

RE22R1QCMU

single function relay, Harmony Timer Relays,
8A, 1 CO, 0.05s...300s, star delta, 24V DC or
24...240V AC DC



Main

Range of Product	Harmony Timer Relays
Product or Component Type	Single function 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	Star-delta
Time delay range	10...100 s 3...30 s 0.1...1 s 0.3...3 s 0.05...0.5 s 1...10 s 30...300 s
Control type	Rotary knob Diagnostic button
[Us] rated supply voltage	24 V DC 24...240 V AC 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 mm ² AWG 20...AWG 12) solid without cable end Screw terminals, 2 x 0.5...2 x 2.5 mm ² AWG 20...AWG 14) solid without cable end Screw terminals, 1 x 0.2...1 x 2.5 mm ² AWG 24...AWG 14) flexible with cable end Screw terminals, 2 x 0.2...2 x 1.5 mm ² AWG 24...AWG 16) flexible with cable end
Tightening torque	5.31...8.85 lbf.in (0.6...1 N.m) IEC 60947-1
Housing material	Self-extinguishing
Repeat accuracy	+/- 0.5 % IEC 61812-1
Temperature Drift	+/- 0.05 %/°C
Voltage drift	+/- 0.2 %/V
Setting accuracy of time delay	+/- 10 % of full scale 25 °C IEC 61812-1
Insulation resistance	100 MOhm 500 V DC IEC 60664-1
Recovery time	120 ms on de-energisation
Immunity to microbreaks	10 ms
Power consumption in VA	35 VA 240 V AC
Power consumption in W	0.6 W 24 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, 8 A at 250 V, AC-1 100000 cycles, 2 A at 24 V, DC-1
Mechanical durability	10000000 cycles
Rated impulse withstand voltage	5 kV 1.2...50 µs IEC 60664-1
Power on delay	100 ms
Creepage distance	4 kV/3 IEC 60664-1
Overvoltage category	III IEC 60664-1
Safety reliability data	MTTFd = 285.3 years B10d = 270000
Mounting position	Any position
Mounting support	35 mm DIN rail conforming to 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)
Net Weight	0.18 lb(US) (0.08 kg)

Environment

Dielectric strength	2.5 kV 1 mA/1 minute 50 Hz between relay output and power supply basic insulation IEC 61812-1
Standards	UL 508 IEC 61812-1
Directives	2004/108/EC - electromagnetic compatibility 2006/95/EC - low voltage directive
Product Certifications	GL[RETURN]CE[RETURN]CCC[RETURN]EAC[RETURN]UL[RETURN]CSA[RETURN]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	Housing IP40 IEC 60529 Front face IP50 IEC 60529 Terminals IP20 IEC 60529
Pollution degree	3 IEC 60664-1
Vibration resistance	20 m/s ² 10...150 Hz)IEC 60068-2-6
Shock resistance	15 gn not operating 11 ms IEC 60068-2-27 5 gn in operation 11 ms IEC 60068-2-27
Relative humidity	95 % 77...131 °F (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	3606480792564
Returnability	No
Country of origin	ID

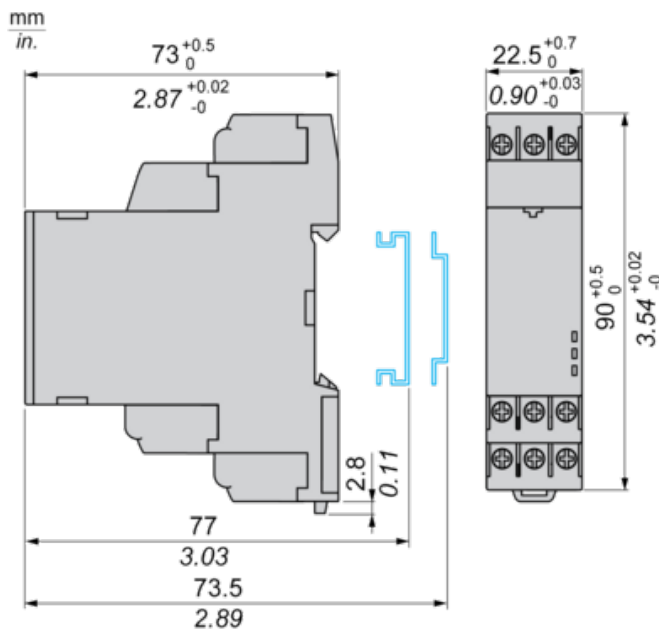
Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	0.98 in (2.5 cm)
Package 1 Width	3.31 in (8.4 cm)
Package 1 Length	3.74 in (9.5 cm)
Package 1 Weight	3.17 oz (90.0 g)
Unit Type of Package 2	S02
Number of Units in Package 2	40
Package 2 Height	5.91 in (15.0 cm)
Package 2 Width	11.81 in (30.0 cm)
Package 2 Length	15.75 in (40.0 cm)
Package 2 Weight	9.13 lb(US) (4.14 kg)
Unit Type of Package 3	P06
Number of Units in Package 3	640
Package 3 Height	31.50 in (80.0 cm)
Package 3 Width	31.50 in (80.0 cm)
Package 3 Length	23.62 in (60.0 cm)
Package 3 Weight	161.78 lb(US) (73.38 kg)

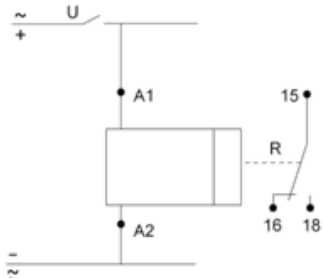
Offer Sustainability

Sustainable offer status	Green Premium product
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov
REACH Regulation	REACH Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
Mercury free	Yes
China RoHS Regulation	China RoHS Declaration
RoHS exemption information	Yes
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End Of Life Information

Dimensions



Wiring Diagram

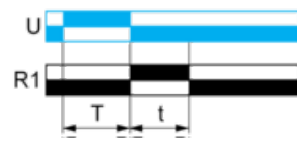


Function Qc: Star-Delta Relay (1 CO)

Description

On energisation of power supply, the output R initializes at its initial state such that energizes STAR CONTACTOR + MAIN CONTACTOR and the timing T starts (STAR connection time duration starts). At the end of the timing period T, the output R closes such that deenergizes STAR CONTACTOR and deenergizes the power supply causes t transition time starts. At the end of the transition time, the output R reverts to its initial state such that energizes DELTA CONTACTOR.

Function: 1 Output



t : 50 ms

Legend

Relay de-energised

Relay energised

Output open

Output closed

U -	Supply
T -	Timing period
t -	Delay to switch ON Delta contact output
R1 -	Star-Delta contact output