



Quotation Number :  
 Project Name : The Knott Inn - Macclesfield  
 Item Reference: : Extract

Fan Code : 45JM/16/4/5/24  
 Customer : Mainland Catering  
 Date: : Tuesday, January 13, 2015

Fan Code 45JM/16/4/5/24  
 Fan Diameter / Size 450 Size / mm  
 Blades 5  
 Fan Speed 1420 rpm  
 Velocity 6.5 m/s  
 Blade Angle 24°  
 Installation Type / Form of Running C / B  
 Fan Casing Long

Requested Duty 1.02m³/s @ 129 Pa (static)  
 Outlet Dynamic Pressure 25 Pa

Duty Shaft Power 0.239 kW  
 Max Shaft Power 0.246 kW  
 Total Efficiency 67.5 %

Motor Frame BT9  
 Motor Rating 0.320 kW [ IE1 ]  
 Full Load Current 2.2 A  
 Starting Current 5 A  
 Motor Mounting Pad  
 Electrical Supply 220-240 Volts 50 Hz 1 Phase  
 Start Type DOL  
 Motor Winding Standard  
 Enclosure Standard All

ErP [FMEG] Rating N 43 (ErP Compliant 2015)  
 ErP [FMEG] Target N 40  
 FMEG Blade Angle [Range] 24° [ 12° - 30° ]  
 Measurement Category C (Static)  
 VSD N  
 Fan + Motor Efficiency 34.9% (0.97 m³/s @ 141 Pa)  
 Motor Input Power (ErP) 0.393 kW

SFP value 0.38 W/(l/s) @ Requested Duty  
 Power from mains 0.39 kWh  
 Energy Consumption 781 kWh (2000 h/year)  
 Running Cost / Year £70

Air Density 1.2 kg/m³ / 20 °C / 0 m / 50% RH  
 Smoke Venting Non Smoke Venting  
 Product Number EJ461466

Performance data has been derived from tests carried out in a Flakt Woods laboratory, in accordance with ISO 5801 and is specifically applicable for Ducted installations. When an electronic controller is incorporated, enhanced motor noise can occur - particularly when the operating speed is well below maximum. FWL therefore recommend using an auto transformer speed controller for noise sensitive applications. Bifurcateds are Erp exempt when used continuously at >100C. They are not for use in the EEA at lower temperatures.

Acoustic data has been derived from tests carried out in a Flakt Woods laboratory, in accordance with BS 848 Pt 2, 1985 / BS EN ISO 5136 under Ducted conditions. The single figure provided is the overall Inlet sound pressure level at the specified distance, under spherical, free field conditions. Breakout levels stated are estimated from induct sound power levels and are provided for guidance.

Acoustic figures for adjusted running speeds have been interpolated and are for reference only.

Terms and Conditions: This offer is made subject to the terms and conditions detailed on the accompanying letter.

	Sound Spectrum (Hz)							Overall		
	63	125	250	500	1k	2k	4k	8k	Lw*	LpA @ 3 m**
Inlet*	73	72	68	66	62	61	57	53	77	49
Outlet*	74	72	68	66	62	61	58	54	78	49
Breakout*	74	72	68	66	62	61	58	54	78	49

\* Lw dB re 10<sup>-12</sup> W

\*\* dBA re 2x10<sup>-5</sup> Pa

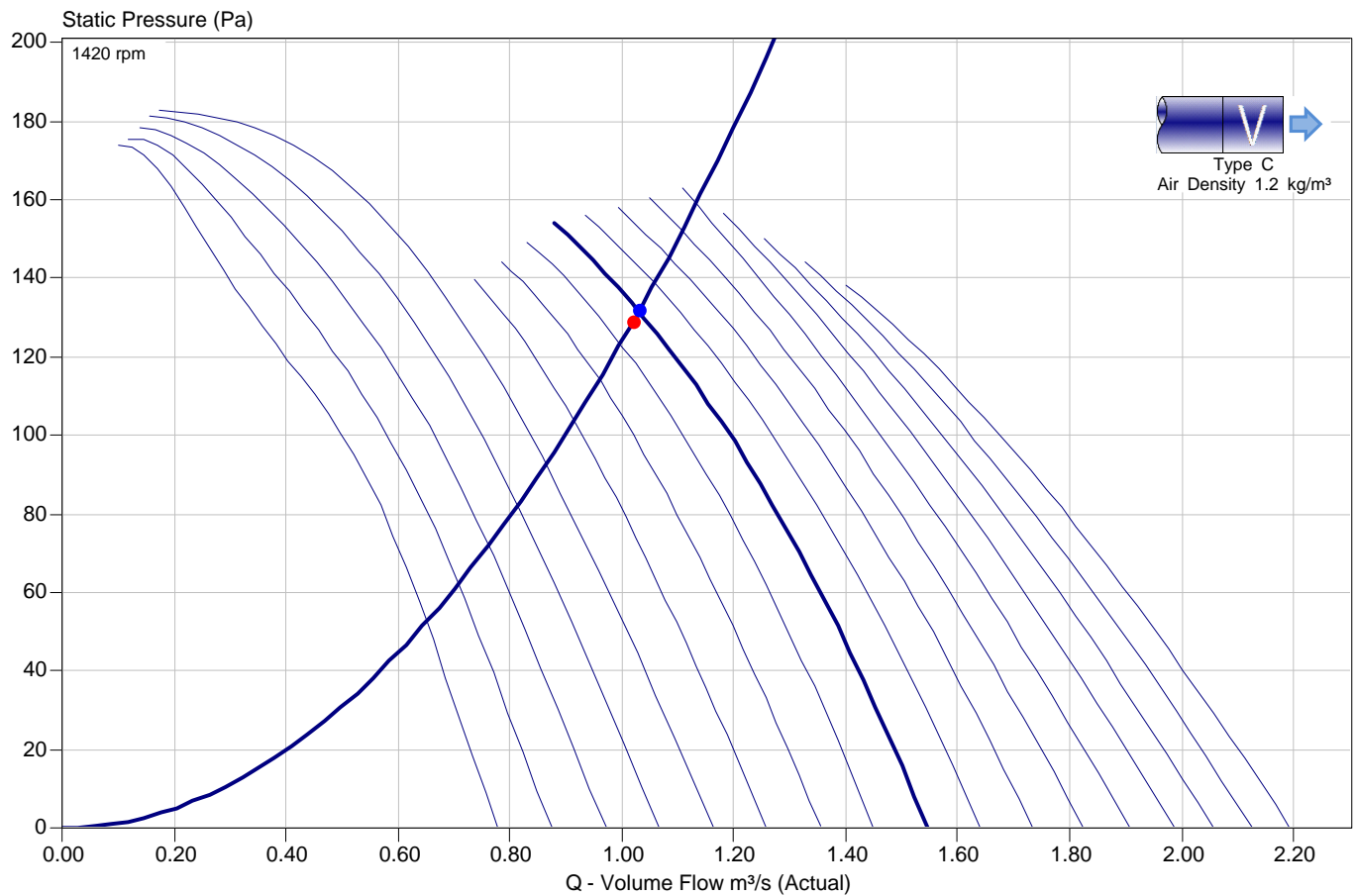
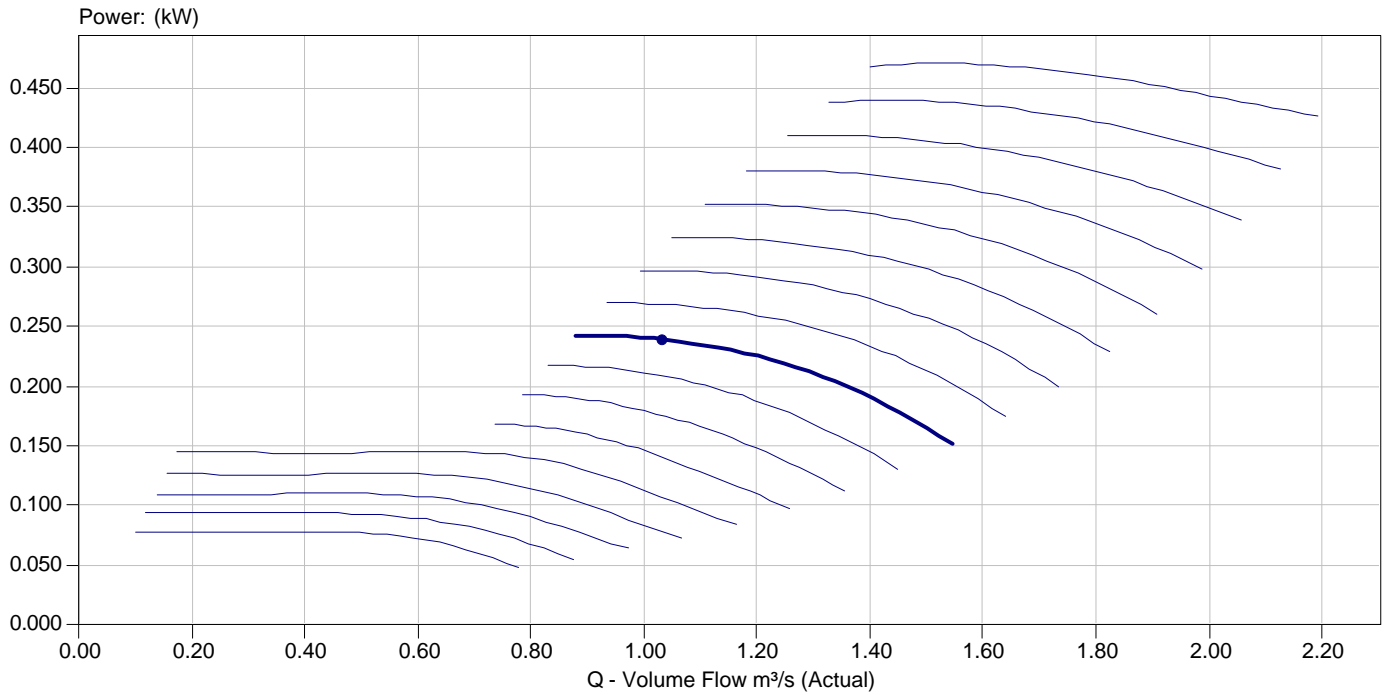
Sound data at requested duty.

Description	Qty	Nett Unit Price	Price
Fan EJ461466 - 45JM/16/4/5/24	1	enquire	enquire
Accessories Thermostat	1	enquire	enquire
TOTAL PRICE (Fan / Accessories / Controls)			enquire



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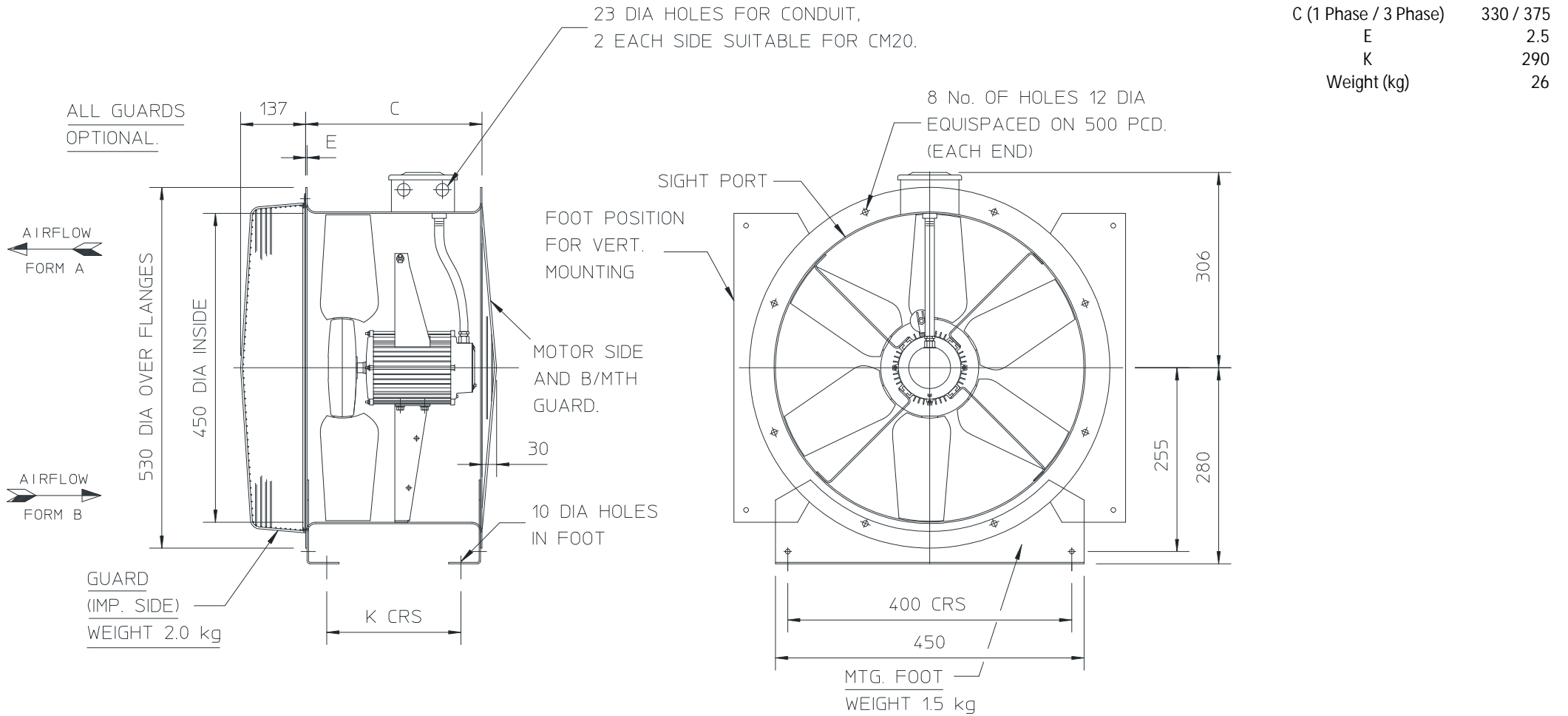
Fan Code : 45JM/16/4/5/24  
Customer : Mainland Catering  
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Fan Code : 45JM/16/4/5/24  
Customer : MainlandCatering  
Date : Tuesday, January 13, 2015



Notes : Dimensions shown in mm / Weight in kg

Reference: D269015

This drawing shows dimensions that should be used as a guide only and are subject to change. Certified drawings are available on request.



**Northern Fan Supplies Ltd**  
**Technical Data Sheet**  
**2100 Series - 2102**



Quotation Number :		Fan Code :	2102/450 (c/w Plate+M/S Guard)
Project Name :	The Knott Inn - Macclesfield	Customer :	Mainland Catering
Item Reference:	Supply	Date:	Tuesday, January 13, 2015

Fan Code	2102/450 (c/w Plate+M/S Guard)
Fan Diameter / Size	450 Size / mm
Fan Speed	1370 rpm
Velocity	5.8 m/s
Installation Type / Form of Running	A / A

Performance data has been derived from tests carried out in a Flakt Woods laboratory, in accordance with BS 848 Pt1, 1980 and is specifically applicable for Non Ducted installations. When an electronic controller is incorporated, enhanced motor noise can occur - particularly when the operating speed is well below maximum. FWL therefore recommend using an auto transformer speed controller for noise sensitive applications.

Requested Duty	0.87m <sup>3</sup> /s @ 114 Pa (static)
Actual Duty	0.93m <sup>3</sup> /s @ 129 Pa (static)
Outlet Dynamic Pressure	20 Pa

Acoustic data has been derived from tests carried out in a Flakt Woods laboratory, in accordance with BS 848 Pt 2, 1985 / BS EN ISO 5136 under Non Ducted conditions. The single figure provided is the overall Inlet sound pressure level at the specified distance, under spherical, free field conditions.

Duty Shaft Power	0.282 kW
Max Shaft Power	0.291 kW
Total Efficiency	49.2 %

Acoustic figures for adjusted running speeds have been interpolated and are for reference only.

Motor Frame	BT9
Motor Rating	0.390 kW [ IE1 ]
Full Load Current	1.26 A
Starting Current	3.9 A
Motor Mounting	Pad
Electrical Supply	380-420 Volts 50 Hz 3 Phase
Start Type	DOL
Motor Winding	Standard
Enclosure	Standard All

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ErP [FMEG] Rating	N 37 (Not ErP Compliant)
ErP [FMEG] Target	N 40
Measurement Category	A (Static)
VSD	N
Fan + Motor Efficiency	29.0% (1.14 m <sup>3</sup> /s @ 115 Pa)
Motor Input Power (ErP)	0.452 kW

SFP value	0.42 W/(l/s) @ Actual Duty
Power from mains	0.39 kWh
Energy Consumption	780 kWh (2000 h/year)
Running Cost / Year	£70

Air Density	1.2 kg/m <sup>3</sup> / 20 °C / 0 m / 50% RH
Smoke Venting	Non Smoke Venting
Product Number	NH451431

	Sound Spectrum (Hz)								Overall	
	63	125	250	500	1k	2k	4k	8k	Lw*	LpA @ 3 m**
Inlet*	72	77	81	81	76	70	63	56	81	61

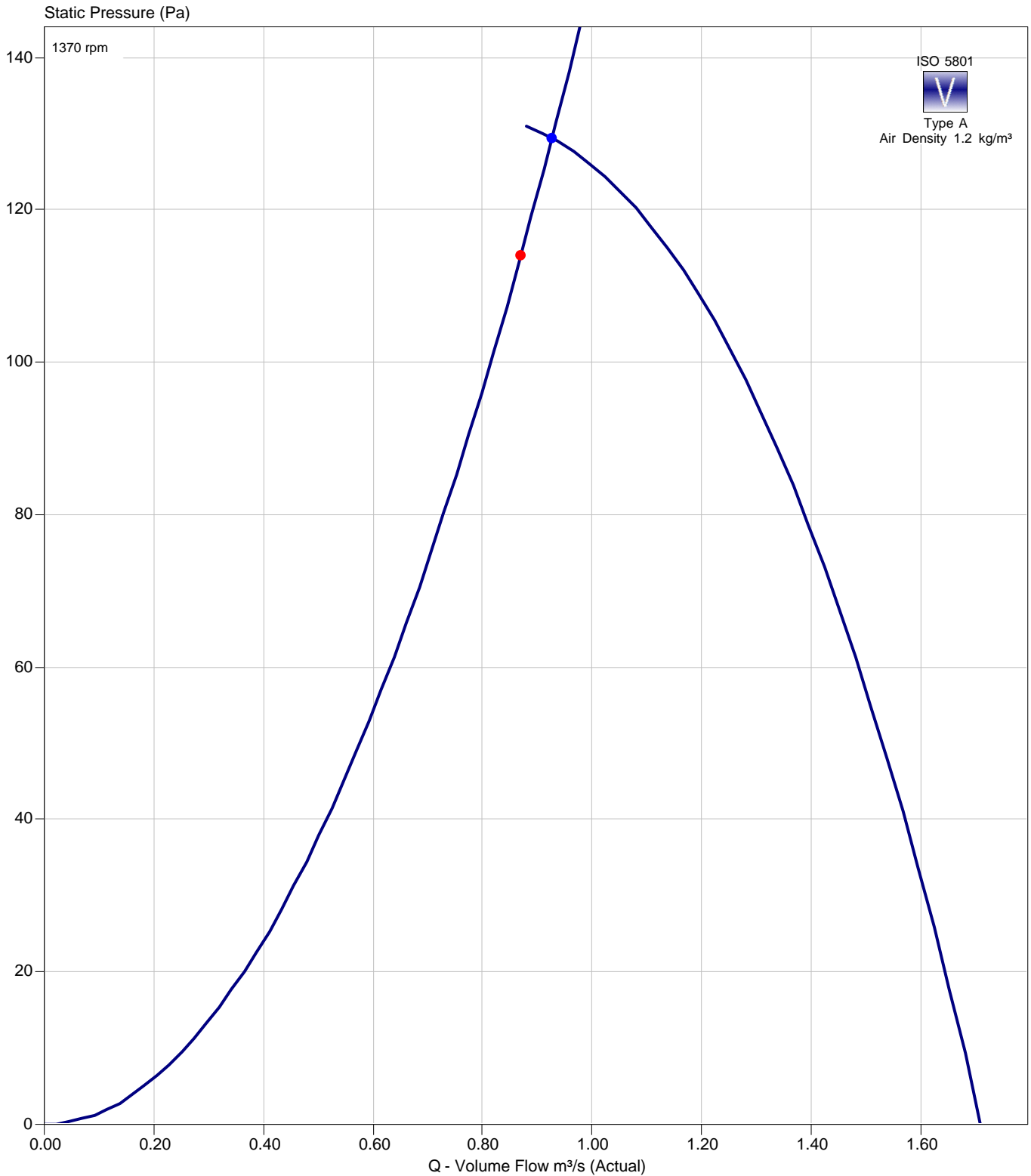
\* Lw dB re 10<sup>-12</sup> W  
 \*\* dBA re 2x10<sup>-5</sup> Pa  
 Sound data at actual duty.

Description	Qty	Nett Unit Price	Price
Fan NH451431 - 2102/450 (c/w Plate+M/S Guard)	1	enquire	enquire
Accessories			
TOTAL PRICE (Fan / Accessories / Controls)			enquire



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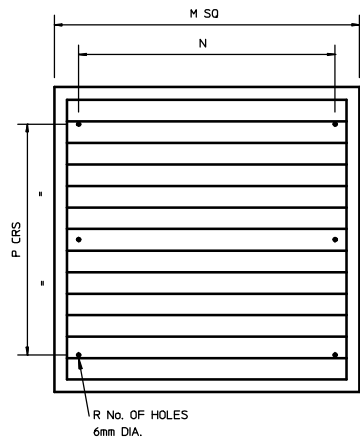
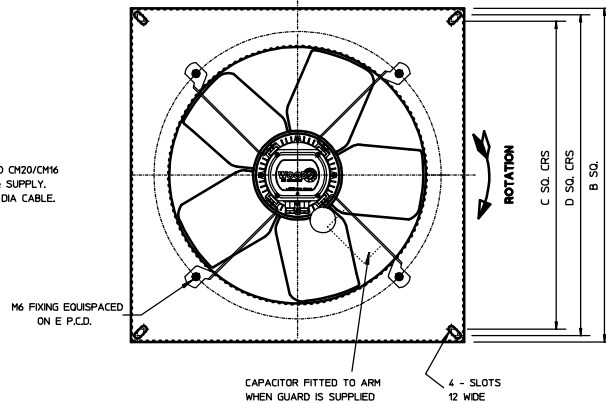
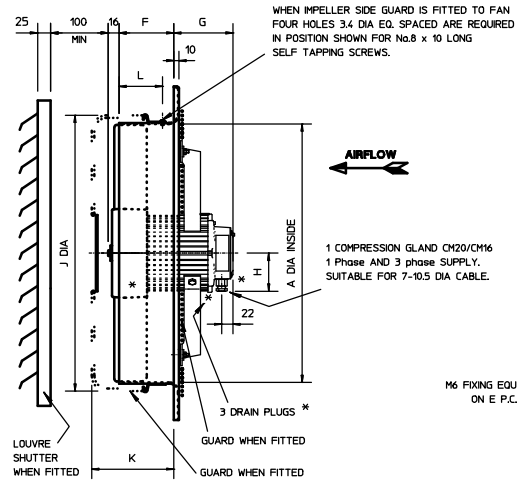
Fan Code : 2102/450 (c/w Plate+M/S Guard)  
Customer : Mainland Catering  
Date: : Tuesday, January 13, 2015





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Fan Code : 2102/450 (c/w Plate+M/S Guard)  
Customer : MainlandCatering  
Date: : Tuesday, January 13, 2015



A	450
B	585
C	535
D	560
E	540
F	100
G	140
H	61
J	475
K	175
L	70
M	545
N	450
P	400
R	4
Weight	13.5

Notes : Dimensions shown in mm / Weight in kg

Reference: D237628

This drawing shows dimensions that should be used as a guide only and are subject to change. Certified drawings are available on request.