

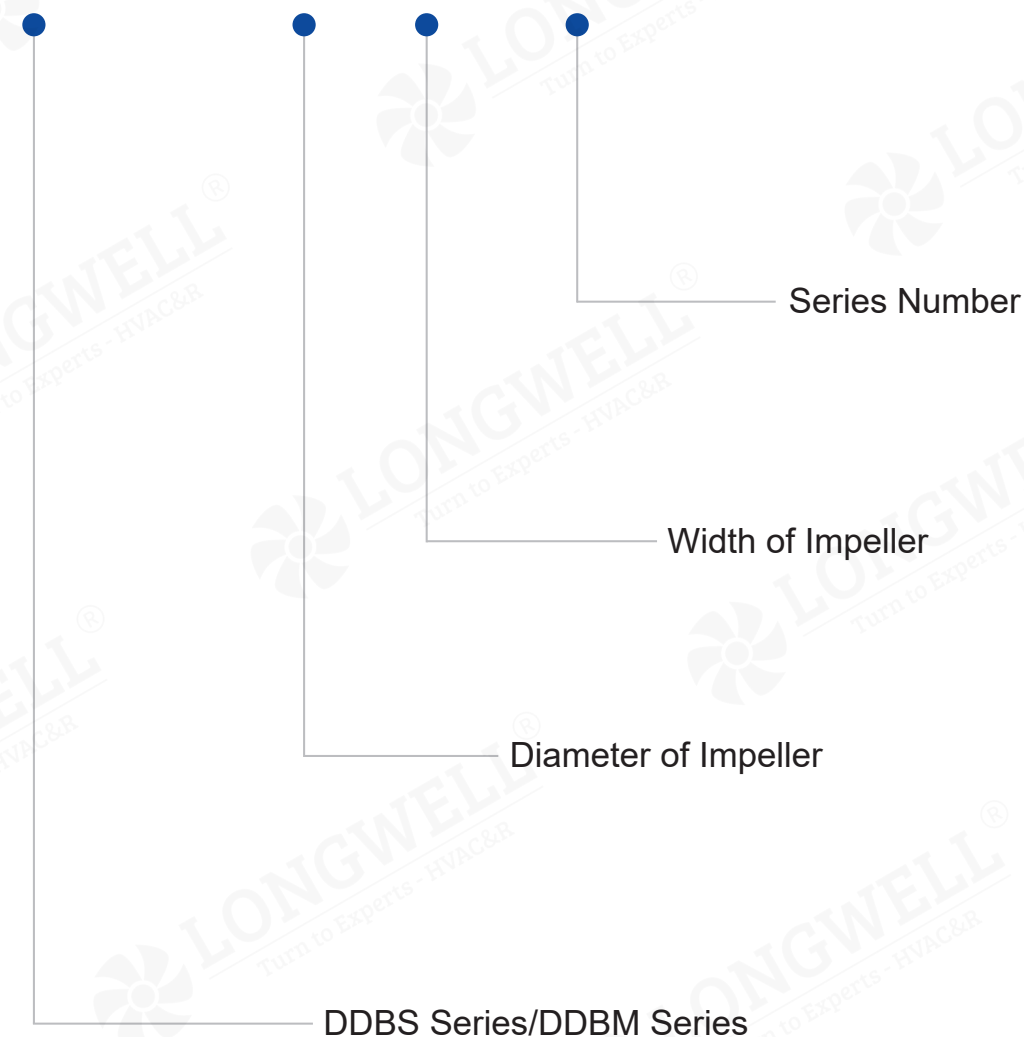
DDBS/DDBM Series Box-type Fan

Professional HVAC Fan & Motors Manufacturer



Type Code

DDBS/DDBM 7 - 7 - 001



The DDBS/DDBM Series Box-type Fan

1.Summary

The DDBS series duct fan is built-in double inlet forward curve centrifugal fans. The fan is driven by Three-speed motor single phase 220V/50HZ. The DDBS Series includes 8 models as described in this catalogue. The air volume and total pressure are from 1000m³/h to 5000m³/h and 100Pa to 300Pa. Customers can request a different site on the noise, can be used with DDBM-type silencer box to meet the requirements of low noise. The series of flexible duct fan with speed control, and convenient installation.

2.Construction of Product

DDBS/DDBM series fans consist of housing, impeller, baseplate (frame), motor, shaft sleeve and air outlet flange.

(1) Housing

DDBS duct fan series is made of galvanized steel square pipe type, the pipe end and the air inlet side has a 20mm standard flange.

DDBM series fan aluminum tenon joint structure design, together with three high-quality silencer cotton board, effective at 15dB acoustic noise around.

(2) Impeller

Forward curved impellers are made of galvanized steel sheet. The impeller is constructed with maximum strength that endures the continuous operation with maximum power. All winds are balanced to G2.5 in according to the ANSI/AMCA 204-05 standard.

(3) Motor

DDBS series fans are equipped with single-phase 220V/50HZ three speeds motors, which are flexible to change speed and easy to install.

(4) Flange

The inlet outlet flanges are made of galvanized steel sheet. and using TOX or spot-welding process. This give the good appearance, of flanges and also make the flanges more strength and rigidity.

DDBM have a flexible connections between fan outlet and flange. DDBS is a hard connection through the fan outlet and flange.

(5) Electrical Connection

DDBS/DDBM series fan motor with a cable, and protection to IP54 junction box connected to an external, removable terminal block.

3.Noise Levels

The figures quoted in the performance curves are the "A" decibel figures which are the sound power levels L_{WOA} at the outlet side in duct systems.

The "A" sound power level at the inlet side L_{WiA} , according to GB/T 2888-2008 part 38, can be calculated via the relative sound power levels or is obtained approximately as follows:

$$L_{WiA} \approx L_{WOA} - 6 \text{ dB}$$

The "A" sound power level L_{WA2} , from the casing according to GB/T 2888-2008 can be calculated via the relative sound power levels or is obtained approximately as follows:

$$L_{WA2} \approx L_{WOA} - 17 \text{ dB, for YGB}$$

$$L_{WA2} \approx L_{WOA} - 25 \text{ dB, for YGBS}$$

The "A" sound pressure level L_{PA} at a distance of 1 meter is obtained approximately by deducting 7 dB(A) from the "A" sound power level:

$$L_{PA(1m)} \approx L_{WA2} - 7 \text{ dB}$$

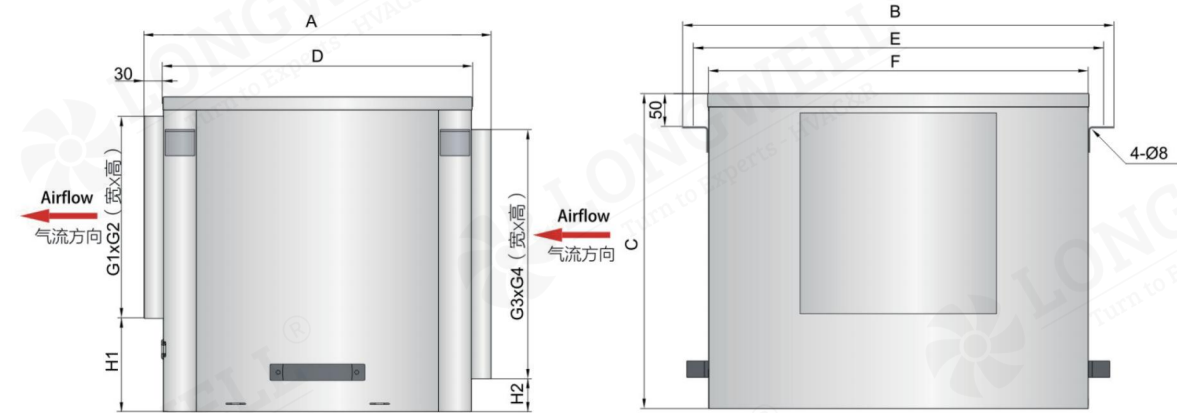
Note that the reflection, room characteristic and natural frequencies will influence the sound pressure levels. To avoid rigid conduction transfer to the duct system, we recommend to use the flexible duct connection.

4.Instructions

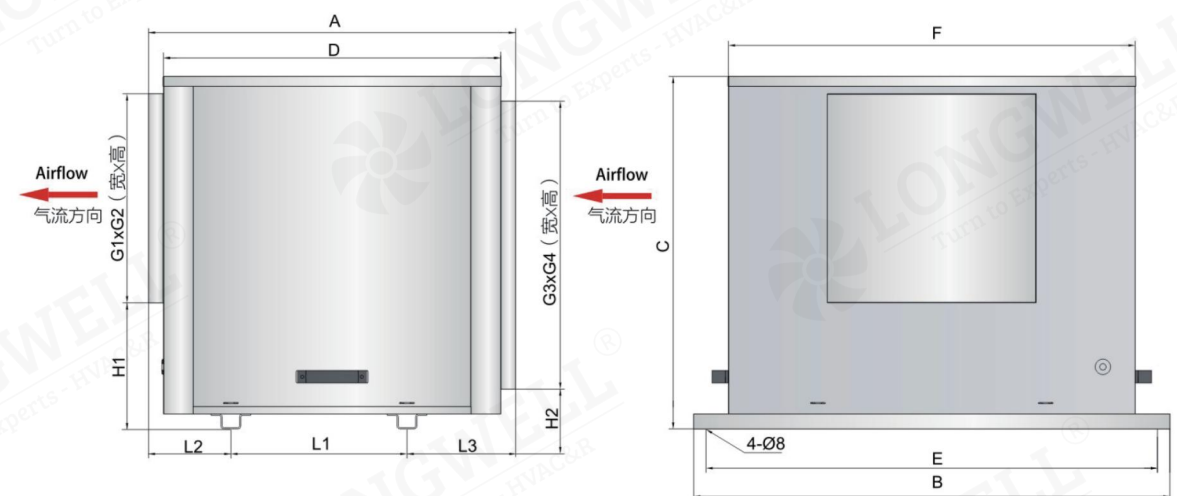
- 1) The motor power is calculated from the Bhp plus the safety factor, so to avoid the motor burn and damage, the fan shall not operate at type A condition. (i.e. free inlet, free outlet)
- 2) The fan performance in the catalog is tested under the rated motor speed, we can meet the actual requirement of the user by changing the motor speed.
- 3) During transportation, loading and unloading, all fans shall be handled carefully to avoid damaging. the fans shall store in a dry, clean and non-toxics area.
- 4) Before commissioning and operating, the impeller should be turned by hand to ensure that it turns freely without colliding with other parts of the fan.
- 5) When the duct is connecting to the inlet and the outlet of the fan, a flexible connector shall be used in between.
- 6) Check and clean the housing of the fan, to ensure than there is no sundry inside the housing.
- 7) Before operating, check the rotational direction of the, to ensure than the rotation direction is same as the label shown on the fan.

DDBS Series Fan Overall Dimension

DDBS 7-7(8-8/9-7/9-9/10-8/10-10)(180°)



DDBS (12-9/12-12)(180°)

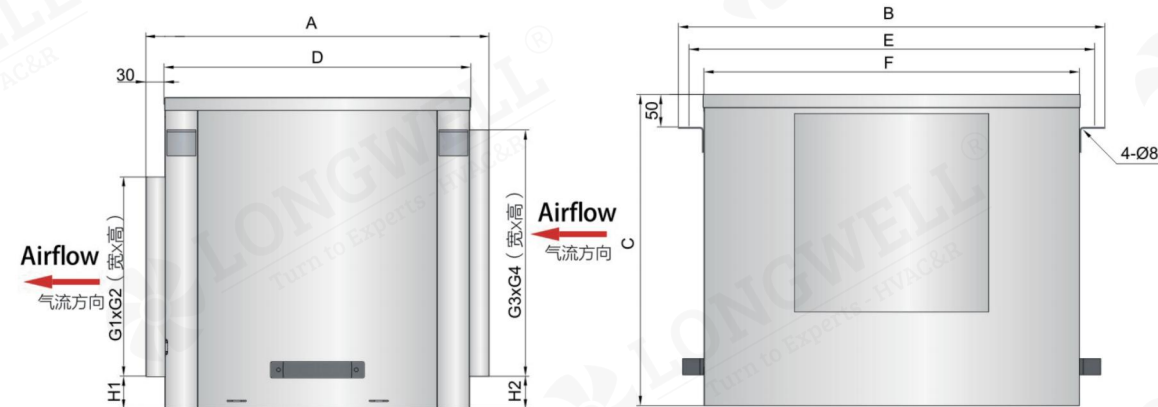


Unit:mm

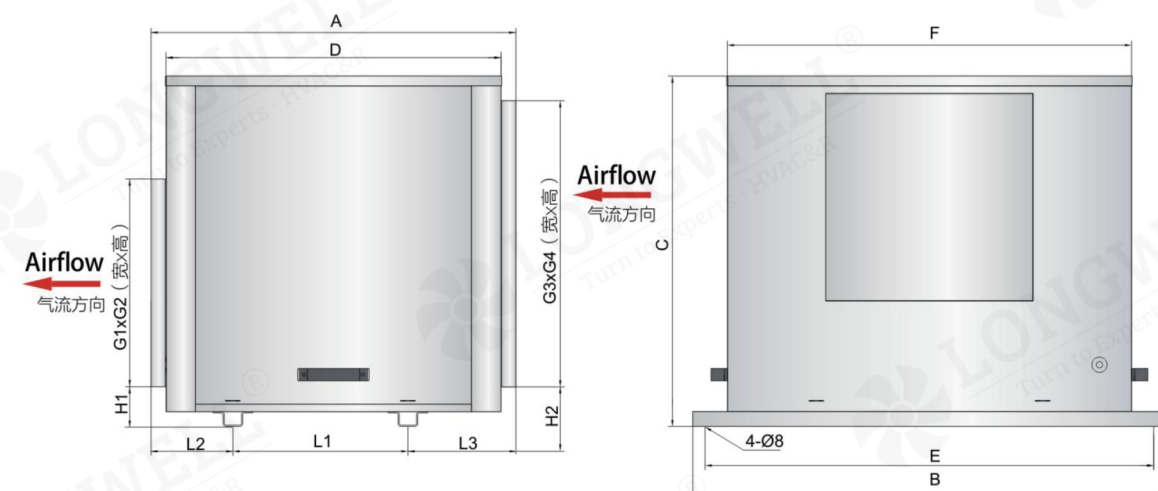
Model	A	B	C	D	E	F	L1	L2	L3	H1	H2	G1	G2	G3	G4
DDBS 7-7	450	470	380	390	442	410				131	45	234	210	320	290
DDBS 8-8	470	550	420	410	522	490				129	45	289	258	400	330
DDBS 9-7	500	520	440	440	492	460				142	45	234	264	370	350
DDBS 9-9	500	590	440	440	562	530				142	45	300	264	440	350
DDBS 10-8	550	610	500	490	570	530				170	50	272	293	430	400
DDBS 10-10	550	670	500	490	630	590				170	50	333	293	490	400
DDBS 12-9	620	760	640	560	710	620	408	90	122	237	75	311	343	520	510
DDBS 12-12	620	620	640	560	790	700	408	90	122	237	75	397	343	600	510

DDBS Series Fan Overall Dimension

DDBS 7-7(8-8/9-7/9-9/10-8/10-10)(0°)



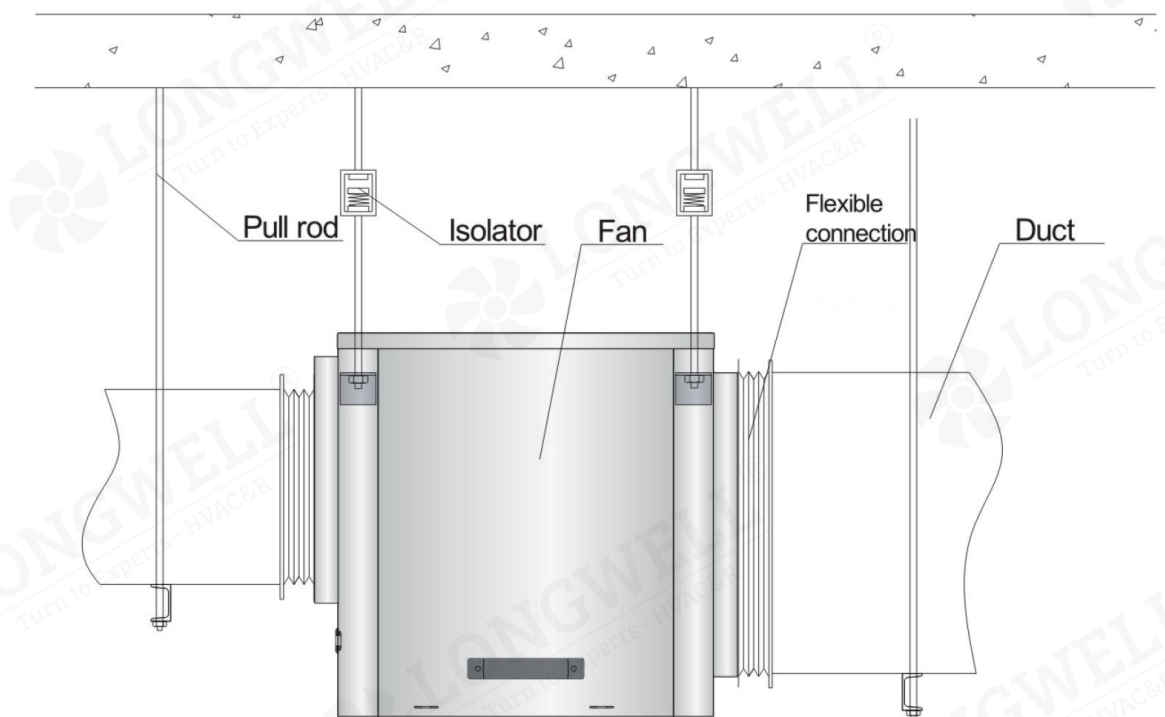
DDBS (12-9/12-12)(0°)



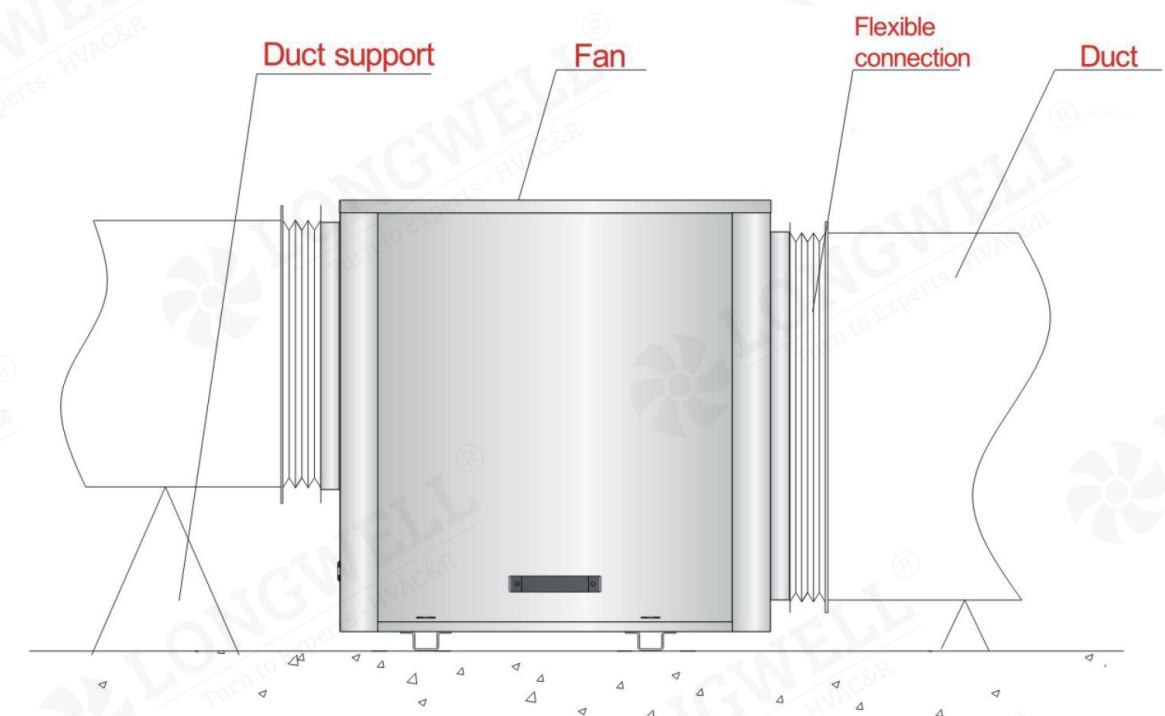
Unit:mm

Model	A	B	C	D	E	F	L1	L2	L3	H1	H2	G1	G2	G3	G4
DDBS 7-7	470	473	380	390	445	410				34	45	232	208	320	290
DDBS 8-8	490	553	420	410	525	490				36	45	278	256	400	330
DDBS 9-7	520	523	440	440	495	460				36	45	232	262	370	350
DDBS 9-9	520	593	440	440	565	530				37	45	298	262	440	350
DDBS 10-8	570	613	500	490	573	530				36	50	270	291	430	400
DDBS 10-10	570	673	500	490	633	590				37	50	333	353	490	400
DDBS 12-9	640	820	640	560	720	620	408	90	122	90	75	309	341	520	510
DDBS 12-12	640	900	640	560	800	700	408	90	122	89	75	395	341	600	510

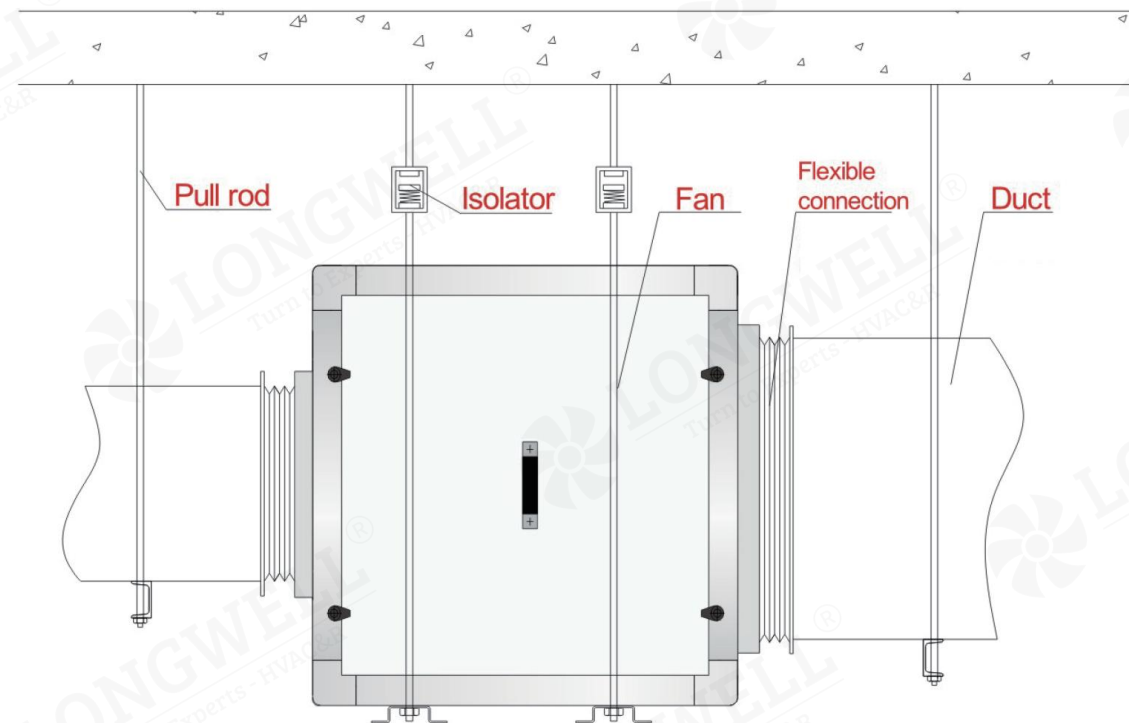
DDBS Ceiling Installation Schematic Diagram



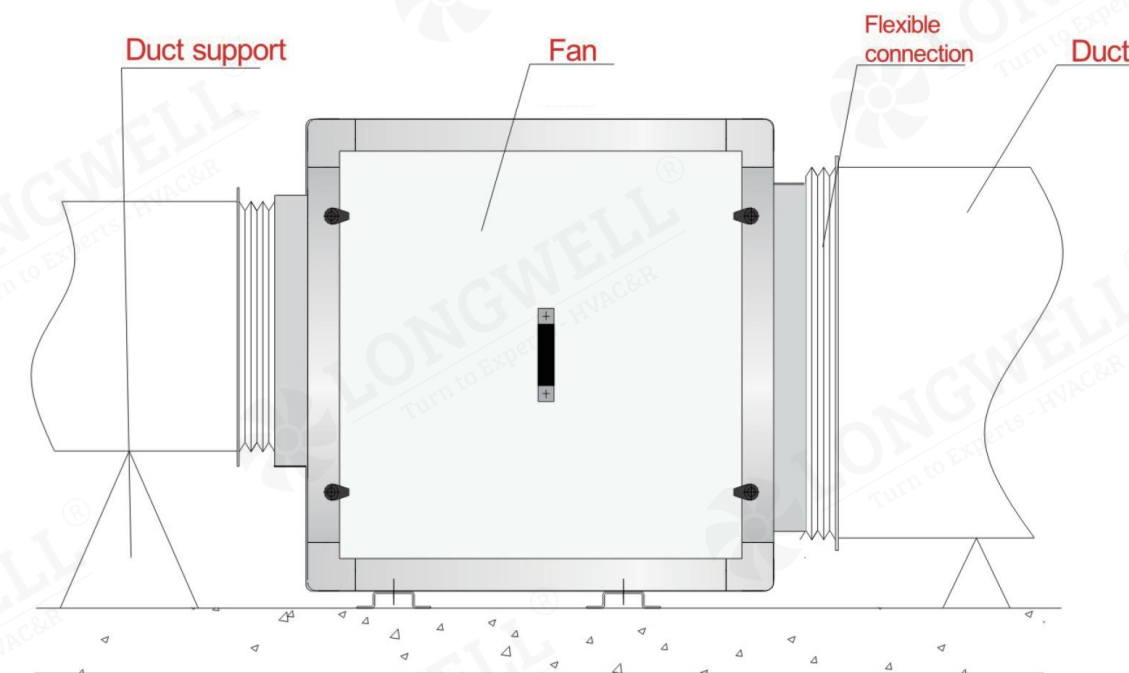
DDBS Floor Installation Schematic Diagram



DDBM Ceiling Installation Schematic Diagram

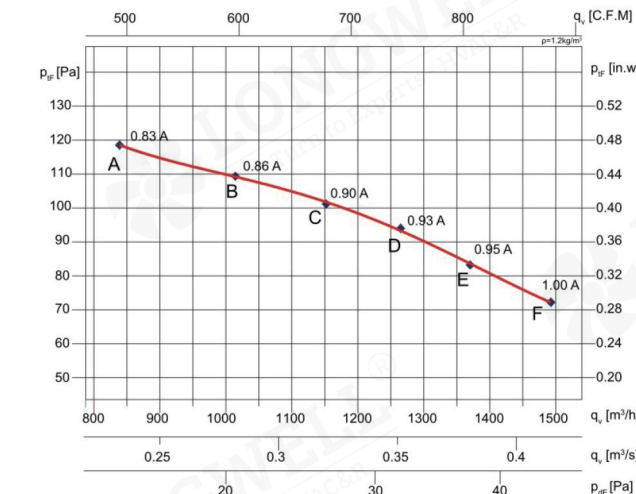


DDBM Floor Installation Schematic Diagram



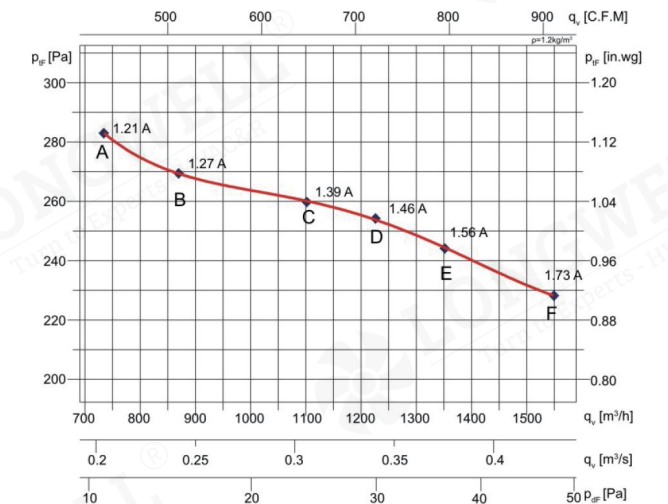
DDBS/DDBM 7-7 Box-type Fan

Technical Specifications



Model	Voltage (V)	Frequency (Hz)	Power	Current (A)	Weight (kg)	Protection Class
DDBS/DDBM 7-7-001	220	50	90W-6P	1.1	8.85	IP20

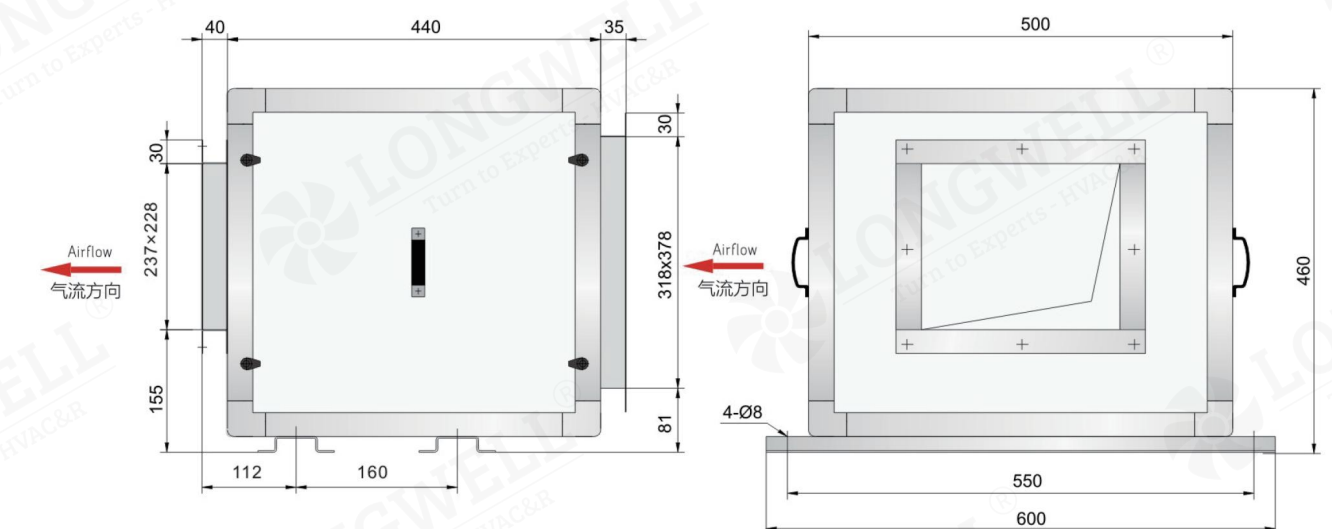
Duty Point	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	L ₁₀₀ dB(A)
A	48.1	54.3	55.3	59.1	56.0	53.5	46.7	63.4
B	48.2	54.9	57.5	61.4	58.2	56.9	48.7	65.5
C	49.6	56.1	59.5	63.3	59.8	59.2	50.6	67.3
D	51.0	57.4	60.7	65.0	61.3	61.6	53.2	69.1
E	52.5	58.7	62.4	66.5	62.7	63.2	55.1	70.6
F	53.0	61.3	63.7	67.6	64.3	65.2	62.3	72.4



Model	Voltage (V)	Frequency (Hz)	Power	Current (A)	Weight (kg)	Protection Class
DDBS/DDBM 7-7-002	220	50	200W-4P	1.8	9.4	IP20

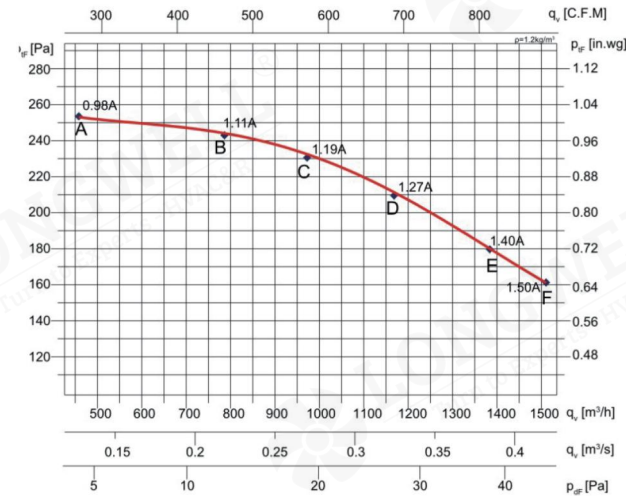
Duty Point	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	L ₁₀₀ dB(A)
A	58.2	64.6	62.7	66.4	63.1	62.0	53.3	71.4
B	56.9	63.9	62.3	66.6	63.5	62.7	54.4	71.3
C	55.4	63.6	62.8	67.8	64.8	64.3	56.6	72.2
D	55.2	64.6	63.3	68.3	65.5	65.5	58.0	73.0
E	55.1	65.1	64.0	69.9	66.5	66.8	59.6	74.2
F	55.3	65.2	65.3	71.0	68.1	68.6	61.8	75.4

Overall Size



DDBS/DDBM 7-7 Box-type Fan

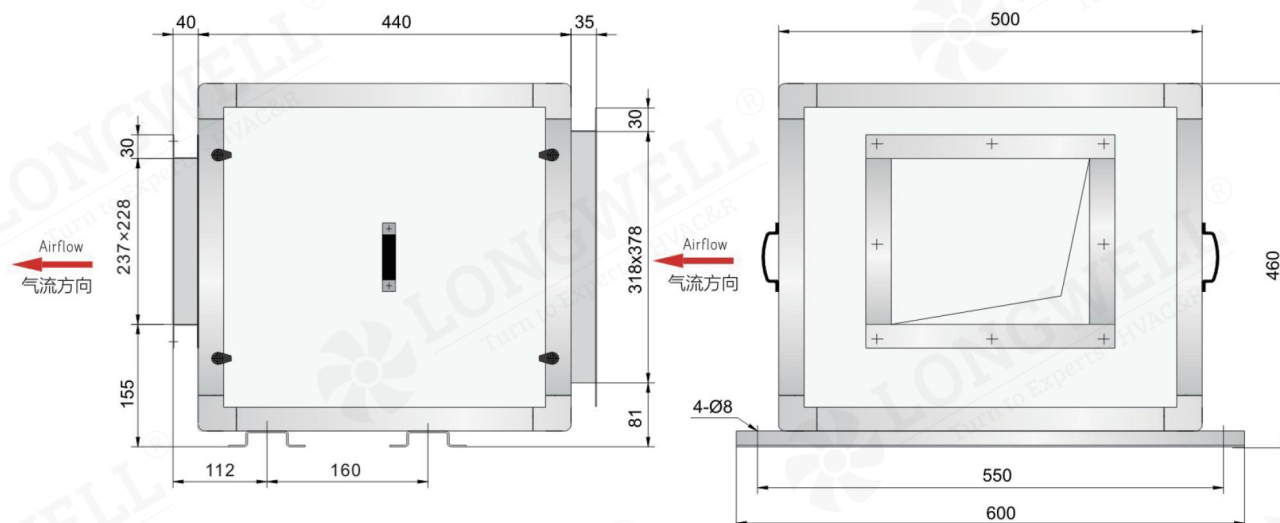
Technical Specifications



Model	Voltage (V)	Frequency (Hz)	Power	Current (A)	Weight (kg)	Protection Class
DDBS/DDBM 7-7-003	220	50	150W-4P	1.6	9.1	IP20

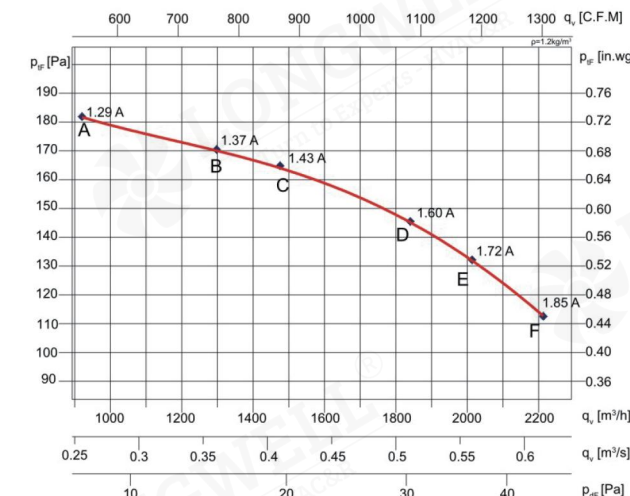
Duty Point	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	L _{wa} dB(A)
A	56.3	63.7	62.5	65.7	62.4	61.3	59.9	70.9
B	55.4	63.3	61.8	65.8	63.1	62.4	60.2	71.0
C	54.6	62.8	62.1	66.7	64.8	64.2	60.8	71.9
D	54.9	63.6	63.3	67.4	64.9	65.0	61.5	72.5
E	54.8	63.7	64.3	68.4	65.9	66.3	61.8	73.4
F	55.7	64.5	65.6	69.8	67.0	67.5	62.6	74.6

Overall Size



DDBS/DDBM 8-8 Box-type Fan

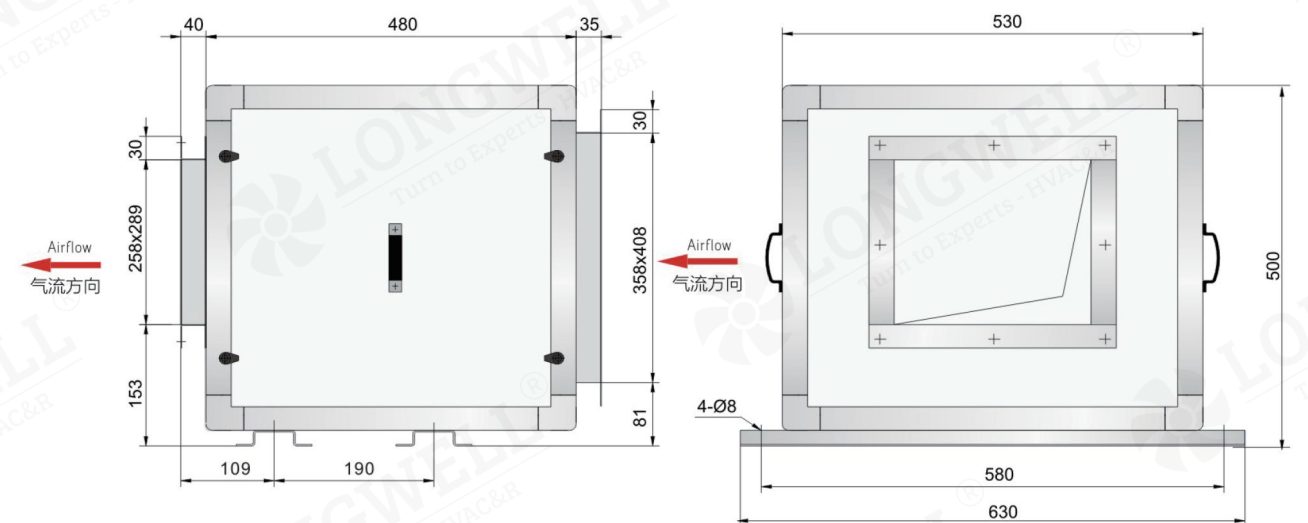
Technical Specifications



Model	Voltage (V)	Frequency (Hz)	Power	Current (A)	Weight (kg)	Protection Class
DDBS/DDBM 8-8-001	220	50	200W-6P	2	14.05	IP20

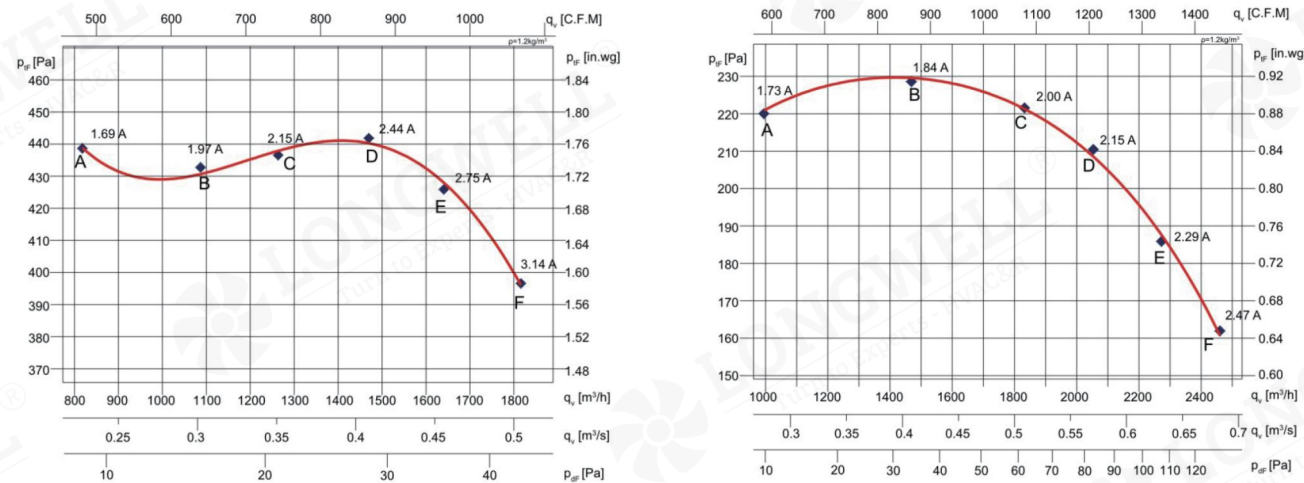
Duty Point	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	L _{wa} dB(A)
A	55.7	64.2	61.3	68.5	61.4	57.6	57.1	71.4
B	55.5	64.1	62.2	68.2	64.1	61.4	57.7	72.0
C	56.5	64.5	64.4	68.4	65.1	63.0	58.5	72.8
D	58.0	65.2	64.5	67.8	67.2	67.0	60.9	73.8
E	58.7	66.1	64.6	67.9	68.5	68.8	62.1	74.8
F	58.5	66.1	66.2	69.5	69.9	70.7	63.5	76.2

Overall Size



DDBS/DDBM 9-7 Box-type Fan

Technical Specifications



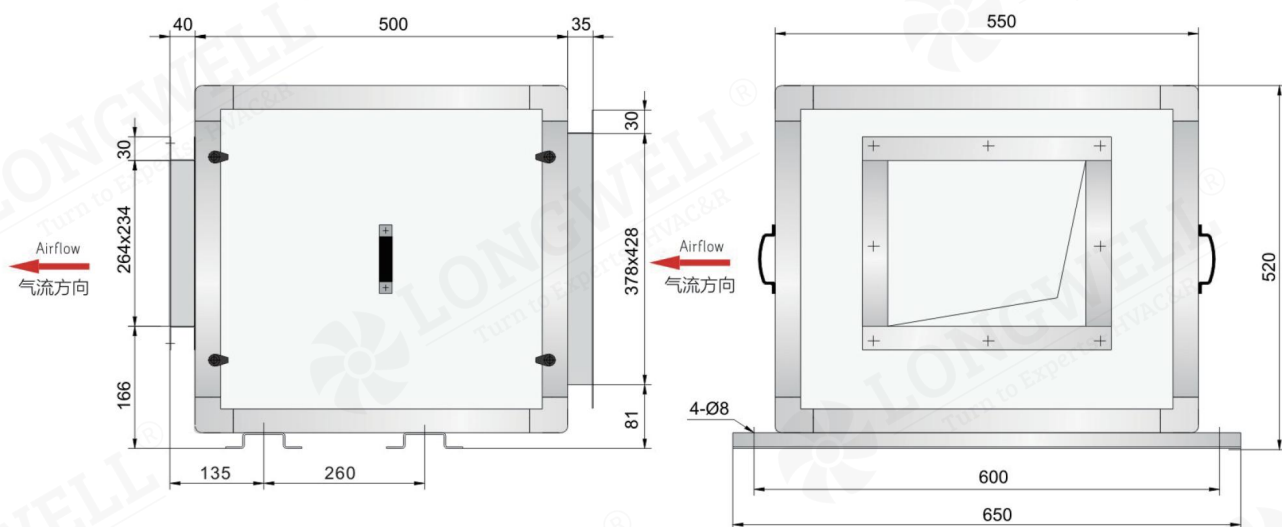
Model	Voltage (V)	Frequency (Hz)	Power	Current (A)	Weight (kg)	Protection Class
DDBS/DDBM 9-7-001	220	50	375W-4P	4.2	14.85	IP20

Duty Point	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	L _w dB(A)
A	63.0	68.9	67.0	67.7	65.8	64.4	56.6	74.4
B	61.9	68.4	67.5	68.5	66.4	65.9	58.5	74.8
C	60.6	67.3	66.5	69.2	66.6	66.4	59.4	74.6
D	58.2	66.1	67.1	69.4	67.2	67.5	60.6	74.9
E	56.0	64.6	66.3	70.0	67.7	68.4	61.4	75.0
F	55.8	64.5	66.4	70.8	68.5	69.4	62.6	75.7

Model	Voltage (V)	Frequency (Hz)	Power	Current (A)	Weight (kg)	Protection Class
DDBS/DDBM 9-7-002	220	50	375W-6P	3.5	15.7	IP20

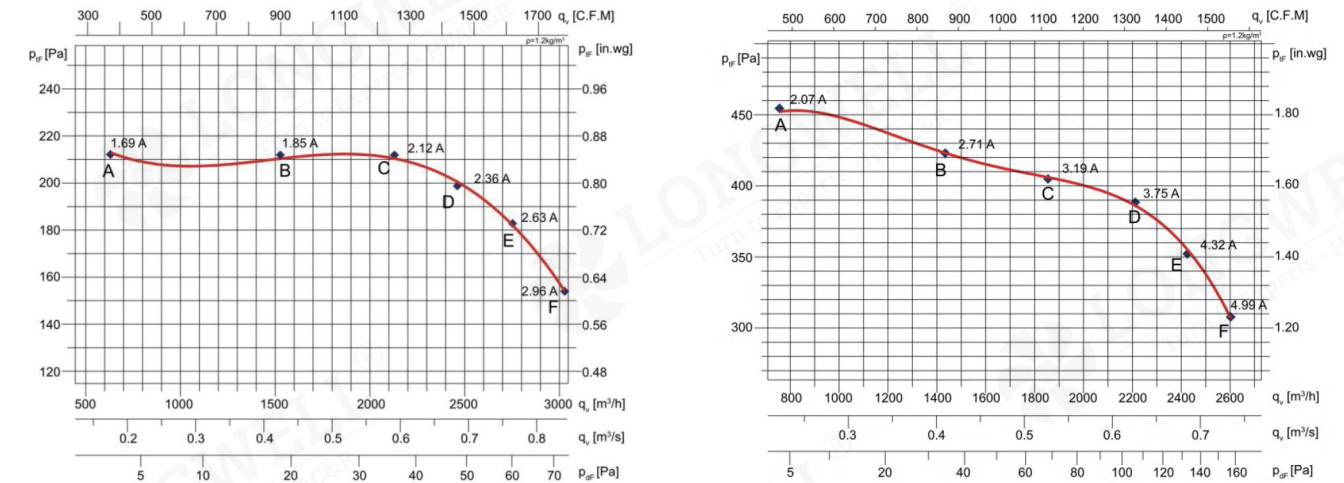
Duty Point	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	L _w dB(A)
A	55.0	63.4	59.3	61.7	60.1	57.8	48.7	68.2
B	53.0	60.1	61.4	64.5	62.9	62.7	53.7	69.8
C	53.2	61.2	64.0	67.6	65.9	66.9	59.2	72.9
D	56.1	63.3	65.5	69.4	68.0	69.2	62.0	74.9
E	58.5	65.5	66.8	71.0	69.9	71.0	64.4	76.7
F	59.8	66.6	67.8	72.2	71.1	72.5	66.1	78.0

Overall Size



DDBS/DDBM 9-9 Box-type Fan

Technical Specifications



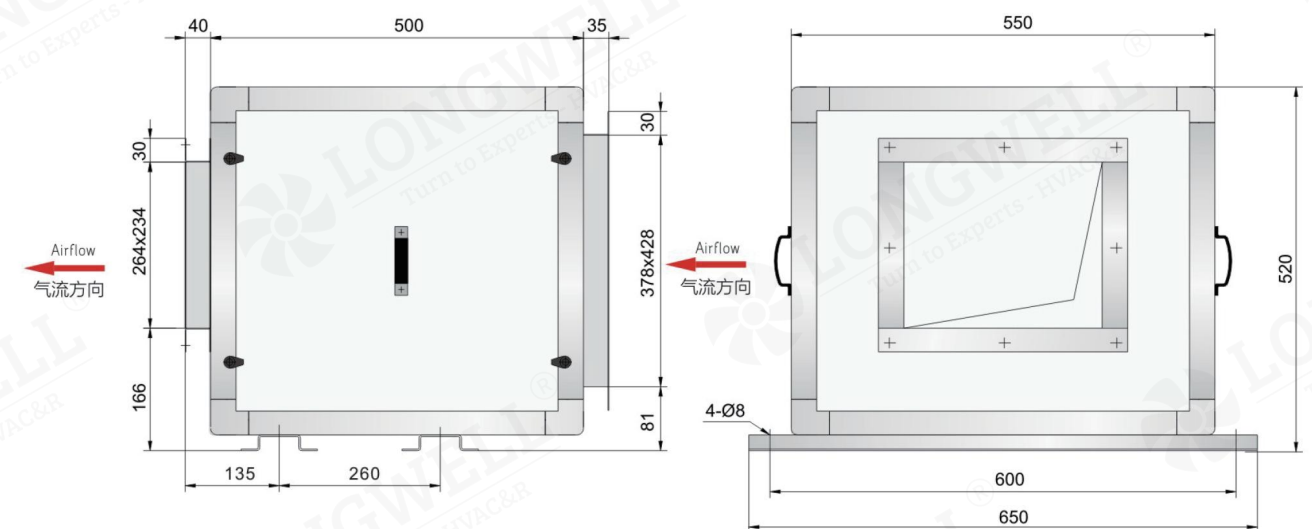
Model	Voltage (V)	Frequency (Hz)	Power	Current (A)	Weight (kg)	Protection Class
DDBS/DDBM 9-9-001	220	50	375W-6P	3.5	16.55	IP20

Duty Point	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	L _w dB(A)
A	56.9	67.5	61.7	64.4	60.9	59.8	48.9	71.0
B	54.1	68.5	59.9	65.7	64.5	61.1	49.8	72.1
C	55.7	64.3	63.6	67.3	65.5	65.6	55.9	72.6
D	59.7	64.1	65.7	69.4	67.9	68.2	59.8	74.7
E	59.4	65.3	67.1	71.0	70.0	70.5	62.8	76.6
F	60.3	66.4	68.6	72.5	72.0	72.5	65.0	78.3

Model	Voltage (V)	Frequency (Hz)	Power	Current (A)	Weight (kg)	Protection Class
DDBS/DDBM 9-9-002	220	50	450W-4P	5	16.75	IP20

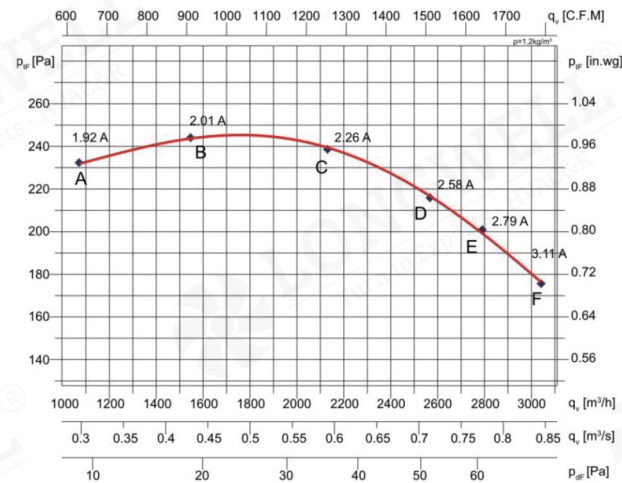
Duty Point	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	L _w dB(A)
A	65.0	71.2	66.9	69.3	67.6	65.9	57.8	76.0
B	64.1	70.5	66.5	69.9	68.4	66.7	58.5	76.1
C	60.4	67.9	65.1	69.5	68.3	67.2	58.9	75.1
D	59.4	67.6	66.7	71.1	69.8	69.1	60.7	76.3
E	59.6	67.3	67.6	71.9	70.4	70.2	62.2	77.0
F	59.0	66.3	67.2	71.5	70.2	70.4	62.7	76.8

Overall Size



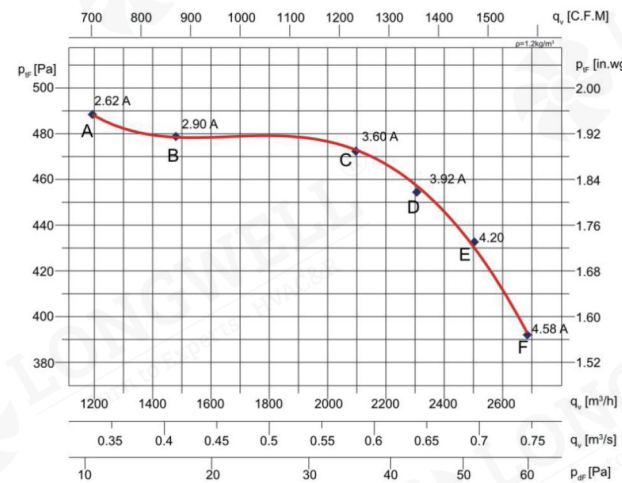
DDBS/DDBM 10-8 Box-type Fan

Technical Specifications



Model	Voltage (V)	Frequency (Hz)	Power (W)	Current (A)	Weight (kg)	Protection Class
DDBS/DDBM 10-8-001	220	50	375W-6P	3.5	17.1	IP20

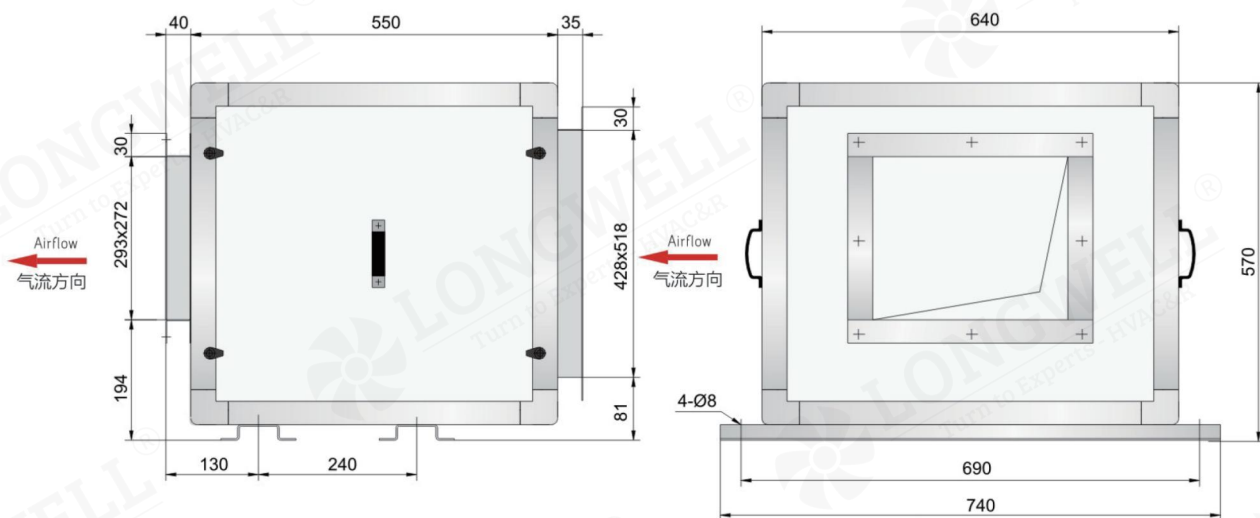
Duty Point	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	L _{WA} dB(A)
A	63.3	62.7	61.5	63.0	61.0	58.5	47.5	69.8
B	61.6	62.0	61.3	64.3	62.3	60.7	50.2	70.0
C	58.7	62.2	62.6	66.5	65.0	64.6	55.0	71.8
D	58.7	63.4	65.1	69.0	68.0	68.0	59.5	74.4
E	59.1	64.6	66.3	70.5	69.9	69.8	61.8	76.0
F	59.3	65.6	67.7	72.1	71.8	71.8	64.3	77.8



Model	Voltage (V)	Frequency (Hz)	Power (W)	Current (A)	Weight (kg)	Protection Class
DDBS/DDBM 10-8-002	220	50	550W-4P	4.9	17.65	IP20

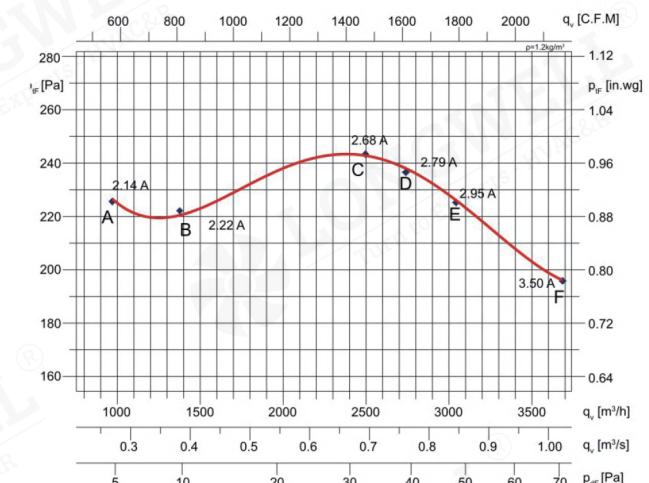
Duty Point	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	L _{WA} dB(A)
A	66.6	71.5	68.1	70.8	69.2	68.3	60.5	77.3
B	66.6	71.5	68.1	70.8	69.2	68.3	60.5	77.3
C	60.3	68.2	66.1	72.0	69.8	69.6	62.2	76.8
D	60.6	68.2	66.5	73.0	70.4	70.3	63.0	77.5
E	60.1	68.1	66.7	72.7	70.5	70.6	63.3	77.5
F	60.2	67.8	67.3	72.7	71.0	71.0	63.6	77.7

Overall Size



DDBS/DDBM 10-10 Box-type Fan

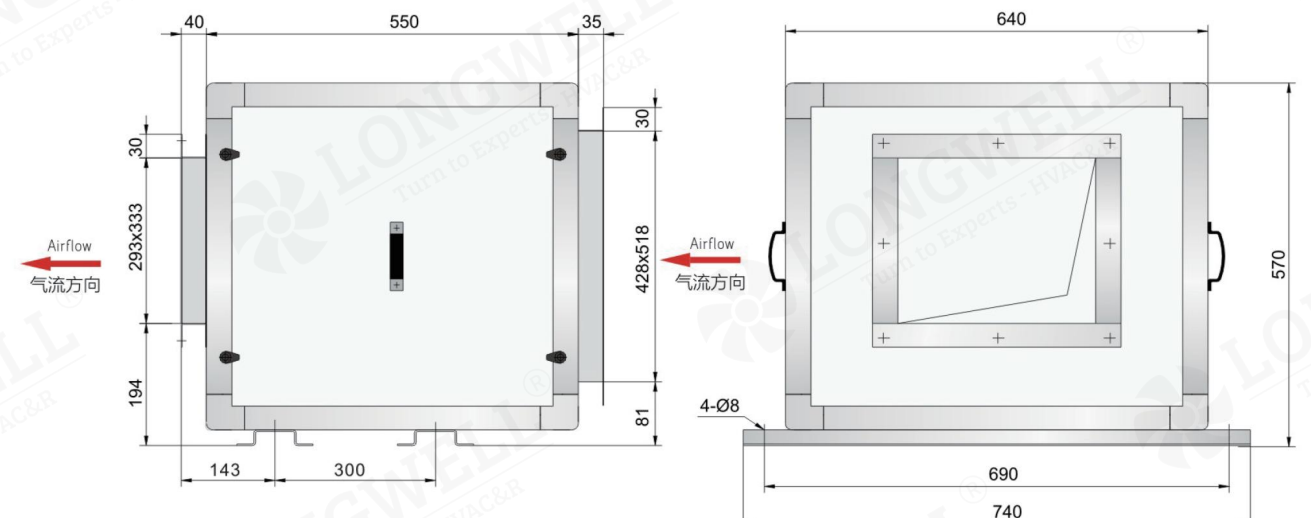
Technical Specifications



Model	Voltage (V)	Frequency (Hz)	Power (W)	Current (A)	Weight (kg)	Protection Class
DDBS/DDBM 10-10-001	220	50	450W-6P	3.5	18.3	IP20

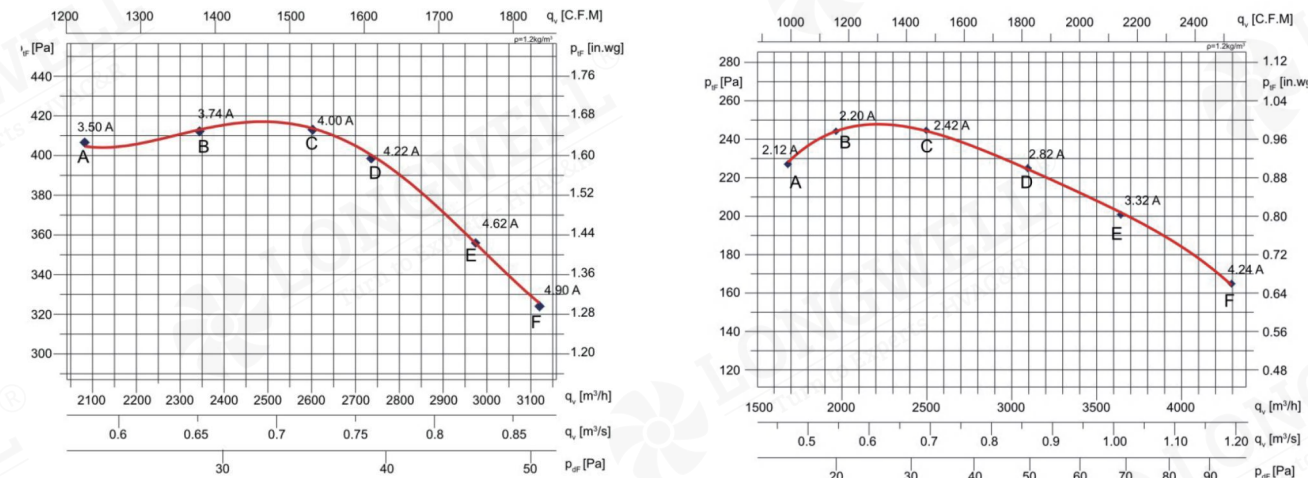
Duty Point	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	L _{WA} dB(A)
A	60.7	70.6	62.1	62.4	60.5	57.9	48.7	72.5
B	60.8	68.1	61.8	63.6	62.1	59.7	50.7	71.5
C	58.7	63.2	62.6	66.6	65.9	64.4	57.2	72.1
D	59.1	64.0	62.2	66.2	65.3	63.6	56.4	71.8
E	59.9	65.2	65.2	69.5	69.0	67.7	61.6	75.0
F	63.0	68.3	68.9	73.7	72.9	71.5	65.7	78.9

Overall Size



DDBS/DDBM 10-10 Box-type Fan

Technical Specifications



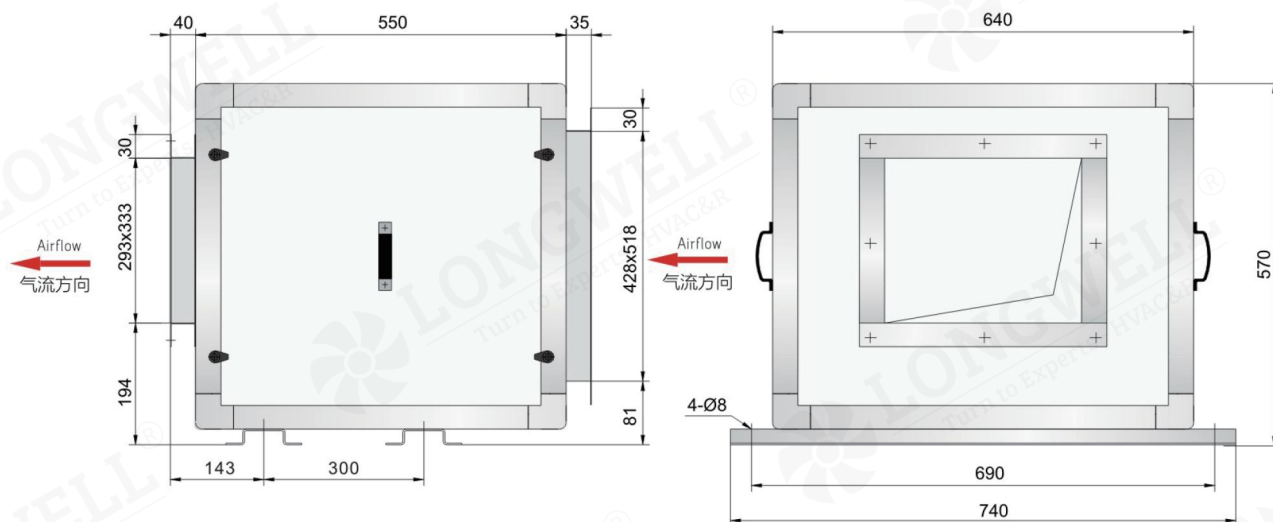
Model	Voltage (V)	Frequency (Hz)	Power (W)	Current (A)	Weight (kg)	Protection Class
DDBS/DDBM 10-10-002	220	50	550W-4P	4.9	18.75	IP20

Duty Point	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	L ₁₀₀₀ dB(A)
A	63.5	71.3	68.7	69.4	68.1	66.2	59.4	76.0
B	60.6	68.6	70.8	66.6	65.7	63.5	55.8	75.0
C	58.1	66.3	61.9	64.5	63.4	61.1	53.1	71.1
D	56.7	63.6	60.5	63.6	62.4	60.1	52.1	69.6
E	52.9	59.5	58.8	62.4	61.1	58.5	50.1	67.5
F	51.1	57.0	60.3	60.6	59.6	56.9	48.3	66.4

Model	Voltage (V)	Frequency (Hz)	Power (W)	Current (A)	Weight (kg)	Protection Class
DDBS/DDBM 10-10-003	220	50	550W-6P	4.7	19.45	IP20

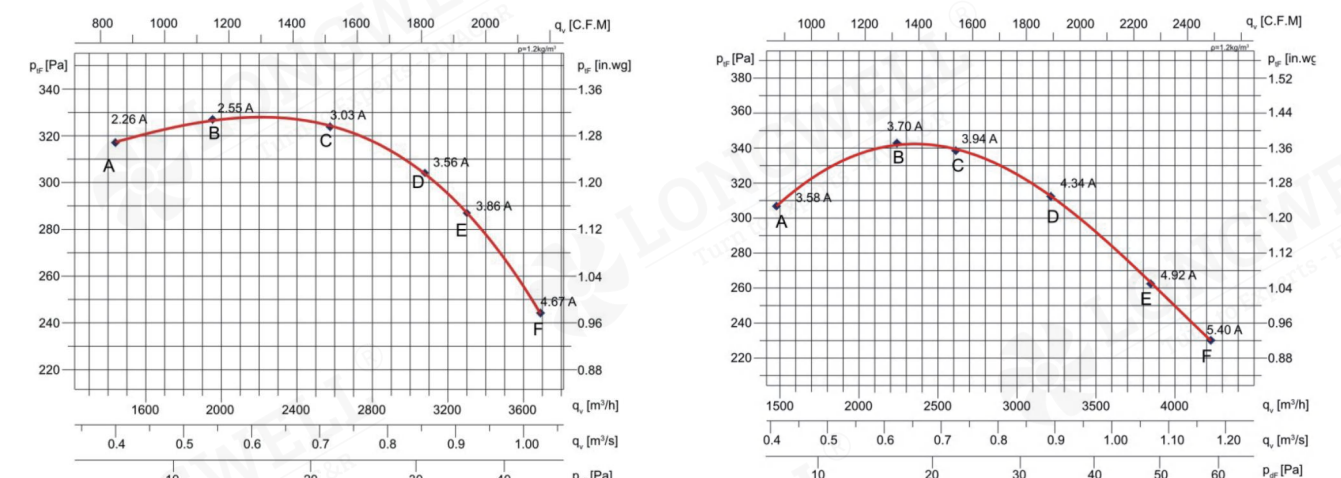
Duty Point	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	L ₁₀₀₀ dB(A)
A	66.0	65.6	64.9	75.6	69.0	72.0	72.1	79.4
B	66.0	64.7	64.4	72.8	68.9	71.3	71.0	77.9
C	61.7	64.2	70.7	69.6	67.3	67.6	66.9	76.1
D	60.7	65.7	66.0	72.0	69.7	68.9	65.5	76.6
E	63.0	68.4	69.1	74.9	72.9	72.3	68.9	79.6
F	69.1	72.0	72.9	77.9	77.2	77.1	75.1	83.8

Overall Size



DDBS/DDBM 12-9 Box-type Fan

Technical Specifications



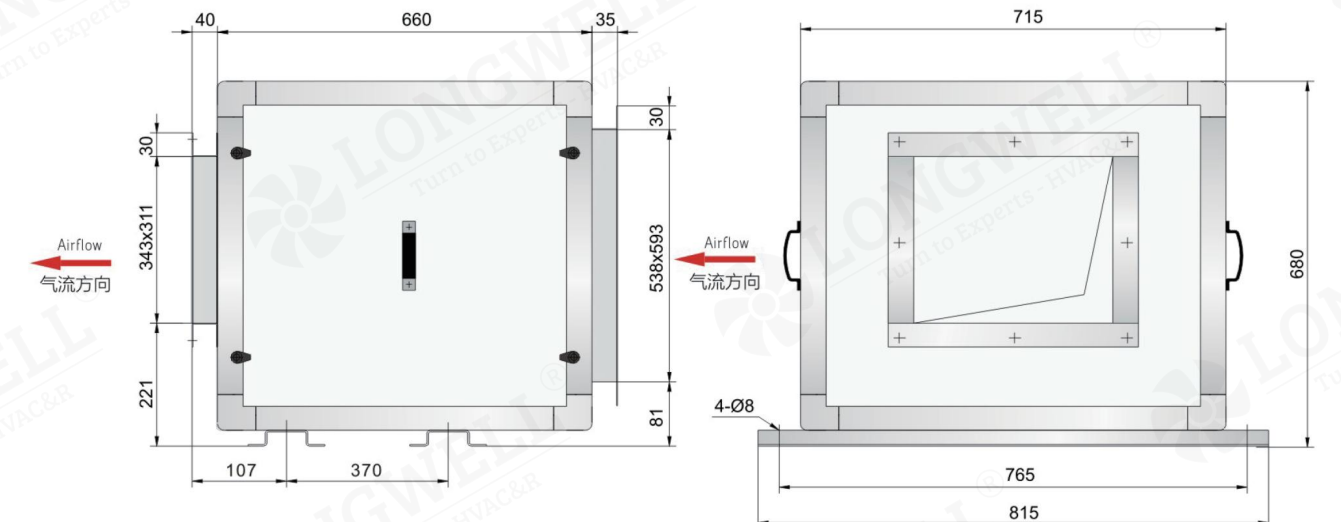
Model	Voltage (V)	Frequency (Hz)	Power (W)	Current (A)	Weight (kg)	Protection Class
DDBS/DDBM 12-9-001	220	50	550W-6P	4.7	22.4	IP20

Duty Point	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	L ₁₀₀₀ dB(A)
A	60.9	69.7	64.8	66.7	63.8	62.5	52.7	73.5
B	61.6	67.0	64.8	67.4	65.0	64.0	53.6	73.2
C	61.4	66.7	66.5	68.5	66.7	65.8	55.1	74.2
D	60.6	65.6	68.6	70.1	68.4	68.3	57.5	75.6
E	61.8	65.5	68.8	70.8	69.4	69.5	59.4	76.3
F	62.6	65.5	69.7	71.8	70.7	71.1	62.4	77.5

Model	Voltage (V)	Frequency (Hz)	Power (W)	Current (A)	Weight (kg)	Protection Class
DDBS/DDBM 12-9-002	220	50	750W-6P	5.4	22.8	IP20

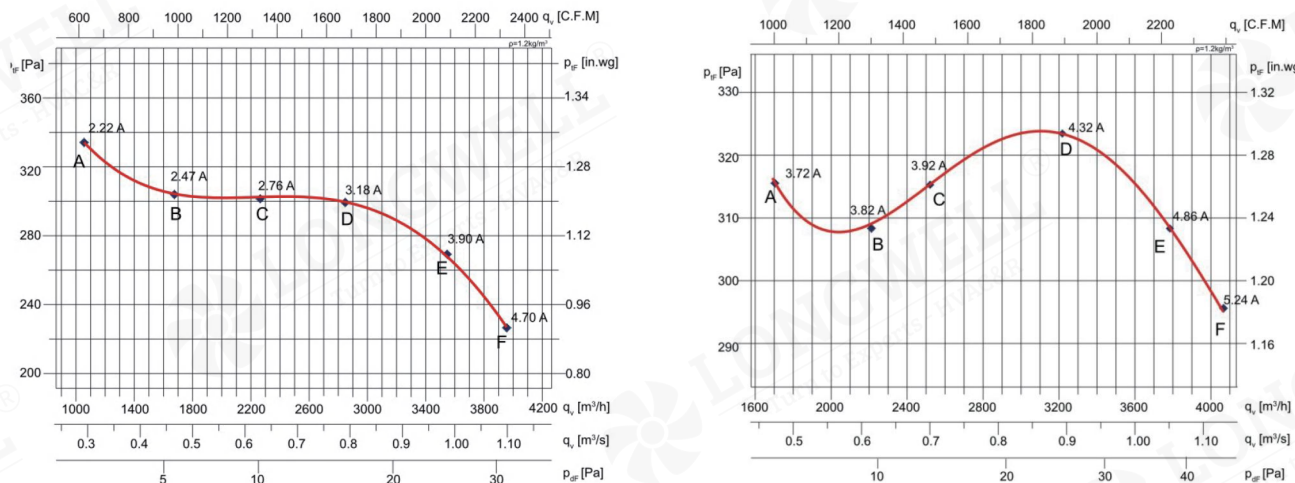
Duty Point	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	L ₁₀₀₀ dB(A)
A	61.9	66.3	65.4	67.4	63.9	62.4	52.7	72.8
B	62.2	66.2	65.7	68.1	65.3	64.3	55.1	73.5
C	62.3	67.0	66.6	68.9	66.3	65.6	56.8	74.4
D	65.8	68.1	69.3	71.5	68.8	68.4	60.3	76.8
E	63.8	71.7	71.9	75.0	72.3	71.7	63.8	79.9
F	62.4	70.0	72.1	76.2	73.5	73.2	65.4	80.7

Overall Size



DDBS/DDBM 12-12 Box-type Fan

Technical Specifications



Model	Voltage (V)	Frequency (Hz)	Power	Current (A)	Weight (kg)	Protection Class
DDBS/DDBM 12-12-001	220	50	550W-6P	4.7	22.8	IP20

Duty Point	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	L _{WA} dB(A)
A	61.3	71.6	65.7	66.2	64.4	62.7	54.0	74.5
B	62.0	65.7	64.8	65.9	63.5	61.5	52.6	72.1
C	61.7	67.4	64.3	65.9	64.0	62.3	53.0	72.5
D	61.8	66.7	65.2	66.9	65.7	64.0	54.3	73.2
E	61.9	64.1	66.2	67.2	66.0	64.4	55.6	73.1
F	61.2	64.0	66.9	68.0	67.3	65.9	58.3	74.0

Model	Voltage (V)	Frequency (Hz)	Power	Current (A)	Weight (kg)	Protection Class
DDBS/DDBM 12-12-002	220	50	750W-6P	5.4	24.4	IP20

Duty Point	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	L _{WA} dB(A)
A	64.3	80.8	68.7	65.6	64.1	62.1	54.3	81.4
B	64.9	83.8	66.8	66.2	64.4	62.2	54.2	84.1
C	62.2	72.3	70.4	69.3	64.9	63.4	55.3	76.4
D	62.5	73.0	65.8	66.9	66.1	64.8	56.2	75.8
E	62.9	71.7	67.4	68.1	67.8	66.6	61.0	76.1
F	62.4	67.3	67.8	68.8	69.0	67.8	62.9	75.6

Overall Size

