

PUTON® Coil Test System CTS-6000



Introduction

•The CTS-6000 Coil Testing System, an integrated solution combining the High-Voltage Matrix Controller (HMC-140) with three instruments: Low-Resistance Meter (GOM-804), AC Withstand Voltage Tester (GPT-15001), and Interlayer Short-Circuit Tester (ST-6K). This system is designed to conduct coil testing with efficiency, precision, and effectiveness.

•Component Overview:

1. High-Voltage Matrix Controller (HMC-140): This controller interfaces with the other three instruments, executing the testing process by controlling and monitoring various test parameters.
2. Low-Resistance Meter (GOM-804): This instrument measures the low-resistance values of coils, ensuring their continuity and conductivity.
3. AC Withstand Voltage Tester (GPT-15001): This instrument tests the high-voltage insulation strength of coils, verifying their insulation performance under high voltage.
4. Surge Tester (ST-6K): This instrument detects interlayer short-circuit conditions within coils, aiding in troubleshooting potential faults.

Specifications



Type	HMC-140	Type	GOM-804	Type	GPT-15001	Type	ST-6K
Test clip	A-Red B-Black G1-Green G2-Blue	Display	50,000 counts	Output voltage range	0.050kV~ 5.000kV	Test Voltage	200V ~ 6,000V
	1.Ground Continuity Test	Gear	5mΩ~100Ω	Maximum rated current	100mA (0.5kV< V ≤5kV)	Output energy	Max 0.4J
	2.Low-Resistance Test	Temperature sensing stick	PT-100	Output voltage frequency	50~60Hz	Sampling Rate	12bit/5ns (200MHz)
Function	3.High-Voltage Insulation Test			Current measurement range	1μA~100.0mA		
	4.Interlayer Short-Circuit Test						
	5.Automatic Full Inspection Test						

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Test Function Introduction

• The correspondence between test clips and coils is as follows:

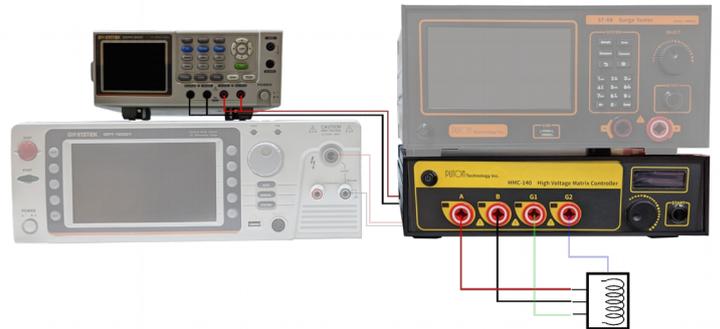
A (Red) - Coil A, B (Black) - Coil B, G1 (Green) - Coil G1, G2 (Blue) - Coil G2's casing.

1. Ground Continuity Test



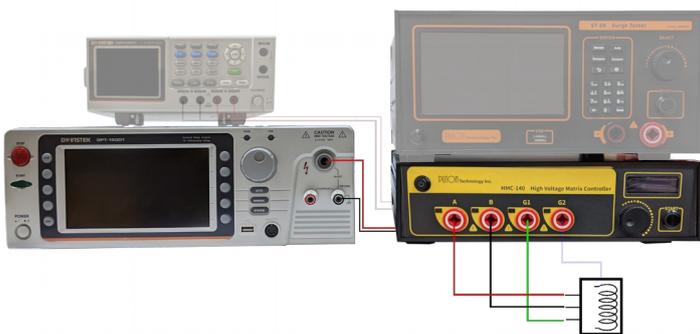
The high-voltage matrix controller is connected to the low-resistance meter for ground continuity test, with PASS/FAIL displayed on the upper right corner screen of the controller.

2. Low-Resistance Test



The high-voltage matrix controller is connected to the low-resistance meter for low-resistance test, with PASS/FAIL displayed on the upper right corner screen of the controller.

3. High-Voltage Insulation Test



The high-voltage matrix controller is connected to the AC withstand voltage tester for high-voltage insulation test, with PASS/FAIL displayed on the upper right corner screen of the controller.

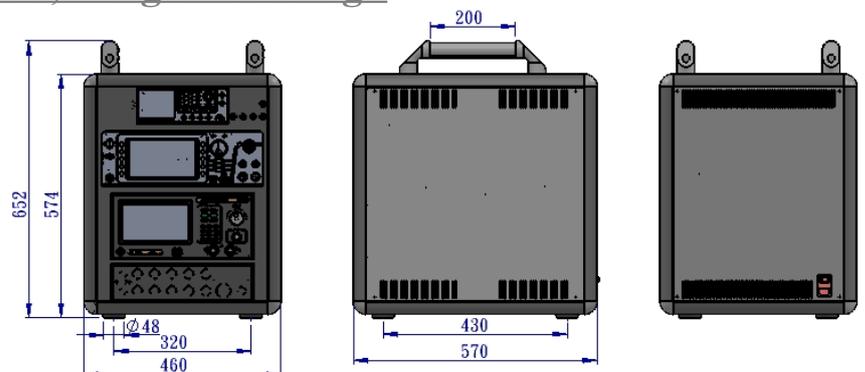
4. Interlayer Short-Circuit Test



The high-voltage matrix controller is connected to the pulse coil tester for interlayer short-circuit test, with PASS/FAIL displayed on the upper right corner screen of the controller.

5. Automatic Full Inspection Test: Automatically completes tests 1 through 4. All instrument results must be PASS for the final test result to be considered as PASS.

Optional: External frame chassis, integrated design



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