



F&F Filipowski L.P.
Konstantynowska 79/81, 95-200 Pabianice, POLAND
phone/fax (+48 42) 215 23 83 / (+48 42) 227 09 71
www.fif.com.pl; e-mail: biuro@fif.com.pl

PCZ-521.4

Programmable
control timer
1-channel, weekly



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 single-channel, programmable PCZ-521.4 control timer is used to control the timing of devices in home or industrial automation systems according to an individual time schedule set by the user. The timer switches the controlled electrical circuit on and off at programmed times in cycles: daily, weekly, on working days (Mon-Fri) or at weekends (Sat-Sun).

Features of the timer

- » Ability to work in automatic mode (according to a preset time schedule) or manual mode.
- » 500 memory cells allow 250 pairs of ON/OFF commands to be programmed.
- » A single command from the controller defines:
 - Relay action (ON/OFF);
 - Hour and minute at which relay action will be performed;
 - Repeat cycle: daily, on a selected day of the week, every day of the week, on working days (Mon-Fri) or weekends (Sat-Sun).

- » Automatic switching between summer and winter time;
- » Replaceable battery to save timer settings in case of power failure;
- » NFC wireless communication to read and save timer settings wirelessly using a smartphone and the free PCZ configurator app. Saving/reading data to the timer via NFC connection does not require the timer to be connected to a power source.
- » The PCZ Configurator app is designed for smartphones equipped with an NFC wireless communication module and running on Android or iOS. The app allows you to:
 - Prepare configurations offline, without the need for access or a connection to the timer;
 - Read and save configurations to the timer (requires the smartphone to be held directly in front of the timer);
 - Quickly programme multiple timers using a single set of settings;
 - Read and save configurations to a file;
 - Sharing configurations via email, network drives, instant messaging, etc.
 - Unambiguous identification of the connected timer and the ability to give devices their own names;
 - Automatic backup of read configurations, which, combined with the unique identifier of each timer, enables quick restoration of previous settings;
 - Setting the time and data based on the smartphone clock (requires power connection at the time of programming);
- » Relay status memory restoring the last relay status after power failure and return;
- » Possibility of correcting the display contrast to obtain a clear LCD reading for different viewing angles.

Functioning

The PCZ-521.4 timer controller can operate in one of the two modes of operation:

» **Automatic mode**

Operation in automatic mode involves the automatic processing of all programs stored in the memory of the controller.

» **Semi-automatic mode**

Automatic mode means that all programmes stored in the memory of the timer are processed automatically. When the time stored in the programme is reached, the relay action (on/off) is carried out and maintained until the next programme is started. The programmes are executed in the order in which they are listed in the timer, not in the order in which they were saved. After the power is turned on, the timer automatically searches for and executes the programme that should be running at that moment.

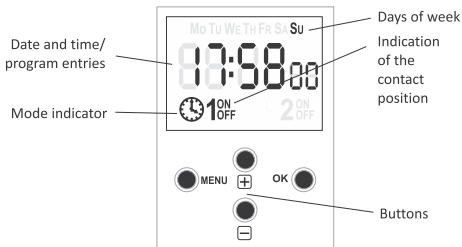
» **Manual mode**

In manual mode, the list of programmes stored in the controller memory is ignored and switching on/off is carried out manually by the user. In manual mode, the relay status can be changed by briefly pressing the +/- button on the front of the controller.



The status of a relay that is in manual mode is restored when the power supply is restored.

Display description



Manual



Full manual for the PCZ-521.4 can be downloaded from the product page on www.fif.com.pl or by scanning the QR code below:



Mobile app

The control application is available free of charge in App Store and Google Play:

Application available on:



<https://apps.apple.com/pl/app/f-f-pcz-konfigurator/id6446887053?l=pl>

Application available on:







<https://play.google.com/store/apps/details?id=pl.com.fif.clockprogramer>






The NFC connection uses very short-range communication, which means that you need to directly touch the phone to the front of the programmed controller.

Operation mode indication

| Display | Mode | Relay status |
|---|-----------|--------------|
|  1 ON OFF | Automatic | ON |
|  1 ON OFF | Automatic | OFF |
|  1 ON OFF | Manual | ON |
|  1 ON OFF | Manual | OFF |

Legend:

| | |
|--|---------------|
|  | ON |
|  | Blinks/pulses |
|  | OFF |

Control buttons

| Button | Description |
|-------------|---|
| MENU | <p>Press the button to enter the controller configuration mode.</p> <p>In parameter editing mode, pressing Menu abandons the edited parameter (without remembering the changes made) and returns to the parent menu level.</p> <hr/> |
| OK | <p>Press the button in edit mode to edit the next setting item. If you are editing the last item, pressing the OK button will save the new parameter value, exit the edit mode and go to the parent menu level.</p> <p>Pressing the OK button in the time display mode will bring up a quick access menu allowing you to view information about the current date, details of the currently running program, and access to operating time statistics..</p> <hr/> |

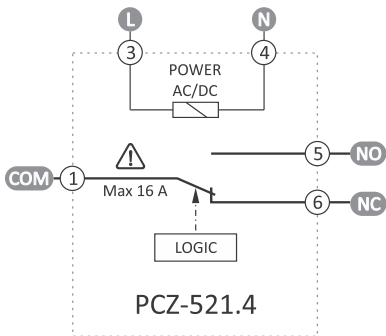
Control buttons cont.

| Button | Description |
|-------------|---|
| + (Up) | <p>In edit mode, pressing the button increases the value of the edited parameter by 1.</p> <p>If the button is pressed for a long time, the parameter value will cyclically increase by 1.</p> <p>In manual operation mode, pressing the button will switch the contact permanently (ON -> OFF or OFF->ON).</p> |
| - (Down) | <p>In edit mode, pressing the button decreases the value of the edited parameter by 1.</p> <p>If the button is pressed for a long time, the parameter value will cyclically decrease by 1.</p> <p>In manual operation mode, pressing the button will switch the contact permanently (ON -> OFF or OFF->ON).</p> |

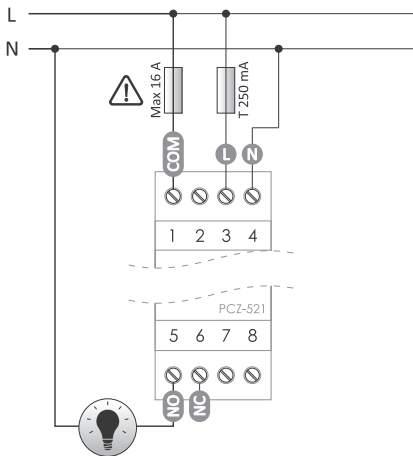
Mounting

1. Turn off the power.
2. Install the timer on the rail in the distribution box.
3. Connect the power cables according to the diagram.
4. Connect receivers according to the diagram.
5. Set the correct date and time.
6. Make software configuration of the timer.

Controller diagram



Wiring diagram



- 1 COM relay power supply
- 3 L power supply
- 4 N power supply
- 5 relay – NO contact (normally open)
- 6 relay – NC contact (normally closed)

Technical data

| | |
|-------------------------------|--|
| power supply | 24÷264 V AC/DC |
| maximum load current (AC-1) | 16 A |
| contact | separated 1×NO/NC |
| backup time timer operation | 6 years* |
| battery type | 2032 (lithium) |
| backup time display operation | none |
| accuracy of the timer | 1 s |
| error time | ±1 s/ 24 h |
| power consumption | 1.5 W |
| terminal | 2.5 mm ² screw terminals (cord) 4.0 mm ² screw terminals (wire) |
| tightening torque | 0.5 Nm |
| working temperature | -20÷50°C |
| dimensions | 2 modules (35 mm) |
| mounting | on TH-35 rail |
| ingress protection | IP20 |

* *Battery life depends on operating conditions and how long the timer is powered by battery only. Low ambient temperature greatly reduces the life of the battery.*

Warranty

The F&F products are covered by a warranty of the 24 months from the date of purchase. Effective only with proof of purchase. Contact your dealer or directly with us.

CE declaration

F&F Filipowski L.P. declares that the device is in conformity with the essential requirements of Directive 2014/53/EU of the European Parliament and of the Council of 16 April 2014 on the harmonization of the laws of the Member States relating to the making available on the market of radio equipment and repealing Directive 1999/5/EC.

The CE Declaration of Conformity, along with the references to the standards in relation to which conformity is declared, can be found at www.fif.com.pl on the product page.