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## PCU-518 DUO TIMING RELAYS

multi purpose  
with external time setting knob



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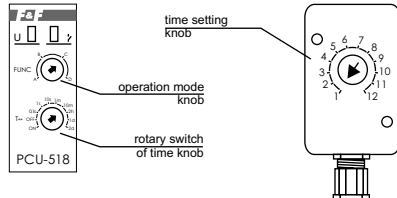
### PURPOSE

Timing relays are devised to time the control of industrial and domestic automatic control engineering systems (e.g. entilation, heating, lighting, signalling, etc.).

### FUNCTIONING

Working mode: **LAGGED DEACTIVATION(A)**

Until the relay is activated, the contact remains in the 11-10 position. After the power voltage is supplied (green LED U is shining), contact is shifted to position 11-12 and the countdown of the preset value  $t$  is commenced (red LED is shining). After the preset time  $t$  has been counted down, contact returns to position 11-10. The working sequence of the relay may be repeated after turning the power supply off and on.



### WORK TIME SETTINGS

By time range switch  $T \rightarrow$  set to one of choosen range and by setting time knob  $T \times$  set value from 1 to 12. Product of this vaules is equal work time (e.g.  $1m \times 7 = 7 \text{ min}$ ).

### WORK MODE SETTINGS

By knob FUNC set one of functions (e.g. function A - Lagged Deactivation).

### 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 and on.
- With the power supply on, it is possible to regulate the preset time freely within the selected time range.

### ASSEMBLY

1. Take OFF the power.
2. Put on the relay on the rail in the switchgearbox.
3. Cables of power connect with wiring diagram with marks: voltage 230V to joints 1-3; voltage 24V to joints 4-3.
4. Cables of external potentiometer connect to relay with marks: **ATTENTION!** Connect only one of choosen voltages. WHITE cable to joint 7, GREEN to joint 8, BROWN to joint 9.

### LAGGED ACTIVATION (B)

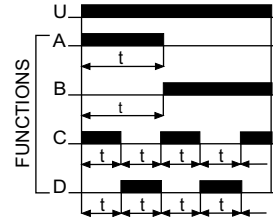
After the power voltage is supplied (green LED U is shining), the contact remains in position 11-10 and the timing of the preset value  $t$  is commenced. After the preset time  $t$  has been counted down, the contact is shifted to position 11-12 (red LED is shining). The working sequence of the relay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

### LAGGED ACTIVATION - CYCLIC (D)

The Lagged Activation mode is triggered in equal work cycles according to the preset time values.

### LAGGED DEACTIVATION - CYCLIC (C)

The Lagged Deactivation mode is triggered in equal work cycles according to the preset time values.



Setting the time range knob regulator in the:

- **ON** - position with power supply activated connection of joint in position 11-12.
- **OFF** - position with power supply activated connection of joint in position 11-10.

5. Take OFF the cover of potentiometer box.
6. From potentiometer take OFF knob which is places on mandrel and unscrew a nut.
7. In general panel of switchgearbox bore to a hole  $\varnothing 10$ .
8. Stick a scale with prepared hole.
9. By through the prepared hole move out a mandrel of potentiometer and screw a nut.
10. Spool to left a mandrel and next put on a knob in position that a white sign on the knob set to of number 1.
11. Take ON the cover of potentiometer box.
12. System of switching ON a receiver connect in line to joints 11-12.

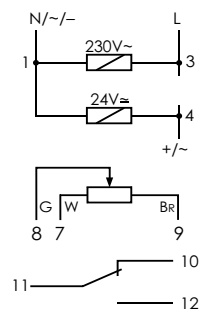
### TECHNICAL DATA

RELAY	
supply	230VAC / 24VAC/DC
current load	<8A
joint	1P
operation time	0,1sec+24h
switching ON delay	<50msec
power supply indicator	green LED
operation mode indicator	red LED
power consumption	0,8W
working temperature	-25+50°C
connection	screw terminals 2,5mm <sup>2</sup>
dimensions	1 module (18mm)
fixing	on rail TH-35

### EXTERNAL POTENTIOMETER

connection	cable 3x0,42mm <sup>2</sup> ; l=70cm
dimensions of knob	83x42x30mm
fixin hole	$\varnothing 10$

**WIRING DIAGRAM**



A090603