

REM A

Manual

Standart Resistance

Revision A

Sefelec

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HIGH VALUE STANDARD RESISTANCE

for megohmmeters and dielectric strength test meters
from 1 Megohm to 100,000,000 Megohms

	For use with
	Megohmmeters M4UCHA-M4UC-M4UCR accessories required: 1 CO 58 cable 1 CO 1 cable Dielectric strength test meters MPCF 45 A, MPC 3C, MPCF 5C, MPC 313, MPCF 125, MPC 43, MPCF 45, MPC 315 accessories required: 1 CO 63 cable
Resistance values	
	References
1 Megohm	REM A 0
10 Megohms	REM A 1
10 ² Megohms	REM A 2
10 ³ Megohms	REM A 3
10 ⁴ Megohms	REM A 4
10 ⁵ Megohms	REM A 5
10 ⁶ Megohms	REM A 6
10 ⁷ Megohms	REM A 7
10 ⁸ Megohms	REM A 8

APPEARANCE

* PVC-coated metal casing.

Dimensions

* 36 mm x 30 mm x 90 mm.

Weight

* Approx. 70 g.

CHARACTERISTICS

Accuracy at 23°C

(Operating voltage 100 VDC)

* from 1 Megohm to 10⁵ Megohms: 1 %.

* from 10⁶ Megohms to 10⁷ Megohms: 5 %.

* 10⁸ Megohms: 10 %.

Temperature Coefficient

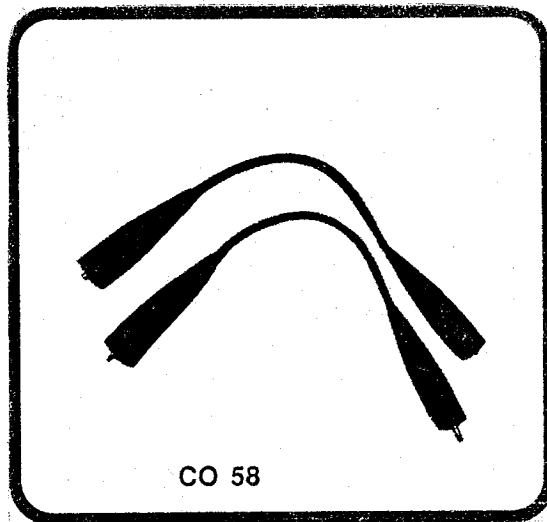
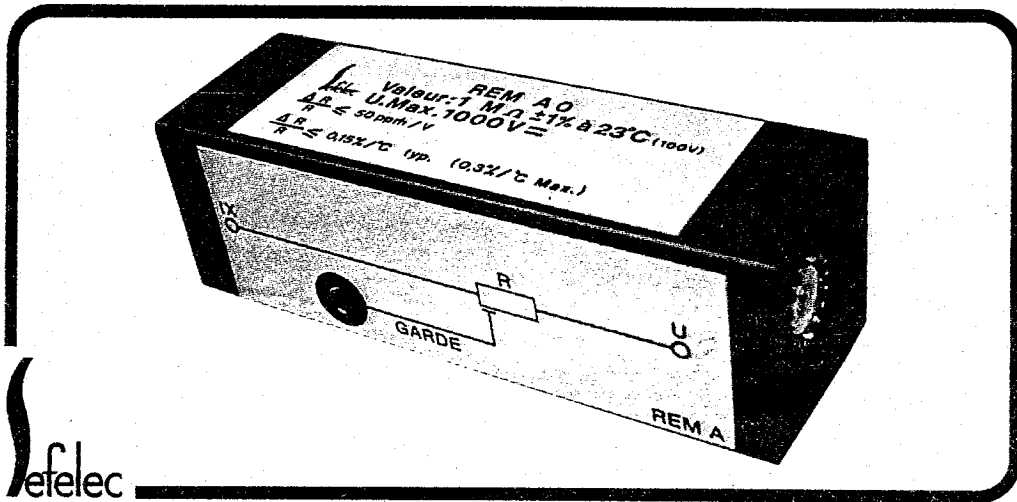
* of the order of 0.15 %/°C with a maximum of 3.0 %/°C over the entire range.

Voltage Coefficient

(Maximum operating voltage: 1000 VDC)

* Constant with the applied voltage.

- . -0.005 % up to 10^2 Megohms
- . -0.02 % up to 10^6 Megohms
- . -0.04 % up to 10^8 Megohms



SPECIFICATIONS

HIGH VALUE RESISTANCES REM AND REM A

SEALED CASING CONTAINING A SERIES OF 9 HIGH TOLERANCE RESISTORS WITH VALUES BETWEEN 1×10^0 OHMS AND 1×10^{14} OHMS.

THIS UNIT IS SPECIFICALLY INTENDED FOR USE IN METROLOGY, FOR CHECKING THE CALIBRATION OF DEVICES SUCH AS MEGOHMMETERS AND PICOAMMETERS.

APPEARANCE

SEALED ALUMINIUM CASING

CONTAINING 1 HIGH TOLERANCE RESISTOR, ONE GUARD TERMINAL AND 2 UHF TEFLON FIXED CONNECTORS (REM A) OR 1 TRIAXIAL SOCKET (REM).

DIMENSIONS

REM A - WIDTH: 36 mm - HEIGHT: 95 mm - DEPTH: 90 mm
REM - HEIGHT: 95 mm - DIAMETER: 26 mm

WEIGHT

APPROX. 70 g (REM) - APPROX 100 g (REM A)

ELECTRICAL CHARACTERISTICS

CASE CONTAINING 1 HIGH TOLERANCE, HIGH VALUE RESISTOR:

RESISTANCE		ACCURACY	MAXIMUM	VOLTAGE	
		OVER THE	TEMPERATURE	COEFFICIENT	
VALUE	MODEL	NOMINAL	COEFFICIENT	TYPICAL	MAX.
		VALUE			
		(1)	(2)	(3)	(4)
1 M Ω	*REMO/REMA0	$\pm 1\%$	- 0,2 %/°C	- 5ppm/V	- 50ppm/V
10 M Ω	*REM1/REMA1	$\pm 1\%$	- 0,2 %/°C	5ppm/V	- 50ppm/V
100 M Ω	*REM2/REMA2	$\pm 1\%$	- 0,2 %/°C	-10ppm/V	- 50ppm/V
1 G Ω	*REM3/REMA3	$\pm 1\%$	- 0,2 %/°C	"	"
10 G Ω	*REM4/REMA4	$\pm 1\%$	- 0,25%/°C	"	"
100 G Ω	*REM5/REMA5	$\pm 1\%$	- 0,25%/°C	"	"
1 T Ω	*REM6/REMA6	$\pm 1\%$	- 0,35%/°C	-80ppm/V	-200ppm/V
10 T Ω	*REM7/REMA7	$\pm 2\%$	- 0,35%/°C	-150ppm/V	-400ppm/V
100 T Ω	*REM8/REMA8	$\pm 10\%$	- 0,35%/°C	-150ppm/V	-400ppm/V

- 1) NOMINAL VALUE MEASURED AT 100 V
- 2) GUARANTEED BETWEEN +5°C AND +50°C
- 3) DETERMINED BETWEEN 100 V AND 500 V
- 4) OVER THE RANGE 10 V TO 1000 V

MAXIMUM OPERATING VOLTAGE: U max = 1000 V

MEASUREMENT CONDITIONS

MEASUREMENTS ARE MADE AT AN AMBIENT TEMPERATURE OF APPROXIMATELY 20°C.

VOLTAGES ARE APPLIED IN STAGES OF 10 V, 100 V AND 1000 V, FOR APPROXIMATELY 10 MINUTES, SUCCESSIVELY AND WITHOUT INTERVAL. ESTABLISHMENT OF THE VALUE IS MADE AT THE END OF THIS TIME.

DURING MEASUREMENT, THE CASING IS CONNECTED TO THE GUARD POTENTIAL OF THE MEASUREMENT DEVICE (REM A) OR TO THE TEST POTENTIAL VIA THE CO 17 ADAPTOR CABLE (REM).

THE POSITIVE OF THE POWER SUPPLY IS APPLIED TO TERMINAL "U" AND TERMINAL Ix OF THE RESISTANCE TO BE MEASURED IS CONNECTED TO THE INPUT OF THE CURRENT MEASURING DEVICE. THE EARTH OF THE POWER SUPPLY, THE EARTH OF THE DEVICE AND THE GUARD TERMINAL ARE CONNECTED TO THE SAME POTENTIAL (REM A).

- LONG TERM DRIFT: $\Delta R < 0.5 \% / \text{YEAR}$.

OPERATING TEMPERATURE

0°C TO +55°C

STORAGE TEMPERATURE

-20°C TO +70°C