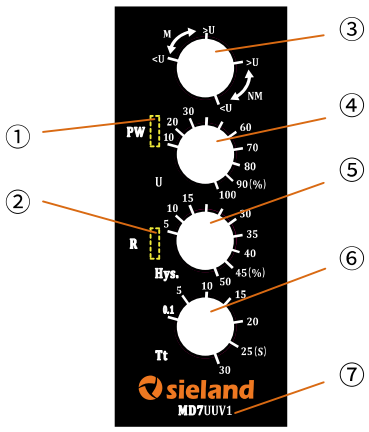
MD7UUV1 Voltage monitoring relays specification



① PW: Green LED, power supply indication
② R: Relay status indication
③ M/NM: Memory or without memory setting
<U: under-voltage monitoring mode
>U: over-voltage monitoring mode
④ U: Voltage threshold setting
⑤ Hys.: Hysterisys setting
⑥ Tt : Delay time value setting
⑦ Product model

Products features:

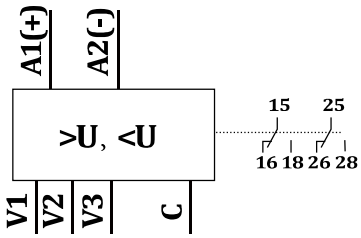
- Power supply: 24-240V AC/DC
- Three monitoring channels: V1/V2/V3 - C
- Memory mode can be set on the panel, M: with memory, NM: without memory

Technical data:

Power supply:	24 - 240V AC/DC
Voltage threshold:	10 - 100% (V1/V2/V3 - C)
Hysterisys setting:	5 - 50% (voltage threshold)
Delay setting:	0.1s - 30s
Relay output:	2 c/o
Repeatability:	±0.5%
Temp. drift:	±0.05%/°C
Voltage drift:	±1%/V
Switch current:	8A/250VAC
Electrical durability:	10^5 cycles
Mechanical durability:	10^7 cycles
IP degree:	IP50/IP20
Temerature:	–40°C…60°C
Store temperature:	–40°C…85°C
Size:	22.5*92*100 mm
Mounting:	35mm DIN rail
Standards:	IEC60255-1、GB14048.5

Reference figure for MD7UUV1:

T: 0.1-30s
A1-A2: 24-240V AC/DC, 50/60Hz
—/— 8A 250V AC

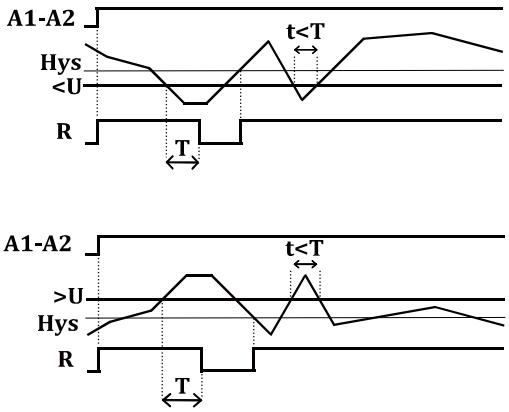


Note:

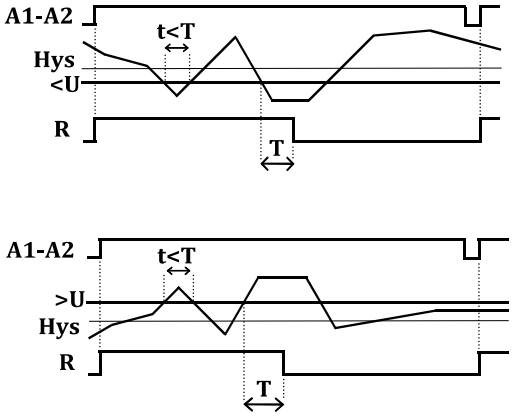
- If A1-A2 is DC power supply, then A1 must be positive, A2 must be negative
- Three voltage monitoring channels: **V1-C: 0.05 - 0.5V, V2-C: 0.3 - 3V, V3-C: 0.5 - 5V AC/DC,** select one channel according to voltage value

Function figure:

(NM: without memory)



(M: with memory)



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

Example

- over-voltage monitoring

Setting:

>U, NM (over-voltage monitoring mode, without memory)
Voltage threshold setting: 60%
Hysterisys setting: 5%
Delay time value setting: 5s

If V3-C is connected
then:

Voltage threshold setting: 5*60% = 3 V
Hysterisys setting: 3*5% = 0.15 V
Hysterisys voltage: 3-0.15 = 2.85 V

Conclusion:
1. If voltage is under 3 V, voltage is normal, relay c/o switch on, led R turn on
2. If voltage is over 3 V, over-voltage fault occur, relay c/o switch off, led R turn off, if voltage fall to hysterisys voltage of 2.85 V, relay c/o switch on, led R turn on

- under-voltage monitoring

Setting:

<U, NM (under-voltage monitoring mode, without memory)
Voltage threshold setting: 60%
Hysterisys setting: 5%
Delay time value setting: 5s

If V3-C is connected
then:

Voltage threshold setting: 5*60% = 3 V
Hysterisys setting: 3*5% = 0.15 V
Hysterisys voltage: 3+0.15 = 3.15 V

Conclusion:
1. If voltage is over 3 V, voltage is normal, relay c/o switch on, led R turn on
2. If voltage is under 3 V, under-voltage fault occur, relay c/o switch off, led R turn off, if voltage rise to hysterisys voltage of 3.15 V, relay c/o switch on, led R turn on