General

The FMM-4-20 Analog Input Module allows the NFS2-3030 fire alarm control panel (FACP) to monitor industry-standard, linear-scale, 4–20 mA protocol sensors. The module converts the sensor output to communication protocol that can be interpreted by the FACP for monitoring and display. There are numerous sensors available in the marketplace that communicate using a 4–20 mA output, including gas sensors, temperature sensors, air speed sensors, and more.

Features

- SEMS screws for easing wiring
- Panel controlled status LED (bi-color)
- Analog communications
- Rotary address switches
- Low standby current
- Mounts in standard 4” (10.16 cm) junction box
- FlashScan® operation

The FMM-4-20 Module includes numerous safeguards and protective features to ensure trouble-free operation. The external power supply is isolated from the communication line. In addition, a 500 mA current limiter and a cutoff circuit protect the module’s electrical supply from short circuits. In the event of a short, the output voltage will cycle within safe limits until the short is removed. The output signal is sampled and filtered for transients and noise prior to passing the signal along to the FACP. If the current running through the sensing circuitry exceeds 25 mA, the output voltage will shut down and the short protection process will begin. The module accepts both 3-wire (device sink) and 2-wire configurations.

The NFS2-3030 panel with compatible firmware supports up to five programmable thresholds for each FMM-4-20.

As with all of Notifier’s intelligent modules, the FMM-4-20 Analog Input Module is rigorously designed and tested for electromagnetic compatibility and environmental reliability, in most cases exceeding industry standards. The device is equipped with a panel-controlled LED for local status indication. The standard SEMS terminals will accept wiring from 12 AWG to 18 AWG.

Ordering Information

FMM-4-20: Analog input module
FMM-4-20A: Same as FMM-4-20 listed for use in Canada.

Listings and Approvals

- UL Listed: S6646
- cUL Listed: S6646 (FMM-4-20A)
- FM approved
- FM6320 approved: Class 6320 for Gas Detection
- CSFM: 7300-0028:254

4–20 mA Sensor

4–20 mA Signal & Device Power

SLC & Device Power

FMM-4-20 Forming the Interface Between 4–20 mA Sensor and the NFS2-3030

NFS2-3030
Specifications

GENERAL SPECIFICATIONS
• Operating Voltage: 15 to 32 VDC
• Communication Line Loop Impedance: 40 Ohm max.
• Temperature Range: 14°F to 140°F (-10° to 60°C)
• Relative Humidity: 10% to 93% noncondensing
• Shipping Weight: 5.5 oz (156 g)
• Dimensions: 4.275” W × 4.675” H × 1.400” D (10.86 cm W × 11.87 cm H × 3.56 cm D)

CURRENT-DRAW SPECIFICATIONS
• Standby Current: 700 μA max. @ 24 VDC (one communication every 5 sec. with LED enabled)
• External Power Supply: 12 to 28 VDC
• External Supply Standby Current: 10 mA @ 24 VDC (nominal - module only, does not include sensor current)
• External Supply Sensor Current: 500 mA (maximum)
• LED Current: 6mA (with LED latched on)