


F&F Filipowski sp. j.
 Konstancynowska 79/81 95-200 Pabianice
 tel/fax +48 42 2152383; 2270971 POLAND
 http://www.fif.com.pl e-mail: fif@fif.com.pl

TIMING RELAY
18 functions


PCS-517.2

WARRANTY. The F&F products are covered by the 24 months warranty from date of purchase. Effective only with proof of purchase. Contact your dealer or directly from us. For more information on the procedures for filing complaints on www.fif.com.pl/reklamacja



5 9 0 8 3 1 2 1 5 9 1 6 2 7

Do not dispose of this device in the trash along with other waste! According to the Law on Waste, electro coming from households free of charge and can give any amount to up to that end point of collection, as well as to store the occasion of the purchase of new equipment (in accordance with the principle of old-for-new, regardless of brand). Electro thrown in the trash or abandoned in nature, pose a threat to the environment and human health.



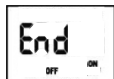
PURPOSE

The timing relay PCS-517 is used to temporarily control of systems in industrial and home automation. With the powerful features of work, one-and two-time contained in the memory of the processor, allows for the elimination of complex and costly control systems based on a compilation of many channels in normal time. Unlike potentiometers relays allow very precise setting time of enclose, for example, 3h - 47min - 19sec.

FUNCTIONING

The relay implement one of the set work functions accordance with to desired times. Positions of joint indicator shows joint status: ON - enclosed (position 1-5); OFF - disconnected (position 1-6). The display shows the currently measured time t1 (⌚1 indicator on the display) or the time t2 (⌚2 indicator on the display) from the upper to zero.

Functions 1÷5 are activated by power supply. After completion of the function, on the display appears inscription END (end).



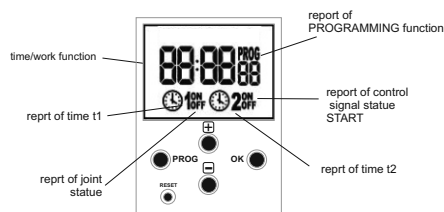
Next realization of function will start when you turn off and re-connecting voltage or "reboot" the CPU. For these functions indicator of status signal START display ON symbol.

Functions 6÷17 are activated by control signal START. After enclosed power supply, the relay is ready to implementation of work function. On the display appears inscription ON.



After giving of the START signal relay launching function. After the completion of returns to standby mode (waiting for another signal to START). For these functions giving of the START signal is indicated on rate by the symbol signal ON. No signal is indicated by the symbol OFF.

DESCRIPTION OF DISPLAY AND CONTROL PANEL



BUTTON FUNCTIONS

PROG:

- pass to **PROGRAMMING** mode (hold >3sec).
- out from **PROGRAMMING** mode

OK:

- entering of settings and pass to next position of settings
- preview of chosen function during of realization it

+:

- change statue of setting by +1 in chosen **PROGRAMMING** position (holding a button cause continuous change by +1 in loop)

-:

- change statue of setting by - 1 in chosen **PROGRAMMING** position (holding a button cause continuous change by - 1 in loop)

RESTART:

- "reset" of processor - necessary in the event of suspension of work functions of the relay. Do not delete the settings of function and times

+ and - ("hard" reset):

- delete (reset) of all times of all work finctions from memory (press >3sec two button together). Timer automatically set P00 function (Inactivity statue)

Function 18 - is activated by control signal START. After enclosed the power supply relay is in stanby mode to implementation of work function. On the display appears inscription ON. After gave START signal relay will start implementation of function. On the display appears inscription END (end). The relay does not respond to subsequent signals START. Next implementation of function will start when you turn off and re-connecting voltage or "reboot" the CPU. For this function giving a signal START is indicated by ON symbol on the rate of control signal. No signal is indicated by the symbol OFF.

ATTENTION!

- To turn off the power during the performance of the work functions cause to stop the relay. Joint will remain in a position to disconnect (pos.1-6). Re-enclose the power will start function from the beginning.
- Pressing the RESTART button during the implementation of the work function cause start the functions from the beginning.

DESCRIPTION OF WORK FUNCTIONS

P00 inactivity statue

P01



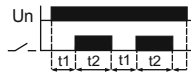
After give the power supply the joint stay in 1-6 position and start count of set of lagged time. After counted time t, the joint is reconnect in the position 1-5 (enclose). The next implementation of work mode is possible after disconnected a the power supply and its re-enclosed.

P02



After give the power supply the joint stay in 1-6 position and start count of set of lagged time. After counted time t, the joint is reconnect in the position 1-5 (enclose). The next implementation of work mode is possible after disconnected a the power supply and its re-enclosed.

P03



The work mode of delayed enclose is implemented out periodically accompany with set times: t1 breaks and working t2 (enclose).

P04



The work mode of delayed exclude is implemented out periodically accompany with set times: t1 (enclose) and break t2.

P05



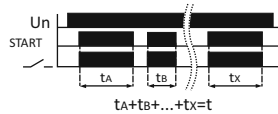
After give the power supply the joint stay in 1-6 position and start count of set of delay time. After counted time t, the joint is reconnect in the position 1-5 (enclose) for time t2. The next implementation of work mode is possible after disconnected a the power supply and its re-enclosed.

P09



Liberation of delay time t1 (pos.1-6) growing slope of signal START. Liberation of enclose time t2 (pos.1-5) is always after the disappearance of the START signal, but no earlier than the time t1.

P10



The enclose of joint (pos. 1-5) at time t, during the count from the value set to "zero" only when the START signal. Failure of the signal START pauses the countdown. After the re-emergence of a START signal is the continuation of the count of the remaining time t. Failure power supply "resets" the remaining time t. When you receive a power supply and signal START is the re-count from the value of T set.

P11



Enclose of joint(pos. 1-5) at time t with falling slope of signal START. During countdown of t time, relay does not respond to next pulse of START signal.

P12

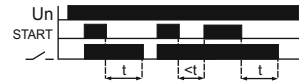


P06



After gave the START signal, joint is re-connected in 1-5 position (enclose). After disappearance of the signal START joint is confirmed by the set time t. During of count of t time ,relay does not respond to subsequent START signal pulses.

P07



After gave the START signal, joint is re-connected in 1-5 position (enclose). After disappearance of the signal START joint is confirmed by the set time t. Return of START signal During of count of t time ,break of count it and joint is enclosed (pos. 1-5). Renewed fading of START signal start count of t time and maintain the joint.

P08



The delay enclosing of joint (pos. 1-5) at time t growing slope signal START. During at countdown of t time relay does not respond to subsequent START signal pulses. After the disappearance and re-emergence of a START signal is disconnected of joint (pos. 1-6) in time t.

Enclose of joint (pos. 1-5) at time t with falling slope of signal START. Return of signal START and disappearance it during countdown time t trigger count time t from beginning

P13



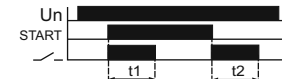
Enclose of joint (pos. 1-5) at time t with growing slope of signal START. Re-enclose of signal START during countdown time t cause stop and disconnect the joint (pos. 1-6).

P14



Enclose of joint (pos. 1-5) at time t with growing slope of signal START. Return of signal START during countdown time t trigger coun time from beginning.

P15



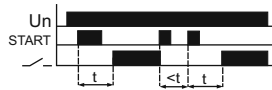
Enclose of joint (pos.1-5) at time t1 with growing slope of START signal and re-enclose it at time t2 with falling slope of START signal.

P16



Enclose of joint (pos.1-5) at time t1 with growing slope of START signal. During of countdown time t the relay does not respond to next pulses of START signal.

P17



Delay enclose of joint (pos.1-5) after time t triggered by growing slope of START signal. Next signal START disconnect the joint (pos. 1-6) for time t. Return of START signal during countdown time t trigger count time t from beginning.

P18



Delay enclose of joint (pos.1-5) after time t triggered by growing slope of signal START. During countdown of time t the relay do not respond to next pulses of signal START. Joint will disconnect (pos. 1-6) with decay of power supply. Re-implementation of work mode of relay is possible after disconnected the power supply and re-enclose it.



By buttons +/- set number of minutes. Enter by OK.

6. Relay show section of hours. Przełącznik pokazuje sekcję godzin (All sections are shifted to the right, the hundredths section is hidden, and in its place will be moved second section, Section minutes will be moved in place of the second. Section hour is on the left side of the display).



By buttons +/- set number of hours. Enter by OK.

- for two-times functions relay pass to set time t2 mode (report 2 on display). Follow as programming time t1.

- for one-times functions relay pass to chose work function mode. By button PROG enter chosen function (out from PROGRAMMING function).

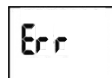
Relay automatically pass to implementation of this function

ATTENTION!

In the case of erroneous data, for example, provide one of the times as 0:

- Press OK. cause to display the error message Err (ERROR) and then move to mode of set time of chosen work functions.

- Pressing PROG will display an error message Err (ERROR), and automatically pass into the inactivity mode (function P00).



PROGRAMMING

1. Connect the power supply.

ATTENTION!

Relay automatically pass to inactivity mode (function P00). If in memory are stored earlier settings than relay pass to implementation of the last set function.

2. Press button PROG >3sec.

Relay pass to chose work function mode.



By buttons +/- set work function:.

- By button PROG out from chose work function mode.

- By button OK w pass to set time for function mode.

Relay pass to set mode of time t1 t1 (reprt 1 on display).

3. Relay show section of hundredth part of a second.



By buttons +/- set number of hundredth part of a second (setting period 25/100). Enter by OK.

4. Relay show section of seconds..



By buttons +/- set number of seconds. Enter OK.

5. Relay show section of minutes.

ASSEMBLY

1. Take OFF the power.

2. Put on the relay on the rail in the switchgearbox.

3. Power connect to joint 3-4 (any polarity)

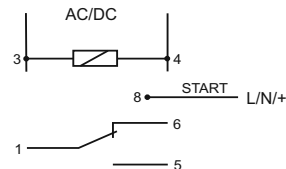
4. Power of controlled receiver connect serial to joint 1-5.

5. Set work program and times of enclose the receiver.

TECHNICAL DATA

supply	24±264V AC/DC
current load	<16A
joints	separate 1P
current of control pulse	<1mA
range os time settings	0,25sek÷99h59min59sek 75/100
activation lag delay function	<50msec
power consumption	1,5W
working temperature	-25÷50°C
connection	screw terminals 2,5mm ²
dimensions	2 modules (35 mm)
fixing	on rail TH-35

IN/OUT DESCRIPTION



3-4 power supply (any polarity)

1 central joint COM

5 contact joint NO [ON]

6 open joint NC [OFF]

8 input control pulse

B091208/D130823