

MOM600A

Micro-ohmmeter



- **Compact and rugged**
- **Easy-to-use**
- **600 A output current**

Description

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.

Micro-ohmmeters 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 micro-ohmmeter 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!

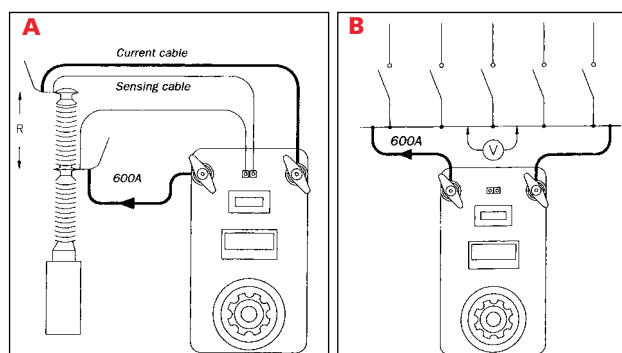
Read the User's manual before using the instrument.

A. Measuring the resistance of a circuit breaker element

1. Connect the micro-ohmmeter 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 micro-ohmmeter's current cables to the object being tested. Do not connect the sensing cables since measurements will be taken using an external movable voltmeter.
1. Set the current (100 A in this example).
2. Connect an external voltmeter to the bus.
3. Read the voltmeter ($0.1 \text{ mV} = 1 \mu\Omega$ in this example).
4. Move the voltmeter to the next joint.
5. Repeat step 4.



Specifications

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

<i>Operating 115 V</i>	0°C to +50°C (32°F to +122°F)
<i>Operating 230 V</i>	0°C to +40°C (32°F to +104°F)
<i>Storage & transport</i>	-40°C to +70°C (-40°F to +158°F)
<i>Humidity</i>	5% – 95% RH, non-condensing

CE-marking

<i>EMC</i>	2004/108/EC
<i>LVD</i>	2006/95/EC

General

<i>Mains voltage</i>	115/230 V AC, 50/60 Hz
<i>Power consumption (max)</i>	115 V, 4370 VA 230 V, 7360 VA
<i>Protection</i>	Miniature circuit breakers, thermal cut-outs
<i>Dimensions</i>	
<i>Instrument</i>	356 x 203 x 241 mm (14" x 8" x 9,5")
<i>Transport case</i>	610 x 290 x 360 mm (24.0" x 11.4" x 14.2")
<i>Weight, 115 V model</i>	25 kg (55.1 lbs) 43.1 kg (95 lbs) with accessories and transport case
<i>Weight, 230 V model</i>	24.7 kg (54.5 lbs), 42.8 kg (94.4 lbs) with accessories and transport case
<i>Current cables</i>	2 x 5 m (16 ft), 50 mm ²
<i>Sensing cables</i>	2 x 5 m (16 ft), 2.5 mm ²

Measurement section

Resistance

<i>Range</i>	0 – 1999 µΩ
<i>Resolution</i>	1 µΩ
<i>Inaccuracy</i>	±1% of reading + 1 digit (at 100 – 600 A test current)

Output, 115 V model

<i>Current</i>	0 – 600 A DC
<i>Open circuit voltage</i>	5.2 V DC
<i>Current shunt output</i>	10 mV/100 A ±0.5%, max 60 mV out, max 10 V to protective earth (ground)

Output, 230 V model

<i>Current</i>	0 – 600 A DC
<i>Open circuit voltage</i>	9 V DC
<i>Current shunt output</i>	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

Item	Art. No.
MOM600A Complete with: Cable set GA-05053 Ground cable GA-00200 Transport case GD-00010	
115 V Mains voltage	BB-11190
230 V Mains voltage	BB-12290
Optional	
Cable set 10 m 2 x 10 m (33 ft), 70 mm ² (current cables). 2 x 10 m (33 ft), 2.5 mm ² (sensing cables) Weight: 16.8 kg (37 lbs)	GA-07103
Cable set 15 m 2 x 15 m (49 ft), 95 mm ² (current cables). 2 x 15 m (49 ft), 2.5 mm ² (sensing cables) Weight: 29.4 kg (65 lbs)	GA-09153
Calibration shunt 600 A/60 mV	BB-90020

Postal address	Visiting address
Megger Sweden AB Box 724 SE-182 17 DANDERYD SWEDEN	Megger Sweden AB Rinkebyvägen 19 SE-182 36 DANDERYD SWEDEN
T +46 8 510 195 00 F +46 8 510 195 95	seinfo@megger.com www.megger.com

Registered to ISO 9001 and 14001
Megger is a registered trademark

Printed matter:
Art.No. ZI-BB05E • Doc. BB0375CE • 2014
MOM600A_DS_en_V02
Subject to change without notice.