RE17RHMU

on-delay timing relay - 1 s..100 h - 24..240 V AC - 1 OC





Main

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Range of product	Zelio Time
Product or component type	Modular timing relay
Discrete output type	Relay
Width	17.5 mm
Device short name	RE17R
Time delay type	H Ht
Time delay range	0.11 s 110 h 110 min 110 s 10100 h 660 min 660 s
Nominal output current	8 A

Complementary

Contacts material	Cadmium free
Control type	Selector switch on front panel
[Us] rated supply voltage	24 V DC 24240 V AC at 50/60 Hz
Voltage range	0.851.1 Us
Supply frequency	5060 Hz (+/- 5 %)
Release of input voltage	10 V
Connections - terminals	Screw terminals, clamping capacity: 2 x 0.22 x 1.5 mm² AWG 24AWG 16 (flexible) with cable end Screw terminals, clamping capacity: 1 x 0.21 x 2.5 mm² AWG 24AWG 14 (flexible) with cable end Screw terminals, clamping capacity: 2 x 0.52 x 2.5 mm² AWG 20AWG 14 (solid) without cable end Screw terminals, clamping capacity: 1 x 0.51 x 3.3 mm² AWG 20AWG 12 (solid) without cable end
Tightening torque	0.61 N.m conforming to IEC 60947-1
Housing material	Self-extinguishing
Repeat accuracy	+/- 0.5 % conforming to IEC 61812-1
Temperature drift	+/- 0.05 %/°C
Voltage drift	+/- 0.2 %/V
Setting accuracy of time delay	+/- 10 % of full scale at 25 °C conforming to IEC 61812-1
Control signal pulse width	30 ms typical 100 ms with load in parallel typical
Insulation resistance	100 MOhm at 500 V DC conforming to IEC 60664-1
Reset time	120 ms on de-energisation typical
On-load factor	100 %
Power consumption in VA	<= 32 VA at 240 V AC
Power consumption in W	<= 0.6 W at 24 V DC
Minimum switching current	10 mA 5 V DC
Maximum switching current	8 A AC/DC
Maximum switching voltage	250 V AC
Breaking capacity	<= 2000 VA

Operating frequency	10 Hz
Electrical durability	100000 cycles for resistive load (8 A at 250 V AC maximum)
Mechanical durability	10000000 cycles
Dielectric strength	2.5 kV 1 mA/1 minute 50 Hz conforming to IEC 61812-1
[Uimp] rated impulse withstand voltage	5 kV (1.2/50 μs)
Power on delay	< 100 ms
Marking	CE
Creepage distance	4 kV/3 conforming to IEC 60664-1
Safety reliability data	MTTFd = 296.8 years B10d = 270000
Mounting position	Any position in relation to normal vertical mounting plane
Mounting support	35 mm DIN rail conforming to EN/IEC 60715
Local signalling	LED indicator pulsing: relay de-energised, no timing in progress (except function Di-D, Li-L) (5 % ON and 95 % OFF) LED indicator flashing: timing in progress (80 % ON and 20 % OFF) LED indicator on steady: relay energised, no timing in progress
Product weight	0.07 kg

Environment

Environment	
Immunity to microbreaks	<= 20 ms
Standards	2004/108/EC EN 61000-6-1 EN 61000-6-2 EN 61000-6-3 EN 61000-6-4 IEC 61812-1 2006/95/EC
Product certifications	CSA CULus GL
Ambient air temperature for storage	-3060 °C
Ambient air temperature for operation	-2060 °C
IP degree of protection	IP50 (front panel) conforming to IEC 60529 IP40 (housing) conforming to IEC 60529 IP20 (terminal block) conforming to IEC 60529
Vibration resistance	20 m/s² (f = 10150 Hz) conforming to IEC 60068-2-6
Shock resistance	15 gn (duration = 11 ms) conforming to IEC 60068-2-27
Relative humidity	93 % without condensation conforming to IEC 60068-2-30
Electromagnetic compatibility	Conducted and radiated emissions conforming to EN 55022 class B Voltage dips and interruptions immunity test, 25/30 cycles at 70 % conforming to IEC 61000-4-11 Voltage dips and interruptions immunity test, 1 cycle at 0 % conforming to IEC 61000-4-11 Conducted RF disturbances, 0.1580 MHz at 10 V conforming to IEC 61000-4-6 level 3 1.2/50 µs shock waves immunity test, common mode at 2 kV conforming to IEC 61000-4-5 level 3 1.2/50 µs shock waves immunity test, differential mode at 1 kV conforming to IEC 61000-4-5 level 3 Electrical fast transient/burst immunity test, direct at 2 kV conforming to IEC 61000-4-4 level 3 Electrical fast transient/burst immunity test, capacitive connecting clip at 1 kV conforming to IEC 61000-4-4 level 3 Susceptibility to electromagnetic fields, 80 MHz to 1 GHz at 10 V/m conforming to IEC 61000-4-3 level 3 Electrostatic discharge immunity test, in air at 8 kV conforming to IEC 61000-4-2 level 3 Electrostatic discharge immunity test, in contact at 6 kV conforming to IEC 61000-4-2 level 3

Offer Sustainability

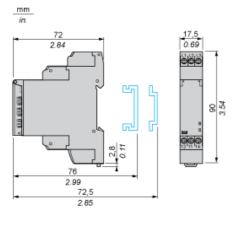
Sustainable offer status	Green Premium product
RoHS (date code: YYWW)	Compliant - since 1243 - Schneider Electric declaration of conformity
REACh	Reference not containing SVHC above the threshold
Product environmental profile	Available Download Product Environmental
Product end of life instructions	Available Download End Of Life Manual



Product data sheet Dimensions Drawings

RE17RHMU

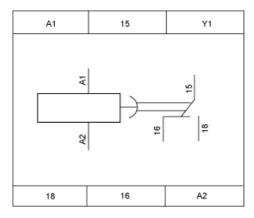
Width 17.5 mm



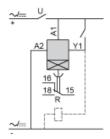
Product data sheet Connections and Schema

RE17RHMU

Internal Wiring Diagram



Wiring Diagram



Product data sheet Technical Description

RE17RHMU

Function H: Interval Relay

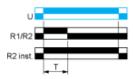
Description

On energisation of the relay, timing period T starts and the output(s) R close(s). At the end of the timing period T, the output(s) R revert(s) to its/their initial state. The second output can be either timed or instantaneous.

Function: 1 Output



Function: 2 Outputs



2 timed outputs (R1/R2) or 1 timed output (R1) and 1 instantaneous output (R2 inst.)

Function Ht: Interval Relay (Summation) with Control Signal

Description

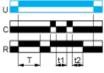
On energisation, the output R closes for the duration of a timing period T then reverts to its initial state.

Pulsing or maintaining control contact C will again close the output R.

Timing T is only active when control contact C is released and so the output R will not revert to its initial state until after a time t1 + t2 +...

The relay memorises the total, cumulative opening time of control contact C and, once the set time T is reached, the output R reverts to its initial state.

Function: 1 Output



T = t1 + t2 +...

Legend

Relay de-energised
Relay energised
Output open
Output closed

C Control contact

G Gate

R Relay or solid state output

R1/ 2 timed outputs

R2

R2 The second output is instantaneous if the right position is selected

inst.

T Timing periodTa Adjustable On-delay

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Tr Adjustable Off-delay

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U Supply