50Hz
VENTILATION SOLUTIONS

UK MADE

NUAIRE. FOR THE COMPLETE VENTILATION SOLUTION

WITH A RECORD OF QUALITY WHICH IS THE ENVY OF THE INDUSTRY...

...Nuaire is a British company with a long history of innovation in the field of ventilation and air movement solutions, and its products are known across the world for their superb quality and efficiency.

Founded in 1966, Nuaire has a long and much-admired heritage in developing and manufacturing ventilation products. A product range renowned worldwide, coupled with unrivalled customer service which has ensured that Nuaire's products have been distributed globally, including the Middle East, Europe, the USA and Asia.

UK MADE

CONTENTS

PRODUCT MATRIX

		PAGE	DUTY RANGE	SMOKE EXTRACT	LARGE OFFICE	SMALL OFFICE
AXIAL	AXIALS	6	UP TO 120m³/s	✔	✔	✔
	HIGH PRESSURE	12	UP TO 25m³/s	✔	✔	
	BIFURCATED	16	UP TO 22m³/s	✔		
SINGLE	SQUIF	20	UP TO 6m³/s	✔	✔	
	SQURBO	24	UP TO 0.4m³/s			✔
	NALSRF	28	UP TO 4m³/s			✔
	DAVE	34	UP TO 1.3m³/s		✔	✔
	NALT TUBE	38	UP TO 0.5m³/s			✔
	AIRMOVER	40	UP TO 11m³/s		✔	✔
	ESX	44	UP TO 5.9m³/s		✔	✔
	ILM/ILM+	56	UP TO 0.55m³/s			✔
	AVS	60	UP TO 1.9m³/s		✔	✔
WALL FANS	EZPLATE	64	UP TO 5.25m³/s		✔	✔
	NA	66	UP TO 80l/s		✔	✔
	XS	68	UP TO 0.55m³/s		✔	✔
	OPUS	72	UP TO 95l/s		✔	✔
TWIN	TWIN SQUIF	76	UP TO 6m³/s			
	AIREVOLVE	80	UP TO 1.7m³/s		✔	✔
	EST	84	UP TO 5.9m³/s		✔	✔
	NALTRF/NALTF	94	UP TO 5.5m³/s			
	OPUS DC	102	UP TO 115l/s			
CAR PARK	SVT2	108	UP TO 50N	✔		
	SVTC	112	UP TO 100N	✔		
	IFC	115	UP TO 1300N	✔		

WASHROOMS	COMMERCIAL KITCHEN	UTILITY TUNNEL /SERVICE ROOM	ROOF	ATRIUM	MULTI STOREY CAR PARK	UNDERGROUND CAR PARK	SUPERMARKETS	WAREHOUSES	SPORTS & LEISURE
✔		✔	✔	✔	✔	✔	✔	✔	✔
		✔	✔	✔	✔	✔	✔	✔	✔
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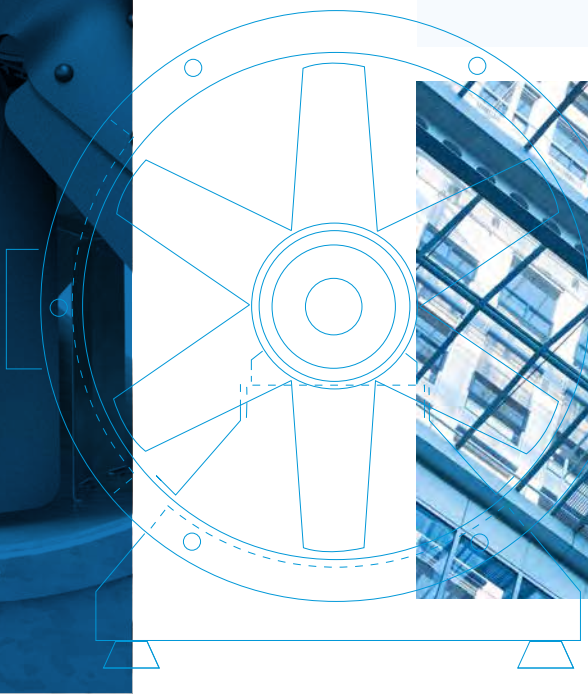
HIGH TEMPERATURE AXIAL RANGE 300°C/2Hrs & 400°C/2Hrs

Nuaire offers a comprehensive range of high performance axial fans, from 250mm to 2000mm diameter that will suit applications up to 120m³/s duty range, including AXUS High Temperature Axials, Smoke Contra Axials and Smoke Run and Standby Axials.

KEY BENEFITS:

- **INDEPENDENTLY TESTED -** EN 12101-3:2015
- **HIGH PERFORMANCE -** UP TO 120M³/s
- **FLEXIBLE SOLUTION -** SUITABLE FOR INTERNAL AND EXTERNAL APPLICATIONS
- **WIDE RANGE -** WITH THE WIDEST RANGE OF AXIAL SOLUTIONS CONFIGURED TO MEET YOUR PROJECT REQUIREMENTS, ENSURING OPTIMUM FAN EFFICIENCIES
- **ENERGY EFFICIENT -** RANGES DEVELOPMENT FOCUSED ON MEETING GLOBAL EFFICIENCY STANDARDS
- **GALVANISED STEEL CONSTRUCTION -** ENSURES STRENGTH, DURABILITY AND PROTECTION
- **AMCA APPROVED LABS -** BOTH TYPE 'A' AND 'D' LABORATORIES AT NUAIRE ARE ACCREDITED TO THE AMCA STANDARD
- **TESTED TO THE HIGHEST STANDARDS -** AIR PERFORMANCE TO ISO 5801 (PART 1) 2017 WITH ACOUSTIC PERFORMANCE TO AMCA 300 AND ISO 13347



ErP 2018 COMPLIANT | 50Hz | 300°C/ 400°C

CONSULTANT SPECIFICATION

CASING

Long cased covering both the motor and impeller, manufactured from heavy gauge galvanised steel (Either Pre-gal or HDG), corrosion resistant to BS EN 10142 1991 with integrally formed inlet and outlet mounting flange, with pre-drilled bolt holes.

Cases are available in a standard execution or with integral case mounted guide vanes – unique to Nuaire – providing performance-enhancing characteristics.

Cases are complete with an externally mounted terminal box to IP55 pre-wired from the motor with a flying lead ensuring ease of installation at site.

Case material options available:

- Hot dip galvanized after manufacture
- Painted: Polyester powder and epoxy

PERFORMANCE

Up to 120m^3/s duty range; for larger duties contact Nuaire.

CERTIFICATION AND OPERATING TEMPERATURE

Suitable for day to day environmental extract up to a maximum of 60°C and one-off emergency extract for either 300°C or 400°C for 2 hours depending on local fire code. Suitable for smoke reservoir and non-smoke reservoir applications.

MOTOR

Motors incorporated are full cast TEAO (Totally Enclosed, Non Ventilated Air Over) with Class F Temperature rise and Class H insulation, IP55 protection, suitable to operate for day to day environmental extract (up to 60°C) and a one off emergency extract, either 300°C or 400°C for two hours (S2), depending on the project requirements.

Motors are available in a range of efficiency Classifications: IE1, IE2, IE3 all tested & certified as a component of the complete fan assembly to EN 12101-3.

Motors are pre-wired to an external case-mounted terminal box as standard, ensuring ease of installation, protected to dust and water ingress to IP55.

Motors are available with additional features in accordance with EN12101-3 such as:

- PTC Thermal overload protection
- Anti-condensation heaters
- IP upgrades optional

ANCILLARIES

- Matching flanges
- Flexible connections
- Anti-vibration mounts
- Mounting brackets
- Acoustic jackets
- Attenuators
- Guards
- Inlet cones
- Backdraught Dampers
- Controls (Day to Day use only)
- Bellmouth

IMPELLER

For 300°C for 2hrs applications impellers are high efficiency aerofoil profile, ensuring optimum efficiency, expansive performance envelopes and low noise characteristics. Impellers can be either fully cast aluminium construction or sheet steel depending on the project specifications. Fully reversible option available.

For 400°C for 2hrs applications impellers are high efficiency profile, fabricated completely from mild steel ensuring optimum performance and safety under emergency conditions.

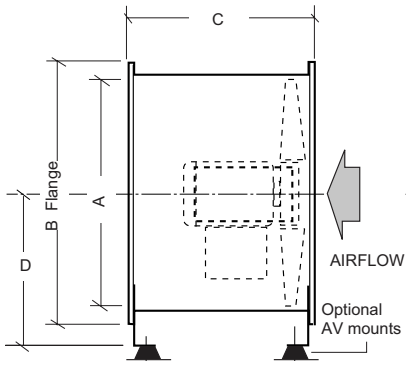
INSTALLATION

Suitable for internal and external operation and installed at any angle. DW/144 and general good practice standards for installation should be taken into consideration at design stage.

APPLICATIONS

- Car parks & smoke
- Industrial
- Boiler rooms
- Lift motor rooms
- Sports halls
- Factories & warehouses
- Hospitals, surgeries & medical centres
- Offices & commercial
- Supermarkets
- Retail, leisure & sports facilities
- Public buildings
- Tunnel and metros

AXIAL - SINGLE STAGE (AX)



CODING AX100X-XX

AX	100	X	-	X	X
1	2	3		4	5

SAMPLE CODING

1. Axial fan
2. Size of casing in CM
3. Impeller specification reference
4. Motor speed in poles
5. Operating temperature reference

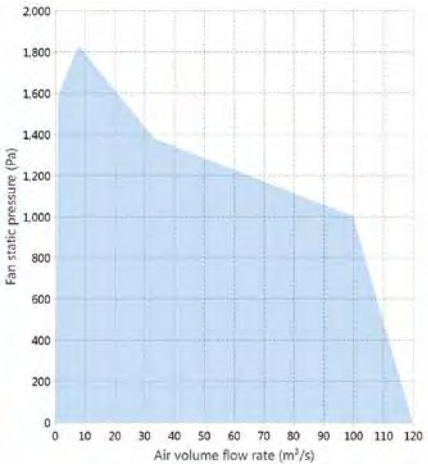
Contact Nuaire for Fan Selector to help in selecting the right unit for your project.

DIMENSIONS (MM)

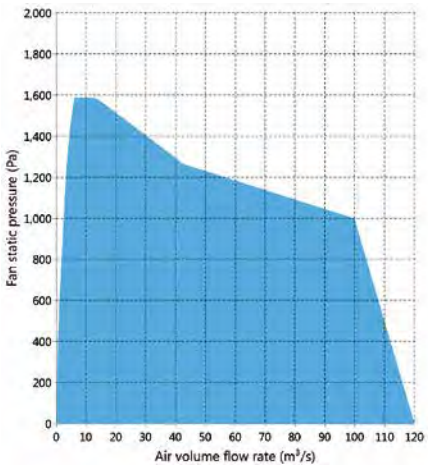
MODEL	A	B	C	D
AX31	315	400	365	210
AX35	350	430	380	240
AX40	400	490	440	270
AX45	450	540	450	300
AX45	450	540	600	300
AX50	500	608	465	340
AX50	500	608	615	340
AX56	560	670	440	370
AX56	560	670	615	370
AX63	630	740	480	430
AX63	630	740	600	430
AX63	630	740	800	430
AX71	710	814	455	470
AX71	710	814	700	470
AX80	800	910	440	540
AX80	800	910	840	540
AX90	900	1016	740	600
AX100	1000	1128	740	670
AX100	1000	1128	850	670
AX112	1120	1240	730	750
AX112	1120	1240	865	750
AX112	1120	1240	1010	750
AX125	1250	1365	865	830
AX125	1250	1365	1010	830

Unit sizes 1400mm and above contact Nuaire for details.

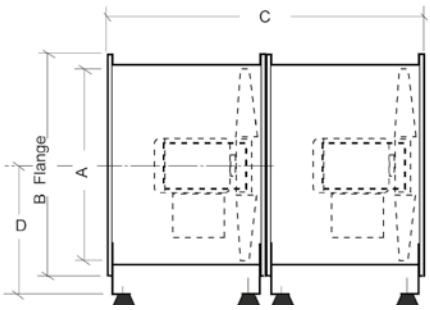
300



400



CONTRA AXIAL - TWO STAGE (AXC)



CODING AXC100X-XX

AXC 100 X - X X
1 2 3 4 5

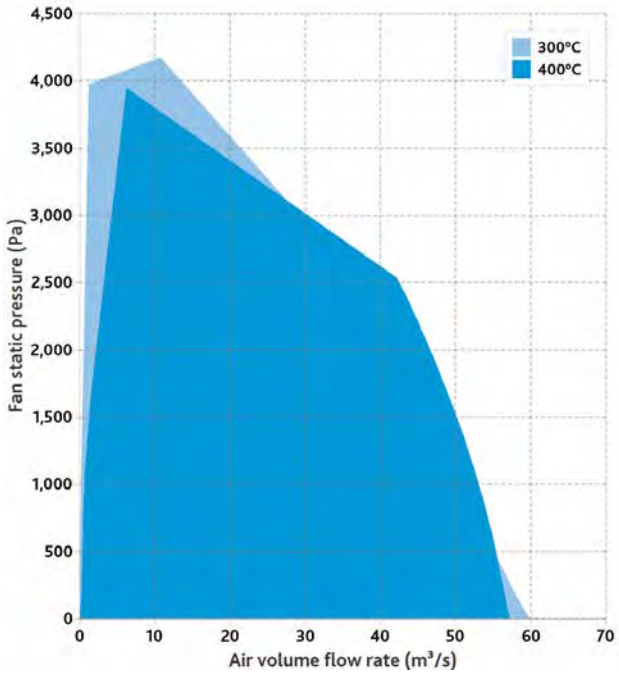
SAMPLE CODING

1. Contra rotating axial fan
2. Size of casing in CM
3. Impeller specification reference
4. Motor speed in poles
5. Operating temperature reference

Contact Nuaire for Fan Selector to help in selecting the right unit for your project.

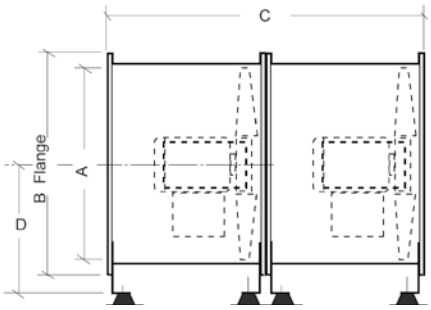
DIMENSIONS (MM)

MODEL	A	B	C	D
AXC31	315	400	730	210
AXC35	350	430	760	240
AXC40	400	490	880	270
AXC45	450	540	900	300
AXC50	500	608	930	340
AXC50	500	608	1230	340
AXC56	560	670	880	370
AXC56	560	670	1230	370
AXC63	630	740	960	430
AXC63	630	740	1200	430
AXC71	710	814	910	470
AXC71	710	814	1400	470
AXC80	800	910	880	540
AXC80	800	910	1680	540
AXC90	900	1016	1480	600
AXC100	1000	1128	1480	670
AXC100	1000	1128	1700	670
AXC112	1120	1240	1460	750
AXC112	1120	1240	1730	750
AXC112	1120	1240	2020	750
AXC125	1250	1365	1730	830
AXC125	1250	1365	2020	830



For unit sizes 1400mm and above contact Nuaire for details.

RUN AND STANDBY AXIAL - TWO STAGE (AXT)



CODING AXT100X-XX

AXT 100 X - X X
1 2 3 4 5

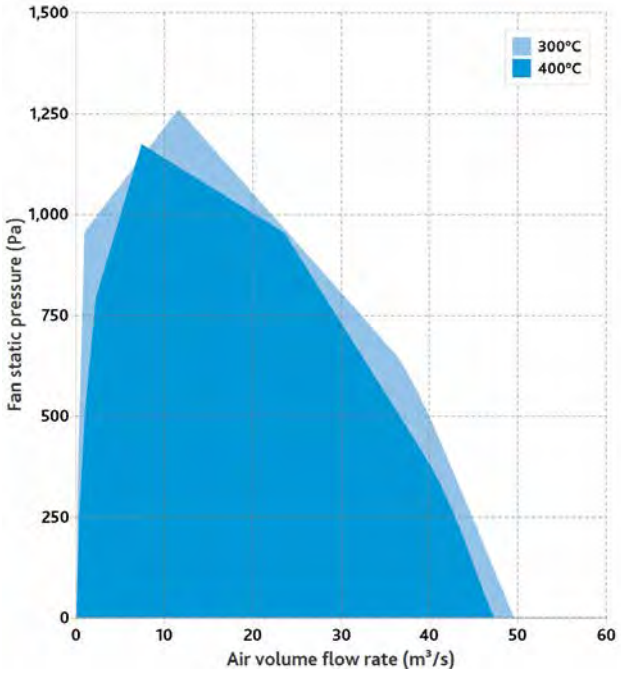
SAMPLE CODING

1. Run and standby axial fan
2. Size of casing in CM
3. Impeller specification reference
4. Motor speed in poles
5. Operating temperature reference

Contact Nuaire for Fan Selector to help in selecting the right unit for your project.

DIMENSIONS (MM)

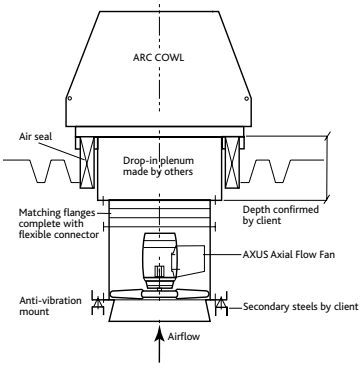
MODEL	A	B	C	D
AXT31	315	400	730	210
AXT35	350	430	760	240
AXT40	400	490	880	270
AXT45	450	540	900	300
AXT50	500	608	930	340
AXT50	500	608	1230	340
AXT56	560	670	880	370
AXT56	560	670	1230	370
AXT63	630	740	960	430
AXT63	630	740	1200	430
AXT71	710	814	910	470
AXT71	710	814	1400	470
AXT80	800	910	880	540
AXT80	800	910	1680	540
AXT90	900	1016	1480	600
AXT100	1000	1128	1480	670
AXT100	1000	1128	1700	670
AXT112	1120	1240	1460	750
AXT112	1120	1240	1730	750
AXT112	1120	1240	2020	750
AXT125	1250	1365	1730	830
AXT125	1250	1365	2020	830

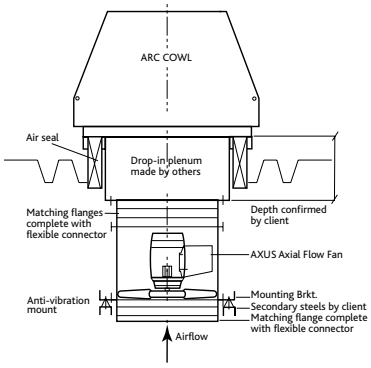


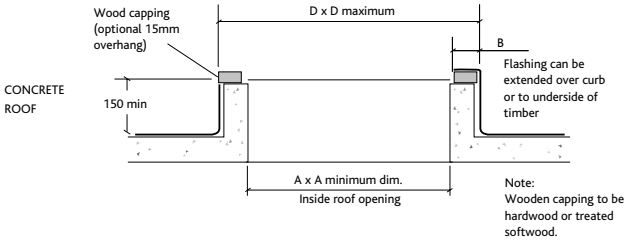
For unit sizes 1400mm and above contact Nuaire for details.

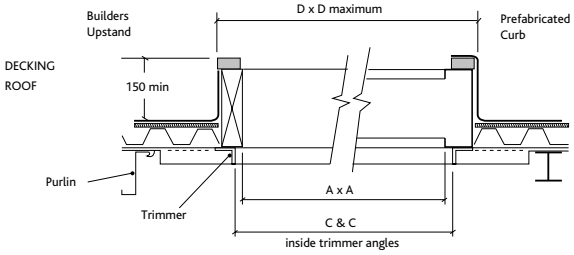
ARC - AXUS ROOF COWL

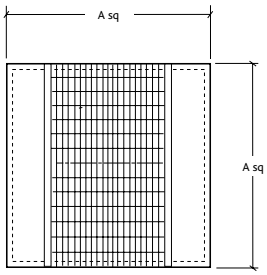
The Axus Roof Cowl (ARC) is completely weather proof and suitable for high temperature operations.
The casing is manufactured from self finish aluminium alloy, and incorporates air operated shutters. In the closed position, the shutters seal - ensuring efficient shedding of rain. The unit's discharge has a safety mesh designed to safely blow off at high temperatures, held to the unit via a retaining strap. Non rusting fixings are used throughout.

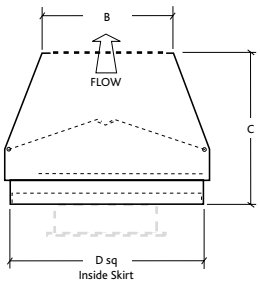












DIMENSIONS(MM) AND WEIGHTS (KGS)

CODE	A	B	C	D	WEIGHT
ARC56	845	570	535	786	22
ARC71	1100	770	760	1045	37
ARC100	1295	1000	880	1234	79
ARC125	1795	1300	1160	1738	213

- Roof cowl suitable for high temperature self finish aluzinc not suitable for 'Atex' hazardous zone applications

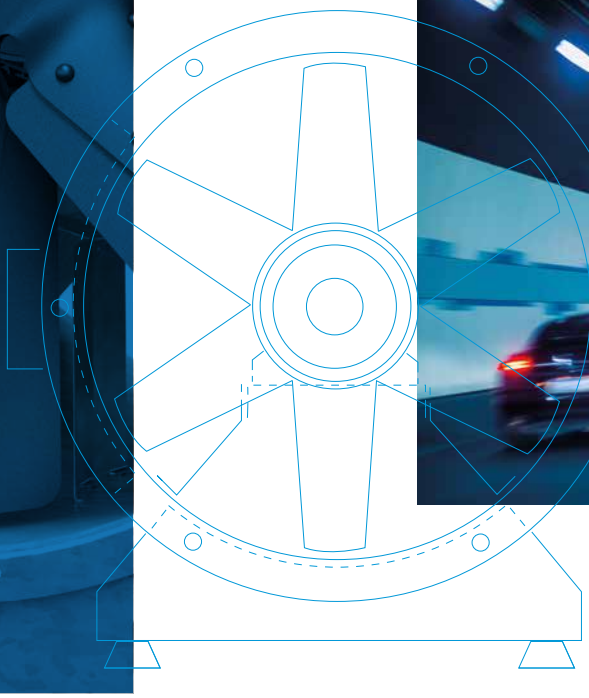
Nuaire offer a variety of roof cowls, for more information contact Nuaire.

HIGH TEMPERATURE AND AMBIENT HIGH PRESSURE AXIAL RANGE

The AXUS high pressure range of axial flow fans are designed for 'in-duct' applications. Manufactured from mild steel and then galvanised, making the unit suitable for indoor and outdoor applications.

KEY BENEFITS:

- **HOT DIPPED GALVANISED STEEL CONSTRUCTION -** ENSURING STRENGTH, DURABILITY AND PROTECTION
- **HIGH PERFORMANCE -** DUTY UP TO 25M³/S WITH PRESSURE UP TO 2000 PA
- **HIGH TEMPERATURE -** INDEPENDENTLY TESTED TO EN12101-3
- **FLEXIBLE SOLUTION -** SUITABLE FOR INTERNAL AND EXTERNAL APPLICATIONS, AND VERTICALLY OR HORIZONTALLY
- **TESTED TO HIGHEST STANDARDS -** AIR PERFORMANCE TO ISO 5801 (PART 1) 2017
- **AMCA APPROVED LABS**



ErP 2018 COMPLIANT

50Hz

300°C/ 400°C

CONSULTANT SPECIFICATION

CASING

Long cased covering both the motor & impeller, manufactured from heavy gauge galvanised steel (HDG), corrosion resistant to BS EN10142 1991 with integral formed inlet & outlet mounting flange, with pre-drilled bolt holes.

Cases are fitted with integral case mounted guide vanes– providing performance-enhancing characteristics.

Case material options available: Painted: Polyester powder & epoxy

PERFORMANCE

Up to 25 m^3/s duty range.

CERTIFICATION AND OPERATING TEMPERATURE

Suitable for day to day environmental extract up to a maximum of 60°C and one-off emergency extract for either 300°C or 400°C for 2 hours depending on local fire code. Suitable for smoke reservoir and non-smoke reservoir applications.

MOTOR

Motors incorporated are full cast TEAO (Totally Enclosed, Air Over) with Class H insulation, IP55 protection, suitable to operate for day to day environmental extract (up to 60°C) and one-off emergency extract, either 300°C or 400°C for 2 hours (S2), depending on the project requirements.

Motors are available in a range of efficiency classifications: IE1, IE2, IE3 all tested & certified as a component of the complete fan assembly to EN12101-3. Motors are pre-wired to an external case-mounted terminal box as standard, ensuring ease of installation, protected to dust and water ingress to IP55. Motors are available with additional features in accordance with EN12101-3, such as:

- PTC thermal overload protection
- Anti-condensation heaters

Ambient motors are TEFC (Totally Enclosed, Fan Cooled) Class F insulation.

ANCILLARIES

- Matching flanges
- Flexible connections
- Anti-vibration mounts
- Mounting brackets (Additional if required)
- Acoustic jackets (ambient only)
- Attenuators
- Guards
- Inlet cones
- Backdraft dampers
- Controls (ambient only)

IMPELLER

For all temperature classes, ambient, 300°C and 400°C for 2hr, impellers are high efficiency profile, fabricated completely from mild steel mounted in a steel hub ensuring optimum performance and safety under emergency conditions.

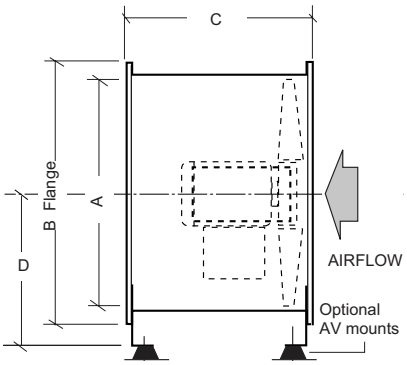
INSTALLATION

Suitable for internal and external operation. The unit should be installed horizontally on the mounting feet as supplied. For alternative mounting arrangements, contact Nuaire. DW/144 and general good practice standards for installation should be taken into consideration at design stage.

APPLICATIONS

- Utility Tunnel and Service Room
- Car parks & smoke
- Industrial
- Boiler rooms
- Lift motor rooms
- Utility and Transit Tunnels
- Sports halls
- Factories & warehouses
- Hospitals & medical centres
- Offices & commercial
- Supermarkets
- Retail, leisure & sports facilities
- Public buildings

AXIAL - HIGH PRESSURE SINGLE STAGE



CODING AX63X-XX

AX	63	X	-	X	X
1	2	3		4	5

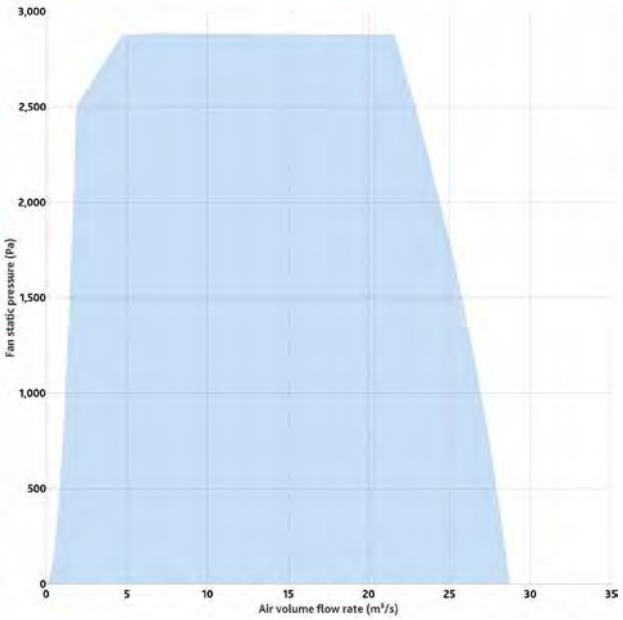
SAMPLE CODING

1. Axial fan
2. Size of casing in CM
3. Impeller specification reference
4. Motor speed in poles
5. Operating temperature reference

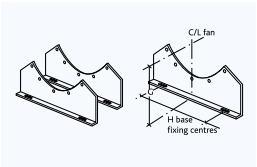
Contact Nuaire for Fan Selector to help in selecting the right unit for your project.

DIMENSIONS (MM)

MODEL	A	B	C	D
AX630	630	740	840	488
AX710	707	817	840	564
AX710	707	817	1043	564
AX800	808	918	840	590
AX800	808	918	1043	590
AX900	909	1019	840	659
AX900	909	1019	1043	659



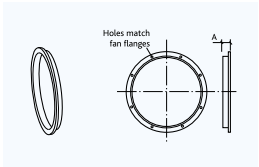
AXUS ANCILLARIES



MOUNTING BRACKETS*

The AXUS mounting brackets are manufactured from heavy gauge galvanised steel and are supplied in pairs.

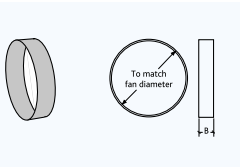
Typical Code - CMB100 (100 = Fan diameter in cm).



MATCHING FLANGE (SINGLE)*

Manufactured from galvanised steel. Matching flanges are supplied individually.

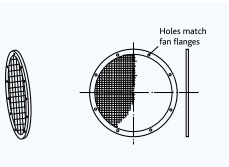
Typical Code: CMF100 (100 = fan diameter in cm).



FLEXIBLE CONNECTOR (SINGLE)*

Circular without flanges. Flexible duct material is flameproof and resistant to heat up to 132°C/400°C, chemicals, ozone, oil and grease. The material is airtight, waterproof and tested to BS476 Part 7. (Supplied complete with fixing straps).

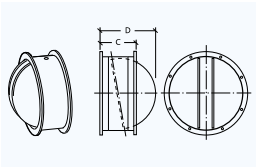
Typical Code: CFC100 (100 = fan diameter in cm) - 132°C. **CFCH100** (100 = fan diameter in cm) - 400°C.



GUARD*

Manufactured from heavy gauge galvanised steel and acid zinc plated steel mesh. Standard Accessory Losses (k). Flat type • Finger guard 0.4.

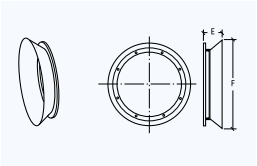
Typical Code: CGD100 (100 = fan diameter in cm). Pressure Drop (Pa) = 0.6 x k x Velocity (m/s).



BACKDRAUGHT DAMPER (SINGLE)*

Gravity operated backdraught damper, manufactured from heavy gauge galvanised steel with a pair of bolted flanges. Standard Accessory Losses (k) (Air stream operated) 0.4.

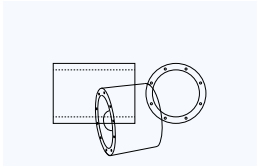
Typical Code: CBD100 (100 = fan diameter in cm) - 132°C. (For horizontal mounting only). Pressure Drop (Pa) = 0.6 x k x Velocity (m/s).



INLET CONE*

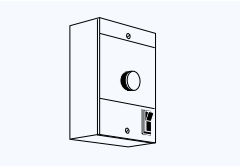
Manufactured in heavy gauge galvanised steel with a single bolted flange. Standard Accessory Losses (k). Low loss • Inlet cone 0.38.

Typical Code: CIC100 (100 = fan diameter in cm). Pressure Drop (Pa) = 0.6 x k x Velocity (m/s).



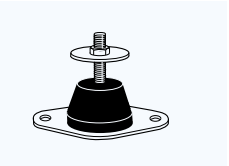
ATTENUATOR*

Standard (non podded), long (non podded), podded, and long podded options available. Conical Inlet silencer available upon request.



CONTROLS*

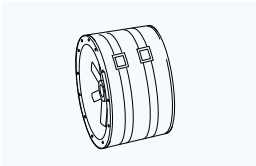
Choice of inverter, electronic or transformer speed controls available.



ANTI-VIBRATION MOUNTS*

Resilient rubber, for fan only. Spring options also available.

Typical code: NAV1.



ACOUSTIC JACKET*

Acoustic material laminated with 25mm foam. Complete with straps/buckles for security.

*For dimensional information, please contact Nuaire.

BIFURCATED AXIALS (AXB)

High performance, with low maintenance, 'motor out of air stream' bifurcated axials suitable for high temperature applications up to 230°C continuous.

KEY BENEFITS:

- **HIGH TEMPERATURE PERFORMANCE**
- **WIDE RANGE 'STANDARD' BIFURCATED AXIALS**
- **LOW MAINTENANCE MOTOR** OUT OF AIR STREAM
- **LONG LIFE HEAVY GAUGE** GALVANISED STEEL CONSTRUCTION
- **TESTED TO THE HIGHEST STANDARDS** AIR PERFORMANCE TO ISO5801 (PART1) 2017 WITH ACOUSTIC PERFORMANCE TO AMCA300
- **EXPLOSION PROOF VERSIONS AVAILABLE**
- **COMPREHENSIVE ANCILLARIES** INCLUDING ATTENUATORS, FREQUENCY INVERTERS, AND MOUNTING ANCILLARIES

UK MADE

50Hz

CONSULTANT SPECIFICATION

CASING

Galvanised steel to BS En10142 1991. Fan incorporates inlet and outlet flanges with pre-drilled bolt holes. Other finishes available.

MOTOR

Motor shall be out of the air stream. Direct drive with high efficiency motors to BS5000, foot mounted TEFV type with IP55 enclosures. Foot mounted Class 'F' insulated and has sealed for life ball bearings, wiring direct to the motor terminal box.

CERTIFICATION AND OPERATING TEMPERATURE

Unit suitable for operation up to 90°C as standard, optional high temperature up to 230°C for in air stream temperature available. Explosion proof available on request.

IMPELLER

Aero-foil selection manufactured from cast aluminium alloy with a die cast aluminium alloy hub.

INSTALLATION

Internal and external installation as standard and can be installed at any angle. DW/144 and general good practice standards for installation should be taken into consideration at design stage.

PERFORMANCE

An indication of the overall duty range is shown on page 16. Please contact Nuaire for any duty outside the range indicated.

NOISE

Air performance to ISO 5801 (Part 1) 2017 with acoustic performance to AMCA300.

ANCILLARIES

- Mounting brackets
- Matching flange
- Flexible connectors
- Anti-vibration mounts
- Attenuator
- Guards
- Inlet cone
- Backdraught damper
- Inverters

APPLICATIONS

TYPICAL APPLICATIONS

- Kitchen extract
- Processing plant
- Paint and spray booths

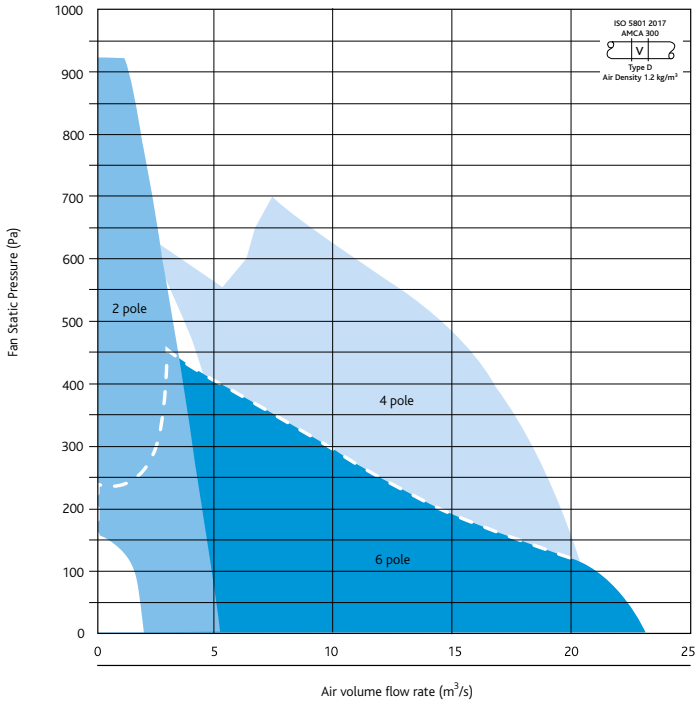
BIFURCATED AXIALS 50Hz

CODING AXB100X-XX

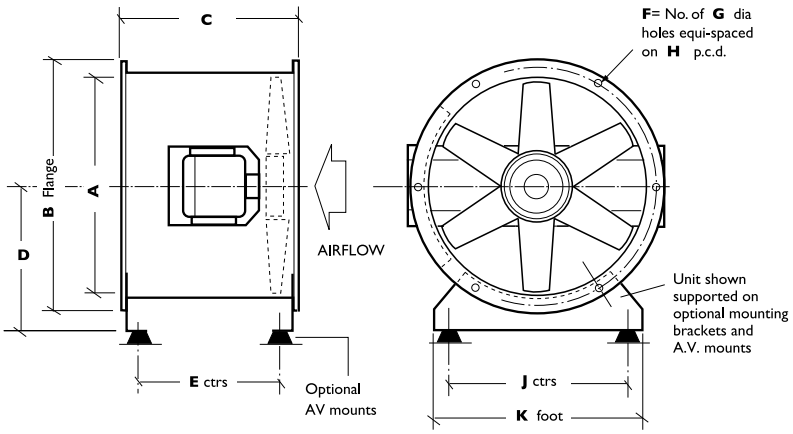
AXB	100	X	-	XX
1	2	3		4

SAMPLE CODING

1. Axus Bifurcated fan range
2. Diameter in cm
3. Impeller specification reference
4. Pole



*Note the performance envelope above shows Nuaire's 50 & 60Hz Bifurcated Axials. Contact Nuaire for additional information.



DIMENSIONS (MM) AND WEIGHT(KG)

MODEL	A	B	C	E	F	G	H	I	J	K	WEIGHT
AXB31	315	400	500	210	420	8	12	355	220	270	22
AXB35	350	430	500	240	420	8	12	395	250	300	25
AXB40	400	490	530	270	450	8	12	450	290	340	31
AXB45	450	540	530	300	450	8	12	500	330	380	38
AXB50	500	608	605	340	525	12	12	560	380	430	49
AXB56	560	670	605	370	525	12	12	620	420	470	55
AXB63	630	740	630	430	550	12	12	690	500	550	84
AXB71	710	795	700	470	620	16	12	770	540	600	153
AXB80	800	885	950	540	870	16	12	860	590	650	257
AXB90	900	1000	950	600	870	16	15	970	670	750	307
AXB100	1000	1100	950	670	840	16	15	1070	770	850	414

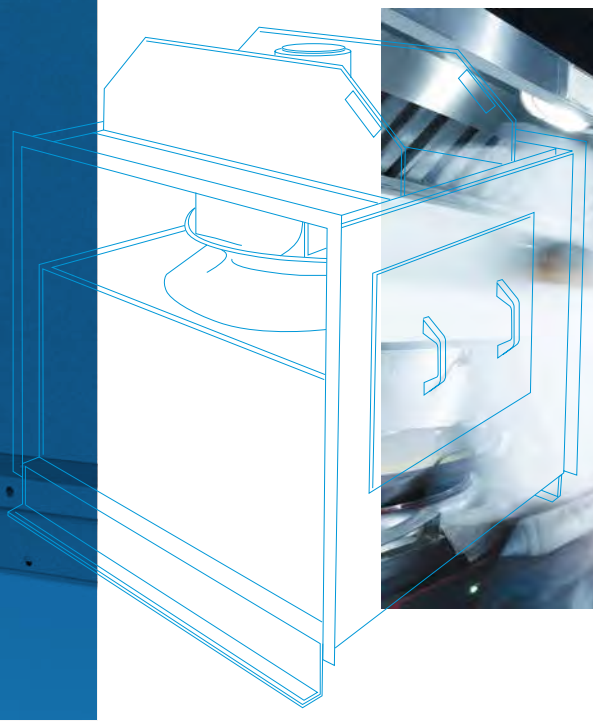
Contact Nuaire for software to make a more detailed selection.

CENTRIFUGAL INLINE SQUIF - SINGLE FAN SQF AND SQF-T (TWO SPEED)

High temperature centrifugal fans for smoke extract (outside smoke reservoir applications) and certified to EN12101-3. Also suitable for ambient applications, the SQUIF is an ideal solution for installations of high resistance with a duty performance range of 6.5m³/s.

KEY BENEFITS:

- **HIGH TEMPERATURE APPLICATION -** CAPABLE OF RUNNING CONTINUOUSLY AT 90°C, AND FOR A ONE-OFF EMERGENCY USE AT 400°C/2 HOURS
- **QUIET OPERATION -** ONE OF THE QUIETEST SOLUTIONS FOR MOTOR UNIT OUT OF AIR STREAM
- **EASY MAINTENANCE -** OUT OF AIR STREAM ALLOWS FOR QUICK AND EASY ACCESS
- **CLASS F MOTOR**
- **SUITABLE FOR HIGH RESISTANCES -** HIGH PRESSURE DEVELOPMENT SUITABLE FOR DUCTED SOLUTIONS
- **FLEXIBLE SOLUTION -** CAN BE MOUNTED INTERNALLY OR EXTERNALLY, AND EITHER HORIZONTALLY OR VERTICALLY



50Hz 400°C

CONSULTANT SPECIFICATION

CASING

The complete units are manufactured from heavy gauge galvanised steel and are designed for easy maintenance and fitted with an integral flange (additional finishes are available). General construction is to a Class A Leakage.

MOTOR

Motors are direct drive mounted out of air stream Class F insulated and IE2 high efficiency. Motors are available as single speed or 2 speed; 4 or 6 pole. Motor bearings are sealed for life.

CERTIFICATION AND OPERATING TEMPERATURE

Units are independently tested to BS EN12101-3, suitable for standard day to day temperatures of up to 90°C and for one-off operation at 400°C for two hours.

IMPELLER

The impeller is a high efficiency backwards curved centrifugal design manufactured from galvanised steel.

INSTALLATION

The units are designed for internal or external installation at any angle.

PERFORMANCE

The units are available in a variety of airflows up to 6.5m³/s with high pressure development.

NOISE

Units are designed for quiet operation with low in-duct and breakout sound levels.

ANCILLARIES

Each unit is available with a range of ancillaries for ease of installation. All ancillaries are certified to BS EN12101-3.

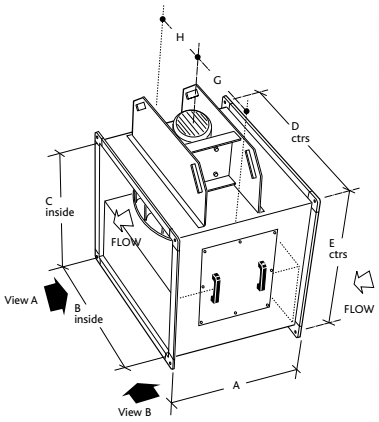
- Splitter attentuators
- AV mounts
- Flexible connectors
- Built-in feet
- Guards for square units

APPLICATIONS

TYPICAL APPLICATIONS

- Car parks and smoke
- Factories and warehouses
- Commercial kitchens
- Student accommodation
- Care homes
- Leisure and sports facilities
- Public buildings

CENTRIFUGAL INLINE SQF AND SQF-T (TWO SPEED)

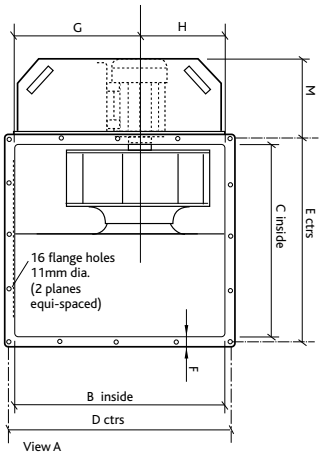


CODING SQF41-3

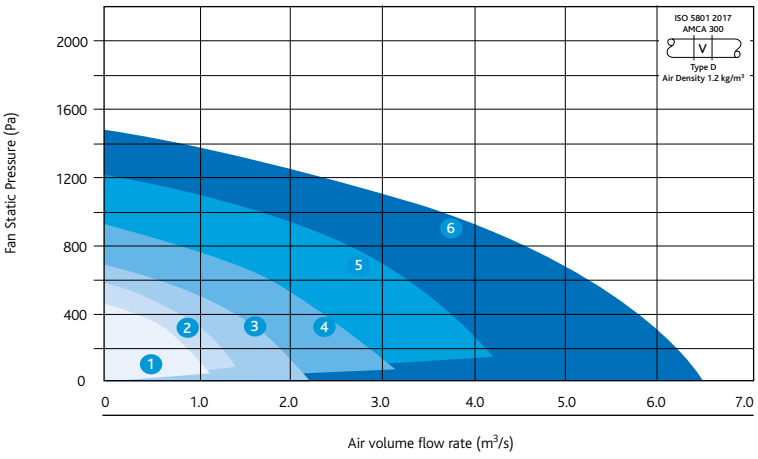
SQF	4	1	-	3
1	2	3		4

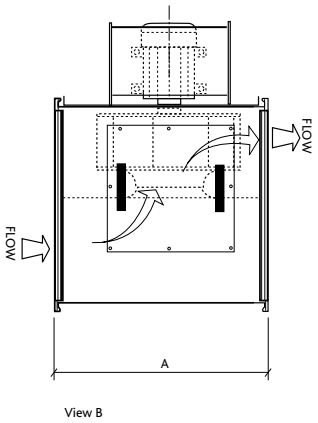
SAMPLE CODING

1 - SQF - Squif range/
SQF-T - Two speed Squif range
2 - Pole (4/6)
3 - Curve number
4 - Phase (1 or 3)

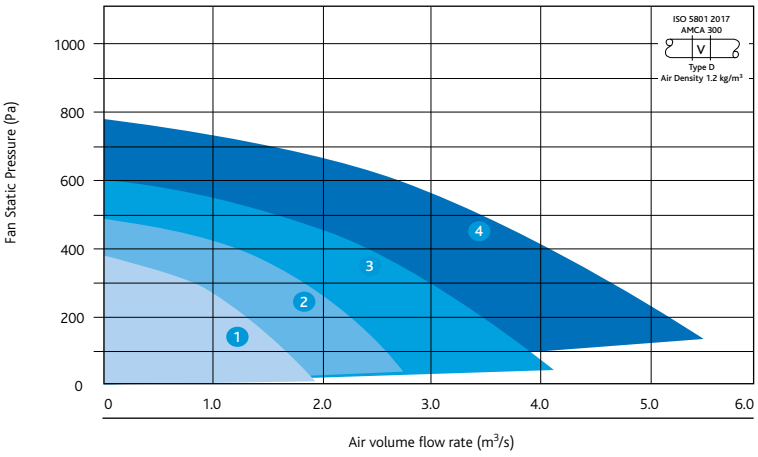


Squif - 4 pole





Squif - 6 pole



DIMENSIONS (MM) AND WEIGHT (KG)

MODEL	A	B	C	D	E	F	G	H	M	WEIGHT
SQF41	634	500	500	532	532	26	273	227	215	52
SQF42	692	700	600	730	630	32	382	318	231	60
SQF43	750	750	650	780	680	32	412	338	231	70
SQF44	820	800	700	830	730	32	440	360	290	100
SQF45	901	900	800	930	830	32	490	410	387	150
SQF46	994	1000	900	1030	930	32	546	484	387	255
SQF61	820	800	700	830	730	32	440	360	290	100
SQF62	901	900	800	930	830	32	490	410	387	150
SQF63	994	1000	900	1030	930	32	546	454	387	255
SQF64	1114	1100	1000	1130	1030	32	600	500	450	315

SINGLE SPEED

				MOTOR CURRENTS		SOUND POWER LEVELS RE 1 PWATT (Hz) INDUCT INLET								
CURVE	CODE	PHASE	RPM SPEED	FLC	SC (DOL)	63	125	250	500	1K	2K	4K	8K	dB(A) @3M
1	SQFA41-1	1	1410	2.80	11.20	87	90	79	70	70	70	69	62	50
1	SQFA41-3	3	1450	1.11	5.20	87	90	79	70	70	70	69	62	50
2	SQFA42-1	1	1370	5.40	21.00	85	92	82	77	74	76	75	67	53
2	SQFA42-3	3	1450	1.70	9.04	85	92	82	77	74	76	75	67	53
3	SQFA43-1	1	1420	7.00	35.00	89	95	83	79	77	78	78	71	56
3	SQFA43-3	3	1450	2.50	12.00	89	95	83	79	77	78	78	71	56
4	SQFA44	3	1450	4.60	28.80	83	93	89	82	77	80	80	71	58
5	SQFA45	3	1450	9.10	59.00	89	99	87	85	85	84	83	81	61
6	SQFA46	3	1450	15.20	108.00	89	103	92	86	86	85	86	83	63
1	SQFA61	3	960	2.20	8.82	81	89	84	75	70	73	73	64	48
2	SQFA62	3	960	3.00	13.20	87	96	83	78	76	75	74	72	56
3	SQFA63	3	960	5.90	28.90	87	100	87	79	76	76	77	73	59
4	SQFA64	3	960	9.40	61.20	88	103	91	82	79	77	77	74	62

TWO SPEED

				MOTOR CURRENTS		SOUND POWER LEVELS RE 1 PWATT (Hz) INDUCT INLET								
CURVE	CODE	PHASE	RPM SPEED	FLC	SC (DOL)	63	125	250	500	1K	2K	4K	8K	dB(A) @3M
1	SQFA41-3T	3	1450	1.40	4.60	87	90	79	70	70	70	69	62	50
2	SQFA42-3T	3	1450	2.30	11.04	85	92	82	77	74	76	75	67	53
3	SQFA43-3T	3	1450	2.80	12.88	89	95	83	79	77	78	78	71	56
4	SQFA44-T	3	1450	5.50	28.80	83	93	89	82	77	80	80	71	58
5	SQFA45T	3	1450	8.90	69.42	89	99	87	85	85	84	83	81	61
6	SQFA46T	3	1450	15.20	89	89	103	92	86	86	85	86	83	63
1	SQFA61T	3	960	2.10	7.98	81	89	84	75	70	73	73	64	48
2	SQFA62T	3	960	3.20	13.20	87	96	83	78	76	75	74	72	56
3	SQFA63T	3	960	5.90	52.20	87	100	87	79	76	76	77	73	59
4	SQFA64T	3	960	10.34	50	88	103	91	82	79	77	77	74	62

INTERNALLY MOUNTED INLINE CENTRIFUGAL - SQURBO

Low profile inline centrifugal fan range supplied with unique one bolt mounting bracket for ease of installation. Units are rectangular, manufactured from galvanised steel with rigid circular spigots. The fan assembly incorporates a high efficiency backward curved impeller and an IP44 rated motor with integral 'Heatseeker' thermal overload protection.

KEY BENEFITS:

- **COMPACT MULTI-PURPOSE FAN** WITH GREAT PERFORMANCE, EASY MAINTENANCE AND MATCHED ANCILLARIES
- **LOW PROFILE -** REDUCED CASE DEPTH MAKES UNIT IDEAL FOR APPLICATIONS WHERE SPACE IS LIMITED
- **HIGH PERFORMANCE -** CENTRIFUGAL IMPELLERS OFFER HIGH PERFORMANCE COMBINED WITH EXTREMELY LOW NOISE LEVELS
- **QUIET SOLUTION -** FAN/SILENCER COMBINATIONS AVAILABLE TO MEET ALL DESIGN REQUIREMENTS
- **PEACE OF MIND -** SQURBO FANS ARE TESTED IN AN AMCA APPROVED LAB
- **UNIQUE 'QUICK' FIXING BRACKET -** REDUCES COST BY SAVING TIME SPENT ON SITE. ALSO INCORPORATES AN ANTI-VIBRATION SEAL - NO ADDITIONAL AV MOUNTS REQUIRED
- **REMOVABLE FAN ASSEMBLY -** QUICK AND EASY TO REMOVE ACCESS PANEL FOR EASY MAINTENANCE

50Hz

CONSULTANT SPECIFICATION

CASING

The units are manufactured of heavy gauge pre-galvanised steel, acoustically lined with Class 'O' foam retardant acoustic foam and fitted with rigid circular spigots. The general construction is to Class A leakage.

MOTOR

High efficiency motors to IEC60034 as standard direct drive.

- 220v

CERTIFICATION AND OPERATING TEMPERATURE

An ambient temperature of up to 50°C (40°C with speed control).

IMPELLER

Backward curved centrifugal plastic impeller.

INSTALLATION

For ease of installation the unit comes complete with a single fixing mounting bracket with integrated anti-vibration seals. The unit incorporates an access panel for removal of fan module and for general maintenance.

PERFORMANCE

The units are available in a variety of airflows up to 0.4m^3/s.

NOISE

Units are designed for quiet operation, silencer ancillary units are available.

ANCILLARIES

- Inline attenuator
- Filter cassette
- Heat exchanger
- Duct heater
- Supply/extract cowl
- Silencers

APPLICATIONS

TYPICAL APPLICATIONS

- Hotels
- Offices
- Retail
- Care homes
- Apartments
- Flats

INTERNALLY MOUNTED INLINE CENTRIFUGAL - SQURBO

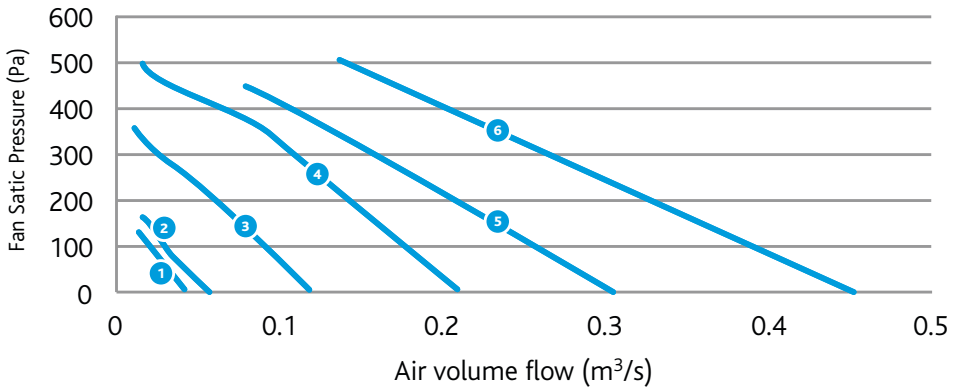
CODING S2-SIL125

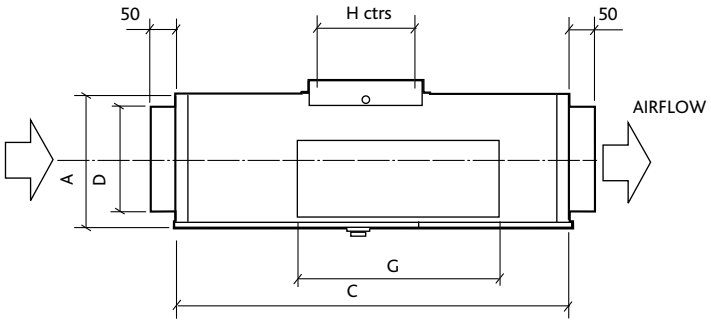
S	2	-	SIL	125
1	2		3	4

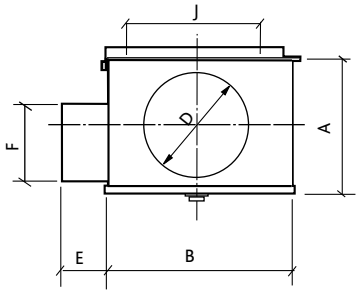
SAMPLE CODING

1. Squrbo centifugal range single fan
2. Fan size
3. Fan with silencer combination/ no SIL excludes matching silencers
4. Spigot diameter

SQURBO 1-6







DIMENSIONS (MM) AND WEIGHT (KG)

MODEL	A	B	C	D	E	F	G	H	SPIGOT	WEIGHT
S1-100	394	230	159	100	50	140	115	200	100	6
S2-125	394	230	159	125	50	140	115	200	125	6
S3-150	394	300	184	150	50	140	150	200	150	7
S4-200	394	350	234	200	50	140	170	200	200	12
S5-250	394	350	284	250	50	140	170	200	250	13
S6-315	394	400	349	315	50	140	200	200	315	14
S1-SIL100	968	230	159	100	50	140	115	200	100	8
S2-SIL125	968	230	159	125	50	140	115	200	125	8
S3-SIL150	968	300	184	150	50	140	150	200	150	11
S4-SIL200	968	350	234	200	50	140	170	200	200	17
S5-SIL250	968	350	284	250	50	140	170	200	250	19
S6-SIL315	968	400	349	315	50	140	200	200	315	22

SQURBO

			MOTOR CURRENTS		SOUND POWER LEVELS RE 1 PWATT (Hz) INDUCT INLET								
CODE	PHASE	RPM SPEED	FLC	SC (DOL)	63	125	250	500	1K	2K	4K	8K	dB(A) @3M
S1-100	1	2780	0.25	0.46	70	65	59	60	49	44	36	30	29
S2-125	1	2724	0.25	0.46	70	65	59	60	49	44	36	30	30
S3-150	1	2350	0.23	0.37	70	65	62	65	56	50	45	37	34
S4-200	1	2500	0.68	1.25	75	70	75	73	65	60	56	49	42
S5-250	1	2750	1.10	3.15	76	71	74	75	67	65	61	57	43
S6-315	1	2750	1.10	3.15	81	76	72	73	67	67	65	61	43

SQURBO INTEGRAL SILENCERS

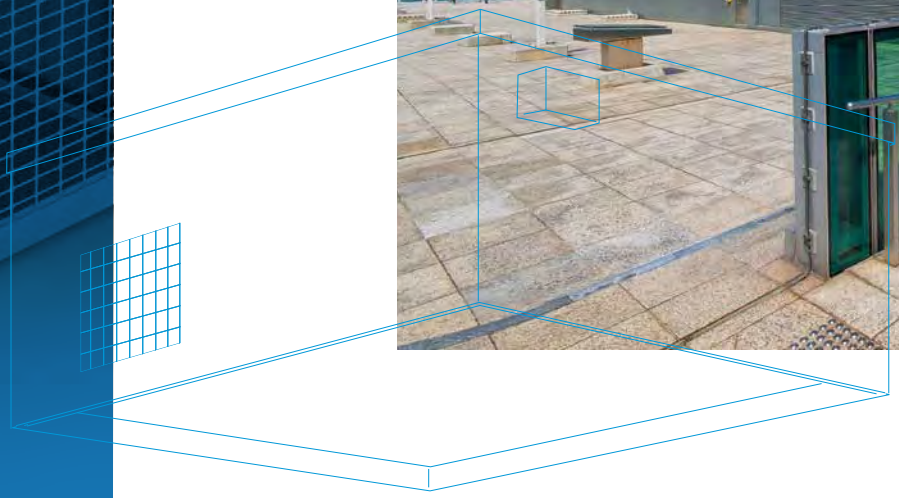
			MOTOR CURRENTS		SOUND POWER LEVELS RE 1 PWATT (Hz) INDUCT INLET								
CODE	PHASE	RPM SPEED	FLC	SC (DOL)	63	125	250	500	1K	2K	4K	8K	dB(A) @3M
S1-SIL100	1	2780	0.25	0.46	56	51	47	47	22	17	16	26	29
S2-SIL125	1	2724	0.25	0.46	65	60	50	49	22	26	22	24	30
S3-SIL150	1	2350	0.23	0.37	69	64	56	48	21	16	32	33	34
S4-SIL200	1	2500	0.68	1.25	72	67	66	61	39	42	50	43	42
S5-SIL250	1	2750	1.10	3.15	74	69	70	63	45	55	57	53	43
S6-SIL315	1	2750	1.10	3.15	72	67	70	66	49	56	57	52	43

INTERNAL AND EXTERNAL MOUNTED SINGLE FAN (NALSRF, NALSF)

External roof-mounted belt driven centrifugal fan range manufactured from aluzinc.
Units are suitable for operation in ambient temperatures of up to 60°C and for internal and external installation up to a maximum angle of 5°. Outlet grilles are positioned on opposite sides of the fan casing to prevent wind pressures affecting fan performance. Units are alternatively available as inline type or with a bottom inlet.

KEY BENEFITS:

- **ROBUST BUILD QUALITY**
- **WIDE RANGE OF APPLICATIONS**
- **EASY INSTALLATION -** VARIABLE SPIGOT OPTIONS
- **FULLY SPEED CONTROLLABLE -** CAN USE EITHER ELECTRONIC OR AUTO TRANSFORMER VOLTAGE REGULATION CONTROLLERS
- **SUITS ALL DUCT SIZES -** WITH A CHOICE OF 6 SIZES AND A HIGHER PERFORMANCE MODEL ALSO AVAILABLE



50Hz

CONSULTANT SPECIFICATION

CASING

Case is manufactured from high grade corrosive resistant aluzinc, with a choice of direct or belt drive. Acoustically lined lid.

MOTOR

3 phase, XX, V and 50Hz with prewired junction box, all motors contain thermal overload protection. Belt Drive in 16 sizes in 3 configurations. IEC60034 Motor.

- IP44

CERTIFICATION AND OPERATING TEMPERATURE

Fan is suitable for operation in ambient temperatures up to 60°C.

IMPELLER

Forward curved centrifugal steel impeller.

INSTALLATION

All units may be installed up to a maximum angle of 5°. External/internal roof mounted single fan units.

PERFORMANCE

Domestic, commercial or industrial, with performances from 0.06-4m^3/s.

ANCILLARIES

- Long and standard silencers
- Flexible connectors

APPLICATIONS

TYPICAL APPLICATIONS

- Washrooms
- Offices
- Supermarkets

INTERNAL AND EXTERNAL MOUNTED SINGLE FAN (NALSRF, NALSF)

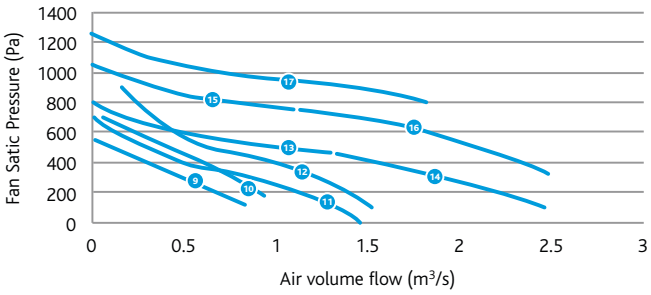
CODING NALSRF-B2G

NAL SRF - B2G
1 2 3

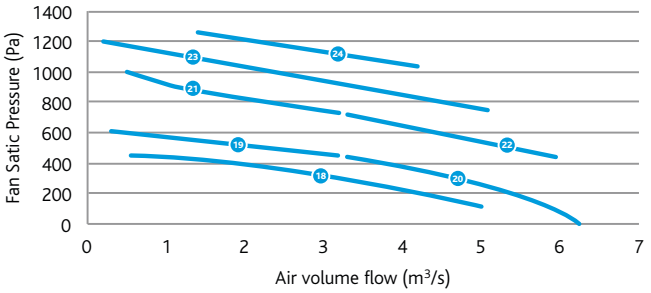
SAMPLE CODING

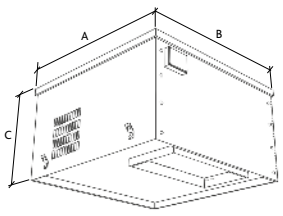
1. NAL roof mount single fan range
2. Size/curve reference
3. B2G - Rear Inlet with side discharge
   S2S - Inline spigots

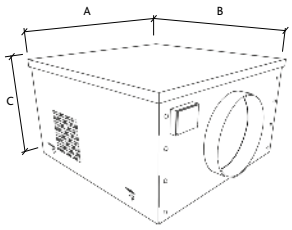
NALSRF 9-17



NALSRF 18-24







RECTANGULAR SPIGOTS DIMENSIONS (MM)

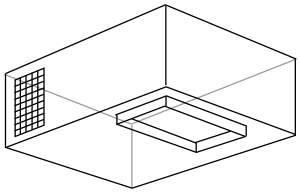
MODEL	A	B	C	SPIGOT
NALSRF9-12	1233	1233	701	762x304
NALSRF13-17	1430	1190	796	889x381
NALSRF18-24	2030	1466	1183	1200x700

CIRCULAR SPIGOTS DIMENSIONS (MM)

MODEL	A	B	C	SPIGOT
NALSRF9/10	974	974	622	400
NALSRF11-17	1430	1635	796	630
NALSRF9-12B2G/S2S	1233	1233	701	500
NALSRF13-17B2G/S2S	1430	1190	796	630

Nuaire have a complete range of fans with different variants of spigot arrangements including spigot to spigot, bottom to grille, and inline. Contact Nuaire for additional information and performance data.

RECTANGULAR BOTTOM SPIGOT



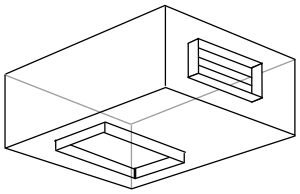
INTERNAL

	CODE	PHASE	RPM SPEED	MOTOR CURRENTS FLC	MOTOR CURRENTS SC (DOL)	SOUND POWER LEVELS RE 1 PWATT (Hz) INDUCT INLET 63	125	250	500	1K	2K	4K	8K	dB(A) @3M
DIRECT DRIVE	NALAF125	1	2040	0.70	0.80	69	64	52	52	44	29	22	21	32
	NALAF150	1	1260	0.60	0.80	85	80	59	53	41	36	29	29	45
	NALAF200	1	1260	1.60	2.30	84	79	62	57	48	43	39	37	44
	NALAF250	1	1260	1.60	2.30	83	78	68	59	51	48	44	39	45
	NALAF315	1	1020	2.70	4.50	77	72	67	57	62	61	56	49	46
	NALAF400	1	1200	6.00	9.60	88	83	74	66	67	67	65	57	53
	NALAF500	1	960	8.00	14.00	85	80	79	76	79	70	67	62	62
BELT DRIVE	NALSF10	3	1440	2.90	18.00	82	77	73	67	69	60	54	47	48
	NALSF11	3	1085	3.70	24.00	78	73	69	70	64	59	61	55	47
	NALSF12	3	1225	5.40	29.00	80	75	70	71	65	60	62	55	49
	NALSF13	3	1040	5.40	29.00	86	81	81	76	76	74	71	68	58
	NALSF14	3	1040	10.00	60.00	89	84	82	80	79	77	75	70	60
	NALSF15	3	1260	6.90	39.00	89	84	83	79	80	77	74	69	58
	NALSF16	3	1260	12.00	75.00	90	85	83	81	81	78	76	71	59
	NALSF17	3	1440	12.00	75.00	91	86	84	82	81	79	77	73	59

EXTERNAL

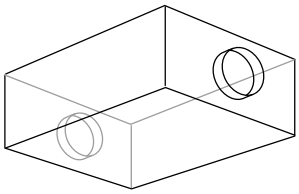
	CODE	PHASE	RPM SPEED	MOTOR CURRENTS FLC	MOTOR CURRENTS SC (DOL)	SOUND POWER LEVELS RE 1 PWATT (Hz) INDUCT INLET 63	125	250	500	1K	2K	4K	8K	dB(A) @3M	Outlet @3M
DIRECT DRIVE	NALSRF1	1	2100	0.72	1.40	71	66	55	52	54	48	43	40	37	41
	NALSRF2	1	1260	0.54	1.50	79	74	55	57	50	47	41	38	40	37
	NALSRF3	1	1700	0.80	1.60	81	76	60	59	51	52	50	46	43	44
	NALSRF4	1	1260	1.80	5.50	73	68	63	60	56	55	52	50	42	49
	NALSRF5	1	1260	1.80	5.50	73	68	63	60	56	55	52	50	42	49
	NALSRF6	1	1272	4.84	18.00	76	71	69	62	57	59	57	57	46	55
	NALSRF7	1	1272	4.84	18.00	88	83	76	71	72	74	70	65	58	59
	NALSRF8	1	960	6.30	50.00	78	73	70	71	73	73	71	66	58	65
BELT DRIVE	NALSRF9	3	1225	2.10	12.00	80	75	70	65	66	58	53	50	49	57
	NALSRF10	3	1440	2.90	18.00	82	77	73	67	69	60	54	47	51	60
	NALSRF11	3	1085	3.70	24.00	78	73	68	68	62	56	58	48	48	55
	NALSRF12	3	1225	5.40	29.00	78	73	69	70	64	59	61	55	50	57
	NALSRF13	3	1040	5.40	29.00	86	81	81	76	76	74	71	68	60	69
	NALSRF14	3	1040	10.00	60.00	89	84	82	80	79	77	75	70	63	72
	NALSRF15	3	1260	6.90	39.00	89	84	83	79	80	77	74	69	63	69
	NALSRF16	3	1260	12.00	75.00	90	85	83	81	81	78	76	71	65	70
	NALSRF17	3	1440	12.00	75.00	91	86	84	82	81	79	77	73	65	70
	NALSRF18	3	700	12.00	75.00	91	86	84	84	73	70	63	63	62	68
	NALSRF19	3	800	10.00	60.00	91	86	84	84	73	70	63	63	62	69
	NALSRF20	3	800	23.00	154.00	96	91	89	89	78	75	68	68	67	72
	NALSRF21	3	1000	12.00	75.00	95	90	87	87	76	75	68	69	65	71
	NALSRF22	3	1000	23.00	154.00	98	93	91	91	80	77	70	70	69	74
	NALSRF23	3	1100	23.00	154.00	97	92	90	90	79	76	69	69	68	75
	NALSRF24	3	1200	23.00	154.00	98	93	90	90	79	78	71	72	68	74

RECTANGULAR BOTTOM SPIGOT TO GRILLE



				MOTOR CURRENTS		SOUND POWER LEVELS RE 1 PWATT (Hz) INDUCT INLET									
	CODE	PHASE	RPM SPEED	FLC	SC (DOL)	63	125	250	500	1K	2K	4K	8K	dB(A) @3M	Outlet @3M
DIRECT DRIVE	NALSRF1-B2G	1	2100	0.72	1.40	71	66	55	52	54	48	43	40	37	41
	NALSRF2-B2G	1	1260	0.54	1.50	79	74	55	57	50	47	41	38	40	37
	NALSRF3-B2G	1	1700	0.80	1.60	81	76	60	59	51	52	50	46	43	44
	NALSRF4-B2G	1	1260	1.80	5.50	73	68	63	60	56	55	52	50	42	49
	NALSRF5-B2G	1	1260	1.80	5.50	73	68	63	60	56	55	52	50	42	49
	NALSRF6-B2G	1	1272	4.84	18.00	76	71	69	62	57	59	57	57	46	55
	NALSRF7-B2G	1	1272	4.84	18.00	88	83	76	71	72	74	70	65	58	59
	NALSRF8-B2G	1	960	6.30	50.00	78	73	70	71	73	73	71	66	58	65
BELT DRIVE	NALSRF9-B2G	3	1225	2.10	12.00	80	75	70	65	66	58	53	50	49	57
	NALSRF10-B2G	3	1400	2.90	18.00	82	77	73	67	69	60	54	47	51	60
	NALSRF11-B2G	3	1085	3.70	24.00	78	73	68	68	62	56	58	48	48	55
	NALSRF12-B2G	3	1225	5.40	29.00	78	73	69	70	64	59	61	55	50	57
	NALSRF13-B2G	3	1040	5.40	29.00	86	81	81	76	76	74	71	68	60	69
	NALSRF14-B2G	3	1040	10.00	60.00	89	84	82	80	79	77	75	70	63	72
	NALSRF15-B2G	3	1260	6.90	39.00	89	84	83	79	80	77	74	69	63	69
	NALSRF16-B2G	3	1260	12.00	75.00	90	85	83	81	81	78	76	71	65	70
	NALSRF17-B2G	3	1440	12.00	71.00	91	86	84	82	81	79	77	73	65	70
	NALSRF18-B2G	3	700	12.00	75.00	91	86	84	84	73	70	63	63	62	68
	NALSRF19-B2G	3	800	10.00	60.00	91	86	84	84	73	70	63	63	62	68
	NALSRF20-B2G	3	800	23.00	154.00	96	91	89	89	78	75	68	68	67	72
	NALSRF21-B2G	3	1000	12.00	75.00	95	90	87	87	76	75	68	69	65	71
	NALSRF22-B2G	3	1000	23.00	154.00	98	93	91	91	80	77	70	70	69	74
	NALSRF23-B2G	3	1100	23.00	154.00	97	92	90	90	79	76	69	69	68	75
	NALSRF24-B2G	3	1200	23.00	154.00	98	93	90	90	79	78	71	72	68	74

SPIGOT TO SPIGOT CONNECTIONS



				MOTOR CURRENTS		SOUND POWER LEVELS RE 1 PWATT (Hz) INDUCT INLET								
	CODE	PHASE	RPM SPEED	FLC	SC (DOL)	63	125	250	500	1K	2K	4K	8K	dB(A) @3M
DIRECT DRIVE	NALSRF1-S2S	1	2100	0.72	1.40	72	67	56	55	52	41	32	31	36
	NALSRF2-S2S	1	1320	0.68	1.50	84	79	61	55	48	47	39	35	44
	NALSRF3-S2S	1	1700	0.80	1.60	87	82	61	57	54	53	48	44	47
	NALSRF4-S2S	1	1260	1.80	5.50	77	72	66	60	57	54	51	47	43
	NALSRF5-S2S	1	1260	1.80	5.50	77	72	66	60	57	54	51	47	43
	NALSRF6-S2S	1	1272	4.84	18.00	76	71	65	59	63	62	60	54	47
	NALSRF7-S2S	1	1272	4.84	18.00	89	84	76	68	69	69	68	64	56
	NALSRF8-S2S	1	960	6.30	50.00	84	79	76	75	72	72	68	61	57
BELT DRIVE	NALSRF9-S2S	3	1225	2.10	12.00	80	75	70	65	66	58	53	50	46
	NALSRF10-S2S	3	1400	2.90	18.00	82	77	73	67	69	60	54	47	48
	NALSRF11-S2S	3	1085	3.70	18.50	78	73	69	70	64	59	61	55	47
	NALSRF12-S2S	3	1225	5.40	29.00	80	75	70	71	65	60	62	55	49
	NALSRF13-S2S	3	1040	5.40	29.00	86	81	81	76	76	74	71	68	58
	NALSRF14-S2S	3	1040	10.00	60.00	89	84	82	80	79	77	75	70	60
	NALSRF15-S2S	3	1260	6.90	39.00	89	84	83	79	80	77	74	69	58
	NALSRF16-S2S	3	1260	12.00	80.00	90	85	83	81	81	78	76	71	59
	NALSRF17-S2S	3	1440	12.00	71.00	91	86	84	82	81	79	77	73	59
	NALSRF18-S2S	3	700	12.00	75.00	91	86	84	84	73	70	63	63	61
	NALSRF19-S2S	3	800	10.00	60.00	91	86	84	84	73	70	63	63	61
	NALSRF20-S2S	3	800	23.00	154.00	96	91	89	89	78	75	68	68	64
	NALSRF21-S2S	3	1000	12.00	75.00	95	90	87	87	76	75	68	69	63
	NALSRF22-S2S	3	1000	23.00	154.00	98	93	91	91	80	77	70	70	66
	NALSRF23-S2S	3	1100	23.00	154.00	97	92	90	90	79	76	69	69	67
	NALSRF24-S2S	3	1200	23.00	154.00	98	93	90	90	79	78	71	72	66

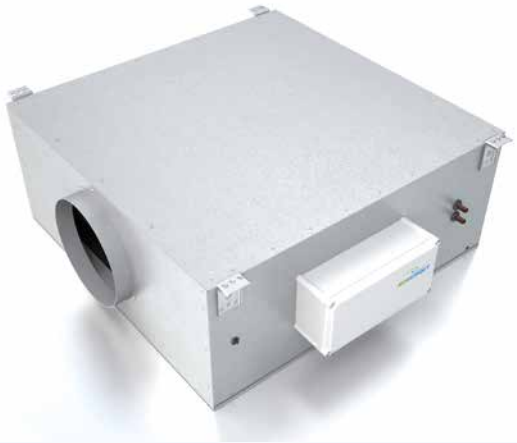
DIRECT DRIVEN INLINE CENTRIFUGAL - DAVE

High efficiency direct driven inline centrifugal fan range. Units are suitable for internal and external installation at any angle. Units have patented 'Floating Fan' technology to minimise vibration and sound levels. Units come complete with Ecosmart speed controls.

KEY BENEFITS:

- **LATEST EC TECHNOLOGY -** PERFORMANCE OPTIMISED BACKWARD CURVED IMPELLERS AND IP54 EC MOTORS PROVIDE LOW SPECIFIC FAN POWERS AND STEPLESS SPEED CONTROL WITHOUT TONAL NOISE GENERATION
- **FLEXIBLE SOLUTION -** INTERNAL AND EXTERNAL MOUNTING OPTIONS AT ANY ANGLE
- **CORROSION RESISTANT -** ALUZINC CORROSION RESISTANT CASING
- **EASY TO INSTALL -** BRACKETS USED TO MOUNT PRODUCT, OR USE OF AN ALREADY EXISTING DROP ROD SYSTEM
- **MULTI ACCESS -** COMPACT RANGE IDEAL FOR RESTRICTED SPACES WITH TOP OR BOTTOM ACCESS AS STANDARD
- **PATENTED FLOATING FAN -** QUIET FAN

50Hz



CONSULTANT SPECIFICATION

CASING

Heavy gauge, corrosion resistant Aluzinc and tested to leakage Class L2.

MOTOR

ERP compliant, low energy, high efficiency IP54 EC motorised fans providing low specific fan powers and stepless speed control without tonal noise generation. Fan/motor assemblies have sealed for life bearings with an anticipated working life of 70,000 hours (L10) and are suitable for single phase supply.

CERTIFICATION AND OPERATING TEMPERATURE

Units are suitable for operation in ambient temperatures of up to 60°C (unit sizes 1-5) and up to 40°C (unit sizes 6-7).

IMPELLER

Impellers are of high efficiency, performance and sound optimised backward curved design.

SOUND

Standard case with patented 'Floating Fan' construction to ensure quiet operation.

INSTALLATION

The unit will be manufactured to provide a low height solution to enable it to be located in low depth ceiling and floor voids. The units have a maximum depth of 233-500mm (models DS1-7). For ease of installation the unit is supplied complete with four mounting brackets for inclusion into a drop rod mounting system. Suitable for both internal and external applications.

PERFORMANCE

Units are designed for duty range up to 1.1m^3/s.

ANCILLARIES

- Fast clamps
- Circular flexible connector
- Silencer internal
- Silencer external
- Anti-vibration mounts

APPLICATIONS

TYPICAL APPLICATIONS

- Small and large offices
- Student accommodation
- Hotels
- Hospital
- Supermarkets

MAINTENANCE

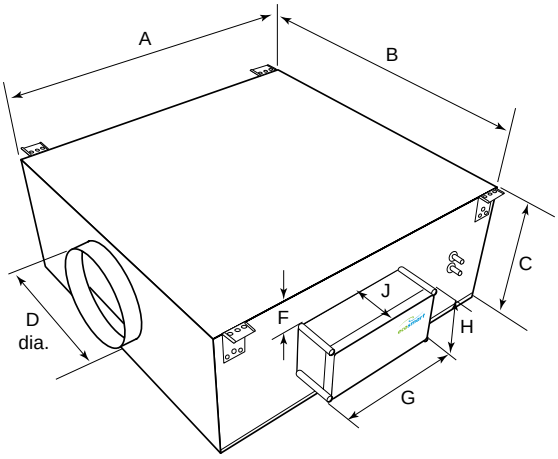
Top or bottom access as standard for easy maintenance.

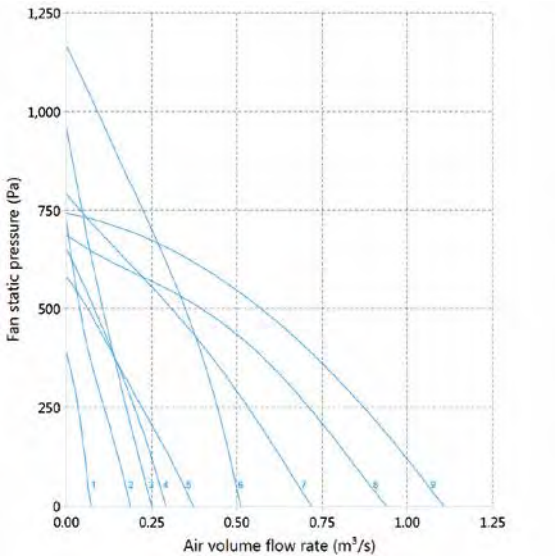
DIRECT DRIVEN INLINE CENTRIFUGAL - DAVE

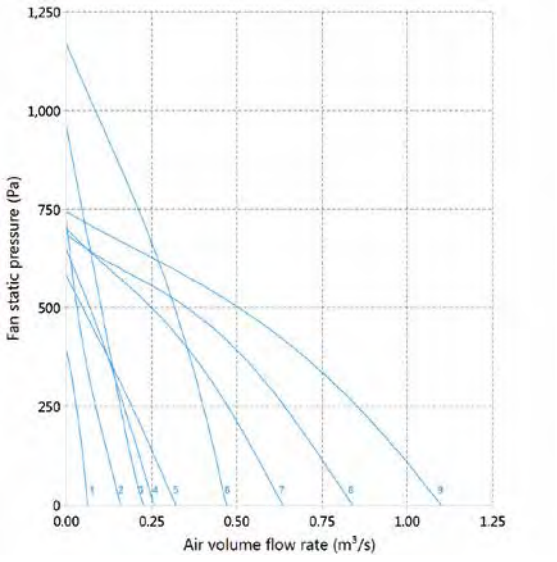
CODING DE2HA-ES

D	E	2	HA	-	ES
1	2	3	4		5

1. D - Dave fan range
2. E - Extract/S - Supply
3. 2 - Case size
4. HA - High pressure/only A - extended case
5. ES - Ecosmart







DIMENSIONS (MM) AND WEIGHT (KG)

MODEL	A	B	C	D	E	F	G	WEIGHT
DE1-ES	604	559	237	150	120	45	480	25
DE2-ES	604	696	304	200	120	78	480	25
DE2H-ES	604	696	304	200	120	78	480	40
DE3-ES	604	780	349	200	120	87	480	30
DE4-ES	604	840	374	250	120	122	480	35
DE4H-ES	604	840	374	250	120	122	480	67
DE5-ES	604	984	414	315	120	131	480	59
DE6-ES	604	1092	459	400	120	154	480	69
DE7-ES	604	1200	504	400	120	176	480	82
DS1A-EES	1004	559	237	150	180	180	530	30
DS2A-EES	1004	696	304	200	180	180	530	40
DS2HA-EES	1004	696	304	200	180	180	530	45
DS3A-EES	1004	780	349	200	180	180	530	55
DS4A-EES	1004	840	374	250	180	180	530	67
DS4HA-EES	1004	840	374	250	180	180	530	67
DS5A-EES	1150	984	414	315	180	180	530	70
DS6A-EES	1150	1092	459	400	180	180	530	75
DS7A-EES	1150	1200	504	400	180	180	530	90

EXTRACT

			MOTOR CURRENTS		SOUND POWER LEVELS RE 1 PWATT (Hz) INDUCT INLET								
CODE	PHASE	RPM SPEED	FLC	SC (DOL)	63	125	250	500	1K	2K	4K	8K	dB(A) @3M
DE1-ES	1	3770	0.27	0.27	71	61	63	53	51	46	45	43	22
DE2-ES	1	3200	0.75	0.75	69	66	60	59	54	52	53	52	24
DE2H-ES	1	4060	1.40	1.40	77	72	68	70	61	61	61	65	30
DE3-ES	1	2860	1.40	1.40	79	76	62	65	59	56	57	57	34
DE4-ES	1	2550	1.35	1.35	73	72	62	63	56	54	55	54	25
DE4H-ES	1	3700	3.30	3.30	81	80	69	78	69	68	64	71	36
DE5-ES	1	2250	2.20	2.20	89	89	74	72	63	62	61	56	40
DE6-ES	1	1710	2.90	2.90	91	88	76	68	67	63	61	54	40
DE7-ES	1	1650	3.50	3.50	86	92	79	72	67	64	62	61	41

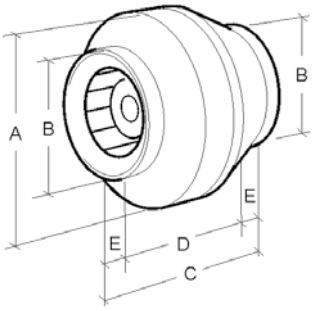
SUPPLY

DS1A-EES	1	3770	0.27	0.27	59	58	57	51	47	43	47	41	14
DS2A-EES	1	3200	0.75	0.75	68	64	59	57	52	51	51	49	18
DS2HA-EES	1	4060	1.40	1.40	75	72	64	71	58	59	58	58	24
DS3A-EES	1	2860	1.40	1.40	81	74	62	64	57	55	57	55	29
DS4A-EES	1	2550	1.35	1.35	76	72	63	64	56	55	53	51	22
DS4HA-EES	1	3700	3.30	3.30	83	78	69	73	69	68	64	66	32
DS5A-EES	1	2250	2.20	2.20	84	85	78	69	61	60	58	52	37
DS6A-EES	1	1710	2.90	2.90	81	78	79	73	62	60	58	52	38
DS7A-EES	1	1650	3.50	3.50	81	83	76	71	66	64	60	61	37

* All units are suitable for internal or external applications. Range above shows EcoSmart Control option, other options are available. Contact Nuaire for details.

TUBE FAN - NALTM

Circular inline centrifugal fan range, manufactured from high grade corrosion resistant steel.



CODING NALTM-100

NALTM - 100
1 2

SAMPLE CODING

1. NALTM - Steel case tube fan
2. 100 - Fan size

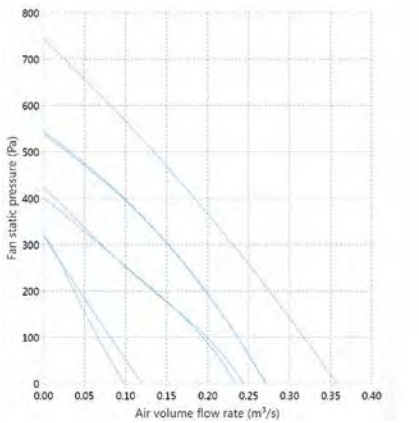
DIMENSIONS (MM) AND WEIGHT (KG)

MODEL	A	B	C	D	E	WEIGHT
NALTM-100	241	98	196	150	23	3
NALTM-125	241	123	198	144	27	3
NALTM-150	332	147	212	166	23	5
NALTM-160	332	157	221	175	23	5
NALTM-200	333	198	223	173	25	5
NALTM-250	333	248	206	152	27	6
NALTM-315	401	312	230	180	25	8

TECHNICAL SPECIFICATIONS

			MOTOR CURRENTS		SOUND POWER LEVELS RE 1 PWATT (Hz) INDUCT INLET								
CODE	PHASE	RPM SPEED	FLC	SC (DOL)	63	125	250	500	1K	2K	4K	8K	dB(A) @3M
NALTM-100	1	2600	0.33	1.0	60	66	72	66	64	59	56	42	38
NALTM-125	1	2620	0.30	1.0	62	57	62	66	63	62	57	45	33
NALTM-150	1	2550	0.44	1.2	59	65	65	71	66	64	62	51	35
NALTM-160	1	2550	0.44	1.2	58	63	65	69	65	64	63	52	34
NALTM-200	1	2720	0.60	1.8	65	65	70	67	68	66	64	61	36
NALTM-250	1	2720	0.60	1.8	62	66	71	68	69	65	65	63	41
NALTM-315	1	2790	1.21	3.3	77	74	74	73	73	67	66	66	40

NALTM



50Hz

CONSULTANT SPECIFICATION

CASING
Manufactured from high grade corrosion resistant galvanised steel.

MOTOR
Single phase IP44 external rotor motors Class B insulation, pre-wired junction box with optional mounting bracket.

CERTIFICATION AND OPERATING TEMPERATURE
-40°C up to +60°C - temperature varies based on the unit size. Contact Nuaire for details.

IMPELLER
Circular inline centrifugal impeller.

SOUND
Low breakout, suitable for noise sensitive applications.

PERFORMANCE
Seven sizes available from 100 to 315mm. Performance up to 0.54m³/s.

ANCILLARIES
- Support brackets
- Electronic speed controls
- Flexible connectors
- Silencers

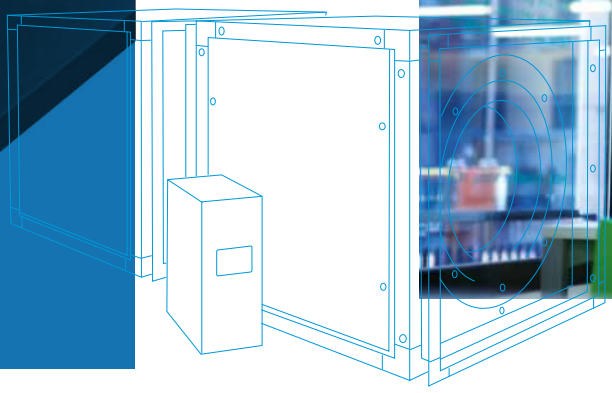
APPLICATIONS
TYPICAL APPLICATIONS
- Washrooms
- Small offices
- Hospital
- Supermarkets
- Villas/residential properties

INLINE CENTRIFUGAL FAN - AIRMOVER

Inline general purpose fan range for high performance applications.

KEY BENEFITS:

- **QUIETEST OPERATION -** THE HIGH RIGIDITY, DOUBLE SKINNED CONSTRUCTION
- **IDEAL FOR DUCTING -** UNITS ARE CONSTRUCTED WITH A SQUARE CASE AND MEZZ FLANGE TO SUIT DUCTED APPLICATIONS
- **ROBUST PROTECTION -** STRONG ALUZINC AND PENTAPOST CONSTRUCTION PROVIDES LONG LIFE AND HELPS MINIMISE ONSITE INSTALLATION DAMAGE
- **FLEXIBLE SOLUTION -** IDEAL FOR EITHER INTERNAL OR EXTERNAL APPLICATIONS WITH AN ACCESS PANEL
- **EASE OF ACCESS -** A PANEL PROVIDES QUICK AND EASY ACCESS REDUCING MAINTENANCE COSTS
- **CONTROLLABILITY AS STANDARD -** ALL MODELS HAVE THE FLEXIBILITY TO BE SPEED CONTROLLED, ALSO SUITABLE FOR USE WITH THE NUAIRE ECOSMART CONTROL
- **SAFETY TESTED -** MOTORS ARE PRE-WIRED TO EXTERNAL IP55 RATED TERMINAL BOX FOR EASE OF INSTALLATION



50Hz

CONSULTANT SPECIFICATION

CASING

Casing consists of high rigidity Pentapost framework with double skinned infill panels. Panels contain inert high density infill. Panel material is heavy gauge Aluzinc corrosion resistant steel.

MOTOR

Fans are direct drive with high efficiency IE2 motors to IEC60034-30:2008 where applicable (e.g. single speed motors, rated at 0.75kW and above).

CERTIFICATION AND OPERATING TEMPERATURE

The fan is CE Low Voltage Directive 2014/35/EU.

IMPELLER

High efficiency backward curved centrifugal design, manufactured in galvanised steel.

INSTALLATION

Internal and external ducted applications as standard. If an inverter is supplied with the fan, it needs to be mounted internally within the building unless a weatherproof enclosure is ordered.

PERFORMANCE

Duty range up to 11m³/s.

ANCILLARIES

- Splitter attenuator
- AV Mounts
- Flexible connectors
- Weatherproof cowls
- Guards (for square units)

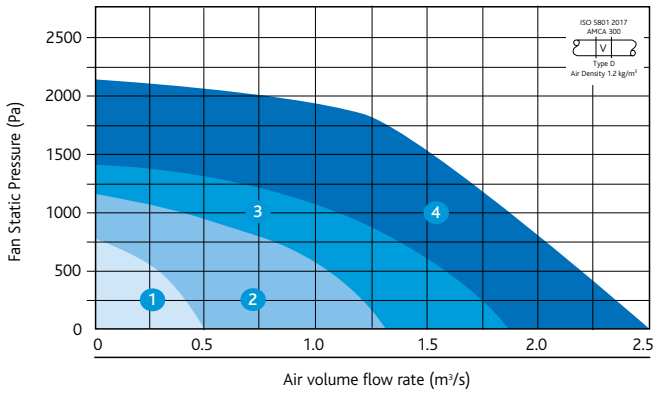
APPLICATIONS

TYPICAL APPLICATIONS

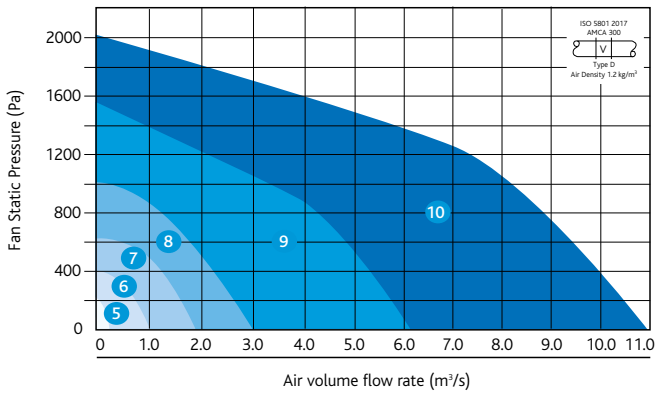
- Apartments & flats
- Factories & warehouses
- Hotels
- Supermarkets
- Student accommodation
- Care homes
- Leisure & sports facilities

INLINE CENTRIFUGAL FAN - AIRMOVER

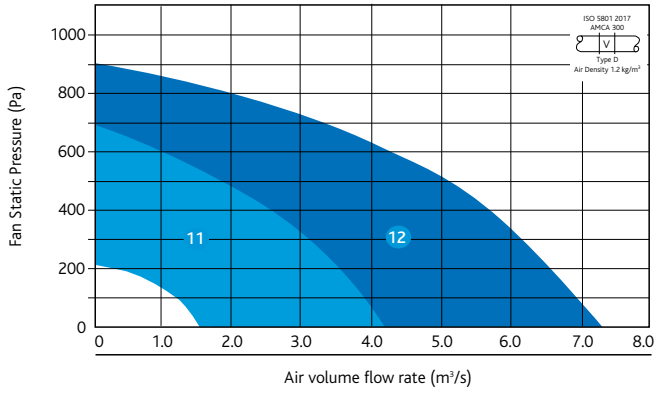
Airmover - 2 pole



Airmover - 4 pole



Airmover - 6 pole



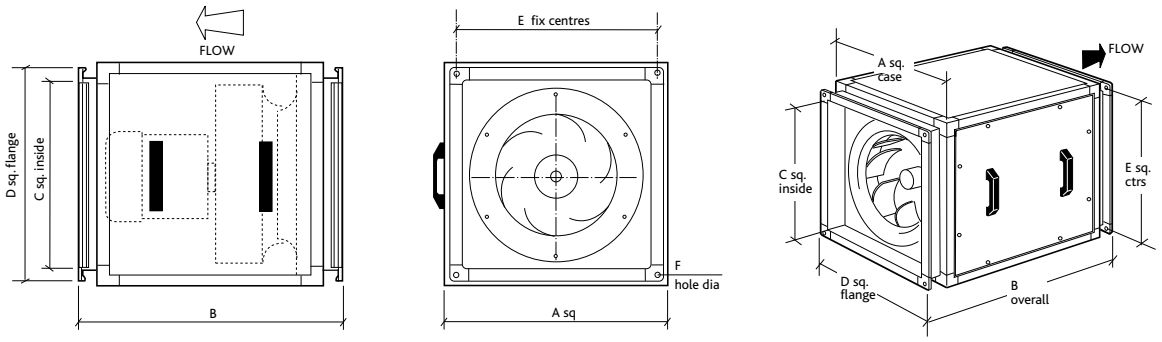
CODING AM42T-ESBC

AM 4 2 T - ES B C
1 2 3 4 5 6 7

SAMPLE CODING

1. Airmover
2. Pole (2, 4 or 6)
3. Size
4. Options
   T = Two speed.
   (Not available with Ecosmart control).
5. ES = Full Ecosmart controls – BMS interfaces and commissioning controls (as 2 & 3 below) full compatibility with Ecosmart sensors.
6. B = BMS interfaces 0-10V, volt freerun and fail indication.
   Commissioning/speed control built in adjustable trickle and boost if required.
7. C = Commissioning/speed control built in.
   Adjustable trickle and boost if required.

All the above control options are preprogrammed with a soft start function The above control options are provided in a purpose made module, mounted remote from the unit. Other controls to be specified separately please contact Nuaire for details.



DIMENSIONS (MM) AND WEIGHT (KG)

MODEL	A	B	C	D	E	F	WEIGHT
AM21ES	376	486	310	370	345	11	28
AM22ES	510	615	440	505	478	11	61
AM23ES	510	615	440	505	478	11	61
AM24ES	642	705	570	635	608	11	68
AM41ES	376	486	310	370	345	11	28
AM42ES	510	615	440	505	478	11	61
AM43ES	642	705	570	635	608	11	68
AM44ES	712	775	645	702	680	11	102
AM45ES	892	1030	805	865	840	13	194
AM46ES	1082	1155	990	1075	1028	13	605
AM61ES	892	1030	805	865	840	13	194
AM62ES	1085	1155	990	1075	1028	13	305

TECHNICAL SPECIFICATIONS

				MOTOR CURRENTS			SOUND POWER LEVELS RE 1 PWATT (Hz)									
CURVE	CODE	PHASE	RPM SPEED	FLC	SC		PC	63	125	250	500	1K	2K	4K	8K	dB(A) @3M
1	AM21ES	3	2820	1.0	1.0	INDUCT INLET	90	84	79	80	66	64	66	65	62	38
						INDUCT OUTLET	90	84	79	76	66	69	69	67	60	
2	AM22ES	3	2855	2.5	2.5	INDUCT INLET	90	81	81	83	81	74	74	75	70	42
						INDUCT OUTLET	90	80	82	79	79	79	79	76	72	
3	AM23ES	3	2875	4.54	4.54	INDUCT INLET	90	84	83	89	85	78	80	80	76	48
						INDUCT OUTLET	90	82	85	85	82	82	85	81	78	
4	AM24ES	3	2890	7.8	7.8	INDUCT INLET	90	94	85	88	84	84	85	86	85	50
						INDUCT OUTLET	90	96	83	84	88	89	87	89	78	
5	AM41ES	3	1430	0.8	0.8	INDUCT INLET	90	70	71	64	54	51	52	49	42	24
						INDUCT OUTLET	90	70	71	60	54	55	55	51	40	
6	AM42ES	3	1430	1.1	1.1	INDUCT INLET	90	74	79	70	67	59	61	58	53	32
						INDUCT OUTLET	90	73	80	66	65	63	65	59	55	
7	AM43ES	3	1445	2.5	2.5	INDUCT INLET	90	77	83	78	76	70	70	65	63	38
						INDUCT OUTLET	90	79	81	74	80	74	71	68	57	
8	AM44ES	3	1450	4.5	4.5	INDUCT INLET	90	80	88	86	79	74	75	73	69	45
						INDUCT OUTLET	90	81	81	83	84	78	77	75	66	
9	AM45ES	3	1455	15.8	15.8	INDUCT INLET	90	86	99	90	82	82	81	78	74	51
						INDUCT OUTLET	90	87	88	89	88	86	83	79	74	
10	AM46ES	3	1460	35	35	INDUCT INLET	90	88	100	95	86	88	84	81	77	53
						INDUCT OUTLET	90	90	93	92	90	92	86	82	74	
11	AM61ES	3	915	6.4	6.4	INDUCT INLET	90	86	87	82	78	74	71	67	63	43
						INDUCT OUTLET	90	88	76	81	83	77	73	68	63	
12	AM62ES	3	975	12.8	12.8	INDUCT INLET	88	90	84	75	77	74	71	67	65	44
						INDUCT OUTLET	90	88	84	81	79	84	75	71	61	

DUCT MOUNTED CENTRIFUGAL FAN (INTERNAL OR EXTERNAL) ESX - EXTRACTOR

Internal inline, external inline, roof mounted with end inlet and side discharge and bottom inlet with side discharge options the ESX range of fans utilise a 'floating fan' technology with coupled attenuators for optimum attenuation with a duty range up to 5.9m³/s.

KEY BENEFITS:

- **QUIET OPERATION -** THE HIGH RIDIGITY, DOUBLE SKINNED CONSTRUCTION
- **EASE OF ACCESS -** ACCESS PANELS PROVIDE QUICK AND EASY ACCESS FOR MAINTENANCE- REDUCING MAINTENANCE COSTS
- **SAFETY TESTED -** MOTORS ARE PRE-WIRED TO EXTERNAL IP55 RATED TERMINAL BOX FOR EASE OF INSTALLATION
- **LOW DEPTH 350MM (INTERNAL ONLY) -** VARIANTS AVAILABLE THAT ARE SUITABLE FOR SPACE RESTRICTED INSTALLATIONS
- **FLEXIBLE SOLUTION -** IDEAL FOR EITHER INTERNAL AND EXTERNAL APPLICATIONS
- **FAILURE DETECTION -** BUILT IN ECOSMART CONTROLS - ENERGY EFFICIENT DEMAND CONTROL VENTILATION SOLUTION WITH FULL CONTROLLABILITY ALLOWING THE DUTY TO BE ADJUSTED IF DUCTWORK INSTALLATION CHANGED DURING CONSTRUCTION ON SITE

50Hz

CONSULTANT SPECIFICATION

CASING

Casing is manufactured using a robust pentapost frame construction with heavy gauge double skinned panels of either galvanised (internal units size 1-13) or Aluzinc corrosion resistant steel. Panels contain high density inert infill offering high acoustic and thermal insulation. Acoustic infill material is V0 grade. Full width side access panels are provided on all units. Construction is to Class A leakage.

MOTOR

Self contained insulated enclosure which is acoustically isolated from external skin providing exceptional breakout characterisctics.

Direct or belt drive with IE2 high efficiency motors to EN 60034-630 as standard.

Units to be fitted with 'hall effect' air flow failure monitoring.

CERTIFICATION AND OPERATING TEMPERATURE

The fan is CE Low Voltage Directive 2014/35/EU, suitable for operation at up to 50°C.

IMPELLER

Impellers are of high efficiency forward or backward curved centrifugal design.

INSTALLATION

Suitable for internal and external installation.

PERFORMANCE

Up to 5.9m³/s.

ANCILLARIES

- Pre-fabricated curbs
- Duct mounted and matched silencers
- Flexible inlet bottom connectors
- AV mounts
- Acoustic flexible connectors
- Purlin boxes
- Fast clamps
- Supply and extract cowls
- Ecosmart controls and BMS interfaces

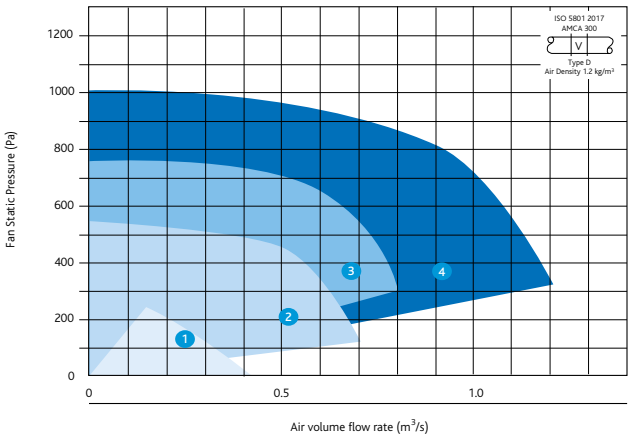
APPLICATIONS

TYPICAL APPLICATIONS

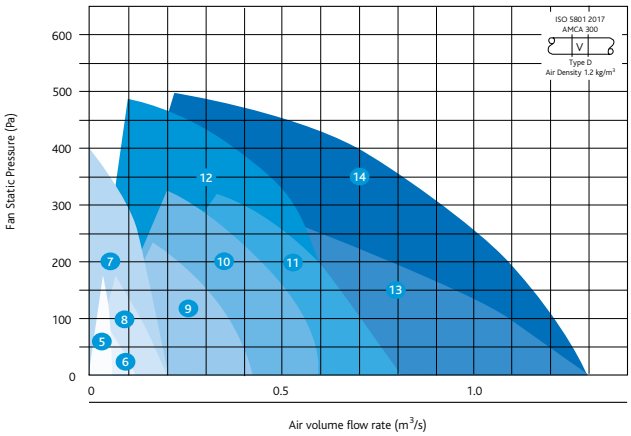
- Apartments & flats
- Hotels
- Offices
- Student accommodation
- Care homes

DUCT MOUNTED CENTRIFUGAL FAN (INTERNAL OR EXTERNAL) ESX - EXTRACTOR

Xtractor Internally Mounted Fan Units 1-4



Xtractor Internally Mounted Fan Units 5-14



CODING ESXL1- ESBC

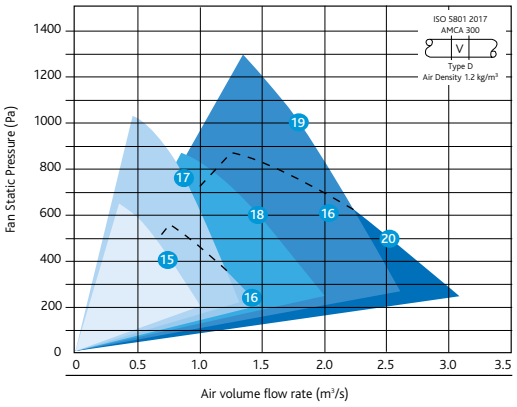
ESX L 1 - ES B C
1 2 3 4 5 6

SAMPLE CODING

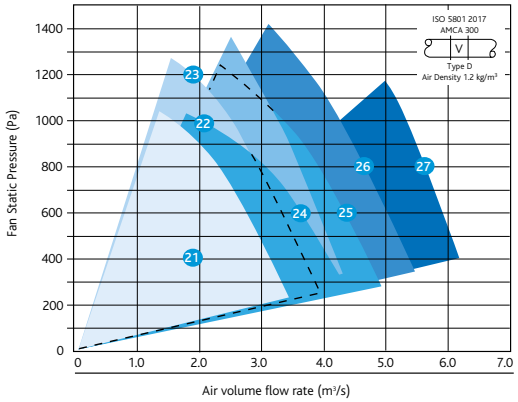
1. Single range
2. High efficiency
3. Sizes 1 - 25
4. ES = Full Ecosmart controls.
   – BMS interfaces and commissioning controls (as 2 & 3 below) full compatibility with Ecosmart sensors.
   DS = Double Skin.
5. B = BMS interfaces 0-10V, volt free run and fail indication.
   Commissioning/speed control built in.
   Adjustable trickle and boost if required.
6. C = Commissioning/speed control built in.
   Adjustable trickle and boost if required.

All the above control options are preprogrammed with a soft start function.

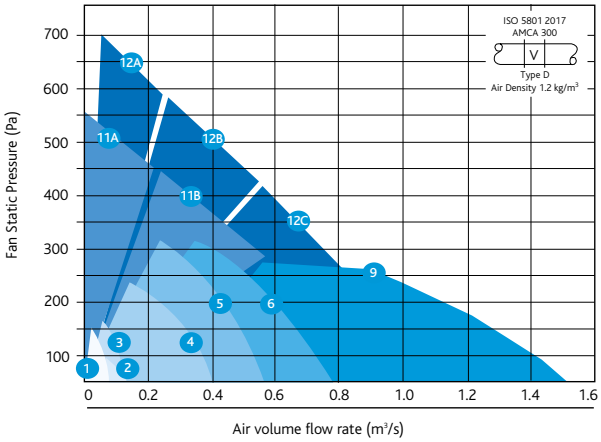
Xtractor Internally Mounted Fan Units 15-20



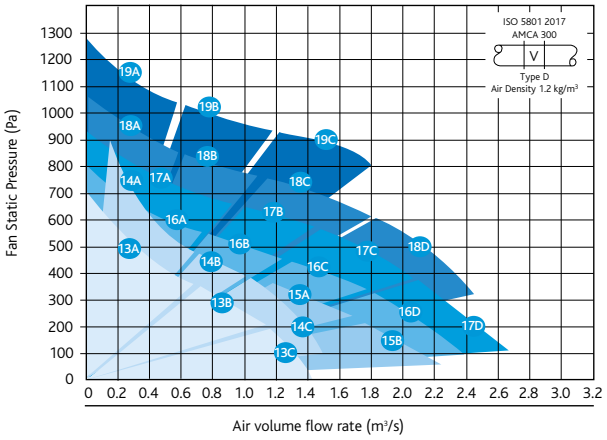
Xtractor Internallly Mounted Fan Units 21-27



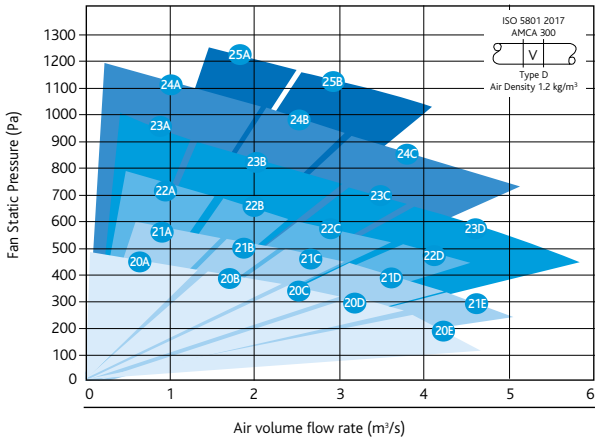
Xtractor Externally Mounted Fan Units 1-12



Xtractor Externally Mounted Fan Units 13-19



Xtractor Externally Mounted Fan Units 20-25



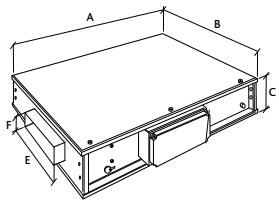
CODING ESX1 - B ES B C

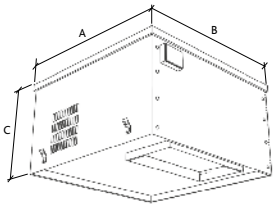
ESX 1 - B ES B C
1 2 3 4 5 6

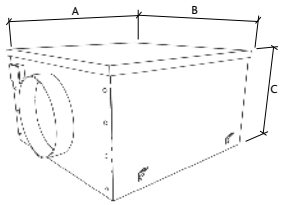
SAMPLE CODING

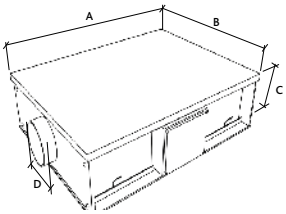
1. Single range
2. Sizes 1 to 25
3. Case type/spigot position
   X = External inline unit
   R = Back inlet, grille outlet external roof mounted unit
   B = Bottom inlet, grille outlet external roof mounted unit.
4. ES = Full Ecosmart controls – BMS interfaces and commissioning controls (as 5 & 6 below) full compatibility with Ecosmart sensors.
5. B = BMS interfaces 0-10V, volt free run and fail indication. Commissioning/speed control built in Adjustable trickle and boost if required.
6. C = Commissioning/speed control built in.

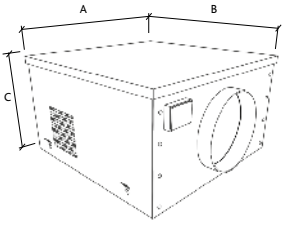
Adjustable trickle and boost if required. All the above control options are preprogrammed with a soft start function.











DIMENSIONS (MM)

MODEL	A	B	C	D	E	F
ESX1ES	763	572	210	150		
ESX2ES	778	787	262	200		
ESX3ES	913	787	340	200		
ESX4ES	1063	1047	360	250		
ESX5/6ES	1193	1047	423	400		
ESX9ES	1195	1174	575	500		
ESX11-12/A-C/ES	974	974	622	400		
ESX13-14/A-C/ES	1233	1235	701	500		
ES15-19/A-C/ES	1430	1190	780	630		
ESX20-25/A-C/ES	2030	1470	1183		1200	700
MODEL	**A**	**B**	**C**	**D**	**E**	**F**
ESX1-BES	705	505	355		152	76
ESX2/3-BES	970	720	485		229	127
ESX4-BES	1165	980	575		305	152
ESX5/6-BES	1165	980	575		457	229
ESX9-BES	1495	1125	710		762	304
ESX11/12-A/C-BES	974	375	622		457	229
ESX13/14-A/D-BES	1233	1235	701		762	304
ESX15/19-A/D-BES	1430	1190	780		889	381
EXS20/25-	2030	1470	1183		1200	700
MODEL	**A**	**B**	**C**	**D**	**E**	**F**
ESX1-DSES	328	462	266	150		
ESX2/2H-DSES	373	524	340	200		
ESX3-DSES	432	570	405	200		
ESX4-DSES	563	807	481	250		
ESX5-6-DSES	563	807	481	400		
ESX9-DSES	655	840	630	500		
ESXL2-4-DSES	1006	1000	350		500	250
ESX15-19-DSES	1200	1000	800		320	320
ESX20/21/22-24-DSES	1500	1300	1000		507	507
ESX22/25-27-DSES	1500	1300	1000		500	500
ESXL1-ES	1063	650	352	250		

DIMENSIONS (MM)

MODEL	A	B	C	D	E	F
ESX1-RES	705	505	355	125		
ESX2-RES	875	720	400	200		
ESX3-RES	970	720	480	200		
ESX4-RES	1165	980	575	250		
ESX5-RES	1165	980	575	400		
ESX6-RES	1165	980	575	400		
ESX9-RES	1495	1125	710	500		
ESX11/12-RES	974	974	622	400		
ESX13/14-RES	1233	1235	701	500		
ESX15/19-RES	1430	1190	780	630		
ESX20/25-RES	2030	1470	1183		1200	700
MODEL	**A**	**B**	**C**	**D**	**E**	**F**
ESX1-XES	705	505	355	125		
ESX2-XES	875	720	400	200		
ESX3-XES	970	720	480	200		
ESX4-XES	1165	980	575	250		
ESX5-6-XES	1165	980	575	400		
ESX9-XES	1495	1125	710	500		
ESX11-12/A-C-XES	974	974	622	400		
ESX13-14/A-D-XES	1233	1235	701	500		
ESX15-19/A-D-XES	1430	1190	780	630		
ESX20-25/A-D-XES	2030	1470	1183		1200	700

TECHNICAL SPECIFICATIONS

			MOTOR CURRENTS		SOUND POWER LEVELS RE 1 PWATT (Hz) INDUCT INLET								
CODE	PHASE	RPM SPEED	FLC	SC (DOL)	63	125	250	500	1K	2K	4K	8K	dB(A) @3M
ESX1ES	1	2040	0.65	0.65	71	66	55	46	47	39	35	31	25
ESX2ES	1	1320	0.56	0.56	67	62	46	40	35	32	31	31	22
ESX3ES	1	1700	0.80	0.80	77	72	55	47	43	40	36	32	28
ESX4ES	1	1140	1.60	1.60	73	68	59	51	49	46	42	35	33
ESX5ES	1	1272	4.84	4.84	73	68	58	49	49	50	48	43	37
ESX6ES	1	1272	4.84	4.84	78	71	63	55	58	58	55	48	44
ESX9ES	1	960	7.30	7.30	87	82	70	66	62	61	56	50	47
ESX11BES	3	1225	1.70	1.70	79	74	68	64	65	57	52	48	45
ESX12AES	3	1400	1.70	1.70	80	75	71	66	66	58	51	45	45
ESX12CES	3	1400	2.90	2.90	82	77	73	67	69	60	54	47	48
ESX13AES	3	1085	2.10	2.10	75	70	67	67	63	56	57	51	45
ESX13BES	3	1085	2.90	2.90	77	72	68	69	65	58	59	54	47
ESX13CES	3	1085	3.70	3.70	78	73	69	70	64	59	61	55	47
ESX14AES	3	1225	2.90	2.90	78	73	68	68	62	56	58	48	45
ESX14BES	3	1225	3.70	3.70	79	74	68	68	63	57	59	49	47
ESX14CES	3	1225	5.40	5.40	80	75	70	71	65	60	62	55	49
ESX14DES	3	1225	6.90	6.90	81	76	72	73	67	62	64	58	53
ESX15AES	3	925	5.40	5.40	85	80	79	78	76	73	70	64	57
ESX15BES	3	925	6.90	6.90	88	83	81	79	78	76	74	68	59
ESX16AES	3	1040	3.70	3.70	85	80	80	75	75	73	71	67	54
ESX16BES	3	1040	5.40	5.40	86	81	81	76	76	74	71	68	58
ESX16CES	3	1040	6.90	6.90	86	81	82	77	77	74	71	68	58
ESX17AES	3	1160	5.40	5.40	88	83	81	75	76	74	73	69	54
ESX17BES	3	1160	6.90	6.90	89	84	82	76	77	75	73	70	58
ESX17CES	3	1160	10.00	10.00	89	84	83	77	78	75	73	70	58
ESX17DES	3	1160	12.00	12.00	90	85	83	80	80	77	76	71	60
ESX18AES	3	1260	5.40	5.40	88	83	84	78	80	76	75	69	57
ESX18BES	3	1260	6.90	6.90	89	84	83	79	80	77	74	69	58
ESX18CES	3	1260	10.00	10.00	89	84	83	79	80	77	74	69	58
ESX18DES	3	1260	12.00	12.00	90	85	83	81	81	78	76	71	59
ESX19AES	3	1440	6.90	6.90	95	90	83	82	80	79	78	73	58
ESX19BES	3	1440	10.00	10.00	92	87	82	81	79	79	77	73	57
ESX19CES	3	1440	12.00	12.00	91	86	84	82	81	79	77	73	59
ESX20AES	3	700	3.70	3.70	88	83	81	79	68	69	62	63	55
ESX20BES	3	700	5.40	5.40	88	83	80	80	69	68	62	62	55
ESX20CES	3	700	6.90	6.90	88	83	80	80	69	68	61	62	56
ESX20DES	3	700	10.00	10.00	88	83	81	81	70	67	60	60	58
ESX20EES	3	700	12.00	12.00	91	86	84	84	73	70	63	63	61
ESX21AES	3	800	5.40	5.40	91	86	83	83	72	71	65	65	58
ESX21BES	3	800	6.90	6.90	91	86	83	83	72	71	64	65	60
ESX21CES	3	800	10.00	10.00	91	86	84	84	73	70	63	63	61
ESX21DES	3	800	12.00	12.00	94	89	87	87	76	73	66	66	62
ESX21EES	3	800	16.00	16.00	95	90	88	87	77	74	67	67	63
ESX22AES	3	900	6.90	6.90	93	88	85	85	74	73	67	67	60
ESX22BES	3	900	10.00	10.00	93	88	85	85	74	73	66	67	59
ESX22CES	3	900	12.00	12.00	93	88	86	86	75	72	65	65	63

TECHNICAL SPECIFICATIONS

			MOTOR CURRENTS		SOUND POWER LEVELS RE 1 PWATT (Hz) INDUCT INLET								
CODE	PHASE	RPM SPEED	FLC	SC (DOL)	63	125	250	500	1K	2K	4K	8K	dB(A) @3M
ESX22DES	3	900	16.00	16.00	96	91	89	89	78	75	68	68	64
ESX23AES	3	1000	10.00	10.00	95	90	87	87	76	75	69	69	61
ESX23BES	3	1000	12.00	12.00	95	90	87	87	76	75	68	69	63
ESX23CES	3	1000	16.00	16.00	95	90	88	88	77	74	67	67	65
ESX23DES	3	1000	23.00	23.00	98	93	91	91	80	77	70	70	66
ESX24AES	3	1100	12.00	12.00	97	92	89	89	78	77	71	71	64
ESX24BES	3	1100	16.00	16.00	97	92	89	89	78	77	70	71	65
ESX24CES	3	1100	23.00	23.00	97	92	90	90	79	76	69	69	67
ESX25AES	3	1200	16.00	16.00	98	93	90	90	79	78	72	72	65
ESX25BES	3	1200	23.00	23.00	98	93	90	90	79	78	71	72	66
ESX1-BES	1	2040	0.65	0.65	71	66	55	46	47	39	35	31	41
ESX2-BES	1	1320	0.56	0.56	67	62	46	40	35	32	31	31	37
ESX3-BES	1	1700	0.80	0.80	77	72	55	47	43	40	36	32	44
ESX4-BES	1	1140	1.60	1.60	73	68	59	51	49	46	42	35	49
ESX5-BES	1	1272	4.84	4.84	73	68	58	49	49	50	48	43	55
ESX6-BES	1	1272	4.84	4.84	78	73	66	54	50	49	47	41	54
ESX9-BES	1	960	7.30	7.30	87	82	70	66	62	61	56	50	54
ESX11A-BES	3	1225	1.30	1.30	78	73	67	62	63	55	49	45	55
ESX11B-BES	3	1225	1.70	1.70	79	74	68	64	65	57	52	48	56
ESX12A-BES	3	1400	1.70	1.70	80	75	71	66	66	58	51	45	56
ESX12B-BES	3	1400	2.10	2.10	79	74	70	65	66	58	51	44	58
ESX12C-BES	3	1400	2.90	2.90	82	77	73	67	69	60	54	47	60
ESX13A-BES	3	1085	2.10	2.10	75	70	67	67	63	56	57	51	55
ESX13B-BES	3	1085	2.90	2.90	77	72	68	69	65	58	59	54	57
ESX13C-BES	3	1085	3.70	3.70	78	73	69	70	64	59	61	55	57
ESX14A-BES	3	1225	2.90	2.90	78	73	68	68	62	56	58	48	55
ESX14B-BES	3	1225	3.70	3.70	79	74	68	68	63	57	59	49	58
ESX14C-BES	3	1225	5.40	5.40	80	75	70	71	65	60	62	55	60
ESX14D-BES	3	1225	6.90	6.90	81	76	72	73	67	62	64	58	60
ESX15A-BES	3	925	5.40	5.40	85	80	79	78	76	73	70	64	67
ESX15B-BES	3	925	6.90	6.90	88	83	81	79	78	76	74	68	71
ESX16A-BES	3	1040	3.70	3.70	85	80	80	75	75	73	71	67	65
ESX16B-BES	3	1040	5.40	5.40	86	81	81	76	76	74	71	68	70
ESX16C-BES	3	1040	6.90	6.90	86	81	82	77	77	74	71	68	70
ESX16D-BES	3	1040	10.00	10.00	89	84	82	80	79	77	75	70	72
ESX17A-BES	3	1160	5.40	5.40	88	83	81	75	76	74	73	69	66
ESX17B-BES	3	1160	6.90	6.90	89	84	82	76	77	75	73	70	69
ESX17C-BES	3	1160	10.00	10.00	89	84	83	77	78	75	73	70	69
ESX17D-BES	3	1160	12.00	12.00	90	85	83	80	80	77	76	71	71
ESX18A-BES	3	1260	5.40	5.40	88	83	84	78	80	76	75	69	68
ESX18B-BES	3	1260	6.90	6.90	89	84	83	79	80	77	74	69	69
ESX18C-BES	3	1260	10.00	10.00	89	84	83	79	80	77	74	69	69
ESX18D-BES	3	1260	12.00	12.00	90	85	83	81	81	78	76	71	70
ESX19A-BES	3	1440	6.90	6.90	95	90	83	82	80	79	78	73	69
ESX19B-BES	3	1440	10.00	10.00	92	87	82	81	79	79	77	73	68
ESX19C-BES	3	1440	12.00	12.00	91	86	84	82	81	79	77	73	70
ESX20A-BES	3	700	3.70	3.70	88	83	81	79	68	69	62	63	63
ESX20B-BES	3	700	5.40	5.40	88	83	80	80	69	68	61	62	64
ESX20C-BES	3	700	6.90	6.90	88	83	80	80	69	68	61	62	64
ESX20D-BES	3	700	10.00	10.00	88	83	81	81	70	67	60	60	66

TECHNICAL SPECIFICATIONS

			MOTOR CURRENTS		SOUND POWER LEVELS RE 1 PWATT (Hz) INDUCT INLET								
CODE	PHASE	RPM SPEED	FLC	SC (DOL)	63	125	250	500	1K	2K	4K	8K	dB(A) @3M
ESX20E-BES	3	700	12.00	12.00	91	86	84	84	73	70	63	63	68
ESX21A-BES	3	800	5.40	5.40	91	86	83	83	72	71	65	65	66
ESX21B-BES	3	800	6.90	6.90	91	86	83	83	72	71	64	65	68
ESX21C-BES	3	800	10.00	10.00	91	86	84	84	73	70	63	63	69
ESX21D-BES	3	800	12.00	12.00	94	89	87	87	76	73	66	66	70
ESX21E-BES	3	800	16.00	16.00	95	90	88	87	77	74	67	67	71
ESX22A-BES	3	900	6.90	6.90	93	88	85	85	74	73	67	67	68
ESX22B-BES	3	900	10.00	10.00	93	88	85	85	74	73	66	67	67
ESX22C-BES	3	900	12.00	12.00	93	88	86	86	75	72	65	65	69
ESX22D-BES	3	900	16.00	16.00	96	91	89	89	78	75	68	68	72
ESX23A-BES	3	1000	10.00	10.00	95	90	87	87	76	75	69	69	69
ESX23B-BES	3	1000	12.00	12.00	95	90	87	87	76	75	68	69	71
ESX23C-BES	3	1000	16.00	16.00	95	90	88	88	77	74	67	67	73
ESX23D-BES	3	1000	23.00	23.00	98	93	91	91	80	77	70	70	74
ESX24A-BES	3	1100	12.00	12.00	97	92	89	89	78	77	71	71	72
ESX24B-BES	3	1100	16.00	16.00	97	92	89	89	78	77	70	71	73
ESX24C-BES	3	1100	23.00	23.00	97	92	90	90	79	76	69	69	75
ESX25A-BES	3	1200	16.00	16.00	98	93	90	90	79	78	72	72	73
ESX25B-BES	3	1200	23.00	23.00	98	93	90	90	79	78	71	72	74

TECHNICAL SPECIFICATIONS

			MOTOR CURRENTS		SOUND POWER LEVELS RE 1 PWATT (Hz) INDUCT INLET								
CODE	PHASE	RPM SPEED	FLC	SC (DOL)	63	125	250	500	1K	2K	4K	8K	dB(A) @3M
ESX1-DSES	1	2040	0.65	0.65	71	66	52	47	44	28	21	17	20
ESX2-DSES	1	1320	0.56	0.56	81	76	51	50	38	30	24	22	22
ESX2H-DSES	1	1700	0.80	0.80	75	70	64	58	48	44	44	36	23
ESX3-DSES	1	1260	1.60	1.60	83	78	56	55	44	38	36	33	25
ESX4-DSES	1	1140	1.60	1.60	73	68	62	56	50	44	42	38	25
ESX5-DSES	1	1110	2.95	2.95	76	71	67	59	60	56	51	46	45
ESX6-DSES	1	1272	4.84	4.84	85	80	74	66	65	64	61	56	33
ESX6H-DSES	1	1480	7.60	7.60	88	83	77	69	68	67	64	59	34
ESX9-DSES	1	960	7.30	7.30	89	84	75	69	66	65	59	52	36
ESX9H-DSES	1	1065	9.40	9.40	93	88	79	73	70	69	63	56	39
ESXL2-DSES	1	1250	6.00	6.00	78	73	68	68	66	61	59	54	34
ESXL3-DSES	1	1160	7.90	7.90	82	77	72	72	70	65	63	58	36
ESXL4-DSES	3	1310	5.00	5.00	85	80	75	75	73	68	66	61	37
ESX15-DSES	3	2415	1.60	1.60	84	79	76	81	77	74	67	61	36
ESX16-DSES	3	1830	2.10	2.10	92	87	77	84	78	78	73	66	44
ESX17-DSES	3	3080	2.50	2.50	93	88	85	78	75	73	68	62	41
ESX18-DSES	3	2300	3.50	3.50	94	89	88	86	79	76	74	68	47
ESX19-DSES	3	2920	6.50	6.50	98	93	92	90	83	80	78	72	51
ESX20-DSES	3	1800	5.00	5.00	84	79	85	79	78	75	69	65	43
ESX21-DSES	3	1970	6.50	6.50	87	82	79	84	79	77	72	67	39
ESX22-DSES	3	1760	8.50	8.50	90	85	82	87	82	80	75	70	42
ESX23-DSES	3	2180	8.50	8.50	87	82	83	84	80	76	72	66	42
ESX24-DSES	3	2430	11.00	11.00	92	87	84	89	84	82	77	72	44
ESX25-DSES	3	1960	11.00	11.00	90	85	86	87	83	79	75	69	45
ESX26-DSES	3	2180	15.50	15.50	92	87	88	89	85	81	77	71	47
ESX27-DSES	3	2460	21.50	21.50	93	88	90	93	88	85	82	77	49
ESXL1-ES	1	1140	1.60	1.60	66	61	61	45	37	31	30	24	30

TECHNICAL SPECIFICATIONS

			MOTOR CURRENTS		SOUND POWER LEVELS RE 1 PWATT (Hz) INDUCT INLET								
CODE	PHASE	RPM SPEED	FLC	SC (DOL)	63	125	250	500	1K	2K	4K	8K	dB(A) @3M
ESX1-RES	1	2040	0.65	0.65	71	66	55	46	47	39	35	31	41
ESX2-RES	1	1320	0.56	0.56	67	62	46	40	35	32	31	31	37
ESX3-RES	1	1700	0.80	0.80	77	72	55	47	43	40	36	32	44
ESX4-RES	1	1140	1.60	1.60	73	68	59	51	49	46	42	35	49
ESX5-RES	1	1272	4.84	4.84	73	68	58	49	49	50	48	43	55
ESX6-RES	1	1272	4.84	4.84	78	73	66	54	50	49	47	41	54
ESX9-RES	1	960	7.30	7.30	87	82	70	66	62	61	56	50	54
ESX11A-RES	3	1225	1.30	1.30	78	73	67	62	63	55	49	45	55
ESX11B-RES	3	1225	1.70	1.70	79	74	68	64	65	57	52	48	56
ESX12A-RES	3	1400	1.70	1.70	80	75	71	66	66	58	51	45	56
ESX12B-RES	3	1400	2.10	2.10	79	74	70	65	66	58	51	44	58
ESX12C-RES	3	1400	2.90	2.90	82	77	73	67	69	60	54	47	60
ESX13A-RES	3	1085	2.10	2.10	75	70	67	67	63	56	57	51	55
ESX13B-RES	3	1085	2.90	2.90	77	72	68	69	65	58	59	54	57
ESX14A-RES	3	1225	2.90	2.90	78	73	68	68	62	56	58	48	55
ESX14B-RES	3	1225	3.70	3.70	79	74	68	68	63	57	59	49	58
ESX14C-RES	3	1225	5.40	5.40	80	75	70	71	65	60	62	55	60
ESX14D-RES	3	1225	6.90	6.90	81	76	72	73	67	62	64	58	60
ESX15A-RES	3	925	5.40	5.40	85	80	79	78	76	73	70	64	67
ESX15B-RES	3	925	6.90	6.90	88	83	81	79	78	76	74	68	71
ESX16A-RES	3	1040	3.70	3.70	85	80	80	75	75	73	71	67	65
ESX16B-RES	3	1040	5.40	5.40	86	81	81	76	76	74	71	68	70
ESX16C-RES	3	1040	6.90	6.90	86	81	82	77	77	74	71	68	70
ESX16D-RES	3	1040	10.00	10.00	89	84	82	80	79	77	75	70	72
ESX17A-RES	3	1160	5.40	5.40	88	83	81	75	76	74	73	69	66
ESX17B-RES	3	1160	6.90	6.90	89	84	82	76	77	75	73	70	69
ESX17C-RES	3	1160	10.00	10.00	89	84	83	77	78	75	73	70	69
ESX17D-RES	3	1160	12.00	12.00	90	85	83	80	80	77	76	71	71
ESX18A-RES	3	1260	5.40	5.40	88	83	84	78	80	76	75	69	68

TECHNICAL SPECIFICATIONS

			MOTOR CURRENTS		SOUND POWER LEVELS RE 1 PWATT (Hz) INDUCT INLET								
CODE	PHASE	RPM SPEED	FLC	SC (DOL)	63	125	250	500	1K	2K	4K	8K	dB(A) @3M
ESX18B-RES	3	1260	6.90	6.90	89	84	83	79	80	77	74	69	69
ESX18C-RES	3	1260	10.00	10.00	89	84	83	79	80	77	74	69	69
ESX18D-RES	3	1260	12.00	12.00	90	85	83	81	81	78	76	71	70
ESX19A-RES	3	1440	6.90	6.90	95	90	83	82	80	79	78	73	69
ESX19B-RES	3	1440	10.00	10.00	92	87	82	81	79	79	77	73	68
ESX19C-RES	3	1440	12.00	12.00	91	86	84	82	81	79	77	73	70
ESX20A-RES	3	700	3.70	3.70	88	83	81	79	68	69	62	63	63
ESX20B-RES	3	700	5.40	5.40	88	83	80	80	69	68	61	62	64
ESX20C-RES	3	700	6.90	6.90	88	83	80	80	69	68	61	62	64
ESX20D-RES	3	700	10.00	10.00	88	83	81	81	70	67	60	60	66
ESX20E-RES	3	700	12.00	12.00	91	86	84	84	73	70	63	63	68
ESX21A-RES	3	800	5.40	5.40	91	86	83	83	72	71	65	65	66
ESX21B-RES	3	800	6.90	6.90	91	86	83	83	72	71	64	65	68
ESX21C-RES	3	800	10.00	10.00	91	86	84	84	73	70	63	63	69
ESX21D-RES	3	800	12.00	12.00	94	89	87	87	76	73	66	66	70
ESX21E-RES	3	800	16.00	16.00	95	90	88	87	77	74	67	67	71
ESX22A-RES	3	900	6.90	6.90	93	88	85	85	74	73	67	67	68
ESX22B-RES	3	900	10.00	10.00	93	88	85	85	74	73	66	67	67
ESX22C-RES	3	900	12.00	12.00	93	88	86	86	75	72	65	65	69
ESX22D-RES	3	900	16.00	16.00	96	91	89	89	78	75	68	68	72
ESX23A-RES	3	1000	10.00	10.00	95	90	87	87	76	75	69	69	69
ESX23B-RES	3	1000	12.00	12.00	95	90	87	87	76	75	68	69	71
ESX23C-RES	3	1000	16.00	16.00	95	90	88	88	77	74	67	67	73
ESX23D-RES	3	1000	23.00	23.00	98	93	91	91	80	77	70	70	74
ESX24A-RES	3	1100	12.00	12.00	97	92	89	89	78	77	71	71	72
ESX24B-RES	3	1100	16.00	16.00	97	92	89	89	78	77	70	71	73
ESX24C-RES	3	1100	23.00	23.00	97	92	90	90	79	76	69	69	75
ESX25A-RES	3	1200	16.00	16.00	98	93	90	90	79	78	72	72	73
ESX25B-RES	3	1200	23.00	23.00	98	93	90	90	79	78	71	72	74

TECHNICAL SPECIFICATIONS

			MOTOR CURRENTS		SOUND POWER LEVELS RE 1 PWATT (Hz) INDUCT INLET								
CODE	PHASE	RPM SPEED	FLC	SC (DOL)	63	125	250	500	1K	2K	4K	8K	dB(A) @3M
ESX1-XES	1	2040	0.65	0.65	71	66	55	46	47	39	35	31	25
ESX2-XES	1	1320	0.56	0.56	67	62	46	40	35	32	31	31	22
ESX3-XES	1	1700	0.80	0.80	77	72	55	47	43	40	36	32	28
ESX4-XES	1	1140	1.60	1.60	73	68	59	51	49	46	42	35	33
ESX5-XES	1	1272	4.84	4.84	73	68	58	49	49	50	48	43	37
ESX6-XES	1	1272	4.84	4.84	78	71	63	55	58	58	55	48	44
ESX9-XES	1	960	7.30	7.30	87	82	70	66	62	61	56	50	47
ESX11A-XES	3	1225	1.30	1.30	78	73	67	62	63	55	49	45	43
ESX11B-XES	3	1225	1.70	1.70	79	74	68	64	65	57	52	48	45
ESX12A-XES	3	1400	1.70	1.70	80	75	71	66	66	58	51	45	45
ESX12B-XES	3	1400	2.10	2.10	79	74	70	65	66	58	51	44	47
ESX12C-XES	3	1400	2.90	2.90	82	77	73	67	69	60	54	47	48
ESX13A-XES	3	1085	2.10	2.10	75	70	67	67	63	56	57	51	45
ESX13B-XES	3	1085	2.90	2.90	77	72	68	69	65	58	59	54	47
ESX13C-XES	3	1085	3.70	3.70	78	73	69	70	64	59	61	55	47
ESX14A-XES	3	1225	2.90	2.90	78	73	68	68	62	56	58	48	45
ESX14B-XES	3	1225	3.70	3.70	79	74	68	68	63	57	59	49	47
ESX14C-XES	3	1225	5.40	5.40	80	75	70	71	65	60	62	55	49
ESX14D-XES	3	1225	6.90	6.90	81	76	72	73	67	62	64	58	53
ESX15A-XES	3	925	5.40	5.40	85	80	79	78	76	73	70	64	57
ESX15B-XES	3	925	6.90	6.90	88	83	81	79	78	76	74	68	59
ESX16A-XES	3	1040	3.70	3.70	85	80	80	75	75	73	71	67	54
ESX16B-XES	3	1040	5.40	5.40	86	81	81	76	76	74	71	68	58
ESX16C-XES	3	1040	6.90	6.90	86	81	82	77	77	74	71	68	58
ESX16D-XES	3	1040	10.00	10.00	89	84	82	80	79	77	75	70	60
ESX17A-XES	3	1160	5.40	5.40	88	83	81	75	76	74	73	69	54
ESX17B-XES	3	1160	6.90	6.90	89	84	82	76	77	75	73	70	58
ESX17C-XES	3	1160	10.00	10.00	89	84	83	77	78	75	73	70	58
ESX17D-XES	3	1160	12.00	12.00	90	85	83	80	80	77	76	71	60
ESX18A-XES	3	1260	5.40	5.40	88	83	84	78	80	76	75	69	57
ESX18B-XES	3	1260	6.90	6.90	89	84	83	79	80	77	74	69	58
ESX18C-XES	3	1260	10.00	10.00	89	84	83	79	80	77	74	69	58
ESX18D-XES	3	1260	12.00	12.00	90	85	83	81	81	78	76	71	59
ESX19A-XES	3	1440	6.90	6.90	95	90	83	82	80	79	78	73	58

TECHNICAL SPECIFICATIONS

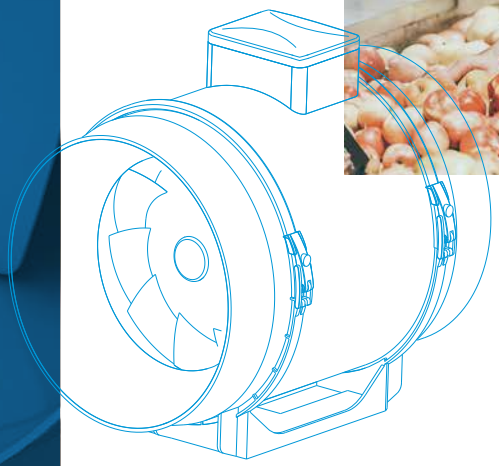
			MOTOR CURRENTS		SOUND POWER LEVELS RE 1 PWATT (Hz) INDUCT INLET								
CODE	PHASE	RPM SPEED	FLC	SC (DOL)	63	125	250	500	1K	2K	4K	8K	dB(A) @3M
ESX19B-XES	3	1440	10.00	10.00	92	87	82	81	79	79	77	73	57
ESX19C-XES	3	1440	12.00	12.00	91	86	84	82	81	79	77	73	59
ESX20A-XES	3	700	3.70	3.70	88	83	81	79	68	69	62	63	55
ESX20B-XES	3	700	5.40	5.40	88	83	80	80	69	68	62	62	55
ESX20C-XES	3	700	6.90	6.90	88	83	80	80	69	68	61	62	56
ESX20D-XES	3	700	10.00	10.00	88	83	81	81	70	67	60	60	58
ESX20E-XES	3	700	12.00	12.00	91	86	84	84	73	70	63	63	61
ESX21A-XES	3	800	5.40	5.40	91	86	83	83	72	71	65	65	58
ESX21B-XES	3	800	6.90	6.90	91	86	83	83	72	71	64	65	60
ESX21C-XES	3	800	10.00	10.00	91	86	84	84	73	70	63	63	61
ESX21D-XES	3	800	12.00	12.00	94	89	87	87	76	73	66	66	62
ESX21E-XES	3	800	16.00	16.00	95	90	88	87	77	74	67	67	63
ESX22A-XES	3	900	6.90	6.90	93	88	85	85	74	73	67	67	60
ESX22B-XES	3	900	10.00	10.00	93	88	85	85	74	73	66	67	59
ESX22C-XES	3	900	12.00	12.00	93	88	86	86	75	72	65	65	63
ESX22D-XES	3	900	16.00	16.00	96	91	89	89	78	75	68	68	64
ESX23A-XES	3	1000	10.00	10.00	95	90	87	87	76	75	69	69	61
ESX23B-XES	3	1000	12.00	12.00	95	90	87	87	76	75	68	69	63
ESX23C-XES	3	1000	16.00	16.00	95	90	88	88	77	74	67	67	65
ESX23D-XES	3	1000	23.00	23.00	98	93	91	91	80	77	70	70	66
ESX24A-XES	3	1100	12.00	12.00	97	92	89	89	78	77	71	71	64
ESX24B-XES	3	1100	16.00	16.00	97	92	89	89	78	77	70	71	65
ESX24C-XES	3	1100	23.00	23.00	97	92	90	90	79	76	69	69	67
ESX25A-XES	3	1200	16.00	16.00	98	93	90	90	79	78	72	72	65
ESX25B-XES	3	1200	23.00	23.00	98	93	90	90	79	78	71	72	66

INLINE MIXED FLOW FAN- ILM & ILM+

Inline mixed flow fan ranges for supply or extract ventilation, constructed of high quality durable plastic.

KEY BENEFITS:

- IDEAL FOR LONG DUCT RUNS
- VERY HIGH AIR FLOW PERFORMANCE
- CONCEALED FOR DISCREET OPERATION
- EASY TO REMOVE MOTOR AND IMPELLER
- MANUFACTURED FROM HIGH QUALITY DURABLE PLASTIC



50Hz

CONSULTANT SPECIFICATION

CASING

ILM - Fan casing is made of ABS plastic with Class HB fire retardant to UL 94. Compatible with ducts from 100-315.

ILM+ - Fan casing is made from a low flammable polypropylene with Class V0 by UL 94.

Compatibly with ducts from 100-315.

MOTOR

ILM - Single phase motor with motor rating of IPX4 ingress protection.

ILM+ - Equipped with single phase, double speed motor.

CERTIFICATION AND OPERATING TEMPERATURE

Ambient temperatures up to 60°C.

IMPELLER

Mixed flow.

INSTALLATION

Casing has a removable impeller and motor block with a terminal box fixed to the casing for easy mounting and maintenance. Units can be installed in any orientation to the floors, walls and ceilings.

ANCILLARIES

- Flexible connectors
- PIR/Run on Timer

APPLICATIONS

TYPICAL APPLICATIONS

- Washroom
- Small offices
- Hospitals
- Supermarkets
- Villas/residential properties

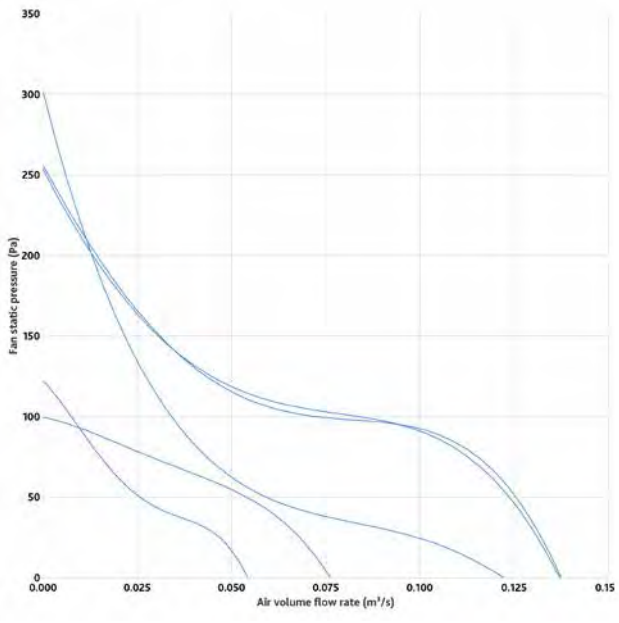
INLINE MIXED FLOW FAN- ILM & ILM+

CODING ILM+100

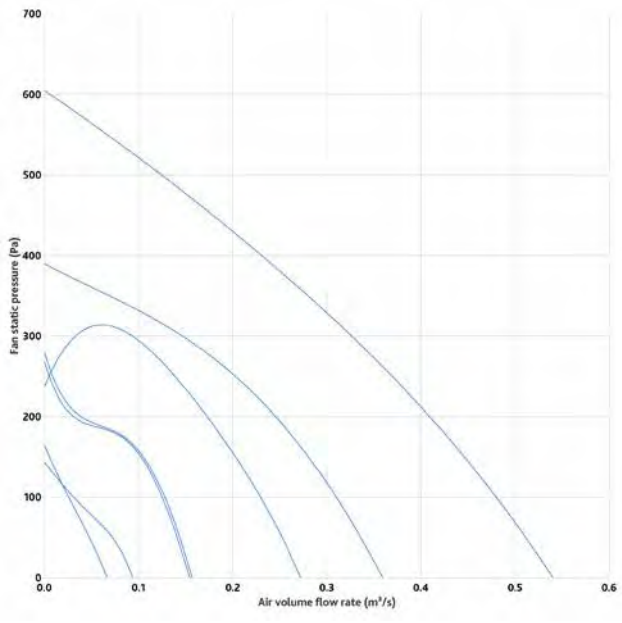
ILM + 100
1 2 3

SAMPLE CODING

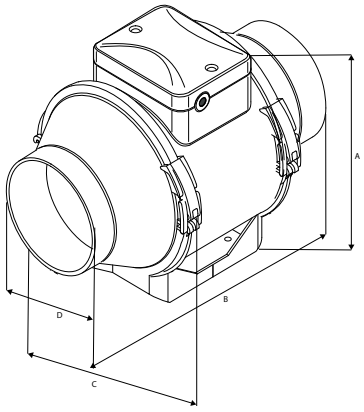
1. ILM- Inline mixed flow fan
   No suffix- standard range
2. + Energy efficient range
3. 100- Fan Size



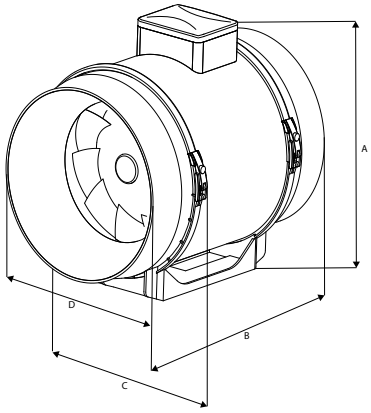
Inline Mixed Flow Fan - ILM



Inline Mixed Flow Fan - ILM+



Inline Mixed Flow Fan - ILM



Inline Mixed Flow Fan - ILM+

DIMENSIONS (MM) AND WEIGHT (KG)

MODEL	A	B	C	D
ILM100	190	246	167	96
ILM125	190	246	167	123
ILM125S	250	295	223	123
ILM150	250	295	223	146
ILM160	250	295	233	158
ILM+100	226	303	195.8	97
ILM+125	226	259	195.6	123
ILM+150	247	289	220.1	148
ILM+160	247	289	220.1	158
ILM+200	261	296	239	199
ILM+250	323	383	287	247
ILM+315	408	445	362	310

TECHNICAL SPECIFICATIONS

			MOTOR CURRENTS	SOUND POWER LEVELS RE 1 PWATT (Hz) OPEN INLET								
CODE	PHASE	RPM SPEED	FLC	63	125	250	500	1K	2K	4K	8K	dB(A) @3M
ILM100	1	2385/2180	0.23/0.14	48	56	62	58	54	45	38	32	41
ILM125	1	2455/1950	0.23/0.14	48	60	59	58	54	50	43	36	41
ILM125S	1	2510/1850	0.27/0.14	55	64	71	68	63	57	53	47	51
ILM150	1	2460/1680	0.28/0.14	57	53	70	68	62	58	54	48	51
ILM160	1	2460/1680	0.28/0.14	58	62	72	67	63	59	54	48	51

TECHNICAL SPECIFICATIONS

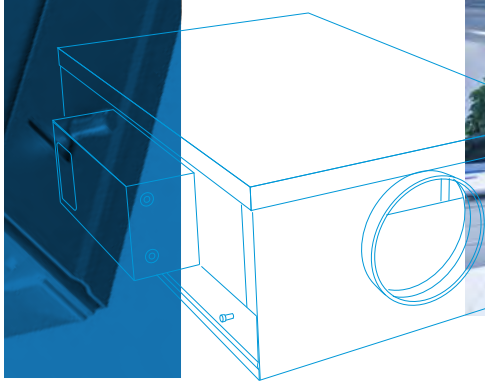
			MOTOR CURRENTS	SOUND POWER LEVELS RE 1 PWATT (Hz) INDUCT INLET								
CODE	PHASE	RPM SPEED	FLC	63	125	250	500	1K	2K	4K	8K	dB(A) @3M
ILM+100	1	2430/1730	0.13/0.12	49	55	60	66	59	54	44	39	47
ILM+125	1	2240/1340	0.16/0.14	49	54	64	58	57	55	47	41	44
ILM+150	1	2580/1880	0.24/0.22	49	53	65	62	61	66	57	49	51
ILM+160	1	2580/1880	0.24/0.22	45	54	65	60	62	76	58	49	59
ILM+200	1	2380/1915	0.52/ 0.4	62	57	60	65	66	67	62	55	54
ILM+250	1	2440/1955	0.79/ 0.5	65	65	69	71	73	69	61	54	58
ILM+315	1	2430/1890	1.44/ 1	73	72	63	72	75	71	67	59	60

INLINE SINGLE FAN - AIRE-VOLVE (AVS)

Inline EC single fan with very low noise levels and SFPs with built in energy efficient controls. A powerful, compact unit with a Class L2 leakage rating for high performance extract with a duty range up to 1.9m³/s

KEY BENEFITS:

- **LATEST EC MOTOR TECHNOLOGY -** GUARANTEES LONGER LIFE AND LOWER SFPs
- **BUILT IN ECOSMART CONTROLS -** ENERGY EFFICIENT DEMAND CONTROL VENTILATION SOLUTION WITH FULL CONTROLLABILITY ALLOWING THE DUTY TO BE ADJUSTED IF DUCTWORK INSTALLATION CHANGES DURING CONSTRUCTION ON SITE
- **COMPACT -** SMALLEST 'SIZE FOR DUTY' CASE AVAILABLE ON THE MARKET, IDEAL FOR APPLICATIONS WITH RESTRICTED CEILING VOIDS. TOP AND BOTTOM ACCESS AS STANDARD
- **SUPERIOR ACOUSTIC SOLUTION -** FULLY ENCLOSED FAN SPIGOT FAN AND MATCHING SILENCER SYSTEM REDUCES BREAKOUT. SILENCERS AVAILABLE IN THREE LENGTHS - 500MM, 1000MM AND 1500MM WITH MATCHING FLANGE
- **DOUBLE WALLED PANEL WITH 35MM ACOUSTIC LINING -** ENSURES LOWEST BREAKOUT
- **EASILY INSTALLED -** REMOVABLE UNIT END PANEL CAN BE ATTACHED TO MATCHED SILENCERS PRIOR TO CONNECTION TO DUCTING SYSTEM
- **MANUFACTURED FROM CORROSION RESISTANT ALUZINC -** 5 TIMES LONGER LIFE THAN GALVANISED STEEL AND PROVIDES HIGHER WEAR RESISTANCE



50Hz

CONSULTANT SPECIFICATION

CASING

Double Skinned with 35mm infill panels and manufactured from heavy gauge, corrosion resistant Aluzinc steel. The units are Class L2 leakage rated.

MOTOR

EC motor, direct drive or belt drive high efficiency motors to BS500 as stand with EN60034-30. Class B insulation and sealed for life bearings.

CERTIFICATION AND OPERATING TEMPERATURE

Units are suitable for operation in ambient temperatures of 50°C.

IMPELLER

High efficiency forward curved centrifugal impeller.

INSTALLATION

Suitable for internal mounting in any orientation and shall incorporate full size top or bottom access panels.

PERFORMANCE

Duty range up to 1.9m^3/s.

ANCILLARIES

- AV Mounts
- Flexible connectors
- Acoustic flexible connectors
- Matched silencer systems
- Rectangular end panels
- Vertical support brackets
- Ecosmart touch screen user control
- Ecosmart sensors & enablers

APPLICATIONS

TYPICAL APPLICATIONS

- Small and large offices
- Student accommodation
- Hotels
- Hospital
- Supermarkets

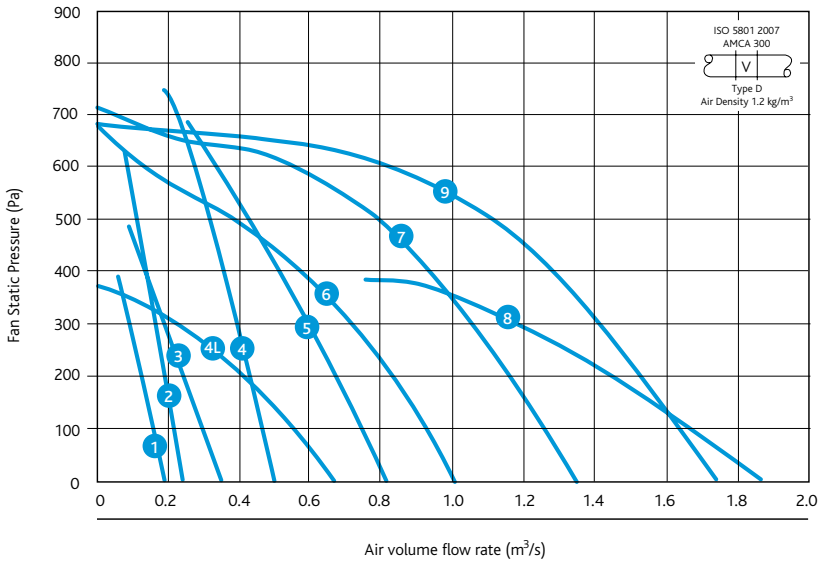
INLINE SINGLE FAN - AIRE-VOLVE (AVS)

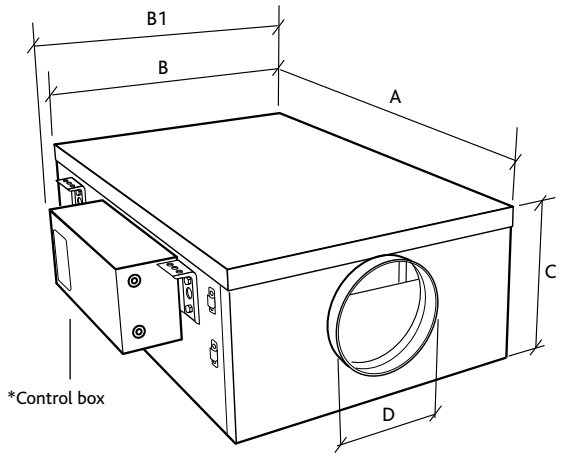
CODING AVS1

AV S 1
1 2 3

SAMPLE CODING

1. Aire-Volve range
2. Single fan
3. Case size 1-9





DIMENSIONS (MM) AND WEIGHT (KG)

MODEL	A	B	C	D	E	WEIGHT
AVS1	580	535	250	200	108	27
AVS2	615	535	285	200	108	24
AVS3	745	672	334	250	108	43
AVS4	788	672	376	315	108	47
AVS4L	914	822	395	315	108	67
AVS5	817	822	428	315	108	66
AVS6	1087	915	545	400	108	90
AVS7	1180	1013	575	400	108	106
AVS8	1338	1237	615	500	108	157
AVS9	1338	1237	615	500	108	141

TECHNICAL SPECIFICATIONS

			MOTOR CURRENTS		SOUND POWER LEVELS RE 1 PWATT (Hz) INDUCT INLET								
CODE	PHASE	RPM SPEED	FLC	SC (DOL)	63	125	250	500	1K	2K	4K	8K	dB(A) @3M
AVS1	1	3300	0.75	0.75	73	68	62	63	59	56	52	50	20
AVS2	1	4000	1.40	1.40	79	74	68	69	65	62	58	56	26
AVS3	1	2500	1.35	1.350	77	74	79	67	63	59	53	51	30
AVS4	1	3400	3.01	3.01	83	79	80	82	78	74	70	67	36
AVS4L	1	1700	1.10	1.10	72	67	67	66	60	57	53	48	29
AVS5	1	2400	2.20	2.20	74	71	69	68	62	61	57	52	25
AVS6	1	1700	2.90	2.90	77	80	74	72	66	65	61	54	30
AVS7	1	1700	3.50	3.50	78	76	73	73	67	65	62	57	29
AVS8	1	1100	3.20	3.20	74	76	71	66	62	64	60	54	27
AVS9	3	1500	1.85	1.85	79	77	76	73	66	66	66	58	32

PLATE FAN - EZ PLATE

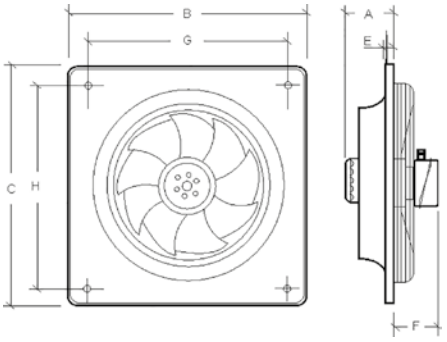
Wall mounted plate fan with a single component spun mounting plate with optional backdraught shutter kit.

CODING EZPLATE315-41

EZPLATE 315 - 4 1
1 2 3 4

SAMPLE CODING

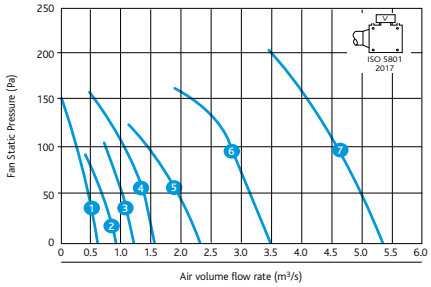
1. EZPLATE - EZplate fan range
2. 315 - Fan size
3. 4 - Pole
4. 1 - Electrical phase



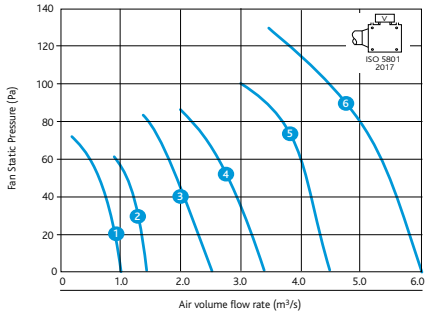
DIMENSIONS (MM) AND WEIGHT (KG)

MODEL	A	B	C	E	F	G	H	WEIGHT
EZPLATE315-41	78	430	430	11	83.9	380	380	7
EZPLATE350-41	80	485	485	12	60	435	435	8
EZPLATE400-41	98	540	540	12	60	490	490	8
EZPLATE450-41	108.5	575	575	14	60	535	535	17
EZPLATE450-61	108.5	575	575	14	60	535	535	15
EZPLATE500-41	120	655	655	16	61	615	615	21
EZPLATE500-61	120	655	655	16	61	615	615	18
EZPLATE560-41	136	725	725	16	46	675	675	32
EZPLATE560-43	136	725	725	16	46	675	675	25
EZPLATE560-61	136	725	725	16	46	675	675	21
EZPLATE560-63	136	725	725	16	46	675	675	21
EZPLATE630-43	130	805	805	20	66	750	750	44
EZPLATE630-61	130	805	805	16	44	750	750	25
EZPLATE630-63	130	805	805	16	44	750	750	23
EZPLATE710-61	170	850	850	20	20	810	810	35
EZPLATE710-63	170	850	850	20	20	810	810	35
EZPLATE800-63	210	970	970	20	17	910	910	40
EZPLATE800-83	210	970	970	20	17	910	910	80
EZPLATE1000-83	210	1170	1170	11	10	1110	1110	75

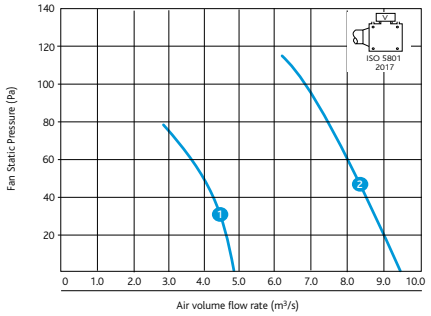
EZplate Axial Fan 4 Pole



EZplate Axial Fan 6 Pole



EZplate Axial Fan 8 Pole



50Hz

CONSULTANT SPECIFICATION

CASING

Manufactured from steel and finished with black polyester powder coat. Fan incorporates inlet side finger guard to BS 848 Part 5.

MOTOR

Class F insulated motor with 'Heatseeker' thermal protection. Motor to IP54 windings vacuum impregnated giving enhanced protection.

CERTIFICATION AND OPERATING TEMPERATURE

Ambient temperatures up to a range of 55°C - 70°C dependent on the unit size. Contact Nuaire for details.

IMPELLER

Advanced sickle blade design manufactured from composite material.

INSTALLATION

Units are fitted with an integral terminal box and motor side guard (Sizes up to 710mm).

ANCILLARIES

- Outlet shutter
- Inlet finger guard
- Inverter speed control wall fixing kit
- Electronic speed controls
- Transformer speed control

APPLICATIONS

TYPICAL APPLICATIONS

- Boiler rooms
- Factories & warehouses
- Leisure & sports facilities
- Industrial
- Hospitals
- Hotels
- Commercial kitchens

TECHNICAL SPECIFICATIONS

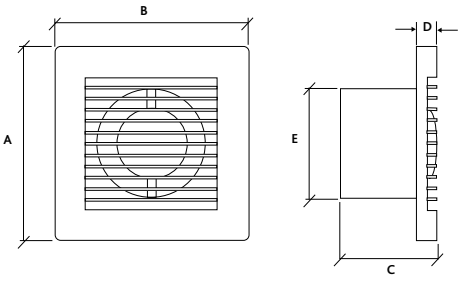
							MOTOR CURRENTS							
	CURVE	CODE	PHASE	RPM SPEED	FLC	SC (DOL)	125	250	500	1K	2K	4K	8K	dB(A) @3M
4 POLE	1	EZPLATE315-41	1	1400	0.61	1.50	67	61	60	59	60	55	47	45
	2	EZPLATE350-41	1	1400	0.99	2.50	71	67	66	65	64	60	53	50
	3	EZPLATE400-41	1	1320	1.35	2.90	70	72	67	67	69	65	56	53
	4	EZPLATE450-41	1	1310	2.80	7.00	78	74	74	70	69	65	57	56
	5	EZPLATE500-41	1	1250	3.40	7.10	77	76	74	74	75	73	65	60
	6	EZPLATE560-41	1	1320	6.00	24.00	81	76	75	75	75	72	66	60
	6	EZPLATE560-43	3	1280	2.20	7.20	76	75	75	75	75	72	66	60
	7	EZPLATE630-43	3	890	1.50	3.60	95	89	86	85	84	82	74	70
6 POLE	1	EZPLATE450-61	1	915	0.84	1.95	69	65	65	61	60	56	48	47
	2	EZPLATE500-61	1	890	1.25	2.70	70	72	67	67	69	65	56	53
	3	EZPLATE560-61	1	920	2.30	5.30	70	72	67	68	68	65	57	53
	3	EZPLATE560-63	3	860	0.81	1.75	70	72	67	68	68	65	57	53
	4	EZPLATE630-61	1	870	2.80	6.00	74	78	74	71	73	71	61	58
	4	EZPLATE630-63	3	890	1.50	3.60	74	78	74	71	73	71	61	58
	5	EZPLATE710-61	1	850	4.10	8.00	76	83	77	77	77	72	64	62
	5	EZPLATE710-63	3	890	1.80	6.40	76	83	77	77	77	72	64	62
	6	EZPLATE800-63	3	900	2.70	9.80	82	80	78	78	77	72	63	63
8 POLE	1	EZPLATE800-83	3	670	1.75	5.00	75	73	71	71	70	65	56	55
	2	EZPLATE1000-83	6	670	4.20	13.00	90	88	86	82	79	73	64	67

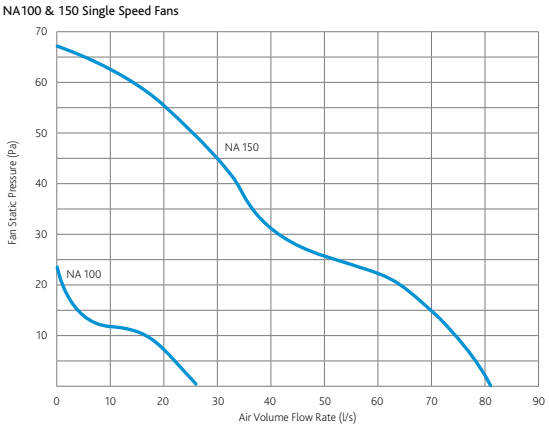
AXIAL FAN (NA)

The NA slimline range of axial fan range incorporates 12 models complete with fixed backdraught shutters, specifically designed to ventilate small spaces. Units are suitable to extract directly to the outside or through a short length of ducting.

KEY BENEFITS:

- **ULTRA-MODERN DESIGN -** PROVIDES AN UNOBTRUSIVE INSTALLATION AND OCCUPANT ACCEPTABILITY
- **IPX4 SPLASHPROOF -** UNITS CAN BE INSTALLED SAFELY IN ZONES 1 & 2
- **QUIET RUNNING -** EXCEPTIONALLY LOW NOISE OPERATION
- **EASY INSTALLATION -** CAN BE SURFACE MOUNTED OR RECESSED
- **FIXED BACKDRAUGHT SHUTTERS -** PREVENTS DRAUGHTS WHEN FAN NOT IN OPERATING MODE





DIMENSIONS (MM) AND WEIGHT (KG)

MODEL	A	B	C	D	E	WEIGHT
NA100	160	160	81	17	97	0.5
NA150	200	200	119	22	149	1.5

TECHNICAL DATA

CODE	PHASE	RPM	FLC	dB(A) @3M
NA100	1	2800	0.1	40
NA150	1	2800	0.2	49

50Hz

CONSULTANT SPECIFICATION

CASING

Fan casing is made of shockproof, high quality techno polymer, double insulted and splash proof.

MOTOR

Double insulated motors of shaded poly type mounted on self-lubricating, sealed ball bearings for long life, and be protected with a thermal cut-out.

The fan has three speeds, allowing a choice of one of the two lower speeds for quiet, continuous operation at installation. The user will be able to boost the fan to its maximum speed as necessary.

CERTIFICATION AND OPERATING TEMPERATURE

The fan is CE Low Voltage Directive 2014/35/EU and with BSEN60529. The fan should finally comply with Building Regulations requirements for installation. The fan should comply with EN 60335-2-80.

IMPELLER

Slimline axial fan.

INSTALLATION

Fan is suitable for installation either into a ceiling, wall or panel (with the appropriate accessories). The fan is double insulated and suitable for installation into Zones I and II.

PERFORMANCE

Duty range up to 80l/s.

ANCILLARIES

- Timer
- Pull cord
- Humidistat timer
- PIR
- 12V
- 12V Timer

APPLICATIONS

TYPICAL APPLICATIONS

- Bathroom
- Utility room
- Toilet
- Kitchens

XS WALL, WINDOW AND ROOF EXTRACT FANS

A wide range of multipurpose wall, window and roof extract fans with optional integrated controls with a duty up to 0.55m³/s.

KEY BENEFITS:

- **QUIET OPERATION -** ULTRA QUIET FAN WITH WAX THERMOS ACTUATOR, TOGETHER WITH MARKET LEADING MOTORS AND IMPELLER TECHNOLOGY
- **HIGH PERFORMANCE -** DELIVERS INDUSTRY LEADING PERFORMANCE, COUPLED WITH LOW NOISE LEVELS
- **FLEXIBLE SOLUTION -** REVERSIBLE FOR EXTRACT AND INPUT WITH INFINITELY VARIABLE SPEED CONTROL
- **SAVE ENERGY & MONEY -** ECONOMY SPEED SETTING THAT WILL MAXIMISE PERFORMANCE AT THE LOWEST ENERGY USE
- **COMPLETE USER SAFETY -** ROBUST CONSTRUCTION, MANUFACTURED FROM FLAME RETARDANT ABS POLYMER IP44 RATED FOR LONG LIFE
- **EASY REFURBISHMENT -** XS REFURB KITS ARE QUICK TO INSTALL AND CAN BE USED TO REPLACE MOST EXISTING SYSTEMS

50Hz

CONSULTANT SPECIFICATION

CASING

Double insulated manufactured from flame retardant ABS polymer. The fan has an external weather louvre and a thermally actuated anti-backdraught shutter at the rear of the fan and a room side grille.

MOTOR

External rotor motor featuring enclosure protection to IP44, Class B winding insulation and maintenance free ball bearings.

CERTIFICATION AND OPERATING TEMPERATURE

The fan is CE Low Voltage Directive 2014/35/EU. All motors shall be suitable for air over motor temperature of up to 60°C and 95% R.H. (non-condensing).

IMPELLER

High efficiency, low noise axial flow impeller.

INSTALLATION

Wall mounted / ceiling mounted / flat roof mounted / pitched roof mounted / window mounted extract fan with flexible controls and mounting options.

The fans are controlled via a full range of integral sensors matched to an external remote controller providing on/off, extract, variable / fixed economy speed, auto/ manual function.

PERFORMANCE

Duty up to 0.55m³/s.

ANCILLARIES

- Speed controls
- Integral PIR sensors
- Integral humidistat
- Integral air quality sensors
- Integral timers
- Integral temperature sensors
- Remote PIR sensors
- Remote humidistat
- Remote air quality sensors
- Refurb kits

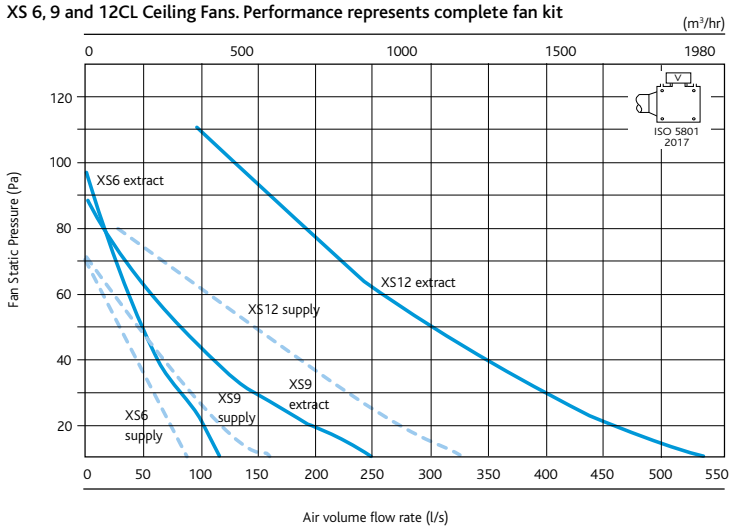
APPLICATIONS

TYPICAL APPLICATIONS

- Accommodation / student accommodation
- Changing areas
- Hospitals & healthcare
- Kitchens - domestic
- Offices - large
- Refurbishment
- Sports halls
- Washrooms - small
- Lift motor rooms

XS WALL/CEILING MOUNTED UNIVERSAL FAN

XS 6, 9 and 12CL Ceiling Fans. Performance represents complete fan kit



CODING XS 6 CL

XS 6 CL
1 2 3

SAMPLE CODING

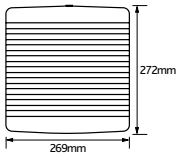
1. XS range
2. Size indication
3. CL = Ceiling model
   WA = Wall model
   FR/PR = Roof models
   GL = Window model

SUPPLY

			MOTOR CURRENTS		SOUND POWER LEVELS RE 1 PWATT (Hz) INDUCT INLET								
CODE	PHASE	RPM SPEED	FLC	SC (DOL)	63	125	250	500	1K	2K	4K	8K	dB(A) @3M
XS6CL	1	2000	0.19	0.60	46	52	55	51	58	58	53	42	40
XS6FR	1	2000	0.19	0.60	47	52	49	52	57	58	54	44	35
XS6GL	1	2000	0.19	0.60	46	51	52	52	57	57	53	42	40
XS6PR	1	2000	0.19	0.60	47	52	49	52	57	58	54	44	35
XS6WA	1	2000	0.19	0.60	44	51	53	51	57	58	53	42	40
XS9CL	1	1400	0.26	0.80	44	56	57	56	58	57	53	44	39
XS9FR	1	1400	0.26	0.80	52	59	57	57	59	58	54	45	40
XS9GL	1	1400	0.26	0.80	47	64	55	52	57	56	53	44	40
XS9PR	1	1400	0.26	0.80	52	59	57	57	59	58	54	45	40
XS9WA	1	1400	0.26	0.80	48	67	61	55	62	59	54	45	40
XS12CL	1	1370	0.48	1.32	62	66	63	65	66	62	56	49	46
XS12FR	1	1370	0.44	1.32	64	67	66	65	65	62	57	50	44
XS12GL	1	1370	0.48	1.32	58	63	61	62	65	61	56	49	46
XS12PR	1	1370	0.44	1.32	64	67	66	65	65	62	57	50	44
XS12WA	1	1370	0.48	1.32	57	63	65	62	64	61	55	48	46

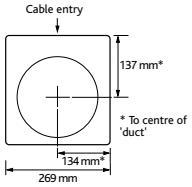
6" FAN XS6CL

Front view

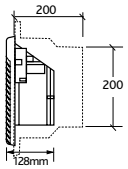


Required ceiling / panel aperture
270mm x 270mm square

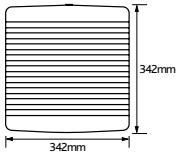
Rear view



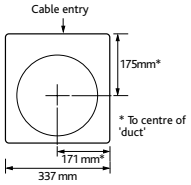
Side view

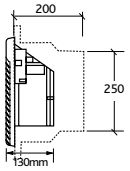


9" FAN XS9CL

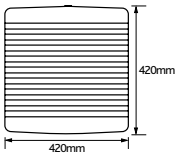


Required ceiling / panel aperture
340mm x 340mm square

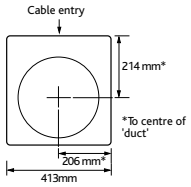


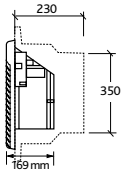


12" FAN XS12CL



Required ceiling / panel aperture
430mm x 430mm square





DIMENSIONS (MM) AND WEIGHT (KG)

MODEL	A	B	C	D	E	F	WEIGHT
XS6CL	269	272	200	200	30		3.95
XS6FR	269	269	161		150	170	6.3
XS6GL	161	269	269		31		4.65
XS6PR	369	269	161		150	170	6.3
XS6WA	370	269	269	31			4.7
XS9CL	342	342	200	250	30		5.5
XS9FR	342	342	158		150	180	9.1
XS9GL	158	342	342		35		6.3

DIMENSIONS (MM) AND WEIGHT (KG)

MODEL	A	B	C	D	E	F	WEIGHT
XS9PR	342	342	158		150	180	8.9
XS9WA	370	342	342	35			6.45
XS12CL	420	420	200	350	30		8.7
XS12FR	420	420	172		150	145	11
XS12GL	172	420	420		46		8.7
XS12PR	420	420	172		150	185	11.8
XS12WA	370	420	420	46			9.4

EXTRACT

			MOTOR CURRENTS		SOUND POWER LEVELS RE 1 PWATT (Hz) INDUCT INLET								
CODE	PHASE	RPM SPEED	FLC	SC (DOL)	63	125	250	500	1K	2K	4K	8K	dB(A) @3M
XS6CL	1	2000	0.19	0.60	53	67	58	57	58	59	50	42	45
XS6FR	1	2000	0.19	0.60	50	77	63	63	53	50	43	35	45
XS6GL	1	2000	0.19	0.60	55	68	59	56	57	57	49	41	42
XS6PR	1	2000	0.19	0.60	50	77	63	63	53	50	43	35	45
XS6WA	1	2000	0.19	0.60	54	68	60	57	58	57	49	41	45
XS9CL	1	1400	0.26	0.80	61	66	58	52	53	53	47	37	42
XS9FR	1	1400	0.26	0.80	60	68	63	58	55	50	44	36	44
XS9GL	1	1400	0.26	0.80	64	71	61	56	56	55	48	38	42
XS9PR	1	1400	0.26	0.80	60	68	63	58	55	50	44	36	44
XS9WA	1	1400	0.26	0.80	57	67	61	53	54	52	47	38	44
XS12CL	1	1370	0.48	1.32	67	70	64	64	63	59	53	46	48
XS12FR	1	1370	0.44	1.32	65	70	65	65	61	54	49	42	48
XS12GL	1	1370	0.48	1.32	65	70	65	64	62	59	53	46	48
XS12PR	1	1370	0.44	1.32	65	70	65	65	61	54	49	42	48
XS12WA	1	1370	0.48	1.32	63	70	63	61	62	59	53	45	47

WALL AND CEILING FAN OPUS 40-60-95

A compact wall and ceiling fan offering high performance with low noise. Duty up to 95 l/s available as single and twin fan options.

KEY BENEFITS:

- **VERY QUIET OPERATION -** UNITS OFFER HIGH PERFORMANCE WITH LOW NOISE LEVELS
- **MOST EFFICIENT SYSTEMS -** DC MOTOR DESIGN PROVIDES HIGH PERFORMANCE WITH THE LOWEST POSSIBLE SPECIFIC FAN POWER AVAILABLE IN ITS CLASS. CONFORMS TO PART L2
- **GUARANTEED VENTILATION -** A COMPACT COST EFFECTIVE TWIN FAN. TWIN FANS ALLOW FOR AUTOMATIC CHANGEOVER TO STANDBY FAN IN EVENT OF FAN FAILURE
- **QUICK AND EASY TO INSTALL -** THE UNIT CAN BE INSTALLED EITHER WALL OR CEILING MOUNTED.
- **SIMPLE TO COMMISSION -** INTEGRAL CONTROL FACILITY ENABLES THE DUTY TO BE PRECISELY SET WITHOUT THE NEED FOR ADDITIONAL CONTROLS
- **LOW MAINTENANCE COSTS -** EASY CLEAN FOAM FILTERS PROTECT MOTOR AND FAN ASSEMBLY, REDUCING MAINTENANCE COSTS AND EXTENDING FAN LIFE. FOAM FILTERS FITTED AS STANDARD

50Hz

CONSULTANT SPECIFICATION

CASING

Flame retardant case manufactured from V0 rated ABS plastic incorporating automatic changeover on fan failure, washable filter and backdraught shutters.

MOTOR

Fan is fitted with a high efficiency DC motor with sealed for life bearings; self lubricating thermally protected motor. The motor has locked rotor protection to prevent overheating in the event of fan failure.

CERTIFICATION AND OPERATING TEMPERATURE

The fan is CE Low Voltage Directive 2014/35/EU. Maximum operating temperature is 55°C.

IMPELLER

Fan internals comprise quick release centrifugal fan.

INSTALLATION

Surface or recess mounting options are available. Recessed units shall be capable of discharging the air either from the rear of the case or the side via spigots suitable for 100mm diameter ductwork. The front cover can easily be removed without tools to aid in making fan adjustments.

PERFORMANCE

Duty range up to 95l/s.

ANCILLARIES

- Remote Fail Indicator
- External Humidistat
- Vandal proof cover
- Backdraught shutter in white

APPLICATIONS

TYPICAL APPLICATIONS

- Washrooms
- Small offices
- Student accommodation
- Hotels
- Apartments & flats
- Hospitals

WALL AND CEILING FAN OPUS 40-60-95

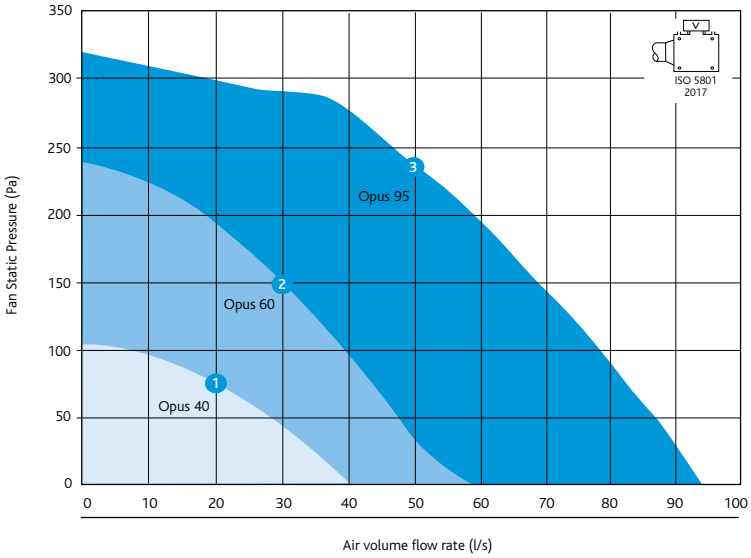
CODING OPUS40T - ESP

OPUS 40 T - ES P
1 2 3 4 5

SAMPLE CODING

1 = Opus range
2 = 40, 60 or 95l/s
3 T= Twin fan
S = Single,
D = Dual fan 2/3rds duty on fan failure
4 = Ecosmart control or speed control
5 = PIR or run on timer

Opus 40, 60 and 95

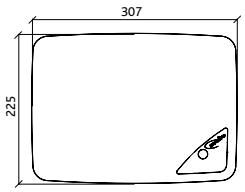


TECHNICAL SPECIFICATIONS

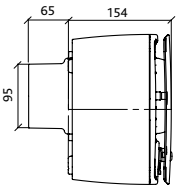
			MOTOR CURRENTS		SOUND POWER LEVELS RE 1 PWATT (Hz) INDUCT INLET								
CODE	PHASE	RPM SPEED	FLC	SC (DOL)	63	125	250	500	1K	2K	4K	8K	dB(A) @3M
OPUS40	1	1800	0.10	0.10	45	47	53	49	47	48	43	33	32
OPUS60	1	2500	0.32	0.32	48	57	57	55	54	55	51	44	39
OPUS95	1	2500	0.60	0.60	50	57	62	58	57	57	52	46	42

Surface mounted unit

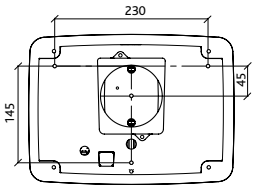
Front view



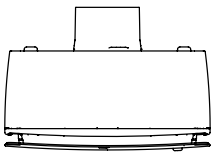
Side view



Back view

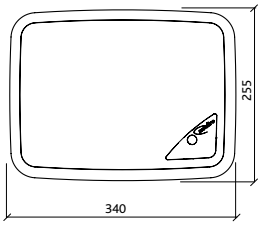


Top view

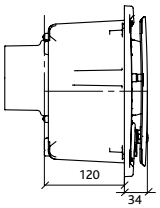


Recessed mounted unit rear discharge

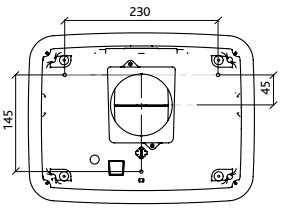
Front view



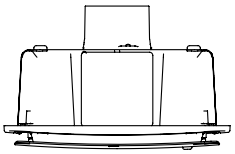
Side view



Back view

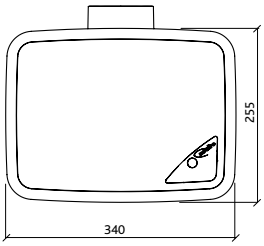


Top view

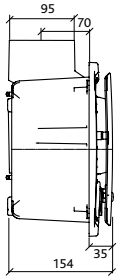


Recessed mounted unit side discharge

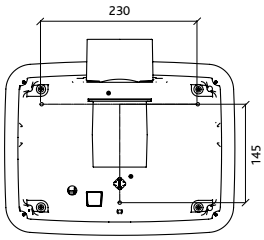
Front view



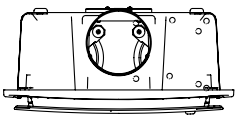
Side view



Back view



Top view



DIMENSIONS (MM) AND WEIGHT (KG)
SURFACE MOUNTED

HEIGHT	WIDTH	DEPTH	SPIGOT SIZE	WEIGHT
225	307	154	95	3.6

RECESSED MOUNTED UNIT WITH REAR DISCHARGE

HEIGHT	WIDTH	DEPTH	SPIGOT SIZE	WEIGHT
255	340	154	95	3.6

RECESSED MOUNTED UNIT SIDE DISCHARGE

HEIGHT	WIDTH	DEPTH	SPIGOT SIZE	WEIGHT
255	340	154	95	3.6

TWIN INLINE CENTRIFUGAL - SQUIF (SQFT)

High pressure, volume and temperature centrifugal extract fan range where the motor is out of the air stream. The twin fan option, run and standby, ensures long life and guaranteed ventilation.

KEY BENEFITS:

- **QUIET AND POWERFUL SOLUTIONS**
- **OUT OF AIR STREAM MOTORS -** IDEAL FOR DIRTY EXTRACT AND GREASY ENVIRONMENTS
- **HIGH TEMPERATURE APPLICATION -** CAPABLE OF RUNNING CONTINUOUSLY AT 90°C, AND A ONE-OFF EMERGENCY USE OF 400°C/2
- **HIGH RESISTANT -** HIGH EFFICIENCY CENTRIFUGAL IMPELLERS PROVIDE HIGH PRESSURE DEVELOPMENT SUITABLE FOR DUCTED SYSTEMS
- **FLEXIBLE SOLUTION -** CAN BE MOUNTED INTERNALLY OR EXTERNALLY AND EITHER VERTICALLY OR HORIZONTALLY

AMBIENT | 50Hz | 300°C/ 400°C

CONSULTANTS SPECIFICATION

CASING

Heavy gauge galvanised steel with integral backdraught shutters operated in conjunction with the running fan. The units are designed for easy maintenance (additional finishes are available). General construction is to a Class A Leakage. Case is fitted with an integral flange.

MOTOR

Motors are direct drive mounted out of air stream Class F insulated and IE2 high efficiency. Motors are available as single speed; 4 or 6 pole. Motor bearings are sealed for life. Units are designed as run and standby fan assemblies with a built in backdraught damper and failure detection.

CERTIFICATION AND OPERATING TEMPERATURE

Units are independently tested to BS EN12101-3, suitable for standard day to day temperatures of up to 90°C and for one-off operation at 400°C for two hours (when located outside the smoke envelope).

IMPELLER

The impeller is a high efficiency backwards curved centrifugal design manufactured from galvanised steel.

INSTALLATION

The units are designed for internal or external installation.

PERFORMANCE

The units are available in a variety of airflows up to 6.0m^3/s with high pressure development.

NOISE

Units are designed for quiet operation with low in-duct and breakout sound levels.

ANCILLARIES

Each unit is available with a range of ancillaries for ease of installation.
All ancillaries are certified to BS EN12101-3.

- Splitter attenuator
- AV mounts
- Flexible connectors
- Weatherproof cowls
- Guards

APPLICATIONS

- Car parks
- Factories and warehouses
- Commercial kitchens
- Student accommodation
- Care homes
- Leisure and sports facilities
- Public buildings

TWIN INLINE CENTRIFUGAL - SQUIF

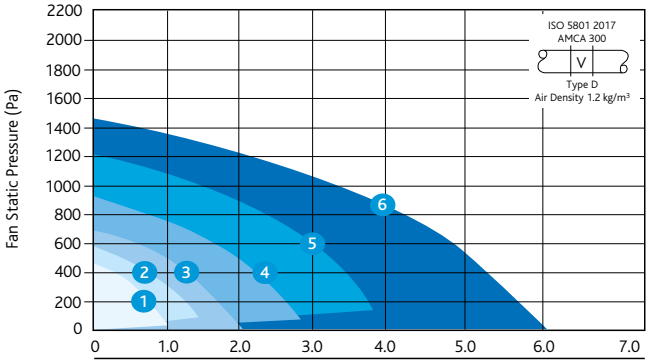
CODING SQFT41-3

SQFT	4	1	-	3
1	2	3		4

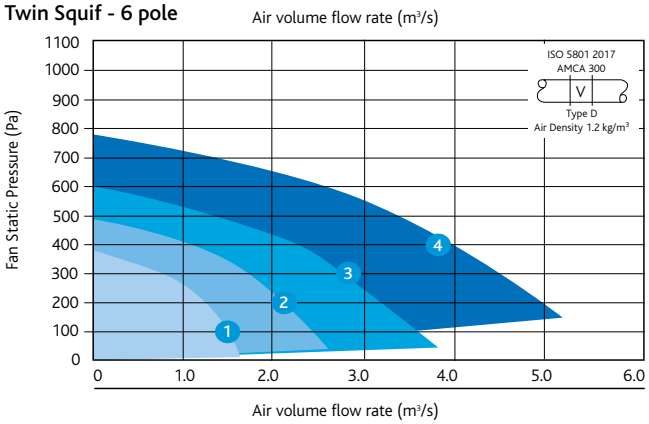
SAMPLE CODING

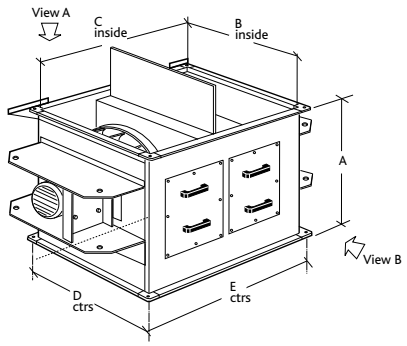
1 - SQFT - High temperature twin squif
2 - Pole (4 or 6)
3 - Curve number
4 - Phase (1 or 3)

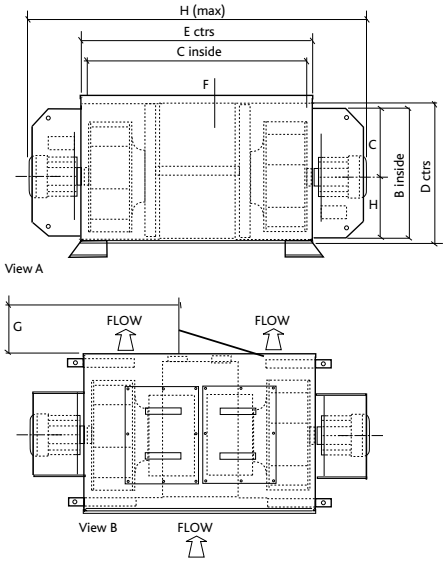
Twin Squif - 4 pole



Twin Squif - 6 pole







DIMENSIONS (MM)

MODEL	CURVE REF	A	B	C	D	E	F	G	H
SQFT41	1	634	500	710	529	741	26.5	223.5	1150
SQFT42	2	692	700	780	730	811	32	248	1250
SQFT43	3	750	750	882	780	913	32	278	1382
SQFT44	4	820	800	970	830	1001	32	303	1550
SQFT45	5	901	900	1075	930	1106.5	32	333	1850
SQFT46	6	994	1000	1230	1030	1261	32	383	2000
SQFT61	1	820	800	970	830	1001	32	303	1550
SQFT62	2	901	900	1075	930	1106.5	32	333	1850
SQFT63	3	994	1000	1230	1030	1261	32	383	2000
SQFT64	4	1114	1100	1380	1130	1411	32	433	2280

TECHNICAL DATA

				MOTOR CURRENTS		SOUND POWER LEVELS RE 1 PWATT (Hz) INDUCT INLET								
CURVE	CODE	PHASE	RPM SPEED	FLC	SC (DOL)	63	125	250	500	1K	2K	4K	8K	dB(A) @3M
1	SQFTA41-1	1	1410	2.80	11.20	90	93	79	70	70	70	69	62	52
1	SQFTA41-3	3	1450	1.06	5.20	90	93	79	70	70	70	69	62	52
2	SQFTA42-1	1	1370	5.50	21.00	88	95	82	77	74	76	75	67	55
2	SQFTA42-3	3	1450	2.10	10.00	88	95	82	77	74	76	75	67	55
3	SQFTA43-1	1	1420	7.00	35.00	92	98	83	79	77	78	78	71	57
3	SQFTA43-3	3	1450	2.50	12.00	92	98	83	79	77	78	78	71	57
4	SQFTA44	3	1450	4.60	28.80	86	96	89	82	77	80	80	71	58
5	SQFTA45	3	1450	9.10	59.00	92	102	87	85	85	84	83	81	63
6	SQFTA46	3	1450	15.20	108.00	92	106	92	86	86	85	86	83	64
7	SQFTA61	3	960	2.10	8.82	84	92	84	75	70	73	73	64	45
8	SQFTA62	3	960	3.00	13.20	90	99	83	78	76	75	74	72	57
9	SQFTA63	3	960	5.90	28.90	90	103	87	79	76	76	77	73	61
10	SQFTA64	3	960	9.40	61.20	91	106	91	82	79	77	77	74	64

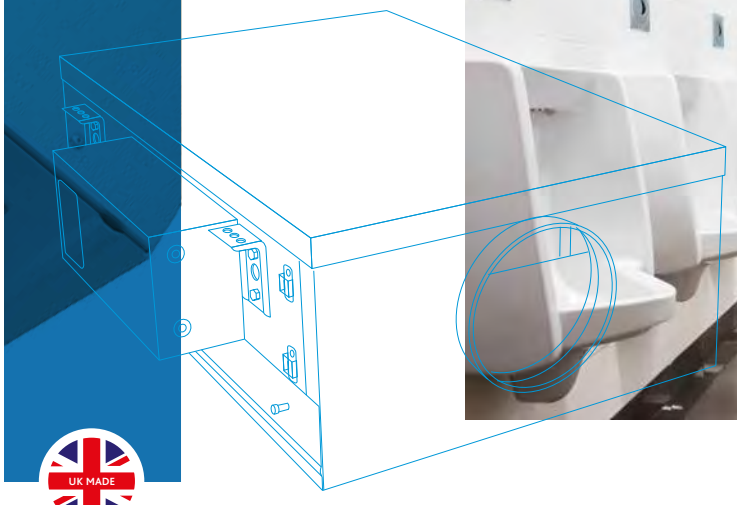
*Ecosmart Control option is available on these units, contact Nuaire for details.

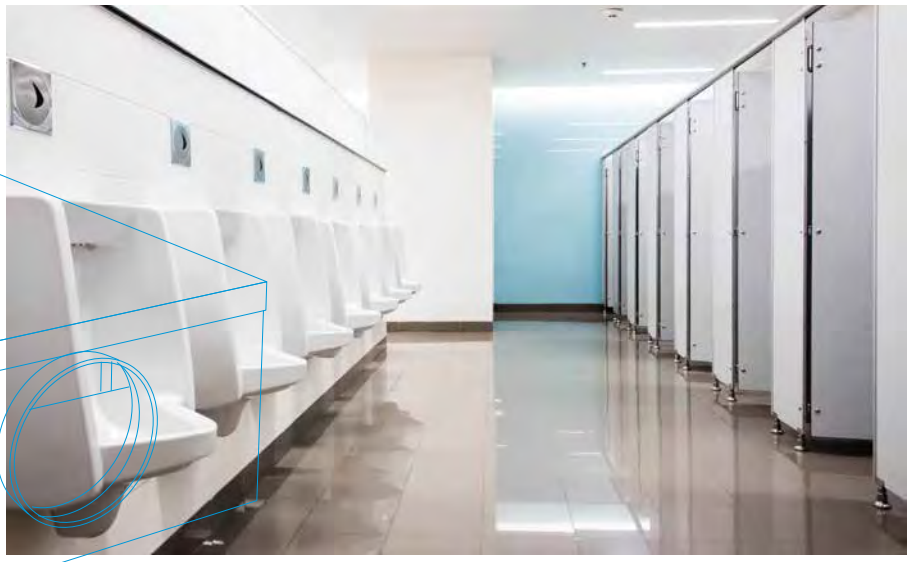
TWIN INTERNAL DUCT MOUNTED - AIRE-VOLVE (AVT)

Internal inline EC twin fan with very low noise levels and compact design, which allows this unit to be ideal for restricted applications, and able to install in any orientation. Duty range up to 1.7m³/s.

KEY BENEFITS:

- **RETAINED ACCESS PANEL -** LOWERS AND SLIDES UNDER MATCHED SILENCERS WHERE APPLICABLE. (INTERNAL UNITS ONLY)
- **LATEST EC MOTOR TECHNOLOGY** GUARANTEES LONGER LIFE AND LOWER SFPs
- **CONSTANT PRESSURE OPTION** IMPROVES THE ENERGY PERFORMANCE OF THE OVERALL BUILDING AND GUARANTEES LOWER ENERGY COSTS FOR END USERS
- **DOUBLE WALLED PANEL** WITH 35MM ACOUSTIC LINING ENSURES LOWEST BREAKOUT
- **MANUFACTURED FROM CORROSION RESISTANT ALUZINC**
- **INNOVATIVE NEW FAN DESIGN -** INLINE FAN ASSEMBLY PROVIDES OPTIMUM PERFORMANCE IN MINIMAL SPACE
- **12 HOUR AUTO CHANGEOVER** GUARANTEES VENTILATION 24/7 IN EVENT OF FAN/MOTOR FAILURE AND EXTENDS LIFE OF FAN
- **SUPPLY & EXTRACT UNIT** CAN BE INTERLINKED WITH A TWIN FAN TO PROVIDE A CONTROLLABLE COST EFFECTIVE SOLUTION





UK MADE

50Hz

CONSULTANTS SPECIFICATION

CASING

Heavy gauge, corrosion resistant Aluzinc steel, internally coated acoustic material.

MOTOR

Motors and EC motors selected to provide the most energy efficient solution conforming to Part L regulations. Direct or belt drive high efficiency motors to BS5000 as standard, belt or direct drive with EN60034-30 motors fitted with Hall effect air flow failure monitoring.

CERTIFICATION AND OPERATING TEMPERATURE

Suitable for operation in ambient temperatures of 40°C.

MAINTENANCE

Hinged pitch roof for maintenance/service and pressure tapping.

IMPELLER

Impellers are of high efficiency, performance and sound optimised backward curved centrifugal design.

INSTALLATION

The fan should be with an 'inline assembly', positioned in series for optimum performance. Suitable for horizontal and vertical installation.

PERFORMANCE

All components are pre-wired and fitted. Duty range up to 1.7 m^3/s.

NOISE

Spigot fan and matching silencer system reduces breakout and guarantees a superior acoustic solution.

ANCILLARIES

- Anti-vibration mounts
- Matched silencers
- Flexible connectors
- Vertical support brackets

APPLICATIONS

- Washrooms
- Offices
- Student accommodation
- Hotels
- Hospital
- Supermarkets
- Apartments and flats

TWIN INTERNAL DUCT MOUNTED - AIRE-VOLVE (AVT)

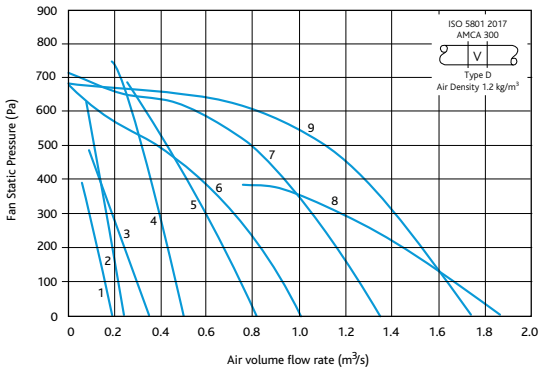
CODING AVT1

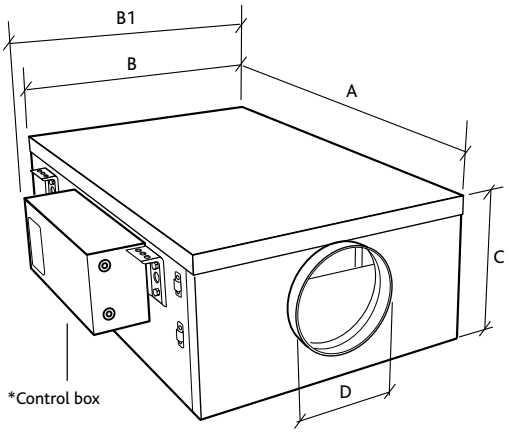
AV	T	1
1	2	3

SAMPLE CODING

1. AV - Airevolve fan range
2. T - Twin fan
3. 1 - Product case size (1-9)

AIRE-VOLVE AVT 1 - 9





DIMENSIONS (MM) WEIGHT (KG)

MODEL	A	B	C	D	SPIGOT SIZE	WEIGHT
AVT1	931	544	250	200	200	46
AVT2	968	543	285	200	200	48
AVT3	1186	681	334	250	250	67
AVT4	1229	681	376	315	315	68
AVT4L	1531	827	401	315	315	99
AVT5	1531	827	428	315	315	102
AVT6	1829	1025	545	400	400	153
AVT7	1892	1019	575	400	400	179
AVT8	2238	1244	615	500	500	267
AVT9	2238	1244	615	500	500	244
AVT1-X	1120	716	393	250	250	56
AVT2-X	1120	716	393	250	250	57
AVT3-X	1120	716	393	250	250	58
AVT4L-X	1466	857	502	315	315	99
AVT4-X	1466	857	502	315	315	100
AVT5-X	1466	857	502	315	315	104
AVT6-X	1831	1045	656	400	400	146
AVT7-X	1831	1045	656	400	400	149
AVT8-X	2172	1278	709	500	500	236
AVT9-X	2172	1278	709	500	500	203
AVT1-R	1620	716	393	250	250	64
AVT2-R	1620	716	393	250	250	65
AVT3-R	1620	716	393	250	250	66
AVT4L-R	2066	857	502	315	315	110
AVT4-R	2066	857	502	315	315	111
AVT5-R	2066	857	502	315	315	114
AVT6-R	2575	1045	656	400	400	161
AVT7-R	2575	1045	656	400	400	164
AVT8-R	2956	1278	709	500	500	262
AVT9-R	2956	1278	709	500	500	229

TECHNICAL SPECIFICATION

				MOTOR CURRENTS		SOUND POWER LEVELS RE 1 PWATT (Hz) INDUCT INLET								
CURVE	CODE	PHASE	RPM SPEED	FLC	SC (DOL)	63	125	250	500	1K	2K	4K	8K	dB(A) @3M
1	AVT1	1	3300	0.75	0.75	73	68	62	63	59	56	52	50	20
2	AVT2	1	4000	1.40	1.40	79	74	68	69	65	62	58	56	26
3	AVT3	1	2500	1.35	1.35	77	74	79	67	63	59	53	51	30
4	AVT4	1	3400	3.30	3.30	83	79	80	82	78	74	70	67	36
4L	AVT4L	1	1925	1.10	1.10	72	70	67	66	60	58	54	50	29
5	AVT5	1	2360	2.20	2.20	74	71	69	68	62	61	57	52	25
6	AVT6	1	1850	2.20	2.20	77	80	74	72	66	65	61	54	30
7	AVT7	1	1700	3.30	3.30	78	76	73	73	67	65	62	57	29
8	AVT8	1	1100	3.20	3.20	74	76	71	66	62	64	60	54	27
9	AVT9	3	1550	1.50	1.50	79	77	76	73	66	66	66	58	32

TECHNICAL SPECIFICATION

				MOTOR CURRENTS		SOUND POWER LEVELS RE 1 PWATT (Hz) INDUCT INLET								
CURVE	CODE	PHASE	RPM SPEED	FLC	SC (DOL)	63	125	250	500	1K	2K	4K	8K	dB(A) @3M
1	AVT1-R	1	3300	0.75	0.75	75	69	64	65	61	57	53	51	53
2	AVT2-R	1	4000	1.40	1.40	81	75	70	71	67	63	59	57	59
3	AVT3-R	1	2500	1.35	1.35	79	75	81	69	65	60	54	52	59
4L	AVT4L-R	1	1925	1.10	1.10	72	67	67	66	60	57	53	48	53
4	AVT4-R	1	3400	3.30	3.30	85	80	82	84	80	75	71	68	72
5	AVT5-R	1	2360	2.20	2.20	76	72	71	70	64	62	58	53	57
6	AVT6-R	1	1850	2.20	2.20	79	81	76	74	68	66	62	55	62
7	AVT7-R	1	1700	3.30	3.30	80	77	75	75	69	66	63	58	62
8	AVT8-R	1	1100	3.20	3.20	76	77	73	68	64	65	61	55	58
9	AVT9-R	3	1550	1.50	1.50	81	78	78	75	68	67	67	59	63

TECHNICAL SPECIFICATION

				MOTOR CURRENTS		SOUND POWER LEVELS RE 1 PWATT (Hz) INDUCT INLET								
CURVE	CODE	PHASE	RPM SPEED	FLC	SC (DOL)	63	125	250	500	1K	2K	4K	8K	dB(A) @3M
1	AVT1-X	1	3300	0.75	0.75	75	69	64	65	61	57	53	51	25
2	AVT2-X	1	4000	1.40	1.40	81	75	70	71	67	63	59	57	31
3	AVT3-X	1	2500	1.35	1.35	79	75	81	69	65	60	54	52	35
4L	AVT4L-X	1	1925	1.10	1.10	72	67	67	66	60	57	53	48	29
4	AVT4-X	1	3400	3.30	3.30	85	80	82	84	80	75	71	68	41
5	AVT5-X	1	2360	2.20	2.20	76	72	71	70	64	62	58	53	30
6	AVT6-X	1	1850	2.20	2.20	79	81	76	74	68	66	62	55	34
7	AVT7-X	1	1700	3.30	3.30	80	77	75	75	69	66	63	58	34
8	AVT8-X	1	1100	3.20	3.20	76	77	73	68	64	65	61	55	32
9	AVT9-X	3	1550	1.50	1.50	81	78	78	75	68	67	67	59	37

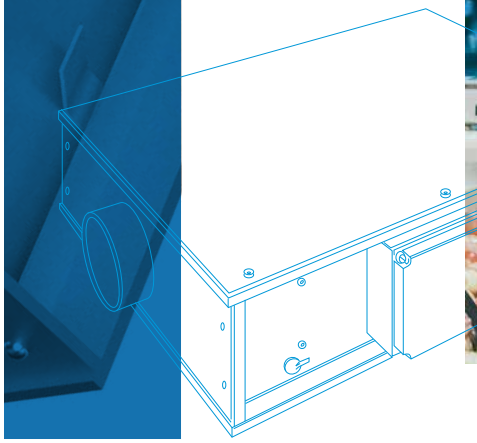
Constant Pressure Units are also available. Contact Nuaire for details.

DIRECT DRIVE TWIN FAN - QUIETSCROLL (EST)

Market leading twin fans designed for continuous ventilation and featuring Ecosmart on demand control. Integrated silencer (direct drive models) help reduce noise and space requirements on site. Ecosmart Twin Fans (EST) 1 Phase, Direct Drive Run and Standby fans for indoor use. Internal duct mounted inline unit. Comprehensive range of twin fans from Nuaire with integral Ecosmart energy saving control.

KEY BENEFITS:

- **LATEST EC MOTOR TECHNOLOGY -** GUARANTEES LONGER LIFE AND LOWER SFPs
- **BUILT IN ECOSMART CONTROLS -** ENERGY EFFICIENT DEMAND CONTROL VENTILATION SOLUTION
- **SIMPLE TO INSTALL -** ALL CONTROLS ARE PRE-ASSEMBLED AND INSTALLED WHICH ENSURES INSTALLATION TIME IS KEPT TO A MINIMUM
- **12 HOUR AUTO CHANGEOVER -** GUARANTEES VENTILATION 24/7 IN EVENT OF FAN/MOTOR FAILURE AND EXTENDS LIFE OF FAN



50Hz

CONSULTANT SPECIFICATION

CASING

Unit sizes 1-9 manufactured from recyclable galvanised steel to BS2989. Unit sizes 11 and above are manufactured from corrosion resistant Aluzinc. Units have top and bottom access panels. All internal surfaces are treated with fire retardant acoustic material.

MOTOR

Directly driven by BS5000 motors fitted with airflow fail monitors.

CERTIFICATION AND OPERATING TEMPERATURE

Fans are suitable for operation in ambient temperatures up to 50°C.

IMPELLER

High efficiency forward curved centrifugal impellers.

INSTALLATION

Available in three mounting options (inline, end inlet and bottom inlet). Internal and external options are available.

PERFORMANCE

Duty range up to 5.9m^3/s.

ANCILLARIES

- Silencers
- Grille
- AV mounts
- Ecosmart touch screen user control
- Sensors & enablers

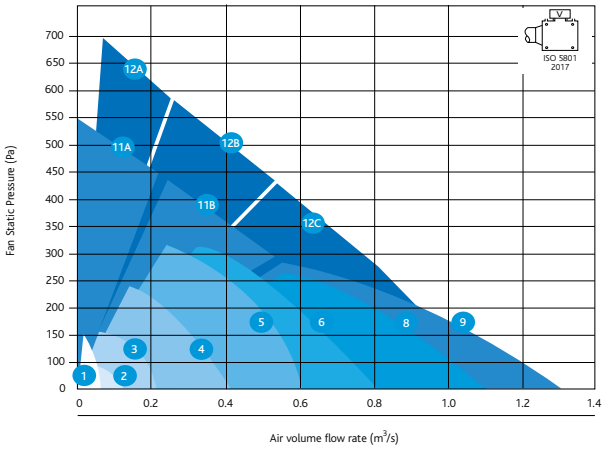
APPLICATIONS

TYPICAL APPLICATIONS

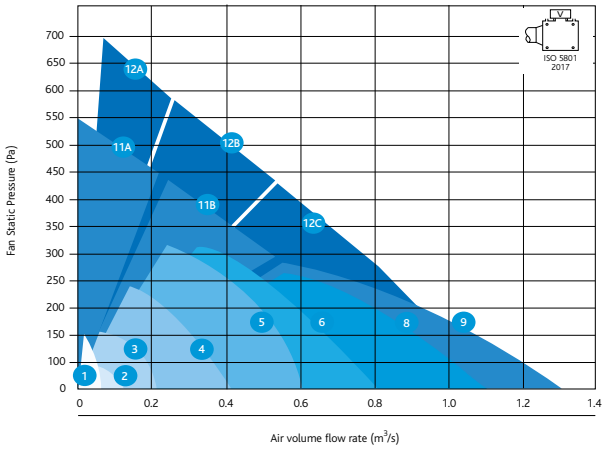
- Small and large offices
- Supermarkets
- Hotels
- Student accommodation
- Washrooms
- Hospitals

QUIETSCROLL - (EST)

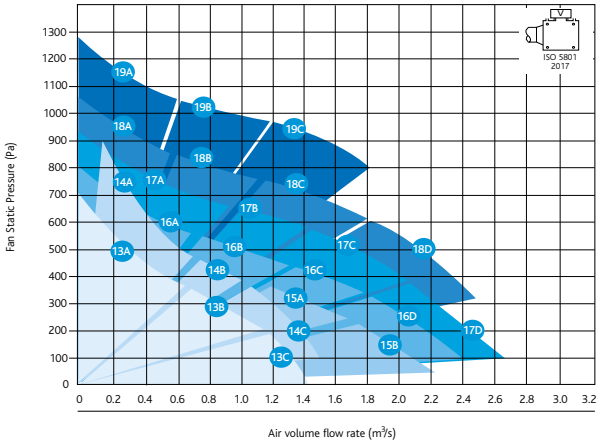
Quietscroll Units 1-9 and 11A-12C



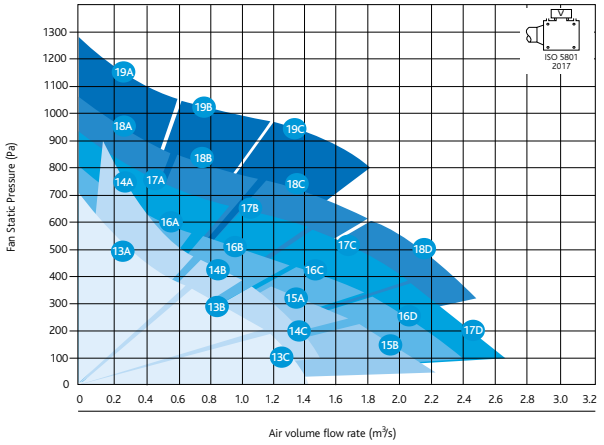
Quietscroll Units 1-9 and 11A-12C



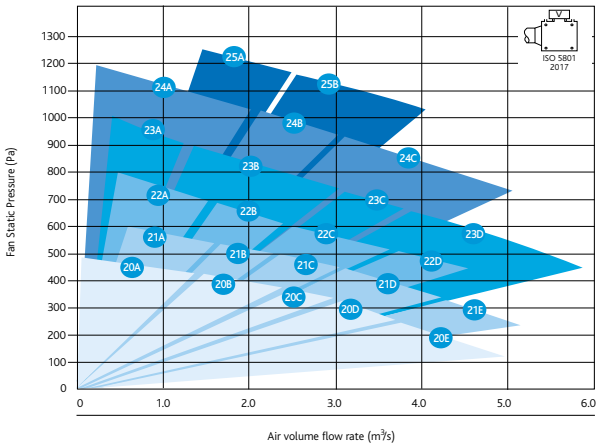
Quietscroll Units 13A-19C



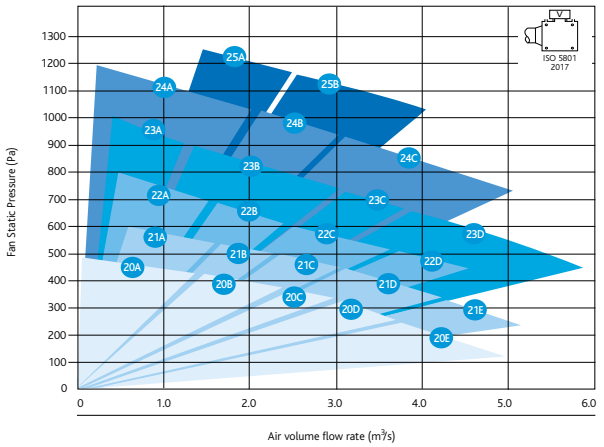
Quietscroll Units 13A-19C



Quietscroll Units 20A-25B



Quietscroll Units 20A-25B

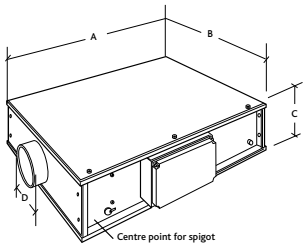


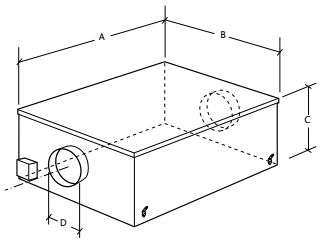
CODING EST11B-X

EST 11 B - X
1 2 3 4

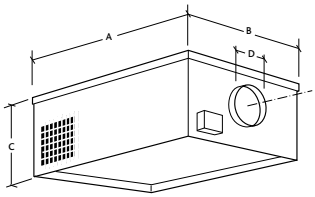
SAMPLE CODING

1. Quietscroll twin range
2. Case Sizes (1-25)
3. A, B, C, & D motor & pulley combination
4. No Suffix - internal inline unit, x - external inline unit,
   R - back inlet, grille outlet external roof mounted unit,
   B - bottom inlet, grille outlet external roof mounted unit.

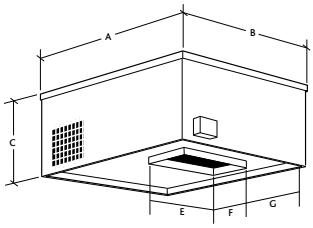


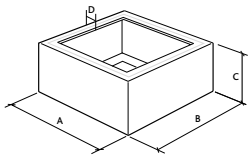


Note: Case sizes 20-25 have rectangular spigots.



Note: Case sizes 20-25-R have rectangular spigots.





Note: Upper faces of curb are fitted with robust sealing strip.

DIMENSIONS (MM) WEIGHT (KG)

MODEL	A	B	C	D	E	F
EST1	763	572	210	150		
EST2	778	787	262	200		
EST3	913	787	340	200		
EST4/4H	1063	1047	360	250		
EST5-6H	1193	1047	423	400		
EST8-9H	1195	1174	575	500		
EST11-12/A-C	974	974	622	400		
EST13-14-A-D	1233	1233	701	500		
EST15-19/A-D	1430	1635	780	630		
EST20-25/A-D	2030	2313	1183		1200	700

DIMENSIONS (MM) WEIGHT (KG)

MODEL	A	B	C	D	E	F
EST1-B	705	505	355		152	76
EST2-B	970	720	485		229	127
EST3-B	970	720	400		229	127
EST4-4H-B	1165	980	575		305	152
EST5-6H-B	1165	980	575		457	229
EST9-9H-B	1495	1125	710		762	304
EST11/12-A/C-B	974	974	622		457	229
EST13-14/A/D-B	1233	1233	701		762	304
EST15-19/A-D-B	1430	1635	780		889	381
EST20-25/A-D-B	2030	2313	1183		1200	700

DIMENSIONS (MM) WEIGHT (KG)

MODEL	A	B	C	D	E	F
EST1-R/X	705	505	355	125		
EST2-R/X	875	720	400	200		
EST3-R/X	970	720	480	200		
EST4-4H-R/X	1165	980	575	250		
EST5-6H-R/X	1165	980	575	400		
EST9-9H-R/X	1495	1125	710	500		
EST11-12/A-D-R/X	974	974	622	400		
EST13-14/A-D-R/X	1233	1233	701	500		
EST15-19/A-D-R/X	1430	1635	780	630		
EST20-25/A-D-R/X	2030	2313	1183		1200	700

TECHNICAL SPECIFICATIONS

			MOTOR CURRENTS		SOUND POWER LEVELS RE 1 PWATT (Hz) INDUCT INLET								
CODE	PHASE	RPM SPEED	FLC	SC (DOL)	63	125	250	500	1K	2K	4K	8K	dB(A) @3M
EST1	1	2040	0.65	0.65	66	61	50	46	35	22	22	22	18
EST2	1	1320	0.56	0.56	70	65	51	41	31	22	22	22	20
EST3	1	1700	0.80	1.60	68	63	57	40	31	24	25	23	26
EST4	1	1140	1.60	1.60	66	61	61	45	37	31	30	24	27
EST4H	1	3600	3.10	3.10	82	78	72	60	52	46	40	31	44
EST5	1	1272	4.84	4.84	71	66	61	48	44	39	35	32	32
EST6	1	1272	4.84	4.84	78	73	66	54	50	49	47	41	39
EST6H	1	1300	7.60	7.60	78	73	66	54	50	49	47	41	40
EST8	1	960	6.30	6.30	78	73	67	60	54	52	49	41	44
EST9	1	960	7.30	7.30	79	74	71	70	67	67	63	56	47
EST9H	1	1065	8.00	8.00	87	82	70	66	62	61	56	50	47
EST11A	3	1225	1.30	1.30	78	73	67	62	63	55	49	45	43
EST11B	3	1225	1.70	1.70	79	74	68	64	65	57	52	48	45
EST12A	3	1400	1.70	1.70	80	75	71	66	66	58	51	45	45
EST12B	3	1400	2.10	2.10	79	74	70	65	66	58	51	44	47
EST12C	3	1400	2.90	2.90	82	77	73	67	69	60	54	47	48
EST13A	3	1085	2.10	2.10	75	70	67	67	63	56	57	51	45
EST13B	3	1085	2.90	2.90	77	72	68	69	65	58	59	54	47
EST13C	3	1085	3.70	3.70	78	73	69	70	64	59	61	55	47
EST14A	3	1225	2.90	2.90	78	73	68	68	62	56	58	48	45
EST14B	3	1225	3.70	3.70	79	74	68	68	63	57	59	49	47
EST14C	3	1225	5.40	5.40	80	75	70	71	65	60	62	55	49
EST14D	3	1225	6.90	6.90	81	76	72	73	67	62	64	58	53
EST15A	3	925	5.40	5.40	85	80	79	78	76	73	70	64	57
EST15B	3	925	6.90	6.90	88	83	81	79	78	76	74	68	59
EST16A	3	1040	3.70	3.70	85	80	80	75	75	73	71	67	54
EST16B	3	1040	5.40	5.40	86	81	81	76	76	74	71	68	58
EST16C	3	1040	6.90	6.90	86	81	82	77	77	74	71	68	58
EST16D	3	1040	8.50	8.50	89	84	82	80	79	77	75	70	60
EST17A	3	1160	5.40	5.40	88	83	81	75	76	74	73	69	54
EST17B	3	1160	6.90	6.90	89	84	82	76	77	75	73	70	58
EST17C	3	1160	8.50	8.50	89	84	83	77	78	75	73	70	58
EST17D	3	1160	12.00	12.00	90	85	83	80	80	77	76	71	60
EST18A	3	1260	5.40	5.40	88	83	84	78	80	76	75	69	57
EST18B	3	1260	6.90	6.90	89	84	83	79	80	77	74	69	58
EST18C	3	1260	8.50	8.50	89	84	83	79	80	77	74	69	58
EST18D	3	1260	12.00	12.00	90	85	83	81	81	78	76	71	59
EST19A	3	1440	6.90	6.90	95	90	83	82	80	79	78	73	58
EST19B	3	1440	8.50	8.50	92	87	82	81	79	79	77	73	57
EST19C	3	1440	12.00	12.00	91	86	84	82	81	79	77	73	59

TECHNICAL SPECIFICATIONS

			MOTOR CURRENTS		SOUND POWER LEVELS RE 1 PWATT (Hz) INDUCT INLET								
CODE	PHASE	RPM SPEED	FLC	SC (DOL)	63	125	250	500	1K	2K	4K	8K	dB(A) @3M
EST20A	3	720	3.70	3.70	88	83	81	79	68	69	62	63	55
EST20B	3	700	5.40	5.40	88	83	80	80	69	68	62	62	55
EST20C	3	720	6.90	6.90	88	83	80	80	69	68	61	62	56
EST20D	3	720	8.50	8.50	88	83	81	81	70	67	60	60	58
EST20E	3	700	12.00	12.00	91	86	84	84	73	70	63	63	61
EST21A	3	800	5.40	5.40	91	86	83	83	72	71	65	65	58
EST21B	3	800	6.90	6.90	91	86	83	83	72	71	64	65	60
EST21C	3	800	8.50	8.50	91	86	84	84	73	70	63	63	61
EST21D	3	800	12.00	12.00	94	89	87	87	76	73	66	66	62
EST21E	3	800	16.00	16.00	95	90	88	87	77	74	67	67	63
EST22A	3	900	6.90	6.90	93	88	85	85	74	73	67	67	60
EST22B	3	900	8.50	8.50	93	88	85	85	74	73	66	67	59
EST22C	3	900	12.00	12.00	93	88	86	86	75	72	65	65	63
EST22D	3	900	16.00	16.00	96	91	89	89	78	75	68	68	64
EST23A	3	1000	8.50	8.50	95	90	87	87	76	75	69	69	61
EST23B	3	1000	12.00	12.00	95	90	87	87	76	75	68	69	63
EST23C	3	1000	16.00	16.00	95	90	88	88	77	74	67	67	65
EST23D	3	1000	23.00	23.00	98	93	91	91	80	77	70	70	66
EST24A	3	1100	12.00	12.00	97	92	89	89	78	77	71	71	64
EST24B	3	1100	16.00	16.00	97	92	89	89	78	77	70	71	65
EST24C	3	1100	23.00	23.00	97	92	90	90	79	76	69	69	67
EST25A	3	1200	16.00	16.00	98	93	90	90	79	78	72	72	65
EST25B	3	1200	23.00	23.00	98	93	90	90	79	78	71	72	66

TECHNICAL SPECIFICATIONS

			MOTOR CURRENTS		SOUND POWER LEVELS RE 1 PWATT (Hz) INDUCT INLET								
CODE	PHASE	RPM SPEED	FLC	SC (DOL)	63	125	250	500	1K	2K	4K	8K	dB(A) @3M
EST1-B/R	1	2040	0.65	0.65	71	66	55	46	47	39	35	31	41
EST2-B/R	1	1320	0.56	0.56	67	62	46	40	35	32	31	31	37
EST3-B/R	1	1700	0.80	1.60	77	72	55	47	43	40	36	32	44
EST4-B/R	1	1140	1.60	1.60	73	68	59	51	49	46	42	35	49
EST4H-B/R	1	3600	3.10	3.10	87	77	73	66	64	60	55	50	68
EST5-B/R	1	1272	4.84	4.84	73	68	58	49	49	50	48	43	55
EST6-B/R	1	1272	4.84	4.84	78	73	66	54	50	49	47	41	54
EST6H-B/R	1	1300	7.60	7.60	78	73	66	54	50	49	47	41	54
EST9-B/R	1	960	7.30	7.30	87	82	70	66	62	61	56	50	54
EST9H-B/R	1	1065	8.00	8.00	87	82	70	66	62	61	56	50	54
EST11A-B/R	3	1225	1.30	1.30	78	73	67	62	63	55	49	45	55
EST11B-B/R	3	1225	1.70	1.70	79	74	68	64	65	57	52	48	56
EST12A-B/R	3	1400	1.70	1.70	80	75	71	66	66	58	51	45	56
EST12B-B/R	3	1400	2.10	2.10	79	74	70	65	66	58	51	44	58
EST12C-B/R	3	1400	2.90	2.90	82	77	73	67	69	60	54	47	60
EST13A-B/R	3	1085	2.10	2.10	75	70	67	67	63	56	57	51	55
EST13B-B/R	3	1085	2.90	2.90	77	72	68	69	65	58	59	54	57
EST13C-B/R	3	1085	3.70	3.70	78	73	69	70	64	59	61	55	57
EST14A-B/R	3	1225	2.90	2.90	78	73	68	68	62	56	58	48	55
EST14B-B/R	3	1225	3.70	3.70	79	74	68	68	63	57	59	49	58
EST14C-B/R	3	1225	5.40	5.40	80	75	70	71	65	60	62	55	60
EST14D-B/R	3	1225	6.90	6.90	81	76	72	73	67	62	64	58	60
EST15A-B/R	3	925	5.40	5.40	85	80	79	78	76	73	70	64	67
EST15B-B/R	3	925	6.90	6.90	88	83	81	79	78	76	74	68	71
EST16A-B/R	3	1040	3.70	3.70	85	80	80	75	75	73	71	67	65
EST16B-B/R	3	1040	5.40	5.40	86	81	81	76	76	74	71	68	70
EST16C-B/R	3	1040	6.90	6.90	86	81	82	77	77	74	71	68	70
EST16D-B/R	3	1040	8.50	8.50	89	84	82	80	79	77	75	70	72
EST17A-B/R	3	1160	5.40	5.40	88	83	81	75	76	74	73	69	66
EST17B-B/R	3	1160	6.90	6.90	89	84	82	76	77	75	73	70	69
EST17C-B/R	3	1160	8.50	8.50	89	84	83	77	78	75	73	70	69
EST17D-B/R	3	1160	12.00	12.00	90	85	83	80	80	77	76	71	71
EST18A-B/R	3	1260	5.40	5.40	88	83	84	78	80	76	75	69	38
EST18B-B/R	3	1260	6.90	6.90	89	84	83	79	80	77	74	69	39
EST18C-B/R	3	1260	8.50	8.50	89	84	83	79	80	77	74	69	39
EST18D-B/R	3	1260	12.00	12.00	90	85	83	81	81	78	76	71	70
EST19A-B/R	3	1440	6.90	6.90	95	90	83	82	80	79	78	73	69
EST19B-B/R	3	1440	8.50	8.50	92	87	82	81	79	79	77	73	68
EST19C-B/R	3	1440	12.00	12.00	91	86	84	82	81	79	77	73	70
EST20A-B/R	3	720	3.70	3.70	88	83	81	79	68	69	62	63	63
EST20B-B/R	3	720	5.40	5.40	88	83	80	80	69	68	61	62	64
EST20C-B/R	3	720	6.90	6.90	88	83	80	80	69	68	61	62	64
EST20D-B/R	3	700	8.50	8.50	88	83	81	81	70	67	60	60	66
EST20E-B/R	3	720	12.00	12.00	91	86	84	84	73	70	63	63	68
EST21A-B/R	3	800	5.40	5.40	91	86	83	83	72	71	65	65	66
EST21B-B/R	3	800	6.90	6.90	91	86	83	83	72	71	64	65	68
EST21C-B/R	3	800	8.50	8.50	91	86	84	84	73	70	63	63	69

TECHNICAL SPECIFICATIONS

			MOTOR CURRENTS		SOUND POWER LEVELS RE 1 PWATT (Hz) INDUCT INLET								
CODE	PHASE	RPM SPEED	FLC	SC (DOL)	63	125	250	500	1K	2K	4K	8K	dB(A) @3M
EST21D-B/R	3	800	12.00	12.00	94	89	87	87	76	73	66	66	70
EST21E-B/R	3	800	16.00	16.00	95	90	88	87	77	74	67	67	71
EST22A-B/R	3	900	6.90	6.90	93	88	85	85	74	73	67	67	68
EST22B-B/R	3	900	8.50	8.50	93	88	85	85	74	73	66	67	67
EST22C-B/R	3	900	12.00	12.00	93	88	86	86	75	72	65	65	69
EST22D-B/R	3	900	16.00	16.00	96	91	89	89	78	75	68	68	72
EST23A-B/R	3	1000	8.50	8.50	95	90	87	87	76	75	69	69	69
EST23B-B/R	3	1000	12.00	12.00	95	90	87	87	76	75	68	69	71
EST23C-B/R	3	1000	16.00	16.00	95	90	88	88	77	74	67	67	73
EST23D-B/R	3	1000	23.00	23.00	98	93	91	91	80	77	70	70	74
EST24A-B/R	3	1100	12.00	12.00	97	92	89	89	78	77	71	71	72
EST24B-B/R	3	1100	16.00	16.00	97	92	89	89	78	77	70	71	73
EST24C-B/R	3	1100	23.00	23.00	97	92	90	90	79	76	69	69	75
EST25A-B/R	3	1200	16.00	16.00	98	93	90	90	79	78	72	72	73
EST25B-B/R	3	1200	23.00	23.00	98	93	90	90	79	78	71	72	74

TECHNICAL SPECIFICATIONS

			MOTOR CURRENTS		SOUND POWER LEVELS RE 1 PWATT (Hz) INDUCT INLET								
CODE	PHASE	RPM SPEED	FLC	SC (DOL)	63	125	250	500	1K	2K	4K	8K	dB(A) @3M
EST1-X	1	2040	0.65	0.65	71	66	55	46	47	39	35	31	25
EST2-X	1	1320	0.56	0.56	67	62	46	40	35	32	31	31	22
EST3-X	1	1700	0.80	1.60	77	72	55	47	43	40	36	32	28
EST4H-X	1	3600	3.30	3.30	87	77	73	66	64	60	55	50	44
EST4-X	1	1140	1.60	1.60	73	68	59	51	49	46	42	35	33
EST5-X	1	1272	4.84	4.84	73	68	58	49	49	50	48	43	37
EST6H-X	1	1300	7.60	7.60	78	73	66	54	50	49	47	41	40
EST6-X	1	1272	4.84	4.84	78	71	63	55	58	58	55	48	44
EST9H-X	1	1065	8.00	8.00	87	82	70	66	62	61	56	50	47
EST9-X	1	960	7.30	7.30	87	82	70	66	62	61	56	50	47
EST11A-X	3	1225	1.30	1.30	78	73	67	62	63	55	49	45	43
EST11B-X	3	1225	1.70	1.70	79	74	68	64	65	57	52	48	45
EST12A-X	3	1400	1.70	1.70	80	75	71	66	66	58	51	45	45
EST12B-X	3	1400	2.10	2.10	79	74	70	65	66	58	51	44	47
EST12C-X	3	1400	2.90	2.90	82	77	73	67	69	60	54	47	48
EST13A-X	3	1085	2.10	2.10	75	70	67	67	63	56	57	51	45
EST13B-X	3	1085	2.90	2.90	77	72	68	69	65	58	59	54	47
EST13C-X	3	1085	3.70	3.70	78	73	69	70	64	59	61	55	47
EST14A-X	3	1225	2.90	2.90	78	73	68	68	62	56	58	48	45
EST14B-X	3	1225	3.70	3.70	79	74	68	68	63	57	59	49	47
EST14C-X	3	1225	5.40	5.40	80	75	70	71	65	60	62	55	49
EST14D-X	3	1225	6.90	6.90	81	76	72	73	67	62	64	58	53
EST15A-X	3	925	5.40	5.40	85	80	79	78	76	73	70	64	57
EST15B-X	3	925	6.90	6.90	88	83	81	79	78	76	74	68	59
EST16A-X	3	1040	3.70	3.70	85	80	80	75	75	73	71	67	54
EST16B-X	3	1040	5.40	5.40	86	81	81	76	76	74	71	68	58
EST16C-X	3	1040	6.90	6.90	86	81	82	77	77	74	71	68	58
EST16D-X	3	1040	8.50	8.50	89	84	82	80	79	77	75	70	60
EST17A-X	3	1160	5.40	5.40	88	83	81	75	76	74	73	69	54
EST17B-X	3	1160	6.90	6.90	89	84	82	76	77	75	73	70	58
EST17C-X	3	1160	8.50	8.50	89	84	83	77	78	75	73	70	58
EST17D-X	3	1160	12.00	12.00	90	85	83	80	80	77	76	71	60
EST18A-X	3	1260	5.40	5.40	88	83	84	78	80	76	75	69	57
EST18B-X	3	1260	6.90	6.90	89	84	83	79	80	77	74	69	58
EST18C-X	3	1260	8.50	8.50	89	84	83	79	80	77	74	69	58
EST18D-X	3	1260	12.00	12.00	90	85	83	81	81	78	76	71	59
EST19A-X	3	1440	6.90	6.90	95	90	83	82	80	79	78	73	58
EST19B-X	3	1440	8.50	8.50	92	87	82	81	79	79	77	73	57
EST19C-X	3	1440	12.00	12.00	91	86	84	82	81	79	77	73	59
EST20A-X	3	720	3.70	3.70	88	83	81	79	68	69	62	63	55
EST20B-X	3	720	5.40	5.40	88	83	80	80	69	68	62	62	55
EST20C-X	3	720	6.90	6.90	88	83	80	80	69	68	61	62	56
EST20D-X	3	720	8.50	8.50	88	83	81	81	70	67	60	60	58
EST20E-X	3	720	12.00	12.00	91	86	84	84	73	70	63	63	61
EST21A-X	3	800	5.40	5.40	91	86	83	83	72	71	65	65	58
EST21B-X	3	800	6.90	6.90	91	86	83	83	72	71	64	65	60
EST21C-X	3	800	8.50	8.50	91	86	84	84	73	70	63	63	61

TECHNICAL SPECIFICATIONS

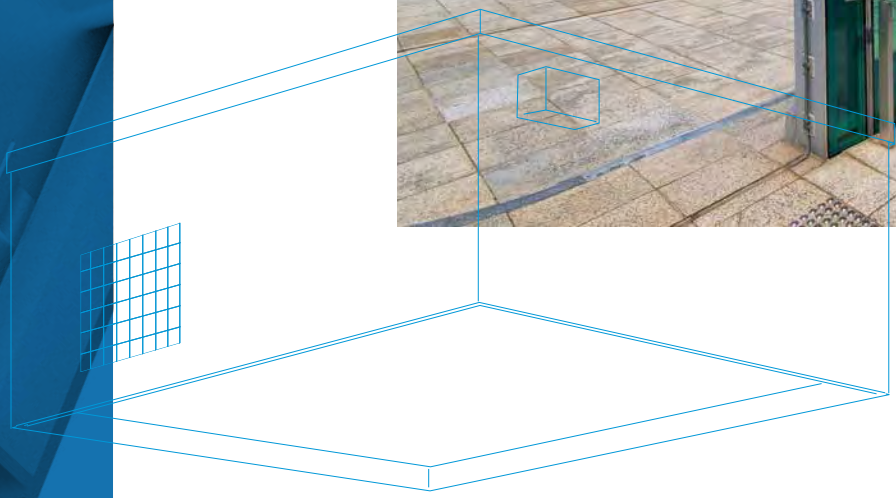
			MOTOR CURRENTS		SOUND POWER LEVELS RE 1 PWATT (Hz) INDUCT INLET								
CODE	PHASE	RPM SPEED	FLC	SC (DOL)	63	125	250	500	1K	2K	4K	8K	dB(A) @3M
EST21D-X	3	800	12.00	12.00	94	89	87	87	76	73	66	66	62
EST21E-X	3	800	16.00	16.00	95	90	88	87	77	74	67	67	63
EST22A-X	3	900	6.90	6.90	93	88	85	85	74	73	67	67	60
EST22B-X	3	900	8.50	8.50	93	88	85	85	74	73	66	67	59
EST22C-X	3	900	12.00	12.00	93	88	86	86	75	72	65	65	63
EST22D-X	3	900	16.00	16.00	96	91	89	89	78	75	68	68	64
EST23A-X	3	1000	8.50	8.50	95	90	87	87	76	75	69	69	61
EST23B-X	3	1000	12.00	12.00	95	90	87	87	76	75	68	69	63
EST23C-X	3	1000	16.00	16.00	95	90	88	88	77	74	67	67	65
EST23D-X	3	1000	23.00	23.00	98	93	91	91	80	77	70	70	66
EST24A-X	3	1100	12.00	12.00	97	92	89	89	78	77	71	71	64
EST24B-X	3	1100	16.00	16.00	97	92	89	89	78	77	70	71	65
EST24C-X	3	1100	23.00	23.00	97	92	90	90	79	76	69	69	67
EST25A-X	3	1200	16.00	16.00	98	93	90	90	79	78	72	72	65
EST25B-X	3	1200	23.00	23.00	98	93	90	90	79	78	71	72	66

DUCTED TWIN DIRECT AND BELT DRIVE FANS - INTERNAL (NALTF) AND EXTERNAL (NALTRF)

Ducted twin fan unit ideal for a wide range of applications domestic, commercial or industrial with performance up to 5.5m³/s.

KEY BENEFITS:

- **HIGH EFFICIENCY -** FORWARD CURVED CENTRIFUGAL IMPELLER
- **DUTY SHARE -** ALL FANS (UP TO AND INCLUDING SIZE 15) INCLUDE INTEGRAL DUTY SHARE, NO REQUIREMENTS FOR SEPARATE CONTROL PANEL
- **WIDE RANGE OF ANCILLARIES -** SPEED CONTROL (DIRECT DRIVE ONLY)
- **WIDE CHOICE -** CHOICE OF 16 MODELS WITH 3 CONFIGURATIONS - INLINE WITH CIRCULAR OR RECTANGULAR SPIGOTS



50Hz

CONSULTANT SPECIFICATION

CASING

Internal - Double insulated, manufactured from galvanised steel, internal faces of the case are lined with a flame retardant acoustic material.

External - unit casing is manufactured from Aluzinc, the underside of the cover which encloses the inlet chamber is acoustically lined.

Air is discharged into a common outlet plenum chamber through separate shutter system which prevents blow back through the standby fan.

MOTOR

Direct drive and belt driven motors are fitted with thermal protection and manufactured to BS5000. Class B insulation and sealed for life bearings.

Direct drive - 6 hour duty share.
Belt drive - 12 hour duty share.

CERTIFICATION AND OPERATING TEMPERATURE

The fan is CE Low Voltage Directive 2014/35/EU, units able to operate up to 60°C.

IMPELLER

High efficiency forward curved centrifugal impeller running in metal scrolls. Sensors fitted in each scroll monitor air flow, detect and signal flow failure.

INSTALLATION

Roof mounted twin fan unit for external use, Fans are suitable for operation in ambient temperatures up to 60°C. NALTRF units are suitable for internal and external use and may be installed up to a maximum angle of 5°.

The fan unit incorporates an integral auto-changeover controller which provides 6 hour duty shared operation and automatic selection of the standby fan should the duty fan fail. Fault indication to a remote fail indicator (supplied) is provided via volt free contacts of a relay. The integral run-on timer allows the fan to run-on for a pre-determined time after the initial source (eg. coupled light switch) has been switched off. The run-on period is adjustable between 1 and 60 minutes.

PERFORMANCE

Duty range up to 5.5m^3/s.

ANCILLARIES

- Flexible connectors
- Silencers - long, long podded, standard and standard podded
- Anti-vibration mounts
- Speed controls (direct drive only)

APPLICATIONS

TYPICAL APPLICATIONS

- Toilets - small and large
- Small and large offices
- Supermarkets
- Plant room

Note: Fan sizes 1 - 15 are supplied with controls. Fan sizes 16-24 are not supplied with controls.

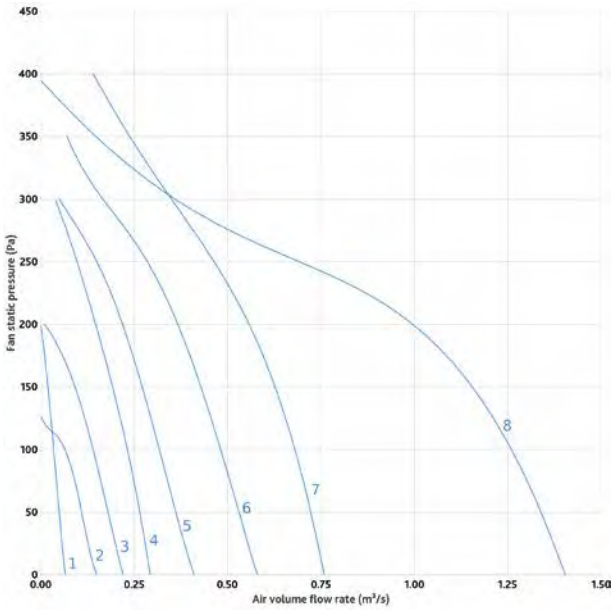
DUCTED TWIN DIRECT AND BELT DRIVE FANS - INTERNAL (NALTF) AND EXTERNAL (NALTRF)

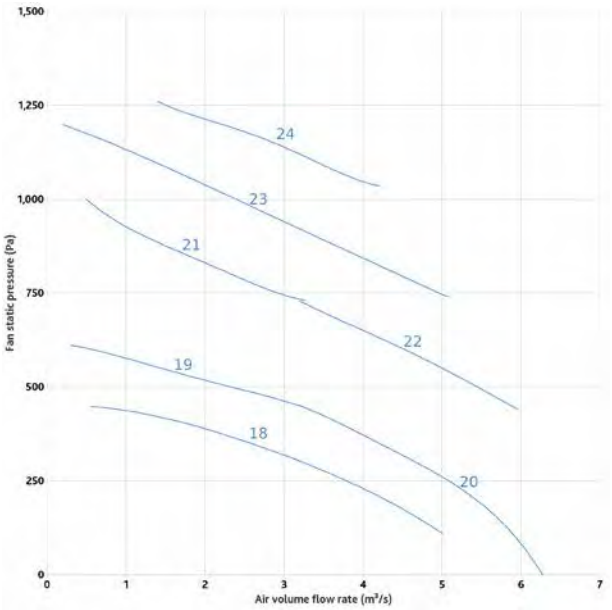
CODING NALTRF9-S2S

NALTRF 9 - S2S
1 2 3

SAMPLE CODING

1. NALTRFNAL Roof mount twin fan range
2. 9 Size/Curve Reference
3. B2G - Rear Inlet with side discharge
   S2S - Inline Spigots





DIMENSIONS (MM) WEIGHT (KG) NALTF AND NALTRF

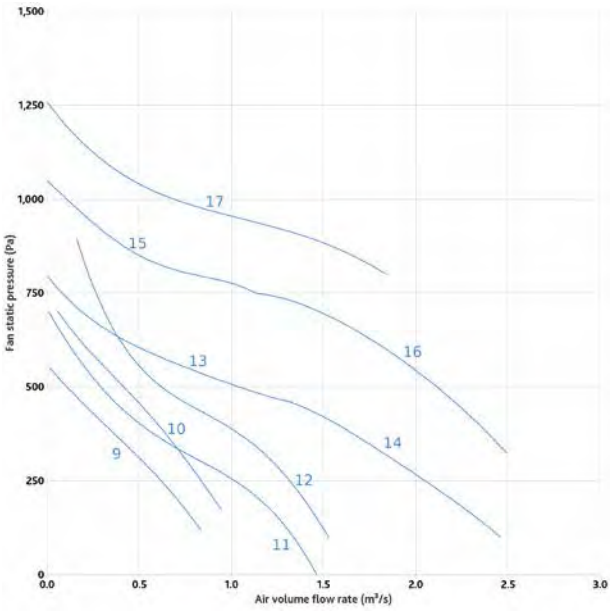
MODEL	A	B	C	D (DIA)	E	F
NALTF1	450	495	238	125	374	
NALTF2	465	710	303	200	389	
NALTF3	560	710	370	200	484	
NALTF4	700	970	476	250	624	
NALTF5	700	970	476	250	624	
NALTF6	700	970	476	400	624	
NALTF7	700	970	476	400	624	
NALTF8	895	1174	575	500	995	
NALTF11-12, NALTRF11-12	1233	1233	701	500		
NALTF13-17, NALTRF13-17	1430	1635	796	630		
NALTF18-24, NALTRF18-24	2030	2313	1183		1200	700

DIMENSIONS (MM) WEIGHT (KG) NALTRF BOTTOM INLET UNIT

MODEL	A	B	C	E	F
NALTRF9 to NALTRF10	974	974	622	457	229
NALTRF11 to NALTRF12	1233	1233	701	762	304
NALTRF13 to NALTRF17	1430	1635	796	889	381

DIMENSIONS (MM) WEIGHT (KG) NALTRF LARGER BOTTOM/END INLET UNIT

MODEL	A	B	C	E	F
NALTRF18 to NALTRF24	2030	2313	1183	1200	700



TECHNICAL SPECIFICATIONS

			MOTOR CURRENTS												
CODE	PHASE	RPM	FLC	SC		63	125	250	500	1K	2K	4K	8K	dB(A) FROM SPECTRUM
NALTF1	1	2040	0.74	1.40	INDUCT INLET	72	67	56	55	52	41	32	31	36
					INDUCT OUTLET	74	69	63	54	66	50	41	35	46
NALTF2	1	1260	0.54	1.00	INDUCT INLET	84	79	61	55	48	47	39	35	44
					INDUCT OUTLET	80	75	62	58	57	55	47	39	43
NALTF3	1	1700	0.80	1.60	INDUCT INLET	87	82	61	57	54	53	48	44	47
					INDUCT OUTLET	87	82	65	60	57	54	52	45	48
NALTF4	1	1260	1.80	5.50	INDUCT INLET	77	72	66	60	57	54	51	47	43
					INDUCT OUTLET	83	78	71	65	63	59	58	54	49
NALTF5	1	1260	1.80	5.50	INDUCT INLET	77	72	66	60	57	54	51	47	43
					INDUCT OUTLET	83	78	71	65	63	59	58	54	49
NALTF6	1	1272	4.84	18.00	INDUCT INLET	76	71	65	59	63	62	60	54	47
					INDUCT OUTLET	79	74	66	67	72	71	67	61	55
NALTF7	1	1272	4.84	18.00	INDUCT INLET	89	84	76	68	69	69	68	64	56
					INDUCT OUTLET	90	85	80	77	76	76	74	69	61
NALTF8	1	960	6.30	50.00	INDUCT INLET	84	79	76	75	72	72	68	61	57
					INDUCT OUTLET	92	87	85	88	91	92	90	83	76
NALTF9	3	1225	2.10	9.50	INDUCT INLET	80	75	70	65	66	58	53	50	49
					INDUCT OUTLET	78	73	74	73	76	64	61	56	57
NALTF10	3	1400	2.90	13.00	INDUCT INLET	82	77	73	67	69	60	54	47	51
					INDUCT OUTLET	84	79	80	77	79	68	64	58	60
NALTF11	3	1085	3.70	18.50	INDUCT INLET	78	73	69	70	64	59	61	55	50
					INDUCT OUTLET	82	77	76	77	73	66	66	61	57
NALTF12	3	1040	5.40	29.00	INDUCT INLET	80	75	70	71	65	60	62	55	51
					INDUCT OUTLET	85	80	79	80	76	69	69	64	60
NALTF13	3	1040	5.40	29.00	INDUCT INLET	86	81	81	76	76	74	71	68	60
					INDUCT OUTLET	94	89	84	78	87	83	80	77	69
NALTF14	3	1040	10.00	60.00	INDUCT INLET	89	84	82	80	79	77	75	70	63
					INDUCT OUTLET	96	91	83	90	88	85	84	78	72
NALTF15	3	1260	6.90	39.00	INDUCT INLET	89	84	83	79	80	77	74	69	63
					INDUCT OUTLET	93	88	81	88	85	83	79	76	69
NALTF16	3	1260	12.00	75.00	INDUCT INLET	90	85	83	81	81	78	76	71	65
					INDUCT OUTLET	94	89	82	89	86	83	82	78	70
NALTF17	3	1440	12.00	75.00	INDUCT INLET	91	86	84	82	81	79	77	73	65
					INDUCT OUTLET	92	87	84	88	87	81	80	76	70
NALTF18	3	700	12.00	75.00	INDUCT INLET	91	86	84	84	73	70	63	63	62
					INDUCT OUTLET	94	89	84	92	79	76	68	69	69
NALTF19	3	800	10.00	60.00	INDUCT INLET	91	86	84	84	73	70	63	63	62
					INDUCT OUTLET	94	89	84	92	79	76	68	69	69
NALTF20	3	800	23.00	154.00	INDUCT INLET	96	91	89	89	78	75	68	68	67
					INDUCT OUTLET	97	92	88	95	83	79	72	73	72
NALTF21	3	1000	12.00	75.00	INDUCT INLET	95	90	87	87	76	75	68	69	65
					INDUCT OUTLET	96	91	86	94	81	79	71	73	71
NALTF22	3	1000	23.00	154.00	INDUCT INLET	98	93	91	91	80	77	70	70	69
					INDUCT OUTLET	100	95	90	97	85	82	74	75	74
NALTF23	3	1100	23.00	154.00	INDUCT INLET	97	92	90	90	79	76	69	69	68
					INDUCT OUTLET	100	95	90	98	85	82	74	75	75
NALTF24	3	1200	23.00	154.00	INDUCT INLET	98	93	90	90	79	78	71	72	68
					INDUCT OUTLET	99	94	89	83	84	82	74	76	68

TECHNICAL SPECIFICATIONS

			MOTOR CURRENTS											
CODE	PHASE	RPM	FLC	SC		63	125	250	500	1K	2K	4K	8K	dB(A) FROM SPECTRUM
NALTRF1	1	2100	0.58	1.40	INDUCT INLET	71	66	55	52	54	48	43	40	37
					OPEN OUTLET	71	66	61	54	57	55	50	45	41
NALTRF2	1	1260	0.54	1.50	INDUCT INLET	79	74	55	57	50	47	41	38	40
					OPEN OUTLET	72	67	58	52	52	50	45	38	37
NALTRF3	1	1264	1.36	4.60	INDUCT INLET	81	76	60	59	51	52	50	46	43
					OPEN OUTLET	76	71	63	56	60	57	53	49	44
NALTRF4	1	1260	1.30	5.50	INDUCT INLET	73	68	63	60	56	55	52	50	42
					OPEN OUTLET	81	76	70	63	66	62	59	56	49
NALTRF5	1	1260	1.30	5.50	INDUCT INLET	73	68	63	60	56	55	52	50	42
					OPEN OUTLET	81	76	70	63	66	62	59	56	49
NALTRF6	1	1272	4.84	18.00	INDUCT INLET	76	71	69	62	57	59	57	57	46
					OPEN OUTLET	80	75	70	70	73	68	63	62	55
NALTRF7	1	1272	4.84	18.00	INDUCT INLET	88	83	76	71	72	74	70	65	58
					OPEN OUTLET	87	82	78	73	76	73	71	62	59
NALTRF8	1	960	6.30	50.00	INDUCT INLET	78	73	70	71	73	73	71	66	58
					OPEN OUTLET	91	86	82	81	80	78	77	74	65
NALTRF9	3	1225	2.10	12.00	INDUCT INLET	80	75	70	65	66	58	53	50	49
					INDUCT OUTLET	78	73	74	73	76	64	61	56	57
NALTRF10	3	1400	2.90	13.00	INDUCT INLET	82	77	73	67	69	60	54	47	51
					INDUCT OUTLET	84	79	80	77	79	68	64	58	60
NALTRF11	3	1085	3.70	24.00	INDUCT INLET	78	73	69	70	64	59	61	55	50
					INDUCT OUTLET	82	77	76	77	73	66	66	61	57
NALTRF12	3	1225	5.40	29.00	INDUCT INLET	80	75	70	71	65	60	62	55	51
					INDUCT OUTLET	85	80	79	80	76	69	69	64	60
NALTRF13	3	1040	5.40	29.00	INDUCT INLET	86	81	81	76	76	74	71	68	60
					INDUCT OUTLET	94	89	84	78	87	83	80	77	69
NALTRF14	3	1040	10.00	60.00	INDUCT INLET	89	84	82	80	79	77	75	70	63
					INDUCT OUTLET	96	91	83	90	88	85	84	78	72
NALTRF15	3	1260	6.90	38.00	INDUCT INLET	89	84	83	79	80	77	74	69	63
					INDUCT OUTLET	93	88	81	88	85	83	79	76	69
NALTRF16	3	1260	12.00	75.00	INDUCT INLET	90	85	83	81	81	78	76	71	65
					INDUCT OUTLET	94	89	82	89	86	83	82	78	70
NALTRF17	3	1440	12.00	75.00	INDUCT INLET	91	86	84	82	81	79	77	73	65
					INDUCT OUTLET	92	87	84	88	87	81	80	76	70
NALTRF18	3	700	12.00	75.00	INDUCT INLET	91	86	84	84	73	70	63	63	62
					INDUCT OUTLET	94	89	84	92	79	76	68	69	69
NALTRF19	3	800	10.00	60.00	INDUCT INLET	91	86	84	84	73	70	63	63	62
					INDUCT OUTLET	94	89	84	92	79	76	68	69	69
NALTRF20	3	800	23.00	154.00	INDUCT INLET	96	91	89	89	78	75	68	68	67
					INDUCT OUTLET	97	92	88	95	83	79	72	73	72
NALTRF21	3	1000	12.00	75.00	INDUCT INLET	95	90	87	87	76	75	68	69	65
					INDUCT OUTLET	96	91	86	94	81	79	71	73	71
NALTRF22	3	1000	23.00	154.00	INDUCT INLET	98	93	91	91	80	77	70	70	69
					INDUCT OUTLET	100	95	90	97	85	82	74	75	74
NALTRF23	3	1100	23.00	154.00	INDUCT INLET	97	92	90	90	79	76	69	69	68
					INDUCT OUTLET	100	95	90	98	85	82	74	75	75
NALTRF24	3	1200	23.00	154.00	INDUCT INLET	98	93	90	90	79	78	71	72	68
					INDUCT OUTLET	99	94	89	83	84	82	74	76	68

TECHNICAL SPECIFICATIONS

			MOTOR CURRENTS											
CODE	PHASE	RPM	FLC	SC		63	125	250	500	1K	2K	4K	8K	dB(A) FROM SPECTRUM
NALTRF1-B2G	1	2100	0.58	1.40	INDUCT INLET	71	66	55	52	54	48	43	40	37
					OPEN OUTLET	71	66	61	54	57	55	50	45	41
NALTRF2-B2G	1	1260	0.54	1.50	INDUCT INLET	79	74	55	57	50	47	41	38	40
					OPEN OUTLET	72	67	58	52	52	50	45	38	37
NALTRF3-B2G	1	1264	1.36	4.60	INDUCT INLET	81	76	60	59	51	52	50	46	43
					OPEN OUTLET	76	71	63	56	60	57	53	49	44
NALTRF4-B2G	1	1260	1.30	5.50	INDUCT INLET	73	68	63	60	56	55	52	50	42
					OPEN OUTLET	81	76	70	63	66	62	59	56	49
NALTRF5-B2G	1	1260	1.30	5.50	INDUCT INLET	73	68	63	60	56	55	52	50	42
					OPEN OUTLET	81	76	70	63	66	62	59	56	49
NALTRF6-B2G	1	1272	4.84	18.00	INDUCT INLET	76	71	69	62	57	59	57	57	46
					OPEN OUTLET	80	75	70	70	73	68	63	62	55
NALTRF7-B2G	1	1272	4.84	18.00	INDUCT INLET	88	83	76	71	72	74	70	65	58
					OPEN OUTLET	87	82	78	73	76	73	71	62	59
NALTRF8-B2G	1	960	6.30	50.00	INDUCT INLET	78	73	70	71	73	73	71	66	58
					OPEN OUTLET	91	86	82	81	80	78	77	74	65
NALTRF9-B2G	3	1225	2.10	12.00	INDUCT INLET	80	75	70	65	66	58	53	50	49
					INDUCT OUTLET	78	73	74	73	76	64	61	56	57
NALTRF10-B2G	3	1400	2.90	13.00	INDUCT INLET	82	77	73	67	69	60	54	47	51
					INDUCT OUTLET	84	79	80	77	79	68	64	58	60
NALTRF11-B2G	3	1085	3.70	24.00	INDUCT INLET	78	73	69	70	64	59	61	55	50
					INDUCT OUTLET	82	77	76	77	73	66	66	61	57
NALTRF12-B2G	3	1225	5.40	29.00	INDUCT INLET	80	75	70	71	65	60	62	55	51
					INDUCT OUTLET	85	80	79	80	76	69	69	64	60
NALTRF13-B2G	3	1040	5.40	29.00	INDUCT INLET	86	81	81	76	76	74	71	68	60
					INDUCT OUTLET	94	89	84	78	87	83	80	77	69
NALTRF14-B2G	3	1040	10.00	60.00	INDUCT INLET	89	84	82	80	79	77	75	70	63
					INDUCT OUTLET	96	91	83	90	88	85	84	78	72
NALTRF15-B2G	3	1260	6.90	38.00	INDUCT INLET	89	84	83	79	80	77	74	69	63
					INDUCT OUTLET	93	88	81	88	85	83	79	76	69
NALTRF16-B2G	3	1260	12.00	75.00	INDUCT INLET	90	85	83	81	81	78	76	71	65
					INDUCT OUTLET	94	89	82	89	86	83	82	78	70
NALTRF17-B2G	3	1440	12.00	75.00	INDUCT INLET	91	86	84	82	81	79	77	73	65
					INDUCT OUTLET	92	87	84	88	87	81	80	76	70
NALTRF18-B2G	3	700	12.00	75.00	INDUCT INLET	91	86	84	84	73	70	63	63	62
					INDUCT OUTLET	94	89	84	92	79	76	68	69	69
NALTRF19-B2G	3	800	10.00	60.00	INDUCT INLET	91	86	84	84	73	70	63	63	62
					INDUCT OUTLET	94	89	84	92	79	76	68	69	69
NALTRF20-B2G	3	800	23.00	154.00	INDUCT INLET	96	91	89	89	78	75	68	68	67
					INDUCT OUTLET	97	92	88	95	83	79	72	73	72
NALTRF21-B2G	3	1000	12.00	75.00	INDUCT INLET	95	90	87	87	76	75	68	69	65
					INDUCT OUTLET	96	91	86	94	81	79	71	73	71
NALTRF22-B2G	3	1000	23.00	154.00	INDUCT INLET	98	93	91	91	80	77	70	70	69
					INDUCT OUTLET	100	95	90	97	85	82	74	75	74
NALTRF23-B2G	3	1100	23.00	154.00	INDUCT INLET	97	92	90	90	79	76	69	69	68
					INDUCT OUTLET	100	95	90	98	85	82	74	75	75
NALTRF24-B2G	3	1200	23.00	154.00	INDUCT INLET	98	93	90	90	79	78	71	72	68
					INDUCT OUTLET	99	94	89	83	84	82	74	76	68

TECHNICAL SPECIFICATIONS

			MOTOR CURRENTS											
CODE	PHASE	RPM	FLC	SC		63	125	250	500	1K	2K	4K	8K	dB(A) FROM SPECTRUM
NALTRF1-S2S	1	2100	0.58	1.40	INDUCT INLET	71	66	55	52	54	48	43	40	37
					OPEN OUTLET	71	66	61	54	57	55	50	45	41
NALTRF2-S2S	1	1260	0.54	1.50	INDUCT INLET	79	74	55	57	50	47	41	38	40
					OPEN OUTLET	72	67	58	52	52	50	45	38	37
NALTRF3-S2S	1	1264	1.36	4.60	INDUCT INLET	81	76	60	59	51	52	50	46	43
					OPEN OUTLET	76	71	63	56	60	57	53	49	44
NALTRF4-S2S	1	1260	1.30	5.50	INDUCT INLET	73	68	63	60	56	55	52	50	42
					OPEN OUTLET	81	76	70	63	66	62	59	56	49
NALTRF5-S2S	1	1260	1.30	5.50	INDUCT INLET	73	68	63	60	56	55	52	50	42
					OPEN OUTLET	81	76	70	63	66	62	59	56	49
NALTRF6-S2S	1	1272	4.84	18.00	INDUCT INLET	76	71	69	62	57	59	57	57	46
					OPEN OUTLET	80	75	70	70	73	68	63	62	55
NALTRF7-S2S	1	1272	4.84	18.00	INDUCT INLET	88	83	76	71	72	74	70	65	58
					OPEN OUTLET	87	82	78	73	76	73	71	62	59
NALTRF8-S2S	1	960	6.30	50.00	INDUCT INLET	78	73	70	71	73	73	71	66	58
					OPEN OUTLET	91	86	82	81	80	78	77	74	65
NALTRF9-S2S	3	1225	2.10	12.00	INDUCT INLET	80	75	70	65	66	58	53	50	49
					INDUCT OUTLET	78	73	74	73	76	64	61	56	57
NALTRF10-S2S	3	1400	2.90	13.00	INDUCT INLET	82	77	73	67	69	60	54	47	51
					INDUCT OUTLET	84	79	80	77	79	68	64	58	60
NALTRF11-S2S	3	1085	3.70	24.00	INDUCT INLET	78	73	69	70	64	59	61	55	50
					INDUCT OUTLET	82	77	76	77	73	66	66	61	57
NALTRF12-S2S	3	1040	5.40	29.00	INDUCT INLET	80	75	70	71	65	60	62	55	51
					INDUCT OUTLET	85	80	79	80	76	69	69	64	60
NALTRF13-S2S	3	1040	5.40	29.00	INDUCT INLET	86	81	81	76	76	74	71	68	60
					INDUCT OUTLET	94	89	84	78	87	83	80	77	69
NALTRF14-S2S	3	1040	10.00	60.00	INDUCT INLET	89	84	82	80	79	77	75	70	63
					INDUCT OUTLET	96	91	83	90	88	85	84	78	72
NALTRF15-S2S	3	1260	6.90	38.00	INDUCT INLET	89	84	83	79	80	77	74	69	63
					INDUCT OUTLET	93	88	81	88	85	83	79	76	69
NALTRF16-S2S	3	1260	12.00	75.00	INDUCT INLET	90	85	83	81	81	78	76	71	65
					INDUCT OUTLET	94	89	82	89	86	83	82	78	70
NALTRF17-S2S	3	1440	12.00	75.00	INDUCT INLET	91	86	84	82	81	79	77	73	65
					INDUCT OUTLET	92	87	84	88	87	81	80	76	70
NALTRF18-S2S	3	700	12.00	75.00	INDUCT INLET	91	86	84	84	73	70	63	63	62
					INDUCT OUTLET	94	89	84	92	79	76	68	69	69
NALTRF19-S2S	3	800	10.00	60.00	INDUCT INLET	91	86	84	84	73	70	63	63	62
					INDUCT OUTLET	94	89	84	92	79	76	68	69	69
NALTRF20-S2S	3	800	23.00	154.00	INDUCT INLET	96	91	89	89	78	75	68	68	67
					INDUCT OUTLET	97	92	88	95	83	79	72	73	72
NALTRF21-S2S	3	1000	12.00	75.00	INDUCT INLET	95	90	87	87	76	75	68	69	65
					INDUCT OUTLET	96	91	86	94	81	79	71	73	71
NALTRF22-S2S	3	1000	23.00	154.00	INDUCT INLET	98	93	91	91	80	77	70	70	69
					INDUCT OUTLET	100	95	90	97	85	82	74	75	74
NALTRF23-S2S	3	1100	23.00	154.00	INDUCT INLET	97	92	90	90	79	76	69	69	68
					INDUCT OUTLET	100	95	90	98	85	82	74	75	75
NALTRF24-S2S	3	1200	23.00	154.00	INDUCT INLET	98	93	90	90	79	78	71	72	68
					INDUCT OUTLET	99	94	89	83	84	82	74	76	68

SINGLE AND TWIN FANS - OPUS DC- (ES-OPUSDC)

A compact in-duct fan offering high performance with low noise. Ideally suited to ceiling voids, the ES-OPUS DC is ideal for simple commissioning for a guaranteed ventilation solution.

KEY BENEFITS:

- **VERY QUIET OPERATION -** UNITS OFFER HIGH PERFORMANCE WITH LOW NOISE LEVELS
- **GUARANTEED VENTILATION -** TWIN FANS ALLOW FOR AUTOMATIC CHANGEOVER TO STANDBY FAN IN EVENT OF FAN FAILURE
- **QUICK AND EASY TO INSTALL -** QUICK RELEASE BRACKET WITH NO NEED FOR ADDITIONAL FIXINGS
- **SIMPLE TO COMMISSION -** INTEGRAL CONTROL FACILITY ENABLES THE DUTY TO BE PRECISELY SET WITHOUT THE NEED FOR ADDITIONAL CONTROLS
- **LOW MAINTENANCE COSTS -** EASY CLEAN FOAM FILTERS PROTECT MOTOR AND FAN ASSEMBLY, REDUCING MAINTENANCE COSTS AND EXTENDING FAN LIFE. FOAM FILTERS FITTED AS STANDARD
- **SIMPLE CONTROLS -** A CHOICE OF 'ON-BOARD' AND 'REMOTE' CONTROL OPTIONS ARE AVAILABLE, INCLUDING ECOSMART ENERGY EFFICIENT CONTROLS

50Hz

CONSULTANT SPECIFICATION

CASING

100% recyclable plastic case, acoustically lined to ensure a very quiet solution.

MOTOR

Low energy, high efficiency DC fan/motor assembly with sealed for life bearings.

CERTIFICATION AND OPERATING TEMPERATURE

The fan is CE Low Voltage Directive 2014/35/EU.

IMPELLER

Forward curved centrifugal impeller.

INSTALLATION

The unit incorporates a quick release mounting bracket. The bracket enables the unit to be mounted horizontally or vertically, enabling the unit to be removed without the aid of specialist tools. The depth of the unit is not greater than 190mm (including mounting bracket).

Three number 100 diameter circular spigots on the system side of the unit are available to allow the ventilation of a number of rooms or points from a single unit. Two of the spigots have blanks fitted which are easily removed to facilitate the interconnection of ductwork.

PERFORMANCE

Duty range up to 115l/s.

ANCILLARIES

- Remote Fail Indicator
- Remote Fail Indicator for Ecosmart model only
- External Humidistat
- External Humidistat for Ecosmart model only
- Vandal proof cover
- Backdraught shutter in white

APPLICATIONS

TYPICAL APPLICATIONS

- Hospitals
- Offices
- Student accommodation
- Hotels
- Commercial kitchens
- Schools
- Apartments & flats

OPUS DC

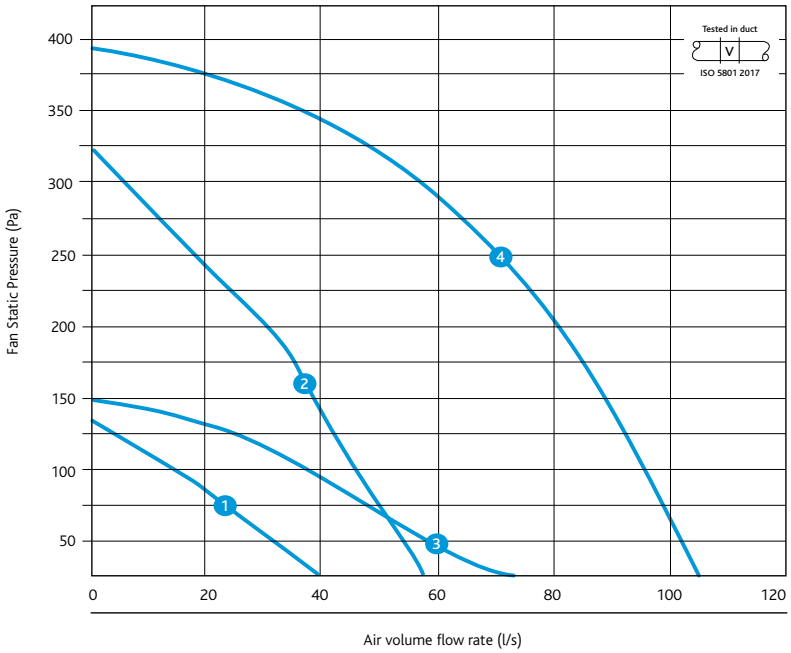
CODING ESOPUSDC402M

ES - OPUSDC 40 - 2 M
1 2 3 4 5 6

SAMPLE CODING

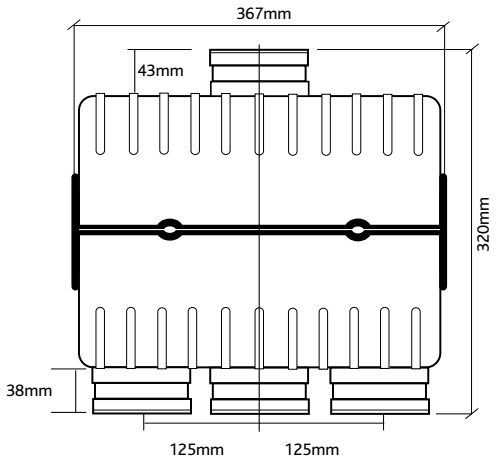
1. Ecosmart control
2. Opus range
3. DC=direct current, low watt
4. 40 = unit size
5. 2 = Twin model (See note*)
   No reference = Single fan
6. M = Duct mounted

ES-OPUSDC Single and Twinfan Units

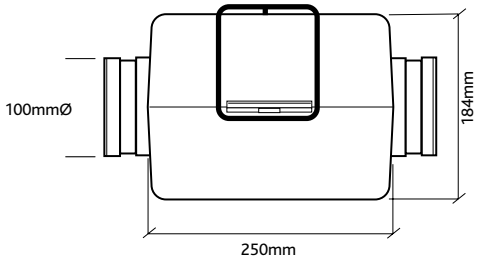


*Note: Unit sizes 75 and 110 have 2 fans running simultaneously as standard. In the event of failure the remaining fans performance will be reduced to approximately 2/3rds. Fully Ecosmart compatible with low voltage plug in control.

View from the top



View from the side



All spigots 100mm dia.
Unit weight = 3kg

DIMENSIONS (MM) AND WEIGHT (KG)

MODEL	A	B	C	D	E	WEIGHT
ES-OPUSDC40-M	367	320	250	184	100	3
ES-OPUSDC40-2M	367	320	250	184	100	3
ES-OPUSDC60-M	367	320	250	184	100	3
ES-OPUSDC60-2M	367	320	250	184	100	3
ES-OPUSDC75-M	367	320	250	184	100	3
ES-OPUSDC110-M	367	320	250	184	100	3

TECHNICAL SPECIFICATIONS

			MOTOR CURRENTS	SOUND POWER LEVELS RE 1 PWATT (Hz) INDUCT INLET								
CURVE	CODE	PHASE	FLC	63	125	250	500	1K	2K	4K	8K	dB(A) @3M
1	ES-OPUSDC40-M	1	0.14	68	65	52	45	41	36	24	25	26
1	ES-OPUSDC40-2M	1	0.14	68	65	52	45	41	36	24	25	26
2	ES-OPUSDC60-M	1	0.32	74	72	58	53	50	45	33	30	31
2	ES-OPUSDC60-2M	1	0.32	74	72	58	53	50	45	33	30	31
3	ES-OPUSDC75-M	1	0.30	72	68	55	49	48	38	27	27	28
4	ES-OPUSDC110-M	1	0.46	76	76	68	61	54	49	40	37	34

CAR PARK VENTILATION HOW IT WORKS

With jet fans available in both axial and centrifugal versions, Nuaire's car park ventilation system has a number of benefits. Not only does the low depth unit save space and money by eliminating the need for complicated and expensive ductwork, but it is also extremely energy efficient as it monitors the air quality and operates the system at its optimum level, reducing the running costs by up to 40%. Also, fewer fans are required as they distribute the air over such a large area.

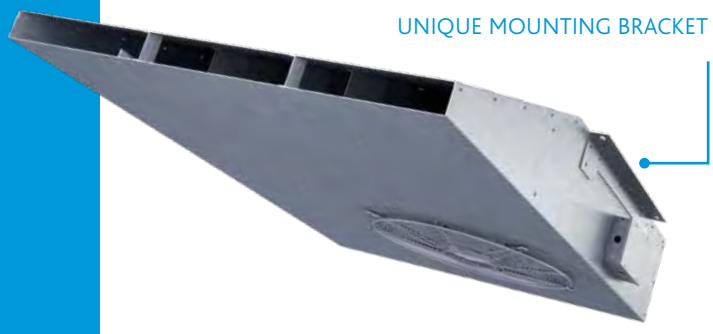
One of the biggest hazards in the event of a fire is that of smoke inhalation. Nuaire smoke rated control systems provide a flexible directional flow to respond to any fire location, containing, channelling and removing the smoke to facilitate safe evacuation and more effective fire fighting access.

Units have a unique mounting bracket to allow for quick and easy installation in two simple stages and inlet and outlet silencers that ensure low noise levels. Most importantly, all equipment is safety tested to EN12101-3 at both 300°/400°C for 2 hours.

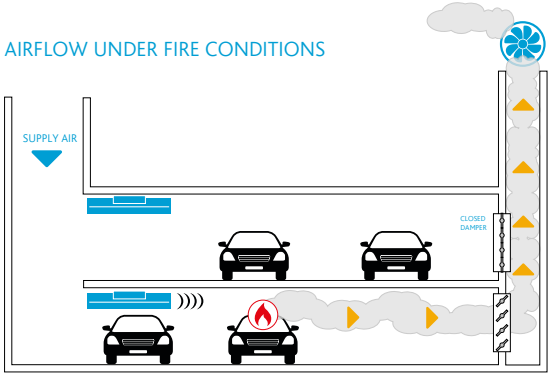
The car park jet fan system is used to control and remove contaminants on a day to day basis, whilst ensuring that smoke is removed quickly and efficiently in the event of a fire. The system utilises a number of strategically positioned jet fans, mounted on the ceiling, that direct the fumes and smoke towards a designated point of exhaust.

This in effect creates a virtual smoke barrier ensuring quick and effective clearance whilst keeping the rest of the car park smoke free. This removes the need for complicated ductwork systems and optimises space.

UNIQUE MOUNTING BRACKET

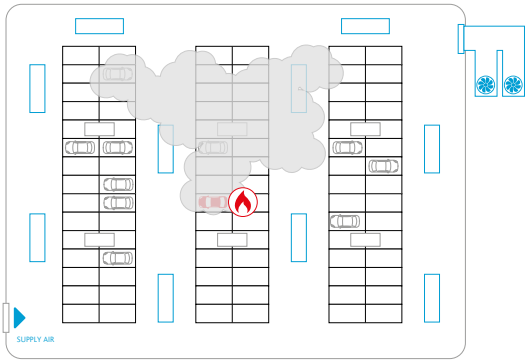


AIRFLOW UNDER FIRE CONDITIONS



EXAMPLE OF JET FAN SYSTEM

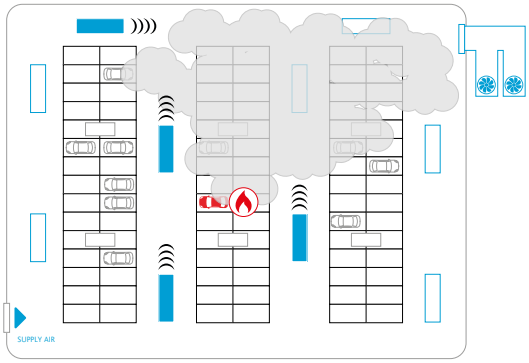
1



STAGE 1

In day-to-day operation the system runs in low speed ensuring carbon monoxide and other contaminants are within acceptable limits. Control is via strategically placed detectors. If a fires starts in one of the vehicles, and smoke spreads, the system starts.

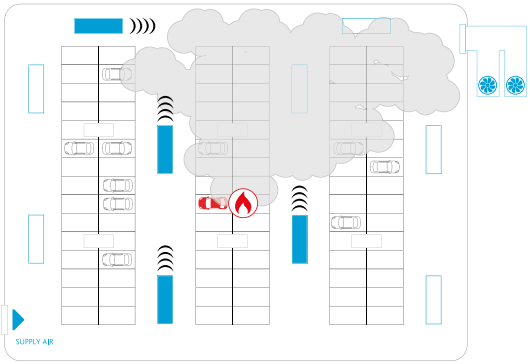
2



STAGE 2

The smoke detection system will identify the situation, activate the fire alarm system and then switch to smoke mode.

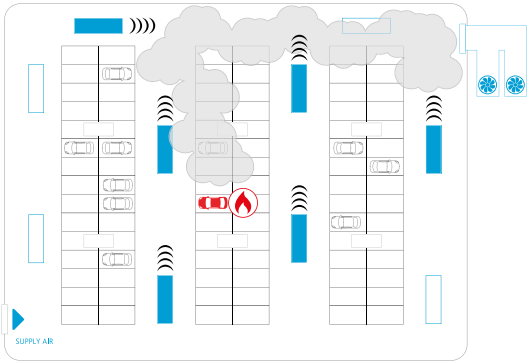
3



STAGE 3

Smoke detectors throughout the car park identify the units which are located at the affected fire zone and increase their fan speed to maximum.

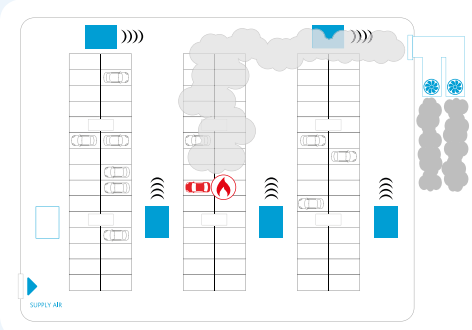
4



STAGE 4

The smoke is contained and directed towards the main exhaust unit, where it can be safely extracted into the atmosphere. This minimises the spread of smoke within the car park, keeping large areas clear and enabling the area to be quickly and safely evacuated.

WHY CHOOSE INDUCTION OVER IMPULSE?



INSTALLED COSTS

Reduced number of units, resulting in a reduced project installed cost.

BACKWARD CURVED IMPELLER

Suitable for high thrust and low noise applications.

LOW PROFILE

Ideal for reduced height area and can prove more suitable than a jet fan and ducted installations.

SUITABLE FOR HIGH CEILINGS

Draws the air upwards, providing a more effective method of extracting the smoke than a jet or axial installation.

THRUST

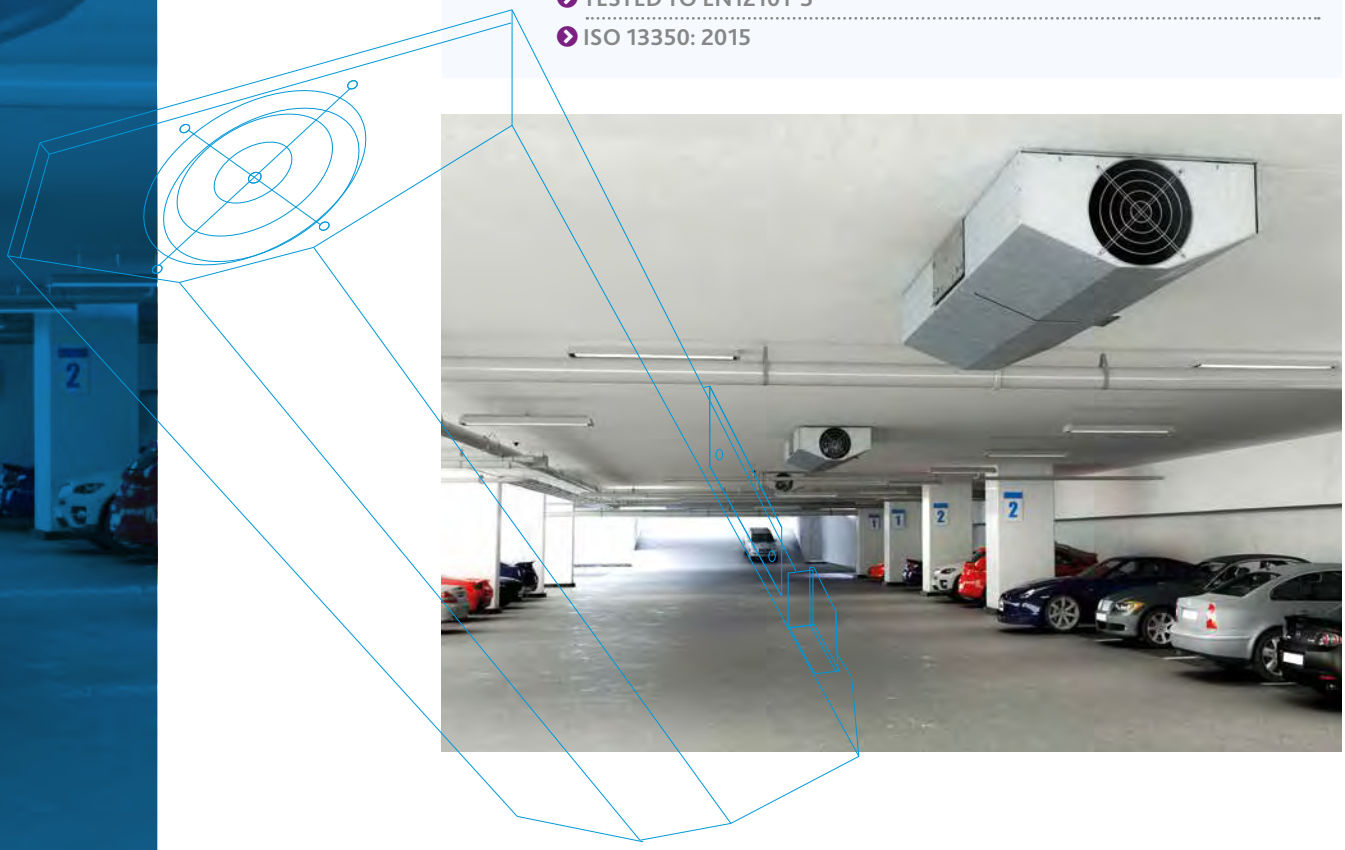
The induction range will provide a greater range of area (m^2) coverage which can result in a lower number of units required to service the car park.

CAR PARK IMPULSE SYSTEM SVT2 & SVT28

Car park ventilation systems are used to control and remove pollutants such as carbon monoxide on a day to day basis, whilst ensuring in an emergency situation smoke is removed quickly and efficiently to aid in the safe evacuation of occupants.

KEY BENEFITS:

- **LOW DEPTH**
- **COST SAVING -** REDUCED DUCTWORK
- **REDUCED INSTALLATION TIME -** 2 STAGE 'QUICK' INSTALLATION
- **ACOUSTICALLY LINED**
- **ALUZINC -** HIGHLY ANTI-CORROSIVE PROPERTIES
- **LOWEST NOISE LEVELS -** FITTED WITH INLET AND OUTLET SILENCERS
- **AVAILABLE IN A FULLY REVERSIBLE OPTION**
- **TESTED TO EN12101-3**
- **ISO 13350: 2015**



UK MADE

25N THRUST | 50N THRUST | 50Hz | 300°C/ 400°C

CONSULTANTS SPECIFICATION

CASING

The complete units, including attenuation, are of flush design to ensure no dust/debris build up. The case is made from Aluzinc (additional finishes are available) and is acoustically lined.

MOTOR

Motors are totally enclosed and protected to IP55 with Class H insultation. Motors are available in two speed or single speed (with VSD operation).

CERTIFICATION AND OPERATING TEMPERATURE

Complete units are tested to BS EN12101-3 for both 300°C/2 and 400°C/2.

IMPELLER

Available in either aluminium or steel aerofoil blades to optimise both air performance and sound to suit the project requirements.

INSTALLATION

The units are designed for flush mounting ceiling installation using our unique mounting bracket that allows for quick two stage site fitting. Units are low profile: 25N units are 325mm and 50N are 407mm deep.

PERFORMANCE

The units are available in 2 thrust output options:

- 50/12N
- 25/5N
- Larger bespoke units are available - contact Nuaire for details.

AIRFLOW

Inlet guards are fitted for safety purposes and to prevent debris from entering the fan. The unit is fitted with a specifically designed airflow deflector to direct the jet stream from the fan at the required angle sufficient to overcome the natural buoyancy effect of the smoke. Reversible options are available.

SYSTEM DESIGN

Nuaire's acoustically treated Impulse fans SVT2 & SVT28 are typically used as part of a car park ventilation system to control and remove pollutants, such as carbon monoxide and in case of a fire scenario. An Impulse system is cost saving due to a reduced need for ductwork. The impulse fans are strategically distributed throughout the car park in accordance with our specialist design.

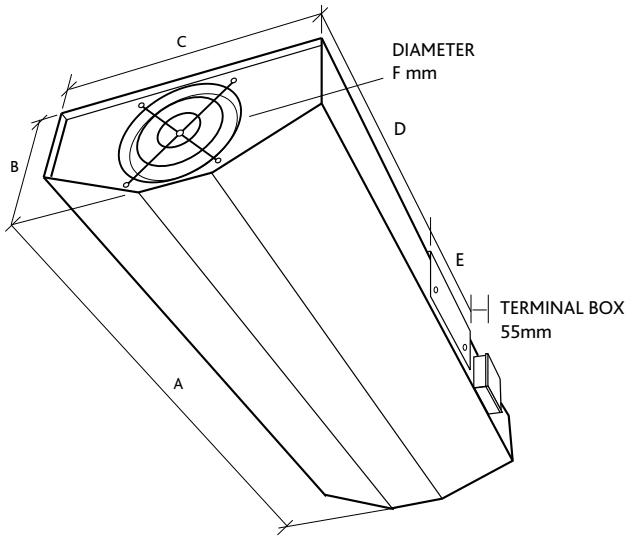
ANCILLARIES

- Thermistors
- Pre-wired isolators
- Isolators
- Anti-condensation motor heaters

APPLICATIONS

Certified for use with sprinkler systems, contact Nuaire for additional information.

CAR PARK IMPULSE SYSTEM SVT2 & SVT28



CODING SVT28-1E

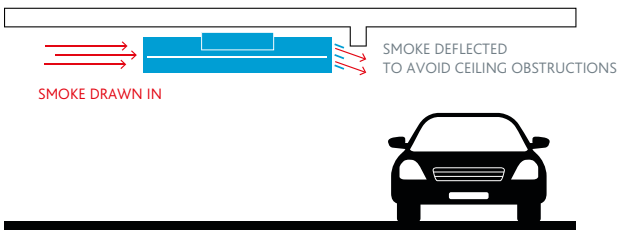
SVT2	8	-	1	E
1	2		3	4

SVT28-1 (AE) (GJ)

1. SVT2 - Axus impulse axial range
2. No prefix - 300°C 8 - 400°C
3. Case size/performance range
4. Impeller angle (A-E)

DIMENSIONS (MM) AND WEIGHT

MODEL	A	B	C	D	E	F	WEIGHT
SVT2-1 (A-E)	2300	325	702	825	600	306	94Kg
SVT2-2 (A-E)	2300	407	702	825	600	350	113Kg



300°C

TECHNICAL AND PERFORMANCE DATA

	50Hz	
FAN REFERENCE	**SVT2-1E**	**SVT2-2E**
Thrust Newtons: Full/Half Speed	25/5	50/12
Airflow m^3/s: Full/Half Speed	1.1/0.5	1.8/0.9
Motor Kw: Half/Full Speed	1.1/0.23	1.1/0.23
Protection Class	IP55	IP55
Insulation	H	H
Electrical Supply	400/3/50	400/3/50
Motor FLC amps: Full/Half Speed	2.7/0.83A	2.7/0.83A
Motor SC amps: DOL Full/Half Speed	14.5/2.9	14.5/2.9
Speed RPM: Full/Half Speed	2775/1370	2775/1370
Sound dBA @1m: Full/Half Speed	67/52	67/54
Material Finish*	Aluzinc	Aluzinc

400°C

TECHNICAL AND PERFORMANCE DATA

	50Hz	
FAN REFERENCE	**SVT28-1E**	**SVT28-2E**
Thrust Newtons: Full/Half Speed	25/5	50/12
Airflow m^3/s: Full/Half Speed	1.1/0.5	1.8/0.9
Motor Kw: Half/Full Speed	1.1/0.23	1.1/0.23
Protection Class	IP55	IP55
Insulation	H	H
Electrical Supply	400/3/50	400/3/50
Motor FLC amps: Full/Half Speed	2.7/0.83A	2.7/0.83A
Motor SC amps: DOL Full/Half Speed	14.5/2.9	14.5/2.9
Speed RPM: Full/Half Speed	2775/1370	2775/1370
Sound dBA @1m: Full/Half Speed	67/52	67/54
Material Finish*	Aluzinc	Aluzinc

*Other finishes are available upon request

CAR PARK INDUCTION FANS SVTC & SVTC8

Car park ventilation induction fan systems are used to control and remove pollutants such as carbon monoxide on a day to day basis, whilst ensuring in an emergency situation smoke is removed quickly and efficiently to aid in the safe evacuation of individuals.

Nuaire offer **50N** and **95N** thrust both in **50/60Hz** models.

KEY BENEFITS:

- LOW DEPTH
- COST SAVING - ELIMINATES NEED FOR DUCTWORK
- TESTED TO EN12101-3
- LARGE COVERAGE MEANS FEWER FANS
- ISO 13350:2015

UK MADE

50N THRUST | 95N THRUST | 50Hz | 300°C/ 400°C

CONSULTANTS SPECIFICATION

CASING

The complete units are of flush design to ensure no dust/debris build up, and suits most applications with a low profile. The case is made from galvanised steel (additional finishes are available).

MOTOR

Motors are totally enclosed and protected to IP55 with Class H insulation. Motors are available as either 2 speed or for inverter speed control, to work on a day to day basis and once off in an emergency situation.

CERTIFICATION AND OPERATING TEMPERATURE

Complete units are tests to BS EN12101-3.
- F300°C/2
- F400°C/2

IMPELLER

The impeller is a high efficiency backward curved centrifugal type manufactured from galvanised steel.

INSTALLATION

The units are designed for flush mounting ceiling installation and may only be fitted at the side brackets with certified anchoring bolts. Units are low profile to suit the majority of car park design constraints.
- SVTC-50- 227mm
- SVTC-100- 282mm

PERFORMANCE

The units are available in 4 thrust options:
- 95N
- 95/24N
- 50N
- 50/12N

AIRFLOW

Inlet guards are fitted for safety purposes and to prevent debris from entering the fan. The unit is fitted with a specifically designed airflow deflector to direct the jet stream from the fan at the required angle sufficient to overcome the natural buoyancy effect of the smoke.

SYSTEM DESIGN

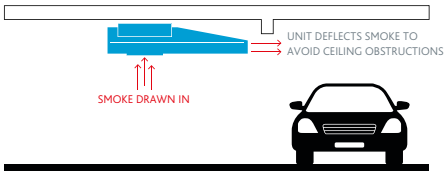
Nuaire's induction fans SVTC & SVTC8 are typically used as part of a car park ventilation system to control and remove pollutants such as carbon monoxide and in case of a fire emergency. An induction system saves costs due to the elimination of ductwork. The induction fans are strategically distributed throughout the car park in accordance with Nuaire's specialist design.

ANCILLARIES

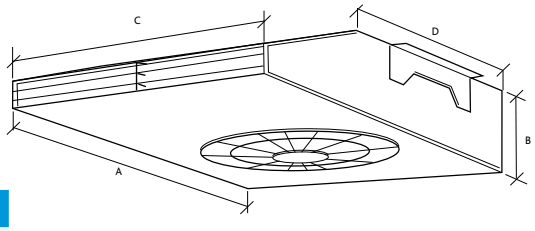
- Thermistors
- Pre-wired isolators
- Isolators
- Anti-condensation motor heaters

APPLICATIONS

Certified for use with sprinkler systems, contact Nuaire for additional information.



CAR PARK INDUCTION FANS SVTC & SVTC8



DIMENSIONS (MM) AND WEIGHT (KG)

MODEL	A	B	C	D	WEIGHT
SVTC-50	1265	230	790	710	100
SVTC-100	1900	282	1150	1150	195

CODING SVTC8-50T8

SVT	C8	-	50	T8
1	2		3	4

SVTC8-50T8G

1. SVTC - Axus induction range
2. 8 - 400°C/2, no suffix - 300°C/2
3. 50 - Case size/performance range
4. T8 - Two speed 4/8 pole

400°C/2 - 50N

TECHNICAL AND PERFORMANCE DATA

	50Hz	
FAN REFERENCE	SVTC8-50	SVTC8-50T8
Thrust Newtons: Full/Half Speed	50	50/12
Airflow m^3/s: Full/Half Speed	1.7	1.7/0.85
Motor Kw: Full/Half Speed	1.1	1.2/0.3
Protection Class	IP55	IP55
Insulation	H	H
Electrical Supply	400/3/50	400/3/50
Motor FLC amps: Full/Half Speed	2.92	3.21/1.37
Motor SC amps: DOL Full/Half Speed	16.35	16/4.11
Speed RPM: Half/Full Speed	1435	1430/705
Sound dBA @1m: Full/Half Speed	81	81/68
Material Finish*	Galv Steel	Galv Steel

400°C/2 - 95N

TECHNICAL AND PERFORMANCE DATA

	50Hz	
FAN REFERENCE	SVTC8-100	SVTC8-100T8
Thrust Newtons: Full/Half Speed	95	95/24
Airflow m^3/s: Full/Half Speed	2.69	2.69/1.83
Motor Kw: Full/Half Speed	2.2	2.2/0.55
Protection Class	IP55	IP55
Insulation	H	H
Electrical Supply	400/3/50	400/3/50
Motor FLC amps: Full/Half Speed	5.8	6.03/2.26
Motor SC amps: DOL Full/Half Speed	30.16	30.2/7.23
Speed RPM: Half/Full Speed	1435	1435/715
Sound dBA @1m: Full/Half Speed	82	82/68
Material Finish*	Galv Steel	Galv Steel

*Other finishes available upon request

300°C/2 - 50N

TECHNICAL AND PERFORMANCE DATA

	50Hz	
FAN REFERENCE	**SVTC-50**	**SVTC-50T8**
Thrust Newtons: Full/Half Speed	50	50/12
Airflow m^3/s: Full/Half Speed	1.7	1.7/0.85
Motor Kw: Full/Half Speed	1.1	1.2/0.3
Protection Class	IP55	IP55
Insulation	H	H
Electrical Supply	400/3/50	400/3/50
Motor FLC amps: Full/Half Speed	2.92	3.21/1.37
Motor SC amps: DOL Full/Half Speed	16.35	16/4.11
Speed RPM: Half/Full Speed	1435	1430/705
Sound dBA @1m: Full/Half Speed	84	84/68
Material Finish*	Galv Steel	Galv Steel

300°C/2 - 95N

TECHNICAL AND PERFORMANCE DATA

	50Hz	
FAN REFERENCE	**SVTC-100**	**SVTC-100T8**
Thrust Newtons: Full/Half Speed	95	95/24
Airflow m^3/s: Full/Half Speed	2.69	2.69/1.83
Motor Kw: Full/Half Speed	2.2	2.2/0.55
Protection Class	IP55	IP55
Insulation	H	H
Electrical Supply	400/3/50	400/3/50
Motor FLC amps: Full/Half Speed	5.8	6.03/2.26
Motor SC amps: DOL Full/Half Speed	30.16	30.2/7.23
Speed RPM: Half/Full Speed	1435	1435/715
Sound dBA @1m: Full/Half Speed	85	85/68
Material Finish*	Galv Steel	Galv Steel

*Other finishes available upon request

IMPULSE FAN CONFIGURATION

This range is composed of our high temperature Axial fans in a Impulse Fan Configuration (IFC).

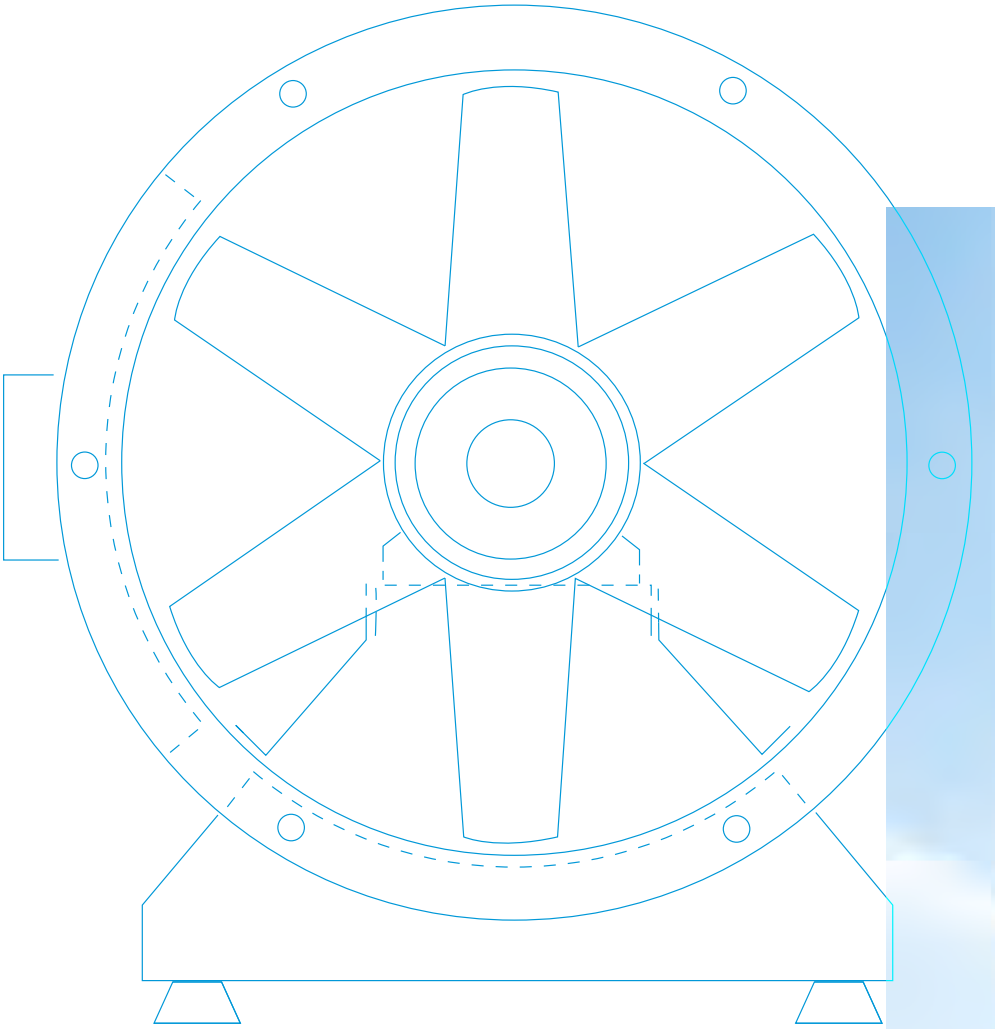
The key benefits of this range are the virtually limitless choice of thrust values available, as well as many other configurable options to suit each project.

Nuaire's axial fan configurator software includes a thrust calculator that enables selection of impulse fans from 10N up to 1300N thrust, and everything in between. Fans can alternatively be selected to achieve a specific airflow.

There is a large variety of parameters available enabling the customer to fix diameter/kW and add paint finish or a higher efficiency motor. Fans are available with smoke rating F300 or F400.

Ancillaries, such as silencers and guards, are included to mimic an impulse fan (site assembly required).

The IFC range is typically used to meet thrust parameters, that are not available within our standard jet fan range. Contact Nuaire for additional details.



NUAIRE. FOR THE COMPLETE VENTILATION SOLUTION

T +44(0)29 2085 8484 E INTERNATIONAL@NUAIRE.CO.UK W NUAIREGROUP.COM @NUAIREGROUP

August 2018.

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