

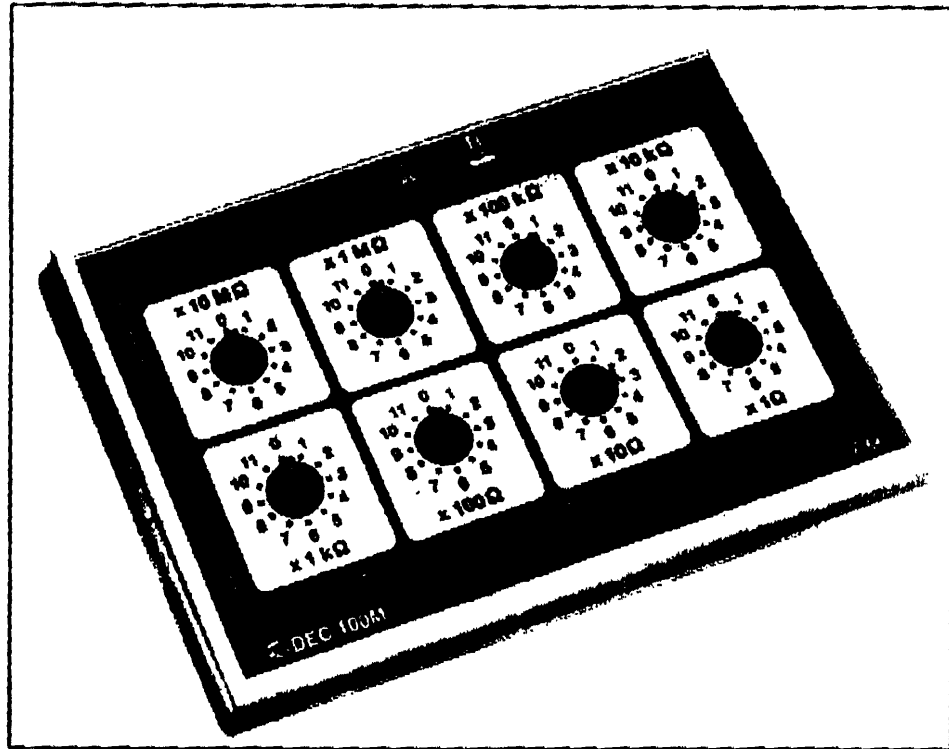
312-2360

Operating Instructions/
Gebrauchsanleitung/
Manuel d'utilisation

R-DEC 100M



Precision R decade/
Präzisions-R-Dekade/
Décade de résistances de précision



ELMES
GOERZ
HEME
NORMA

LEM

Technical Data

5 Technical data

General:	Resistance decade from 1 Ω to 122, 222, 221 Ω (122 M Ω); Conforms to EN 60477 / Oct. 1997
Reference temperature range:	23°C \pm 2°C
Storage temperature range:	-20 °C + 60 °C
Operating temperature:	+ 5 °C ... + 40 °C
Class:	0.1
Inherent deviation:	\pm 0.1 % \pm R ₀ within the reference temperature range
Temperature coefficient:	50 ppM /K within the nominal temperature range
Zero resistance:	R ₀ = 125 m Ω \pm 50 m Ω
Long-term stability:	< 100ppM for resistance \leq 1 M Ω
Climate:	Class B2 according to IEC 654-1 (+ 5°C...+ 40 °C, 5 %...85 % RH, no dew formation)
Safety:	IP40, conforms to safety class II/double insulated Fully insulated plastic housing with inner shield
Test voltage:	3,7 kV pursuant to IEC 61010 Part 1 (outwards and against the shield)
Impulse load:	For smaller resistances; reduced impulse load depending R value.
Quality standard:	Built, designed, and manufactured according to DIN ISO 9001
Max. input voltage to earth:	1000 V CATI pollution degree 1 as per IEC 61010 part 1
Max. voltage SHIELD to resistance inputs:	1000V eff

Technical Data

Maximum load	
Voltage:	$U_{max} = 1000 \text{ V DC}$ (starting at $1 \text{ M}\Omega$) → see appendix
Current:	2 A (⊙ 1Ω) see appendix
Wattage:	4 W (⊙ 1Ω) see appendix
Dimensions:	275 mm (W) x 195 mm (D) x 48 mm (H)
Weight:	Approx. 0.8 kg without accessories
Housing:	ABS, impact-resistant and scratch-proof thermoplastic
ATTENTION!	The formation of dew may occur if temperature changes are present. Before operating the instrument, it is necessary to wait for a minimum of 30 minutes at temperatures $> 0 \text{ }^\circ\text{C}$.
Note:	Considering the decade zero resistance R_0 , even low ohmic settings can reach an accuracy of below 0.1%.