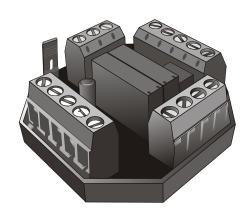
# POLFEN DO

always works

# DZU CENTRAL CONTROL INSTALLATION AND USE INSTRUCTIONS



#### Notes on safety

- After removing the device from the packaging, check for any visible damage that might occur in transit. If such damage is found, notify the supplier immediately and do not install the device.
- ▶ Read the instruction manual carefully before use.
- ➤ The DZU controller power supply should be 230 V AC, 50 Hz. For this reason, its installation should be carried out only by a licensed electrician as shown in the attached wiring diagram, in accordance with all applicable regulations.

### Description of functions

The DZU controller is used to control one actuator in the system of central control of roll-up device openers, i.e. roller shutters, grilles and roll-up doors, awnings etc.

#### Functions of DZU controllers:

- can be connected to a central switch and an individual (local) switch:
- ▶ one opener can be operated with multiple switches;
- multiple openers can be connected in parallel and operated with a single central switch:
- protection against overvoltage and simultaneous switching of opposing poles.

# Controller installation

Before you start installing the controller, please read the attached diagram.

The controller does not require periodic maintenance and inspections.

- 1) Turn off the power supply
- 2) Connect the controller as shown in the attached diagram.

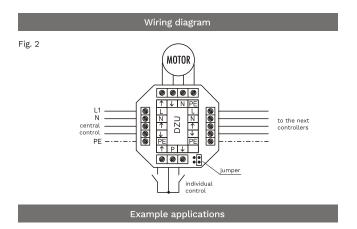


Fig. 3 Controlling a group of curtains

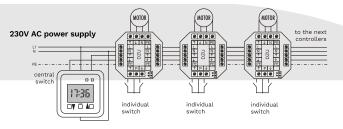


Fig. 4 Controlling two groups of curtains with the use of a group control panel D2

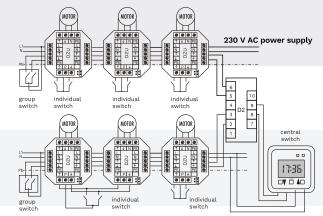
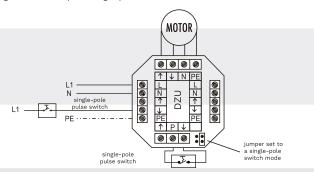


Fig. 5 DZU with a pulse single-pole switch



#### NOTE!

Observe local regulations regarding grounding and protective measures

Use double-insulated cables with the following cross sections:

- 1.5 to 2.5 mm2 for connecting power supply;
- 0.75 to 1.5 mm2 for connecting an actuator:
- 0.75 mm2 for connecting local and group switches.

#### IMPORTANT!

- · Do not allow a short circuit between the direction wires of the opener and the neutral wire, as this may damage the relays of the device!
- Do not connect 230 V power cables to terminals designated for connecting a switch!
- Do not connect a switch directly to the opener, in parallel to the controller!
- 3) Insert a jumper on the pins corresponding to the required operating mode.
- 4) Install the controller in a flush-mounted box under an individual switch. For outdoor installation additional steps should be taken to protect the controller against dust and moisture (it is recommended to put the controller in an IP65 PVC box)
- 5) Turn on the power supply.

Check whether the direction of rotation of the motor corresponds to up and down buttons of the roller shutter. If they do not, replace the direction cables.

If the total power of the actuators in the powered group exceeds 1.5 kW, it shall be split into groups with an overall power of 1-1.5 kW, feeding each group separately, also from different phases of the 3-phase network.

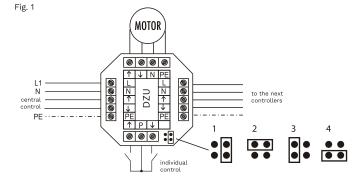
# Selecting the operating mode

#### NOTE!

The operating mode is selected by placing a jumper on appropriate pins. The jumper must be repositioned when the power supply is switched off, otherwise the new operating mode cannot be set

Depending on the jumper position, the device can operate in the following modes:

- 1) single-pole switch the controller operates step by step in UP-STOP-DOWN-STOP mode (Fig. 1 item 1)
- 2) without sustaining the signal lasts as long as the switch button is pressed (Fig. 1 item 2)
- 3) latching after pressing the switch button the signal is latched by DZU for 90 seconds (Fig. 1 item 3)
- 4) louvre setting the inclination angle of the louver slats and raising and lowering the entire shutter (Fig. 1 item 4)



## Connection of a single-pole pulse (doorbell) switch

Instead of bipolar switches, single-pole impulse switches can also be connected to the DZU (so-called doorbell switches), provided that the DZU is not part of any group (Fig. 5). DZU with a single-pole pulse switch connected works only in the latching mode.

A single-pole latching switch must not be connected to the DZU!

Activate the "single-pole switch" mode on the DZU controller by inserting a jumper on appropriate pins (Fig. 1 item 1).

## Operating the controller in the "latching" mode

#### NOTE

For group and individual (local) control, use a non-latching (momentary) switch. For central control, in addition to a non-latching switch, switches with temporary signal latching can be used (e.g. timers).

After pressing the up or down button, the curtain will be raised or lowered accordingly. In order to stop the curtain, shortly press the

- if the curtain is moving up, press the down button
- if the curtain is moving down, press the up button

The curtain can be raised or lowered again, but please note that there is a delay of approx. 2 seconds for the DZU to switch the direction of motor rotation.

In order to immediately change the direction of movement of the curtain, press and hold the opposing button for more than 2 seconds, i.e.

- if the curtain is moving up, press and hold the down button for approx. 2 seconds - the curtain will stop and then it will start
- if the curtain is moving down, press and hold the up button for approx. 2 seconds - the curtain will stop and then start moving up.

#### IMPORTANT

When latching switches / controllers are used for central control, the first pressing of an opposing button on the controller will only stop the signal being supplied by the controller, which will not stop the curtains. The curtain movement will stop only after pressing the same button again. If the controller latching is longer than 2 seconds, the curtain will move in the opposite direction after this time.

# Operating the controller in "shutter" mode

A short press of the switch button (up to 2 seconds) allows for precise, step-by-step setting of the shutter position or the angle of inclination of the louver slats. Pressing and holding (over 2 seconds) of the UP or DOWN button will raise or lower the shutter accordingly. For other operations - see "Operating the controller in latching mode".

## Technical data

Power supply voltage -

230V~, 50Hz Current (load current) -

5A (cos  $\phi$  = 1), 2A (cos  $\phi$  = 0,6)

Control voltage 230V~

Number of actuators operated

Pulse duration:

- non-latching mode time when a switch button

is held pressed - latching mode -90 seconds or as programmed

Delay between changing the actuator

rotation direction -2 seconds

-20°to +45 C°

Operating temperature range

44 x 44 x 25 mm Dimensions

(can be mounted in \$60mm x 100mm)