## **ADC105** Addressable Damper Controller For SIMPLEX ES Fire Alarm Systems



#### APPLICATION

ADC105 addressable damper controller meets NFPA 80 and 105 life safety remote damper testing requirements. The ADC105 is an addressable module that works with SIMPLEX ES fire alarm panels. With the ADC105 connected to a SIMPLEX fire alarm system, it allows continuous monitoring and alarm capability if something should go wrong. The ADC105 allows for the periodic testing that is required in NFPA 80 and NFPA 105.

ADC105 The ADC105 comes standard with a 5" x 6" handy box with 3' power and blade indication switch leads. The ADC105 is designed for easy installation within 3 foot of a smoke or combination fire smoke damper. Once installed any local power supply may be used to operate the damper. A 18 gauge twisted pair field wiring from another Simplex device will the addressable control on the ADC105 and damper assembly.

# Model ADC105 meets the requirements for smoke and combination fire and smoke dampers established by:

- National Fire Protection Association NFPA Standards 80, 90A, 92A, 92B, 101 and 105.
- ICC International Building Codes
- CBC California Building Codes



Typical Fire Smoke Damper with ADC105



COVER PLATE



IAM AND RELAY



MOUNTING PLATE



BASE

The ADC105 is supplied with 18 inch long blade indicator and power leads (not shown above) for easy installation and wiring to the damper.

## SIMPLEX ES PANELS

The Simplex ES system supports the supervision, reporting and control of the fire/smoke dampers. This information is available at the local panel and across the ES Network, including connected TSW workstations. The entire system is supervised providing increased reliability versus legacy system solutions.





## WIRING DIAGRAM



### ADC105 QUICK SPEC

The International Fire Codes (IFC) Section 706 "Duct and Air Transfer Openings" state in 706.1 Maintaining Protection states "Dampers protecting ducts and air transfer openings shall be inspected and maintained in accordance with NFPA80 and NFPA105. All fire, smoke and combination fire/ smoke dampers shall be tested prior to building occupancy, cycle tested again, following one year after occupancy and periodically thereafter. All life safety dampers shall be equipped with ADC105 addressable damper interface to facilitate communication and testing via a Simplex fire alarm panel.

The ADC105 interface shall continuously communicate damper health and status to the Simplex fire alarm panel. The ADC105 interface shall facilitate automated testing of all life safety dampers within the structure. Testing shall establish that all dampers will close during a fire/life-safety event and confirm that all dampers are open or in their normal positions during all other times. The ADC105 shall be installed by the contractor installing the life safety dampers and is included on all fire/smoke dampers at locations specified on plans, Electrician shall install and provide necessary power, including material and labor required for connections to the fire smoke damper through the ADC105 single-point power connections. Power shall be brought to each ADC105 interface enclosure and landed at that location on each damper. Work shall be coordinated with the Simplex installing contractor, fire smoke damper installing contractor and controls contractor.

The Simplex fire alarm panel contractor shall install specified cable and provide associated labor necessary for networking all components and programming the Simplex fire alarm panel for each ADC105 and its corresponding damper.

#### **1** LINKS TO IMPORTANT DOCUMENTS

**Document Title** 

Limited Warranty Document



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