



## Supply Air Controller

### B1668-230 & B1668-24

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#### General

The supply air controller is designed to meet the requirements of the Australian Standard AS1668.2. The basic application is to provide standalone control of supply air fans. This is achieved by using the controller in conjunction with a duct probe housing (6377) and conventional photo-electric smoke detector with a conventional detector base (4352) + (2324).

The supply air controller provides a single alarm detection circuit which is continuously supervised for short and open circuit fault, normal and alarm conditions, it reports the status accordingly.

The smoke detector circuit requires 3K9 end of line resistor. The controller incorporates both alarm and fault test facilities to assist with commissioning and maintenance.

The Supply Air Controller is available in 2 models:

**B1668-230:** Powered from a 230VAC supply.

**B1668-24:** Powered from 24V dc supply, typically from conventional CIE.

The duct probe housing is mounted on the outer surface of the supply air duct. Sampling tubes are placed through the duct and into the air flow. Sampling tubes can be selected to suit the duct dimensions. The sampling tube, through a venturi effect, samples the supply air passing through the

duct, the smoke is drawn into the smoke detector chamber.

The alarm relay contact provides the interface to the mechanical services panel (HVAC) which in turn shuts down the supply air fan. When the smoke level reduces below the alarm threshold, a 60-75 second post alarm timer starts to ensure the supply air remains smoke free. At the end of this post alarm period the detector resets and the alarm relay de-energises sending a signal to restart the supply air fan.

#### Features

- Supervised detector circuit
- Output for remote indicator (RIL).
- Facility for ALARM and FAULT TEST
- Indicators for Power, Controller Status, Alarm and Fault
- Alarm Output - relay change over contacts rated at 240Vac / 5A.
- Fault Output - Relay Contact rated at 30V / 1A
- Auxiliary Output Supply (Fused 24Vdc 250mA).
- Cable glands supplied as standard. (cables 6-12mm diameter)
- Clear cover for viewing status indicators
- Mounting feet, screws and cover seal

## Specifications

LED	Function	Status
Status	Nomal Post Timer active Detector reset, power off Detector reset, power on Fault condition	OFF Flashing 0.1S ON, 0.9S OFF Continuously flashing Flashing 0.5S ON, 0.5S OFF Continuously on

Product Code	
B1668-230	Standalone Supply Air Controller
B1668-24	24V Supply Air Controller

## Specifications

Function	B1668-230	B1668-24
Supply Voltage	230V AC	24V DC
Operating Voltage	24V DC	24V DC
Operating Voltage Range	20 – 28 Volt DC	20 – 28 Volt DC
Quiescent Current	20mA (fault relay is normally energised)	20mA (fault relay is normally energised)
Alarm Current	60mA	60mA
EOL Resistor	3k9 Ohms; 0.6 Watt	3k9 Ohms; 0.6 Watt
Smoke Detector	4352 Photoelectric Detector	4352 Photoelectric Detector
Fault Relay	1A @ 30Vdc	1A @ 30Vdc
Alarm Relay	5A @ 240Vac / 5A @ 30Vdc	5A @ 240Vac / 5A @ 30Vdc

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All technical features and data are subject to changes without notice, resulting from continuous development and improvement.

Product Leaflet	Date of issue	Revision / Date of revision
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