

# Product data sheet

Specifications



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

RE48AML12MW

## Main

Range of product	Harmony Timer Relays
Electrical connection	Plug-in sub-base 11 pin(s)
Width	48 mm
Product or component type	Panel-mounted/plug-in timer relay
Discrete output type	Relay
Contacts type and composition	2 C/O timed contacts, AgNi (cadmium free)
Component name	RE48A
Time delay range	0.5...30 s 5...300 s 0.2...12 min 0.5...30 h 2...120 s 0.05...3 s 0.2...12 s 0.02...1.2 s 2...120 min 5...300 min 0.5...30 min 5...300 h 2...120 h 0.2...12 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
[In] 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 conforming to IEC 61812-1
Temperature drift	+/- 0.02 %/°C of the maximum setting value conforming to IEC 61812-1
Voltage drift	+/- 0.2 %/V of the maximum setting value at 48...240 V +/- 1 %/V of the maximum setting value at 24...48 V
Setting accuracy of time delay	+/- 5 % of full scale at 25 °C conforming to IEC 61812-1 +/- 10 % of full scale at 25 °C conforming to IEC 61812-1
Time delay type	Power on-delay - A- Power on-delay relay Interval - B- Single interval relay w/ control signal Off-delay - C- Off-delay relay w/ control signal Symmetrical flashing - Di- Symmetrical flashing relay (starting pulse-on)
Minimum pulse duration	20 ms

<b>Reset time</b>	25 ms on de-energisation
<b>Pick up duration</b>	55 ms
<b>On-load factor</b>	100 %
<b>Power consumption in VA</b>	6 VA at 240 V
<b>Power consumption in W</b>	2 W at 240 V
<b>Breaking capacity</b>	1250 VA
<b>minimum switching current</b>	100 mA
<b>Maximum switching current</b>	5 A
<b>Maximum switching voltage</b>	250 V AC/DC
<b>Electrical durability</b>	100000 cycles
<b>Mechanical durability</b>	30000000 cycles
<b>Output voltage</b>	240 V at 5 A AC-12 30 V at 2 A DC-13 240 V at 1.5 A AC-15
<b>Marking</b>	CE
<b>Surge withstand</b>	1 kV differential mode conforming to IEC 61000-4-5 level 3 2 kV common mode conforming to IEC 61000-4-5 level 3
<b>Mounting support</b>	Base mounted: socket Panel mounted: system supplied with the product
<b>Local signalling</b>	1 LED (yellow) for output relay state LED indicator (green) for flashing: relay energised timing in progress LED indicator (green) for on steady: relay energised, no timing in progress
<b>Function available</b>	A- Power on-delay relay-2 C/O B- Single interval relay w/ control signal-2 C/O C- Off-delay relay w/ control signal-2 C/O Di- Symmetrical flashing relay (starting pulse-on)-2 C/O
<b>Control type</b>	Without test button
<b>Net weight</b>	0.14 kg
<b>Shape of pin</b>	Cylindrical
<b>Number of functions</b>	4

## Environment

<b>Humidity drift</b>	+/- 0.05 %/RH of the maximum setting value conforming to IEC 61812-1
<b>Immunity to microbreaks</b>	5 ms
<b>Dielectric strength</b>	2 kV 1 mA/1 minute conforming to IEC 61812-1
<b>Protection against electric shocks</b>	4 kV class III conforming to IEC 60664-1 4 kV class III conforming to IEC 61812-1
<b>Standards</b>	IEC 61812-1 EN 50081-1/2 93/68/EEC 89/336/EEC EN 50082-1/2 IEC 60669-2-3 73/23/EEC
<b>Product certifications</b>	UL cULus CSA C-Tick
<b>Ambient air temperature for storage</b>	-40...70 °C
<b>Ambient air temperature for operation</b>	-20...50 °C

<b>IP degree of protection</b>	IP40 (housing) conforming to IEC 60529 IP50 (front face) conforming to IEC 60529
<b>Vibration resistance</b>	0.35 mm (f= 10...55 Hz) conforming to IEC 60068-2-6
<b>Relative humidity</b>	93 % without condensation conforming to IEC 60068-2-3
<b>Resistance to electrostatic discharge</b>	6 kV in contact conforming to IEC 61000-4-2 level 3 8 kV in air conforming to IEC 61000-4-2 level 3
<b>Resistance to electromagnetic fields</b>	10 V/m 26 MHz to 1 GHz conforming to IEC 61000-4-3 level 3
<b>Resistance to fast transients</b>	2 kV (direct) conforming to IEC 61000-4-4 level 3
<b>Immunity to radioelectric fields</b>	10 V (0.15...80 MHz) conforming to IEC 61000-4-6 level 3
<b>Immunity to voltage dips</b>	30 % / 10 ms conforming to IEC 61000-4-11
<b>Disturbance radiated/conducted</b>	Class B 0.15...30 MHz conforming to EN 55022 (EN 55011 group 1)

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Number of Units in Package 1</b>	1
<b>Package 1 Height</b>	5.700 cm
<b>Package 1 Width</b>	6.200 cm
<b>Package 1 Length</b>	10.500 cm
<b>Package 1 Weight</b>	130.000 g
<b>Unit Type of Package 2</b>	S02
<b>Number of Units in Package 2</b>	30
<b>Package 2 Height</b>	15.000 cm
<b>Package 2 Width</b>	30.000 cm
<b>Package 2 Length</b>	40.000 cm
<b>Package 2 Weight</b>	4.350 kg

## Contractual warranty

<b>Warranty</b>	18 months
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Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

[Environmental Data explained >](#)

[How we assess product sustainability >](#)

## Environmental footprint

Total lifecycle Carbon footprint **37**

Environmental Disclosure [Product Environmental Profile](#)

## Use Better

### Materials and Substances

Packaging made with recycled cardboard **Yes**

Packaging without single use plastic **Yes**

[EU RoHS Directive](#) **Pro-active compliance (Product out of EU RoHS legal scope)**

SCIP Number **Eacae435-a913-4cb7-91f9-1611e08cac07**

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](#)**

## Use Again

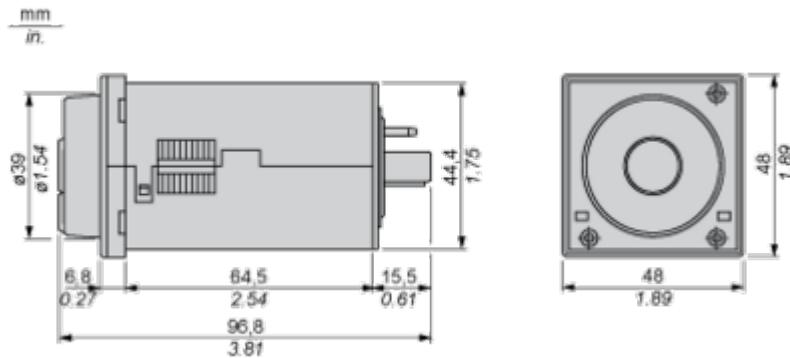
### Repack and remanufacture

End of life manual availability [End of Life Information](#)

Take-back **No**

## Dimensions Drawings

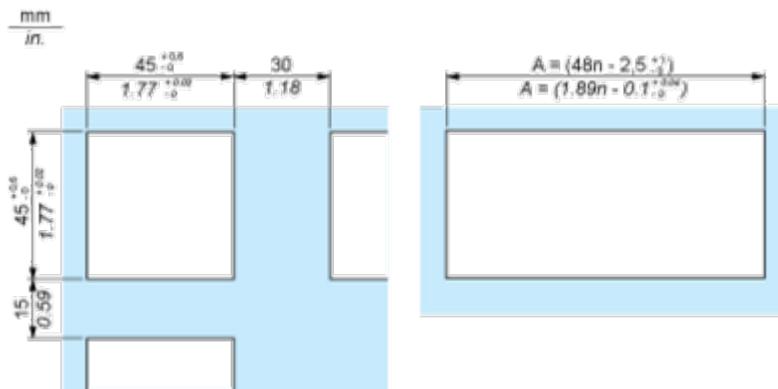
Width 48 mm



## Mounting and Clearance

Panel Cut-Out and Mounting

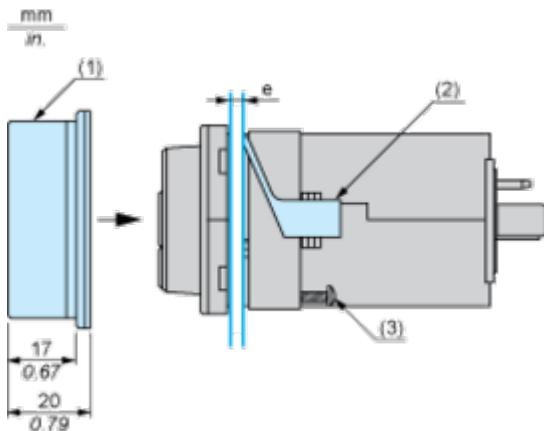
## Panel Cut-Out



n Number of devices mounted side-by-side

## Mounting

Cover positioning and mounting



e Panel thickness

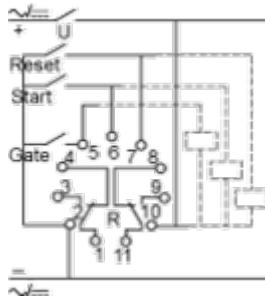
1 Protective cover

2 Panel mounting frame

3 Locating screw

Connections and Schema

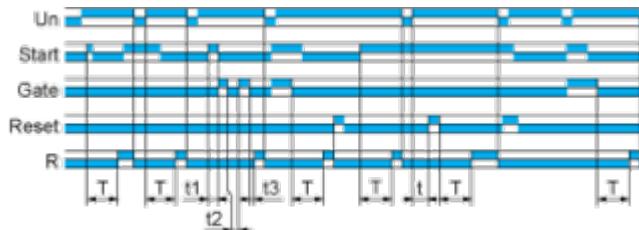
Wiring Diagram



## Technical Description

Function A : Power on Delay Relay**Description**

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



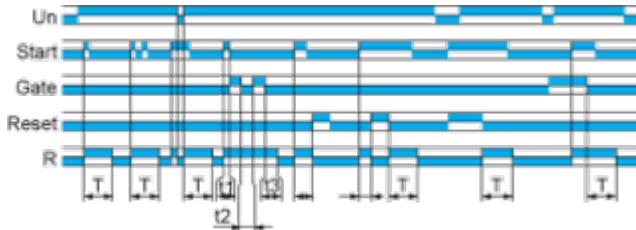
$$T = t_1 + t_2 + t_3$$

**Function B : Interval Relay with Control Signal**

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**Description**

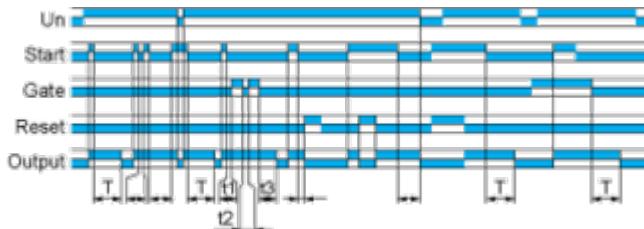
After power-up, pulsing or maintaining control contact C starts the timing T. The output R closes for the duration of the timing period T then reverts to its initial state.



$$T = t_1 + t_2 + t_3$$

Function C : Off-Delay Relay with Control Signal**Description**

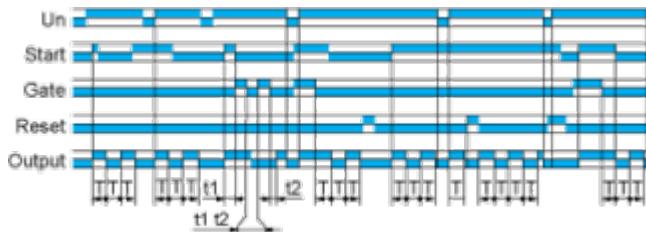
After power-up and closing of the control contact, the output closes. When control contact re-opens, timing T starts. At the end of the timing period, the output reverts to their initial state.



$$T = t_1 + t_2 + t_3$$

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**

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	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 <sub>a</sub> -	Adjustable On-delay
T <sub>r</sub> -	Adjustable Off-delay
U	Supply

## Technical Illustration

## Dimensions

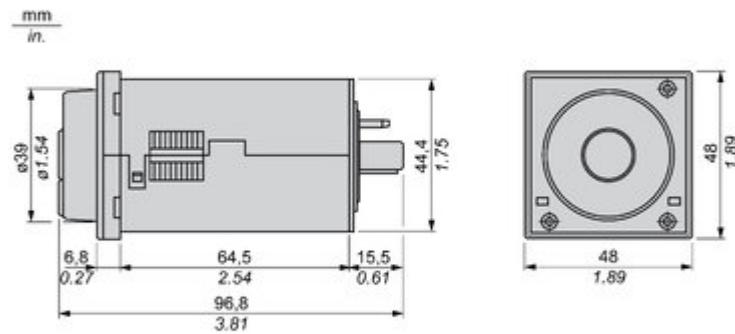


Image of product in real life situation

