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TIMING RELAYS
10-function

PCS-516
UNI

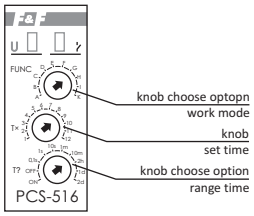
5 9 0 8 3 1 2 5 9 1 4 2 9

PURPOSE

Lagged-pulse time relay PCS-516 is devised to support the power supply of the controlled receiver for a specified period of time after decay of the control voltage, e.g. in bathroom ventilation systems in which the upkeep of the fan operation (activated along with the lighting) is required for a specified period of time after turning off the accompanying lighting.

ATTENTION!

- With the power supply ON, the system does not respond to time range setting modifications.
- The newly set time range is active after the power supply has been turned OFF an ON.
- With the power supply on, it is possible to regulate the preset time freely within the selected time range.



WORK TIME SETTINGS

By time range switch T- set one of choosen range and by time knob T× set value on the scale from 1 to 12. Product of this values egual work time „t" (e.g. t= 1m×7= 7 min).

SETTINGS OF WORK MODE

By choose option knob FUNC set one of functions (e.g. function A- delay activation).

WORK FUNCTIONS

A

DELAY ACTIVATION

After the power voltage is supplied (green LED is shining), the contact remains in position 11-10 and the timing of the preset value „t" is commenced. After the preset time „t" has been counted down, the contact is shifted to position 11-12 (red LED is shining). The working sequence of the relay may be repeated after turning the power supply OFF and ON.

B

DELAY DEACTIVATION

Until the relay is activated, the contact remains in the 11-10 position. After the power voltage is supplied (green LED is shining), the contact is shifted to position 11-12 and the count-down of the preset value „t" is commenced (red LED is shining). The working sequence of the relay may be repeated after turning the power voltage off and on.

C

DELAY ACTIVATION - CYCLIC

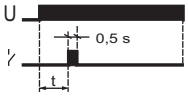
The DA operational mode is triggered in equal interruption/work cycles according to preset time values.

D

DELAY DEACTIVATION - CYCLIC

The DD operational mode is triggered in equal interruption/work cycles according to preset time values.

E

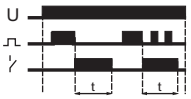


Generate impulse 0,5 s after set time „t".

F

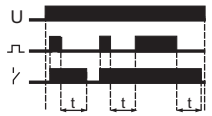
Generation of a single impulse of „t" time by the START signal eading edge. During preset time countdown, the system does not respond to START impulses.

G



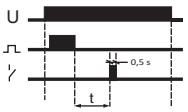
Generation of a single impulse of „t" time by the START signal trailing edge. During preset time countdown, the system does not respond to START impulses.

H



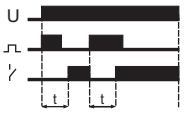
Delay in deactivation with support function enabled. The leading edge of the START signal results in relay activation, where as the trailing edge of the same signal triggers the time countdown. The supply of the START signal during countdown results in an extension of the cycle by another „t" time value along the trailing edge.

I



Deactivation and activation lags with support function enabled. If the START voltage is supplied for less than 45 s, it is ignored by the system, however if it is longer, the relay is activated after the 45s and the preset time value is counted down with the trailing edge of the START signal. If another START impulse is applied during the countdown, then the trailing edge of this signal will result in the repeated countdown sequence (e.g. for ventilation purposes: short activation of the lighting does not turn the fan on, but if the lilting lighting is activated for longer than the 45 s, the fan will start).

K



Turning off the relay for a specified period of time along the leading edge of the START signal. During the preset time countdown the system does not respond to START signals.

If the RESET voltage is applied during the execution of:
* A, B, C, D, F functions the selected work mode is restarted
* F, G, H, I functions the relay returns to the initial condition and awaits the START signal;
* K function the relay's contact is closed permanently in the 11-12 position.

Setting the time range knob regulator in the:
- **ON** - position with power supply activated results in the permanent closure of the contact in position 11-12..
- **OFF** - position (power supply activated) causes the contact to be permanently closed in the position 11-10.

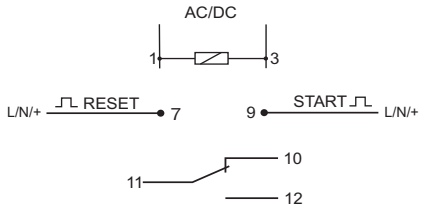
ASSEMBLY

1. Take OFF the power.
2. Put on the relay in the switchgearbox.
3. Cables of power connect with diagram to contacts 1-3.
4. System of connected receiver connect in line to contacts 11-12.

TECHNICAL DATA

supply	12÷264V AC/DC
current load	<8A
contact	1×NO/NC
work time	0.1÷576h
activation lag delay function	<50 ms
power supply indicator	green LED
work mode indicator	red LED
power consumption	0.8W
working temperature	-25÷50°C
connection	2.5mm² screw terminals
dimensions	1 module (18 mm)
mounting	on TH-35 rail
protection level	IP20

WIRING DIAGRAM



Example of connection with N control signals