Please read this document carefully before using this product. The guarantee will be invalidated if the device is damaged by not following instructions detailed in the manual. The company shall not be responsible for any damage or losses however caused, which may be experienced as a result of the installation or use of this product.

## ENDA EFSC SERIES SINGLE PHASE FAN SPEED CONTROL

Thank you for choosing ENDA EFSC Fan Speed Controller
-4-20mA or 0-10V Inputtype.
-2A-4A-6A-8A AC Load current.

- Zero-Cross Control.
- CE marked according to European standarts.

The device should not be powered during installation. Installation and electrical connections should be carried out by technical personnel in accordance with the instructions in the user manual. It is intended for open PCB use and should be kept away from water

The EFSC series devices are single-phase fan speed control
 devices that can supply current ranging from 2 A to 8 A when connected to the main control unit. They are of the open PCB type, and the device dimensions may vary according to the current value (Table 3).

## ? $\begin{aligned} & \mathrm{R} \odot \mathrm{HS} \\ & \text { Compliant }\end{aligned}$

Table-1

| Product code | Nominal Current <br> at $40^{\circ} \mathbf{C}$ | Nominal Current <br> at $50^{\circ} \mathbf{C}$ | Input signal |
| :---: | :---: | :---: | :---: |
| EFSC-02-V | 2.5 A | 2 A | $0 \ldots 10 \mathrm{~V} D$ |
| EFSC-04-V | 5 A | 4 A | $0 \ldots 10 \mathrm{VDC}$ |
| EFSC-06-V | 7 A | 6 A | $0 \ldots 10 \mathrm{~V}$ DC |
| EFSC-08-V | 9 A | 8 A | $0 \ldots 10 \mathrm{VDC}$ |

Table-2

| Device Code | Nominal Current <br> at $40^{\circ} \mathbf{C}$ | Nominal Current <br> at $50^{\circ} \mathbf{C}$ | Input signal |
| :---: | :---: | :---: | :---: |
| EFSC-02-I | 2.5 A | 2 A | $4-20 \mathrm{~mA} \mathrm{DC}$ |
| EFSC-04-I | 5 A | 4 A | $4-20 \mathrm{~mA} \mathrm{DC}$ |
| EFSC-06-I | 7 A | 6 A | $4-20 \mathrm{mADC}$ |
| EFSC-08-I | 9 A | 8 A | $4-20 \mathrm{mADC}$ |

## TECHNICAL SPECIFICATIONS

| Supply Voltage | 230 V AC +\%10-\%20, $50 / 60 \mathrm{~Hz}$ |  |
| :---: | :---: | :---: |
| Rated Current (at $40^{\circ} \mathrm{C}$ ) | Refer to Table-1 and Table-2 |  |
| Current Value at $40^{\circ} \mathrm{C}$ and $50^{\circ} \mathrm{C}$ | Refer to Table-1 and Table-2 |  |
| Fuse Type and Rating | - EFSC-02 : 5x20mm 2.5A Time Delay <br> - EFSC-06 : 5x20mm 8A Time Delay | - EFSC-04 : 5x20mm 5A Time Delay <br> - EFSC-08 : 5x20mm 10A Time Delay |
| Power Consumption for 0-10V DC / 4-20mA DC | 1.5 VA |  |
| Connection | $2.5 \mathrm{~mm}^{2}$ terminal block |  |
| EMC | EN 61326-1: 2021 |  |

CONTROL

| Signal Type | $0-10 \mathrm{~V} \mathrm{DC}, \mathrm{4-20mA} \mathrm{DC}$ |
| :--- | :--- |
| Input Impedance | $180 \mathrm{k} \Omega$ for $0-10 \mathrm{~V}$ DC ,100 $\mathrm{for} 4-20 \mathrm{~mA} \mathrm{DC}$ |
| Min. Input Signal Amplitude | 5 V |
| Max. Input Signal Amplitude | 9.3 V |
| Operating Environment <br> Temperature | $-10 \ldots .50^{\circ} \mathrm{C}$ |
| Storage Enviroment <br> Temperature | $-20 \ldots .85^{\circ} \mathrm{C}$ |
| Operating and Storage <br> Environment Humidity | $10 \ldots . .90 \%$ (non-condensing) |

EFSC-T-01-240312

## DIMENSIONS




Table-3

| Device Code | h |
| :---: | :---: |
| EFSC-02-xx |  |
| EFSC-04-xx |  |
| EFSC-06-xx |  |
| EFSC-08-xx | 67.0 mm |

## CONNECTION

The input type of the device should be checked before providing power to the device.

## Device Calibration:

When powering the device, provide 10 V or 20 mA to the device input based on the input type, and short-circuit the calibration pin for 1 second. If the calibration value is correct, the device will output $100 \%$ in 1 -second intervals for 10 seconds. Once the time is completed, the device returns to normal operating mode.
If the calibration value is incorrect, the device output will be at $100 \%$ in 250 ms intervals. Provide the correct calibration value to the input, and the device will continue to output in 250 ms intervals until the calibration pins are short-circuited for 1 second, at which point the device will return to normal operation."


## INPUT - OUTPUT CHARACTERISTICS



Input (0-10V DC)


