Product data sheet
Characteristics

RE22R1AKMR
Asym. On and Off-delay Timing Relay - 0.05s…300h - 24…240V AC/DC - 1C/O

Green Premium

Product availability: Non-Stock - Not normally stocked in distribution facility

Main

Range of product	Zelio Time
Product or component type	Modular timing relay
Discrete output type	Relay
Device short name	RE22
Nominal output current	8 A

Complementary

Contacts type and composition	1 C/O timed contact, cadmium free
Time delay type	Akt Ak
Time delay range	30...300 h 1...10 s 30...300 s 3...30 min 0.3...3 s 0.05...1 s 10...100 s 3...30 h 30...300 min
Control type	Rotary knob Diagnostic button External potentiometer
[Us] rated supply voltage	24...240 V AC/DC at 50/60 Hz
Release input voltage	<= 2.4 V
Voltage range	0.85...1.1 Us
Supply frequency	50...60 Hz (+/- 5 %)
Connections - terminals	Screw terminals : 1 x 0.5...1 x 3.3 mm², AWG 20...AWG 12 solid cable without cable end Screw terminals : 2 x 0.5...2 x 2.5 mm², AWG 20...AWG 14 solid cable without cable end Screw terminals : 1 x 0.2...1 x 2.5 mm², AWG 24...AWG 14 flexible cable with cable end Screw terminals : 2 x 0.2...2 x 1.5 mm², AWG 24...AWG 16 flexible cable with cable end
Tightening torque	5.31...8.85 lbf.in (0.6...1 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	100 ms (with load in parallel) 30 ms
Insulation resistance	100 MOhm at 500 V DC conforming to IEC 60664-1
Recovery time	120 ms (on de-energisation)
Immunity to microbreaks	<= 10 ms
Power consumption in VA	3 VA at 240 V AC

Power consumption in W	1.5 W at 240 V DC
Switching capacity in VA	2000 VA
Minimum switching current	10 mA 5 V DC
Maximum switching current	8 A
Maximum switching voltage	250 V AC
Electrical durability	100000 cycles for 8 A at 250 V AC-1 100000 cycles for 2 A at 24 V DC-1
Mechanical durability	10000000 cycles
Rated impulse withstand voltage	5 kV 1.2...50 µs conforming to IEC 60664-1
Power on delay	< 100 ms
Creepage distance	4 kV/3 conforming to IEC 60664-1
Overvoltage category	III conforming to IEC 60664-1
Safety reliability data	B10d = 180000 MTTFd = 194 years
Mounting position	Any position
Mounting support	35 mm DIN rail conforming to EN/IEC 60715
Status LED	Green LED backlight (steady) dial pointer indication Yellow LED (steady) output relay energised Yellow LED (fast flashing) timing in progress and output relay de-energised Yellow LED (slow flashing) timing in progress and output relay energised
Width	0.89 in (22.5 mm)
Product weight	0.22 lb(US) (0.1 kg)

Environment

Dielectric strength	2.5 kV for 1 mA/1 minute at 50 Hz between relay output and power supply with basic insulation conforming to IEC 61812-1
Standards	IEC 61812-1 UL 508
Directives	2006/95/EC - low voltage directive 2004/108/EC - electromagnetic compatibility
Product certifications	CSA UL CCC EAC GL China RoHS CE RCM
Ambient air temperature for operation	-4...140 °F (-20...60 °C)
Ambient air temperature for storage	-40...158 °F (-40...70 °C)
IP degree of protection	IP20(Terminals) conforming to IEC 60529 IP40 (housing) conforming to IEC 60529 IP50 (front face) conforming to IEC 60529
Pollution degree	3 conforming to IEC 60664-1
Vibration resistance	20 m/s² (f = 10...150 Hz) conforming to IEC 60068-2-6
Shock resistance	15 gn (not operating) (duration = 11 ms) conforming to IEC 60068-2-27 5 gn (in operation) (duration = 11 ms) conforming to IEC 60068-2-27

Relative humidity	95 % at 25...55 °C
Electromagnetic compatibility	Fast transients immunity test (test level: 1 kV, level 3 - capacitive connecting clip) conforming to IEC 61000-4-4 Surge immunity test (test level: 1 kV, level 3 - differential mode) conforming to IEC 61000-4-5 Surge immunity test (test level: 2 kV, level 3 - common mode) conforming to IEC 61000-4-5 Electrostatic discharge (test level: 6 kV, level 3 - contact discharge) conforming to IEC 61000-4-2 Electrostatic discharge (test level: 8 kV, level 3 - air discharge) conforming to IEC 61000-4-2 Radiated radio-frequency electromagnetic field immunity test (test level: 10 V/m, level 3 - 80 MHz...1 GHz) conforming to IEC 61000-4-3 Conducted RF disturbances (test level: 10 V, level 3 - 0.15...80 MHz) conforming to IEC 61000-4-6 Fast transient bursts (test level: 2 kV, level 3 - direct contact) conforming to IEC 61000-4-4 Immunity to microbreaks and voltage drops (test level: 30 % - 500 ms) conforming to IEC 61000-4-11 Immunity to microbreaks and voltage drops (test level: 100 % - 20 ms) conforming to IEC 61000-4-11

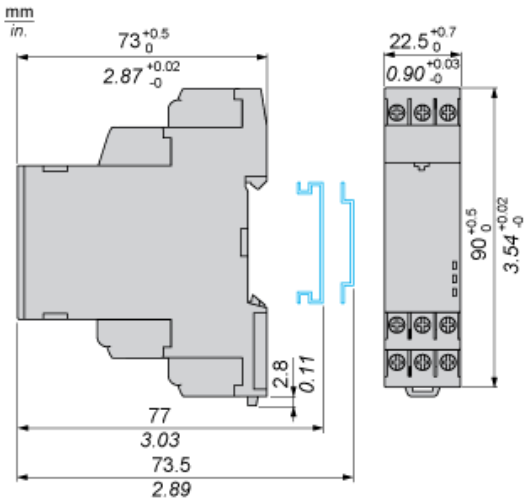
Ordering and shipping details

Category	22376 - RELAYS-MEASUREMENT(RM4)
Discount Schedule	CP2
GTIN	00785901464761
Nbr. of units in pkg.	1
Package weight(Lbs)	0.20000000000000001
Returnability	N
Country of origin	ID

Offer Sustainability

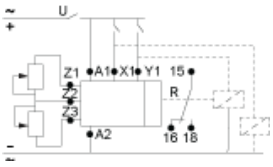
Sustainable offer status	Green Premium product
RoHS (date code: YYWW)	Compliant - since 1650 - Schneider Electric declaration of conformity Schneider Electric declaration of conformity
REACh	Reference not containing SVHC above the threshold
Product environmental profile	Available
Product end of life instructions	Available
California proposition 65	WARNING: This product can expose you to chemicals including:
- - - - - - - Substance 1	Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm.
- - - - - - - More information	For more information go to www.p65warnings.ca.gov

Dimensions


mm
in.
73 +0.5 0
2.87 +0.02 -0
22.5 +0.7 0
0.90 +0.03 -0
90 +0.5 0
3.54 +0.02 -0
2.8
0.11
77
3.03
73.5
2.89

RE22R1AKMR

Wiring Diagram



Function Ak: Asymmetrical On-Delay & Off-Delay with Control Signal

Description

After energisation of power supply and energization of Y1, timing starts for a period Ta.At the end of this timing period Ta, the output(s) R closes.Deenergization of Y1 causes a second timing period Tr to start.At the end of this timing period Tr, the output(s) R reverts to its initial state.

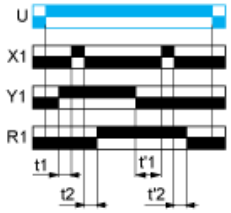
Function: 1 Output

Function Akt: Asymmetrical On-Delay & Off-Delay with Control Signal & with Pause / Summation Control

Description

After energisation of power supply and energization of Y1, timing starts for a period Ta.At the end of this timing period Ta, the output(s) R closes.Deenergization of Y1 causes a second timing period Tr to start.At the end of this timing period Tr, the output(s) R reverts to its initial state.

Function: 1 Output



Ta = t1 + t2 +…
Tr = t'1 + t'2 +…

Legend

Relay de-energised
Relay energised
Output open
Output closed

U	Supply
-	
R1	Timed output
-	
Ta	Adjustable On-delay
-	
Tr	Adjustable Off-delay
-	
X1	Pause / Summation control
-	
Y1	Retrigger / Restart control
-	

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