

# 10.

## TIME CONTROLLERS

### STP-541 PROGRAMMABLE CONTROLLER (LEFT/RIGHT activation mode)

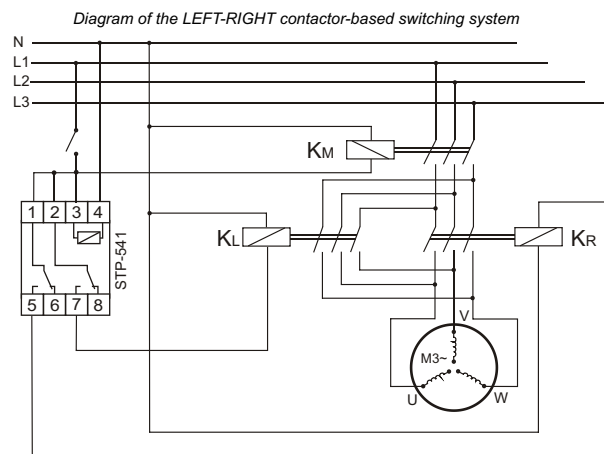
With four time settings available and a programmable number of repetitions or infinite work sequence in the "loop mode"

#### PURPOSE

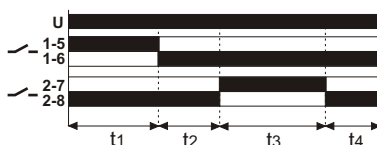
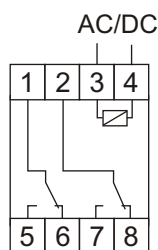
The controller is used for technological process control in industrial automatic-control device systems which require temporal, cyclic and alternate activation of receivers with appropriate intervals between successive switchings.

#### FUNCTIONING

The controller works in compliance with a four-time sequence program and a preset number of cycles. A cycle is a sequence of four successive contact states.



KM - main contactor  
KR - "RIGHT" contactor  
KL - "LEFT" contactor



supply	24+264V AC/DC
current load	2x(<16A)
contacts	2x1N/C
time settings t1, t2, t3, t4	1sec+ 99h 59min 59sec
time setting accuracy	1 sec
number of cycle repetitions	1 + 999999
	or infinite in the "loop mode"
power consumption	1.5W
working temperature	-20+50°C
connection	screw terminals 2.5mm <sup>2</sup>
dimensions	2 module (35mm)
fixing	on rail TH-35

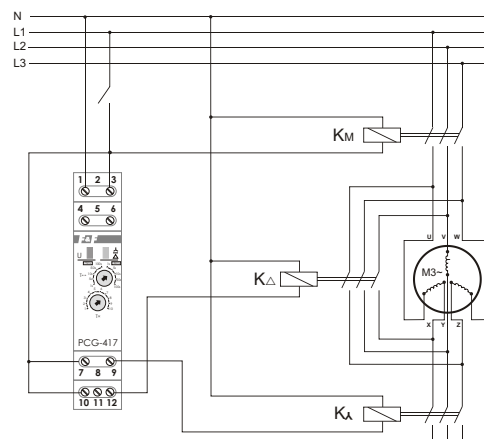
### PCG-417 STAR-DELTA SWITCH

To control the STAR-DELTA contactor connection system.

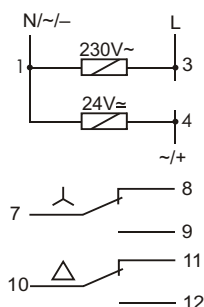
#### FUNCTIONING

The PCG-417 relay is equipped with a special system of two electromagnetic relays which removes the risk of activating two connectors simultaneously, with each relay controlling a given connector. Once the system is switched from STAR to DELTA, one relay disconnects the "star" connector (a forced interval takes place). The other then activates the "delta" connector.

After the power supply is turned on, the contact 7-9 is closed and remains in this position for the preset start-up time t1. After the lapse of t1, contact 7-9 opens and both contacts remain open for the time t2. After the lapse of t2, the contact 10-12 is closed and remains in this position until the power voltage is disconnected.



KM - main contactor  
KΔ - contactor "DELTA"  
KΔ - contactor "STAR"



supply	230V AC / 24V AC/DC
current load	2x(<8A)
contact	2x1C/O
start-up time t1	1+1000sec
switching time Δ	75msec / 150msec
power consumption	0.8W
power supply indicator	green LED
action indicator	red LED
working temperature	-25+50°C
connection	screw terminals 2.5mm <sup>2</sup>
dimensions	1 module (18mm)
fixing	on rail TH-35