

TAP POSITION



TECHNICAL SPECIFICATION

INPUT

Rated range	min. 100 ohms.... max. 20 kOhms
Sensor current	min. 50uA.... max. 10mA
Sensor voltage	<1 Volt
Working range	0-125% Rn

OUTPUT

Rated value mA	0-1/5/10/20 & 4-20mA
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Rated value volts	0-5 / 10 & 1-5 V
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ADJUSTMENT

Zero	±2%
Span	±10%

AUXILIARY

A.C. Voltage	115 / 230 / 400 V (± 25% / 45-65 Hz / < 2VA)
D.C. Voltage	24 / 48 / 110 V (± 20% / galvanically isolated / <3W)

WEIGHT & CASE SIZE	Approx. 0.4 kg. 55 mm case
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NOTE

No isolation is provided between input and output

SELECTION GUIDE

M100-TAP Resistance measurement

TYPICAL APPLICATIONS

The M100-TAP measures the value of resistance on tap position changers, typically used on high voltage transformers. Each position on the selector has an equal value of resistance so that as the tap position is increased or decreased the value of resistance increases or decrease respectively. The M100-TAP measure the value of this resistance and provides an output proportional to the value of the number of taps selected.

The M100-TAP can also be used to measure variable resistance 2 or 3 wire systems.

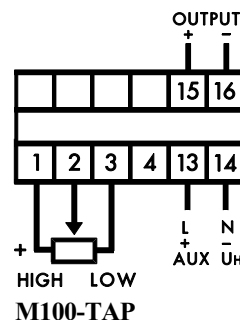
ORDERING INFORMATION

Product Code	No Taps	Output	Aux.	Freq.	Options
M100-TAP	10	5 mA	230V	50Hz	

OPTIONS

1. Non standard inputs / outputs only as far as technically acceptable.
2. A.C. Auxiliary in range 57.7 to 450 volts
3. Calibration at temperature other than 23°C

CONNECTION DIAGRAM



Panel Components & Systems



GENERAL SPECIFICATIONS

ENVIRONMENTAL

Working temperature	0 to +60 deg C
Functional temperature	-25 to +70 deg C
Storage temperature	-55 to +85 deg C
Temperature coefficient	0.02% per deg C (100 ppm / °C)
Relative humidity	95% non condensing
Class of climate	HSE complying with DIN 40040 -3 complying with VDE/VDI 3540

INSULATION

Test voltage	4kV RMS 50Hz 1min. between Input / Case / Auxiliary / Output
Impulse test	EMC 5kV transient complying with IEC 801 / EN55020
HF interference test	EHF 2.5kV 1MHz complying with IEC 255-4
Protection class	II complying with IEC 348 BS 4753 / DIN 57411 / VDE 0411

APPLIED STANDARDS

General	IEC 688 / BS 6253 / VDE/ VDI 2192
Safety	BS EN61010 DIN 57411 / VDE 0411 ANSI C37
Surge withstand	IEC 801 / EN 55020 ANSI C37-90a
Radio screening	RFI degree N complies with VDE 0875
EMC	Emissions EN50081-2 Immunity EN50082-1

ACCURACY

Class	±0.2 % complying with IEC 688
Calibration temperature	23°C
Temperature coefficient	0.01% / °C (100 ppm / °C)
Stability	0.05 % per annum non cumulative
Warm up time	<15 min

OUTPUT

Rated value	See individual product pages	
Load resistance mA (Unless otherwise stated)	1mA	<15 kOhm
	5mA	<3 kOhm
	10mA	<1.5 kOhm
	20mA	< 0.75kOhm
	4-20mA	< 0.75kOhm
Load resistance volts	1, 5 & 10 volts	>1 kOhm
(M100-VA1,VA3 only)	1, 5 & 10 volts	> 50kOhm
Load influence	<0.1 %	
Ripple	<0.5% peak-peak at full load	
Response time	<200 msec for 0-99 % at full load	
Overload	<2 x rated value at full load	
No load voltage	<27 V	

ENCLOSURE

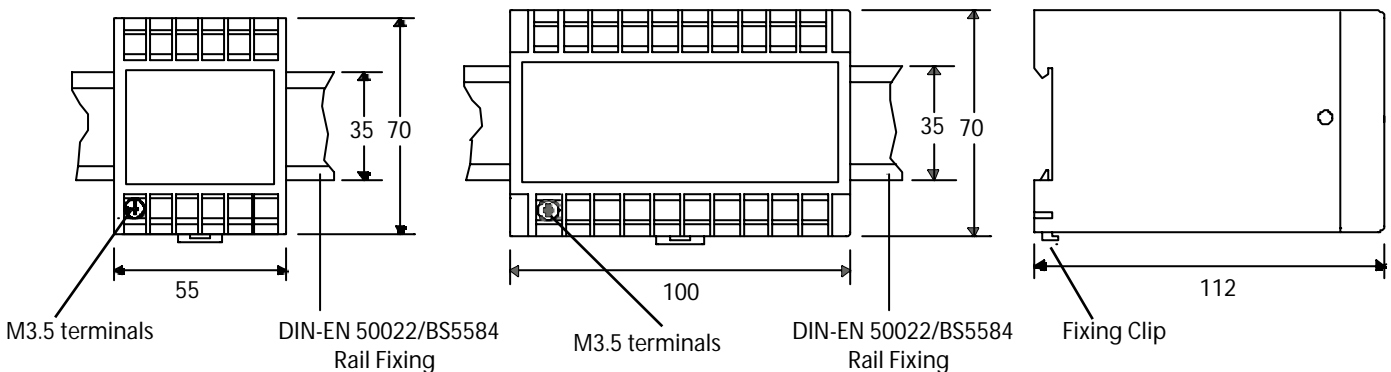
Fixing	Snap on to DIN rail 35 x 7.5 mm complies with DIN-EN 50022 BS 5584
Mounting	Any position
Enclosure Code	Case IP 50 / terminals IP 30 Complies with IEC 529 BS 5490 DIN 40050

APPROVALS

cU.L. Approval	File No E157034
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CASE DIMENSIONS

All Dimensions in mm



Panel Components & Systems

