

BOX M
CM1

MOTOR CONTROLLER



Universal single-phase
motor controller

SINGLE-PHASE MOTOR CONTROLLER

The BOX M CM1 motor controller is designed for single-phase motors up to 0.75 hp at 230 V AC.

SUITABLE FOR ALL KINDS OF DOORS AND GATES

This single-phase motor controller is ideal for sliding, sectional, shutter and roll-up doors.

- UNIVERSAL RADIO CARD SOCKET
- FIVE OPERATING MODES
- FLEXIBLE CONFIGURATION
- EASY TO INSTALL
- OPERATION INDICATOR LED

SMiNN

innovative in electronics

BOX M

CM1



OPERATING MODES

This motor controller features 5 operating modes in line with European standard EN1324-1:2003.

► Automatic

Enables the door to be closed after being fully opened and once the programmed automatic cycle is complete.

► Optional automatic

Allows the user to override the automatic cycle delay.

► Alternating (semi-automatic)

This mode allows the user to stop the door before it reaches its final position.

► Dead-man

This mode allows the user to open or close the door only while the relevant button is being pressed.

► Semi-automatic dead-man (semiautomatic)

This mode allows the user to open the door automatically by just pressing on the relevant button, and to close it by keeping the button pressed.

WIDE RANGE

Sminn offers a wide range of configurations to suit every need.

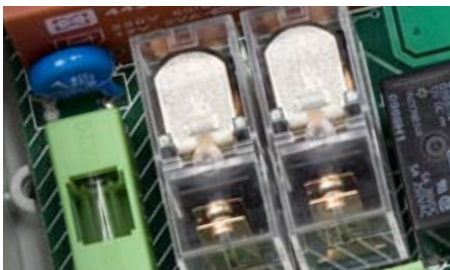
Reference	Limits switches	Garaje light	VDC output	Light barrier test	Terminal blocks		Plug-in
					Plug-in	Normal	
BOX M - CM1 / 20	-	-	-	-	-	Yes	2.8 W
BOX M - CM1 / 22	-	-	-	-	Yes	-	2.8 W
BOX M - CM1 / 30	-	-	Yes	Yes	-	Yes	5 W
BOX M - CM1 / 32	-	-	Yes	Yes	Yes	-	5 W
BOX M - CM1 / 40	-	Yes	Yes	Yes	-	Yes	5 W
BOX M - CM1 / 42	-	Yes	Yes	Yes	Yes	-	5 W
BOX M - CM1 / 50	Yes	Yes	Yes	Yes	-	Yes	5 W
BOX M - CM1 / 52	Yes	Yes	Yes	Yes	Yes	-	5 W



OPTIONS INCLUDED



Easily configured by using the options selector.



High power relays.



Analog time control.



Plug-in radio card socket.

▶ Light barrier test

By selecting this option, the unit tests the security edge and the light barrier that are connected to CSEG and BND before starting the operation.

▶ Power supply for peripherals

This connection enables the unit to power external devices such as light barrier.

▶ Garage light / Courtesy lamp

The unit has an auxiliary relay with voltage-free contacts for turning on garage or courtesy lights or a pre-flashing lamp of 100 W at max. 230 VAC.

▶ Pre-flashing lamp

This mode activates three light flashes before the door begins to close.

▶ Receiver card

The unit features a socket for an SMINN TRSH radio card, which allows the unit to be activated by remote control.

▶ Automatic limit detection

Using the FC AUT Jumper, the unit automatically detects external limit switches in the central axis motors.

▶ Limit switch control

The unit has a connection for detecting mechanical or magnetic travel limits.

▶ Independent activation input sockets

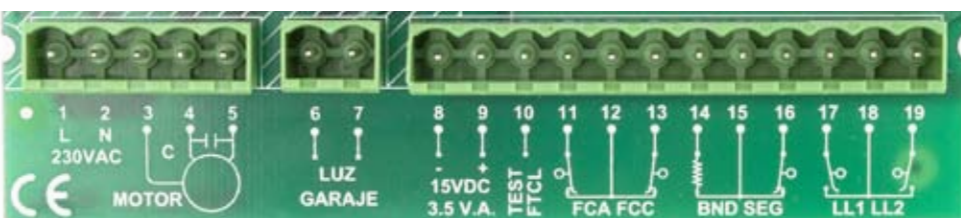
Independent connection for activation and closure in dead-man mode.

▶ Double times

Using the Tx2 Jumper, the time selected on the operation and automatic cycle time.

▶ LED light

LED light showing the state of all Inputs, relays and the automatic cycle.



Detail of the circuit printing on the PCB.



Easy to install

Manufactured in an ABS plastic box with high-grade IP-54 protection. Simple installation thanks to the following features:

- › Just three mounting screws.
- › Pre-threaded captive screws on the front cover.
- › Plenty of space for wiring.
- › Independent cable entry points for power and peripherals.

Configuration versatility

The BOX M CM1 can be configured in different ways, depending on the type of door or gate installed.

- › Function selector
- › Time control and potentiometer.
- › Automatic limit switch selector.
- › Universal radio card socket.

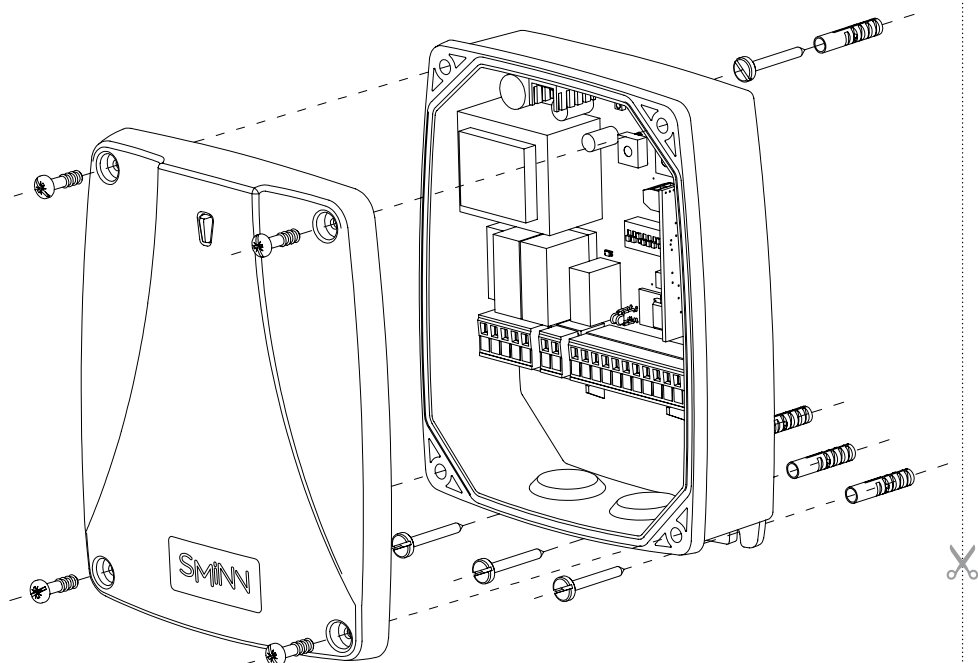
Maximum safety

Includes state of the art components and electronic systems that provide a greater degree of safety and functional reliability.

- › High-power relays for the motor.
- › Stabilised power supply.
- › Network transient suppressors.
- › Optocoupled inputs.
- › Protected voltage outputs.

TECHNICAL SPECIFICATIONS

Power	230 V AC (125 V AC optional)
Motor power	0,75 hp single-phase
Optional cards	Radio receiver
Time/security edge control	Analog
Option selector	Dip switch
Voltage output protection	Automatic reset fuse
External device voltage output	15VDC/0,3 A
Light barrier self test output	Negative 0,1A
Manoeuvre control inputs	5 optocoupled (FCA/FCC-SEG-LL1/LL2) 1 analog (Resistant safety band 8K2 Ohm)
Operational temp.	- 20°C / +85°C Industrial range
Permitted humidity level	To 85% RH
Cover	ABS
Size	H185 x W145 x Z65 mm
Weatherproofing	IP54 (IP-66 with cable gland)



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