SmartOne® Dual Addressable Relay Output Device (AO)

Kidde Fire Systems

Effective: March 2022

FEATURES

- *New generation SmartOne® module design*
- *Dual Address to Activate Two Independent Relay Outputs*
- *Full Digital Communications*
- *Control-by-Event And/or By Time Operation*
- *Unpowered, SPDT Relay Contacts*

- *Addressable Control Point*
- *Status Indicator on Device*
- *Unique Internal Supervision*
- *cULus Listed*
- *FM Approved*
- *California State Fire Marshal Listed*

DESCRIPTION

The Dual Addressable Relay Output Device (AO) is a SmartOne® field device for control of auxiliary equipment such as air handlers, door release and elevator recall. This intelligent device contains its own micro-processor and memory, and all necessary electronics to provide standard Form "C" dry contact type output. The Dual AO has two SLC addresses and can activate up to two relay outputs. It is connected via the SLC communication line of the following SmartOne-compatible control units:

COMPATIBLE CONTROL UNITS

Fire Alarm Control Unit (FACU) Type	Current Product	Legacy Product
Single Loop	ARIES®-SLX	ARIES® FENWALNET™ 6000 MICRO SLX PEGAsys™* FENWALNET™ 2000*
Multi Loop	ARIES®-MLX	ARIES® NETLink FenwalNET™ 8000-ML MICRO MLX PEGAsys™* FENWALNET™ 2000*

*FACUs running software revision 82.4 are compatibility-tested but not agency listed with the device(s) in this data sheet.

SUPERVISION

The Dual AO is fully supervised and continuously monitors the integrity of the following: Contact position, Power/Communication voltage, Internal power supply, Memory status, and Device/ Panel Communication. An internal set of relay contacts provides feedback on the Form C output relay positions. If a relay contact fails to operate at the appropriate time, the device transmits a Trouble status.

STATUS LEDs

Two status LEDs are mounted on the device and indicate the relay set or reset status by a 2 or 9 second flash interval. A Trouble condition inhibits the status LEDs completely.

FIELD PROGRAMMING AND INSTALLATION

The Dual AO is interchangeable with existing Addressable Output modules in the field. The module includes two consecutive Signaling Line Circuit (SLC) addresses: the first is user-selected and the second is automatically incremented by "1". The first address is set in the same manner as all SmartOne devices using the SmartOne Hand-held Programmer. The Dual AO must be installed in the same room as the device(s) it is controlling or must be connected in conduit within 20 feet (6 m) or less in length from the device(s) it is controlling.

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SPECIFICATIONS

Operating Voltage Range:	24VDC (nominal)
Device Current: (for all operating conditions)	400 µA Max
Operating Temperature Range:	-31 TO 151ºF (-35 to 66ºC)
Operating Humidity Range:	0 - 95% R, non-condensing
Environment:	Indoor Use Only, Dry Locations
Construction:	Flame Retardant ABS
Shipping Weight:	8 oz. (200 g)
Dimensions: (with bracket, ready to be mounted in gang box)	4.0 in. (L) x 1-13/16 in. (W) x 1-13/16 in. (H) 102 mm (L) x 46 mm (W) x 46 mm (H)

Compatible Electrical Boxes: (listed to applicable standard(s) for electrical construction)
North American 1-Gang Box with Metal Cover or Standard 4 in. Square Box with Metal Cover (or other similar grounded metal enclosures). The depth and volume of the box is to be determined per Article 370 of the National Electrical Code. The volume of the device is 5.25 cubic-inches.

Resistive Contact Rating: Form C (SPDT)	2.0 A @ 30 VDC 0.5 A @ 125 VAC
Inductive Rating: (Motor Control)	1.0 A @ 30 VDC (0.6 PF)
Pilot Duty:	0.6 A @ 30 VDC (0.35 PF)
EMI Immunity:	Meets UL864
Wire Sizes:	14,16,18 AWG acceptable

ORDERING INFORMATION

Description	Part Number
Dual Addressable Relay Output Device (AO)	70-528004-001
Note: P/N 70-528004-001 includes: – Dual Addressable Relay Output Device – Installation Bracket — Nonconductive sleeving	
Installation Bracket	06-237614-001

400 Main Street
Ashland, MA 01721 USA
Tel: (508) 881-2000
kiddefiresystems.com