



### **DIN12 – Full Specification**

Supply voltage:	230V ac 50Hz 250mA max. or 24V ac/dc 1.5A max.
Output x 1:	230V ac 200mA 24V ac/dc 600mA
Inputs x 2 :	5V dc 2mA to volt free contacts
Fusing:	PCB mounted thermal re-settable
Communications driver protection:	3kV ESD protected Short circuit proof Thermal shutdown
Timers:	Damper opening timer 120s Damper closing timer 20s Comms fault watchdog 8s
Enclosure dimensions:	180x110x60mm
Material:	Polystyrene
Flammability rating:	Self extinguishing to UL 94
Colour:	Light grey with smoked transparent lid
IP rating:	55
Environment:	0-70° C ambient 80% RH non condensing
Cable entry:	5 x cable glands fitted

## **Principles of operation**

### 1. Prior to commissioning

The DIN 12 will upon power being applied supply power to the output. This enables airflow balancing to be undertaken prior to damper control commissioning. If the un-powered state is required then power is removed.

### 2. Commissioning

The unit is configured either through local programming or via the touch screen panel with parameters including the unit address, type, membership of zones and override groups.

### 3. Operation

Providing the DIN 12 receives a constant stream of 'no fire' messages the output will remain in its normal state according to the type it has been programmed to. On receipt of the 'fire' message the output is switched according to type. Failure to receive a 'fire' or 'no fire' message for 8 seconds will always result in the output being turned off (failsafe).

Two inputs are reserved for the driven and un-driven limit switches on the actuator. The DIN 12 transmits a message to the panel indicating the status of these switches, along with the damper type. The panel will then display this as 'open' or 'closed' accordingly. If the limit switches are not made after the timeout period the DIN 12 will transmit a fault message.

On the DIN 14 the third input is reserved for a local smoke detector input and the fourth for a local test switch. DIN 14 options must be specified when ordering.

Damper types:	1 normally driven open, close on fire
	2 normally driven closed, open on fire
	3 normally closed, drive open on fire
	4 normally open, drive closed on fire

Types 1 & 3 are fail safe closed, types 2 & 4 are fail safe open.