



## Main

Range of product	Harmony Timer Relays
Product or component type	Power on-delay relay Interval relay Off-delay relay Symmetrical flashing relay
Electrical connection	Plug-in sub-base 11 pin(s)
Discrete output type	Relay
Contacts type and composition	2 C/O timed contacts, AgNi (cadmium free)
Component name	RE48A
Time delay type	A B C Di
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
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 at 24 V 4.8 VA at 240 V
Power consumption in W	0.5 W at 24 V 1.7 W at 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 at 5 A AC-12 30 V at 2 A DC-13 240 V at 1.5 A AC-15
Marking	CE
Surge withstand	1 kV differential mode conforming to IEC 61000-4-5 level 3 2 kV common mode conforming to IEC 61000-4-5 level 3
Mounting support	Base mounted: socket Panel mounted: system supplied with the product
Local signalling	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
Net weight	0.14 kg

## Environment

Humidity drift	+/- 0.05 %/%RH of the maximum setting value conforming to IEC 61812-1
Immunity to microbreaks	10 ms
Dielectric strength	1 kV 1 mA/1 minute conforming to IEC 61812-1
Protection against electric shocks	4 kV class III conforming to IEC 60664-1 4 kV class III conforming to 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...70 °C
Ambient air temperature for operation	-20...50 °C
IP degree of protection	IP40 (housing) conforming to IEC 60529 IP50 (front face) conforming to IEC 60529
Vibration resistance	0.35 mm (f= 10...55 Hz) conforming to IEC 60068-2-6
Relative humidity	93 % without condensation conforming to IEC 60068-2-3
Resistance to electrostatic discharge	6 kV in contact conforming to EN/IEC 61000-4-2 level 3 8 kV in air conforming to EN/IEC 61000-4-2 level 3
Resistance to electromagnetic fields	10 V/m 26 MHz to 1 GHz conforming to IEC 61000-4-3 level 3
Resistance to fast transients	2 kV (capacitive connecting clip) conforming to EN/IEC 61000-4-4 level 4 4 kV (direct) conforming to EN/IEC 61000-4-4 level 4
Immunity to radioelectric fields	10 V (0.15...80 MHz) conforming to EN/IEC 61000-4-6 level 3
Immunity to voltage dips	30 % / 10 ms conforming to EN/IEC 61000-4-11 60 % / 100 ms conforming to EN/IEC 61000-4-11 95 % / 5 s conforming to EN/IEC 61000-4-11
Disturbance radiated/conducted	Class B 0.15...30 MHz conforming to EN 55022 (EN 55011 group 1)

## Packing Units

Package 1 Weight	0.130 kg
Package 1 Height	0.570 dm
Package 1 width	0.600 dm
Package 1 Length	1.050 dm

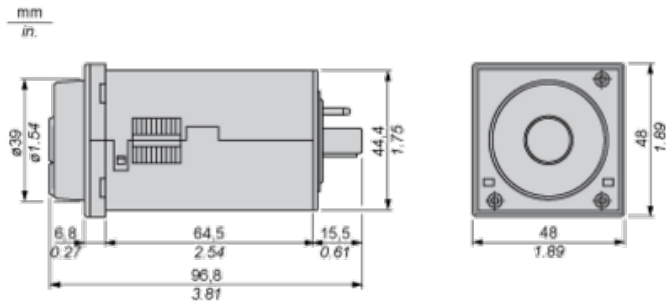
## Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	<a href="#">REACH Declaration</a>
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
Mercury free	Yes
RoHS exemption information	<a href="#">Yes</a>
China RoHS Regulation	<a href="#">China RoHS Declaration</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

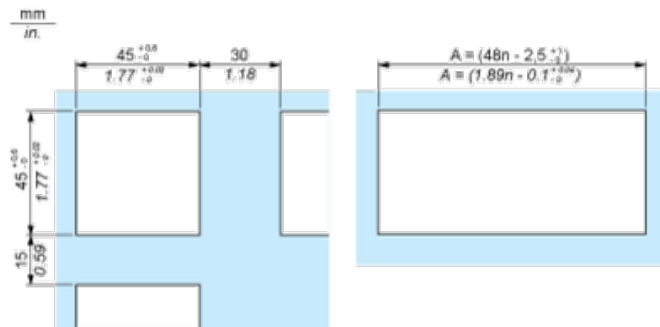
Warranty	18 months
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Width 48 mm



Panel Cut-Out and Mounting

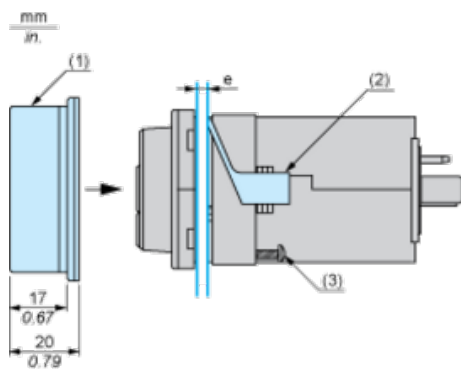
Panel Cut-Out



n Number of devices mounted side-by-side

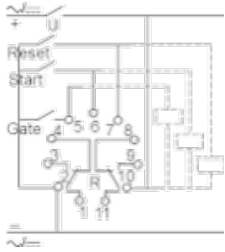
Mounting

Cover positioning and mounting



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

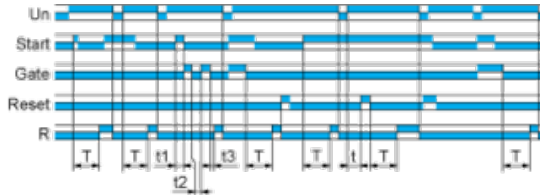
## Wiring Diagram



Function A : Power on Delay Relay

Description

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

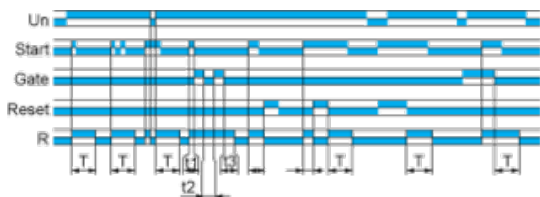


$$T = t1 + t2 + t3$$

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.

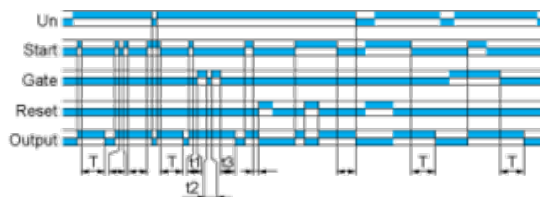


$$T = t1 + t2 + t3$$

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.

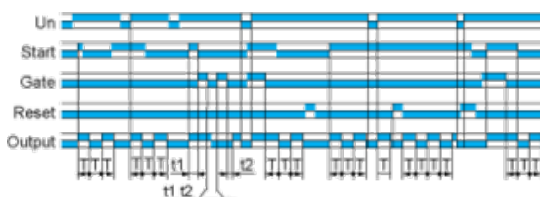


$$T = t1 + t2 + t3$$

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