Intelligent Ventilation

Axial Fan Range

ELTA

Established over 40 years ago on principles of high quality, fan engineering solutions, future focused innovation, strong relationships and the value of people. Elta was one of the original members of Elta Group.

Today, it is an internationally recognised leader in axial flow fans and impellers with pioneering technologies that also include the world's first adjustable-pitch mixed-flow impeller.

The axial ranges manufactured in our Asian factories incorporate the Elta impeller designs which are renowned across the world for performance and efficiency.


ELTA FANS

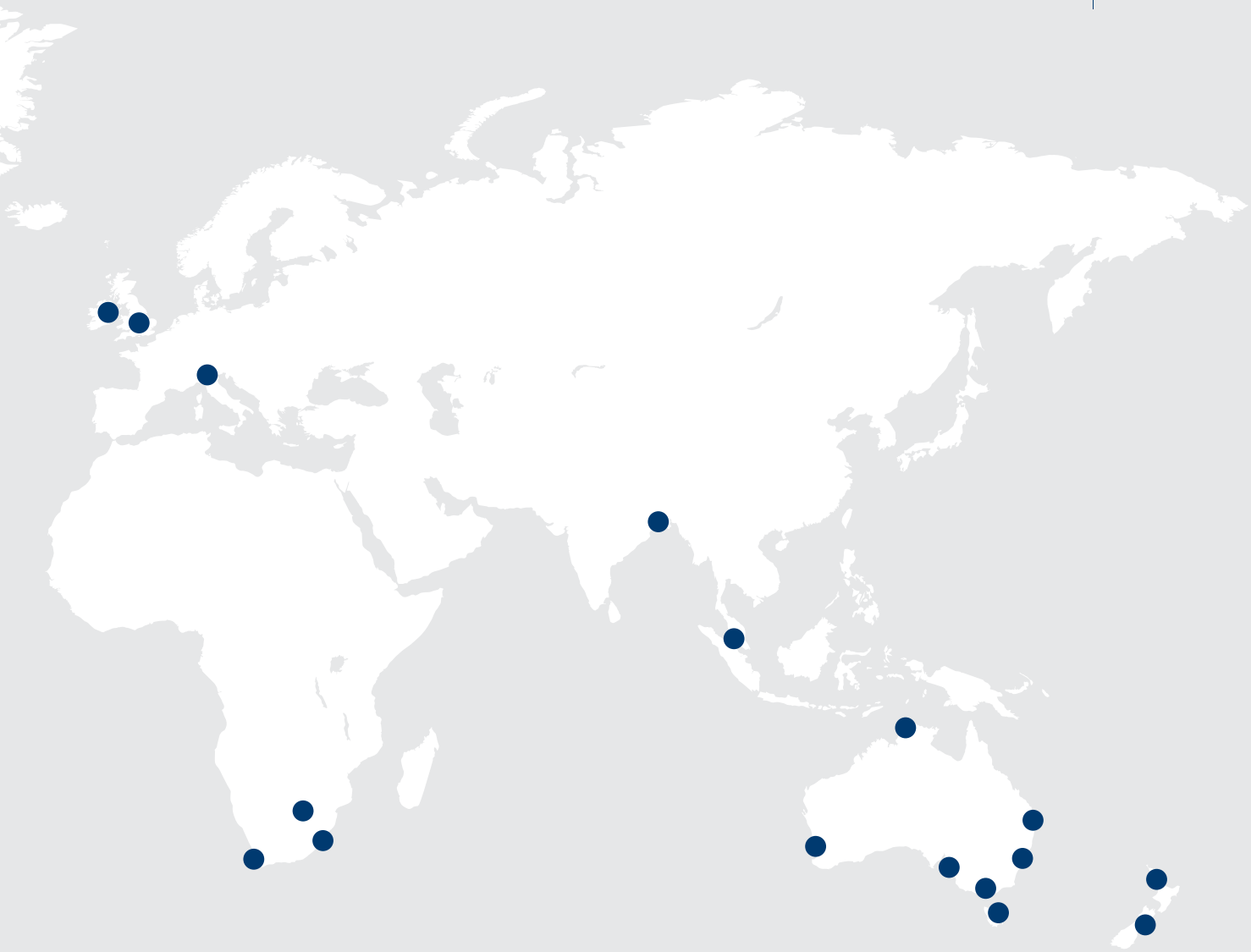
PART OF ELTA GROUP

Across all of our people, in all of our businesses, on all continents on which we operate, Elta Group has one purpose: To enhance life through air.

Over 20 years we have been a proudly independent, family-owned group, but our foundations were laid over 45 years ago. Our foundations were built on an entrepreneurial spirit and a clear vision of meeting market needs and improving air quality. These have seen us become a leader in high-integrity solutions that move, filter, treat and distribute air, from agriculture to building services to applied technology. We're never standing still, always living and breathing our cause, and looking to the horizon.

eltagroup.com

ELTA GROUP



Europe
Asia
Australasia
REGIONS

Building Services
Applied Technology
Agriculture
International
MARKETS

Fans
Air Handling
Heat Recovery
Filtration
Natural Ventilation
Acoustics
Air Distribution
Controls
Heating
Cooling
Welfare
Lighting
PRODUCTS


ELTA

WORLD CLASS CONSTRUCTION

All our axial fan casings are rolled and flanged from either pre-galvanised sheet or heavy-gauge mild steel that is hot-dip galvanised after manufacture. All hot-dip galvanising of axial flow fan products is to BS EN ISO 1461:2009 and is the standard finish on the fans larger than 800mm diameter and their accessories. The standard casings enclose the impeller and motor completely. Weatherproof external terminal boxes are standard.

The motor is wired into the external terminal box through flexible terminal weatherproof conduit and a separate earthing screw is provided.

An inspection hatch is standard on fans 900mm diameter and over; a 50mm sight hole is fitted on smaller fans.

Flameproof or increased-safety motors are wired to the outside of the case and left with a generous length of lead. This is so the client can connect to their own terminal box in accordance with the requirements for the particular hazardous zone.

GLOBALLY RENOWNED IMPELLER TECHNOLOGY

Elta impellers use the latest technology in axial impeller design, resulting in enhanced pressure development, energy efficiency and reduced noise levels.

There are three main ranges:
Elta 1000: 315 to 1000mm diameter using 150 or 250mm diameter hubs.
Elta 1400: 800 to 1400mm diameter using 255 or 350mm diameter hubs.
Elta 2000: 1250 to 2000mm diameter using 400 or 550mm diameter hubs.

Blades & hubs

Our blades have been designed for optimal performance, for both aerodynamic needs as well as noise characteristics. They are available in a range of materials. All hubs use Elta TECH-LOCK® taper bushes as standard. The bush ensures ease of fitting and removal of the impeller from the motor shaft should adjustment of the pitch angle, cleaning or repair of the impeller prove necessary.

Fixings & balancing

All impellers are assembled using high-tensile, zinc-plated set screws and self-locking nuts. The balance of all impellers is carefully checked before leaving our facilities to ensure vibration-free running.

Fully adjustable

All impeller pitch-angles are fully adjustable. For the Elta Range, up to size 1400, the required blade angles are set on jigs but sizes up to 1000 may also be set utilising the graduated scale at the root of each blade. For the Elta 2000 Range, pitch angle setting is by protractor.

For performances beyond those detailed, and for applications such as mine and tunnel ventilation, please refer to our experienced team for more information.

A JOB DONE RIGHT

At Elta, we pride ourselves on our integrity and reliability as a supplier. We respect that this is your project. To ensure that your project is the best it can be, when working with us, you get a partnership with as much or as little involvement from us as you need.

We have a dedicated sales team with individuals who are specifically trained to be experts in their individual market. When you place an order with us, you are allocated a direct point of contact to ensure consistency throughout the sales process. Our dedicated projects team constantly monitor projects, giving customers updates on their order as often as they need them.

From order processing to manufacture and all the way through to delivery, our dedicated aftersales team follow an established process to ensure we don't lose visibility of the project at any stage.

AP SERIES

The AP Series of axial flow fans is available in an extensive range of variants and airflow performance. They can be manufactured to handle most conditions from ambient air to hot, corrosive or explosive gases and can be ordered in sizes extending from 315 to 2000mm diameter.

Features

- Standard casings are made of durable hot-dipped galvanised steel or pre-galvanised steel.
- Casings with special coatings such as epoxy paint can be supplied.
- Casings of stainless steel or other materials can be supplied.
- Ability to select a fan with a specific impeller pitch angle ensures selections can be made accurately to the specification.
- All impellers are adjustable pitch aerofoil section.
- Impeller materials range from GRP (standard), aluminium, nylon and anti-static.
- Casing designs for direct-drive, belt-drive, smoke-spill and bifurcated applications are available.
- Can be supplied with motors to meet Ex e, Ex d, Ex nA and Ex tD Standards.
- Available in various models; direct-drive, direct-drive vertical mounted, belt-drive and bifurcated direct-drive.

Typical Applications

Commercial and industrial supply or exhaust air applications such as shopping centres, office buildings and car parks, through to industrial processes and equipment ventilation.

Smoke-spill Applications

The APS Series has been tested to meet the air performance and high temperature test requirements of Standards AS/NZS1668.1:1998 and AS4429:1999; both tests are mandatory. For advice on smoke-spill wiring requirements refer to the above standards.

Hazardous Fume Applications

AP Series fans can be made to accommodate requirements for corrosive fume and explosion risk applications. Special coatings and alternative materials, such as stainless steel, are available as well as increased safety motors and anti-static impellers. Our sales engineers are able to assist with requirements, which must be specified at time of quotation.

Construction

Casings are hot-dip galvanised mild steel, or pre-galvanised steel. Impellers can be GRP (standard) or aluminium. Anti-static blades for hazardous applications up to 1400mm diameter are also available.

Motors

Type - squirrel cage, induction motors to suit virtually any application.

Electricity supply - three-phase to suit a wide range of voltages and frequencies.

Bearings - ball

Motors to meet Ex e, Ex d, Ex nA and Ex tD Standards can be fitted.

Internal Thermal Protection

Thermal protection can be provided as an optional extra.

Testing

Airflow tests to BS848:Part 1, 1980 (for our 315 to 1000mm diameter models) and ISO5801:1997 (for our 1250 to 2000mm diameter models)

Noise tests to BS848:Part 2, 1985

Ancillary Equipment

CP Series - Circular silencers

Vibration isolators

Matching flange

Mounting foot

Inlet cone

Finger guards

Inverter

The Complete Series

AP Series - Direct-drive
For a wide range of applications.

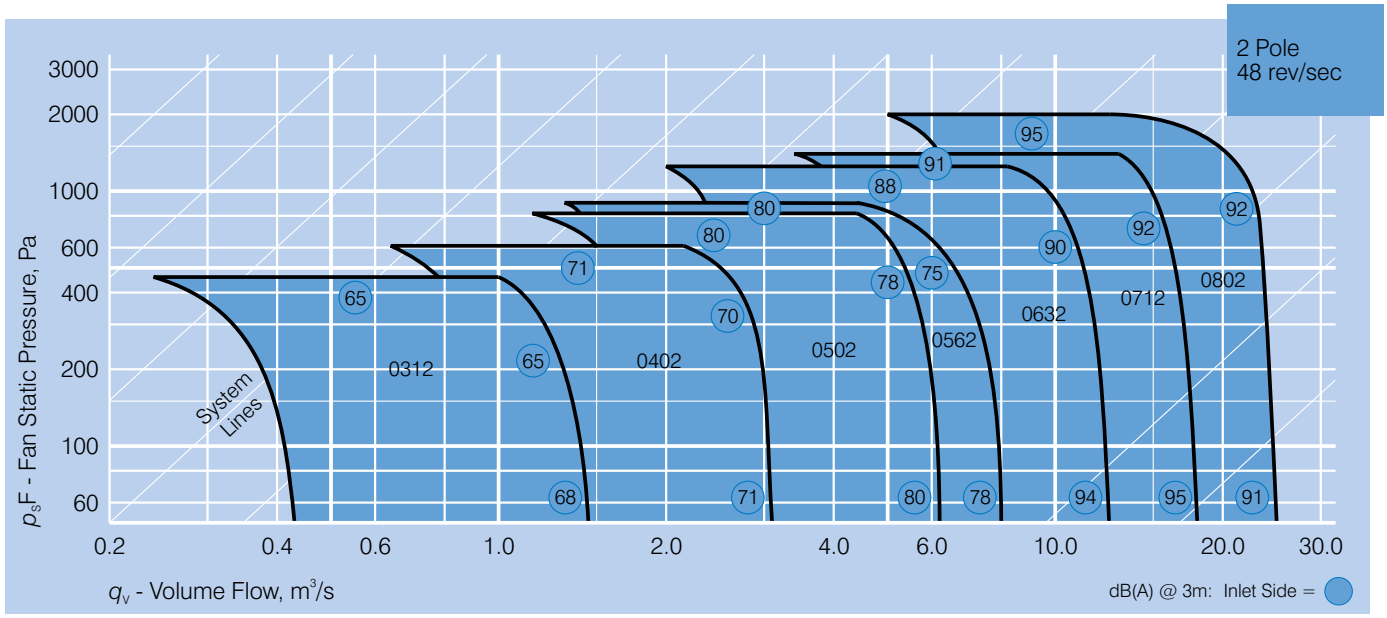
APV Series - Direct-drive vertical mounted
For applications where the fan must be installed vertically.

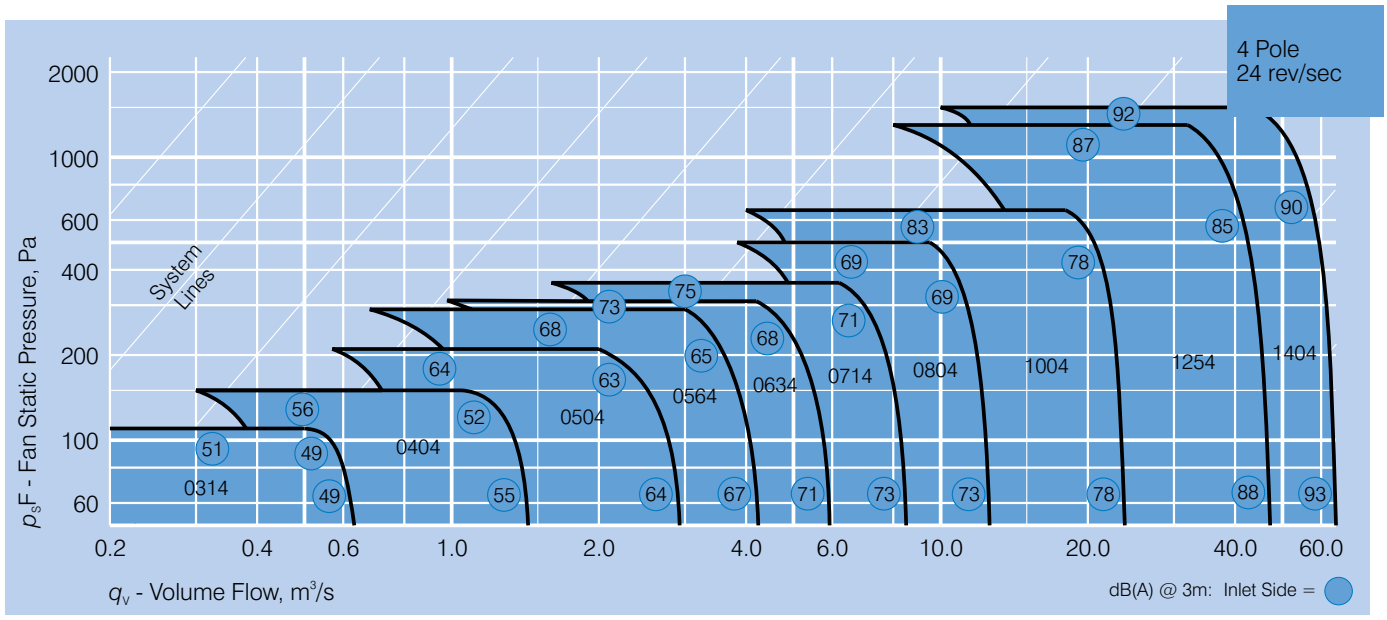
APS Series - Direct-drive smoke-spill
For smoke spill applications.

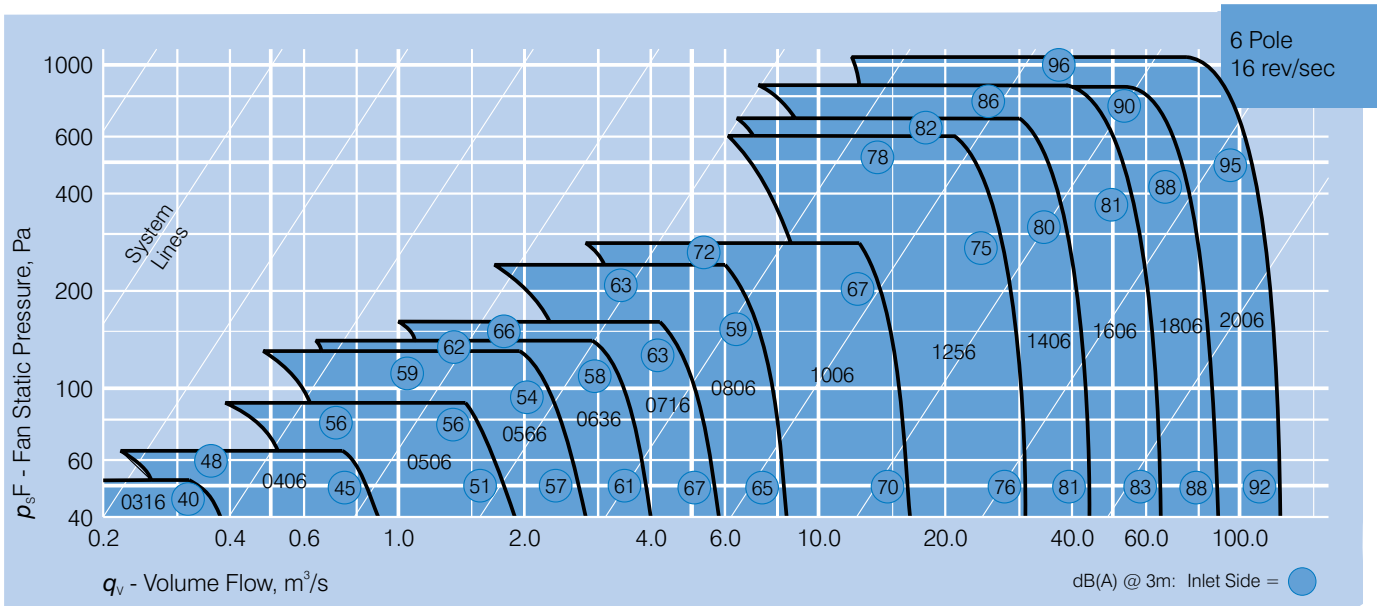
APB Series - Belt-drive
For applications where the motor must be out of the air stream.

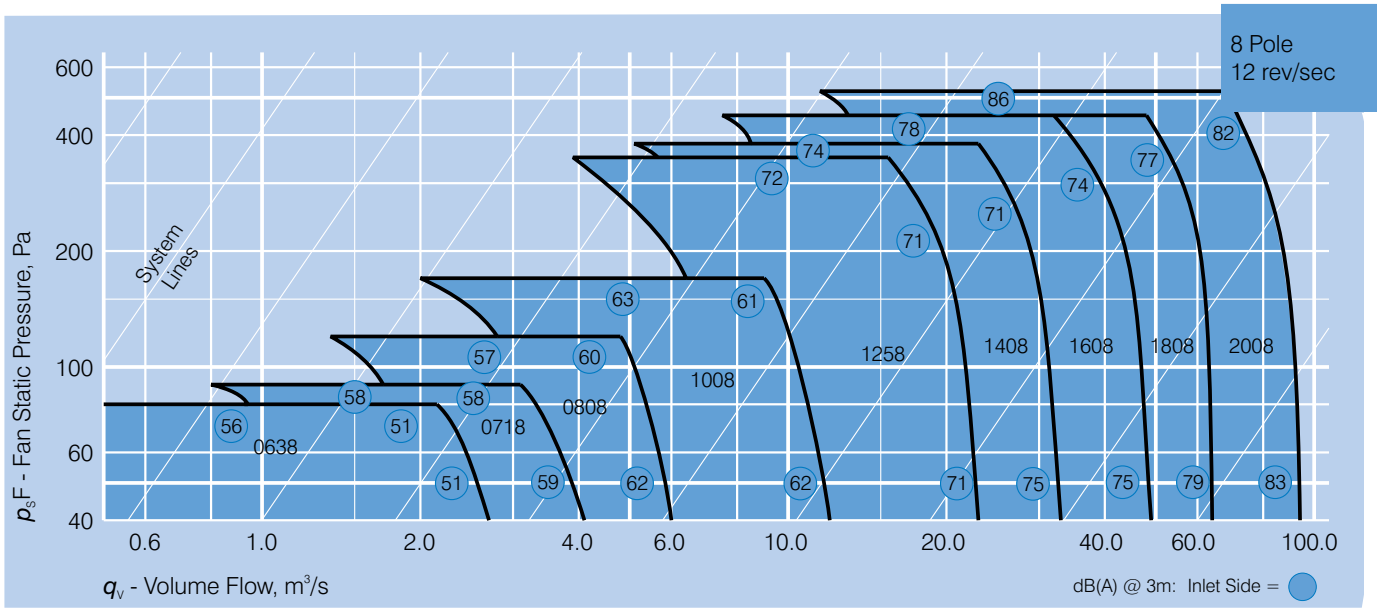
BFA Series - Bifurcated, direct-drive
For applications involving toxic, noxious, abrasive and hot gases.

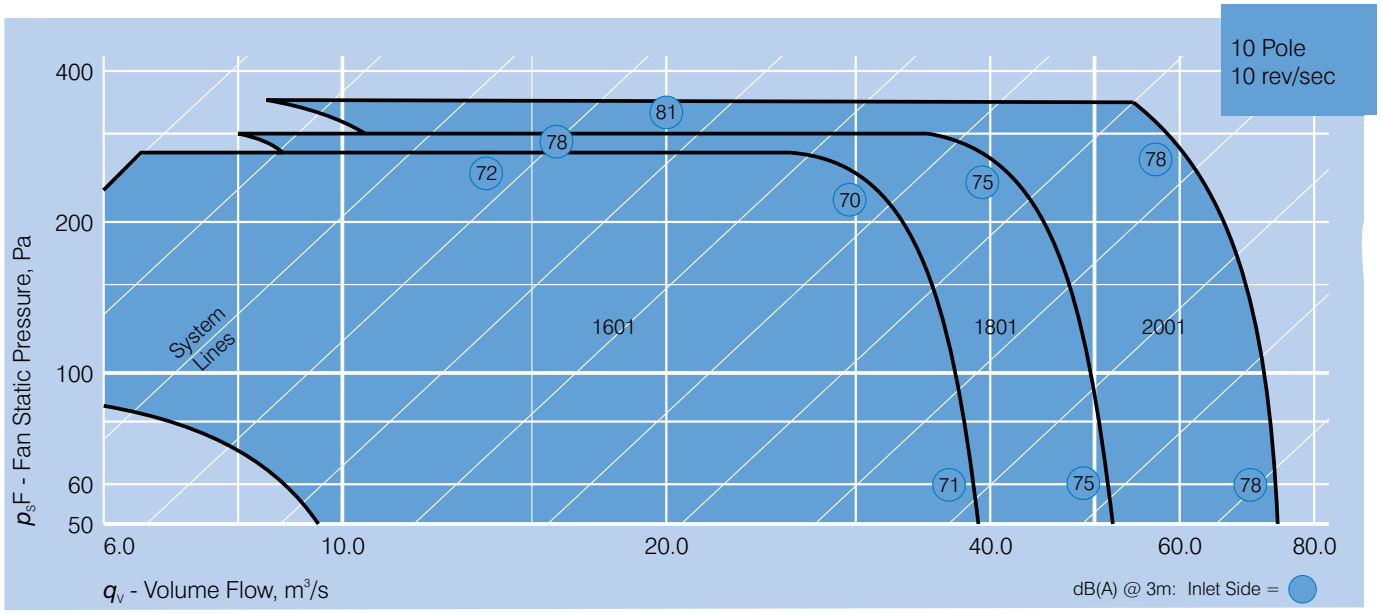
PERFORMANCE CURVES








8 Pole
12 rev/sec
600
400
200
100
60
40
p_sF - Fan Static Pressure, Pa
System Lines
0638
0718
0808
1008
1258
1408
1608
1808
2008
56
58
51
58
51
57
60
59
63
61
62
62
72
74
71
71
78
74
71
75
86
77
75
82
79
83
0.6
1.0
2.0
4.0
6.0
10.0
20.0
40.0
60.0
100.0
q_v - Volume Flow, m³/s
dB(A) @ 3m: Inlet Side =


10 Pole
10 rev/sec
400
200
100
60
50
p_sF - Fan Static Pressure, Pa
System Lines
1601
1801
2001
72
78
81
70
75
71
75
78
78
6.0
10.0
20.0
40.0
60.0
80.0
q_v - Volume Flow, m³/s
dB(A) @ 3m: Inlet Side =

ELTA

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IVAFR-05-2026 Issue A