

PARTIAL DISCHARGE TESTER DAC-PD-7P

Features

- Partial Discharge Tester with Built-in Power supply, test voltage Max 5kV.
- Exclusively applicable to EN60747-5-2:2002 (VDE routine test).
- Operation in very short tact time (Min 4 sec.) is possible.
- By equipping Input Output Contact terminal for external control and output for PASS/FAIL judgment, DAC-PD-7P is suitable for Production Line Test.

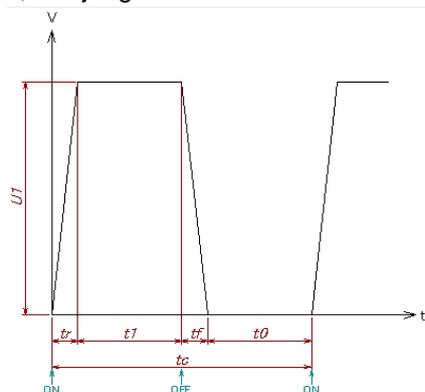
Applications

Suitable for Production Line Test for a lower capacitance specimen like;
such as, IGBT gate drive photo coupler,
Pulse Transformer,
EV Motor, Relay, etc.



Manual Test

When partial discharges which occurred during the retention period "t1" at test voltage "U1" exceed both any set-up electric charge and generating frequency value, it is judged as FAIL, and when the charges within the values, it is judged as PASS.

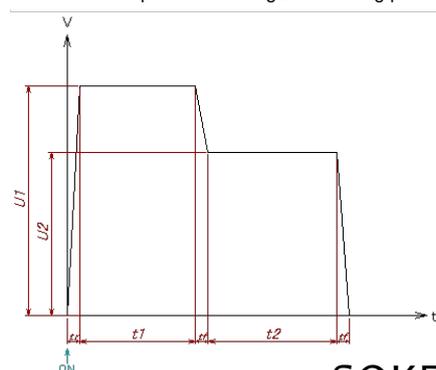


U1	: Test Voltage	0 - 5000VAC
t0	: Test Power OFF time	0.5 sec or more
t1	: Holding Time (Partial Discharge Testing Period)	1 sec or more
tr, tf	: Voltage Rising time·falling time	0.1 sec

Automated Test

Any of one to five measuring points can be set up.

The below is an example when setting 2 measuring points.



Setting item (per each measuring point)	Setting range
1. Voltage V[V]	0 - 5000V
2. Holding Time t[s]	0 - 60sec
3. Electric charge for judgment Q[pC]	1 - 1000[pC]

U1: Voltage at Measuring point 1
t1: Holding time at measuring point 1
tr, tf: Rising time, falling time (0.1s or less)

Model DAC-PD-7P Partial Discharge TESTER

Specifications

Power Unit

·Input Voltage	100VAC±10% 50/60Hz
·Output Voltage	0 - 5000VAC, 30VA
·The shortest testing cycle	4s
·Voltage Holding Time (Measuring Time)	>1s
·Voltage Rising Time	<0.1s
·Partial Discharge in Device	<1pC (at AC5000V)
·Frequency	50Hz, 60Hz
·Wave Shape	Sine wave
·Maximum Capacitance Load	1000pF
·Voltage Setting Range	0 - 5000VAC
·Voltage Setting Accuracy	1%F.S.

Partial Discharge Measurement Part

·Gain	0 - 80dB
·Judgment Electric charge	1~1000pC (with restriction by detection sensitivity)
·Judgment Generation Frequency	10~9000PPS
·Calibrator Charge	100pC, 1000pC
·Calibration Pulse Injection Capacitor	50pF
·Calibration Pulse Voltage	2V, 20V
·Calibration Pulse Generation Frequency	50PPS
·Built-in Coupling Capacitor	1000pF

Others

· Judgment	Negative judgment is given when a pulse count for 1 second exceeds a threshold value
· Display	
Measuring Data	Pulse counter (at Threshold value of Electric Charge)
Test Voltage	Existing Applied Voltage
Setting Voltage	Voltage to be applied when measure ON
Judgment Electric Charge	Electric Charge to be judged
Generation Frequency Threshold	Synchronize with test frequency
OK/NG Judgment	Negative judgment is given when generating frequency at judgment electric charge exceeds a threshold value.
Calibration Value	100pC / 1000pC
Test Frequency	50Hz / 60Hz
REMOTE/LOCAL	
· Output Contact	PASS/FAIL Judgment, during voltage output (Each Dry Contact)
Output Voltage	Output : SHORT Suspension : OPEN
PASS/FAIL Contact	FAIL : OPEN PASS : SHORT
Input Contact	Measurement START/END
START/ END contact	OPEN : turn off measurements SHORT : turn on Measurement
Interlock	OPEN : disable to measure SHORT : able to measure
· Interface	RS-232C
· Size	427mm×380mm×197mm (W×D×H, without projection)
· Weight	15kg

Specifications are subject to be changed without prior notice.

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