

## MH-4000 Architects & Engineers Specifications

The control panel for the Fire Alarm Extinguishing Releasing System shall be the MH-4000 Control System manufactured by SAFETECH™ INTERNATIONAL, INC. of Lenexa, Kansas, USA. The control system and components shall be U.L. listed and F.M. approved for use as a local fire alarm system with releasing device service and suitable for pre-action sprinkler activation.

The system shall consist of a combination of the following modules: Detection and Control Module (DCM), model number MH-4000-DCM; Interactive Display Module (IDM), model number MH-4000-IDM; and Relay Module (RM4), model number MH-4000-R4.

The system shall be capable of providing detection and control for up to 39 hazards. The system shall be microprocessor based utilizing a distributed processing concept. A single microprocessor failure shall not impact operation of additional modules on the system. The system shall be capable of supporting Cross Zone and Sequential detection schemes per zone.

The DCM module shall supply an integral 2.0 amp power supply circuitry. Systems requiring multiple DCMs shall use a bus power concept to allow power sharing between modules for redundancy. Three initiating circuits shall be provided per DCM. Each circuit shall be capable of Class A or Class B operation. Each circuit shall be capable of operating up to 50 approved detectors with a maximum of 35 ohms line resistance. In addition to operating automatic smoke detectors, each circuit shall be capable of monitoring contact devices configured for manual release, manual alarm, system abort, trouble input, supervisory input, or auxiliary (non-fire) input. Each circuit shall have a user defined custom message.

Each DCM shall contain three indicating/release circuits for annunciation and activation of an extinguishing system. Each circuit shall be capable of Class A or Class B operation. Each output circuit shall be jumper selectable to operate as an indicating circuit, solenoid activation circuit, or an agent release circuit.

Each circuit shall be rated for 2.0 amps @ 24 VDC. Each circuit shall be protected from false activation by an intelligent transistor. Each circuit shall support a user defined custom message.

Each DCM shall provide an auxiliary power output rated for 0.5 amps @ 24 VDC. Each DCM shall provide a SPDT relay for common alarm and common trouble. Additional programmable relays can be added to each DCM by adding a RM4 Relay module.

Each system shall require at least one Interactive Display Module. The IDM shall provide an 80-character LCD display for system annunciation and configuration.

The IDM shall have dedicated LEDs for Normal AC, Alarm, Supervisory, Trouble, and Silence.

A 600-event history buffer shall be maintained on the IDM. Each system event including configuration changes, enabling and disabling system components shall be logged into history with a time and date stamp.

