SlimLine Programmable timing module

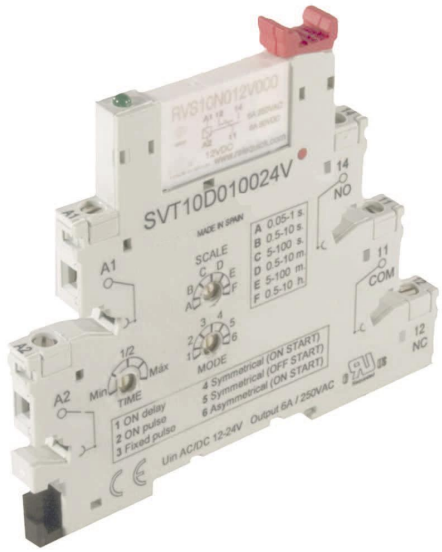
Overview

ICD's new electronic programmable module has been specifically designed for timing and controlling 5.08 mm PCB relays. The module can be mounted on a DIN-rail and thanks to its 6.22 mm width and compact design it will take up minimum space on any control panel.

With its 6 different functions and the wide timing range available (from 0.05 seconds to 10 hours) the module offers great control versatility within a reduced space.

Nominal values

Supply voltage	12 - 24 VAC / VDC	
Programming timing range	0.05 seconds to 10 hours	
Operation time	0.01 seconds	
Timing precision	± 1% of set time	
Indicators	Relay excited	Green LED
Output relay	1 SPDT relay with 6A switching capacity (AC1 / 250 V - DC1 / 30V)	



Features

Programmable multifunction electronic device. Up to 6 functions can be configured with 3 trimmers and using 6 different time scales:

[0.05 - 1] [0.5 - 10] [5 - 100] seconds
[0.5 - 10] [5 - 100] minutes
[0.5 - 10] hours

Compact design (6.22 mm) and easy mounting and wiring. SPDT 1-relay output with switching capacity of 6A (AC1 / 250V, DC1 / 30V). Timing range: 0.05 seconds to 10 hours.

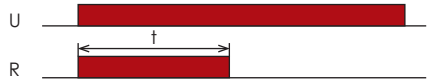
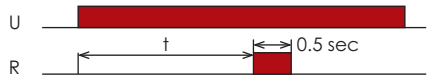
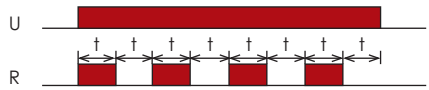
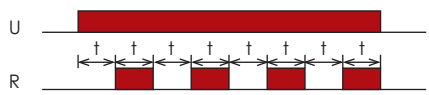
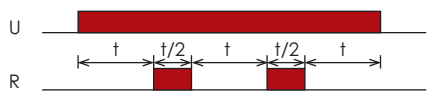
LED indication of relay excitation.

One model covers the whole tension range 12 - 24 VAC/DC. Easy programming: timers can be configured using a more precise scale to adjust their value best. Once the value is considered correct, the scale can be changed to the actual one to be used in operating mode.

Uses and applications

Being able to add timing behavior is often useful in all kind of systems, from industrial applications to buildings. With our programmable timed module it is possible to adjust how the whole system works, and its different customizable functions make it useful in a wide range of possible environments.

Available functions

	Short description	Diagram	Description
Function 1	On delay (switch-on delay)		The relay is activated after a timed delay t
Function 2	On pulse (switch-off delay)		The relay starts activated and is switched off after a timed delay t
Function 3	Fixed pulse		The relay is activated after a timed delay t and keeps switched on for 0.5 seconds. It is then switched off again
Function 4	Symmetrical cycle (starts activated)		The relay is first switched off after a timed delay t and then in turn switched on again after a new t delay. The process repeats in a cyclical manner, starting off with a switched on relay
Function 5	Symmetrical cycle (starts disconnected)		The relay is first switched on after a timed delay t and then in turn switched off again after a new t delay. The process repeats in a cyclical manner, starting off with a disconnected relay
Function 6	Asymmetrical cycle (starts disconnected)		The relay is first switched on after a timed delay t and then in turn switched off again after a second t/2 delay. The process repeats cyclically manner, starting off with a disconnected relay

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Specifications

Working temperature		-10 to 60 °C
Storage temperature		-20 to 70 °C
Supply frequency (AC)		50 / 60 Hz ± 3 Hz
Output relay	Resistive load	6 A at 250 VAC ($\cos\Phi = 1$) 6 A at 30 VDC (L / R = 0 ms)
	Inductive load	1 A at 250 VAC ($\cos\Phi = 0.4$) 1 A at 30 VDC (L / R = 7 ms)
	Mechanical life Electrical life	10^7 cycles 3×10^4 cycles
Max. screw torque		0.6 Nm
Mounting		DIN-rail
Dimensions		6.22 (width) x 90 (height) x 76 (depth) mm

Precautions for a correct use

GENERAL PRECAUTIONS

Do not use the product in places exposed to radiant heat, vibrations or shocks.
Make sure the module has been configured properly with regard to the controlled object. Otherwise unwanted or false outputs could be activated.
When the product has reached the end of its mechanical or electrical lifetime take into account the applicable laws and policies regarding industrial waste when throwing it out.

INSTALLATION PRECAUTIONS

Tighten the terminal screws firmly without exceeding the maximum screw torque. Recommended torque: 0.6 Nm.
The working room temperature must be within the specified allowed range.
Double-check the polarity of the module connections for a correct installation.
Allow for the necessary heat dissipation. Do not block the built-in ventilation openings.
Do not apply any supply to the module during the wiring and installation process.
Do not install the module anywhere near sources of electromagnetic interference.

CORRECT USE

Do not supply the module outside the specified allowed supply range. If the socket's supplied within the range 12 - 18 V the 12 V relay must be used; if it supplied with 18 to 24 V though, the 24 V version is to be used.
Do not modify or manipulate the product without the supervision of a qualified person.
The use of this module on circuits with a high level of harmonics might result in unwanted operations.