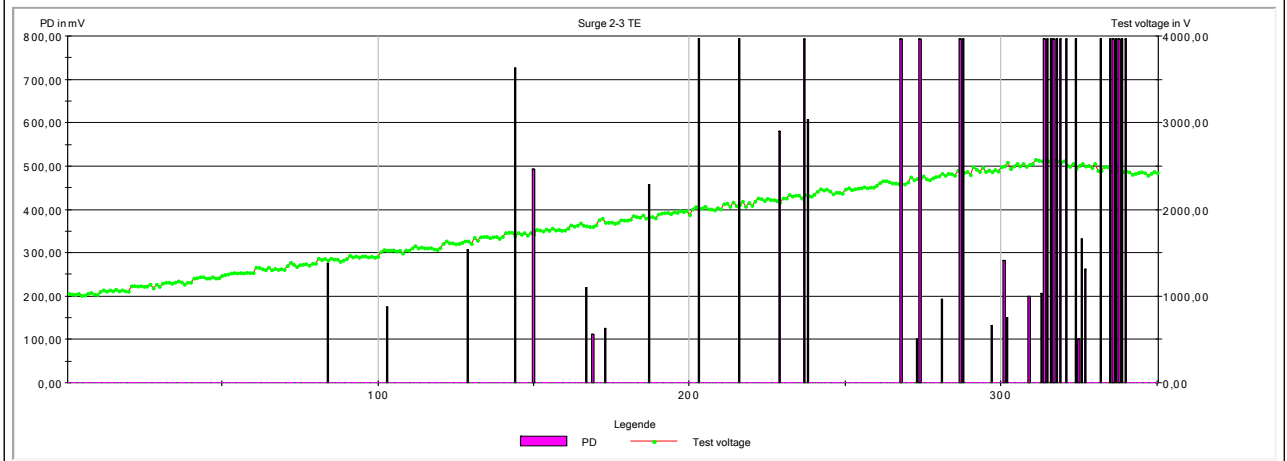
Compare	4000V, Cor.=20.0%, Att.=20.0%	3850V, Cor.=0.2%, Attenuate=0.5%	PASS
---------	----------------------------------	-------------------------------------	-------------



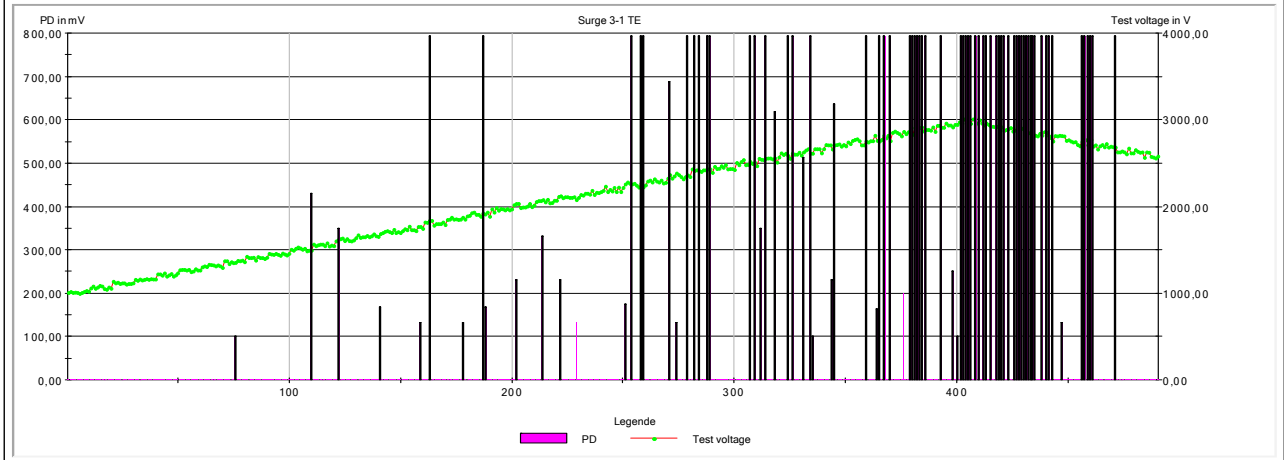
Test step	Set value(s)	Real value(s)	
Surge 1-2 TE	No set values, Detection threshold: 100 mV	PDIV: 1518V, RPDIV: 2036V, RPDEV: 1929V, PDEV: 1683V, Background noise signal: 37,50mV, Detection system noise signal: 43,75mV	Tested



Surge 2-3 TE	No set values, Detection threshold: 100 mV	PDIV: 1416V, RPDIV: 2555V, RPDEV: 2528V, PDEV: 2421V, Background noise signal: 37,50mV, Detection system noise signal: 50,00mV	Tested
--------------	--	--	--------

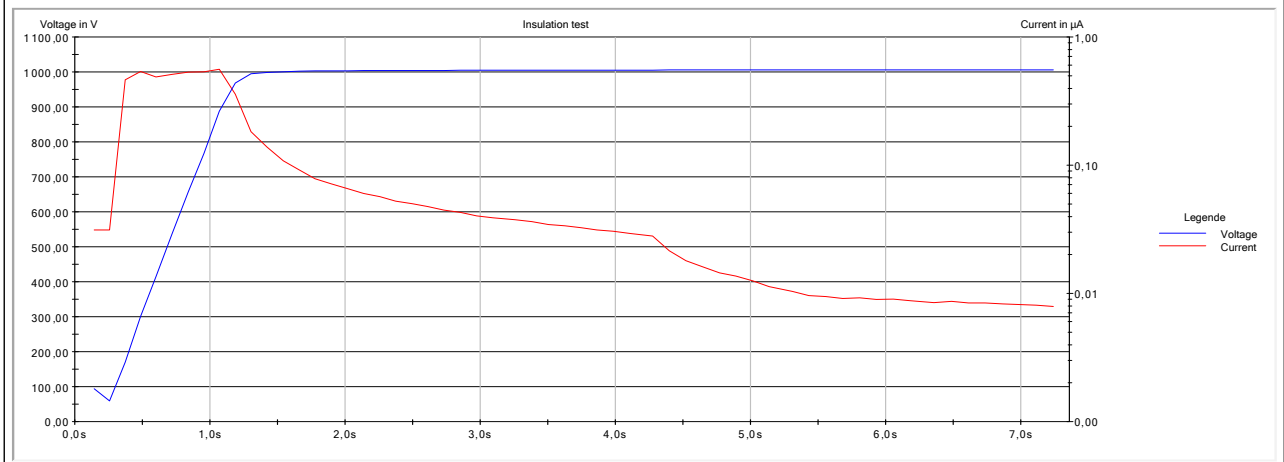


Test step	Set value(s)	Real value(s)	
Surge 3-1 TE	No set values, Detection threshold: 100 mV	PDIV: 1357V, RPDIV: 3014V, RPDEV: 2768V, PDEV: 2581V, Background noise signal: 37,50mV, Detection system noise signal: 50,00mV	Tested



Insulation test DC

Test step	Set value(s)	Real value(s)	
Insulation test	1000V, 1.000 MOhm	1005V, >100.000 GOhm, I _{max1} =1.100μA, I _{max2} =0.008μA	PASS



Insulation test explanations:
 I_{max1}: maximum current during the ramp up
 I_{max2}: maximum current after the test voltage has been reached
 DAR and PI: Resistance > 5GOhm => Values are ambiguous and will be disregarded (IEEE Std 43-2000)

Surge test explanations:
 Cor.: (Correlation) Being a mathematical procedure to the inquiry of the resemblance of two signals.
 EAR.: (Difference surface) determines the originating surface between two curves and compares this.
 AREA: the surface is calculated between signal and the zero line and is compared to the reference.
 Zero Crossing: with the help of the zero passageways the frequency is determined and compared
 Attenuate: Damping of the curve oscillation
 U_e: PD start voltage
 U_a: PD stop voltage