

## **1. GENERAL FEATURES:**

Control points: 8 points of control;

Control: Via MD BUS;

**Applications:** Switching outlets, heating boilers, motors, lighting, switching loads in general;

Installation: DIN Rail Distribution Board;

## 2. GENERAL SPECIFICATIONS:

Voltage: 12VDC;

Consumption: 440mA @ 12VDC;

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 $\phi = 0,4$ ):

8A at 230VAC;

#### Switching capacity:

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

3680VA at 230VAC;

480W at 30VDC;

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

1840VA at 230VAC;

#### **Physical Specifications:**

**Dimensions:** 157mm X 90mm X 70mm DIN rail mounting, 9 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 PCCWD versions 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.

Do not touch live parts. High voltages present in module.

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

## 5. CONNECTIONS:

Thickness of conductors: Circuit Loads: Mono-wire 2.5mm<sup>2</sup>;

Multi-wire 2.5mm<sup>2</sup>;

Circuit Bus: CAT6 Cable F/UTP shielded, twisted;

Power Circuit:

Mono-wire or multi-wire at least 0.75mm<sup>2</sup>;

#### Table of Connections:

Number	Function	Number	Function
1	GND	34	Output Phase Ch5
2	MD BUS TX (A)	35	Output Phase Ch5
3	MD BUS TX (B)	38	Output Phase Ch4
22	GND	39	Output Phase Ch4
23	+12VDC PSU	40	Output Phase Ch3
24	GND	41	Output Phase Ch3
25	+12VDC PSU	42	Output Phase Ch2
26	Not Connected	43	Output Phase Ch2
27	Network Neutral	44	Output Phase Ch1
28	Output Phase Ch8	45	Output Phase Ch1
29	Output Phase Ch8	51	Network Phase In
30	Output Phase Ch7	52	Network Phase In
31	Output Phase Ch7	53	Network Phase In
32	Output Phase Ch6	54	Network Phase In
33	Output Phase Ch6		

If controlling highly reactive or inductive loads it must be placed a capacitor XCLASS X2 470nF/275VAC between terminals 51-54 (PHASE) and the output terminal of the load.







In case the module is the last position on the bus, jumpers should be placed according to Fig 1a) to close the BUS chain. In the case of bus lenght very long you may need only put the jumper Term. In other situations should remain as in Fig 1b).

#### Connect the Bus:

To connect the BUS should be used a twisted pair cable CAT6. For example: Green for  $\bf{A}$  and Green/White to  $\bf{B}$ . Shield should be connected to GND.

#### Connect the outputs:

In the case of using the OF8Wd for switching loads or low voltage DC, connection of the neutral (27) is dispensable and terminals (51-54) are to be connected to the power supply of loads. In Mordomus Software, the module must be set to operate DC mode.

The phase mains input of the module (53-54) must be protected by an automatic breaker adequated to the loads connected.

## Connect the 12VDC power:

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

# 6. ADDRESSING AND CONFIGURATION:

To assign the desired module to do the following:

- 1. Open the "Register modules" in the Mordomus software;
- 2. Pressing (Addressing) inside the 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 at the window now displayed on Mordomus Software.

# The chosen address must not be shared with another module.

4. Set the operation mode DC or AC. The AC mode is desirable for switching loads 115/230VAC.

The DC mode is recommended for switching loads DC.



## Firmware: V3.5

## 7. FUNCTIONING:

LED Code:

Green LED ON: Module powered;

Green LED blinking briefly: Module to receiving data;

**Green LED blinking continuously:** Module awaiting address;

**Red LED blinking:** module to sending data.

#### 12VDC power interruption:

After a 12VDC power interruption, each output will be set the previous state before power interruption.

Note that in AC mode, OF8Wd will only activate the output relays when the mains voltage is present at terminal 54 and neutral terminal 27.

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

