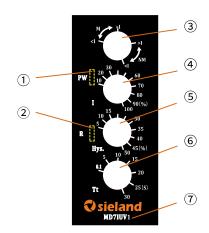


MD7IUV1 Current monitoring relays specification





- ① PW:Green LED, power supply indication
- ② R: Relay status indication
- ③ M/NM: Memory or without memory setting

<I: Undercurrent monitoring mode</p>
>I: Overcurrent monitoring mode

- 4 I: Current threshold setting
- 5 Hys.: Hysterisys setting
- 6 Tt: Delay time value setting
- Product model

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 threshold: 10 - 100% (I1/I2/I3 - C)Hysterisys setting: 5 - 50% (current threshold)

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: 10⁵ cycles Mechanical durability: 10⁷ cycles IP degree: IP50/IP20 -40°C...60°C Temerature: -40°C...85°C Store temperature:

Size: 22.5*92*100 mm Mounting: 35mm DIN rail

Standards: IEC60255-1, GB14048.5

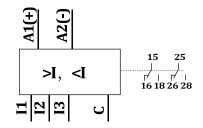


Reference figure for MD7IUV1:

T: 0.1-30s

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

∠-: 8A 250V AC

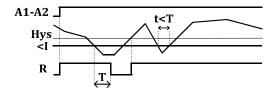


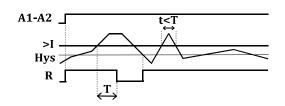
Note:

- If A1-A2 is DC power supply, then A1 must be positive, A2 must be negative
- Three monitoring channels: **I1-C: 2mA 20mA I2-C: 10mA 100mA I3-C: 50mA 500mA AC/DC** select one channel according to the current under monitoring

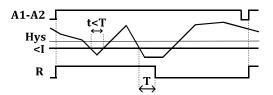
Function figure:

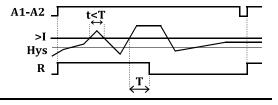
(NM: without memory)





(M: with memory)





■ 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:

Overcurrent monitoring

Setting:

>I, NM (overcurrent monitoring mode, without memory)

Current threshold setting: 60% Hysterisys setting: 5% Delay time value setting: 5s

If I3-C is connected

then:

Current threshold setting: 500*60% = 300 mAHysterisys setting: 300*5% = 15 mAHysterisys current: 300-15 = 285 mA

Conclusion:

- 1. If current is under 300 mA, current is normal, relay c/o switch on, led R turn on
- If current is over 300 mA, over-current fault occur, relay c/o switch off, led R turn off, if current fall to hysterisys current of 285 mA, relay c/o switch on, led R turn on

Undercurrent monitoring

Setting:

<I, NM (undercurrent monitoring mode, without memory)

Current threshold setting: 60% Hysterisys setting: 5% Delay time value setting: 5s

If I3-C is connected then:

Current threshold setting: 500*60% = 300 mAHysterisys setting: 300*5% = 15 mAHysterisys current: 300+15 = 315 mA

Conclusion:

- 1. If current is over 300 mA, current is normal, relay c/o switch on, led R turn on
- If current is under 300 mA, under-current fault occur, relay c/o switch off, led R turn off, if current rise to hysterisys current of 315 mA, relay c/o switch on, led R turn on