

1. GENERAL FEATURES:

Control points: 3 points control;

Control: Via keys direct to the module or MD BUS;

Applications: Gradual Control for shutters, blinds and electric curtains;

Installation: DIN rail distribution Board;

Means of Positioning: Timing.

2. GENERAL SPECIFICATIONS:

Supply Voltage: 12VDC;

Consumption: 180mA @ 12VDC (With 3 relays active);

Storage Temperature: -10°C to 60°C;

Operating Temperature: 10°C to 50°C;

Maximum humidity: 80% non-condensing;

Operating voltage: 115/230VAC +/-10%;

Operating frequency: 50/60Hz;

Specifications Outputs:

Rated Current: 16A;

Rated load:

Resistive ($\cos \varphi = 1$):

16A at 230VAC;

16A at 30VDC.

Inductive ($\cos \varphi = 0,4$):

8A at 230VAC.

Switching capacity:

Resistive ($\cos \varphi = 1$):

20VA - 3680VA at 230VAC

480W at 30VDC.

Inductive ($\cos \varphi = 0,4$):

1840VA at 230VAC.

Warning: Outputs arc extinction by capacitor. Mains voltage always present at the outputs without load connected! Do not connect engines with a capacity of less than 20VA 115VAC / 230VAC.

Inputs Specifications:

Nominal voltage at inputs:

Low-voltage 5VDC;

Maximum allowable resistance of button contacts: 50Ω.

Physical Specifications:

Dimensions: 105mm X 90mm X 70mm DIN rail mounting (6 modules);

Box Plastic, self-extinguishing UL-94 V0;

Level of Protection: IP20, for indoor use.

Directives:



-Electromagnetic Compatibility Directive / EMC Directive 2004/108/EC

-Low Voltage Directive / LVD Directive 2006/95/EC

3. COMPATIBILITY:

PCCWd Compatibility: V3.2 or higher. Note that versions PCCWD V3.2, V3.31, requires BUS Adapter;

Mordomus Software Compatibility: Mordomus Software v2015.2 or higher;

4. SECURITY:

Before making any connections, please read these instructions carefully.

Never remove the plastic base from DIN rail.

High voltage always present in the output with no load connected!

Do not touch live parts. Voltages present within the module.

To access the interior of this equipment must first be disconnected from the mains.

5. CONNECTIONS:

And specification section of conductors:

Circuit Loads:

Mono-wire 2.5mm²;

Multi-wire 2.5mm²;

Circuit Bus:

CAT6 Cable F/UTP shielded, twisted;

Circuit Keys:

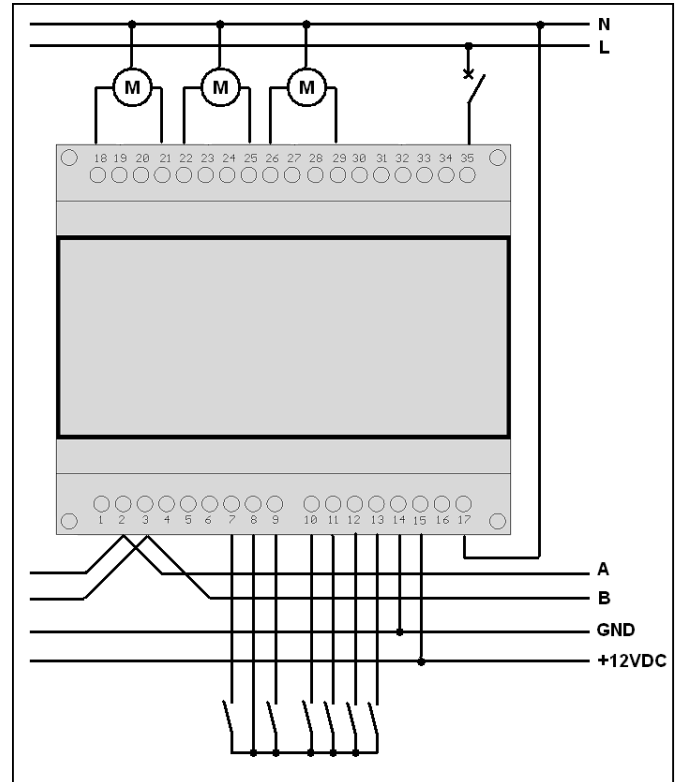
CAT6 Cable F/UTP shielded, twisted;

Power Circuit:

Mono-wire or multi-wire at least 0.75mm²;

Table of Connections:

Number	Function	Number	Function
1	GND	18	Phase Down Ch 1
2	MD BUS TX (A)	19	Phase Down Ch 1
3	MD BUS TX (B)	20	Phase Up Ch 1
7	Down Key Ch1	21	Phase Up Ch 1
8	GND	22	Phase Down Ch 2
9	Up Key Ch1	23	Phase Down Ch 2
10	Down Key Ch2	24	Phase Up Ch 2
11	Up Key Ch2	25	Phase Up Ch 2
12	Down Key Ch3	26	Phase Down Ch 3
13	Down Key Ch3	27	Phase Down Ch 3
14	GND	28	Phase Up Ch 3
15	+ 12VDC PSU	29	Phase Up Ch 3
16	Not connected	34	Supply of Motors
17	Mains Neutral	35	Supply of Motors


Connecting inputs:

Each of the inputs (7, 9, 10, 11, 12, 13) is to be connected to a normally open key contact/button, which in the case of being pressed, connects input to system GND (1, 8, 14).

Connect the outputs:

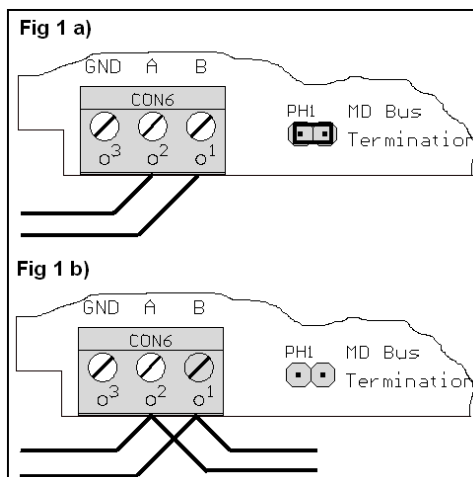
Connect the terminals up and down to the up and down at the motor.

When using low voltage motors or DC connection of the Neutral (17) is unnecessary and should be defined in Mordomus Software to the module operate in DC mode.

The power input (34, 35) of the motors must be protected by an automatic breaker adequately caliber to the loads connected.

Connect the 12VDC:

It is recommend the use of Mean-Well power supplies, DR60-12 and DR30-12.



In the case of the module is the last bus on the bus must be placed in jumper according to Fig 1 a) to close the chain BUS. In other situations should remain as in Fig 1 b).

6. ADDRESSING AND CONFIGURATION:

To assign the desired module to do the following:

1. Open the "Register modules" in the software Mordomus;
2. With power 115V / 230V disconnected, push button (Addressing) in module. The Green LED will blink slowly and the red LED will pulse once.

Note that after three minutes without having assigned a new address, the module automatically returns to normal.

3. Set the desired address in the window now displayed on Software Mordomus.

The chosen address must not be shared with another module.

4. Set individual parameters for each output. For more information about these settings see Help Mordomus Software.

7. FUNCTIONING:

Code of LEDs:

Green LED ON: Module powered;

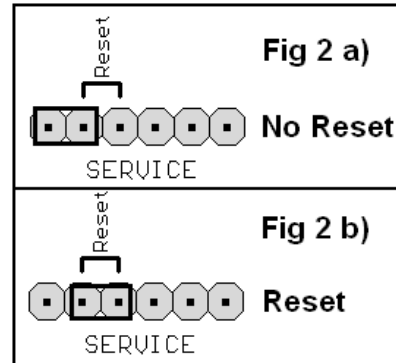
Green LED blinking briefly: Module receiving data;

Green LED blinking continuously: Module awaiting address;

Red LED blinking: module sending data.

12VDC power interruption:

When the 12V power supply is interrupted, the module sets the outputs (18, 19, 22, 23, 26, 27) to descend the motors connected to it by set time period. This behavior is optional and can be configured in Mordomus Software.



Reset: To perform a reset to the module, cut power supply 12VDC for a few seconds or place the jumper according to Fig 2 b) for about 3 seconds and put it back in its original position (Fig 2 a)).