

Bifurcated Series 33 - Cased Axial Fans



Features

- 152 - 305 mm diameter
- Volume up to 3,420 m³/h (0.95 m³/s)
- Static pressures up to 380 Pa
- Suitable for temperatures up to 200°C
- Series 33 is cost effective solution to Bifurcated applications
- Motor protection IP55

Electrical Supply

- 220-240V/50Hz/1 ϕ
- 380-420V/50Hz/3 ϕ

Temperature Range

- Suitable for temperatures between 100°C and 200°C (continuous operation)

Sizes

152, 254 and 305 mm

Impellers

Cast in aluminium silicon alloy and with a fixed-pitch aerofoil section blade. This ensures strength, reliability and performance at high temperature.

Motors

All motors are totally enclosed fan cooled, class F insulation with motor protection to IP55. All motors are supplied with sealed for life bearings. For higher temperatures please enquire.

Casings

Bifurcated fans are available long case only. Long casing covers impeller and motor and has duct mounted terminal box. The hot dipped galvanised casing gives a high resistance to corrosion. Motor is mounted inside a tunnel, so is 'out of air stream'.

Only for use at 100°C or above, which makes it exempt from ErP legislation. If the temperature of airflow within a bifurcated fan system is above ambient, FWL recommend that the fan is allowed to overrun so that any excessive heat is removed from the system. Failure to do this could mean that heat will transfer via the shaft/casing to the motor tunnel, which could cause degradation of the grease and lead to premature failure.

Product Code

15JMBif.33 2900

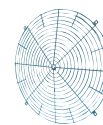
- 15 - denotes the fan impeller diameter in centimetres
- JMBif - denotes Bifurcated Series 33
- 2900 - denotes speed

Accessories

Rubber anti-vibration mounts can be used, but only if the mounts are below the fan and the temperature at the anti-vibration mount is less than 80°C. Fans are only suitable for use at 100°C or above, which makes the product exempt from ErP legislation.



Damper



Guard



Bellmouth



Flange



Mounting Feet



Rubber AV's



Spring AV's



Flexible Connector



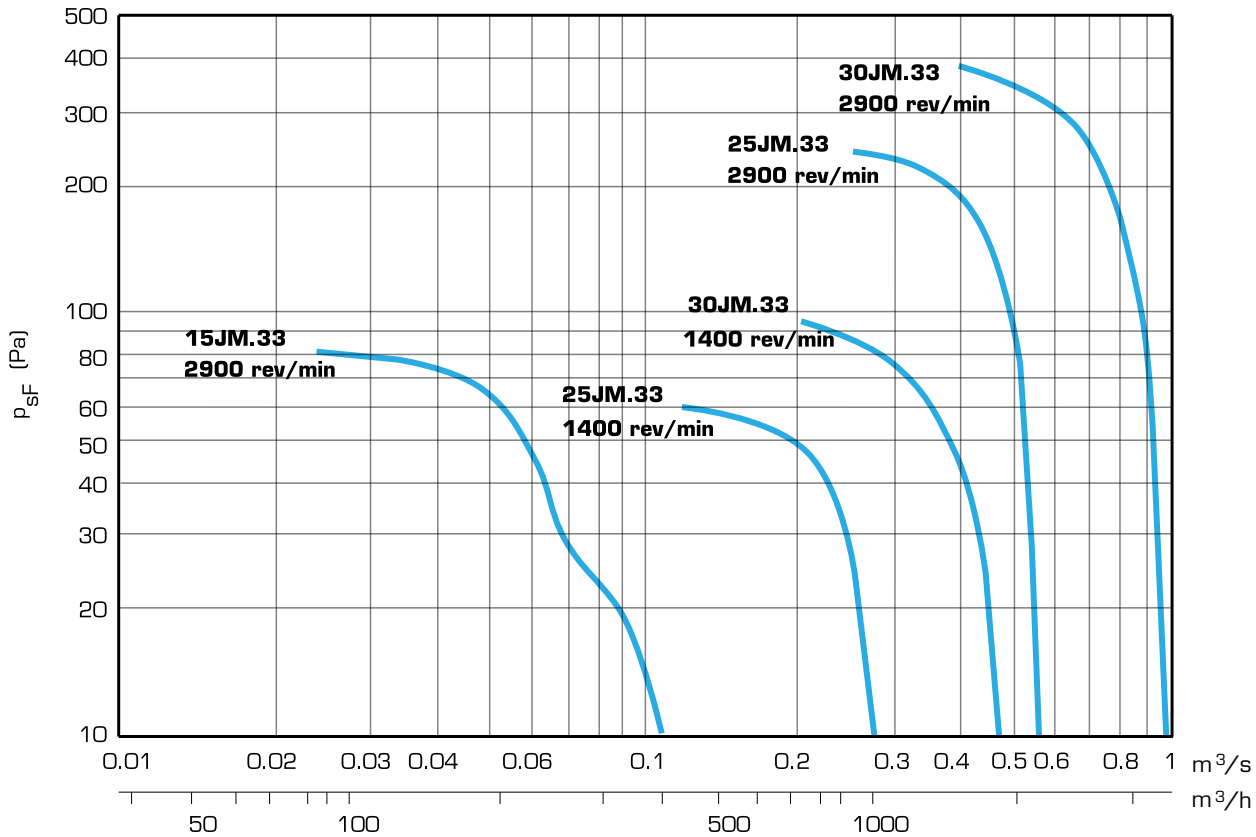
Silencer



Controls Inverter

Series 33 Performance and Electrical Data

Performance Chart - 150-300 mm



Performance Table - 150-300 mm
380-420v/50Hz/3φ

Product Code	Speed rev/min	m³/s at Pa (Static)								
		0	25	50	75	100	150	200	250	275
25JM.Bif.33	1400	0.29	0.25	0.19						
25JM.Bif.33	2900	0.57	0.54	0.52	0.51	0.49	0.46	0.38		
30JM.Bif.33	1400	0.49	0.44	0.38	0.31					
30JM.Bif.33	2900	0.98	0.96	0.93	0.91	0.88	0.83	0.77	0.7	0.44

220-240v/50Hz/1φ

Product Code	Speed rev/min	m³/s at Pa (Static)			
		0	25	50	75
15JM.Bif.33	2900	0.11	0.07	0.06	
25JM.Bif.33	1400	0.29	0.25	0.19	
30JM.Bif.33	1400	0.49	0.44	0.38	0.31

Product, Electrical and ErP Table - 150-300 mm
380-420v/50Hz/3φ

Product Code	Product Number	Speed rev/min	Motor	Rating (kW)	Full Load Current (A)	Starting Current (A)	Wiring Diagram (CD)	Speed Controller Inverter
25JM.Bif.33	DB215608	1400	63	0.18	0.57	2.28	CD2416	IDDXF54-2.2
25JM.Bif.33	DB215609	2900	71	0.37	0.90	4.95	CD2416	IDDXF54-2.2
30JM.Bif.33	DB025608	1400	63	0.18	0.57	2.28	CD2416	IDDXF54-2.2
30JM.Bif.33	DB025609	2900	71	0.37	0.90	4.95	CD2416	IDDXF54-2.2

220-240v/50Hz/1φ

Product Code	Product Number	Speed rev/min	Motor	Rating (kW)	Full Load Current (A)	Starting Current (A)	Wiring Diagram (CD)	Speed Controller Inverter
15JM.Bif.33	DB125603	2900	63	0.18	1.40	4.2	CD2426	N/A
25JM.Bif.33	DB215607	1400	63	0.12	1.14	3.0	CD2426	N/A
30JM.Bif.33	DB025607	1400	63	0.12	1.14	3.0	CD2426	N/A

Product Code	Product Number	Inlet Sound Levels	Efficiency Rating	Target	Grade
25JM.Bif.33	DB215608	46	-	-	-
25JM.Bif.33	DB215609	66	-	-	-
30JM.Bif.33	DB025608	52	-	-	-
30JM.Bif.33	DB025609	71	-	-	-

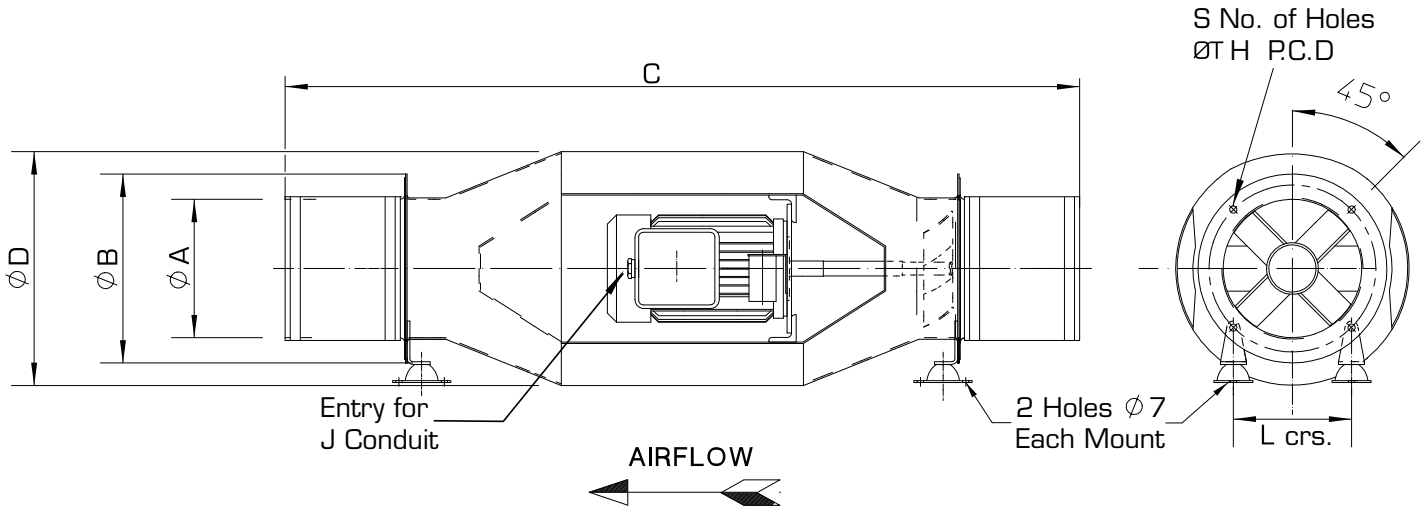
Product Code	Product Number	Inlet Sound Levels	Efficiency Rating	Target	Grade
15JM.Bif.33	DB215608	50	-	-	-
25JM.Bif.33	DB215609	46	-	-	-
30JM.Bif.33	DB025608	52	-	-	-

If the temperature of airflow within a bifurcated fan system is above ambient, FWL recommend that the fan is allowed to overrun so that any excessive heat is removed from the system. Failure to do this could mean that excessive heat can transfer via the shaft/casing to the motor tunnel that can cause degradation of the grease and lead to premature failure.

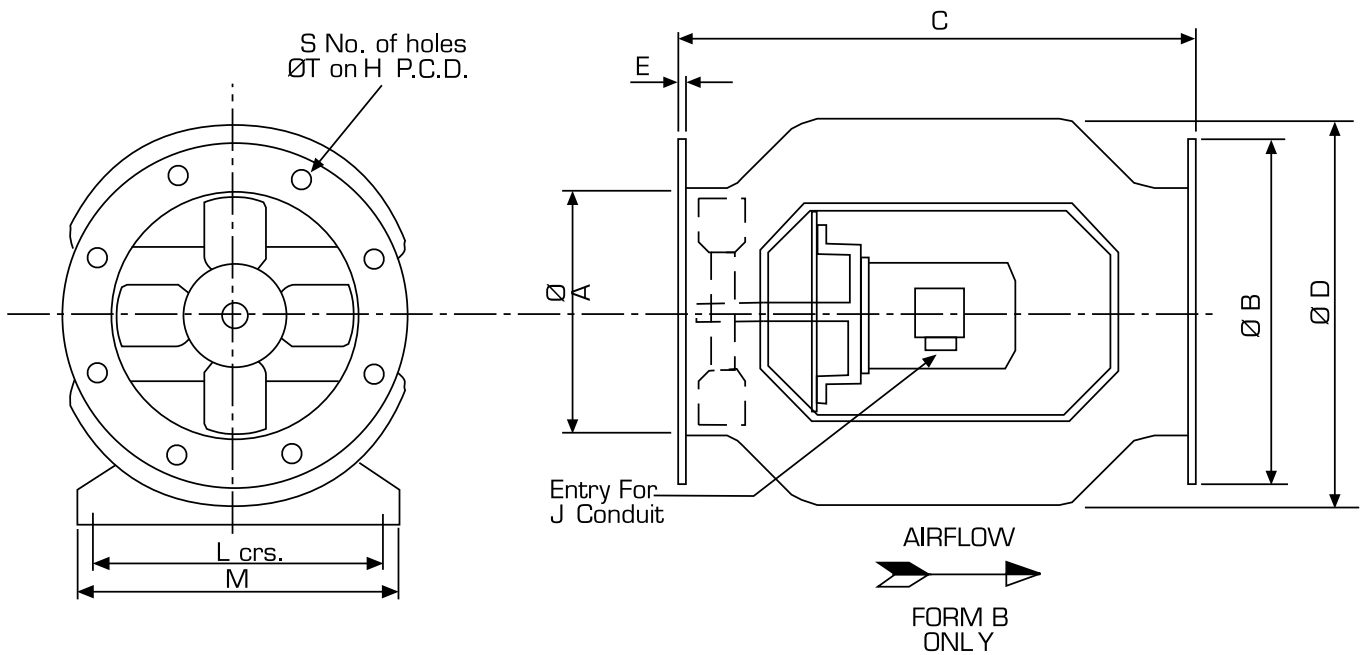
Sound pressure levels quoted are at the inlet, and are average dBA at 3m distance over a sphere at the mid point at the highest angle given, under free field conditions. These are presented for comparative purposes only. Performance shown at emergency operating temperatures.

Drawing - JM Bif 33 200°C Continuous

150 mm



250-300 mm

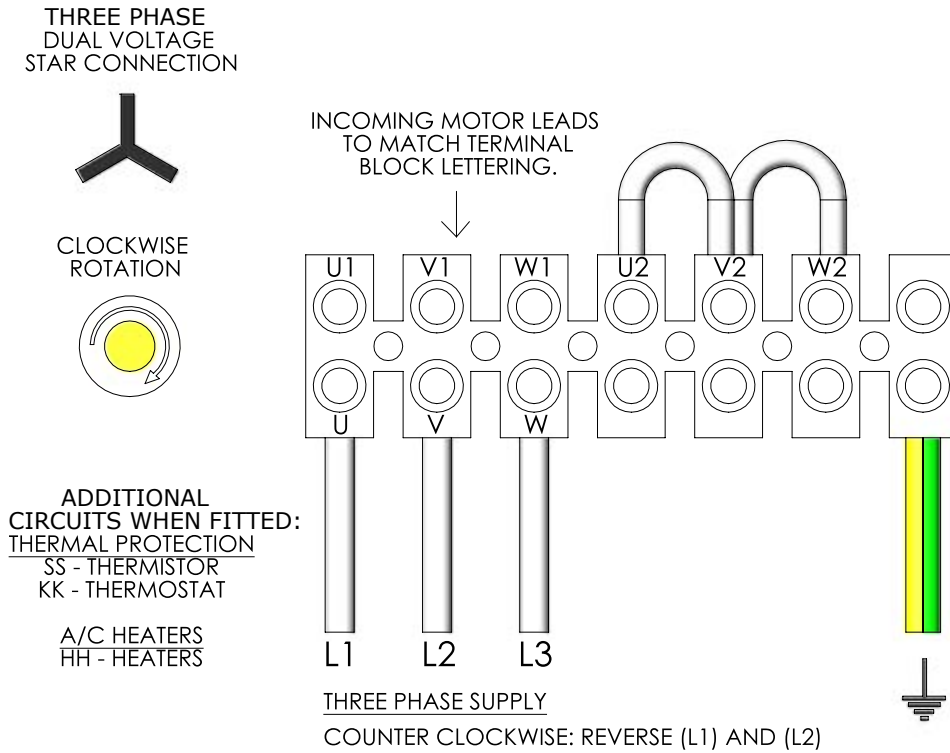


Product Code	Motor Range	Ø A	Ø B	C	Ø D	E	H	J	L	M	S	Ø T	Weight (kg)
15JM.33	63	155.6	208	875	257.5	2	184	CM20	130.1	172.9	4	8	15
25JM.33	63	254	324	489	400	2	299	CM20	222	254	8	10	21
25JM.33	71	254	324	489	400	2	299	CM20	222	254	8	10	24
30JM.33	63	305	375	584	470	2	349	CM20	273	305	8	10	26
30JM.33	71	305	375	584	470	2	349	CM20	273	305	8	10	28

All dimensions in mm

Wiring Diagrams - Series 33

CD2416



CD2426

