

AVON AIR HANDLERS

for more information see
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Avon AIR HANDLERS, HEATED & UNHEATED

Avon Electric Ltd manufacture air handlers for a variety of applications: recirculating heating systems, fresh air ventilation systems, combination fresh/recirc systems, exhaust systems, process heating & drying.

Various capacities available to custom design systems for NZS4303 compliance. Available in for indoor or outdoor installation, in a number of formats to accommodate a variety of building types,

STANDARD FEATURES

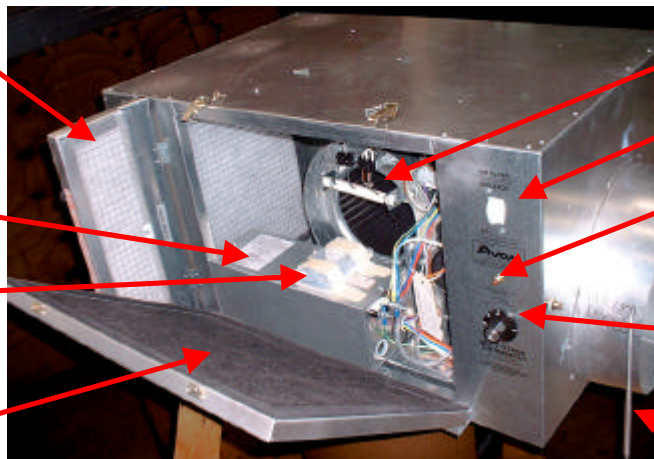
- AS/NZS 1668 Pt 2 & AS/NZS 3350.2.30:1997 compliant.
- Dedicated fusible link on each element, to interrupt each element circuit, not a contactor coil - the ultimate protection from commercial risk.
- Diaphragm air pressure switch, fan run-on & manual reset (with external IP54 reset button) overtemp thermostats
- User friendly labeling and engraved remote controls to your specification.
- Forward curved, multi-speed, direct drive blower on a quiet resilient mount (100 l/s - 10,000 l/s)
- Open wound heating elements 1kW - 200kW or specify finned coil (water or DX coil)
- Control box has contactors (S/state optional) and fused control circuit, fully pre-wired up to and including integral On/Off switch and terminals for remote controls to your specification.
- Thermally and acoustically lined cabinet fabricated from galvanised steel, access panels are nitrile gasketed with lockable toggle clamps
- Supplied with factory run test report, detailed instruction operating/maintenance manual and wiring diagram

Easily accessible air filter tray with disposable filter media

Terminal compartment - for all external connections.

Engraved remote control panel (supplied loose)

Thermal and acoustic insulation



Double inlet, forward curved, centrifugal fan

Local On/Off switch

Overtemperature thermostat reset button

Multi-stage automatic thermostat (air off)

Air off thermostat sensor (for in-duct installation)

FILTERS

Without air filtration all hot air heaters will accumulate dust, creating a fire hazard.

Avon air handlers are fitted with an integral air filter consisting of galvanised steel frame with disposable filter media. Available in grades EU1 - EU5 (higher on request).

The filter media must be replaced regularly (time interval is dependant on site conditions), this service should be implemented as part of the routine building maintenance and can be undertaken by unskilled personnel.

As with all electrical equipment a regular internal service check by a registered electrician should also be scheduled.

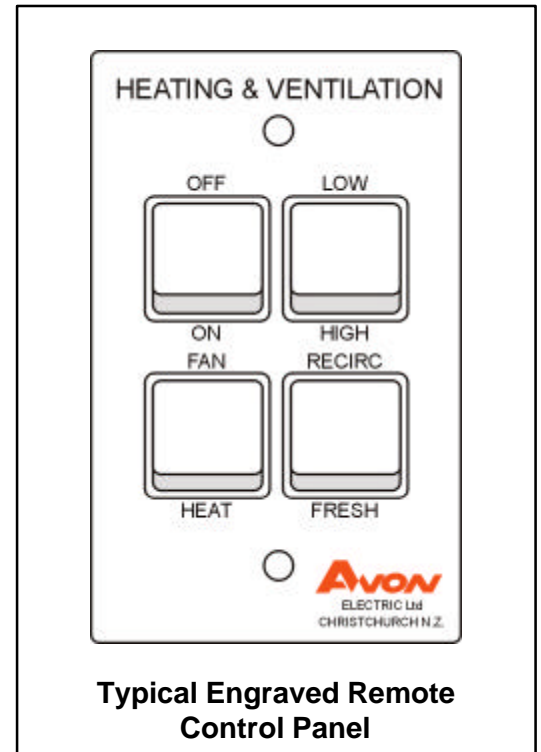
CONTROLS

AVON air handlers are supplied pre-wired up to and including a three pole local On/Off switch. All internal controls are pre-wired to a terminal compartment within the air handler for connection to any remote controls as may be specified (remote thermostats, BMS, etc).

A permanently engraved remote control panel (PDL 600 series switchplate) is supplied loose for installation in a convenient location

OTHER OPTIONS INCLUDE:

- Painted finish or stainless steel (#304 or #316) cabinet
- Indoor or outdoor installation
- Airflow horizontal or vertical, updraft or downdraft
- Any configuration of inlet/outlet spigots
- Service and filter access panels on top, bottom or side
- Air filter pleated type or panel type with reusable frame
- Duct mounted or remote multi-stage electronic or diaphragm thermostat
- Ultra-quiet models



Typical Engraved Remote Control Panel



Weatherproof supply air handler



Wall mounted exhaust air handler

HEATING ELEMENTS

Standard AVON heated air handlers are supplied with AVON **ELECTRODUCT** open coil heating element banks.

Avon air handlers can also be designed to incorporate finned tube elements, water or refrigerant coils as may be necessary.

ELECTRODUCT elements deliver almost instant & evenly distributed heat, cause almost no restriction to air flow, and enable very large *capacity to space ratios* to be easily achieved.

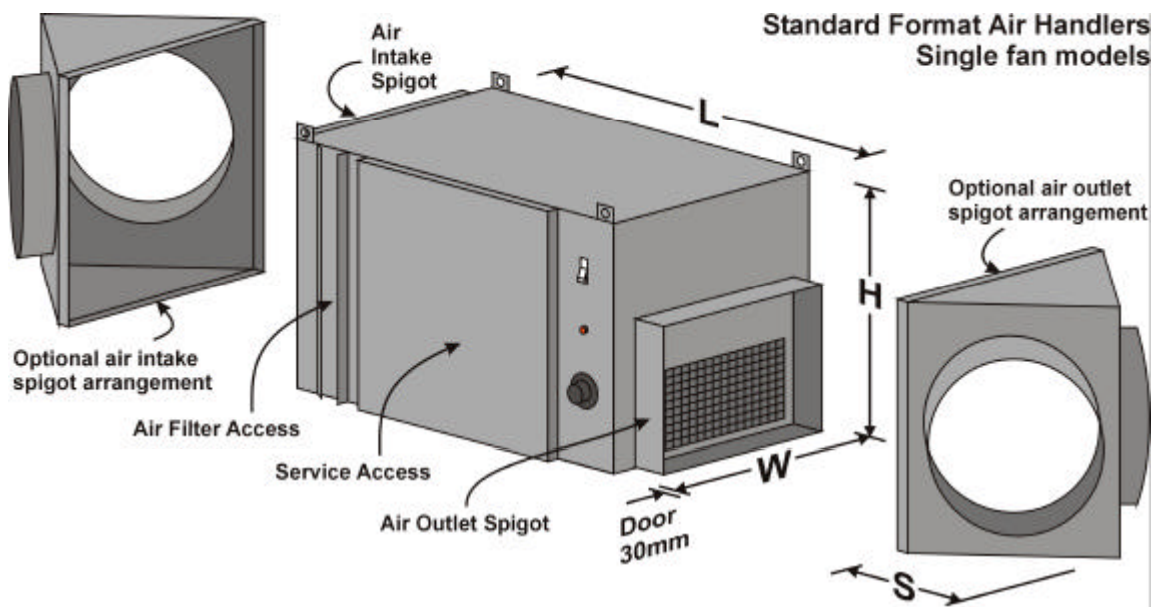
ELECTRODUCT elements do not suffer earth faults due to dampness & condensation (even if saturated).

SAFETY

Who can guarantee that a contactor, controlled by a manual reset over-temperature thermostat will open when the coil is de-energized by the thermostat? If a jammed contactor causes a fire, the system did not comply with AS3102, or the durability provisions (possibly 15 years) of the NZBC Section B2.

Because jammed contactors cause fires the individual elements in every **ELECTRODUCT** element bank have a dedicated fusible link as "back up protection of last resort". A safety failure in a heater can result in litigation & cost your business.

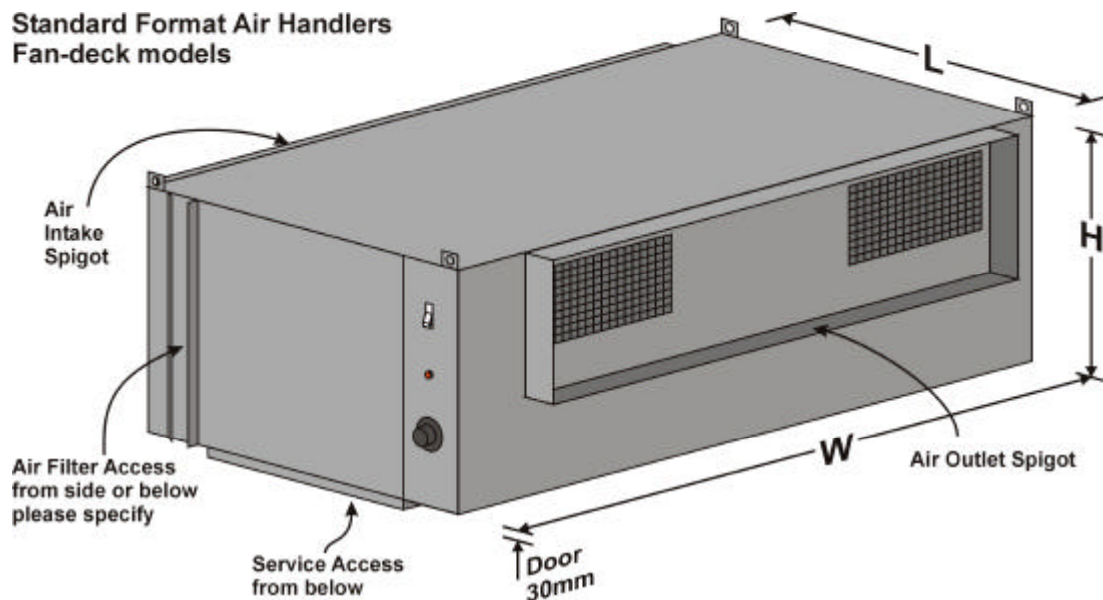
AVON Electric Ltd has never had an insurance claim due to product malfunction



Avon Fan Model	Max Fan Capacity (l/s)	Available Heating Range (kW)	Approx Dimensions (mm)				Approx. Weight (kg)
			L	H	W	S	
039	515	3 - 12	850	450	550	275	39
058	905	6 - 18	900	500	670	335	45
030	1135	12 - 24	1050	500	750	375	55
360	1285	12 - 24	1050	500	750	375	55

For unheated or exhaust air handlers dimension **L** can be reduced by 200mm

**Standard Format Air Handlers
Fan-deck models**



Avon Fan Model	Max Fan Capacity (l/s)	Available Heating Range (kW)	Approx Dimensions (mm)				Approx. Weight (kg)
			L	H	W	S	
TDI	575	3 - 12	800	285	1000	N/A	
041	1280	12 - 24	850	335	1100	N/A	
521	1700	12 - 48	950	420	1200	N/A	
541	2180	12 - 48	950	420	1350	N/A	

For unheated or exhaust air handlers dimension **L** can be reduced by 200mm