System 3™ Control Module

ENGINEER AND ARCHITECT SPECIFICATIONS

MODEL HC-35
Release Module

- Cross-Zone Automatic Release
- Discharge Delay Timing Options
- Supervises Cylinder Pressure
- Confirms Agent Discharge
- Identifies Automatic or Manual Release
- Listed/ULC Listed, FM, CSFM and NYMEA Approved

Description

The Fire Extinguishing System Control Module HC-35 is used to effect, either manually or automatically, the discharge of Halon halogenated fire extinguishing agent, or other extinguishing agents as covered by NFPA 12/12A. It is Underwriters Laboratories, Inc. and U.L. Canada listed and Factory Mutual and California State Fire Marshal approved.

To assure continuous operation of the extinguishing system, the HC-35 utilizes the 24 or 60 hr battery back up provided by the System 3 control panel.

The HC-35 connects to 2 separate automatic initiating zones which are cross zoned, therefore, requiring both zones to be in order to activate agent release.

A shorting contact device circuit which accommodates manual station controls, series MH-501/517C is also provided for immediate or selectable time delayed agent release.

The HC-35 also provides for utilization of the Cerberus Pyrotronics AW-1 abort station. When the AW-1 is used, the HC-35 will provide various selectable system abort timing sequences.

Upon operation, a supervised agent release circuit, consisting of up to 4 series connected solenoids, automatically releases the extinguishing agent from the containers. This circuit is reset from the CP-35 control panel.

Three (3) red alarm LED’s are provided to identify means and confirmation of agent release as listed below:

1. Discharge LED, flashes during selectable time delay period then goes steady when solenoids are energized.
2. Manual Station LED, lights when manual release circuit is activated.
3. Manifold Discharge LED lights when pressure is sensed in the discharging piping. (Separate pressure switch is required.)

Four (4) yellow trouble LED’s are provided to indicate trouble in:

1. Release solenoid circuit.
3. The abort station (AW-1) circuit.
4. Low cylinder pressure (separate cylinder pressure switch required).

All LED’s can be lamp tested from the system control panel. The HC-35 module which occupies four (4) module spaces, is placement supervised and provides a system trouble signal when removed.
The module is also fitted with a manually operated Disconnect Switch which disables the release circuit during system test. When placed in the disconnect position, the control panel goes into the system trouble mode and the module trouble LED identified “Release Circuit” is illuminated.

The various timing options are listed as follows and set by dip switches:

- **Discharge Delay**: 0-60 seconds in 10 second increments
- **Abort Delay**
  - Option 1 - Operational only if activated before second zone is in alarm. Release of the abort switch after both zones are in alarm will result in the regular preselected Discharge Delay time.
  - Option 2 - Actuated at any time before the preselected Discharge Delay time expires, the release of the abort switch after both zones are in alarm will result in a delay of 10 seconds before the actual discharge.
  - Option 3 - Actuated at any time before the preselected Discharge Delay time expires, the release of the abort switch after both zones are in alarm will result in a continuation of the unexpired preselected Discharge Delay period before actual discharge begins.

*Note*: In options 1 and 3, the maximum delay period permitted by U.L. is 10 seconds.

- **Manual Station Release**
  - Option 1 - Actuation of a manual station release results in a discharge delay period equal to the period preselected for the Discharge Delay provided the delay selected was 30 seconds or less. Manual station activation has a maximum discharge delay of 30 seconds.
  - Option 2 - Actuation of a manual station release results in an immediate discharge regardless of the preselected discharge delay period.

### Current Requirement

**Standby:** 53mA  
**Alarm:** 1.6A for max. of 64 seconds followed by 106mA

### Engineer and Architect Specifications

The extinguishing system automatic or manual release module shall be a Cerberus Pyrotronics Model HC-35. This module shall be system interconnected by a ten-pin plug and harness assembly and shall be operated with and supervised by the main control panel.

The HC-35 shall provide a supervised agent release circuit capable of operating up to four (4) series connected solenoids (6VDC, 1.6 A each). The unit shall operate on the receipt of two (2) independent actuating inputs from cross zoned detection circuits, or by the actuation of any manual station release.

A supervised Disconnect Switch shall be provided to disable the release circuit for system test purposes. Disconnection shall cause identified trouble indications on the module as well as system trouble.

Three (3) red alarm LED’s shall be provided to indicate:
1. Predischarge (flashing) and discharge (steady)
2. Manual Station release actuation
3. Confirmation of agent release (pressure switch sensed)

Four (4) yellow trouble LED’s shall be provided to indicate:
1. Fault in the Manual Station release circuit
2. Fault in the Abort circuit
3. Fault in the solenoid release circuit
4. Low cylinder pressure (pressure switch sensed)

The module shall provide various timing options in each of the following listed operations:
1. Automatic actuation Discharge Delay
2. Abort Switch release Discharge Delay
3. Manual Station release Discharge Delay (30 second max.)

The module shall be U.L. and U.L.C. listed, and approved by Factory Mutual, California State Fire Marshal and NYMEA.

### Ordering Information

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<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Ship. Wt.</th>
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<tr>
<td>HC-35</td>
<td>Fire Extinguishing System Control Module</td>
<td>4.0 lb. (1.8 kg.)</td>
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See installation Instructions P/N 315-086659

*NOTICE*: The use of other than Cerberus Pyrotronics detectors and bases with Cerberus Pyrotronics equipment will be considered a misapplication of Cerberus Pyrotronics equipment and as such void all warranties either expressed or implied with regard to loss, damage, liabilities and/or service problems.