

Rogowski Coil Transducer

M250-TRC Rogowski Coil Operated Transducer

Description

The M250-TRC converts the output from the M240-RCM MultiCoil (Rogowski coil) to either a DC or AC output which is directly proportional to the AC current being measured by the MultiCore. Available DC outputs are 0-1mA, 0-5mA, 0-10mA, 0-20mA, 4-20mA, 0-5V, 0-10V, 1-5V DC. This product is also available with an output of 0-333mV AC.

The combination of the M250 and the M240 allows the user to replace convenient current transducers and current transformers. With the output of the M250 set for 330mv AC, split-core transformers can also be replaced. This coil / transducer combination offers major advantages over conventional systems, including its compact design and safe, simple connection. The coils are easily clipped around a cable or busbar without having to break the connection of either. The coil is accurate across a range of 30A to 4000A, so there is no need to order a variety of products with differing current ratings. This offers the added advantage of stock holding being reduced.

The M250 will as standard give full output at 4000A but can be scaled to the actual primary current readings required.
Example: 0-300A = 4-20mA or 1200A = 0-10V.

Coil

The M240-RCM is available in a variety of standard lengths to suit most installation scenarios.

Special lengths are available on request.

Power Supply

The M250-TRC has a universal power supply capable of the following ranges:

- | | |
|-----------|------------------------|
| Standard: | AC: 75V - 277V 50/60Hz |
| | DC: 48V - 300V |
| Option 1: | DC: 20V - 56V |
| Option 2: | DC: 12V |



Converts coil input to either DC or AC output



Easy Installation

Flexible Multicore (Rogowski coil) allows installation around conductors without disconnection or removal of the conductor



Specifications

Power Supply

Supply Voltage	75-277V AC
	20-56V DC
	12V DC
Frequency Range	50 / 60Hz 400Hz Option
Isolation	4kV Isolation between power supply and input / output. Output is not isolated from input until the coil (M240-RCM) is connected. The coil provides isolation.

Outputs

DC mA:

0-1mA	<12 kOhm
0-5mA	<2.4 KOhm
0-10mA	<1.2 kOhm
0-20mA	<600 Ohm
4-20mA	<600 Ohm

DC Volts:

0-5V	>1 kOhm
0-10V	>1 kOhm
1-5V	>1 kOhm

AC Volts: 0-333mV AC

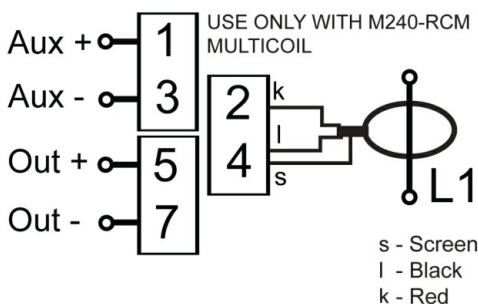
General

Ambient Temp	-20 to + 70°C
Relative Humidity	95%
Housing	UL94V0
Mounting	Din Rail (35mm)
Accuracy	1% Over measurement range
Cut off	10A on lowest range
Minimum Full Span Range	100A

Indicator

Power Supply	Green LED
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Connection Diagram



Ordering Information

M250-TRC-

Output	Code			
0-1mA	A1			
0-5mA	A2			
0-10mA	A3			
0-20mA	A4			
4-20mA	A5			
0-5V	V1			
0-10V	V2			
1-5V	V3			
0-333mV AC	M1			
Frequency	Code			
50Hz	H5			
60Hz	H6			
Window Size	Coil Length	Code		
80mm	281mm	W1		
130mm	448mm	W2		
200mm	658mm	W3		
290mm	940mm	W4		

Power Supply	Code
STD: 75-277V AC / 48-300V DC	P1
20-56V DC	P2
12V DC	P3

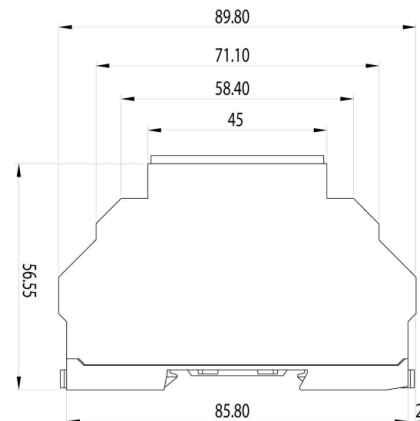
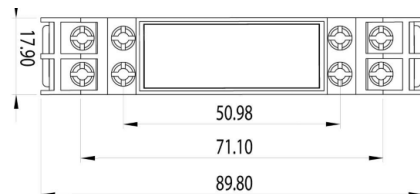
Example M250-TRC-A5-H5-W1-P1

If the requirement is for a nominal primary current to equal a nominal output please state current after order code.

For example, if the requirement was a 10V output for 800A input, the order code would be as follows:

M250-TRC-V2-H6-W2-P1 800 Amps

Case



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