Product data sheet Characteristics

RE48AML12MW

multifunction relay, Harmony Timer Relays, 5A, 2CO, 0.02s...300h, time delay, 24...240V AC DC





Main	
Range of Product	Harmony Timer Relays
Product or Component Type	Multifunction relay
Electrical connection	Plug-in sub-base 11
Discrete output type	Relay
Contacts type and composition	2 C/O timed contacts, AgNi (cadmium free)
Component name	RE48A
Time delay type	Power on-delay Interval Off-delay Symmetrical flashing
Time delay range	0.530 s 5300 s 0.212 min 0.530 h 2120 s 0.053 s 0.212 s 0.0212 s 2120 min 5300 min 0.530 min 5300 h 2120 h 0.212 h
[Us] rated supply voltage	24240 V AC/DC 50/60 Hz
Voltage range	0.851.1 Us AC 0.91.1 Us DC
Line Rated Current	5 A

Complementary

Complementary	
Product front plate size	48 x 48 mm
Control type	Selector switch front panel
Housing material	Self-extinguishing
Repeat accuracy	+/- 0.2 % of the maximum setting value IEC 61812-1
Temperature drift	+/- 0.02 %/°C of the maximum setting value IEC 61812-1
Voltage drift	+/- 0.2 %/V of the maximum setting value 48240 V +/- 1 %/V of the maximum setting value 2448 V
Setting accuracy of time delay	+/- 5 % of full scale 25 °C IEC 61812-1
Minimum pulse duration	20 ms
Reset time	25 ms on de-energisation
Pick up duration	55 ms
On-load factor	100 %
Power consumption in VA	1.1 VA 24 V 4.8 VA 240 V
Power consumption in W	0.5 W 24 V 1.7 W 240 V
Breaking capacity	1250 VA
Minimum switching current	100 mA
Maximum switching current	5 A

Maximum switching voltage	250 V AC/DC
Electrical durability	100000 cycles
Mechanical durability	30000000 cycles
Output voltage	240 V 5 A AC-12 30 V 2 A DC-13 240 V 1.5 A AC-15
Marking	CE
Surge withstand	1 KV differential mode IEC 61000-4-5 level 3 2 kV common mode IEC 61000-4-5 level 3
Mounting Support	Base mounted: socket Panel mounted: system supplied with the product
Local signalling	For output relay state 1 LED (yellow) For flashing: relay energised timing in progress LED indicator (green) For on steady: relay energised, no timing in progress LED indicator (green)
Net Weight	0.31 lb(US) (0.14 kg)

Environment

Humidity drift	+/- 0.05 %/%RH of the maximum setting value IEC 61812-1
Immunity to microbreaks	10 ms
Dielectric strength	1 kV 1 mA/1 minute IEC 61812-1
Protection against electric shocks	4 KV class III IEC 60664-1 4 kV class III IEC 61812-1
Standards	IEC 61812-1 EN 50081-1/2 93/68/EEC 89/336/EEC EN 50082-1/2 IEC 60669-2-3 73/23/EEC
Product Certifications	UL[RETURN]cULus[RETURN]CSA[RETURN]C-tick
Ambient Air Temperature for Storage	-40158 °F (-4070 °C)
Ambient Air Temperature for Operation	-4122 °F (-2050 °C)
IP degree of protection	IP40 IEC 60529 housing) IP50 IEC 60529 front face)
Vibration resistance	0.35 mm 1055 Hz)IEC 60068-2-6
Relative Humidity	93 % without condensation IEC 60068-2-3
Resistance to electrostatic discharge	6 KV in contact IEC 61000-4-2 level 3 8 kV in air IEC 61000-4-2 level 3
Resistance to electromagnetic fields	9.14 V/m (10 V/m) 26 MHz to 1 GHz IEC 61000-4-3 level 3
Resistance to fast transients	2 KV IEC 61000-4-4 level 4 capacitive connecting clip) 4 kV IEC 61000-4-4 level 4 direct)
Immunity to radioelectric fields	10 V 0.1580 MHz)IEC 61000-4-6 level 3
Immunity to voltage dips	30 % / 10 ms IEC 61000-4-11 60 % / 100 ms IEC 61000-4-11 95 % / 5 s IEC 61000-4-11
Disturbance radiated/conducted	Class B 0.1530 MHz EN 55022 (EN 55011 group 1)

Ordering and shipping details

Category	22370-RE, RM MISC TIMERS & COUNTERS
Discount Schedule	CP2
GTIN	3389110649598
Returnability	Yes
Country of origin	ID

Packing Units

Unit Type of Package 1	PCE	
Number of Units in Package 1	1	
Package 1 Height	2.24 in (5.7 cm)	
Package 1 Width	2.44 in (6.2 cm)	
Package 1 Length	4.13 in (10.5 cm)	

Package 1 Weight	4.59 oz (130 g)
Unit Type of Package 2	S02
Number of Units in Package 2	30
Package 2 Height	5.91 in (15 cm)
Package 2 Width	11.81 in (30 cm)
Package 2 Length	15.75 in (40 cm)
Package 2 Weight	9.59 lb(US) (4.35 kg)

Offer Sustainability

Sustainable offer status	Green Premium product
California proposition 65	WARNING: This product can expose you to chemicals including: Nickel compounds, which is known to the State of California to cause cancer, and Di-isodecyl phthalate (DIDP), which is known to the State of California to cause 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
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.

Contractual warranty

Warranty

18 months

Product data sheet Dimensions Drawings

RE48AML12MW

Width 48 mm



RE48AML12MW

Panel Cut-Out and Mounting

Panel Cut-Out



n Number of devices mounted side-by-side

Mounting

Cover positioning and mounting



- e Panel thickness
- 1 Protective cover
- 2 Panel mounting frame
- 3 Locating screw

Product data sheet Connections and Schema

RE48AML12MW

Wiring Diagram



RE48AML12MW

Function A : Power on Delay Relay

Description

The timing period T begins on energisation. After timing, the output R closes.



T = t1 + t2 + t3

Function B : Interval Relay with Control Signal

Description

After power-up, pulsing or maintaining control contact C starts the timing T. The output R closes for the duration of the timing period T then reverts to its initial state.



Function C : Off-Delay Relay with Control Signal

Description

After power-up and closing of the control contact, the output closes. When control contact re-opens, timing T starts. At the end of the timing period, the output reverts to their initial state.



T = t1 + t2 + t3

Function Di : Symmetrical Flasher Relay (Starting Pulse On)

Description

Repetitive cycle with two timing periods T of equal duration, with output changing state at the end of each timing period T.



Legend

Relay de-energised

Relay energised

Output open

Output closed

Control contact
Gate
Relay or solid state output
2 timed outputs
The second output is instantaneous if the right position is selected
Timing period
Adjustable On-delay
Adjustable Off-delay
Supply