

SDRM201

Static / Dynamic Resistance Measurement

Accessory for EGIL, TM1700 and TM1800



- Enables resistance measurement on circuit breakers
- Small and light weight
- A number of operations can be run with short waiting intervals

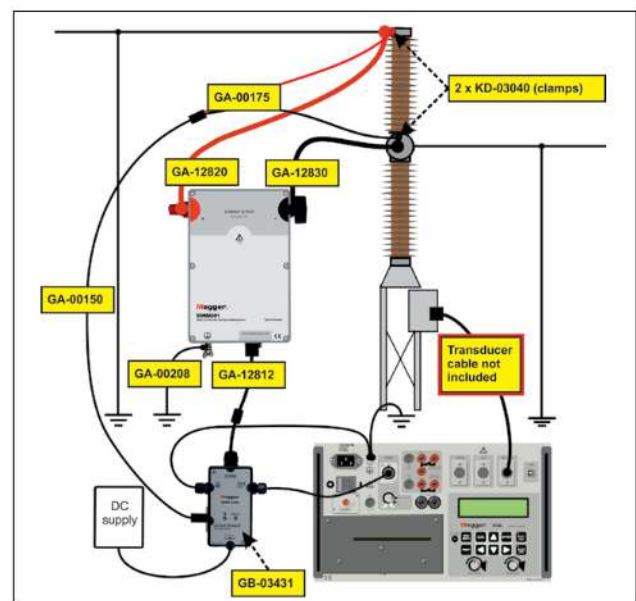
DESCRIPTION

The SDRM201 is an accessory for EGIL, TM1700 and TM1800. EGIL must be equipped with the SDRM option and CABA Win version R03A or higher is needed.

The SDRM201 is intended to use for both static and dynamic resistance measurements (SRM and DRM) on high voltage circuit breakers or other low resistive devices. Used together with the test instrument the current and also the voltage-drop across the circuit breaker contacts are measured. The measuring unit can thus calculate the resistance as a function of time.

A system consists of an SDRM201 unit with current cables and an SDRM Cable. The SDRM Cable is a small box with integrated cables for connection to the SDRM201 and to the test instrument.

CONNECTING DIAGRAM WITH EGIL



SPECIFICATIONS SDRM201

Inaccuracy is specified for 1 year after calibration at 22 °C to 28 °C, relative humidity 90%. Specifications are valid, after 30 minutes warm up time. Specifications are subject to change without notice.

Environment

Application field	The instrument is intended for use in high-voltage substations and industrial environments.
Installation category	CAT I
Pollution degree	2
Temperature	
Operating	-20°C to +50°C (-4°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	2014/35/EU
EMC	2014/30/EU
RoHS	2011/65/EU

Classifications and standards

vibration	IEC 60068 2-6 2 g for 5-500 Hz
Shock (non-operating)	IEC 60068-2-27 30 g, half-sine, 11 ms

Degree of protection

SDRM201/202 (Box, anal. SDRM Cable) interconnected	IP 43
SDRM Cable	IP 41

General

Power inlet	24 V / 2.5 A 
Voltage	24 V DC (max) 21 V DC (min)
Current	2.5 A (max 50% intermittence)
Dimensions	160 x 240 x 90 mm (6.3"x 9.4"x 3.5") excl. binding posts
Weight	
Instrument	1.5 kg (2.9 lbs) 2.5 kg (5.5 lbs) incl. current cables
Total incl. transport case with accessories	9.4 kg (20.7 lbs)

SDRM201 – Terminals
CURRENT OUTPUT terminals – and +

Open circuit	2.5 V DC (max)
Short circuit current (max.)	
Instantaneous	500 A DC
After 2 seconds	150 A ±10%

Minimum current with cables

Instantaneous	200 A DC
After 1 second	140 A DC

Overvoltage protection	45 V between terminals and between terminals and ground
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Note: Not to be connected to circuits generating peak power pulse above 1500 W (10/1000 µs)

SDRM Cable – Terminals
TM180C, TM1700, EGIL
ANALOG INPUT terminals I₁ and I₂

Voltage (max)	12 V DC
Voltage	10 V/250 A
Short circuit current	100 mA (max)
SRM inaccuracy	
TM1800, TM1700	1% ±1µΩ
EGIL	2% ±2µΩ

TM1800, TM1700
DRM OUTPUT terminal/TRIG terminal

Voltage	60 V DC (max)
Trig threshold	9 V (min) 10 V (max)
Trig current at trig threshold	40 mA (max)

INCLUDED ACCESSORIES



SDRM Cable for EGIL, GB-03431



SDRM Cable for TM1700/1800, GB-03412



3-phase SDRM Cable for TM1700/1800, GB-03460



Red current cable 3.0m (9.8ft), black current cable 0.5m (1.6 ft)

ORDERING INFORMATION

Item	Art. No.
SDRM201 for EGIL (1 pc)	CG-90250
Included accessories	
SDRM cable EGIL (1 pc)	GB-03431
SDRM multi cable extension (1 pc)	GA-12812
DC supply (1 pc)	HC-04211
Voltage sense (1 pc)	GA-00175
Voltage sense extension cable (1 pc)	GA-00130
Current cable, red (1 pc)	GA-12820
Current cable, black (1 pc)	GA-12830
Clamps (2 pcs)	KD-00040
Ground cable (1 pc)	GA-00208
SDRM201 for TM1700/TM1800 (1 pc)	CG-90260
Included accessories	
SDRM cable TM1700/TM1800 (1 pc)	GB-03412
SDRM multi cable extension (1 pc)	GA-12812
DC supply (1 pc)	HC-04211
Current cable, red (1 pc)	GA-12820
Current cable, black (1 pc)	GA-12830
Ground cable (1 pc)	GA-00208
SDRM201 for TM1700/TM1800 (3 pcs)	CG-90263
Included accessories	
3-phase SDRM cable TM1700/TM1800 (1 pc)	GB-03460
SDRM multi cable extension (3 pcs)	GA-12812
DC supply (1 pc)	HC-04212
Current cable, red (3 pcs)	GA-12820
Current cable, black (3 pcs)	GA-12830
Ground cable (3 pcs)	GA-00208
Optional accessories	
Extension cables for multi cable	
10 m (33 ft) extension	GA-12812