HIGH CAPACITY & SMOKE-SPILL SERIES



DESCRIPTION

The High Capacity (HC) and Smoke-Spill (SS) Series of vertical exhaust axial roof ventilators have been designed for use in commercial and industrial applications. They are built to handle clean air, toxic, noxious and explosive gases as well as handling air at elevated temperatures. There are 10 sizes in the series extending from 500 to 1800mm diameter.

Typical Applications

The HC model exhausts air from a wide range of commercial and industrial installations, ranging from clean air through to toxic, noxious and explosive gases. The SS model is designed for high temperature air exhaust applications.

Features

- Robust and durable galvanised steel construction.
- Adjustable pitch impellers can provide a wide range of performances.
- Available in a range of speeds to suit specific applications.
- Can be used for free air intake and ducted applications.
- Impellers can be GRP, aluminium, nylon or anti-static (max 1400mm dia) to suit specific applications.
- Designed to handle clean air, toxic, noxious and explosive gases as well as handling air at elevated temperatures such as for smoke-spill applications.
- All non-hazardous motors are speed-controllable using variable speed drives.
- Multi-speed motors, as well as motors to meet Ex d, Ex e, Ex nA and Ex tD Standards can be supplied.

Construction

Galvanised steel cowl. Shutters are fitted as standard. Impeller blades can be GRP (standard), aluminium, nylon or anti-static to suit the application.

Motors

Type - squirrel cage induction motors

Electricity supply - 415V, 3-phase, 50Hz

Bearings - Sealed-for-life, ball

All standard motors in HC range can be speed-controlled using variable speed drives.

Motors with 2-speed windings, or to meet Ex d, Ex e, Ex nA, Ex tD or smoke-spill applications can be supplied.

See pages O-3/7 for details on these motors.

Internal Thermal Protection

Thermistors can be fitted on request. If fitted on Smoke Spill Series they must not operate under smoke-spill mode.

Testing

Air flow testing - 500-1000mm diameter - BS848:Part 1, 1980 1250-1800mm diameter - ISO5801:1997

Noise testing to BS848:Part 2, 1985

SMOKE-SPILL APPLICATIONS

The SS Series of smoke-spill fans has been fully tested to meet the air performance and high temperature requirements of Standards AS/NZS1668.1:1998 and AS4429:1999.

Discharge damper fail-open latching

An additional requirement of AS/NZS1668.1:1998 with respect to un-sprinklered buildings (300°C for 30mins) requires dampers to fail-open during smoke spill operation.

The fail-open discharge damper latches come in two forms; the first being a manual release type requiring manual closing after the fan has been run. The second design, an electro-mechanical type permits the shutter latch to release and close automatically after the fan stops.

For advice on smoke-spill wiring requirements refer to AS/NZS1668.1:1998.

See page C-8 for details of the smoke-spill range.

Wiring Diagram

See pages N-6/7, diagrams DD 1, 2, 3.

Weights

Go to pages C-28/29 for full details

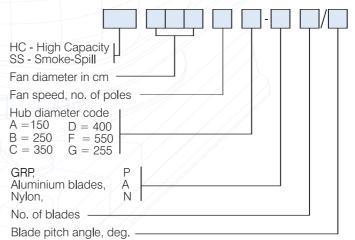
Special notes

Quick select envelope curves are shown on page *D-62*. Accurate selections, including comprehensive noise data, can be obtained from your local Fantech office or from the Fans by Fantech Product Selection Program. Refer to Fantech for performances at speeds other than shown.

Where prevailing winds are high we recommend the fitting of Magloks $^{\circ}$, see page *J-8* for details.

Designed for mounting on horizontal up-stands only.

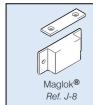
HOW TO ORDER

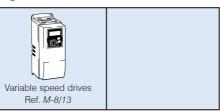


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HIGH CAPACITY & SMOKE-SPILL SERIES

ANCILLARY EQUIPMENT





SUGGESTED SPECIFICATION

High Capacity Series

The axial roof ventilators shall be of the HC Series as designed and manufactured by Fantech Pty Ltd.

The axial impellers shall be adjustable pitch, driven by a direct drive motor and supplied with blades of GRP, aluminium, nylon or anti-static material; GRP is standard.

The cowl shall be of the vertical discharge type, incorporate butterfly shutters and manufactured from galvanised steel.

All models shall incorporate fans fully tested to BS848:Part 1, 1980 for air flow and to BS848:Part 2, 1985 for noise.

Smoke-Spill Series

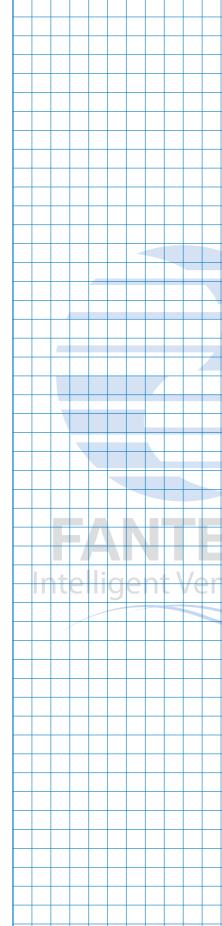
The axial roof ventilators shall be of the SS Series as designed and manufactured by Fantech Pty Ltd.

The axial impellers shall be adjustable pitch, manufactured in aluminium and driven by a direct drive motor.

The cowl shall be of the vertical discharge type, incorporate butterfly shutters and manufactured from galvanised steel.

Motors shall be selected to suit the elevated temperature needs of smoke-spill applications.

All models shall incorporate fans fully tested to BS848:Part 1, 1980 for air flow and to BS848:Part 2, 1985 for noise.





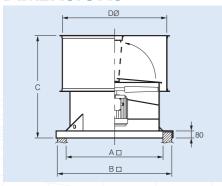


TECHNICAL DATA

Model	Fan			
Number	Speed	Max.	App.	
HC./SS.	rev/sec	kW	vol. m³	
0504	24	1.5	0.5	
0564	24	2.2	0.6	
0634	24	4.0	1.0	
0636	16	1.1		
0714	24	5.5	1.2	
0716	16	2.2		
0804	24	11.0		
0806	16	4.0	1.9	
8080	12	1.5		
1004	24	30.0		
1006	16	15.0	2.6	
1008	12	4.0		
1254	24	90.0		
1256	16	30.0	4.2	
1258	12	11.0		
1406	16	45.0	5.8	
1408	12	18.5		
1606	16	75.0	8.5	
1608	12	37.0		
1806	16	125.0	11.8	
1808	12	55.0		



DIMENSIONS



Model	Dimensions, mm				
HC/SS	A 🗆	В□	C*	DØ	
050	570	770	680	675	
056	570	770	810	730	
063	780	980	830	800	
071	780	980	980	875	
080	900	1100	1230	975	
100	1080	1280	1330	1180	
125	1280	1480	1600	1430	
140	1480	1680	1730	1580	
160	1680	1880	2030	1785	
180	1880	2080	2130	1985	

^{*} The height dimension, C, is based upon the maximum motor as scheduled being fitted. If a motor with lower kW or 2-speed motor is fitted, this value could change.

