

Approvals:



CE



2yr Guarantee

High pressure mixed flow inline duct fans

Key features

Type: Mixed flow inline

Application: Commercial/Industrial

Control options: Speed control and humidity/PIR sensing



The range

Xpelair Xpress is a completely new generation of inline fans with a number of innovative design features, providing ultra high pressure development within a compact circular casing that is no bigger than the ducting in which it is installed. Xpelair Xpress fans feature contoured bellmouth and inlet hub, a ring mounted fan assembly which eliminates the tip clearance associated with pressure loss. The 3D profile impeller ensures an optimal laminar flow over the entire blade width. A double seal between the inlet and pressure chamber reduces turbulence losses. Downstream aerofoil profiled guide vanes contribute to a third of the fan's pressure development. Finally an outlet assembly changes residual dynamic energy into useable static pressure. The result is a low energy use fan with efficiencies up to 57%, 250% higher pressure development than normal fans and low noise levels.

Models

Xpelair Xpress XPRS Model / Ref

XPRS250 / 91498AA

XPRS315 / 91499AA

XPRS355/1 / 91500AA

XPRS355/2 / 91501AA

- High pressure inline mixed flow fans
- Steel housing with bell mouth entry
- Mixed flow fabricated blade and hub assembly balanced to G2.5 ISO 1940
- Continuously rated capacitor start and run motor with integrated thermal overload protection
- Matching aerofoil section guide vanes
- Integral mounting foot
- Terminal box to IP44
- Voltage speed controllable

Controllers

- 5 Step Transformer Speed Controller
- Multi-tapped auto transformer giving 5 speeds allowing accurate adjustment to suit site conditions
- Provides five speed and On/Off function
- Robust ISO casing
- IPX4 protected

Technical specification

The unit is to be supplied from the Xpelair Xpress range by Applied Energy Products Ltd. Morley Way, Peterborough PE2 9JJ. Tel. +44 (0)1733 456789 Model / Ref

XPRS250 / 91498AA

XPRS315 / 91499AA

XPRS355/1 / 91500AA

XPRS355/2 / 91501AA • The inline fan shall have a pressure characteristic up to 2505 higher than a conventional unit • The fan shall have a steel housing with a contoured bellmouth entry and integrated foot • The mixed flow fan blade shall be fabricated and balanced on the hub assembly to G 2.5 ISO 1940. There shall be matching aerofoil section guide vanes • The motor shall be a continuously rated capacitor start and run motor with integrated thermal overload protection • Wiring to the outside of the unit shall to a terminal box rated at IP44 • The fan diameter shall be no bigger than the duct in which it will be installed • The fan shall be speed controllable using a Five step auto transformer

Product variations

	XPRS355/2	XPRS355/1	XPRS315	XPRS250
Reference number	91501AA	91500AA	91499AA	91498AA
Spigot diameter (mm)	355	355	315	250
Airflow (m ³ /s) - 0Pa	1.36	0.73	0.99	0.49
Airflow (m ³ /s) - 100Pa	1.31	0.59	0.93	0.44
Airflow (m ³ /s) - 200Pa	1.25	-	0.88	0.38
Airflow (m ³ /s) - 300Pa	1.14	-	0.79	0.13
Airflow (m ³ /s) - 400Pa	1.04	-	0.63	-
Airflow (m ³ /s) - 500Pa	0.90	-	0.20	-
Airflow (m ³ /s) - 600Pa	0.41	-	0.11	-
Airflow (m ³ /s) - 700Pa	0.18	-	-	-
Nominal fan speed (rpm)	2740	1440	2750	2750
Max electrical power (W)	870	160	600	200
Full load current (A)	3.9	0.7	2.7	0.9
Starting current (A)	4.8	1.2	3.4	1.2
Motor insulation class	F	F	F	F
IP rating	IP44	IP44	IP44	IP44
Max operating temperature (C°)				
Weight (kg)	17	14	14	7

