

Failure Alarm (FA)

Specifications & Operating Instructions



The failure alarm option for the VS5100 VERSA-SWITCH® consists of a separate electronic circuit board that monitors critical functions of the VERSA-SWITCH® on a continuous, real time basis. This "watch dog" circuitry initiates an output alarm trip on channel two should a malfunction occur in any of the following:

- Sensors
- Field Wiring (remote)
- Sensor Excitation Electronics
- Sensing & Signal Conditioning Electronics
- Power Supply Regulator
- Electrical Power Source

Versa-Switch®Switch Option

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Operating Instructions



In normal operation, the channel two relay contacts are open and three yellow LED's are illuminated indicating an "Alarm Ready" status. If a failure occurs, the failure alarm relay contacts will close and one or more of the yellow LED's will be extinguished. The combination of "Off" and "illuminated" LED's will provide an indication of the probable malfunction. The column on the right side of this page indicates the possible light combinations and the potential malfunctions that they represent.

The failure alarm is a factory installed option. If you need a failure alarm option installed in an existing VERSA-SWITCH® the electronics must be returned to the factory for upgrading. This option is not available for the Microtuf® line of DELTA M switches.

Normal Operation







All LED's are illuminated. The failure alarm relay contacts are open indicating that the switch is functioning properly.

Failure Modes







All LED's are Off indicating a loss of power. The failure alarm relay contacts are closed indicating a fault.







Center LED is Off all others are illuminated indicating an electronic failure or low power voltage. The relay contacts are closed indicating a fault.







Center and right LED's are illuminated indicating that there is a hot sensor failure, electronic failure, or hot sensor wire failure. The relay contacts are closed indicating a fault.







Center and left LED's are illuminated indicating that there is a hot and cold sensor failure. electronic failure, or sensing wire failure. The relay contacts are closed indicating a fault.







Left and right LED's are Off indicating a cold sensor failure, electronics failure, or wiring problem. The relay contacts are closed indicating a fault. Form Number (DML1002.01)