

PCG-417 DUO

TIME CONTROLLERS

star-delta switch



www.fif.com.pl

F&F products are covered by an 24 months warranty from date of purchase

PURPOSE

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 (green LED is shining), the joint 7-9 is closed and remains in this position for the preset start-up time t_1 . After the lapse of t_1 , joint 7-9 opens and both joints remain open for the time t_2 . After the lapse of t_2 , the joint 10-12 is closed and remains in this position until the power voltage is disconnected.

ASSEMBLY

1. Take OFF the power.
2. Put on the relay on the rail in the switchgearbox.
3. Cable of power connect with wiring diagram with marks; voltage 230V to joints 1-3, voltage 24V to joints 1-4.

ATTENTION! :Connect only one of choosen voltages.

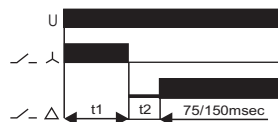
4. Power system of coil of connector which switching STAR system connect in line with joint 7-9.
5. Power system of coil of connector which switching DELTA system connect in line with joint 10-12.

TECHNICAL DATA

supply	230VAC/24VAC/DC
current load	2×(<8A)
joint	2×PZ
DELTA activation time	1+1000sec
switching time	green LED
action indicator	red LED
power consumption	0,8W
working temperature	-25+50°C
connection	screw terminals 2,5mm ²
dimensions	1 module (18mm)
fixing	on rail TH-35

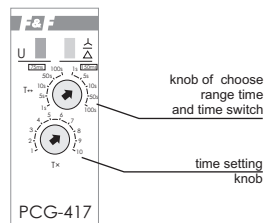
Realisation of time t_1 is signaling by pulse shining of red LED. Take ON a STAR system (after time t_2) is signalibly by shine of red LED.

DIAGRAM



SETTINGS OF ACTIVATION TIME AND DELAY OF SWITCHING TO

By setting range knob $T \leftrightarrow$ set choosen time range (for delay switch for $t_2=75msec$ on the left side of scale, but for delay switch for $t_2=100msec$ on the right side of scale). By knob $T \times$ set value on the scale from 1 to 10. Product of this values is equal activation time t_1 (e.g.. $t_1=1s \times 7=7sec$).



WIRING DIAGRAM

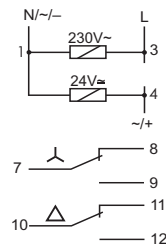
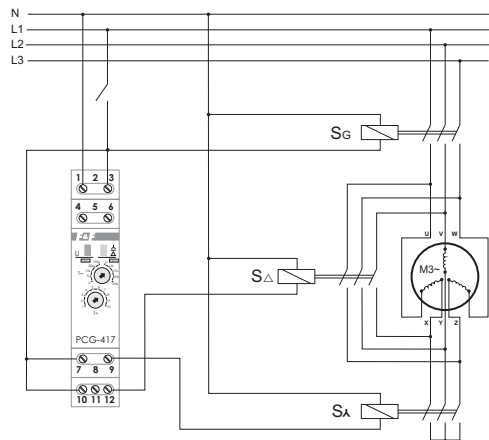


Diagram of switching connector system
STAR - DELTA



S_G - main connector
 S_{Δ} - connector of system "DELTA"
 S_{λ} - connector of system "STAR"