

Technical Data Sheet

DS0121**IE3 500 Smoke Fan****Product Description**

The FDS FireSmart Smoke Fan has been specifically developed for emergency smoke extract.

M&E Specifications

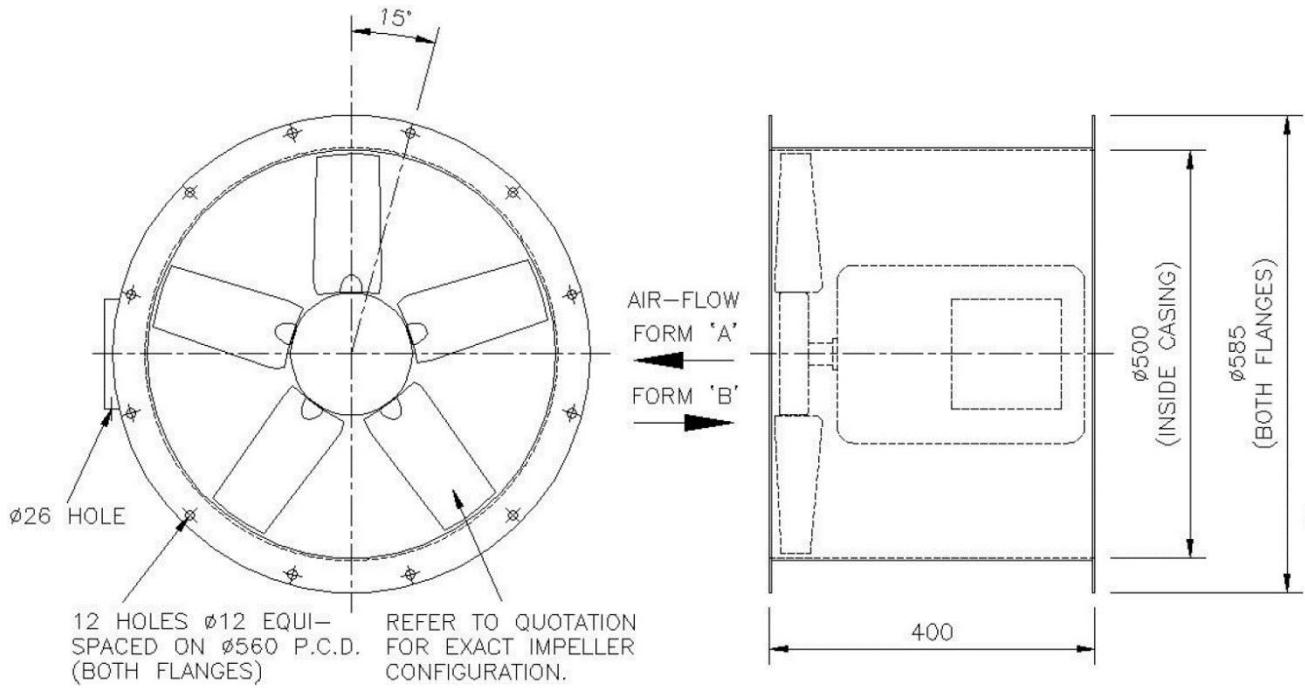
N/A

Controls

N/A

Technical Data Sheet

Dimensional Drawings



Performance Data

Air Flow	2.00 m ³ /s	Air Flow	2.01 m ³ /s
Static Pressure	300 Pa	Static Pressure	423 Pa
Selection Pressure	420 Pa	Total Pressure	486 Pa
Installation Type	TYPE D		
Air Density	1.204 kg/m ³		
Atmos. Temp	20 °C		
Altitude	0 m		
Humidity	0.0%		



Technical Data Sheet

Fan Data

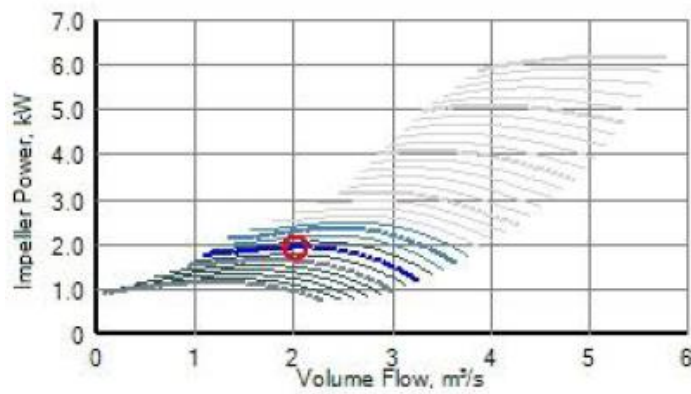
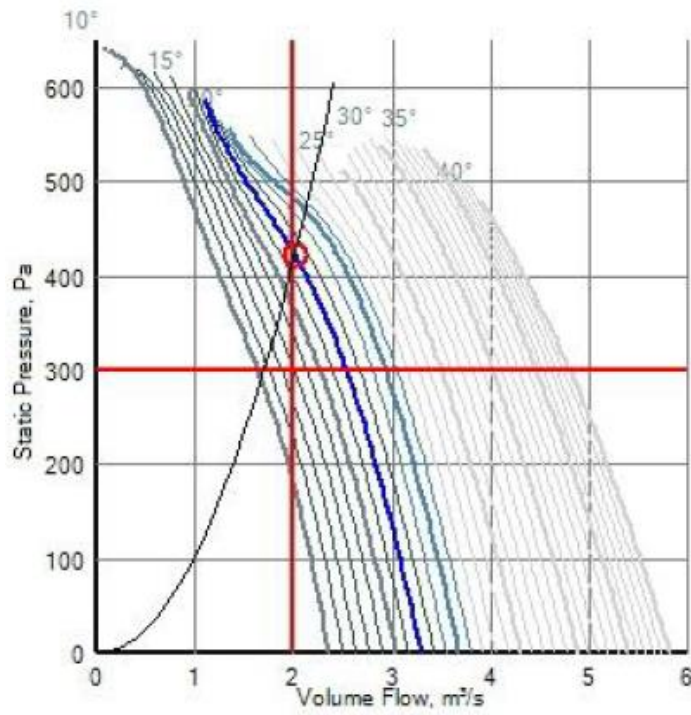
Diameter	500 mm	Hub	131 mm
Impeller Type	Axial	Pitch	17°
Blade Material	Aluminium	Blades	6
Speed	2880 r/min @50 Hz	Form	B
Power, Abs	1.92 kW	Peak	1.92 kW
Input Power	2.22 kW		
Efficiency Total	51.0%	Static	44.4%
SFP	1.11		
Fan Weight	47.2 kg		

Technical Data

Energy Related Product Data			
		At Maximum Efficiency Point	
Overall Efficiency	38.3%	Input Power	2.22 kW
Measurement Category	C	Air Flow	2.10 m ³ /s
Efficiency Category	Static	Pressure	405 Pa
FMEG	42	Speed	2880 r/min
Specific Ratio	1		



Technical Data Sheet





Technical Data Sheet

Motor Data

Motor Type	F300 (IE3)	
Electrical Supply	400V 3ph 50Hz	
Motor Frame	90L	
Motor Power	2.64kW (AOM)	(2.20kW IEC)
FLC/Start (DOL)	5.32A (AOM) / 33.23A	(4.43A FL IEC)
Motor Speed	2 Pole	
Motor Efficiency	86.2%	

Acoustic Data

Spectrum (Hz)	63	125	250	500	1K	2K	4K	8K	dBW	dB(A) @ 3m
Inlet (dB)	79	81	84	97	94	89	82	78	100	77
Outlet (dB)	80	81	84	96	94	89	83	79	99	77

Sound levels are quoted as in-duct values. dB(A) values are average spherical free-field for comparative use only.

Installation Guide Reference Number

N/A

Optional Extras

N/A



Technical Data Sheet

Compliance

- ISO 5801:2007 (Airside Performance)
- BS 848 Part 2:1985 (Sound Performance)
- BS ISO 13347-2:2004 (Reverberation Room Method)
- BSEN 12101-3:2015 – Legislation outlining test procedure to ensure fans are suitable to be used in the event of an emergency, in this instance 300°C for 2 hours
- ISO 5801:2007 (Airside Performance)
- BS 848 Part 2:1985 (Sound Performance)
- BS ISO 13347-2:2004 (Reverberation Room Method)
- ISO 5801:2007 (Airside Performance)
- BS 848 Part 2:1985 (Sound Performance)
- BS ISO 13347-2:2004 (Reverberation Room Method) ALL

Part Number

N/A