

Zelio Control - measurement and control relays

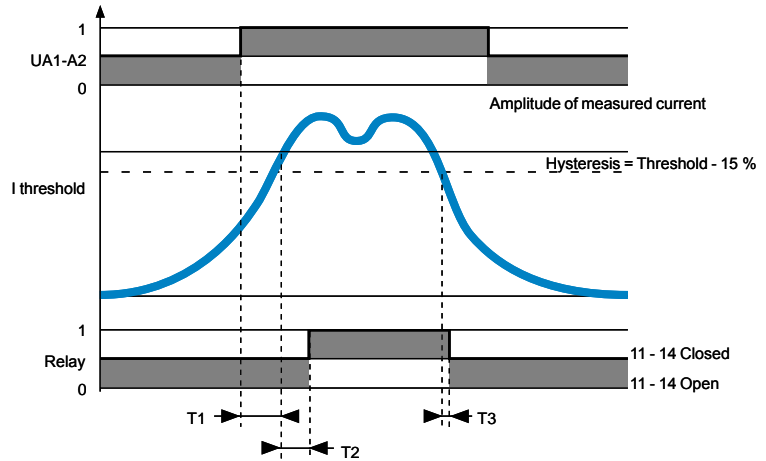
a.c. current control relays,
model RM 84 871

- Current transformer incorporated by passing a cable through the front panel.
- a.c. current threshold adjustable from ~ 1 to 20 A (30 Hz to 400 Hz) via button on front panel.
- Relay output ~ 5 A - 250 V - 1 N/O contact.
- Multivoltage supply:
- ~ 110 to 240 V 50/60 Hz,
- \sim or --- 24 V.
- 17.5 mm enclosure, clips onto symmetrical DIN rail.

Operating principle

The relay contact (11 and 14) closes if the current is greater than the threshold.

The relay contact (11 and 14) opens if the current is less than 15 % (hysteresis) of the threshold.

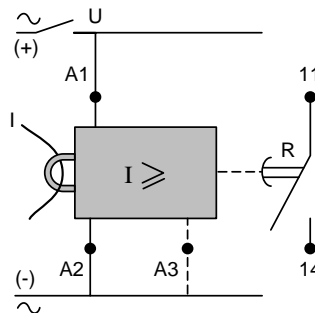


T1: Delay on pick-up 500 ms maximum

T2: Response time to sensing 400 ms \pm 50 %

T3: Response time on de-energisation 120 ms \pm 50 %

Connection scheme



A1 - A2 $\sim 110 \dots 240$ V supply

A1 - A3 \sim or --- 24 V supply

References

a.c. current control relays

Voltage	Reference	Weight kg
$\sim/\text{---} 24 \text{ V} / \sim 110 \dots 240 \text{ V}$	RM 84 871 102	0.080



RM 84 871 102

Note: The graduated set-point scale on the front panel relates to sinusoidal or delta current measurement. The relay can measure non-sinusoidal currents, for example currents subject to phase control. In this case an error coefficient may be assigned to the display, this coefficient being a function of the tripping angle of the phase controller (form factor).

Supply characteristics

Supply voltage U_n	V	$\sim/\text{---} 24 / \sim 110 \dots 240$
Frequency	Hz	50/60
Operating range		$\pm 15 \%$ for $24 \text{ V } \text{---}/\sim$, $-15 \dots +10 \%$ from $110 \dots 240 \text{ V } \sim$
Maximum consumption	$\sim 24 \text{ V}$	VA 1
	$\sim 240 \text{ V}$	VA 9
	$\text{---} 24 \text{ V}$	W 0.6
Temperature drift		0.06 %/ °C
Repeat accuracy		0.45 %
Relative humidity		95 %

Input characteristics

Measured current range	A	1...20 sinusoidal
Frequency range of measured current	Hz	30...400
Setting accuracy	V	$\pm 10 \%$ of the maximum scale value
Switching hysteresis		15 % of the set value
Maximum continuous current	A	40
Accidental overload current	A	100 A for 3 s
Response time to sensing	t2	ms 400 $\pm 50 \%$
	t3	ms 120 $\pm 50 \%$
Delay on pick-up	t1	ms 500 max

Output circuit characteristics

Output		1 N/O contact (AgCdO)
Breaking capacity	VA	1250
Maximum breaking current	A	~ 5 , $\text{---} 5$
Minimum breaking current	mA	~ 10 , $\text{---} 10$
Maximum switching voltage	V	~ 250 , $\text{---} 250$
Mechanical life		30 x 10 ⁶ operating cycles
Electrical life		10 ⁵ operating cycles at 1250 VA resistive
Terminal capacity	With cable end	mm ² 2 x 1.5
	Without cable end	mm ² 2 x 2.5

Other characteristics

Temperature limits	Operation	°C	-20...+60
	Storage	°C	-30...+70
Dielectric strength	Conforming to IEC 255-5	kV	2.5/1 min/1 mA/50 Hz
Product certifications			c UL us, CSA

Dimensions

