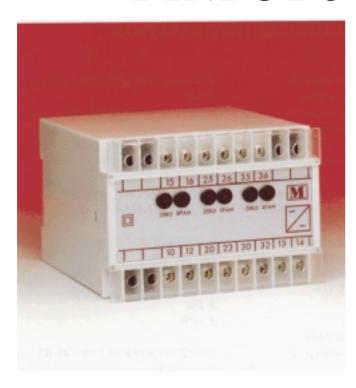
DC CURRENT OR VOLTAGE 1 INPUT 3 OUTPUTS



SELECTION GUIDE

M100-DM3 One input three outputs

TYPICAL APPLICATIONS

The M100-DM3 takes 1 DC Input and provides 3 isolated outputs all directly proportional to the input. The outputs can all be of the same D.C. Value or can be different. Typically this product is used to prevent earth loops between measuring devices. For example the M100-DM3 could have its input signal provided by a M100-WA4 watt transducer with 4-20mA output. The 3 outputs from the M100-DM3 could be as follows.

Output A = 4-20mA fed to a PLC.

Output B = 0-20mA fed to a analogue meter scaled in kW.

Output C = 1-5 volt fed to a chart recorder.

The isolation between the Input / Output / Case is 1.5kV and the isolation between each output is 500 volts.

TECHNICAL SPECIFICATION

INPUT

Rated value In $\pm 0-1/5/10/20 & 4-20mA$

Voltage drop 20mV

±20mV.....10V Rated value Un Impedance 100 kOhm / volt ±125% In Working range Overload continuous $4 \times In$ Overload continuous 1.5 x Un

OUTPUT

Rated value mA 0-1/5/10/20 & 4-20mA Load resistance 10/2/1/0.5 kOhm 0-5 / 10 & 1-5 V Rated value volts

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) Approx. 0.4 kg. 100mm case

WEIGHT & CASE SIZE

INSULATION

Test voltage 1.5 kV between Input/ Output/Case

500 volt between each output

ORDERING INFORMATION

Product Code Input In Output Aux. Freq. Options M100-DM3 A = 1mA 230V 50Hz

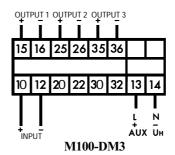
1mA

R=4-20mAC=10V

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 DIAGRAMS



GENERAL SPECIFICATIONS

ENVIRONMENTAL

ACCURACY

Temperature coefficient

Working temperature
Functional temperature
Storage temperature
Temperature coefficient
Relative humidity
Class of climate

0 to +60 deg C -25 to +70 deg C -55 to +85 deg C 0.02% per deg C (100 ppm / °C) Stability 95% non condensing

HSE complying with DIN 40040 -3 complying with VDE/VDI

3540

Class ±0.2 % complying with IEC 688 Calibration temperature

0.01% / °C (100 ppm / °C)

0.05 % per annum non cumulative

<15 min

OUTPUT

Warm up time

INSULATION

HF interference test

Test voltage 4kV RMS 50Hz 1min. between Input / Case / Auxiliary / Output Impulse test EMC 5kV transient complying

with IEC 801 / EN55020 EHF 2.5kV 1MHz complying

with IEC 255-4

Protection class II complying with IEC 348 BS 4753 / DIN 57411 /

VDE 0411

Rated value See individual product pages Load resistance mA <15 kOhm 1 mA(Unless otherwise <3 kOhm5mAstated) 10mA<1.5 kOhm 20mA< 0.75kOhm4-20mA < 0.75kOhm1, 5 & 10 volts > 1 kOhm Load resistance volts

(M100-VA1, VA3 only) 1, 5 & 10 volts > 50kOhm Load influence < 0.1 %

Ripple <0.5% peak-peak at full load <200 msec for 0-99 % at full load Response time Overload <2 x rated value at full load

< 27 VNo load voltage

APPLIED STANDARDS

IEC 688 / BS 6253 / VDE/ General

VDI 2192

Safety BS EN61010

DIN 57411 / VDE 0411

ANSI C37

Surge withstand IEC 801 / EN 55020

ANSI C37-90a

RFI degree N complies with Radio screening

VDE 0875

EMCEmissions EN50081-2

Immunity EN50082-1

ENCLOSURE

Fixing Snap on to DIN rail 35 x 7.5 mm

complies with DIN-EN 50022

BS 5584

Any position Mounting

Case IP 50 / terminals IP 30 Enclosure Code Complies with IEC 529

BS 5490 DIN 40050

APPROVALS

cU.L. Approval File No E157034

CASE DIMENSIONS

All Dimensions in mm

