

# HOT LINE COIL RESISTANCE METER

## DAC-HRI-3



- Test Materials:**
- EV Motor**
  - Brushless Motor**
  - Compressor Motor for Air-Conditioner**

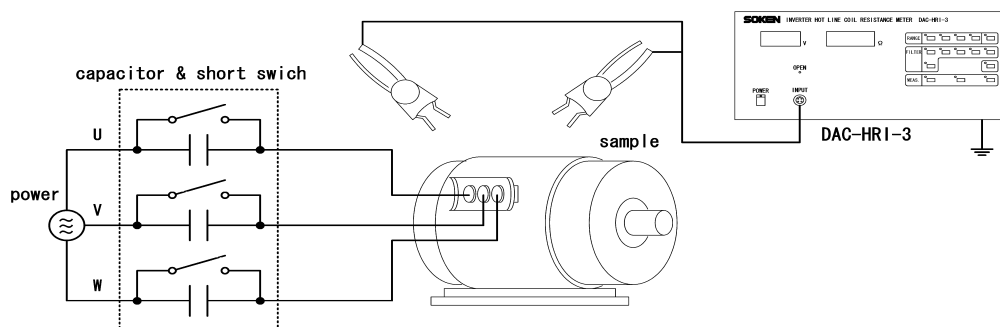
The rise in temperature in electrical equipment is generally estimated from changes in the resistance of the winding wire after the power to the equipment is turned off. However, our HOT LINE coil resistance temperature meter provides real-time monitoring of changes in the resistance of electrical equipment winding wire, because it is capable of measuring winding wire resistance while AC power is applied to the equipment (the tested device is running). The detected changes in resistance can be converted into temperature rise. Winding wire resistance measurement can continue even after the power is turned off.

This method of resistance monitoring can provide a means for testing the safety of electrical equipment winding wire (temperature measurement using resistance-temperature characteristics \*1).

This temperature meter is capable of measuring the resistance of a live winding wire of electrical equipment powered by an inverter supply. It can also measure the resistance of winding wire in the presence or absence of ordinary AC voltage.

\*1 JIS Handbook 42 Electrical Instrumentation

C2526-1979 Testing method for electrical resistance-temperature characteristics of metallic resistance materials



## Specifications

- Measuring range :
  - 0.2  $\Omega$  Range : 0-0.2000  $\Omega$  (Testing Current DC100mA)
  - 2  $\Omega$  Range : 0-2.000  $\Omega$  (Testing Current DC100mA)
  - 20  $\Omega$  Range : 0-20.00  $\Omega$  (Testing Current DC10mA)
  - 200  $\Omega$  Range : 0-200.0  $\Omega$  (Testing Current DC1mA)
- Testing Voltage : AC400V max (50/60Hz)
- Frequency : 10 - 400Hz
- Resolution :
  - Voltage Meter : 0.1V
  - Resistance Meter : 0.1m $\Omega$  (0.2  $\Omega$  Range)
- Display :
  - Voltage Meter : 4 digit
  - Resistance Meter : 4 digit 2000FS
- Accuracy :
  - 2  $\Omega$  /20  $\Omega$  /200  $\Omega$  :  $\pm 0.3\%$  FS
  - 0.2  $\Omega$  Range :  $\pm 0.5\%$  FS
- Input impedance :
  - 0.2  $\Omega$  /2  $\Omega$  Range : Approx. 1.5k  $\Omega$
  - 20  $\Omega$  Range : Approx. 15k  $\Omega$
  - 200  $\Omega$  Range : Approx. 150k  $\Omega$
- Interface : RS232C or GP-IB
- Power Source : AC100V-240V  $\pm 10\%$  50/60Hz
- Dimensions : W430  $\times$  H200  $\times$  D385mm Approx. 20kg
- Accessories :
  - 1) 4-terminal probe (6m for HR)
  - 2) Power cable (3P inlet cord with a ground terminal)
  - 3) Spare Fuse (2A)
  - 4) Instruction manual
  - 5) Inspection certificate (Test Report)
- Option : DC Blocking Capacitors Box (C-BOX)

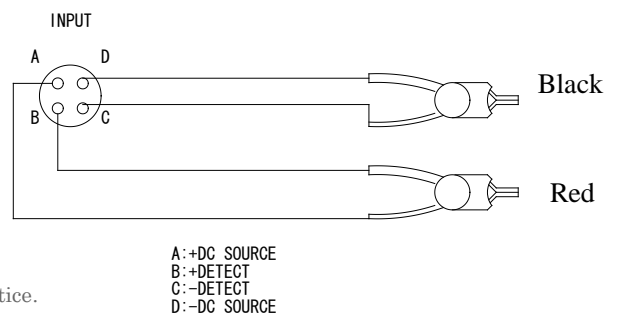


C-BOX

### 4-terminal measurement probe

Use the 4-terminal measurement probe supplied with the temperature meter.

The probe contains special clips that enable 4-point measurement. The special clips are connected to the connector as follows:



Specifications are subject to change for improvements without prior notice.



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# SOKEN

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