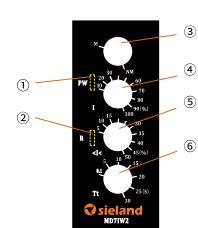


# MD7IW2 Current monitoring relays specification





- ① PW:Green LED, power supply indication
- ② R: Relay status indication
- ③ M/NM: Memory or without memory setting
- ④ I: Current benchmark setting
- ⑤ <I<: Undercurrent/overcurrent setting
- 6 Tt: Delay time value setting

# Products features:

■ Power supply: 24-240V AC/DC

■ Three monitoring channels: I1/I2/I3 - C

■ Memory mode can be set on the panel, M: with memory, NM: without memory

# Technical data:

Power supply: 24 - 240V AC/DC

Current benchmark: 10 - 100% (I1/I2/I3 - C)

Under/overcurrent: 5 - 50% (current benchmark)

Delay setting: 0.1s - 30sRelay output: 2 c/o  $\pm 0.5\%$ Repeatability: Temp. drift: ±0.05%/°C Voltage drift:  $\pm 1\%/V$ Switch current: 8A/250VAC Electrical durability: 10<sup>5</sup> cycles Mechanical durability: 10<sup>7</sup> cycles IP degree: IP50/IP20 -40°C...60°C Temerature:

Store temperature: -40°C...85°C
Size: 22.5\*92\*100 mm
Mounting: 35mm DIN rail

Standards: IEC60255-1, GB14048.5

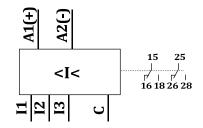


# Reference figure for MD7IW2:

T: 0.1-30s

A1-A2: 24-240V AC/DC, 50/60Hz

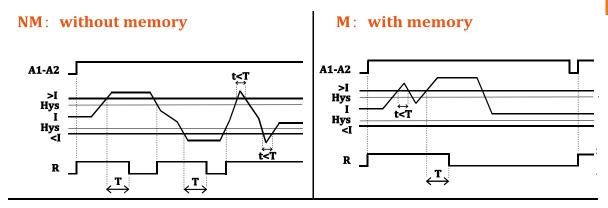
∠-: 8A 250V AC



#### Note:

- If A1-A2 is DC power supply, then A1 must be positive, A2 must be negative
- Three current monitoring channels: **I1-C: 0.15A 1.5A I2-C: 0.5A 5A I3-C: 1.5A 15A AC/DC**, select one channel according to the current under monitoring

# Function figure:



■ M: with memory means if fault occur only for one time, relay c/o can not return to normal status automatically, unless power supply restart

### Example:

#### Current monitoring

## Setting:

NM: without memory

I: 60% (current benchmark setting)

<I< setting: 20% Delay time value setting: 5s

If I3-C is connected

Then:

Current benchmark: 15\*60% = 9 ACurrent threshold: 9\*0.2 = 1.8 A

>I: 9+1.8 = 10.8 A <I: 9-1.8 = 7.2 A

Hysterisys :  $1.8*10\% = 0.18~\mathrm{A}$  (hysterisys value 10% fixed in firmware)

Current: 10.8-0.18 = 10.62 A (return from >I fault) Current: 7.2+0.18 = 7.38 A (return from <I fault)

#### Conclusion

- 1. If current is between 7.2A and 10.8A, current is normal, relay c/o switch on, led R turn on
- 2. If current is over 10.8A, over-current fault occur, relay c/o switch off, led R turn off, if current fall to 10.62A, relay c/o switch on, led R turn on
- 3. If current is under 7.2A, under-current fault occur, relay c/o switch off, led R turn off, if current rise to 7.38A, relay c/o switch on, led R turn on