

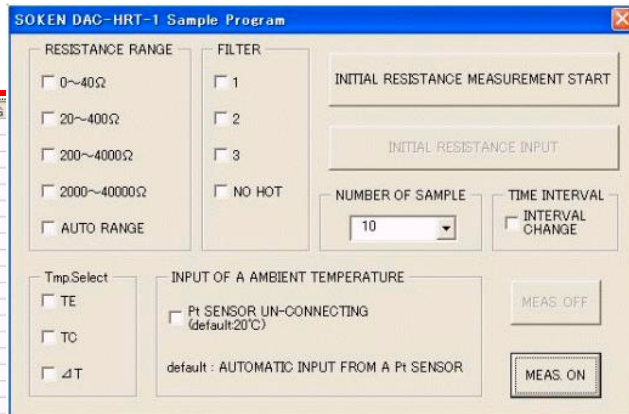
HOT LINE

HOT LINE COIL RESISTANCE & TEMPERATURE METER

DAC-HRT-1



	A	B	C	D	E	F	G
1		SET RO =	120.75Ω				
2		SET TO =	22.6°C				
3							
4		測定回数 =	1000 Times				
5		測定間隔 =	10 s				
6							
7		測定回数	測定時刻	抵抗値(Ω)	温度値(°C)	電圧値(V)	
8		1	10:06:49	121.91	22.9	211	
9		2	10:06:59	121.39	23.9	214	
10		3	10:07:09	122.27	25.8	214	
11		4	10:07:19	123.24	27.9	214	
12		5	10:07:29	124.18	29.9	214	
13		6	10:07:39	125.02	31.6	214	
14		7	10:07:49	125.76	33.2	214	
15		8	10:07:59	126.53	34.9	214	
16		9	10:08:09	127.19	36.3	214	
17		10	10:08:19	127.87	37.7	214	
18		11	10:08:29	128.46	39	214	
19		12	10:08:39	129.08	40.3	214	
20		13	10:08:49	129.64	41.5	214	
21		14	10:08:59	130.18	42.6	214	
22		15	10:09:09	130.69	43.7	214	
23		16	10:09:19	131.15	44.7	214	
24		17	10:09:29	131.67	45.8	214	
25		18	10:09:39	132.12	46.8	215	
26		19	10:09:49	132.53	47.6	214	
27		20	10:09:59	132.98	48.6	214	



Automatic Measuring Sample Software

Coil Winding Temperature Test under energized in AC voltage!!

For J I S 5 3 1 1 standard test

東方科技公司 ORIENTAL TECHNOLOGY COMPANY



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General



This measuring instrument, based on a testing standard JIS5311, can measure resistances of coil winding of motors and transformers under energized in AC voltages. The measured resistances are automatically calculated by an internal CPU to give an equivalent in temperature.

It is possible to ensure the safety in the rise in heat of electrical machineries like motors and transformers.

Feature

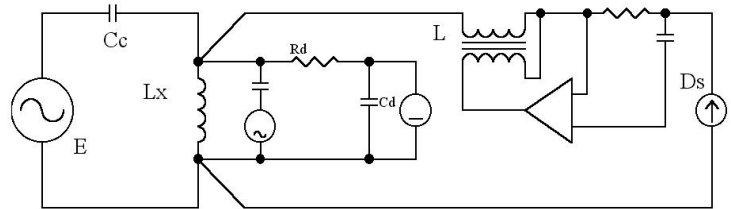
- Maximum 450V AC test available.
- GP-IB and RS232C as standard
- With Temperature sensor PT100 (option). It can respond to the change in environmental temperature.
- With Selection Control Box(option), DAC-SCB-2 a number of specimen can be measured in series.
- With Thermal printer (option) measured value and a temperature equivalent can be printed out.

Specifications

- Resistance Measuring Range :
 - 20Ω range : 0 – 40.000Ω
 - 200Ω range : 20.00 – 400.00Ω
 - 2000Ω range : 200.0 – 4000.0Ω
 - 20000Ω range : 2000 - 40000Ω
- Test specimen applied voltage : Max. AC450V (50/60Hz)
- Measuring Input Impedance : 200kΩ or more(50/60Hz)
Minimum resolution : 1mΩ (20Ω range)
- Display :
 - Resistance : 5 digitals, Max display“41000”
 - Temperature : 5 digitals、Max display “999.9”(°C) “1999.9” (°F)
 - Voltage : 3 Digitals, Max display “550”

Measurement principle

Alternating voltage (E) is supplied to the sample (Lx). In the state, a direct testing current is superimposed from a constant current source (Ds), and the voltage (E) component is eliminated by Rd and Cd to measure by Potential Drop Method. At this time, so that the testing current from a constant current source may not flow into AC power supply, a blocking capacitor, Cc, is combined. And an electronic inductance (L) is combined so that AC power source may not flow into the constant current source.



- E:AC test source
- Cc:DC cut capacitor
- Lx:Test sample
- Ds:Constant DC current source
- Cd:Detecting capacitor
- Rd:Detecting resistor
- L:Electronical inductor
- AC voltmeter
- DC voltmeter

Applications

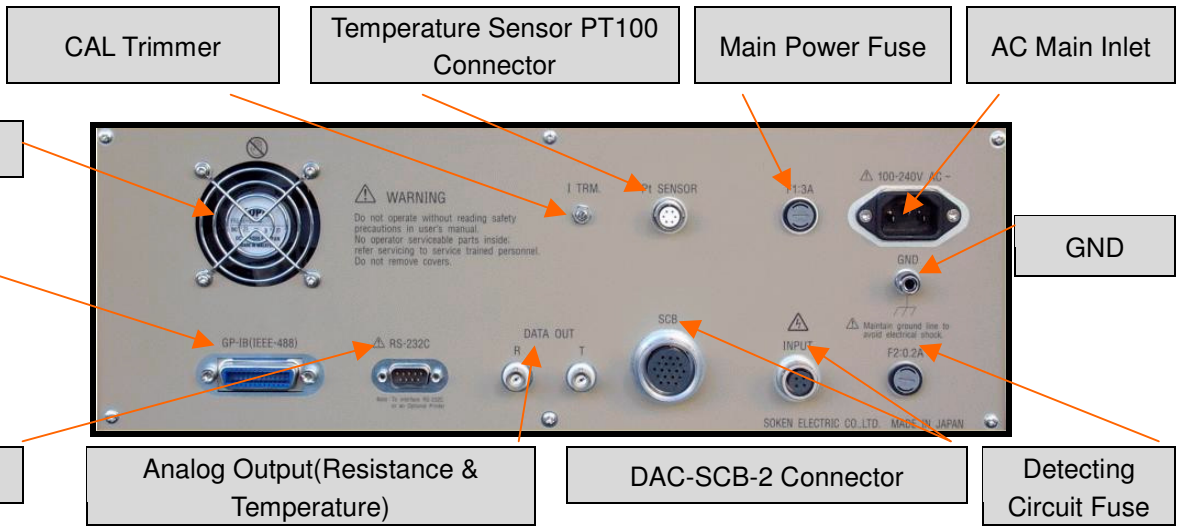
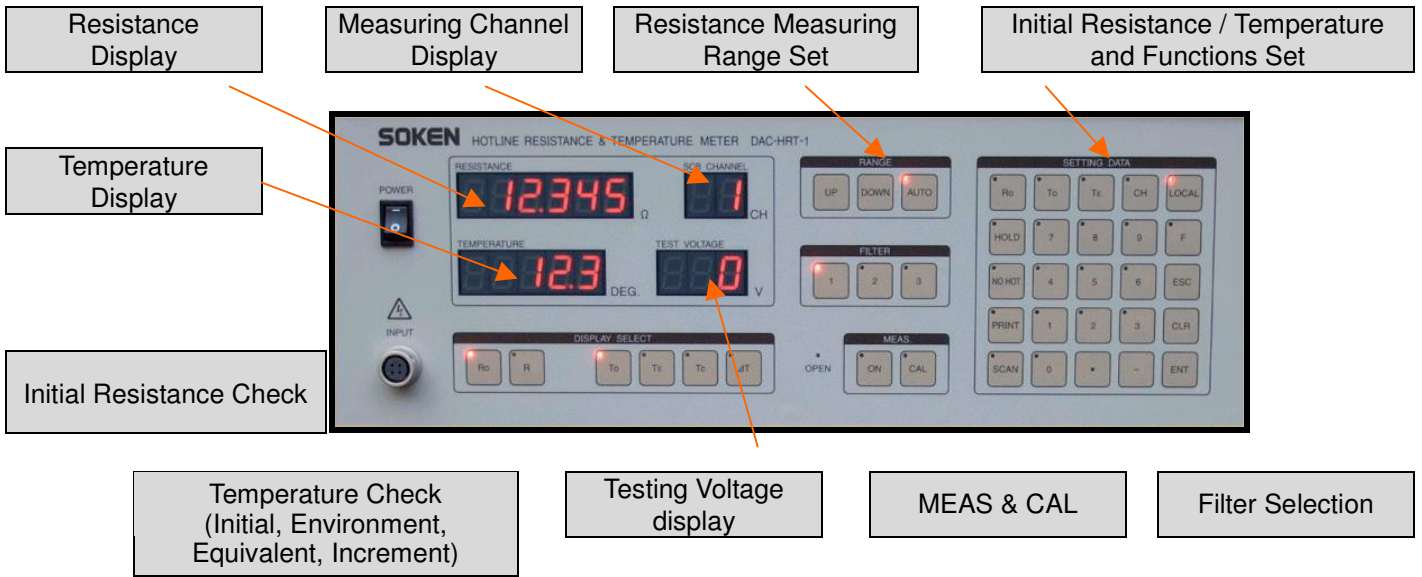
- **Motor**
 - For home appliances, industry and Telecommunications
 - Compressor Motor for Air conditioner
- **Transformer Choking Coil**
 - Home Appliances
 - Audio and Video equipment
 - Microwave oven
 - For medical equipment



納入実績 ※HOT LINE 測定器として試験機関抜粋 (順不同)

- 国内** ●(財)電気安全環境研究所(JET) ●日本電気計器検定所(JEMIC) ●(財)日本品質保証機構(JQA)
●テュフラインラント・ツィンツァムン (株) ●ULツィンツァムン
- 海外** ●UL(アメリカ、香港) ●BSI(イギリス) ●E1(フィンランド) ●CSA(カナダ) ●EEA(イタリア)
●VDE(ドイツ) ●SEMKO(スウェーデン) ●KEMA(オランダ) ●広州電気安全試験室(中国) ●検研局(中国)
●上海浦東海関進出口商品検験局(中国) ●美華認証(蘇州UL)有限公司(中国) ●上海医療器械検験局(中国) ●広州電器検測研究所(中国)
●広東省広州進出口商品検験局(中国) ●浙江省技術監督局方園検測有限公司(中国) ●安徽省合肥通用機会研究所(中国)
●Small and Medium Business Administration (韓国) ●Korea Institute of Industrial Technology(KITECH) 韓国
●Korea Electrotechnology Reserch Institute(KERI)韓国 ●Korea Electric Testing Institute(KETI)韓国 ●Korea Testing Laboratory(韓国)
●Korea Electrical Safety Corporation(KESCO)韓国 ●Korea Electronics Technology Institute(KETI)韓国

Panel explanation



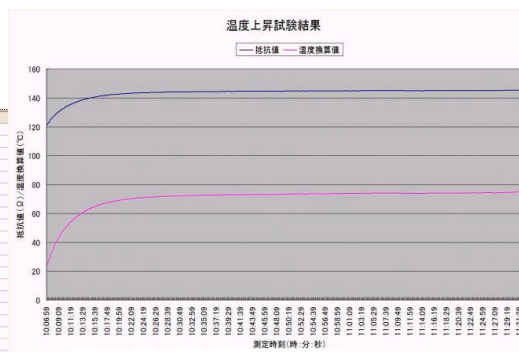
Automatic Measuring Software (sample)

This sample software runs on Excel.

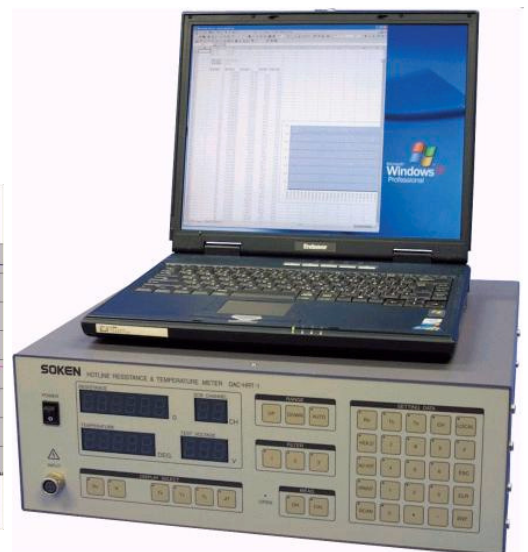
The data measured automatically can be taken into the sheet of Excel, and be specified in graph form easily and promptly.

Since RS-232C interface is provided as standard, the software can be used immediately if your PC has a COM port.

A	B	C	D	E	F	G
1	SET R0 =	120.75Ω				
2	SET T0 =	22.6℃				
3						
4	測定回数 =	1000 Times				
5	測定時間 =	10 s				
6						
7	測定回数	測定時刻	抵抗値(Ω)	温度値(℃)	電圧値(V)	
8	1	10:06:49	121.91	22.9	211	
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26	19	10:09:49	132.53	47.6	214	
27	20	10:09:59	132.98	48.6	214	



Graph Example



- PC Operating Requirements
- OS: Windows®98SE / 2000(SP3 or later) / XP Each Japanese version
- Application : Microsoft® Excel2000

Option

DC cut capacitor box *DAC-CHR-1B*

This box, combined with HOTLINE winding resistance measuring instrument, has blocking capacitors inside so that testing currents may not flow into AC line. It is surely required for measurement under energized. An appropriate capacitor must be selected in accordance with testing currents.

● Specifications

- Built-in capacitor : Electrolytic capacitor
 - Maximum-allowed-current Value :
470 μ F \cdot 2A, 4,700 μ F \cdot 7A, 47,000 μ F \cdot 23 A
(One-piece each built-in Protection diode \ Arrester included)
 - Size & Weight : W 210 x H 133 x D 160 mm Approx. 3 kg
- Optional capacitors for single phase, 3 phases, and large current specification etc., are available.



Temperature sensor *PT100*

Ambient temperature is automatically taken in by connecting the sensor with DAC-HRT -1.

● Specifications

- Standard : P T 1 0 0 Standard (C 1 6 0 4 - 1 9 8 9 Resistor)
- Temperature Measuring Range : - 5 0 ~ 1 5 0 $^{\circ}$ C
- Accuracy and Resolution : 0 . 5 $^{\circ}$ C or less \cdot 0 . 1 $^{\circ}$ C



Thermal Printer *DPU-H245AS-B03A* *Seiko Instruments Make*

BY connecting with DAC-HRT -1 -- measured resistance value and temperature equivalents are printed out. If interval mode is used, measurement data automatically recordable for every time.

● Specifications

- Printing System : Admiration heat line dot system
- Power Source : AC/DC adaptor (100V-240V) -- or Internal Battery (NiMH battery) 12-hour charge
- Size Weight : W 1 3 5 x H 3 8 x D 1 0 0 mm
Approx. 3 9 0 g

Ro= 0300.20	To= 28.1C	060s	
0:01:08	00	0300.90	0.7C
0:02:33	01	15.0130	0.4C
0:04:04	02	10010.0	0.8C
0:05:12	03	0200.70	0.8C
0:06:37	04	30.0300	0.5C
0:07:53	05	0995.10	0.7C
0:09:16	06	1993.60	0.5C
0:10:33	07	0499.20	0.9C
0:11:57	08	09.9990	0.8C
0:13:26	09	049.660	0.8C
0:14:34	00	0300.30	0.6C
0:16:02	01	15.0140	0.8C
0:17:35	02	10009.0	1.1C
0:18:44	03	0200.70	1.1C
0:20:12	04	30.0400	0.7C
0:21:31	05	0995.30	0.7C
Ro= 0300.20	To= 28.1C	060s	
0:01:17	00	0300.60	0.9C
Ro= 0300.20	To= 28.1C	060s	
0:00:09	00	0300.90	1.2C



Printing Sample

Selection control box *DAC-SCB-2*

This control box is combined with DAC-HRT-1 to change a number of testing specimens one by one to measure separately.

● Specifications

- The Number of Change Channels : 10 Channels
- Testing power capacity : A C 2 5 0 V 1 5 A or 4 5 0 V 1 0 A
- Power Source : A C 1 0 0 V / 2 0 0 V \pm 1 0 % 5 0 / 6 0 H z
- Size & Weight : W 4 3 0 x H 2 0 0 x D 3 8 5 mm Approx. 1 6 k g



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