



Compact, high-power axial fan for car parks

Designed with car parks and underground structures in mind, Airvent's Sentry is a compact solution that can replace traditional ducted ventilation.

Suitable for relieving build-up of harmful gases in day-to-day use and directing smoke toward extraction points in the event of a fire, the Sentry produces a high velocity jet which adds momentum to the air in front of the fan, imparting thrust to the surrounding air via mixing and entrainment as it diffuses. The Sentry is also available with a truly reversible motor.

The small size increases ceiling clearance and reduces clutter and obstruction to CCTV cameras in the car park. The fan is powerful enough to operate in situations where there are structural obstacles to airflow such as pillars and downstandings.

Materials

Manufactured to the European Standard EN12101-3:2002, Airvent's Sentry can operate in ambient temperatures up to 40°C, and can be relied upon in a fire event to operate for two hours up to 300°C.

The impellers are constructed from pressure die cast aluminium (LM24) and aluminium alloy (LM6), dynamically balanced to ISO Grade G6.3. Casing is robust sheet steel hot dipped galvanised after fabrication to BS 729. Motors are totally enclosed, airstream cooled, metric frame protected to IP55, with the complete units being manufactured to BS EN ISO 9001:2000. Accessories and colour variants are available.

Application

- > Enclosed Car Parks
- > Tunnels
- > Underground Structures

Our range



Specification

The Sentry range comprises multiple thrust types, suitable for ambient temperature operation (at 40°C) plus a one off operation at 200°C or 300°C for 2 hour high temperature smoke conditions to European Standard EN12101-3:2002.

Impeller

Adjustable pitch aerofoil section impellers are provided with blades made from high quality pressure die cast aluminium alloy (LM6). Hubs are made from pressure die cast aluminium (LM24). The assembled impellers have their blades positively locked by pinning, which provides added security for operation in the smoke regime.

Impellers are dynamically balanced to Grade G6.3.

Silencers

Integral inlet and outlet silencer are mounted to either side of the fan housing, with an integral bell mouth to provide reduced sound levels and optimal performance. Silencers are constructed from pre-galvanised sheet steel outer and pre-galvanised perforated sheet inner lining.

The inlet silencer has a zinc plated guard attached, whilst the outer silencer has a deflector fitted to guide the air in the direction required.

NOTE: All accessories for these units are incorporated during testing to ensure accurate thrust test figures are obtained from our thrust rig.

Casing

Sentry fans are of robust, heavy duty construction for added strength and durability. Fan casings are heavy gauge, sheet steel, roll formed, welded and hot dipped galvanised after fabrication to BS 729.

The integral 4-Point mounting feet allow the unit to be mounted easily to the ceiling.

Motors

Motors are totally enclosed airstream cooled, metric frame protected to IP55.

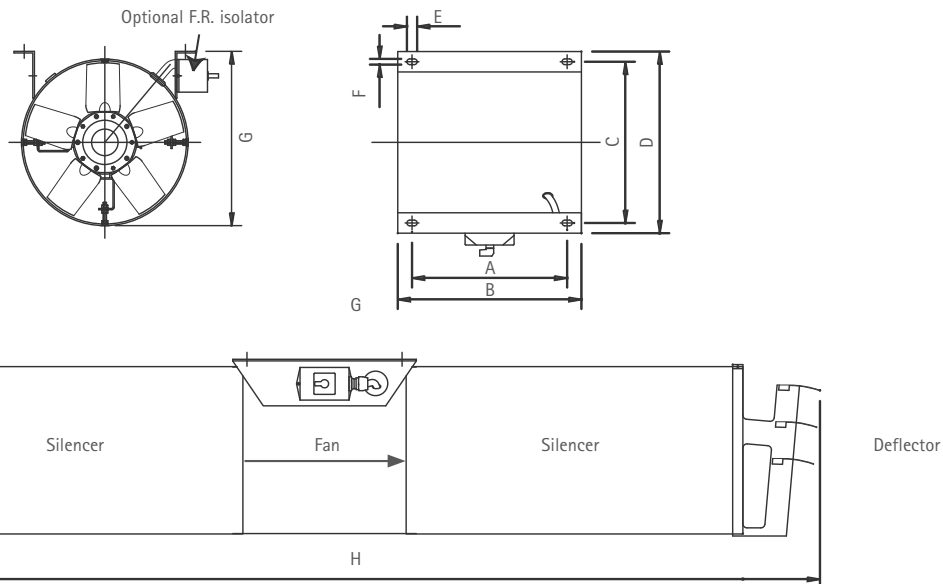
Motors have Class F or Class H insulation and are rated for normal continuous duty at 40°C and once only emergency operation in smoke conditions of 200°C or 300°C for 2 hours.

Motors are either single speed or two speed with a truly reversible motor option.

Quality management

Units are designed and manufactured with procedures as defined in BS EN ISO 9001:2000.

Uni directional



Product Code	A	B	C	D	E	F	G	H	Weight Kg	Speed r/min	Motor Power kW	FLC Amps	SC Amps	Absorbed Power kW
JVSU-CPA-315 2-3	380	450	350	400	25	14	335.5	1990 (max)	65	2960	0.80	1.91	11.46	0.45
JVSU-CPA-400 2/4-3	380	450	395	445	25	14	427	2880 (max)	75	2855/1448	1.30/0.28	2.41/0.75	14.50/2.85	1.02/0.16

Technical modifications reserved

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