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DMA-1 CT TrueRMS

Current intensity indicator,
1-phase



Do not dispose of this device in the trash along with other waste! According to the Law on Waste, electro coming from households free of charge and can give any amount to up to that end point of collection, as well as to store the occasion of the purchase of new equipment (in accordance with the principle of old-for-new, regardless of brand). Electro thrown in the trash or abandoned in nature, pose a threat to the environment and human health.



Purpose

The DMA-1 CT is a 1-phase current intensity indicator, adapted for measurement in an indirect circuit using current transformers with an output current of 5 A.



The sensor correctly measures the true rms value of the current (TrueRMS), even in the case of a distorted (deformed) current waveform.

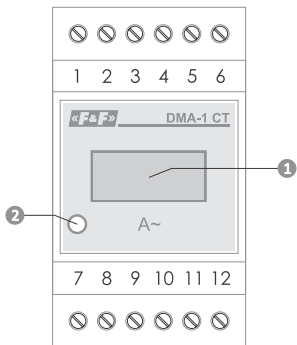
Functioning

The indicator continuously measures the TrueRMS current value, the result of which is shown on a 3-digit segment display on the facade of the unit.

The indicator allows the value of connected current transformers to be set, so that the value shown on the display corresponds to the actual current value.

The DMA-1 CT is suitable for mounting in a switchgear directly on a 35 mm DIN rail.

Front description



- 1 LCD display
- 2 SET button

Mounting

1. Switch off power supply.
2. Install indicator on DIN rail.
3. Connect the indicator according to the connection diagram:
 - » Connect the power supply of the indicator (230 V AC) to terminals 5 and 6;
 - » The current transformer output is connected to terminals 2 and 8.
4. Switch on the power supply.



If the secondary windings of the measuring transformers are open (e.g. during assembly) and a current flows through the measured circuit, a dangerous voltage may be induced at the terminals of the measuring transformer. It is absolutely necessary to protect oneself from such a situation by switching off the power supply of measured circuits or installing additional bridges short-circuiting the secondary side of a measuring transformer.

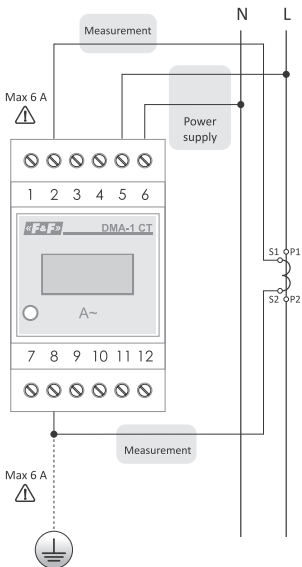


The indicator is designed for current measurement using current transformers with a rated output current of 5 A. Current flow through the measuring circuit of the indicator of a value higher than 6 A may lead to damage of the indicator.



For increased safety, it is recommended that one side of the current transformer be earthed as shown in the connection diagram.

Wiring diagram



- 2 L phase – current input (S1 terminal of the transformer)
- 5 power supply 230 V AC (phase wire)
- 6 power supply 230 V AC (neutral wire)
- 8 L phase – current output (S2 terminal of the transformer)

Configuration

In order for the indicator to show current values, the current transformers connected to the indicator must first be programmed.

Current transformer setting

The DMA-1 CT indicator is adapted for use with the following current transformers with 5A secondary and primary current: 20, 25, 30, 40, 50, 70, 75, 80, 100, 120, 125, 150, 160, 200, 250, 300, 400, 500, 600, 700, 750, 800, 900, 1000 A.

Current ratio programming

1. Press and hold down the SET button located on the facade of the indicator.
2. Release the button after a minimum of 5 seconds.
3. Use successive short presses of the SET button to set the desired current ratio value.
4. Confirmation of the change takes place by pressing the SET button for a minimum of 5 seconds.



The set value of the current ratio is indicated each time on the display of the indicator when the power is switched on.

Technical data

power supply	165÷265 V AC/DC
measurement	indirect (transformer 5 A)
number of measurement channels	1
measured value	TrueRMS value AC current
frequency	45÷55 Hz
maximum current	6 A
measurement range	0÷5 A
maximum momentary overload	20 A/1 s
indication accuracy	1%
reading accuracy	
measurement range <100 A	0.1 A
measurement range ≥100 A	1 A
display (for 1 phase)	3×LED segment 6×10 mm
power consumption	4 W
terminal	2,5 mm ² screw terminals (cord) 4.0 mm ² screw terminals (wire)
tightening torque	0.5 Nm
working temperature	-25÷50°C
dimensions	3 modules (52.5 mm)
mounting	on TH-35 rail
ingress protection	IP20

Warranty

F&F products are covered by a 24-month warranty from the date of purchase. The warranty is only valid with proof of purchase. Contact your dealer or contact us directly.

CE declaration

F&F Filipowski sp. L.P. declares that the device is in conformity with the essential requirements of The Low Voltage Directive (LVD) 2014/35/EU and the Electromagnetic Compatibility (EMC) Directive 2014/30/UE.

The CE Declaration of Conformity, along with the references to the standards in relation to which conformity is declared, can be found www.fif.com.pl on the product subpage.

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