■GENERAL SPECIFICATION

Display (LCD)	4199 count, maximum reading 4199, 12mm high
Operating Principle	Σ⊿ conversion
Range Selection	Manual range
Overload Warning	"OL" indication when exceeding 4200 count
	(in comparator, "Hi" indication when exceeding 4000 count)
Remaining Battery Level Indications	"▭" indication at 60% or more
	"▭" indication from 30% to 59%
	"▭" indication from 10% to 29%
	"▭" indication less than 10%
Operating Voltage	Between approx. 8.5V and 12.8V
Sampling Rate	2 times / second
Display Hold	Hold indicating values by "DH" Key
Comparator	Available with "COMP" Keys
Zero Adjustment	Available with "0 Ω ADJ." Key
Operating Temperature & Humidity	0℃ to 40℃, less than 80%RH in non-condensing
Storage Temperature & Humidity	−20℃～60℃, less than 70%RH in non-condensing
Temperature Coefficient	Accuracy at 23℃±5℃×0.1 / ℃
Power Supply	1.5V LR6 or R6P batteries 8 pcs.
Power Consumption	300mA maximum (in mΩ measurement)
Auto Power Off	Automatic turn off after approx. 10 minutes
Continuous Measurement	up to 3 minutes
Measurable Number of Times	mΩ range : approx. 40 times (continuous measurement up to 3 min., with manganese batteries)
	Ω/kΩ range : approx. 250 times (continuous measurement up to 3 min., with manganese batteries)
Fuse	Fast-acting 0.5A / 600V (φ6.3×32mm) 1 pce. ※KAISE model No. F22
Safety Level	CE marking approved (EN61326-1)
Test Lead Length	Approx. 1250mm (excluding the terminals and plugs)
Dimensions & Weight	140mm (H) ×130mm (W) ×60mm (D), approx. 600g (excluding batteries)
Accessories	100-71 Test Leads, 1035 Carrying Case, Spare Fuse F22 (0.5A / 600V) 1 pce (contained in the rear case)
	1.5V R6P Batteries 8 pcs, Instruction Manual

■MEASUREMENT SPECIFICATION

	Range	Accuracy	Resolution	Test Current	Maximum Applied Power	Open Circuit Voltage
LOW Ω / Ω	40.00mΩ	±0.3%rdg±3dgt	10μΩ	200mA	1.7mW	5V or less
	400.0mΩ		100μΩ		17mW	
	4.000Ω		1mΩ	2mA	17μW	
	40.00Ω		10mΩ		170μW	
	400.0Ω		100mΩ	1mA	420μW	
	4.000kΩ	±0.3%rdg±2dgt	1Ω	20μA	1.7μW	
	40.00kΩ		10Ω	10μA	4.2μW	

DISTRIBUTOR

All specifications are subject to change without notice.

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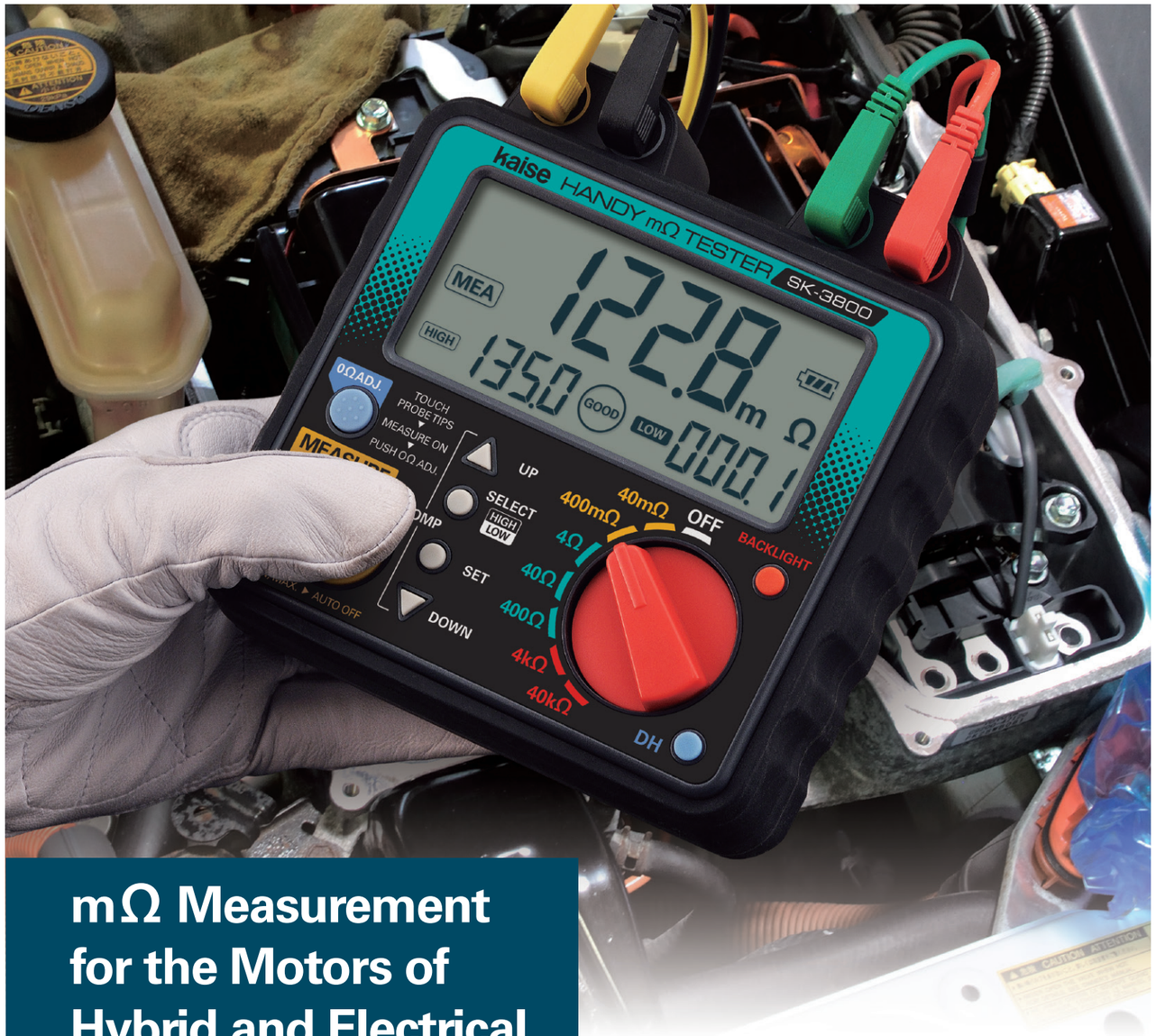
kaise

HANDY mΩ TESTER SK-3800 NEW



mΩ Measurement for the Motors of Hybrid and Electrical Vehicles!

Ideal for the Maintenance of Hybrid and Electrical Vehicles!

Low resistance measurement is required for hybrid vehicle motor and generator if the DTC code "P0A78 (Drive Motor "A" Inverter Performance) is detected.

In this testing, the resistance to be measured is very low around 100mΩ.
2-terminal measurement like normal Digital Multimeters is not suitable for this level of resistance due to the errors of impedance contribution of the wiring and contact resistances.

SK-3800 can eliminate such errors by 4-terminal measurement which assures the accurate testing.

Automotive mΩ Tester focusing on testing Hybrid and Electric Vehicles

Specially designed measurement ranges and test current that are adapted to the measurement conditions specified in the general maintenance manuals of hybrid and electric vehicles.

> **For reference :**
> Resistance between the all exposed electrically-conductive part and the electrical chassis should be less than 0.1Ω when applying more than 0.2A of current.

Handheld Unit Useful for Car Mechanics

Rubber Holster for Shock Protection

Covered with rubber holster for slip-proof and to prevent scratching on the vehicle body.

Accurate Testing with 4-terminal Method

Effective for eliminating the impedance contribution of the wiring and contact resistances to be able to ensure the accurate measurement.
Also helpful in preventing the wrong insertion by color-coded test plugs.

Large Backlit LCD

Large backlit LCD display with 44(H)×95(W)mm.
Easy-to-read even in a dark place.

Carrying Case Equipped

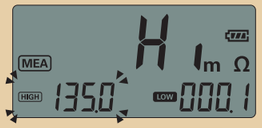
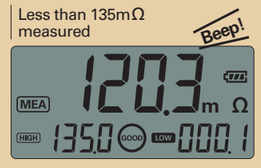
Enhanced portability that can pack the all items together.

CE Marking Approved

Comparator Function

High/Low judgment by LCD display and buzzer comparing with the preset reference value.

Setting example : Buzzer sound at 135.0mΩ or less
Set HIGH at 135, and set LOW at the lowest value 000.1.

135mΩ or more measured	Less than 135mΩ measured
	
Hi with flashing 135.0	Buzzer & GOOD display

Clip-on Test Lead Tips

Hands-free measurement without holding the test leads.

Display Hold Function

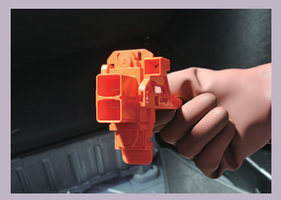
The function that can hold the display values. Useful for reading the fluctuating values.

Car Measurement with SK-3800

Low resistance measurement of hybrid vehicle motor

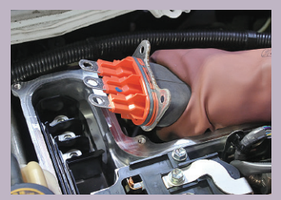
Measurement example with TOYOTA Prius
※Observe the procedures in the maintenance manual.

❶Turn off the power switch of the vehicle.
Detach the minus terminal from auxiliary battery, then remove the service plug grip.



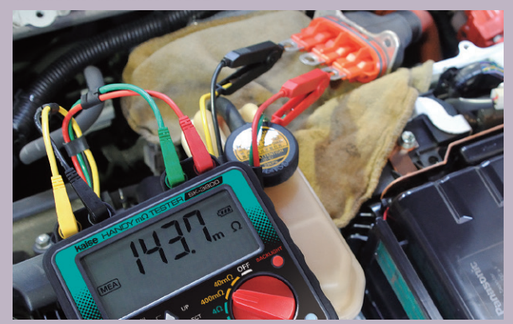
❷Remove the inverter cover.

❸Disconnect the three-phase alternating current cable of the hybrid vehicle motor from the inverter.



❹Set the measurement range of the SK-3800.

❺Make the zero-adjustment for SK-3800.
(Press "MEASURE" Key with the test lead tips short-circuit. Then, press "0Ω ADJ" Key.

❻Connect the test leads to the three-phase alternating current cable terminals of the hybrid vehicle motor.

❼Read the resistance on LCD.