

READ THESE INSTRUCTIONS BEFORE YOU BEGIN INSTALLATION

■ PRODUCT APPLICATION

The ACI/SM-501 series duct smoke detector provides early detection of smoke and products of combustion present in air moving through HVAC ducts in Commercial, Industrial, and Residential applications. The ACI/SM-501 is designed to prevent the re-circulation of smoke in areas by the air handling systems, fans and blowers. Complete systems may be shut down in the event of smoke detection.

■ PRODUCT DESCRIPTION

Continuing to expand on the reliable design utilized in the previous duct units, the compact ACI/SM-501 contains 3 sets of alarm contacts. Namely, (2) sets of 10A form “C” alarm contacts and (1) set of 10A form “C” trouble contacts for monitoring detector head removal and supply voltage failure.

The pilot and alarm visual indicators provided on the front of the ACI/SM-501 duct unit, signal the operating status of the device. The Green pilot LED will be extinguished when the detector head is removed. A manual test/reset switch is located next to the visual indicators.

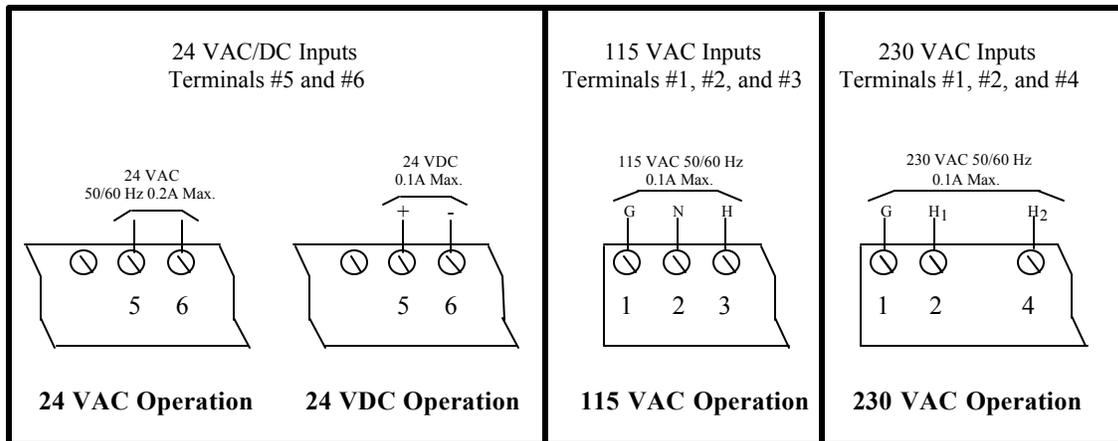
The ACI/SM-501 has been specifically designed to allow common detector functions to be linked between up to 30 detectors. Specifically, 30 units may be wired to use a common test/reset function, and to alarm when a single unit alarms. Also up to 15 units with signaling devices may be interconnected to operate with a single alarm.

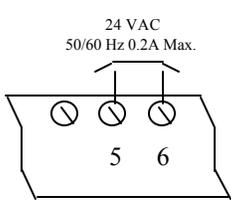
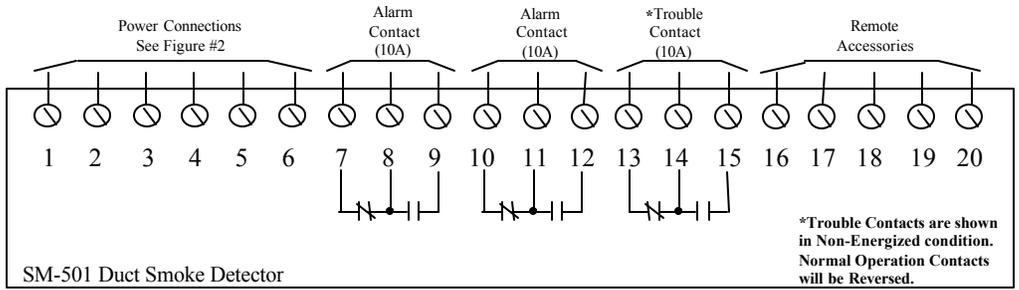
The ACI/SM-501 is designed and built to meet all local requirements, as well as the NFPA regulations regarding duct smoke detectors. Output terminals are provided for remote accessories such as a horn, strobe, remote status indicators, and reset key switches or push buttons. The Ionization and Photoelectric detector heads are interchangeable. Air sampling is accomplished by two tubes, which protrude into the duct. An exhaust tube of one standard length (7.5”) is supplied in the installation kit with the ACI/SM-501. Once the duct width has been determined, the air intake sampling tubes must be ordered. Sampling tubes are supplied in (3) standard lengths 2.5’, 5’, and 10’ and may be cut to size for smaller duct dimensions.

■ PRODUCT INSTALLATION

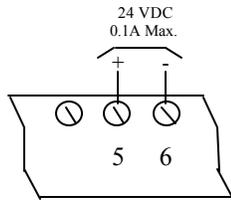
The sampling tubes may be cut to the proper size to fit the duct. Mounting the ACI/SM-501 to the duct is accomplished by the use of a template, and (4) sheet metal screws, which are provided with the unit. The unit may be mounted without removing the clear plastic cover, which is secured by (4) captive screws.

■ WIRING DIAGRAMS

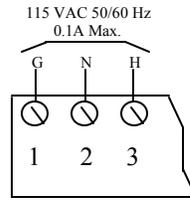




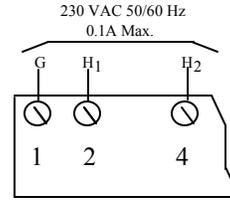
24 VAC Operation



24 VDC Operation



115 VAC Operation



230 VAC Operation