

AIR COMFORT

FIRE SAFETY

JM AEROFOIL

Performance Catalogue



Certified Model :
JM - 160

JM AEROFOIL - DESCRIPTION

Features

- 1600mm Dia with 635 hub
- Volumes up to (2,62800 cmh, 73.0 cms)
- Static pressures up to 1400pa
- Fans tested to AMCA 210, AMCA 300
- High energy efficiency
- Low installed noise levels
- Motor protection IP55/IP65 as required
- Larger sizes available please enquire for more information

Electrical supply

380-420V/ 50-60Hz/3

Temperature range

-40o to 50oC as standard

Impellers

A unique high efficiency aerofoil section blade with a purposely smoothed hub and clamp plate for adjustable pitch angle availability.

FlaktWoods impellers are all high pressure die cast to offer this aerofoil sections for low generation of noise. Every cast aluminium component is X-ray examined using Real Time Radiography inspection prior to assembly. The maximum pitch angles shown allow for speed control by frequency inverter (3ph only).

Sealed for life bearings lubricated with wide temperature range grease. These motors are suitable for inverter drives and where within scope incorporate IE2/ IE3 compliant motors.



Motors

All motors are totally enclosed air stream rated class F insulation. Constructed from aluminium or cast iron as standard with special "T" slot, pad or foot mounted fixings. Single speed motors are suitable for speed control by voltage regulation where indicated. Three phase motors are suitable or use with frequency inverters.

Two speed motors are available on request. Suitable for horizontal or vertical shaft operations. Supplied IP55, with removable drain plug.



Casings

JM Aerofoil fans are available in either a long-cased form, complete with an externally mounted pre-wired electrical terminal box, or short cased for duct or plate installation. Casings are spun from sheet sleet with integral Pre-drilled and radiused inlet flanges or welded flanges. The galvanised finish gives a high resistance to corrosion and is ideal for external as well as internal use. Special coating also available for marine and industrial application. Special design integral straightening vanes provided.

Product Code

160 JM /63 /4/6/XX

- 160 JM /63/ 4/6/20
- Where: 160 denotes the fan impeller diameter in centimetres.
- JM denotes Fan Type.
- /63 denotes impeller hub diameter in centimetres.
- /4 denotes a nominal 4 pole speed.
- /6 denotes the number of blades
- /XX denotes the Pitch angle for the required duty.

Accessories Available (on request)



Damper



Guard



Bellmouth



Flange



Mounting Feet



Rubber AV's



Spring AV's



Flexible Connector



Silencer



Controls Transformer



Controls Electronic

HOW TO SPECIFY A FAN

Specifying The Fan

Having chosen the fan most suitable for your individual application.

Please specify as follows:-

1. The fan shall be manufactured by FlaktGroup model type JM Aerofoil long or short cased (L or S- type)
2. Motors, squirrel cage type, insulated to class F, bearings lubricated with wide temperature grease, keyed shaft. To comply with BS5000 Pt 99 and IEC 34-1. Weatherproof to IP55. (Overheat protection provided on most single phase motors).
3. Impellers, precision die cast aluminium hub and clamp-plate, with equally spaced, fully adjustable precision die cast Aerofoil section blades. All rotating aluminium components to be X-ray examined prior to machining to assure quality of castings.
4. Casings, either a long cased form complete with an externally mounted pre-wired electrical terminal box, or short cased for duct or plate installation. Casings are spun from sheet steel with integral pre-drilled flanges, fully welded seams and hot-dipped galvanised after manufacture for excellent durability.
5. Mounting Arms/ motor base manufactured from mild steel hot dipped or special paint galvanised after manufacture.
6. Performance shall be independently approved by AMCA, and established in accordance with AMCA 210 installation category D, method of testing Air performance and AMCA 300 for sound testing
7. Ancillaries as required.

Ordering The Fan

After identifying the best fan for your application please order as follows:-

1. Fan type : JM Aerofoil long cased (L-type), or short cased (S- type) Form A or Form B
2. Fan Code:
160 JM /63/ 4/6/XX
Where: 160 denotes the fan impeller diameter in centimetres.
JM denotes Fan Type.
/63 denotes impeller hub diameter in centimetres.
/4 denotes a nominal 4 pole speed.
/6 denotes the number of blades
/XX denotes the Pitch angle for the required duty.
3. Quantity required.
4. Duty required at standard air and temperature
e.g. 30 cms @ 800 Pa Static Pressure
5. Motor e.g.: 250M
6. Electrical Supply:
380-420 V / 50 Hz / 3 ϕ

7. Ancillary items (Optional)

Mounting Feet
Impeller and Motor Side Guards
Silencers with or without pod
Speed Controller (electronic or auto-transformer;
or 2 speeds with type MDS3.10
Air Operated Dampers
Matching Flanges
Bellmouth Inlets
Flexible Connectors
Vibration Isolators



FläktGroup India Pvt. Ltd. certifies that the 160JM, shown herein are licenced to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA publication 211 and AMCA publication 311 and comply with the requirements of the AMCA Certified Ratings Program.

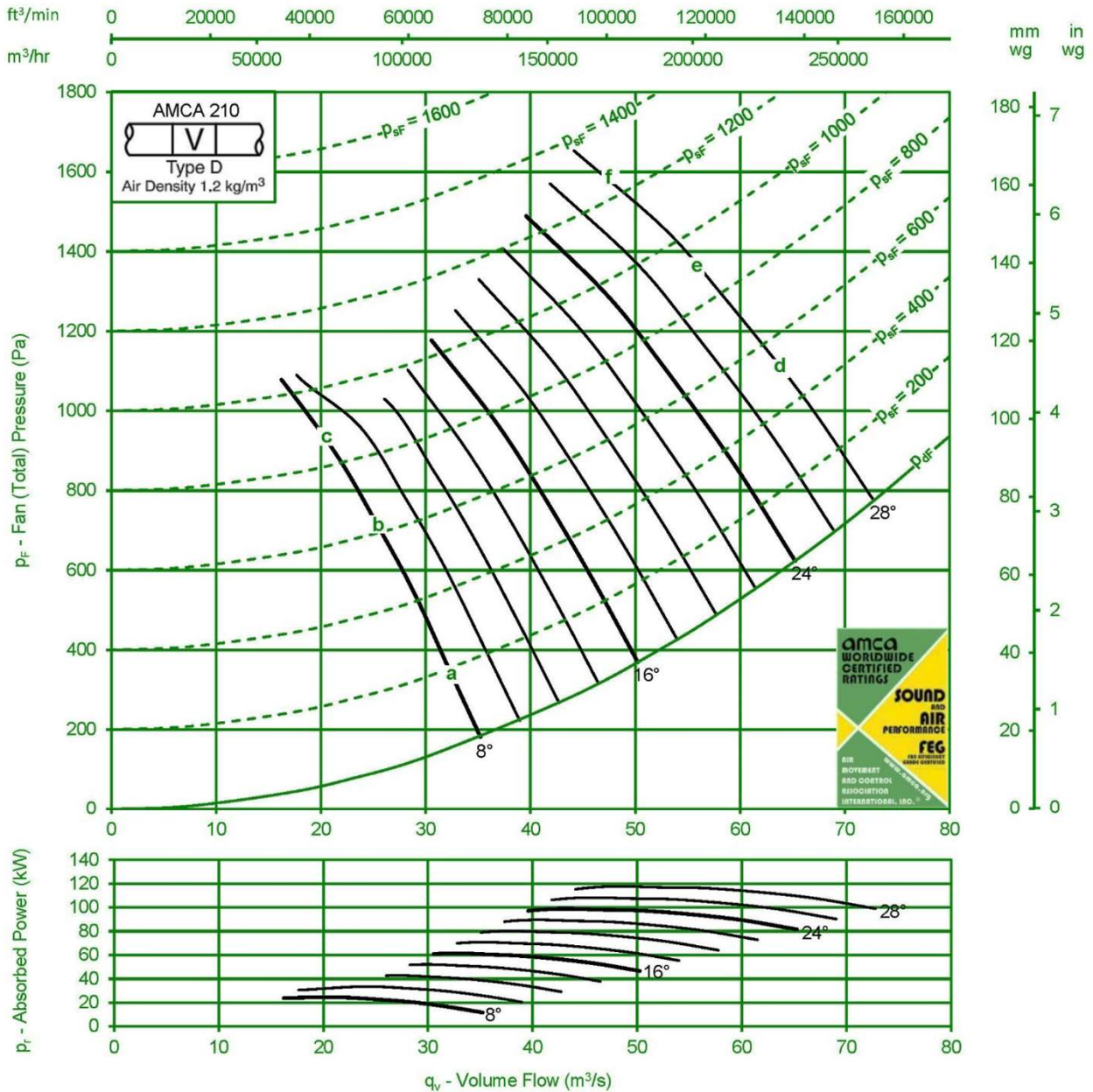




Fan Code: 160JM/63/4/6 ...
1600 mm 1480 rev/min 6 Blades 50 Hz



FEG 85



Ref	FULL OCTAVE BAND FREQUENCY								LWA
	63 Hz	125 Hz	250 Hz	500 Hz	1K Hz	2K Hz	4K Hz	8K Hz	
a	108	108	104	100	99	97	97	96	105
b	106	106	102	108	111	107	100	95	114
c	109	109	104	114	112	105	99	95	115
d	118	118	111	107	105	102	99	99	111
e	116	116	111	106	105	103	100	100	111
f	117	117	110	106	105	104	100	100	111

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The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and AMCA Publication 311 and comply with the requirements of the AMCA Certified Ratings Program.

Performance certified is for installation type D: Ducted Inlet-Ducted Outlet. Performance ratings do not include the effects of appurtenances (accessories).

The Sound Power Level ratings shown are in decibels, referred to 10^{-12} watts, calculated per AMCA International Standard 301. Values shown are for outlet Lwo and LwoA sound power levels for installation type D: ducted inlet, ducted outlet. Ratings include the effects of duct end correction.

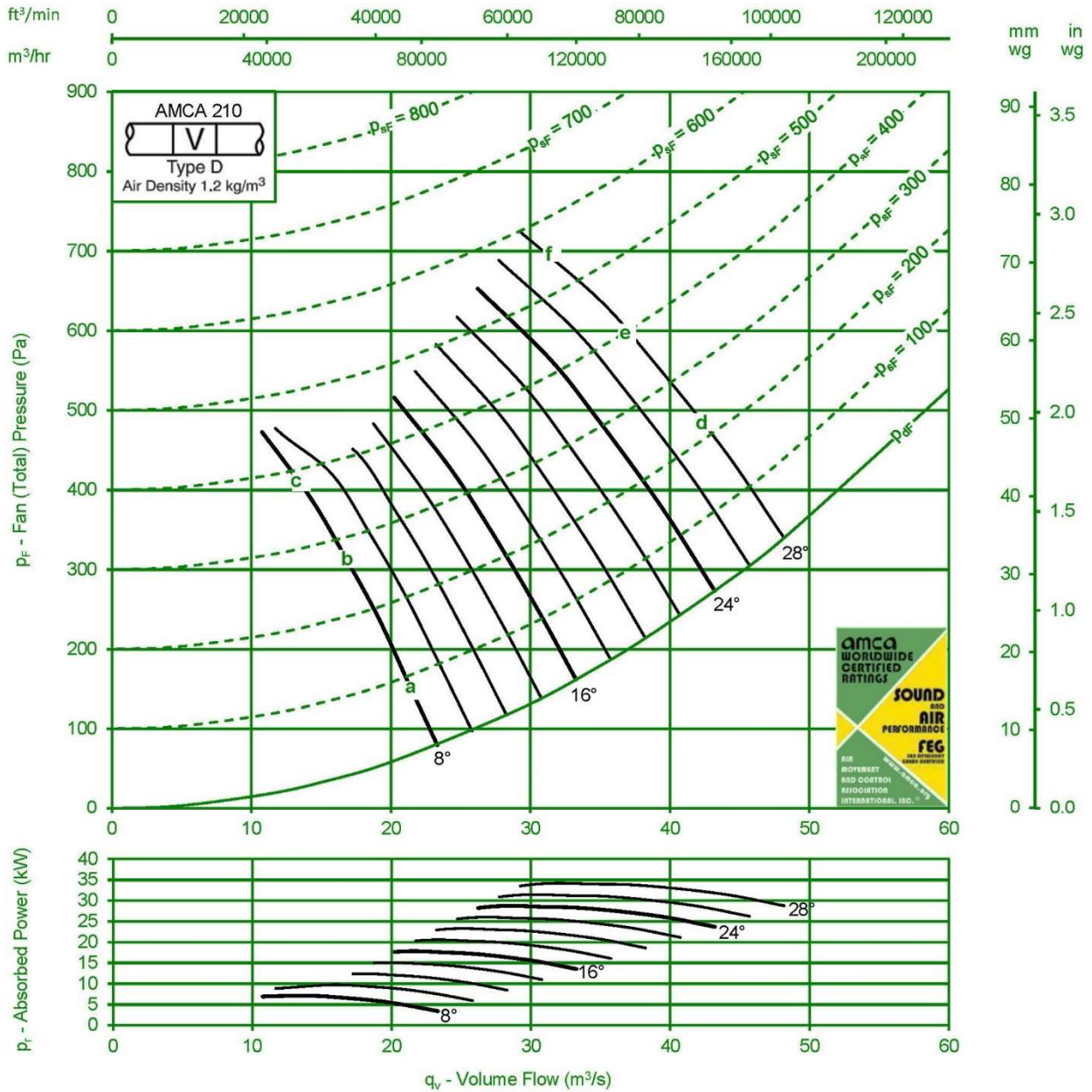
The A-weighted sound ratings shown have been calculated per AMCA International Standard 301.



Fan Code: 160JM/63/6/6 ...
1600 mm 980 rev/min 6 Blades 50 Hz



FEG 85



Ref	FULL OCTAVE BAND FREQUENCY								LWA
	63 Hz	125 Hz	250 Hz	500 Hz	1K Hz	2K Hz	4K Hz	8K Hz	
a	99	99	92	90	89	88	88	81	95
b	97	97	96	101	100	94	88	82	103
c	100	100	101	104	99	93	88	84	104
d	109	109	100	97	94	91	90	90	101
e	107	107	99	96	95	92	91	91	101
f	108	108	99	97	96	93	91	91	101

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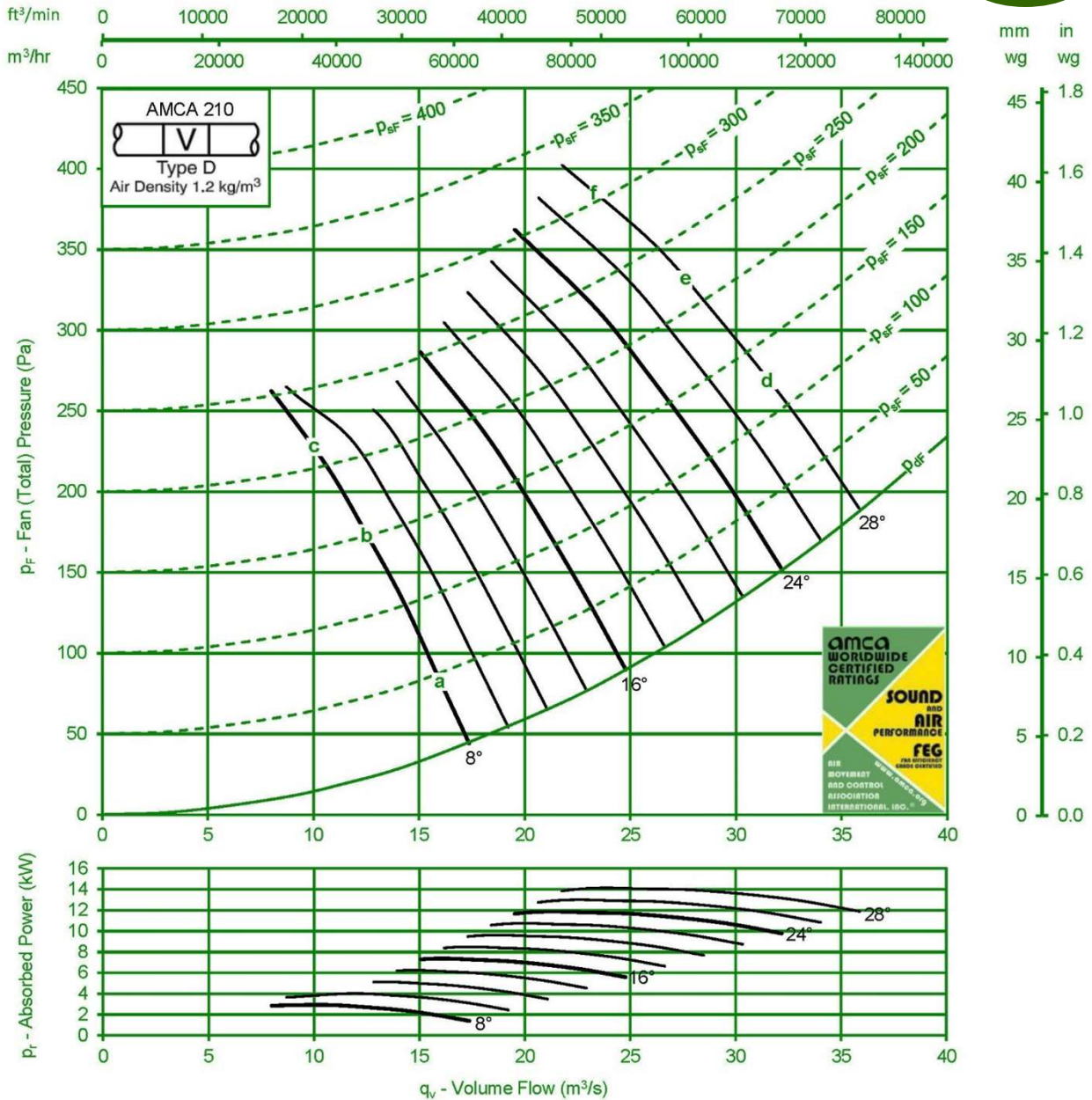
The A-weighted sound ratings shown have been calculated per AMCA International Standard 301.



Fan Code: 160JM/63/8/6 ...
1600 mm 730 rev/min 6 Blades 50 Hz



FEG 85



Ref	FULL OCTAVE BAND FREQUENCY								LWA
	63 Hz	125 Hz	250 Hz	500 Hz	1K Hz	2K Hz	4K Hz	8K Hz	
a	93	89	84	83	82	81	81	70	88
b	91	86	93	96	91	85	80	73	96
c	93	89	98	97	90	83	80	75	97
d	102	95	92	90	86	84	83	84	93
e	101	95	91	89	88	84	85	85	94
f	102	95	91	90	88	85	85	85	94

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Performance certified is for installation type D: Ducted Inlet-Ducted Outlet. Performance ratings do not include the effects of appurtenances (accessories).

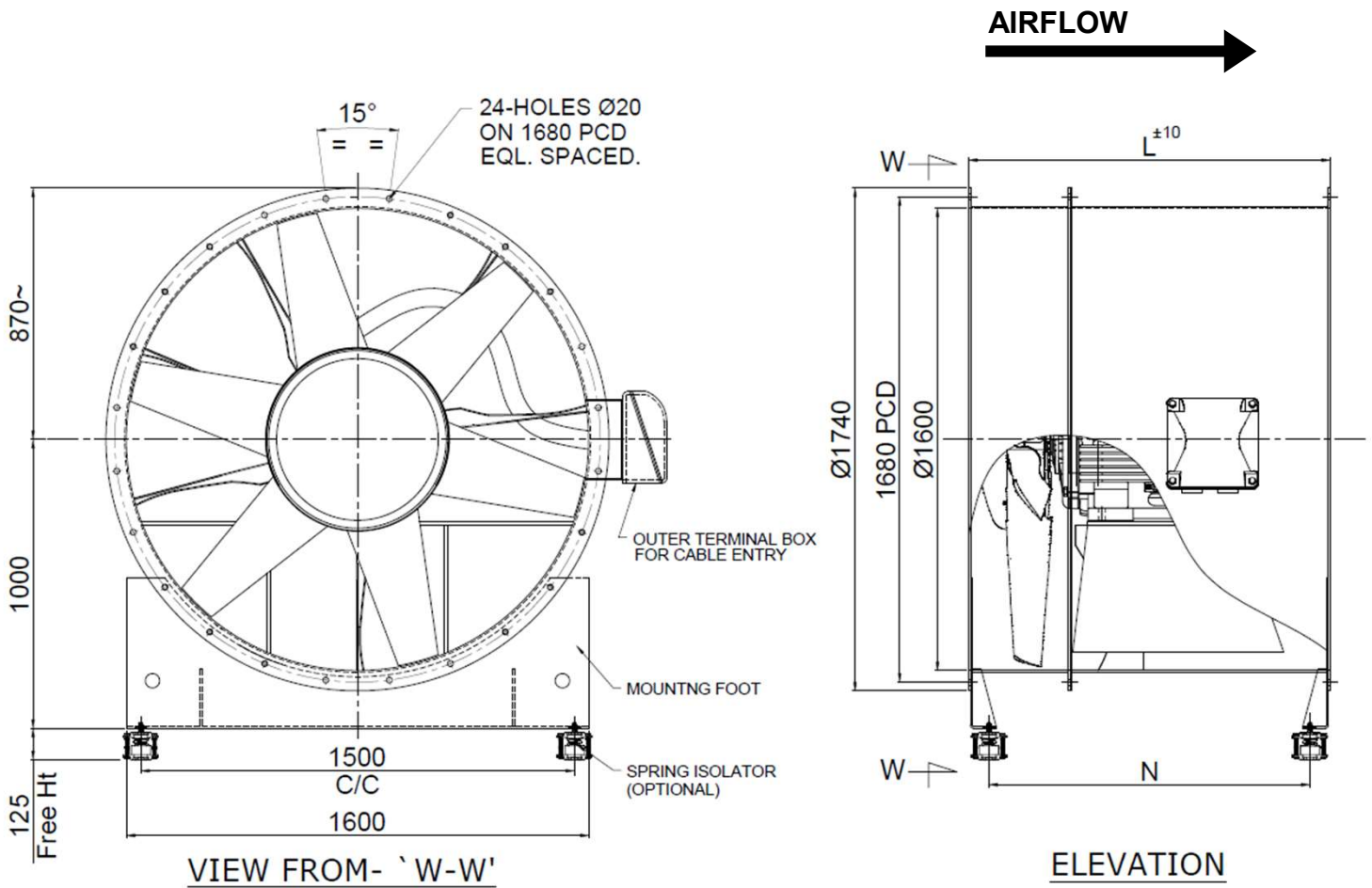
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The A-weighted sound ratings shown have been calculated per AMCA International Standard 301.



ISO 9001
FM 00155

Dimensions and Weights



NOTE : ALL THE DIMENSIONS ARE IN 'MM' UNLESS OTHERWISE SPECIFIED.

FAN MODEL COVERS

- 160JM/63/8/6/... - 1600 mm 730 rev/min 6 Blade 50Hz
- 160JM/63/6/6/... - 1600 mm 980 rev/min 6 Blade 50Hz
- 160JM/63/4/6/... - 1600 mm 1480 rev/min 6 Blade 50Hz

MOTOR FRAME	L	N	WEIGHT (Kg)
225	1050	908	1150~
250	1100	958	1300~
280	1250	1108	1500~



WE BRING **BETTER AIR**[™] TO LIFE

FläktGroup is a global leader for indoor Air Comfort and Fire Safety. We specialize in the design and manufacturing of a wide range of products, systems and components to provide the best performances and maximum energy efficiency. Our product brands such as SEMCO®, eQ®, eQ Prime®, JM Aerofoil®, Econet®, Veloduct®, Optivent®, Optimix®, Econovent® and Cleanvent® are well known and trusted by customers all over the world to deliver best Air Comfort and Fire Safety

Our collective experience is unrivalled for every customer application like Offices, Hygiene, Hotels, Public Buildings, Education, Car Parks, Retails, Green Buildings, Marine, Oil & Gas. and others.



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