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## PCZ-522.2

### PROGRAMMABLE CONTROL TIMER two-way type



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

#### PURPOSE

Programmable control timers are used to control the work time of devices included into industrial or household automatic systems in compliance with individual time schedule planned by the user.

#### FUNCTIONING

The timer activates and deactivates a given device at preset hours in the following cycles: 24-hour, weekly, working day (Mon-Fri) or weekend (Sat, Sun).

#### DESCRIPTION OF BUTTONS FUNCTION

##### MENU:

- pass to programmable menu (preeser >3sec)
- acceptance of settings **DATE, TIME AND ORDERS SWITCH ON-SWITCH OFF**
- pass to upper level
- OK:**
- enter settings and pass to next settings
- peep a date

##### +:

- change setting position by +1 in choosen programmable position (preesing a button make intensitive changes in settings by +1 in loop)
- in **HANDIWORK** mode: permanent enclosure **ON** and exclusion **OFF** a joint for **CHANNEL 1**
- : change settings position by -1 in choosen programmable position (preesing a button make intensitive changes in settings by -1 in loop)
- in **HANDIWORK** mode: permanent enclosure **ON** and exclusion **OFF** a joint for **CHANNEL 2**

##### RESET:

- to reset a processor - in case of hook-up of function of work indispensable of timer. It does not erase setups of **DATES** and **TIME** and **ORDERS SWITCH ON - SWITCH OFF**.
- **+ and -** ("hard" reset):
- delete of all settings of **DATE** and **TIME** and **ORDERS SWITCH ON - SWITCH OFF** from memory (preesing >3sec two buttons simultaneously).

#### DESCRIPTION OF WORK AND FUNCTIONS

**AUTOMATIC WORK** - according to program points of enclosures and switching off joint [sign ☺ on the left of display]

**HANDIWORK- [ON]** - enduring connection of joint ( **CHANNEL 1** :position 1-5, **CHANNEL 2** : position 2-7) or **[OFF]**- enduring switch off joint (**CHANNEL 1** :position 1-6, **CHANNEL 2** : position 2-8) by activated **AUTOMATIC WORK** [ lack of sign ☺ on the left of display]

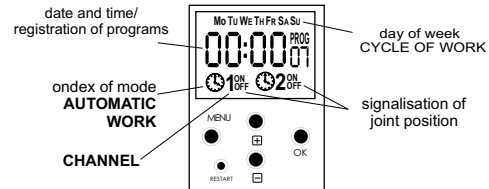
**ORDER SWITCH ON - SWITCH OFF** - registry of program by whom make switch **ON** or **OFF** a receiver.

**PROGRAMMING**- set correct date and time by whom will be enclose or exclusion a receiver repeat weekly.

**CYCLE OF WORK** - setting by user, weekly ( 7 days from monday to sunday). In this time a receiver is enclose with programmabled **ORDERS SWITCH ON- SWITCH OFF**.

**CHANNEL** - programming line, with user settings for **ORDERS ENCLOSE-EXCLUSION**, contoll with own enclosing joint a receiver

#### DESCRIPION OF DISPLAY AND PANEL STEERING



Mo-monday; Tu-tuesday; We-wednesday; Th-thursday; Fr-friday; Sa-saturday; Su-sunday

#### PROGRAMMING

##### 1. START

- 1.1 Take **ON** the **POWER**
- 1.2 Timer make a test of display ( enclose all section)



1.3 Timer started count time from hour. 00:00

**ATTENTION!** If after took the power timer show another time and date then it means, in memory timer are earlier setting. If timer have got in memories earlier settings, they could be deleted by "hard" reset (see p. 8).

##### 2. DATE

- 2.1 Prees a button **MENU** >3sec. Timer pass to setting mode of programming (date -hour -prog -edit -del - mode-dst).
- 2.2 By buttons **+/-** select mode date "**DATE**"



Enter by **OK**.

2.3 Timer pass to setting year mode.



By buttons +/- set year, enter OK.  
 2.4 Timer pass to setting month mode.



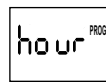
By buttons +/- set a month, enter OK.  
 2.5 Timer pass to setting day of month mode.



By buttons +/- set to actual day of month  
 - by button OK pass to setting year mode (see p.2.3)  
 - by button MENU accept to registry and out of programming mode.  
 By button MENU enter registry of date. Timer automatically out from programmable DATE function and pass to programming mode. Again prees a button MENU cause pass to main menu.

### 3. TIME

3.1 Button MENU prees >3sec. Timer pass to programing menu (date - hour - prog - edit - del - mode - dst).  
 3.2 By buttons +/- select mode of set hour "HOUR"



Enter OK.  
 4.1.3 Timer pass to choosen CHANNEL menu (set - edit - del - mode)

#### 4.2 ORDER ENCLOSE- EXCLUSION- setting parameters

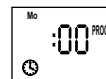
4.2.1 By buttons +/- select settings parameter mode "set"



Enter OK.  
 4.2.2. Timer displid (1sec) next number of ORDER ENCLOSE- EXCLUSION.



Timer automaticly pass to setting minutes mode.



By buttons +/- set minutes, enter OK.  
 4.2.3 Timer pass to setting hour mode.



Enter OK..  
 3.3. Timer pass to setting minutes mode.



By buttons +/- set minutes, enter OK..  
 3.4 Timer pass to setting hour mode.



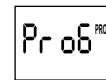
By buttons +/- set hour.

- By button OK return to setting minutes mode (see p.3.3.)  
 - By button MENU enter registry of time. Timer automaticly out from programmable DATE function and pass to programming mode. Again prees a button MENU cause pass to main menu.

### 4. ORDER ENCLOSE- EXCLUSION- parameters

#### 4.1 CHANNEL 1-select

4.1.1 Prees button MENU >3sek. Timer pass to programing mode (date - hour - prog - edit - del - mode - dst).  
 4.1.2 By buttons +/- select CHANNEL 1 "PROG1". or CHANNEL 2 "PROG2".



By buttons +/- set hour. Enter OK.

4.2.4 Timer pass to setting CYCLE WORK mode. By buttons +/- set CYCLE of WORK:

- one day of week: Mo; Tu; We; Th; Fr; Sa lub Su.
- work days: Mo Tu We Th Fr (from monday to friday).
- weekand: Sa Su (saturday and sunday)
- everyday: Mo Tu We Th Fr Sa Su (from monday to sunday)

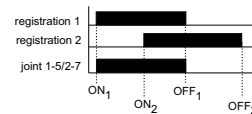
Enter OK.  
 4.2.5 Timer pass to setting option SWITCH ON [ON]or SWITCH OFF [OFF] mode.

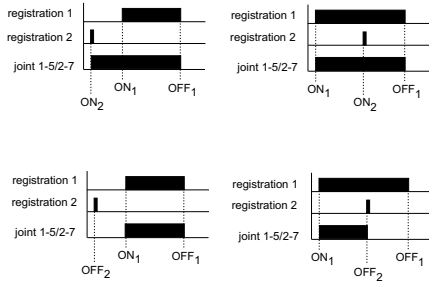


- By button +/- set option ON or OFF, enter OK.  
 - Timer automaticly pass to input a next parameter of ORDER ENCLOSE-EXCLUSION mode (see p..4.2.2.)  
 - By button MENU enter registry of time. Timer automaticly pass to menu. Again prees a button MENU cause pass to main menu.

#### ATTENTION!

- Registried orders ENCLOSE-EXCLUSION didn't make up permanent function which realise ENCLOSING or EXCLUSIONING of joint. They are threat as once orders and realise with input chronolgy. Example of set to interplay times of ENCLOSE oders ENCLOSE-EXCLUSION present below digrams:





- Time of enclose joint which is established by pair of orders ENCLOSE-EXCLUSION could be longer than 24 hours. It means order ON could be set for any hour and day of week (e.g. Tuesday 13:45) but order OFF for any different date (Thursday 17:05).  
 - for every order could be established different CYCLE of WORK. Orders with different CYCLES of WORK are realise with sequence:  
 - one day of week: Mo; Tu; We; Th; Fr; Sa lub Su.  
 - work days: Mo Tu We Th Fr (from monday to friday).  
 - weekand: Sa Su (saturday and sunday)

**5. EDITION - change of parameter**

5.1 Prees button MENU >3sek. Timer pass to programming mode (date - hour - prog - edit - del - mode - dst).  
 5.2 By buttons +/- select change parameter mode ORDER ENCLOSE-EXCLUSION "edit".

**ATTENTION!**

If you want delete all earlier settings od DATE, TIME, ORDERS ENCLOSE-EXCLUSION ("hard" reset see p. 8.)

**7. WORK MODE- choose**

7.1 Prees button MENU >3sek. Timer pass to programming mode (date - hour - prog - edit - del - mode - dst).  
 7.2 Select channel 1 or 2 (see p. 4.1.2)  
 7.3 By buttons +/- select work selecting mode "mode".



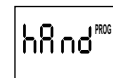
Enter OK.

7.4 Timer pass to menu WORK MODE (auto-hand).  
 7.45 By buttons +/- select work mode. AUTOMATIC WORK - "auto"

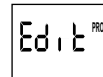


or

-HAND WORK - "hand"



Enter OK.. Timer automaticly pass to programming mode. Again prees a button MENU cause pass to main menu.



Enter OK.

5.3 Timer displayed first ORDER ENCLOSE-EXCLUSION. By buttons +/- set number of ORDER ENCLOSE-EXCLUSION to changes of parameter, enter OK.  
 5.4 Conduct as by set parameters of ORDER ENCLOSE-EXCLUSION (see p. 4.2.2 + 4.2.5)  
 By button MENU enter registry. Timer automaticly pass to programming mode of choosen channel. Again prees a button MENU cause pass to main menu.

**6. CANCEL- delete registry**

6.1 Prees button MENU >3sek. Timer pass to programming mode (date - hour - prog - edit - del - mode - dst).  
 6.2 Select channel 1 or 2 (see p. 4.1.2)  
 6.3 By buttons +/- select delete mode ORDER ENCLOSE-EXCLUSION "del".



Enter OK.

6.4 Timer displayed first ORDER ENCLOSE-EXCLUSION. By buttons +/- set number of ORDER ENCLOSE-EXCLUSION to changes of parameter, enter OK.

By button MENU enter registry. Timer automaticly pass to programming mode. Again prees a button MENU cause pass to main menu.

**ATTENTION!**

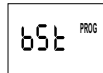
Changes of joint position in HAND WORK mode make by buttons +/- in main menu of this menu.

**8. MEMORY RESET - "hard" reset**

If you wont delete all earlier settings of DATE, TIME and ORDERS ENCLOSE-EXCLUSION , prees simultaneously a buttons +i- >3sek.

**9. Exclusion of AUTOMATIC TIME CHANGE**

9.1 Prees button MENU >3sek. Timer pass to programming mode (date - hour - prog - edit - del - mode - dst).  
 9.2 By buttons +/- select exclusion of AUTOMATIC TIME CHANGE mode "dst".  
 DST - Daylight Saving Time - global name for summer time (free transtation: time of win a sun light).



Enter OK.

9.3 Timer pass to exclusion of AUTOMATIC TIME CHANGE mode (auto -OFF) .

9.4 By buttons +/- select mode:  
 - with AUTOMATIC TIME CHANGE - "auto"



or  
-without AUTOMATIC TIME CHANGE - "off"



Enter OK.  
Timer automatically pass to programming mode. Again prees a button MENU cause pass to main menu.

#### AUTOMATIC TIME CHANGE!

Changes time from winter time to summer time is automatically make at the last sunday of march at 2 a.m. ( add 1 hour to actual time ).  
Changes time from summer time to winter time is automatically make at the last sunday of october at 3 a.m. ( subtract 1 hour from actual time ).

#### ATTENTION!

Possible is take OFF automatic function of time change (see p.9).

#### ASSEMBLY

1. Take OFF the power.
2. Timer put on the rail in the switchgearbox
3. Cable of supply connect with digram.
4. A receiver connect with diagram.
5. Set a correct date (see p2) and time (see p3).
6. Set time of enclose a receiver (see p4).

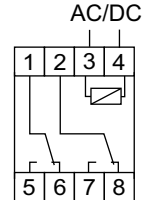
#### TECHNICAL DATA

supply	24÷264V AC/DC
current load	2×(<16A)
contacts	2×1C/O
display maintenance time	non
timer maintenance time	6 years
indication accuracy item	1sec
time deviation	±1s/24h
schedule time accuracy item	1min
no. of program memory sectors	2×250 (2×125 entry pairs: ON/OFF)
power consumption	1,5W
working temperature	-20÷50°C
connection	screw terminals 2,5mm <sup>2</sup>
dimensions	2 modules (35mm)
fixing	on the rail TH-35

#### WIRING DIAGRAM

CHANNEL 1:  
joint 1-5 "ACTIVATE" [ON]  
joint 1-6 "DEACTIVATE" [OFF]

CHANNEL 2:  
joint 2-7 "ACTIVATE" [ON]  
joint 2-8 "DEACTIVATE" [OFF]



**Programming diagram**

