# SIEMENS

# Installation Instructions Models ZU-35/-35DS/-35TS Dual Zone Module

### Description

#### ZU-35

The Dual Zone Module Model ZU-35, is designed to provide two independent initiating circuits. Up to thirty standard Siemens ionization and photoelectric detectors or flame detectors (except model DF-3, DF-3A and DF-30) are supported by these modules.

Additionally, any quantity of shorting type contact devices such as manual stations and thermal detectors also can be accommodated and intermixed on each initiating circuit.

Screw Terminals are provided for each power limited circuit, in either NFPA Class A (Style D) or Class B (Style B.)

#### ZU-35DS

In addition to all the same features of the ZU-35, each zone is provided with a disconnect switch which will disable the zone. This action will cause a zone trouble and a system trouble signal until the switch is returned to normal.

#### ZU-35TS

The ZU-35TS is furnished with a 3 position momentary contact test switch for each zone. The normal switch position is in the center, one side position will test the zone trouble signal and the other will test a zone alarm signal. This is a requirement for US Coast Guard approval for use on marine systems, and the module is Coast Guard approved.

# **Electrical Ratings**

Supervisory: 31mA @ 24VDC Alarm: 272mA @ 24VDC

# Operation

Upon operation of a detector or shorting type device installed on the initiating circuit, the module will lock into an alarm condition, initiating the start of the sequential functions designed into the system. These functions may include sounding audible devices, operating alarm transmitters, closing doors, shutting down fans and equipment, recalling elevators, and other similar functions required for life and property safety.

In addition to the system alarm, a red Alarm LED, on the face of the dual zone module will be illuminated for that particular detection circuit. A trouble on either detection circuit will be similarly annunciated with a yellow LED, one for each circuit. The module supplies a current limited output signal for the circuit in alarm providing for activation of supplementary modules or annunciators.

The dual zone module occupies one module space in the System 3 rail structure and is interconnected via a ten-pin plug and harness assembly.

#### Installation

- 1. Mount the module to the horizontal mounting brackets in the control enclosure.
- Install the Model JA-5 (5 in long) bus connector cable assembly between receptacle P2 of the module and receptacle P1 of the module or control panel immediately preceding it in the bus.

**Note:** If the preceding module is on another row in the enclosure, a JA-24 (24 in long) bus connector cable assembly will be required.

- Modules are to be bus-connected from right to left. For two-row enclosures, the modules in the lower row are to be connected from left to right. Succeeding rows are to be alternately connected, right to left, left to right, etc.
- 4. If a module is the last module in the system, install either a JS-30 (30 in long) or JS-64 (64 in long) bus connector assembly from the unused receptacle of the last module to terminal 41 of the CP-35 control panel. This completes the module supervision circuit.
- 5. Wire the circuit(s) as described in the CP-35 Control Panel Instruction Manual (P/N 315-085063) *Installation and Wiring.* Refer to the Wiring illustration.

**Note:** If a zone is not used, the EOL device should be connected to the alarm initiating circuit terminals 2 and 3 (Zone 1) or 4 and 5 (Zone 2) of the module.

 If a supplementary relay module, annunciator, or other output module is used, then the alarm outputs, terminals 1 (Zone 1) and 7 (Zone 2), should be connected to these units.

#### Wiring Test

Refer to the CP-35 Control Panel Instruction Manual, *Installation and Wiring.* 

P/N 315-083222-18

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# **Typical Wiring**



#### COMPATIBLE DETECTORS

DETECTOR Compatibility Identifier	BASE Compatibility Identifier	INSTALLATION/ WIRING INSTRUCTIONS
DI-3/3H	DB-3S	P/N 315-081943-18
DI-A3/-A3H	DB-3S	P/N 315-081943-18
DI-B3/-B3H	AD-3I/3ILP	P/N 315-093234-6
	AD-3RI/3RP	P/N 315-086591-7
	SA-3I/3P	P/N 315-086593-6
DT-11	DB-11	P/N 315-095429-3
	DB-3S with DB-ADPT	P/N 315-095429-3
PE-11/-11T	DB-11	P/N 315-094198-9
	DB-3S with DB-ADPT	P/N 315-094198-9

ZU-35/-35DS/-35TS is the compatibility identifier

#### **INITIATING CIRCUITS**

Rated: 18.1–23.5 VDC, Unfiltered Full Wave Rectified Supv: 9mA

Alarm: 275mA

- 1. Total zone initiating circuit resistance is 36 ohms max (9 ohms per line).
- 2. Unused (spare) zones must have an EOL device connected.
- See individual detector for actual terminal connection numbers. Maximum
  of 30 detectors (any combination of those listed on the table at the right)
  are allowed per circuit. Also may use optional detector remote lamp or
  detector relay as indicated on the applicable detector instructions.
- 4. Positive and negative ground fault impedance threshold  $\leq$  40K ohms.