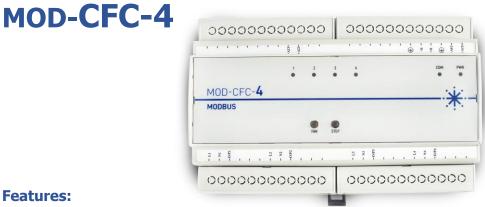




4 CH Ceiling Fan Controller-Modbus RTU Technical Documentation





Features:

- 4 Channel Ceiling Fan Controller .
- Control up to 5 speeds for each channel
- Manual output operation with push button .
- Total data saving on bus failure
- DIN rail mount assembly -
- Dimension: 142.3 (L) X 90.5 (H) X 62 (D) mm [8 DIN Units]
- DIP switch for Modbus RTU slave configuration
- No configuration software needed
- CE Mark

Manual Push Button:

- 1. FAN: Select Fan Channel to be operate
- 2. STEP: Change speed of fan from 0 to 5 .

| | General Produ | ict Specifications: | |
|-------------------------------|---|------------------------------|--|
| Device Type | Electric Operation Control Device | | |
| Main Supply | Voltage (typical) | 24VDC | |
| | Voltage Range | 18-30 VDC | |
| | Connection type | Pluggable Terminal Connector | |
| Other External Supply | 12VDC | | |
| Mains Voltage | 230VAC (50 Hz), + 10 % -20% | | |
| Communication Interface & | RS485 & MODBUS RTU | | |
| Protocol | | | |
| No. of Channels | 4 | | |
| Speed Control for each | Step 1 to 5 and OFF | | |
| Channel | | | |
| Maximum recommended | 90W | | |
| Load per Output | | | |
| Protection | Fuse protection on load side | | |
| IP Level | IP20 | | |
| Isolation | Isolation between I/O and Logic | | |
| Operating Temperature | 0 to 70 °C | | |
| Storage Temperature | -25 °C to +75 °C | | |
| Ambient Humidity Dimension | 5 to 95 % RH (no condensation) | | |
| Manual Test Facility | 142.3 (L) X 90.5 (H) X 62 (D) mm [8 DIN Units] | | |
| Certification | 2 Push button switches - 1. Select Fan 2. Select Speed CE | | |
| Certification | | | |
| Usage | Indoor, to be mounted inside distribution boxes or electrical panels with DIN rail | | |
| Power ON response | When power resumes, last fan speed and other settings will automatically apply | | |
| Operation Indicator | LED (RED) for DC power ON, Flickering Yellow LED to indicate communication, GREEN LEDS (4 no's) indicating fan channel selection | | |

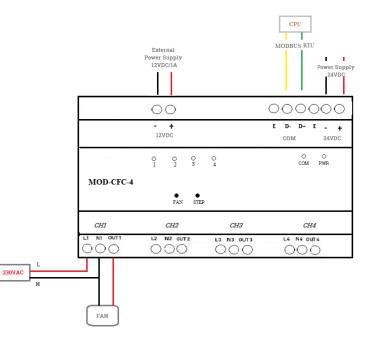
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WIRING DIAGRAM

| Modbus Communication Specifications | | |
|-------------------------------------|---|--|
| Protocol | Slave Modbus RTU | |
| Baud Rate | 9600,19200 | |
| Slave Address | 1-15 | |
| Data Bit | 8 | |
| Stop Bit | 1 | |
| Parity | None | |
| Response Time | <100ms | |
| Termination Resistance | 120ohms | |
| Control Registers | Holding Register 1 to 4 (Value- 0-5) | |
| Distance | Up to 1200m | |



Modbus Configuration DIP Switch Access

Steps:

1. Open the upper facia plate of the module.

2. Adjust the DIP switch according to requirements. Refer below image.

| DIP Switch | | | | | | |
|-------------|------------------------|-----|-----|-----|--|--|
| | Slave ID Configuration | | | | | |
| Slave ID | 1 | 2 | 3 | 4 | | |
| 1 | OFF | OFF | OFF | ON | | |
| 2 | OFF | OFF | ON | OFF | | |
| 3 | OFF | OFF | ON | ON | | |
| 4 | OFF | ON | OFF | OFF | | |
| 5 | OFF | ON | OFF | ON | | |
| 6 | OFF | ON | ON | OFF | | |
| 7 | OFF | ON | ON | ON | | |
| 8 | ON | OFF | OFF | OFF | | |
| 9 | ON | OFF | OFF | ON | | |
| 10 | ON | OFF | ON | OFF | | |
| 11 | ON | OFF | ON | ON | | |
| 12 | ON | ON | OFF | OFF | | |
| 13 | ON | ON | OFF | ON | | |
| 14 | ON | ON | ON | OFF | | |
| 15 | ON | ON | ON | ON | | |

| Termination Resistor Configuration | | |
|------------------------------------|------------|--|
| Termination (120 ohm) | DIP Switch | |
| | 5 | |
| ON | ON | |
| OFF | OFF | |

| Baud Rate Configuration | | | | |
|-------------------------|------------|--|--|--|
| Baud Rate | DIP Switch | | | |
| | 6 | | | |
| 9600 | OFF | | | |
| 19200 | ON | | | |
| | | | | |

SAFETY INSTRUCTIONS

- Installation should only be performed by qualified professionals according to the laws and regulations.
- Do not connect the mains voltage nor any other external voltage to any point of the Modbus connector; it would represent a risk for the entire system. The facility must have enough insulation between the mains (or auxiliary) voltage and the Modbus or the wires of other accessories, in case of being installed.
- · Keep the device away from water and do not cover it with clothes, paper or any other material while in use.



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