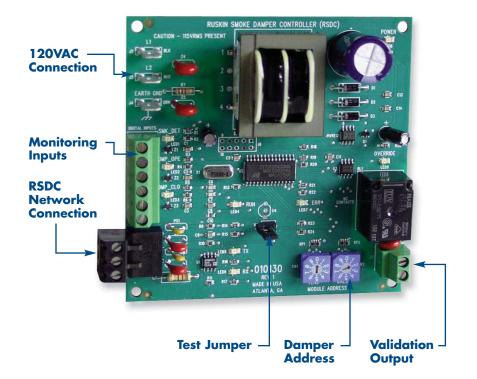
# **Ruskin Validat**Or

# RSDC - RUSKIN "SMART" DAMPER CONTROLLER

Ruskin, the HVAC industry's leading fire/smoke damper manufacturer, brings you the latest in fire/smoke damper technology. Ruskin Validator is a testing and maintenance System that includes the industries **first** fire/smoke damper integrated with communication capabilities. The Ruskin Validator System was developed to ensure HVAC life/safety systems provide protection for the life of the building. Periodic testing and verification of proper operation is vital to keep life/safety systems functioning properly. The RSDC (Ruskin "Smart"

Damper Controller) is connected to the fire/smoke damper and powered by a local 120VAC circuit. The RSDC is then connected to the Ruskin Gateway/Router (up to 99 RSDC can be connected to a single Ruskin Gateway/Router) which opens the door to seamless integration to Building Automation Systems via an open protocol port (N2, MODBUS, Lonworks, BacNET) and network connectivity (through a server) over LAN (Local Area Networks), WAN (Wide Area Networks) and/or the World Wide Web.



# **ADDITIONAL FEATURES & BENEFITS**

- Factory provided enclosure for easy access and mounting
- Pre-wired terminal strip for quick electrical connection
- UL 268A Listed
- Test jumper for start-up/troubleshooting damper operation
- Power, run, transmit, receive LED's
- Powered by local 120VAC circuit
- Monitoring inputs for smoke detector, damper open and damper closed switches
- Addressable smoke and fire/smoke dampers
- Validation output relay for damper testing

# ENGINEERS & ARCHITECTS VALIDATOR SYSTEM SPECIFICATIONS

Fire and smoke damper testing and maintenance system meeting the following specifications shall be furnished and installed where shown on the plans and/or described in schedules. The testing and maintenance system shall be comprised of three components; a damper controller for each damper, a gateway/router for each 99 controllers and a keypad/display through which the testing and maintenance system can be accessed. The testing and maintenance system shall also have the optional capability to connect to the Internet and be accessible via the world wide web.

The damper controller shall be factory installed in an easy access wall mount enclosure. The enclosure shall contain a pre-wired terminal with spade connectors on board for easy electrical connection to a local 120VAC power supply. The controller shall be UL 268A listed, addressable, and shall be capable of being connected to other controllers and the router using low voltage communication wiring via a EIA485 serial port. The communications wiring shall be flexible for routing and shall be twisted pair shielded cable.

The gateway/router shall be UL 916, CSA and CE listed and shall accept up to 99 controllers. It shall be factory mounted in an enclosure with the keypad/display for easy installation. The gateway/router shall include one Ethernet port, one open protocol port configurable for EIA-232 or EIA-485 and one EIA-485 serial port. The gateway/router shall be capable of seamless integration using a local area network (LAN), open protocol port and/or connection through a server to the Internet and accessible via the world wide web.

The keypad/display shall be UL 916, CSA and CE listed and (if used) shall be factory mounted in an enclosure with the gateway/router. The keypad/display shall allow the user to perform or initiate testing, view operation and view/reset alarms.

The fire and smoke damper testing and maintenance system shall continuously monitor each fire and smoke damper to verify that the damper is open. The system shall alarm if a damper closes for any reason other than a test or if a smoke detector, used in conjunction with the damper, goes in to alarm or if a damper fails to go full open or full closed. The system shall allow tests to be fully automated or manually performed through the keypad/display unit. Automated tests shall have the capability of being varied to meet local requirements. Dampers shall be tested one at a time with a minimum one minute time delay between each damper test to avoid havoc in the building. The fire and smoke damper testing and maintenance system shall be the Ruskin Validator System.

### RSDC SPECIFICATIONS

### **Power Requirements**

120 Volt AC, 50/60 Hz

#### Communication

One (1) Serial port, EIA485

## **Environmental Operating Range**

0°F to 130°F, 10% to 90% relative humidity, non condensing

#### Inputs

Damper Open (dry contact)
Damper Closed (dry contact)
Smoke Detector, optional (dry contact)

#### **Approval**

Underwriters Laboratories Listed (UL268A)

#### **Mounting**

Factory mounted in easy access UL approved screw panel NEMA 1 rated enclosure

#### **Dimensions**

RSDC - 4" W x 4" H x 1.5" D (10.2 cm W x 10.2 cm H x 3.8 cm D) Enclosure - 10" W x 10" H x 4" D (25.4 cm W x 25.4 cm H x 10 cm D)



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