



Main

Range of product	Harmony Timer Relays
Product or component type	Asymmetrical 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	L Li
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
[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	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 C-Tick CULus CSA
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 EN/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	0.550 dm
Package 1 width	0.610 dm
Package 1 Length	1.030 dm

Offer Sustainability

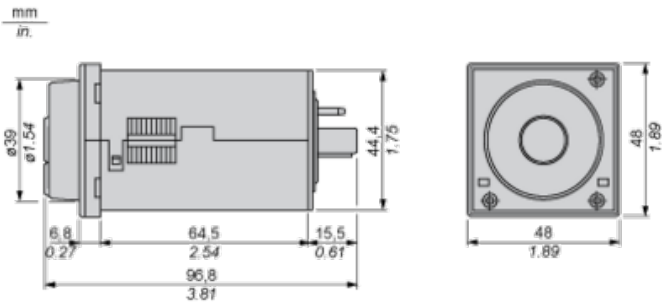
Sustainable offer status	Green Premium product
REACH Regulation	 REACH Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)  EU RoHS Declaration
Mercury free	Yes
RoHS exemption information	 Yes

China RoHS Regulation	 China RoHS Declaration
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

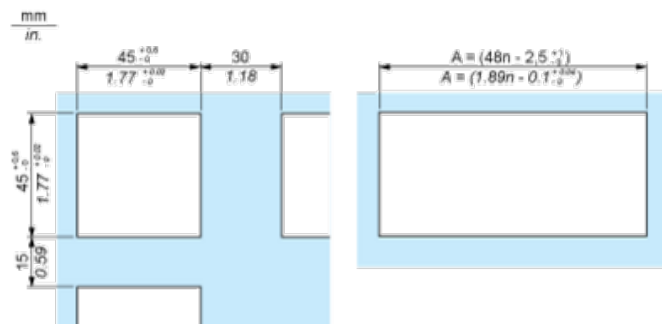
Warranty	18 months
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Width 48 mm



Panel Cut-Out and Mounting

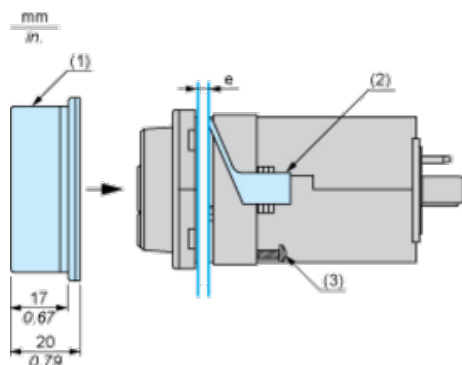
Panel Cut-Out



n Number of devices mounted side-by-side

Mounting

Cover positioning and mounting



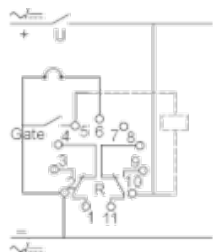
e Panel thickness

1 Protective cover

2 Panel mounting frame

3 Locating screw

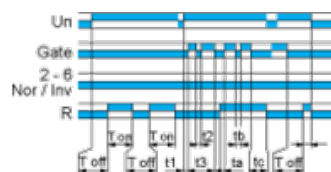
Wiring Diagram



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.



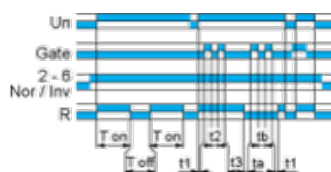
$$T_{off} = t_1 + t_2 + t_3$$

$$T_{on} = t_a + t_b + t_c$$

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.



$$T_{on} = t_1 + t_2 + t_3$$

$$T_{off} = t_a + t_b + t_c$$

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