

DC CURRENT OR VOLTAGE 4kV OR 1.5kV ISOLATION



TECHNICAL INFORMATION

INPUT

Rated value I_n	$\pm 0-1mA...10A$ M100-DA1 / DA11
Voltage drop	20mV
Rated value U_n	$\pm 20mV.....11.9V$ M100-DV1 / DV11
Impedance	100 kOhm / volt
Rated value U_n	$\pm 12 V.....600 V$ M100-DV2 / DV21
Impedance	10 kOhm / volt
Working range	$\pm 125\% I_n$
Overload continuous	4 x I_n M100-DA1 (upto 20A max)
Overload continuous	1.5 x U_n M100-DV1 / DV2

OUTPUT

Rated value mA	0-1/5/10/20 & 4-20mA
Load resistance	12/2.4/1.2/0.6 kOhm
Rated value volts	0-5 / 10 & 1-5 V

ADJUSTMENT

Zero	$\pm 2\%$
Span	$\pm 10\%$

AUXILIARY

A.C. Voltage	115 / 230 / 400 V ($\pm 25\%$ / 45-65 Hz / < 2VA)
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D.C. Voltage	24 / 48 / 110 V ($\pm 20\%$ / galvanically isolated / < 3W)
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WEIGHT & CASE SIZE	Approx. 0.4 kg. 55mm case
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INSULATION

M100-DA1/DV1/DV2	4kV As shown in general specification see page 3.
M100-DA11/DV11/DV21	Test voltage 1.5kV RMS 50Hz 1 min between input / case / output, rest of specification as shown in general specification see page 3

SELECTION GUIDE

M100-DA1	DC current input 4kV isolation
M100-DV1	DC voltage 20 mV...11.9V input 4kV isolation
M100-DV2	DC voltage 12 V....600 V input 4kV isolation

M100-DA11	DC current input 1.5kV isolation
M100-DV11	DC voltage 20mV...11.9V input 1.5kV isolation
M100-DV21	DC voltage 12 V...600V input 1.5kV isolation

TYPICAL APPLICATIONS

These isolators isolate the DC input signal from the DC Output signal, which is directly proportional to the input signal. There are two levels of isolation offered, the M100-DA1 / DV1 / DV2 have 4kV isolation and the M100-DA11 / DV11 / DV21 have 1.5kV isolation. A wide range of both D.C. Current and voltage inputs are offered.

Typically these isolators can be used to prevent earth loops, which occur when a measuring source, that is earthed, is connected to a computer or data logger that is also earthed. Another common use is to provide isolation on the inputs to a PLC.

All of the above isolators have either A.C. or D.C. Auxiliaries which means they have an advantage over loop powered units, in that if for any reason the output lead should become disconnected, the input will not be saturated.

ORDERING INFORMATION

Product code	Input	I_n	Output	Aux	Freq.	Options
M100-DA11	1mA	4-20mA	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

