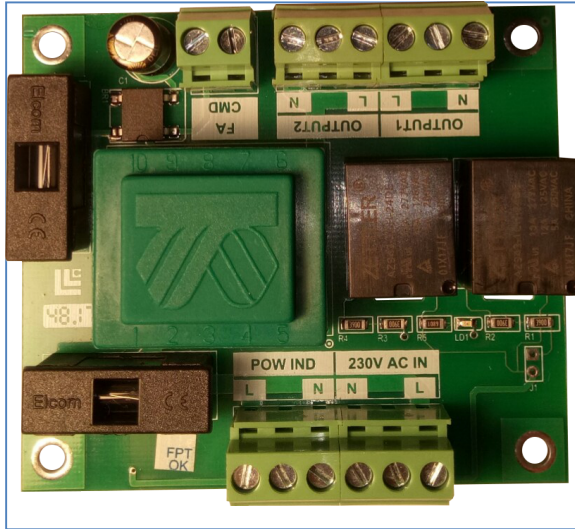


ESMSFD2

MSFD Interface Module



Introduction

ESMSFD2, the MSFD Interface Module, is a compact PCB relay module, which has been specially designed to be used in conjunction with a Fire Alarm module to drive Motorized Smoke/Fire damper. This module simply acts as an interface module between the FA control module and the damper modules; It does not process any algorithms or controls of the input or output. Any algorithm or control to energize the damper is to be processed by the FA control module.

Operation

The MSFD interface module operates directly by 230VAC mains supply. It has an on-board 24VAC transformer, which transforms the power supply that can be utilized by 24VDC relays after appropriate rectification. This rectified 24VDC supply is then passed through the FA control module's output to energize the on-board relay(s). On-board relays can be used for switching higher resistive/inductive loads with 230VAC@4A. The terminal blocks for the dampers are arranged in such a way that, the dampers' Line/Neutral wires can directly be connected to the terminal blocks.

Features

- On-PCB Transformer (Step-Down) to drive the relay.
- On-PCB Fuse holder for both AC230VAC in and 24VAC with 5x20mm, 2A fuse.
- On-PCB relays with 2 outputs: each output has independent Line/Neutral terminals.
- PCB Terminal Blocks for 230VAC supply, power indicator, outputs & FA trigger input (All terminals are for 2.5mm²).
- On-PCB LED indication for Relay "ON" status.
- On-PCB texts for all terminals such as "230VAC IN", "Output 1", "Output 2", "L", "N", "FA CMD", etc.,
- Direct panel mountable.
- Reduced assembly time.
- Smaller panel size: This module is very compact with on-board PCB and terminals, which helps to use a smaller enclosure for the assembly.
- Cost-effective: use of this module helps get rid of the bulky transformer and bulky terminal blocks, thereby making a significant cost-reduction.
- Easy on-site installation.
- On-board provision for "Damper-ON" panel indicator.

Product Specifications

Power Supply Input	: 230VAC Mains
Max Current Consumption (When dampers are not loaded/ not used)	: 20mA
Control Input	: VFC from the FA control module
Output type	: Power output, 230VAC
Output rating (Resistive)	: 4A @ 230VAC, 6A @ 125VAC
Mounting	: Direct on-to the panel
Relay type	: SPST

Connection

The image below shows the terminal designations of the MSFD interface module, ESMSFD2. One side of the board has terminals for relay drive inputs and damper outputs, while the other side has terminals for supply voltage and power indicator.

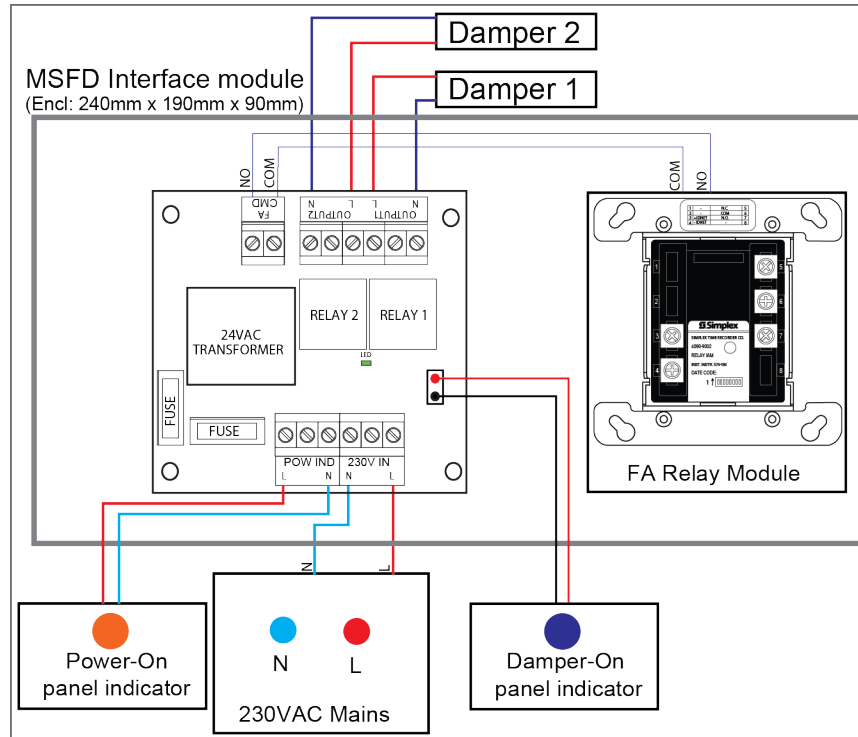


Figure 1: Example Connection Diagram of ESMSFD2

Warning

ESMSFD2 module is used to switch high voltage and therefore it is dangerous to work on the module when it is energized. Make sure power is isolated from the module before you start working on it.

ORDERING INFORMATION

ESMSFD2 : MSFD interface module with 2 damper outputs

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