

OCV1A Control Unit – Instructions for Use



1. DESCRIPTION

The OCV1A control unit is capable of commanding a motor (or a set of motors) by means of peripheral control units or additional modules, depending on the wind conditions. The command will be implemented by making use of a switch to be connected to the control unit.

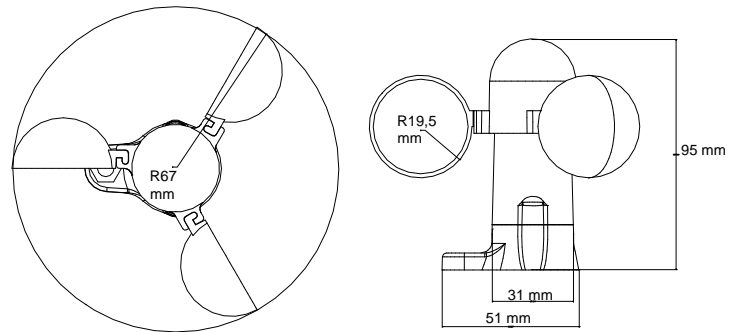
2. PACKAGE CONTENTS

- 1 Electronic control unit on a sealed container (IP55)
- 2 Wind gauge inclusive of cable (length. 2 m)
- 3 Container wall-mounted support kit
- 4 Wind gauge supporting bracket

3. COMPATIBILITY

The OCV1A control unit is compatible with:

- a motor;
- an motor's additional module;
- a peripheral control unit.



4. OPERATION

The OCV1A control unit operates by means of a switch which is connected to the control unit by means of terminals 3 (**downward movement** – the curtain will open), 4 (**common push-button**) and 5 (**upward movement** – the curtain will close). The switch may be of the stable or push-button type.

In case a wind alarm occurs (wind gauge coming into action) when a stable switch has been left depressed in the downward movement, the OCV1A control unit will in any case cause the curtain to go up, yet the curtain will go down again 8 minutes after the alarm is triggered.

CAUTION! When the alarm is ON, the switch will be fully disabled.

4.1 Operation priority

In the event that several commands are given simultaneously (e.g. curtain opening and wind alarm as well), the priority will be as follows:

- 1 wind gauge; 2 switch.

4.2 Adjustments

The wind actuation threshold can be adjusted by means of a potentiometer available on the board.

The “+” sign corresponds to 35 km/h; the “-“ sign corresponds to 1 km/h.

4.3 Installation reset

Upon the first installation, after checking the wind alarm for perfect operation, if the wind gauge is made to turn, the curtain shall go up when the alarm speed is reached. You may cancel the alarm wait time (8 minutes) by pressing the Reset button.

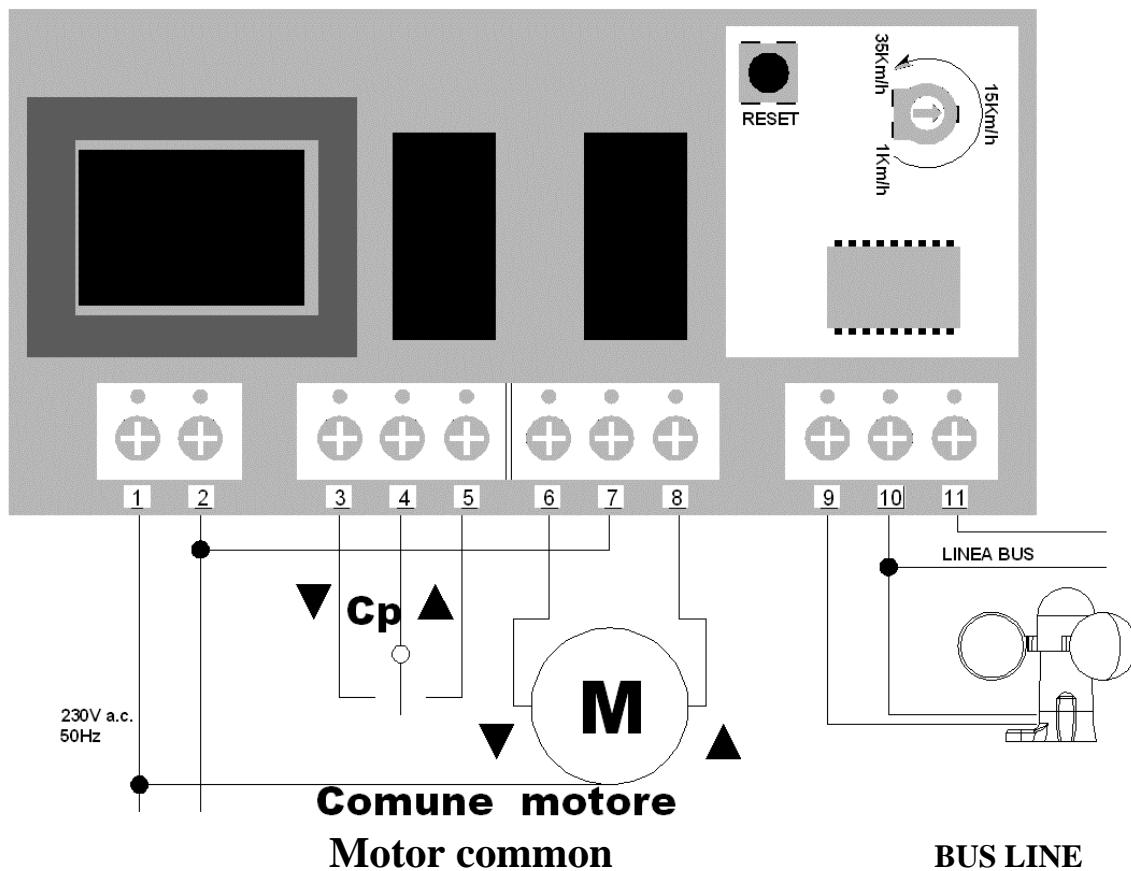
4.4 Connection diagrams

To control an electro-mechanical motor, fully adhere to the instructions given in Diagram 1.

Note: Connect a wire between terminals 2 (power supply input) and 7.

The motor common cable shall be connected to terminal 1 (power supply).

Connection diagram for one motor Diagram 1



5. Commissioning instructions

The OCV1A control unit can be positioned in covered or uncovered civil premises in accordance with the rules and regulations currently in force for the 230 V switching devices featuring a degree of protection equal to IP55.

How to install the container and the wind gauge

- 1 Place the OCV1A control unit, near the motor (if possible) or at any other suitable place. Two wall-mounted supports are available to carry out this operation.
- 2 Remove the four screws, then make the connection to the board – make sure that every operation has been carried out correctly prior to applying the voltage.
- 3 After powering the control unit, place the curtain at the half-travel position, then cause the wind gauge to turn and verify that the curtain will go up (i.e. close) when the alarm has been triggered. In case the curtain moves in the opposite direction, reverse the wires at terminals 6 and 8.
- 4 Secure the wind gauge to the special bracket available and verify that the gauge has been placed in such a perfect position as to be hit by the wind.
- 5 Make the wind calibration, then close the cover and tighten down the screws again.
- 6 The cable inlet shall be positioned at the container bottom.

6. Technical features

Power supply	230 V – 50 Hz a.c.
Working temperature	-10° ÷ +60°C
Relay max. capacity	250 Vac – 4 A (cosφ 0.4)
Wind calibration range	1 km/h ÷ 35 km/h
Container material	ABS
“ colour	Grey
“ dimensions	120 x 80 x 50

Fuse
Compliance

Recoverable (for board protection)
EN60335-1, EN60335-2, EN55014-1,
EN55014-2, EN61000-3-2 and EN61000-3-3
Standards

Degree of protection (IP)

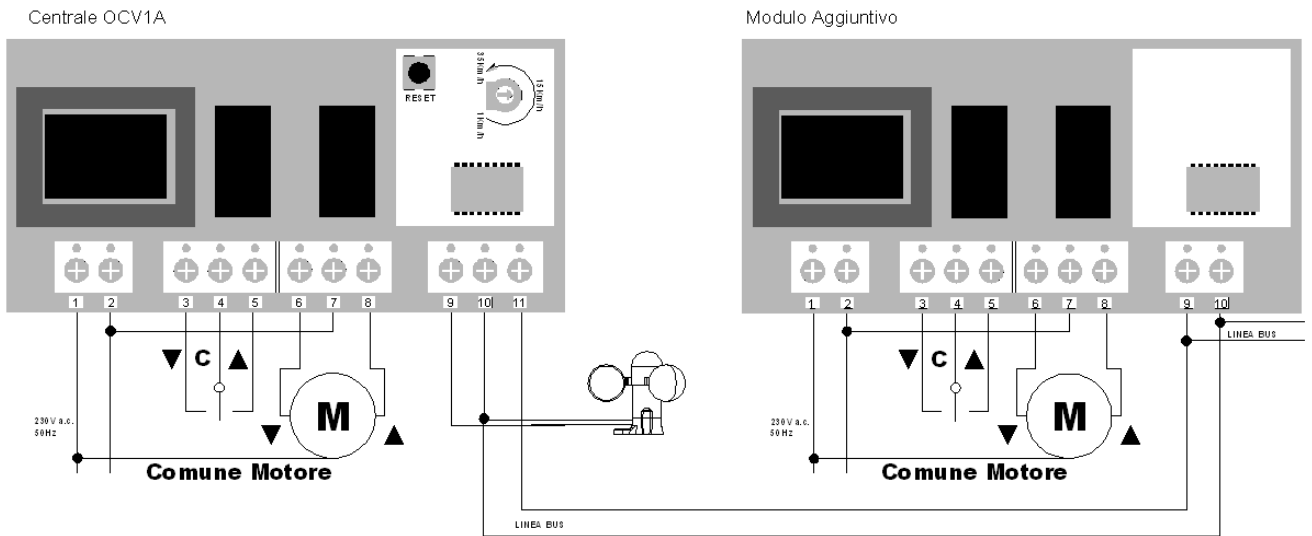
IP56

7. Connection diagram for additional control units

This diagram shows the connection between the OCV1A control unit and the additional module for controlling one or several motors with one single wind gauge and independent switches.

OCV1A control unit

Additional module



Motor common

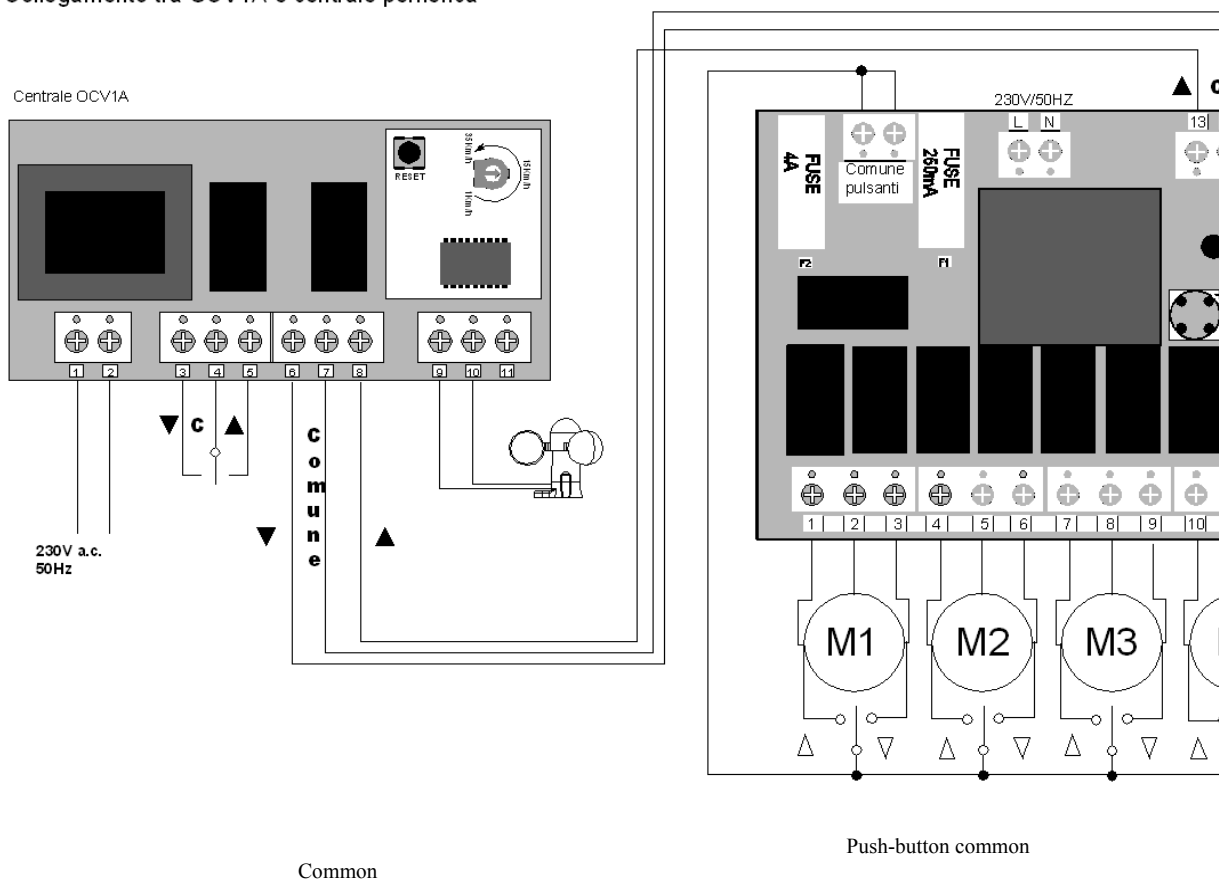
Motor common

BUS LINE

Connection between the OCV1A control unit and the peripheral control unit

OCV1A control unit

Collegamento tra OCV1A e centrale periferica



This combination allows you to control two to four motors with one single wind gauge and one single simultaneous command or with independent push-button switches. The curtain closing (i.e. upward movement) shall always be connected to **the OCV1A control unit's terminal 8**. When a peripheral control unit is connected, verify that all motors will go up when the wind alarm is triggered.

8. GENERAL RULES

- The product shall be installed only by qualified technical personnel, in compliance with the rules and regulations applying to the industrial sector of automatic opening devices, curtains, shutters and blinds, etc.
- When carrying out the wiring operations, strictly adhere to the connection diagram instructions: wrong connections may damage the system!
- Never exceed a length of 50 m between the control unit and the wind gauge.
- After powering the control unit, place the curtain at the half-travel position, then cause the wind gauge to turn and verify that the curtain will go up (i.e. close) when the alarm has been triggered. In case the curtain moves in the opposite direction, reverse the wires at terminals 6 and 8.
- The curtain upward movement shall always be connected to terminal 8.
- Place the wind gauge in such a perfect position as to be hit by the wind and, also, as close to the curtain to be protected as possible.
- The wind gauge is equipped with removable blades which can be replaced if they are broken (refer to drawing 'A').

Possible operation troubles:

Curtain will go down due to the wind

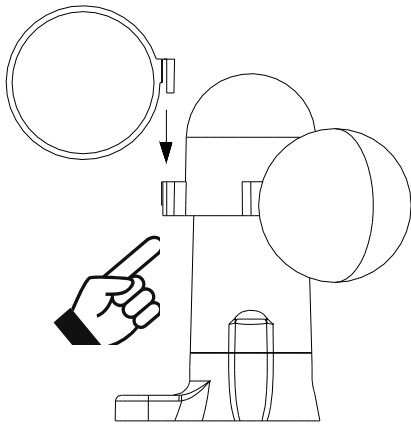
Reverse the motor wires between terminals 6 and 8.

Curtain won't work

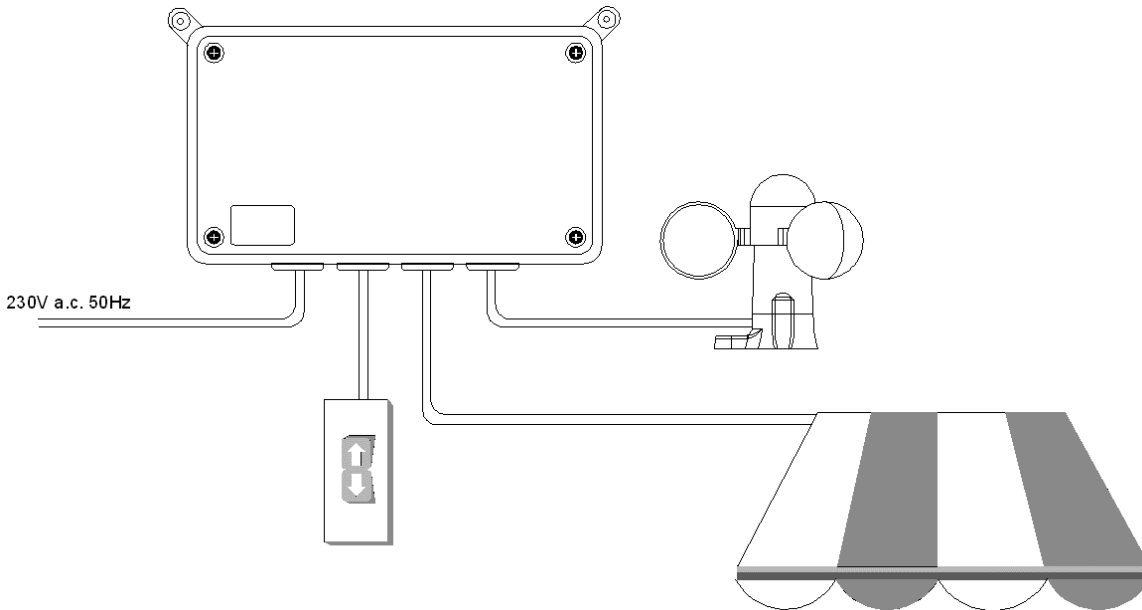
Verify that you made the jumper between terminals 2 and 7

It won't close when the wind blows

Verify that, when the wind gauge is rotated, the red LED will blink; otherwise, check the wind gauge connection.



Drawing 'A'



Example of correct connection.