SDRM202
Static / Dynamic Resistance Measurement Accessory for TM1800 / TM1600 / EGIL

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

Description

The SDRM202 is an accessory for TM1800, TM1600 and EGIL. EGIL must be equipped with the SDRM option and CABA Win version R03A or higher is needed.

The SDRM202 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 TM1800, TM1600/MA61 or EGIL 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 SDRM202 unit with current cables and an SDRM Cable which comes in three versions, for TM1800, TM1600 and EGIL respectively. The SDRM Cable is a small box with integrated cables for connection to the SDRM202 and to TM1800, TM1600 or EGIL.

The red current cables are 3.0 m (9.8 ft) and the black ones are 0.5 m (1.6 ft).

The SDRM Cable is in three versions; for TM1800, TM1600 and EGIL. This picture shows the version for TM1800.

Specifications SDRM202

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)
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	
SDRM202 (Box) and SDRM Cable interconnected	IP 43
Humidity	5% – 95% RH, non-condensing

CE-marking

LVD	2006/95/EC
EMC	2004/108/EC

General

Dimensions	160 x 240 x 90 mm (6.3”x 9.4”x 3.5”) excl. binding posts
Weight	1.8 kg (4 lbs) 4.3 kg (9.5 lbs) incl. current cables
Total incl. transport case with accessories	11 kg (24 lbs)
SDRM Cable	0.2m (0.7 ft), 0.7 kg (1.5 lbs)

SDRM202 – Terminals

CURRENT OUTPUT terminals 1 and 2

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

Not to be connected to circuits generating peak power pulse above 1500 W (10/1000 µs)

SDRM Cable – Terminals

TM1800/TM1600/EGIL
ANALOG INPUT terminals I_1 and I_2

Voltage (max)	12 V DC
Voltage	10 V/250 A (TM1800, EGIL) 1 V/250 A (TM1600)
Short circuit current (max)	100 mA

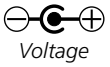
SRM inaccuracy

TM1800/TM1600	1% ±1µΩ
EGIL	(2% ±2µΩ)

TM1800/TM1600
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)

Power inlet
24 V / 2.5 A



Voltage	24 V DC (max) 21 V DC (min)
Current	2.5 A (max 50% intermittence)

Ordering information

Item	Art. No.
SDRM202 for TM1800	CG-90200
SDRM202 for TM1800 Pack of 3 units (CG-90200) for circuit breaker with 2 Breaks/Phase	CG-90230
SDRM202 for TM1600	CG-90210
SDRM202 for EGIL	CG-90220
Optional accessories	
Extension cable for CG-90200 and CG-90210	
10 m (33 ft) extension	GA-12810
7.5 m (24.6 ft) extension	GA-12811
Separate SDRM Cables	
SDRM Cable for TM1800	CG-90205
SDRM Cable for TM1600	CG-90215
SDRM Cable for EGIL	CG-90225

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