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), knifecontact fuses, bus joints, line joints etc.

The MOM600ATM 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.

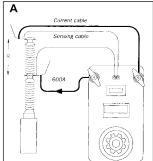
APPLICATION EXAMPLES

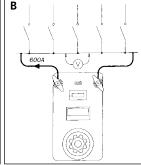
A. Measuring the resistance of a circuit breaker element

- **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

- 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 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 fieldThe instrument is intended for use in high-voltage substations and industrial

environments.

Temperature

 Operating 115 V
 0° C to $+50^{\circ}$ C (32° F to $+122^{\circ}$ F)

 Operating 230 V
 0° C to $+40^{\circ}$ C (32° F to $+104^{\circ}$ F)

 Storage & transport
 -40° C to $+70^{\circ}$ C (-40° F to $+158^{\circ}$ F)

 Humidity
 5% - 95% RH, non-condensing

CE-marking

EMC2014/30/EULVD2014/35/EURoHS2011/65/EU

General

Mains voltage 115/230 V AC, 50/60 Hz

Power consumption 115 V, 4370 VA (max) 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

 $\begin{array}{ll} \mbox{Resistance range} & 0 - 1999 \; \mu \Omega \\ \mbox{Resolution} & 1 \; \mu \Omega \end{array}$

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 $\pm 0.5\%$, 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%						
	Min. out- put volt-	Max. load		Input cur- rent		
	age	time				
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%							
	Min. out- put volt- age	Max. load time	Rest time	Input cur- rent			
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

Part. No.

2 x 5 m (16 ft), 50mm² (current cables) 2 x 5 m (16 ft), 2.5 mm² (sensing cables) Ground cable GA-00200

Transport case GD-00182

 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

Postal address

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