

# **PARTIAL DISCHARGE TESTER DAC-PD-7P**

# Features

- Partial discharge tester with built-in power supply, test voltage Max 5kV.
- Applicable to EN60747-5-5:2007 (VDE routine test).
- Operation in very short tact time (Min 4 sec.) is possible.
- Suitable for production line test. (External control and PASS/FAIL judgment are available.)

# Applications

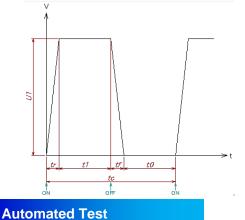
- IGBT gate drive photo coupler
- Pulse Transformer



# **Manual Test**

When partial discharges which occurred during the retention period "t1" at test voltage "U1" exceed set-up values of both electric charge and generating frequency

, "FAIL" is determined. When the charges are within the values, "PASS" is determined.



- U1 : Test Voltage
- t0 : Test Power OFF time
- : Holding Time t1

1. Voltage V[V]

- 1 sec or more (Partial Discharge Testing Period)
- tr, tf : Voltage Rising time falling time 0.1 sec

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

The below is an example when setting 2 measuring points. 5 +2

Setting item (per each measuring point)

- Setting range 0 - 5000V
- 0-60sec

0 - 5000VAC

0.5 sec or more

- 2. Holding Time t[s] 3. Electric charge for judgment Q[pC] 1 - 1000[pC]
  - U1: Voltage at Measuring point 1
  - t1: Holding time at measuring point 1
  - Rising time, falling time (Less than 0.1s / 1kV/s) tr, tf:

# SOKEN ELECTRIC CO., LTD.

# Model DAC-PD-7P **Partial Discharge TESTER**

# **Specifications**

# **Power Unit**

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

#### **Partial Discharge Measurement Part**

 Gain · Judgment Electric charge Judgment Generation Frequency ·Calibrator Charge ·Calibration Pulse Injection Capacitor ·Calibration Pulse Voltage ·Calibration Pulse Generation Frequency ·Built-in Coupling Capacitor

# **Others**

Judgment

Display

Measuring Data Test Voltage Setting Voltage Judgment Electric Charge **Generation Frequency Threshold PASS/FAIL Judgment** 

**Calibration Value Test Frequency** 

Output Contact

**Output Voltage** PASS/FAIL Contact Input Contact START/ END contact Interlock

- Interface
- Size
- Weight

0 - 80dB 1~1000pC (with restriction by detection sensitivity) 10~9000PPS 100pC、1000pC 50pF 2V, 20V 50PPS 1000pF

Negative judgment is given when a pulse count for 1 second exceeds a threshold value

Pulse counter (at Threshold value of electric charge) Existing applied voltage Voltage to be applied when measure ON Electric charge to be judged Synchronize with test frequency Negative judgment is given when generating frequency at judgment electric charge exceeds a threshold value. 100pC / 1000pC 50Hz / 60Hz

PASS/FAIL Judgment, during voltage output (Each Dry Contact) Output : SHORT Suspension : OPEN FAIL : OPEN PASS : SHORT Measurement START/END **OPEN** : turn off measurements SHORT : turn on measurement OPEN : disable to measure SHORT : able to measure **RS-232C** 427mm×380mm×197mm (W×D×H, without projection) 15kg

Specifications are subject to be changed without prior notice.



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