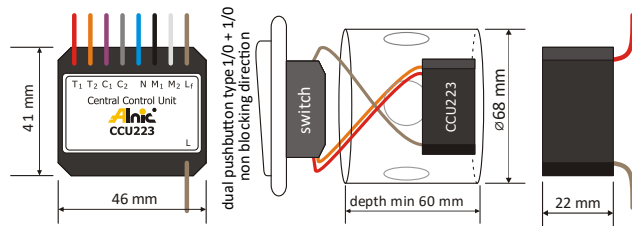


# Alnic® Central Control Unit Installation Manual CCU223

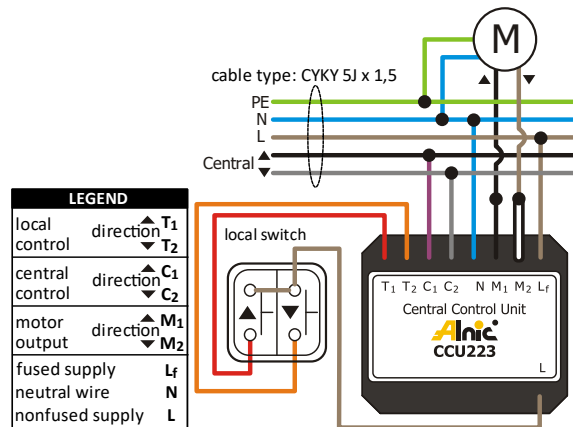
Authorized personnel only

## Product Description

CCU223 is an electronic driver for 230 VAC motors powering electrical blinds, rollers, windows, garage doors. The motors are typically single-phase asynchronous devices with mechanical or electronic end switches. The devices can be controlled individually from local switch, per group or centrally. The driver is designed to fit under a wall-mounted switch button. It can be installed in external environments inside protective boxes or in proximity of the roller motor thanks to its polyurethane protective casing.



## Electrical Connection



## Technical Information

- Power supply: 230 VAC / 50 Hz
- Fuse: 3,15 A (Lf input) non-replaceable
- Input Voltage (T1, T2, C1, C2): 230 VAC
- Nominal Power: 3,1 VA
- Max inductive load power: 750 VA

- Switch buttons shall be of type 1/0+1/0 (dual-button without mutual direction blocking!)
- In case of blown fuse, the supply line can be connected to L input (external fuse must be provided)

## Settings

CCU223 offers functionality which increases user control comfort. To enable all features, the following items must be properly set:

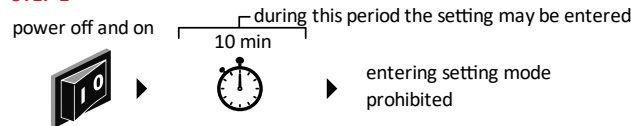
- 1) Choose the device type (blinds or roller)
- 2) Choose the motor type (electronic vs mechanical)
- 3) Set the motor move period (per window size)
- 4) Adjust the lamella tilt time (optional)

All settings are done via local switch.

### Before entering the setting...

CCU223 can enter the setting mode only in the first 10 min after the power up. If this period has elapsed, the unit must be power cycled, see **STEP 1**.

#### STEP 1



### Entering the setting mode

First ensure the controlled device is at its top position by a short button press UP. Then press both buttons and hold down for at least 6 sec. The blinds will move down and up shortly to indicate the setting mode was entered. Release the buttons.

#### STEP 2



**HINT:** If setting a higher number of devices, you can perform **STEP 2** with all devices. The devices will remain ready in the setting mode until a local switch button is pressed.

### Choosing the device type

In case of blinds (factory default), skip **STEP 3** and go to **STEP 4**. If a controlled device is a roller or other device without tilting lamellas, proceed with **STEP 3** followed by **STEP 4**.

#### STEP 3 (skip if the controlled device is blinds)



### Choosing the motor type

Blinds motors are available in two types:

- 1) Electronic end switches (eg. Somfy WT)
- 2) Mechanical end switches (eg. Geiger GJ)

Perform **STEP 4** only in the case of electronic motor.

**HINT:** How to identify the motor type? Try "Stepper Mode" see User Manual – Basic Control Commands. If the blinds move in steps, then **STEP 4** can be skipped. If the motor does not move during stepping, it signifies an electrical end switch motor type. Then **STEP 4** must be set to "electrical".

#### STEP 4 (skip in case of mechanical end switches motor)



### Setting motor move period

Press and hold down direction for the entire time the controlled device is in motion. Release the button only after the motor end switch ceases the motion (as shown in **STEP 5**). The device indicates it has been set by a short move up and down.

#### STEP 5

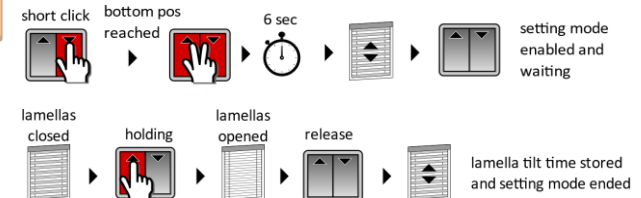


### Lamella tilt time adjustment

The lamella adjustment can be skipped in most cases. To find out if an adjustment is needed make 4 short clicks of DOWN button. The blinds should (when reaching the bottom end) fully open the lamellas. If the countermovement of the motor is insufficient, adjust the tilting time - **STEP 6**.

Execute **STEP 1** to reset the unit. Short press down button to reach the bottom end, enter setting mode and press and hold UP button until the lamellas are fully open and then release the button (shown in **STEP 6**).

#### STEP 6



### Factory Defaults

To reset the unit to factory defaults first power cycle (**STEP 1**) and then hold down both buttons for 12 sec until the device indicates it by the second up and down movement.

# Alnic® Central Control Unit

## User Guide CCU223

### User Control

CCU223 unit supports local and central control with a special set of commands for each type.

The local switch should be placed in proximity to the controlled device so the blinds can be observed when using the switch.

The central or group switch for controlling all or group of blinds can be placed anywhere (within the reach of the central cabling). Central control can also be extended by a time scheduler, wind, rain, and solar automation or PLC control.

### Basic Commands

#### Local Control

A short button press (less than 0.3 sec) in desired direction will move the blinds into its end position. It can be stopped while moving by pressing the opposite direction.

#### Stepper mode for blinds

Longer press (above 0.3 sec) will activate the stepper mode for fine lamella angle control. The stepping is active while tilting and then the motor movement is uninterrupted. Releasing the button will stop the motor.

#### Central Control

A button press (less than 2 sec) in desired direction will move the blinds into its end position. It can be stopped at any time by pressing both buttons at once. Pressing the opposite direction while moving will reverse the movement.

### Blocking the central commands

The individual CCU223 unit can be set to ignore central commands (e.g. from time scheduler). It can be done using local switch: press both buttons and slide finger to the right. Unblocking is done by sliding finger to the left. (as shown below):



The unit blocking setting is preserved after the power cycle.

HINT: Blockage can be overridden if central switch command is pressed for over 2.5 sec.

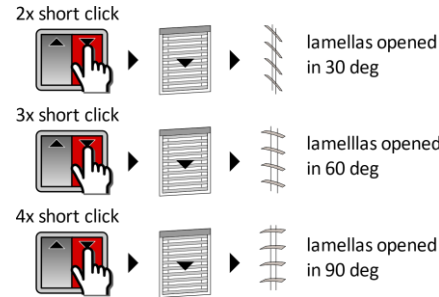
### Comfort Commands

The CCU223 unit provides a set of automatic commands which can be called from both central and local switches.

#### Automatic lamella angle commands

These commands allow a user to call the blinds to its bottom position and tilt lamellas to open in a one of the three angles of choice (30deg, 60deg and 90deg).

It is done by adding short button presses to DOWN button (as shown below) and it works both from local and central switch.



#### Favorite Position (FP)

Any blinds position can be stored and recalled later, both from local and central switch.

It is even possible to store different positions for individual blinds and recall them by a single central command. For rollers the function can be used to open to a ventilation position.

#### Storing Favorite Position - FP (use local switch)

Put the blinds to a position which should be memorized. Press both buttons and hold for 2 seconds. The blinds will indicate saving the position by a short move up and down. This will overwrite the previously saved position.



*Note: If the favorite position could not be stored:*

- 1) Less than 10 min elapsed since the last power up.
- 2) The unit is not calibrated. Never been sent to top or bottom since the last power up.
- 3) The move period was not set during installation. Please refer to installation manual.

### Recalling the favorite position

Make two short UP button clicks. The command can be executed both centrally and locally.



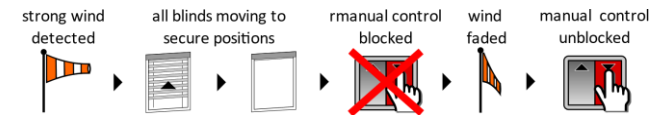
HINT: The accuracy of recalling the favorite position depends on multiple factors:

- Ensure the move time has been set properly.
- Before saving FP, calibrate the motor by first reaching TOP or BOTTOM and then move the desired position without interrupts.
- An accurate lamella angle will be saved if lamellas were fully closed before tilting by stepper mode.

### Hazard Commands

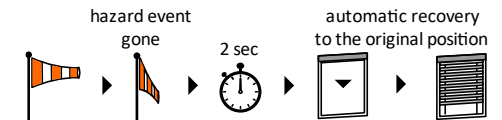
If wind, rain, security, or fire protection device is connected to the central cabling of CCU223 units, then when such a hazardous event occurs, all blinds will be automatically sent to secure positions (typically UP). All local or manual central commands are ignored until the event is removed.

#### EXAMPLE: Wind automatics hazard command



#### Automatic hazard event position recovery

The CCU223 unit will automatically return the blinds to its original position after the hazard event disappears.



### For details see: [www.alnic.cz](http://www.alnic.cz)



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