

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
Width	1.9 in (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 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 +/- 10 % of full scale 25 °C 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

Reset time	25 ms on de-energisation
Pick up duration	55 ms
On-load factor	100 %
Power consumption in VA	6 VA 240 V
Power consumption in W	2 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	Output relay state 1 LED yellow) Flashing: relay energised timing in progress LED indicator green) On steady: relay energised, no timing in progress LED indicator green)
Function available	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
Control type	Without test button
Net weight	0.31 lb(US) (0.14 kg)
Shape of pin	Cylindrical
Number of functions	4

Environment

Humidity drift	+/- 0.05 %/%RH of the maximum setting value IEC 61812-1
Immunity to microbreaks	5 ms
Dielectric strength	2 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 cULus CSA C-Tick
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	9.1 V/yd (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 3 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
Disturbance radiated/conducted	Class B 0.15...30 MHz EN 55022 (EN 55011 group 1)

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	2.2 in (5.7 cm)
Package 1 Width	2.4 in (6.2 cm)
Package 1 Length	4.1 in (10.5 cm)
Package 1 Weight	4.6 oz (130 g)
Unit Type of Package 2	S02
Number of Units in Package 2	30
Package 2 Height	5.9 in (15 cm)
Package 2 Width	11.8 in (30 cm)
Package 2 Length	15.7 in (40 cm)
Package 2 Weight	9.59 lb(US) (4.35 kg)

Contractual warranty

Warranty	18 months
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Sustainability

Green Premium™ label is Schneider Electric's commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO₂ products.

Guide to assessing product sustainability is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

[Learn more about Green Premium >](#)

[Guide to assess a product's sustainability >](#)



Transparency RoHS/REACH

Well-being performance

Mercury Free

Rohs Exemption Information Yes

Certifications & Standards

Reach Regulation [REACH Declaration](#)

Eu Rohs Directive Pro-active compliance (Product out of EU RoHS legal scope)

China Rohs Regulation [China RoHS declaration](#)

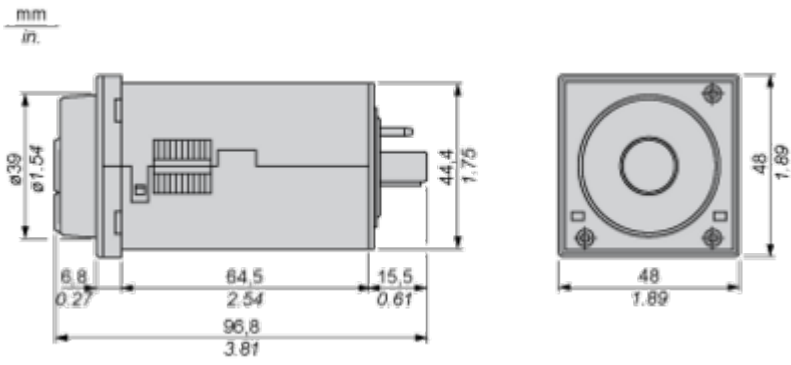
Environmental Disclosure [Product Environmental Profile](#)

Weee The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

Circularity Profile [End of Life Information](#)

Dimensions Drawings

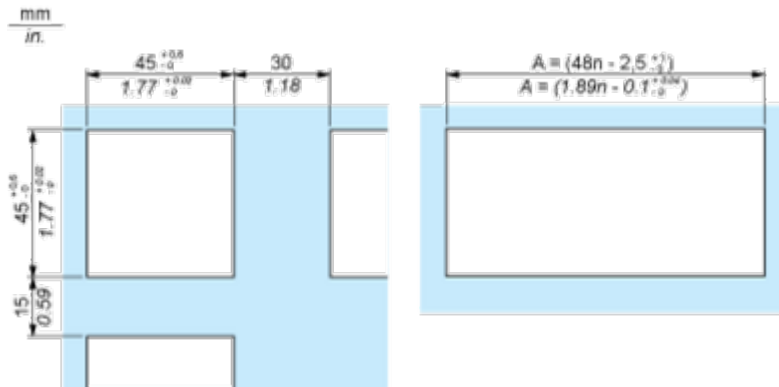
Width 48 mm



Mounting and Clearance

Panel Cut-Out and Mounting

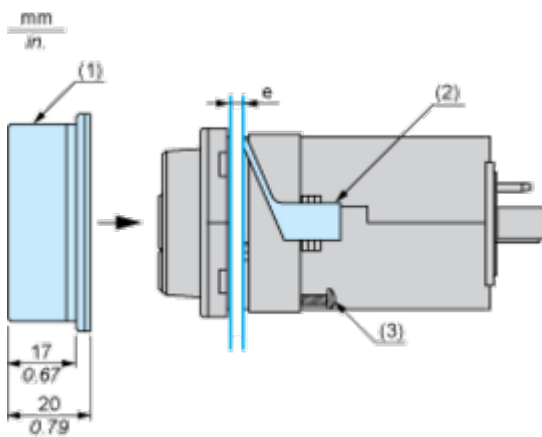
Panel Cut-Out



n Number of devices mounted side-by-side

Mounting

Cover positioning and mounting



e Panel thickness

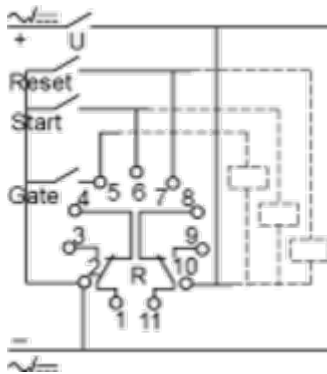
1 Protective cover

2 Panel mounting frame

3 Locating screw

Connections and Schema

Wiring Diagram

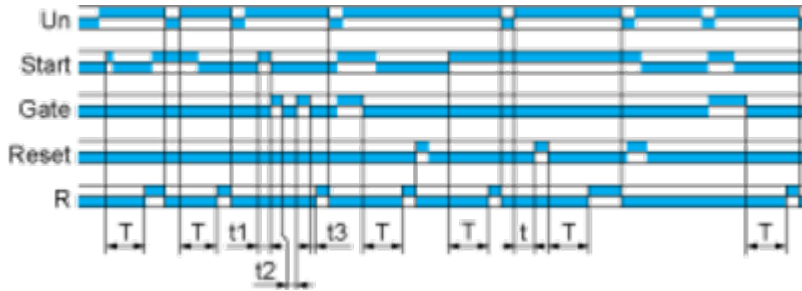


Technical Description

Function A : Power on Delay Relay

Description

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



$$T = t1 + t2 + t3$$

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.

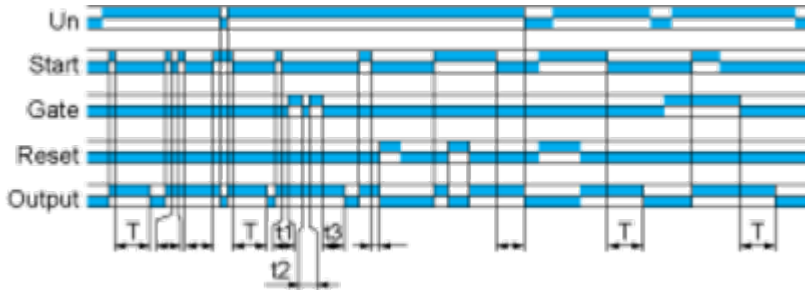


$$T = t1 + t2 + t3$$

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.

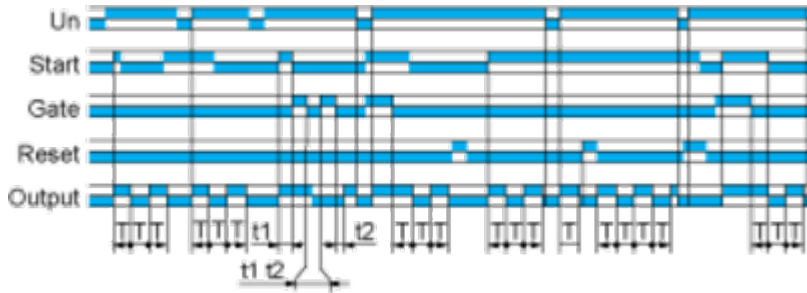


$$T = t1 + t2 + t3$$





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.



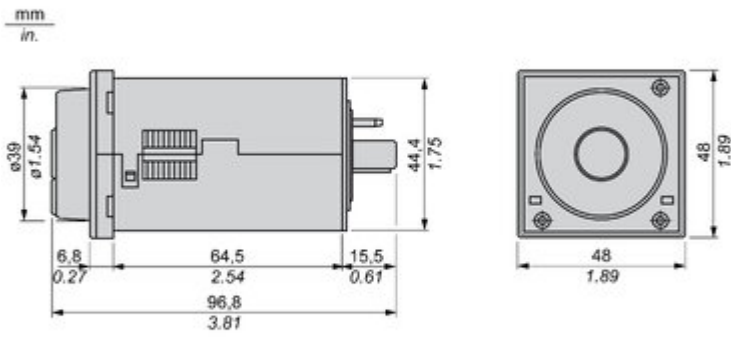
Legend

-  Relay de-energised
-  Relay energised
-  Output open
-  Output closed

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
Ta -	Adjustable On-delay
Tr -	Adjustable Off-delay
U	Supply

Technical Illustration

Dimensions



Offer Marketing Illustration

Product benefits / Features

Technical Benefits

Harmony Timer Relay

Flexible choice of screw or spring connection terminals for wiring.

One product reference covering 28 timing functions, 2 outputs, and a wide range of supply voltage 24...240 V AC/DC.

Dust and unintended human intervention avoided thanks to the IP50 lead-sealable settings protection cover.



A Dial-Pointer LED indicator that enhances ease of operation in difficult environments such as dusty or low-light conditions

Different mounting style to meet your preference:
DIN rail mount with product width; 17.5 mm/0.69 in. 22.5 mm/0.88 in.
Plug in mounting with socket

Offer Marketing Illustration

Product benefits / Features

Features

Harmony Timer Relay



The image shows a Schneider Harmony Timer Relay, model RE48AML12MW. It is a black, rectangular device with a central dial for time adjustment. The dial has markings for '1000h', '100h', '10h', '1h', '10min', '1min', and '10s'. There are also markings for 'TOn' and 'TOff'. The device has a 'DIAGNOSTIC' button on the top left and a 'TEST' button on the bottom left. The Schneider logo is visible at the bottom of the device.

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"Diagnostic button" to check downstream circuit immediately, shorten the commission and troubleshooting time
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Wide range of time delay for adjustment: from 0.01 s to 999 hrs.
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Compatible with a wide range of applications including machines, buildings, water segments, and HVAC.
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Compliant with IEC 60255-1 standard, and a wide array of product certifications such as UL, CE, CSA, EAC.
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Unprecedented accuracy, predictive maintenance, and superior security.