MOM600A

Microhmmeter

Programma®

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Switchgear breakdowns are frequently caused by excessively high contact resistance at breakpoints and busbar joints. Moreover, overheating risks are becoming more serious due to the fact that today's distribution networks have to carry heavier loads. Checking contact resistances at regular intervals detects faults before they cause overheating. And here, an ounce of prevention is worth a pound of cure.

Microhmmeters are used to measure contact resistances in high-voltage breakers, disconnecting switches (isolators), knife-contact fuses, bus joints, line joints etc.

The MOM600A™ is in a class apart on world markets. Designed for use from the arctic to the tropics, this rugged, compact microhmmeter is ideal for field work.

A complete set of equipment includes a set of highly flexible cables (including separate measurement cables) and a sturdy transport case.

Application examples

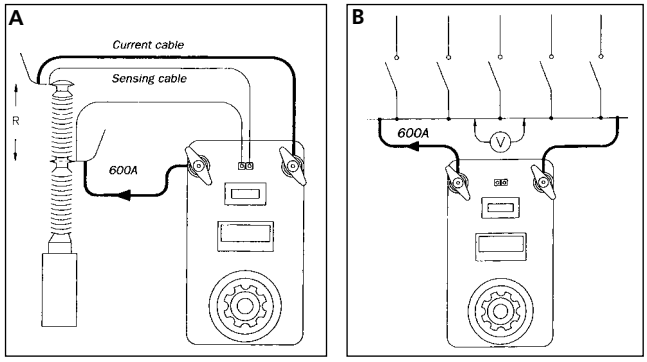
IMPORTANT
Read the User's manual before using the instrument.

A. Measuring the resistance of a circuit breaker element

1. Connect the microhmmeter to the circuit breaker.
2. Set the current (100 A in this example).
3. Press the resistance pushbutton.
4. Read the result.

B. Measuring the resistance of busbar joints

1. Connect the microhmmeter's current cables to the object being tested. Do not connect the sensing cables since measurements will be taken using an external movable voltmeter.
2. Set the current (100 A in this example).
3. Connect an external voltmeter to the bus.
4. Read the voltmeter (0.1 mV = 1 µΩ in this example).
5. Move the voltmeter to the next joint.
6. Repeat step 4.



Specifications MOM600A

Specifications are valid at nominal input voltage and an ambient temperature of +25°C, (77°F). Specifications are subject to change without notice.

Environment	
Application field	The instrument is intended for use in high-voltage substations and industrial environments
Temperature	
Operating	0°C to +50°C (32°F to +122°F)
Storage & transport	-40°C to +70°C (-40°F to +158°F)
Humidity	5% – 95% RH, non-condensing
CE-marking	
LVD	Low Voltage Directive 73/23/ EEC am. by 93/68/EEC
EMC	EMC Directive 89/336/EEC am. by 91/263/EEC, 92/31/EEC and 93/68/EEC
General	
Mains voltage	115/230 V AC, 50/60 Hz
Power consumption (max)	115 V, 4370 VA 230 V, 7360 VA
Protection	Miniature circuit breakers, thermal cut-outs
Dimensions	
Instrument	356 x 203 x 241 mm (14" x 8" x 9,5")
Transport case	610 x 290 x 360 mm (24.0" x 11.4" x 14.2")
Weight, 115 V model	25 kg (55.1 lbs) 43.1 kg (95 lbs) with accessories and transport case
Weight, 230 V model	24.7 kg (54.5 lbs), 42.8 kg (94.4 lbs) with accessories and transport case
Current cables	2 x 5 m (16 ft), 50 mm²
Sensing cables	2 x 5 m (16 ft), 2.5 mm²
Measurement section	
Resistance	
Range	0 – 1999 µΩ
Resolution	1 µΩ
Inaccuracy	±1% of reading + 1 digit (at 100 – 600 A test current)
Output, 115 V model	
Current	0 – 600 A DC
Open circuit voltage	5.2 V DC
Current shunt output	10 mV/100 A ±0.5%, max 60 mV out, max 10 V to protective earth (ground)
Output, 230 V model	
Current	0 – 600 A DC
Open circuit voltage	9 V DC
Current shunt output	10 mV/100 A ±0.5%, max 60 mV out, max 10 V to protective earth (ground)

Max. load capacity, 115 V model

Current adjustment set to 100%

Output current	*Min. output voltage*	*Max. load time*	*Rest time*	*Input current*
100 A DC	4.6 V	-	-	8 A
300 A DC	3.8 V	1.5 min.	15 min.	20 A
600 A DC	2.6 V	10 s	5 min.	38 A

Max. load capacity, 230 V model

Current adjustment set to 100%

Output current	*Min. output voltage*	*Max. load time*	*Rest time*	*Input current*
100 A DC	8.3 V	–	–	6 A
300 A DC	7.2 V	2.5 min.	15 min.	16 A
600 A DC	5.6 V	15 s	5 min.	32 A

Ordering information

	Art.No.
MOM600A	
Complete with: Cable set GA-02053 Ground cable GA-00200 Transport case GD-00010	
115 V Mains voltage	**BB-11190**
230 V Mains voltage	**BB-12290**
Optional accessories	
Cable set 10 m 2 x 10 m (33 ft), 70 mm² (current cables). 2 x 10 m (33 ft), 2.5 mm² (sensing cables) Weight: 16.8 kg (37 lbs)	**GA-07103**
Cable set 15 m 2 x 15 m (49 ft), 95 mm² (current cables). 2 x 15 m (49 ft), 2.5 mm² (sensing cables) Weight: 29.4 kg (65 lbs)	**GA-09153**
Calibration shunt 600 A/60 mV	**BB-90020**

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