

# RE48ACV12MW

dual function relay, Harmony Timer Relays,  
5A, 2CO, 0.02s...300h, asymmetrical flashing,  
24...240V AC DC



## Main

Range of Product	Harmony Timer Relays
Product or Component Type	Dual function 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	Asymmetrical flashing
Time delay range	0.2...12 min 5...300 s 0.02...1.2 s 0.5...30 min 5...300 h 0.2...12 h 0.2...12 s 0.5...30 s 2...120 s 0.05...3 s 2...120 min 5...300 min 0.5...30 h 2...120 h
[Us] rated supply voltage	24...240 V AC/DC 50/60 Hz
Voltage range	0.85...1.1 Us AC 0.9...1.1 Us DC
Line Rated Current	5 A

## 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 48...240 V +/- 1 %/V of the maximum setting value 24...48 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	EN 50081-1/2 EN 50082-1/2 IEC 61812-1 93/68/EEC 89/336/EEC IEC 60669-2-3 73/23/EEC
Product Certifications	UL[RETURN]C-tick[RETURN]cULus[RETURN]CSA
Ambient Air Temperature for Storage	-40...158 °F (-40...70 °C)
Ambient Air Temperature for Operation	-4...122 °F (-20...50 °C)
IP degree of protection	IP40 IEC 60529 housing) IP50 IEC 60529 front face)
Vibration resistance	0.35 mm 10...55 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 0.15...80 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 0.15...30 MHz EN 55022 (EN 55011 group 1)

## Ordering and shipping details

Category	22370-RE, RM MISC TIMERS & COUNTERS
Discount Schedule	CP2
GTIN	3389110649741
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 (5.700 cm)
Package 1 Width	4.06 in (10.300 cm)
Package 1 Length	2.44 in (6.200 cm)
Package 1 Weight	4.62 oz (131.000 g)
Unit Type of Package 2	S02

Number of Units in Package 2	30
Package 2 Height	5.91 in (15.000 cm)
Package 2 Width	11.81 in (30.000 cm)
Package 2 Length	15.75 in (40.000 cm)
Package 2 Weight	9.74 lb(US) (4.417 kg)

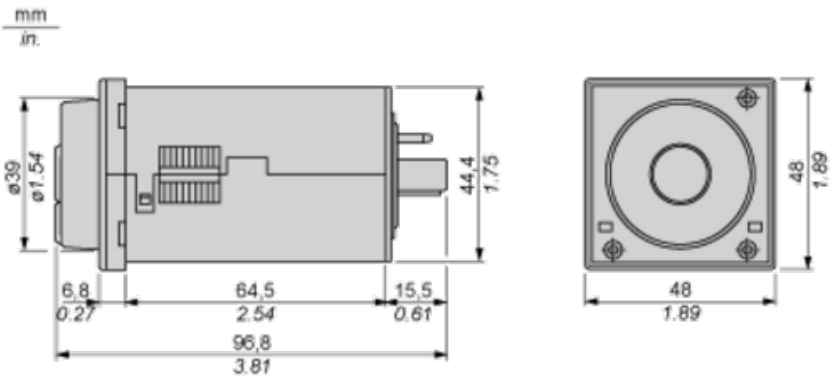
## Offer Sustainability

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 <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>
REACH Regulation	<a href="#">REACH Declaration</a>
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
Mercury free	Yes
China RoHS Regulation	<a href="#">China RoHS Declaration</a>
RoHS exemption information	<a href="#">Yes</a>
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Circularity Profile	<a href="#">End Of Life Information</a>
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.

## Contractual warranty

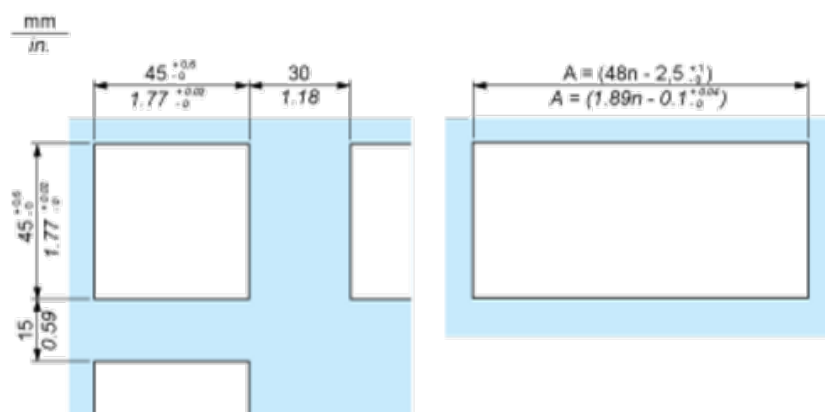
Warranty	18 months
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Width 48 mm



## Panel Cut-Out and Mounting

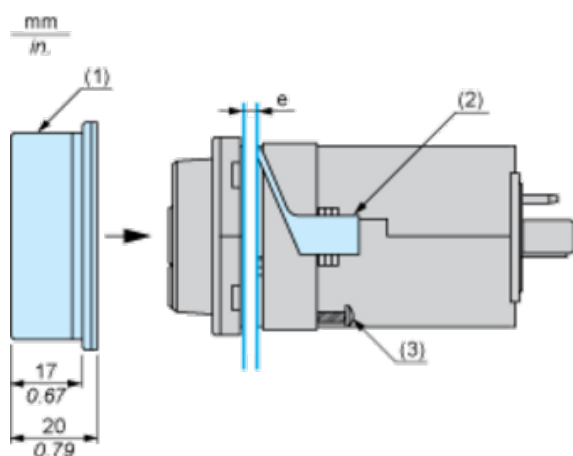
### Panel Cut-Out



n Number of devices mounted side-by-side

### Mounting

Cover positioning and mounting



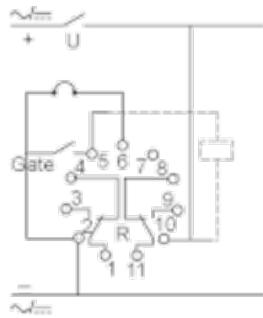
e Panel thickness

1 Protective cover

2 Panel mounting frame

3 Locating screw

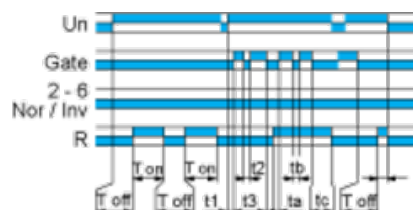
## Wiring Diagram



## Function L : Asymmetrical Flasher Relay (Starting Pulse Off)

### Description

Repetitive cycle comprises of two, independently adjustable timing periods  $T_a$  and  $T_r$ . Each timing period corresponds to a different state of the output R.



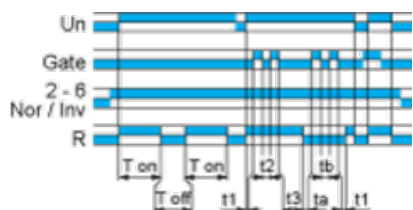
$$T_{off} = t1 + t2 + t3$$

$$T_{on} = ta + tb + tc$$

## Function Li : Asymmetrical Flasher Relay (Starting Pulse On)

### Description

Repetitive cycle comprises of two, independently adjustable timing periods  $T_a$  and  $T_r$ . Each timing period corresponds to a different state of the output R.



$$T_{on} = t1 + t2 + t3$$

$$T_{off} = ta + tb + tc$$

### Legend

Relay de-energised

Relay energised

Output open

Output closed

C	Control contact
G	Gate
R	Relay or solid state output
R1/R2	2 timed outputs
R2 inst.	The second output is instantaneous if the right position is selected
T	Timing period
$T_a$ -	Adjustable On-delay
$T_r$ -	Adjustable Off-delay
U	Supply