

# MOM600A Micro-ohmmeter

# Megger<sup>®</sup>



- 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.

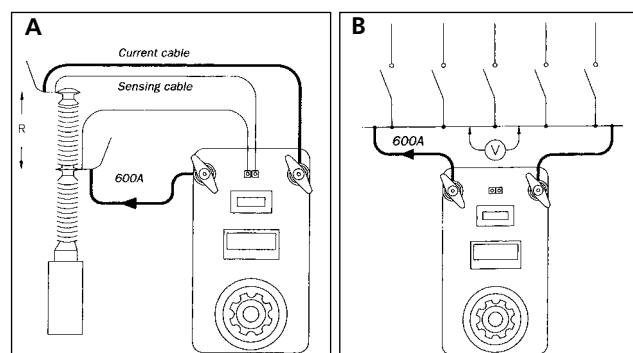
## APPLICATION EXAMPLES

### 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.
2. Set the current (100 A in this example).
3. Connect an external voltmeter to the bus.
4. Read the voltmeter ( $0.1 \text{ mV} = 1 \mu\Omega$  in this example).
5. Move the voltmeter to the next joint.
6. 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

Operating 115 V 0°C to +50°C (32°F to +122°F)  
 Operating 230 V 0°C to +40°C (32°F to +104°F)  
 Storage & transport -40°C to +70°C (-40°F to +158°F)

#### Humidity

5% – 95% RH, non-condensing

### CE-marking

EMC 2014/30/EU  
 LVD 2014/35/EU  
 RoHS 2011/65/EU

### 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 356x203x241 mm (14" x8" x9,5")  
 Transport case 610x290x360 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 mm<sup>2</sup>

#### Sensing cables

2 x 5 m (16 ft), 2.5 mm<sup>2</sup>

### 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)

### 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

### 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



Cable set GA-05053 (2 current cables and 2 sensing cables)



Ground cable GA-00200



Optional accessory: Calibration shunt BB-90020

## ORDERING INFORMATION

Item	Part. No.
<b>MOM600A</b> Complete with: Cable set GA-05053, 2 x 5 m (16 ft), 50mm <sup>2</sup> (current cables) 2 x 5 m (16 ft), 2.5 mm <sup>2</sup> (sensing cables) Ground cable GA-00200 Transport case GD-00182	
<b>115 V Mains voltage</b>	BB-11190
<b>230 V Mains voltage</b>	BB-12290
<b>Optional accessories</b>	
<b>Cable set 10 m</b> 2 x 10 m (33 ft), 70 mm <sup>2</sup> (current cables) 2 x 10 m (33 ft), 2.5 mm <sup>2</sup> (sensing cables)Weight: 16.8 kg (37 lbs)	GA-07103
<b>Cable set 15 m</b> 2 x 15 m (49 ft), 95 mm <sup>2</sup> (current cables). 2 x 15 m (49 ft), 2.5 mm <sup>2</sup> (sensing cables )Weight: 29.4 kg (65 lbs)	GA-09153
<b>Calibration shunt</b> 600 A/60 mV	BB-90020

**Postal address**  
 Megger Sweden AB  
 Box 724  
 SE-182 17 Danderyd  
 SWEDEN

T +46 8 510 195 00  
 E seinfo@megger.com

MOM600A\_DS\_en\_V05a  
 Art. No. ZI-BB05E ■ BB0375FE ■ 2023  
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ISO 9001:2008  
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