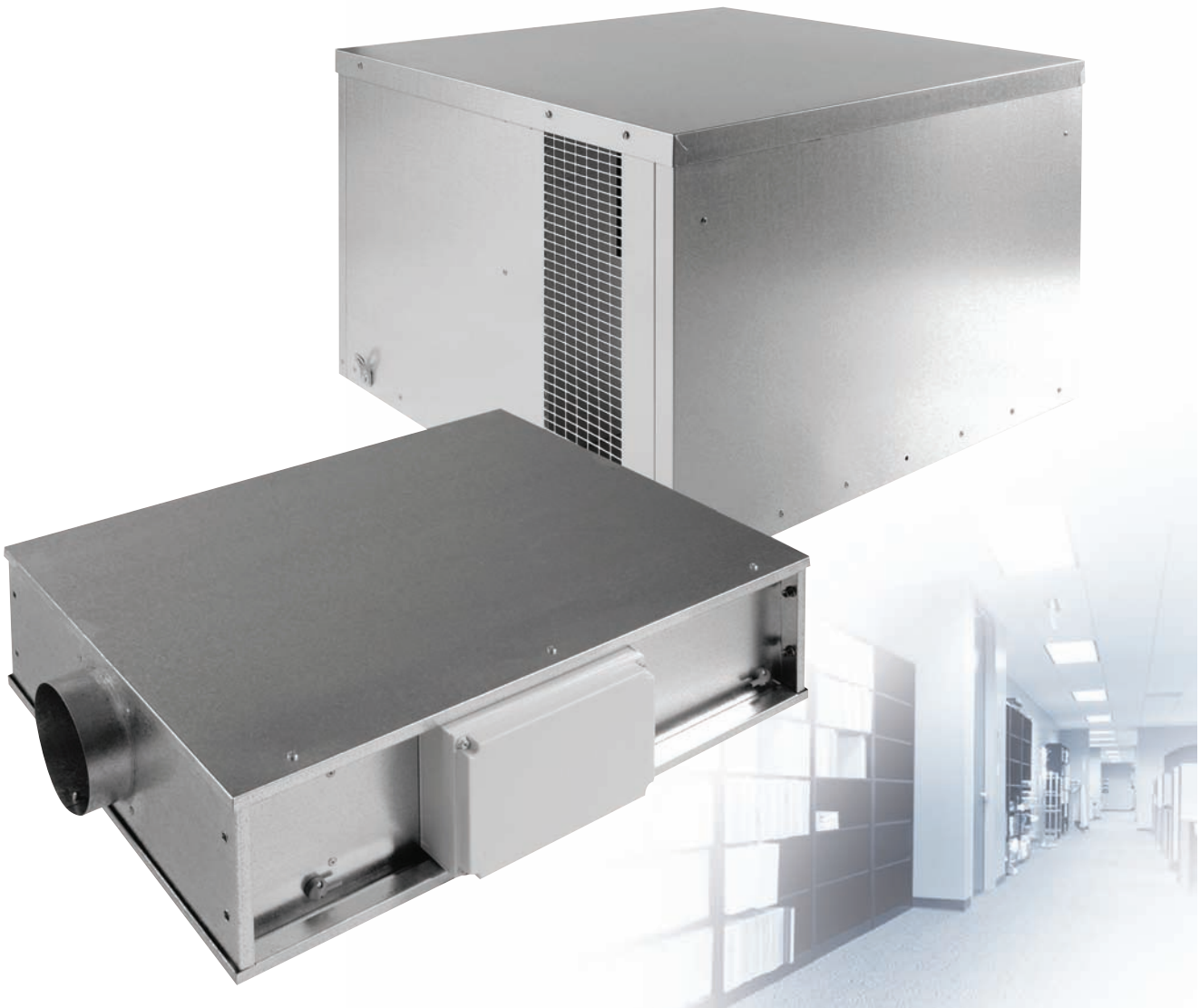
XTRACTOR SINGLE FANS

THE QUIETEST NOISE TO DUTY RATIO UNIT AVAILABLE.



ecosmart
OPTIONS AVAILABLE

BENEFITS

QUIETEST INSTALLATION
The high rigidity, double skinned construction produces the quietest noise to duty ratio unit in the industry, ensuring that your system requirements are easily met.

LOW DEPTH 350MM (INTERNAL ONLY)
For applications where the space is at a premium, the ESXL version at only 350mm deep provides the perfect fit.

PART L EFFICIENT
The fan impeller and motor are high efficiency IE2 motors to EN60034-30 with high efficiency forward or backward curved centrifugal impellers provide the most efficient solution. (Available on larger sizes, 11 and above).

FLEXIBLE SOLUTION
Ideal for either internal or external applications. (See below for specific code).

EASE OF ACCESS
Access panels provide quick and easy access for quick and easy maintenance – limiting maintenance costs.

SAFETY TESTED
Motors are pre-wired to external IP55 rated terminal box for ease of installation.

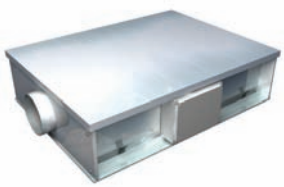
'PERFECT MATCH' ATTENUATORS
Wide range of attenuators available to assist in meeting design criteria. Contact Nuaire for details.

ECOSMART COMPATIBILITY
Units can be supplied with Ecosmart controls, providing a simple to install, easy to commission, energy efficient solution. Also facilitates the interconnection of a supply AHU.

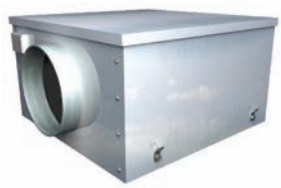
BMS & COMMISSIONING OPTION
Unit can be provided with integrated speed controls for commissioning purposes. This can be upgraded to a BMS option which gives these features plus BMS interfaces. Ecosmart has these features as standard.

WARRANTY
Ecosmart Xtractor has a 5 year warranty.

EXTRACTOR UNITS



ESX internal in-line fans.

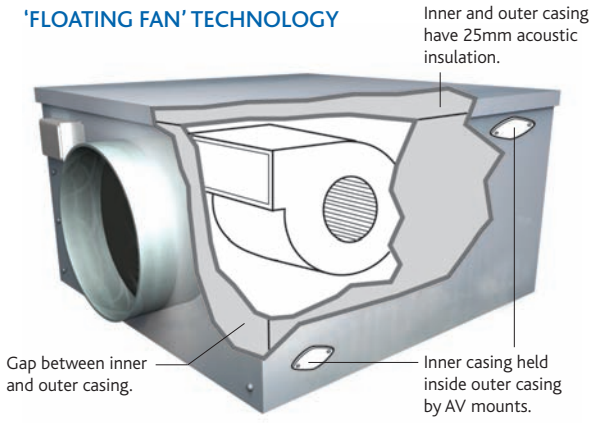


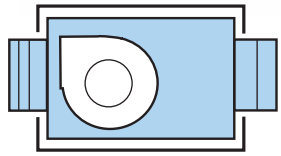
ESX-X External in-line fans.

ESX-R Roof mounted fan with end inlet and side discharge.

ESX-B Roof mounted fan with bottom inlet and side discharge.

'FLOATING FAN' TECHNOLOGY

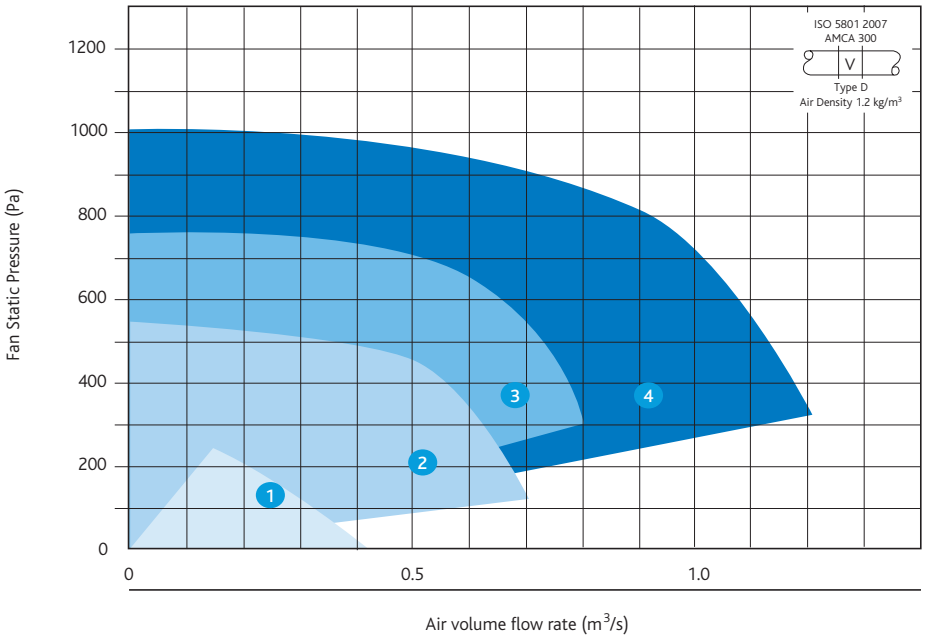




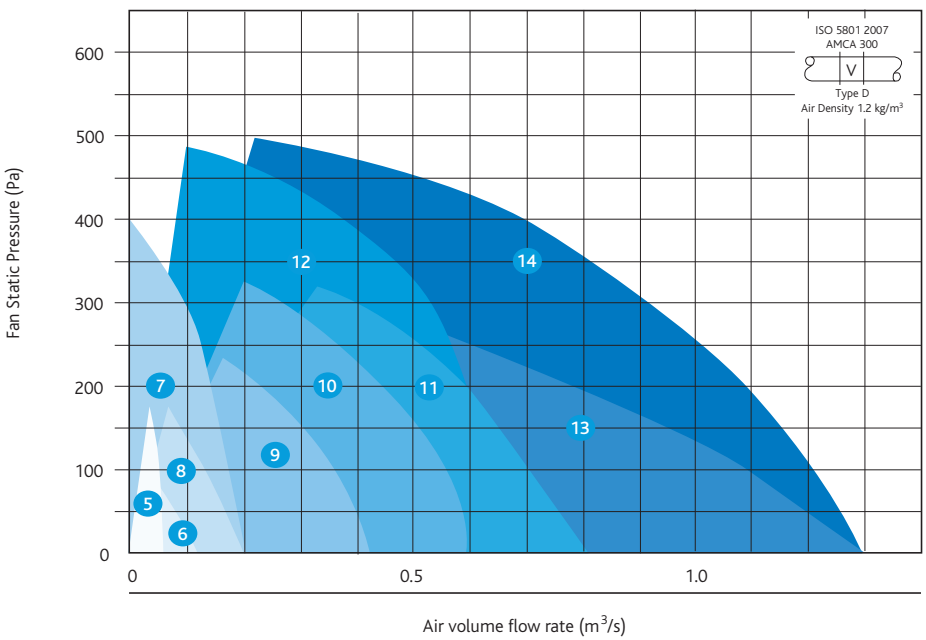
This is why the ESX is so quiet - Floating fan double skinned with direct coupled attenuators - patented by Nuaire.

PERFORMANCE - INTERNALLY MOUNTED XTRACTOR UNITS

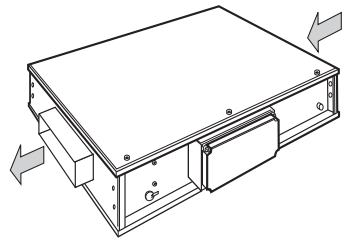
Xtractor Internally Mounted Fan Units 1-4



Xtractor Internally Mounted Fan Units 5-14



Casing



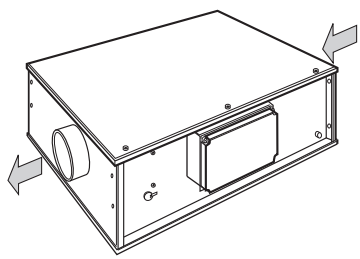
ESXL internal in-line fans

Code descriptions

ESX L1- ES B C

1 2 3 4 5 6

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 pre-programmed with a soft start function.



ESX internal in-line fans

INTERNALLY MOUNTED XTRACTOR UNITS

ELECTRICAL & SOUND UNITS 1 - 14

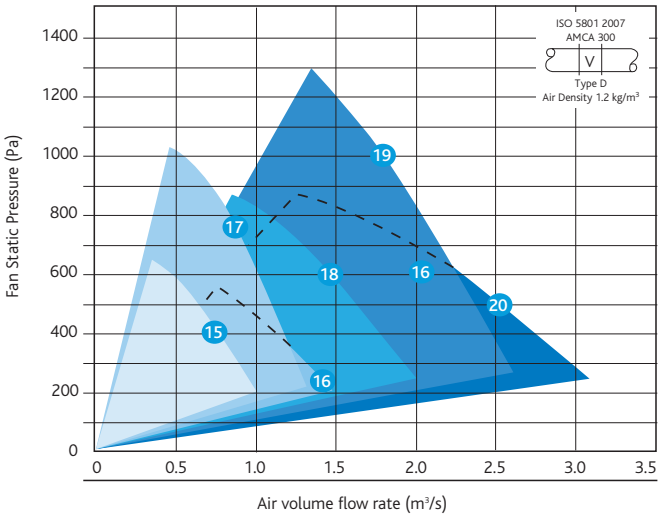
								Induct Sound Power Level dB re 1pW							
				Input power	FLC	SC	Inlet	Frequency (Hz)							Breakout
Curve	Unit	Phase	RPM	Watts	A	A	/Outlet	125	250	500	1K	2K	4K	8K	dBA@ 3m
1	ESXL1	1	1140	410	1.6	1.6	I	61	61	45	37	31	30	24	30
							O	67	62	54	53	49	45	38	
2	ESXL2-DS	1	1250	1250	6	6	I	73	68	68	66	61	59	54	34
							O	79	87	88	87	76	74	69	
3	ESXL3-DS	1	1160	1750	7.9	7.9	I	77	72	72	70	65	63	58	36
							O	83	91	92	91	80	78	73	
4	ESXL4-DS	3	1310	3000	5	5	I	80	75	75	73	68	66	61	38
							O	86	94	95	94	83	81	76	
5	ESX1-DS	1	2040	86	0.65	0.65	I	66	52	47	44	28	21	17	20
							O	66	61	53	56	40	32	25	
6	ESX2-DS	1	1320	104	0.56	0.56	I	76	51	50	38	30	24	22	22
							O	69	56	50	48	48	40	33	
7	ESX2H-DS	1	1700	191	0.8	0.8	I	70	64	58	48	44	44	36	23
							O	73	66	65	60	59	59	54	
8	ESX3-DS	1	1260	230	1.6	1.6	I	78	56	55	44	38	36	33	25
							O	81	76	64	59	58	55	49	
9	ESX4-DS	1	1140	370	1.6	1.6	I	68	62	56	50	44	42	38	24
							O	75	67	62	62	59	57	54	
10	ESX5-DS	1	1110	660	2.95	2.95	I	71	67	59	60	56	51	46	26
							O	76	74	73	73	71	67	62	
11	ESX6-DS	1	1272	1110	4.84	4.84	I	80	74	66	65	64	61	56	33
							O	86	80	77	78	79	78	72	
12	ESX6H-DS	1	1480	1230	7.6	7.6	I	83	77	69	68	67	64	59	34
							O	89	83	80	81	82	81	75	
13	ESX9-DS	1	960	1600	7.3	7.3	I	84	75	69	66	65	59	52	36
							O	86	77	78	75	73	70	65	
14	ESX9H-DS	1	1065	1600	9.4	9.4	I	88	79	73	70	69	63	56	39
							O	90	81	82	79	77	74	69	

Please note that the units are pre-programmed with a soft start function - therefore the starting current is identical to the FLC.
The electrical and sound information in the table is nominal.
* Motor electrical supply, 1=1 phase (230V, 50Hz) (3=3phase (400V, 50Hz).

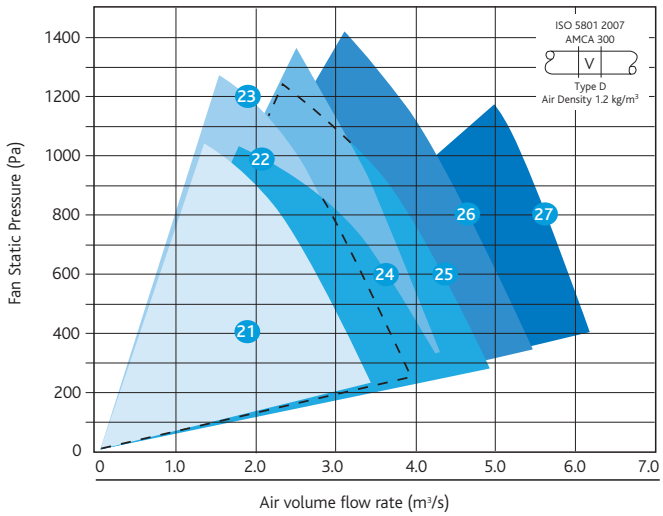
Note: DS = Double skin casework. For specification see page 166.

PERFORMANCE - INTERNALLY MOUNTED XTRACTOR UNITS CONT.

Xtractor Internally Mounted Fan Units 15-20



Xtractor Internallly Mounted Fan Units 21-27



INTERNALLY MOUNTED XTRACTOR UNITS

ELECTRICAL & SOUND UNITS 15 - 27

Curve	Unit	Phase	RPM	kW	FLC (A)	SC (A)	Inlet /Outlet	Induct Sound Power Level dB re 1pW (+ correction for outlet) Frequency (Hz) 125	250	500	1K	2K	4K	8K	Breakout dBA @3m
15	ESX15-DS	3	2415	0.55	1.6	1.6	I	79	76	81	77	74	67	61	36
							O	76	75	79	81	78	69	62	
16	ESX16-DS	3	1830	0.76	2.1	2.1	I	88	85	78	75	73	68	62	42
							O	88	83	79	80	76	69	63	
17	ESX17-DS	3	3080	1.1	2.5	2.5	I	87	77	84	78	78	73	66	40
							O	88	77	82	80	84	76	67	
18	ESX18-DS	3	2300	1.5	3.5	3.5	I	89	88	86	79	76	74	68	45
							O	93	90	86	82	81	76)	69	
19	ESX19-DS	3	2920	3.029	6.5	6.5	I	93	92	90	83	80	78	72	49
							O	97	94	90	86	85	80	73	
20	ESX20-DS	3	1800	2.249	5.0	5.0	I	79	85	79	78	75	69	65	41
							O	79	86	82	83	77	70	65	
21	ESX21-DS	3	1970	3	6.5	6.5	I	82	79	84	79	77	72	67	39
							O	83	81	84	83	82	74	68	
22	ESX22-DS	3	1760	4	8.5	8.5	I	82	83	84	80	76	72	66	41
							O	83	83	83	85	80	73	66	
23	ESX23-DS	3	2180	4	8.5	8.5	I	85	82	87	82	80	75	70	42
							O	86	84	87	86	85	77	71	
24	ESX24-DS	3	2430	5.5	11.0	11.0	I	87	84	89	84	82	77	72	44
							O	88	86	89	88	87	79	73	
25	ESX25-DS	3	1960	5.5	11.0	11.0	I	85	86	87	83	79	75	69	44
							O	86	86	86	88	83	76	69	
26	ESX26-DS	3	2180	7.5	15.5	15.5	I	87	88	89	85	81	77	71	46
							O	88	88	88	90	85	78	71	
27	ESX27-DS	3	2460	11	21.5	21.5	I	88	90	93	88	85	82	77	48
							O	93	93	91	91	91	84	78	

Please note that the units are pre-programmed with a soft start function - therefore the starting current is identical to the FLC.

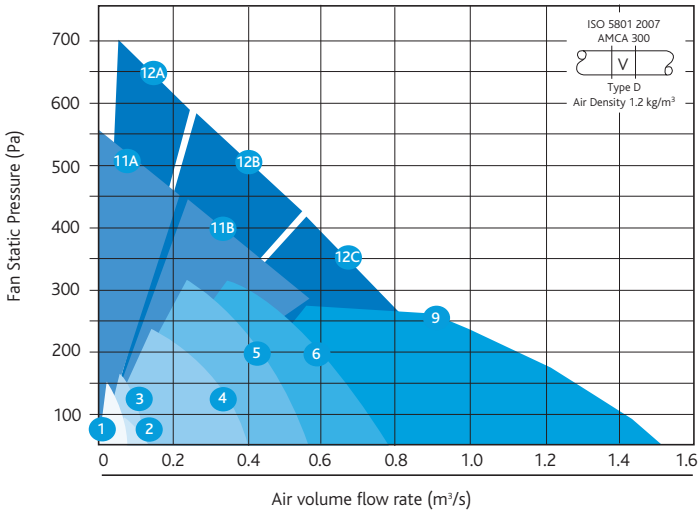
The electrical and sound information in the table is nominal. Breakout dBA@3m is spherical, free field.
Start currents (sc) are DOL other than for motors of 4 kW and above which is star delta applies to single phase motors only.

* Motor electrical supply, 1=1 phase (230V, 50Hz) (3=3phase (400V, 50Hz).

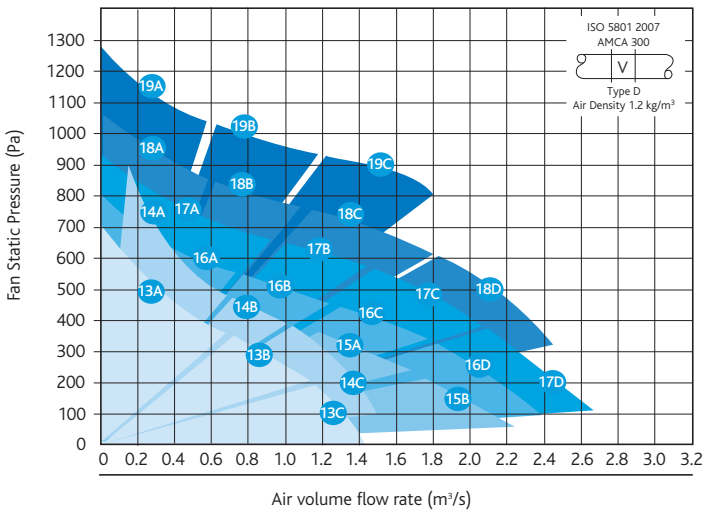
Note: DS = Double Skin Casework for specification see page 166.

PERFORMANCE - EXTERNALLY MOUNTED XTRACTOR UNITS

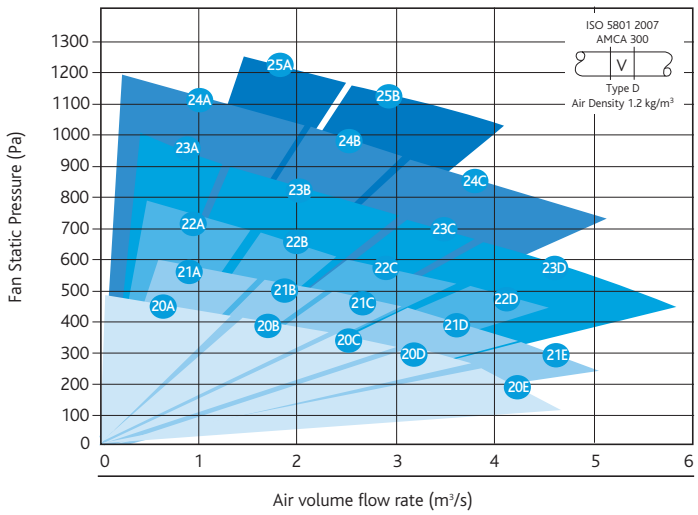
Xtractor Externally Mounted Fan Units 1-12



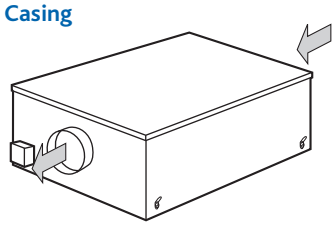
Xtractor Externally Mounted Fan Units 13-19



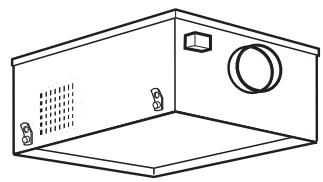
Xtractor Externally Mounted Fan Units 20-25



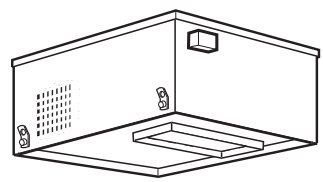
Casing



ESX-X External In-line Fans



ESX-R External Fans



ESX-B External Fans

Code descriptions

ESX1 - B ES B C

1 2 3 4 5 6

1. Single range
2. Sizes 1 to 25
3. Case type/spigot position
   X = External in-line 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 pre-programmed with a soft start function.

EXTERNALLY MOUNTED XTRACTOR UNITS - ESX-X

ELECTRICAL, SOUND & WEIGHT

Code/ Curve	Phase	RPM	Motor power (kW)	FLC (amps)	SC (amps)	Induct Sound Power level dB re 1pW (+ correction for outlet) Octave band mid frequency (Hz) 125	250	500	1K	2K	4K	8K	Breakout dBA@3m	Weight (Kg)
ESX1-X	1	2040	0.086	0.65	0.65	66(+8)	55(+3)	46(+0)	47(+6)	39(+13)	35(+11)	31(+8)	29	22
ESX2-X	1	1320	0.104	0.56	0.56	62(+11)	46(+4)	40(+9)	35(+15)	32(+17)	31(+13)	31(+5)	25	35
ESX3-X	1	1260	0.23	1.6	1.6	72(+2)	55(+6)	47(+7)	43(+14)	40(+14)	36(+15)	32(+13)	32	45
ESX4-X	1	1140	0.37	1.6	1.6	68(+8)	59(+6)	51(+10)	29(+17)	46(+15)	42(+16)	35(+18)	37	72
ESX5-X	1	1110	0.66	2.95	2.95	68(+8)	58(+10)	49(+14)	49(+19)	50(+18)	48(+17)	43(+17)	40	75
ESX6-X	1	1272	1.1	4.84	4.84	71(+5)	63(+4)	55(+12)	58(+13)	58(+13)	55(+13)	48(+12)	47	86
ESX9-X	1	960	1.6	7.3	7.3	82(0)	70(+6)	66(+6)	62(+12)	61(+6)	56(+9)	50(+10)	50	133
ESX11A-X	3	1225	0.37	1.3	1.3	73(+1)	67(+7)	62(+10)	63(+11)	55(+9)	49(+11)	45(+9)	46	77.5
ESX11B-X	3	1225	0.55	1.7	1.7	74(+2)	68(+7)	64(+9)	65(+10)	57(+8)	52(+9)	48(+7)	48	82.4
ESX12A-X	3	1400	0.55	1.7	1.7	75(-1)	71(+4)	66(+7)	66(+9)	58(+7)	51(+8)	45(+5)	48	82.4
ESX12B-X	3	1400	0.75	2.1	2.1	74(+3)	70(+8)	65(+10)	66(+12)	58(+9)	51(+11)	44(+9)	50	84.4
ESX12C-X	3	1400	1.1	2.9	2.9	77(+2)	73(+7)	67(+10)	69(+10)	60(+8)	54(+10)	47(+11)	51	90.4
ESX13A-X	3	1085	0.75	2.1	2.1	70(+5)	67(+8)	67(+8)	63(+8)	56(+8)	57(+7)	51(+7)	50	116
ESX13B-X	3	1085	1.1	2.9	2.9	72(+5)	68(+8)	69(+8)	65(+8)	58(+8)	59(+7)	54(+7)	50	116
ESX13C-X	3	1085	1.5	3.7	3.7	73(+4)	69(+7)	70(+7)	64(+9)	59(+7)	61(+5)	55(+6)	50	125
ESX14A-X	3	1225	1.1	2.9	2.9	73(+5)	68(+7)	68(+7)	62(+10)	56(+8)	58(+6)	48(+7)	48	116
ESX14B-X	3	1225	1.5	3.7	3.7	74(+5)	68(+9)	68(+10)	63(+11)	57(+10)	59(+8)	49(+12)	50	125
ESX14C-X	3	1225	2.2	5.4	5.4	75(+5)	70(+9)	71(+9)	65(+11)	60(+9)	62(+7)	55(+9)	52	134
ESX15A-X	3	925	2.2	5.4	5.4	80(+6)	79(+2)	78(+9)	76(+8)	73(+7)	70(+6)	64(+9)	60	168.7
ESX15B-X	3	925	3	6.9	6.9	83(+8)	81(+3)	79(+9)	78(+9)	76(+9)	74(+10)	68(+12)	62	174.6
ESX16A-X	3	1040	1.5	3.7	3.7	80(+5)	80(+1)	75(+8)	75(+7)	73(+6)	71(+6)	67(+8)	57	159.6
ESX16B-X	3	1040	2.2	5.4	5.4	81(+8)	81(+3)	76(+2)	76(+11)	74(+9)	71(+9)	68(+9)	61	168.7
ESX16C-X	3	1040	3	6.9	6.9	81(+7)	82(+2)	77(+11)	77(+10)	74(+8)	71(+9)	68(+8)	61	174.6
ESX16D-X	3	1040	4	10	10	84(+7)	82(+1)	80(+10)	79(+9)	77(+8)	75(+9)	70(+8)	63	193.6
ESX17A-X	3	1160	2.2	5.4	5.4	83(+4)	81(0)	75(+7)	76(+7)	74(+5)	73(+5)	69(+6)	57	168.7
ESX17B-X	3	1160	3	6.9	6.9	84(+5)	82(+1)	76(+12)	77(+9)	75(+8)	73(+7)	70(+7)	61	174.6
ESX17C-X	3	1160	4	10	10	84(+4)	83(0)	77(+11)	78(+8)	75(+7)	73(+7)	70(+6)	61	193.6
ESX17D-X	3	1160	5.5	12	12	85(+4)	83(-1)	80(+10)	80(+7)	77(+7)	76(+7)	71(+6)	62	231.6
ESX18A-X	3	1260	2.2	5.4	5.4	83(+3)	84(-1)	78(+7)	80(+5)	76(+5)	75(+4)	69(+5)	60	168.7
ESX18B-X	3	1260	3	6.9	6.9	84(+4)	83(-2)	79(+9)	80(+5)	77(+6)	74(+5)	69(+7)	61	174.6
ESX18C-X	3	1260	4	10	10	84(+4)	83(-2)	79(+9)	80(+5)	77(+6)	74(+5)	69(+7)	61	193.6
ESX18D-X	3	1260	5.5	12	12	85(+4)	83(-1)	81(+8)	81(+5)	78(+5)	76(+6)	71(+7)	62	231.6
ESX19A-X	3	1440	3	6.9	6.9	90(+2)	83(-2)	82(+5)	80(+4)	79(+5)	78(+3)	73(+4)	61	174.6
ESX19B-X	3	1440	4	10	10	87(-2)	82(-1)	81(+5)	79(+5)	79(+3)	77(+2)	73(+3)	60	193.6
ESX19C-X	3	1440	5.5	12	12	86(+1)	84(0)	82(+6)	81(+6)	79(+2)	77(+3)	73(+3)	62	231.6

Fan size 11A to 25B inc. are belt drive and cannot be mounted at an angle of no greater than 5°.
Please contact your local Nuaire Technical Sales Engineer or the Technical Department to discuss your application requirements.
The electrical and sound information in the table is nominal.

EXTERNALLY MOUNTED XTRACTOR UNITS - ESX-X CONT.

ELECTRICAL, SOUND & WEIGHT

Code/ Curve	Phase	RPM	Motor power (kW)	FLC (amps)	SC (amps)	Induct Sound Power level dB re 1pW (+ correction for outlet) Octave band mid frequency (Hz) 125	250	500	1K	2K	4K	8K	Breakout dBA@3m	Weight (Kg)
ESX20A-X	3	700	1.5	3.7	3.7	83(+1)	81(-2)	79(+7)	68(+5)	69(+4)	62(+4)	63(+4)	58	682
ESX20B-X	3	700	2.2	5.4	5.4	83(+1)	80(-1)	80(+6)	69(+5)	68(+4)	62(+3)	62(+5)	58	691
ESX20C-X	3	700	3	6.9	6.9	83(+1)	80(-1)	80(+7)	69(+5)	68(+4)	61(+3)	62(+4)	59	697
ESX20D-X	3	700	4	10	10	83(+3)	81(0)	81(+8)	70(+6)	67(+6)	60(+5)	60(+6)	61	716
ESX20E-X	3	700	5.5	12	12	86(+3)	84(0)	84(+7)	73(+6)	70(+6)	63(+5)	63(+6)	63	730
ESX21A-X	3	800	2.2	5.4	5.4	86(+1)	83(-1)	83(+6)	72(+5)	71(+4)	65(+3)	65(+5)	61	691
ESX21B-X	3	800	3	6.9	6.9	86(+4)	83(-1)	83(+8)	72(+5)	71(+5)	64(+6)	65(+7)	63	697
ESX21C-X	3	800	4	10	10	86(+3)	84(0)	84(+8)	73(+6)	70(+6)	63(+5)	63(+6)	64	716
ESX21D-X	3	800	5.5	12	12	89(+2)	87(-1)	87(+6)	76(+5)	73(+5)	66(+4)	66(+5)	65	730
ESX21E-X	3	800	7.5	16	16	90(+2)	88(-1)	87(+7)	77(+5)	74(+5)	67(+4)	67(+5)	66	750
ESX22A-X	3	900	3	6.9	6.9	88(+1)	85(-1)	85(+6)	74(+5)	73(+4)	67(+3)	67(+5)	63	697
ESX22B-X	3	900	4	10	10	88(+2)	85(-2)	85(+5)	74(+4)	73(+5)	66(+3)	67(+3)	62	716
ESX22C-X	3	900	5.5	12	12	88(+3)	86(0)	86(+8)	75(+6)	72(+6)	65(+5)	65(+6)	66	730
ESX22D-X	3	900	7.5	16	16	91(+2)	89(-1)	89(+6)	78(+5)	75(+5)	68(+4)	68(+5)	67	750
ESX23A-X	3	1000	4	10	10	90(-2)	87(-1)	87(+5)	76(+5)	75(+3)	69(+2)	69(+3)	64	716
ESX23B-X	3	1000	5.5	12	12	90(+1)	87(-1)	87(+7)	76(+5)	75(+4)	68(+3)	69(+4)	66	730
ESX23C-X	3	1000	7.5	16	16	90(+3)	88(0)	88(+8)	77(+6)	74(+6)	67(+5)	67(+6)	68	750
ESX23D-X	3	1000	11	23	23	93(+1)	91(-1)	91(+6)	80(+5)	77(+4)	70(+4)	70(+5)	69	794
ESX24A-X	3	1100	5.5	12	12	92(+1)	89(-1)	89(+6)	78(+5)	77(+4)	71(+3)	71(+5)	67	730
ESX24B-X	3	1100	7.5	16	16	92(+1)	89(-1)	89(+7)	78(+5)	77(+4)	70(+3)	71(+4)	68	750
ESX24C-X	3	1100	11	23	23	92(+3)	90(0)	90(+8)	79(+6)	76(+6)	69(+5)	69(+6)	70	794
ESX25A-X	3	1200	7.5	16	16	93(+1)	90(-1)	90(+6)	79(+5)	78(+4)	72(+3)	72(+5)	68	750
ESX25B-X	3	1200	11	23	23	93(+1)	90(-1)	90(+7)	79(+5)	78(+4)	71(+3)	72(+4)	69	794

Fan size 11A to 25B inc. are belt drive and cannot be mounted at an angle of no greater than 5°.
Please contact your local Nuaire Technical Sales Engineer or the Technical Department to discuss your application requirements.
The electrical and sound information in the table is nominal.

EXTERNALLY MOUNTED XTRACTOR UNITS - ESX-R AND ESX-B

ELECTRICAL, SOUND & WEIGHT

Code/ Curve	Phase	RPM	Motor power (kW)	FLC (amps)	SC (amps)	Inlet /Outlet	Power levels dB re 1pW inlet Octave band mid frequency (Hz) 125	250	500	1K	2K	4K	Open inlet Open outlet 8K	dBA@3m	Weight (Kg)
ESX1-R	1	2040	0.086	0.65	0.65	I	66	55	46	47	39	35	31	29	22
						O	66	61	54	57	56	50	45	44	22
ESX2-R	1	1320	0.104	0.56	0.56	I	62	46	40	35	32	31	31	23	35
						O	67	58	52	52	50	45	38	40	35
ESX3-R	1	1260	0.23	1.6	1.6	I	72	55	47	43	40	36	32	31	45
						O	72	63	57	60	57	53	49	46	45
ESX4-R	1	1140	0.37	1.6	1.6	I	68	59	51	49	46	42	35	37	72
						O	75	70	64	66	62	59	56	52	72
ESX5-R	1	1110	0.46	2.95	2.95	I	68	58	49	49	50	48	43	38	75
						O	75	70	70	73	68	63	62	58	75
ESX6-R	1	1272	1.1	4.84	4.84	I	73	66	54	50	49	47	41	45	86
						O	73	73	69	70	68	66	61	62	86
ESX9-R	1	960	1.6	7.3	7.3	I	82	70	66	62	61	56	50	48	133
						O	75	73	71	70	67	65	60	68	133
ESX11A-R	3	1225	0.37	1.3	1.3	I	73	67	62	63	55	49	45	47	77.5
						O	70	70	71	74	64	60	54	58	77.5
ESX11B-R	3	1225	0.55	1.7	1.7	I	74	68	64	65	57	52	48	49	82.4
						O	72	72	72	75	65	61	55	59	82.4
ESX12A-R	3	1400	0.55	1.7	1.7	I	75	71	66	66	58	51	45	51	82.4
						O	70	72	72	75	65	59	50	59	82.4
ESX12B-R	3	1400	0.75	2.1	2.1	I	74	70	65	66	58	51	44	50	84.4
						O	73	75	74	78	67	62	53	61	84.4
ESX12C-R	3	1400	1.1	2.9	2.9	I	77	73	67	69	60	54	47	53	90.4
						O	75	77	76	79	68	64	58	63	90.4
ESX13A-R	3	1085	0.75	2.1	2.1	I	70	67	67	63	56	57	51	50	116
						O	75	75	75	71	64	64	58	56	116
ESX13B-R	3	1085	1.1	2.9	2.9	I	72	68	69	65	58	59	54	52	116
						O	71	74	77	73	66	66	61	59	116
ESX14A-R	3	1225	1.1	2.9	2.9	I	73	68	68	62	56	58	48	50	116
						O	72	73	75	72	64	64	55	58	116
ESX14B-R	3	1225	1.5	3.7	3.7	I	74	68	68	63	57	59	49	50	125
						O	73	75	78	74	67	67	61	60	125
ESX14C-R	3	1225	2.2	5.4	5.4	I	75	70	71	65	60	62	55	53	134
						O	74	77	80	76	69	69	64	62	134
ESX14D-R	3	1225	2.2	6.9	6.9	I	76	72	73	67	62	64	58	55	140
						O	74	77	80	76	69	69	64	62	140

Fan size 11A to 25B inc. are belt drive and cannot be mounted at an angle of no greater than 5°.
Please contact your local Nuaire Technical Sales Engineer or the Technical Department to discuss your application requirements.
Please insert R or B into code for spigot position eg. ESX11B-B.
The electrical and sound information in the table is nominal. dBA@3m is hemispherical.

EXTERNALLY MOUNTED XTRACTOR UNITS - ESX-R AND ESX-B CONT.

ELECTRICAL, SOUND & WEIGHT

Code/ Curve	Phase	RPM	Motor power (kW)	FLC (amps)	SC (amps)	Inlet /Outlet	Power levels dB re 1pW inlet Octave band mid frequency (Hz) 125	250	500	1K	2K	4K	8K	Open inlet Open outlet dBA@3m	Weight (Kg)
ESX15A-R	3	925	2.2	5.4	5.4	I	80	79	78	76	73	70	64	62	168.7
						O	81	80	86	84	80	76	73	70	168.7
ESX15B-R	3	925	3	6.9	6.9	I	83	81	79	78	76	74	68	65	174.6
						O	86	83	87	87	85	84	80	74	174.6
ESX16A-R	3	1040	1.5	3.7	3.7	I	80	80	75	75	73	71	67	62	159.6
						O	80	80	82	82	79	77	75	68	159.6
ESX16B-R	3	1040	2.2	5.4	5.4	I	81	81	76	76	74	71	68	63	168.7
						O	84	82	87	87	83	80	77	73	168.7
ESX16C-R	3	1040	3	6.9	6.9	I	81	82	77	77	74	71	68	63	174.6
						O	83	82	87	87	82	80	76	72	174.6
ESX16D-R	3	1040	4	10	10	I	84	82	80	79	77	75	70	66	193.6
						O	86	81	89	88	85	84	78	74	193.6
ESX17A-R	3	1160	2.2	5.4	5.4	I	83	81	75	76	74	73	69	63	168.7
						O	83	80	81	83	79	78	75	69	168.7
ESX17B-R	3	1160	3	6.9	6.9	I	84	82	76	77	75	73	70	64	174.6
						O	84	82	87	86	83	80	77	73	174.6
ESX17C-R	3	1160	4	10	10	I	84	83	77	78	75	73	70	64	193.6
						O	83	82	87	86	82	80	76	72	193.6
ESX17D-R	3	1160	5.5	12	12	I	85	83	80	80	77	76	71	67	231.6
						O	84	81	89	87	84	83	77	74	231.6
ESX18A-R	3	1260	2.2	5.4	5.4	I	83	84	78	80	76	75	69	66	168.7
						O	81	82	84	85	81	79	74	71	168.7
ESX18B-R	3	1260	3	6.9	6.9	I	84	83	79	80	77	74	69	66	174.6
						O	84	80	87	85	83	79	76	72	174.6
ESX18C-R	3	1260	4	10	10	I	84	83	79	80	77	74	69	66	193.6
						O	83	81	87	85	83	79	76	72	193.6
ESX18D-R	3	1260	5.5	12	12	I	85	83	81	81	78	76	71	67	231.6
						O	84	81	88	86	83	82	78	73	231.6
ESX19A-R	3	1440	3	6.9	6.9	I	90	83	82	80	79	78	73	68	174.6
						O	89	81	87	84	84	81	77	72	174.6
ESX19B-R	3	1440	4	10	10	I	87	82	81	79	79	77	73	67	193.6
						O	82	81	86	84	82	79	76	71	193.6
ESX19C-R	3	1440	5.5	12	12	I	86	84	82	81	79	77	73	68	231.6
						O	84	84	87	87	82	80	76	73	231.6

Fan size 11A to 25B inc. are belt drive and cannot be mounted at an angle of no greater than 5°.
Please contact your local Nuaire Technical Sales Engineer or the Technical Department to discuss your application requirements.
Please insert R or B into code for spigot position eg. ESX11B-B.
The electrical and sound information in the table is nominal. Breakout dBA@3m is hemispherical.
(Start currents (sc) are DOL other than for motors of 4 kW and above which is star delta.) Applies to single phase motors.
* Motor electrical supply, 1=1 phase (230V, 50Hz) 3=3phase (400V, 50Hz).

EXTERNALLY MOUNTED XTRACTOR UNITS - ESX-R AND ESX-B CONT.

ELECTRICAL, SOUND & WEIGHT

Code/ Curve	Phase	RPM	Motor power (kW)	FLC (amps)	SC (amps)	Inlet /Outlet	Power levels dB re 1pW inlet Octave band mid frequency (Hz) 125	250	500	1K	2K	4K	8K	Open inlet Open outlet dBA@3m	Weight (Kg)
ESX20A-R	3	700	1.5	3.7	3.7	I	83	81	79	68	69	62	63	61	682
						O	82	78	86	73	73	66	67	66	682
ESX20B-R	3	700	2.2	5.4	5.4	I	83	80	80	69	68	61	62	61	691
						O	82	78	87	74	72	64	66	66	691
ESX20C-R	3	700	3	6.9	6.9	I	83	80	80	69	68	61	62	61	697
						O	82	78	87	74	72	64	66	67	697
ESX20D-R	3	700	4	10	10	I	83	81	81	70	67	60	60	62	716
						O	84	80	89	76	73	65	66	68	716
ESX20E-R	3	700	5.5	12	12	I	86	84	84	73	70	63	63	65	730
						O	86	83	91	79	75	68	69	71	730
ESX21A-R	3	800	2.2	5.4	5.4	I	86	83	83	72	71	65	65	64	691
						O	85	81	89	77	75	68	70	69	691
ESX21B-R	3	800	3	6.9	6.9	I	86	83	83	72	71	64	65	64	697
						O	88	81	91	77	76	70	72	71	697
ESX21C-R	3	800	4	10	10	I	86	84	84	73	70	63	63	65	716
						O	87	83	92	79	76	68	69	72	716
ESX21D-R	3	800	5.5	12	12	I	89	87	87	76	73	66	66	68	730
						O	89	85	93	81	78	70	71	73	730
ESX21E-R	3	800	7.5	16	16	I	90	88	87	77	74	67	67	68	750
						O	90	86	94	82	79	71	72	74	750
ESX22A-R	3	900	3	6.9	6.9	I	88	85	85	74	73	67	67	66	697
						O	87	83	91	79	77	70	72	71	697
ESX22B-R	3	900	4	10	10	I	88	85	85	74	73	66	67	66	716
						O	88	82	90	78	78	69	71	70	716
ESX22C-R	3	900	5.5	12	12	I	88	86	86	75	72	65	65	67	730
						O	87	84	92	80	76	69	70	73	730
ESX22D-R	3	900	7.5	16	16	I	91	89	89	78	75	68	68	70	750
						O	91	87	95	83	80	72	73	75	750
ESX23A-R	3	1000	4	10	10	I	90	87	87	76	75	69	69	68	716
						O	86	85	92	81	78	71	72	72	716
ESX23B-R	3	1000	5.5	12	12	I	90	87	87	76	75	68	69	68	730
						O	89	85	94	81	79	71	73	74	730
ESX23C-R	3	1000	7.5	16	16	I	90	88	88	77	74	67	67	69	750
						O	91	87	96	83	80	72	73	75	750

Fan size 11A to 25B inc. are belt drive and cannot be mounted at an angle of no greater than 5°.
Please contact your local Nuaire Technical Sales Engineer or the Technical Department to discuss your application requirements.

Please insert R or B into code for spigot position eg. ESX11B-B.

The electrical and sound information in the table is nominal. Breakout dBA@3m is hemispherical.
(Start currents (sc) are DOL other than for motors of 4 kW and above which is star delta.) Applies to single phase motors.
* Motor electrical supply, 1=1 phase (230V, 50Hz) 3=3phase (400V, 50Hz).

EXTERNALLY MOUNTED XTRACTOR UNITS - ESX-R AND ESX-B CONT.

ELECTRICAL, SOUND & WEIGHT

Code/ Curve	Phase	RPM	Motor power (kW)	FLC (amps)	SC (amps)	Inlet /Outlet	Power levels dB re 1pW inlet Octave band mid frequency (Hz) 125	250	500	1K	2K	4K	8K	Open inlet Open outlet dBA@3m	Weight (Kg)
ESX23D-R	3	1000	11	23	23	I	93	91	91	80	77	70	70	72	794
						O	93	89	97	85	82	74	75	77	794
ESX24A-R	3	1100	5.5	12	12	I	92	89	89	78	77	71	71	70	730
						O	91	87	95	83	81	74	76	75	730
ESX24B-R	3	1100	7.5	16	16	I	92	89	89	78	77	70	71	70	750
						O	91	87	96	83	81	73	75	76	750
ESX24C-R	3	1100	11	23	23	I	92	90	90	79	76	69	69	71	794
						O	93	89	98	85	82	74	75	77	794
ESX25A-R	3	1200	7.5	16	16	I	93	90	90	79	78	72	72	71	750
						O	92	88	96	84	82	75	77	76	750
ESX25B-R	3	1200	11	23	23	I	93	90	90	79	78	71	72	71	794
						O	92	88	97	84	82	74	76	77	794

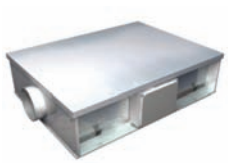
Fan size 11A to 25B inc. are belt drive and cannot be mounted at an angle of no greater than 5°.
Please contact your local Nuaire Technical Sales Engineer or the Technical Department to discuss your application requirements.

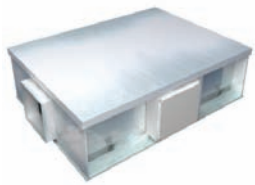
Please insert R or B into code for spigot position eg. ESX11B-B.

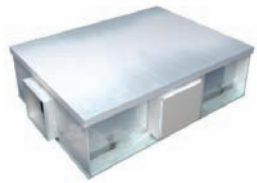
The electrical and sound information in the table is nominal. Breakout dBA@3m is hemispherical.
(Start currents (sc) are DOL other than for motors of 4 kW and above which is star delta.) Applies to single phase motors.
* Motor electrical supply, 1=1 phase (230V, 50Hz) 3=3phase (400V, 50Hz).

XTRACTOR UNITS

ESXL LOW PROFILE INTERNAL FANS (CIRCULAR & RECTANGULAR SPIGOTS)

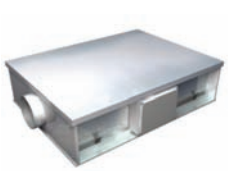

ESXL1-DS

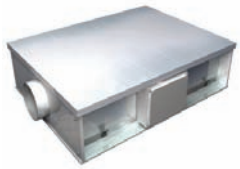

ESXL2-DS

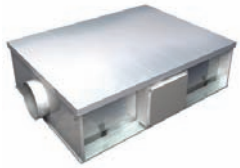

ESXL3-DS

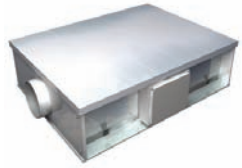

ESXL4-DS

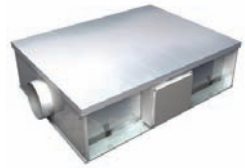
ESX INTERNAL FANS (CIRCULAR & RECTANGULAR SPIGOTS)

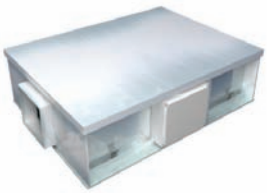

ESX1-DS

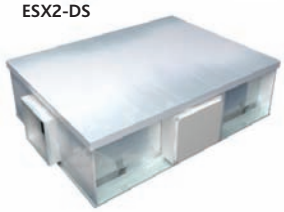

ESX2-DS


ESX3-DS


ESX4-6-DS


ESX9-DS


ESX15-19-DS


ESX20-27-DS

ESX-B (RECTANGULAR SPIGOTS) & ESX-R EXTERNAL FANS (CIRCULAR & RECTANGULAR SPIGOTS)


ESX1-B


ESX2-3B


ESX4-6B

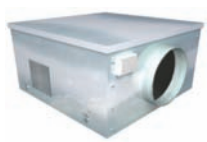

ESX9-10B

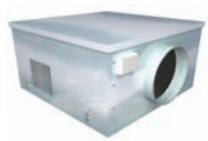

ESX11-12B


ESX13-14B

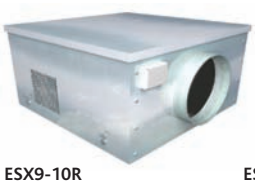

ESX15-19B


ESX20-26B


ESX1-R


ESX2-3R

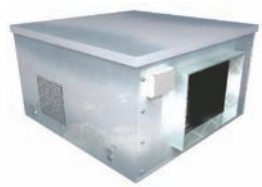

ESX4-6R


ESX9-10R

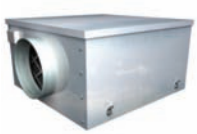

ESX11-12R

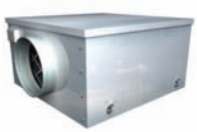

ESX13-14R


ESX15-19R


ESX20-26R

ESX-X EXTERNAL FANS (CIRCULAR & RECTANGULAR SPIGOTS)


ESX1-X

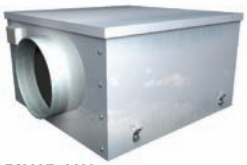

ESX2-3X


ESX4-6X


ESX9-10X


ESX11-12X


ESX13-14X


ESX15-19X

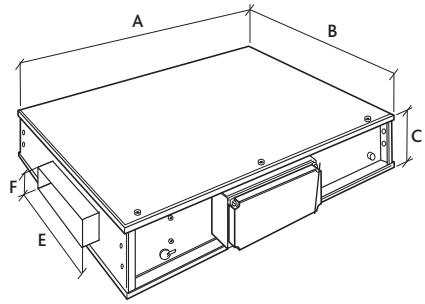

ESX20-26X

Note: The above illustrations show number of units in the range.
For accurate dimensions refer to page 159.

DIMENSIONS

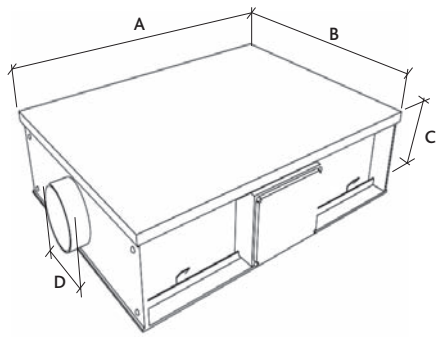
ESXL LOW PROFILE INTERNAL FAN DIMENSIONS (mm)

Fan Code	A	B	C	Circular Spigot DØ	Rectangular Spigot E	F	Weight Kg
ESXL1	1063	650	352	250	-	-	40
ESXL2	1006	1000	350	-	500	250	118
ESXL3	1006	1000	350	-	500	250	118
ESXL4	1006	1000	350	-	500	250	118



ESX INTERNAL FAN DIMENSIONS (mm)

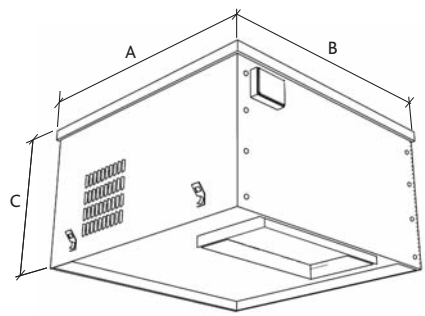
Fan Code	A	B	C	Circular Spigot DØ	Rectangular Spigot E	F	Weight Kg
ESX1-DS	328	462	266	150	-	-	14
ESX2-DS	373	524	340	200	-	-	19
ESX2H-DS	373	524	340	200	-	-	19
ESX3-DS	432	570	405	200	-	-	29
ESX4-DS	563	807	481	250	-	-	46
ESX5-DS	563	807	481	400	-	-	49
ESX6-DS	563	807	481	400	-	-	57
ESX6H-DS	563	807	481	400	-	-	60
ESX9-DS	655	840	630	500	-	-	97
ESX9H-DS	655	840	630	500	-	-	97
ESX15-19-DS	1200	1000	800	-	400	400	217
ESX20-27-DS	1500	1300	1000	-	500	500	293

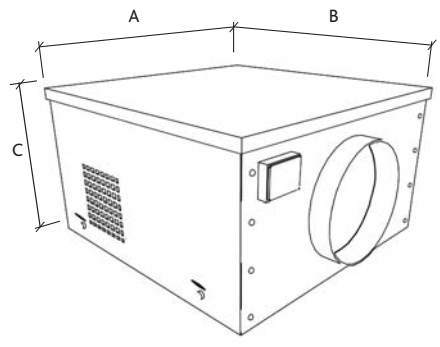


ESX-B OR ESX-R EXTERNAL FAN DIMENSIONS (mm)

Fan Code	A	B	C	Circular Spigot DØ	Rectangular Spigot E	F	Weight Kg
ESX1-B/R	705	505	355	125	152	76	22
ESX2-3B/R	970	720	485	200	229	127	45
ESX4-6B/R	1165	980	575	250	305	152	*86
ESX9-10B/R	1195	1174	575	500	762	304	162
ESX11-12B/R	974	974	622	400	457	229	*91
ESX13-14B/R	1233	1233	701	500	762	304	134
ESX15-19B/R	1430	1190	796	630	889	381	*232
ESX20-26B/R	2030	1466	1183	-	1200	700	*750

* Approximate weight, contact Nuaire for details.



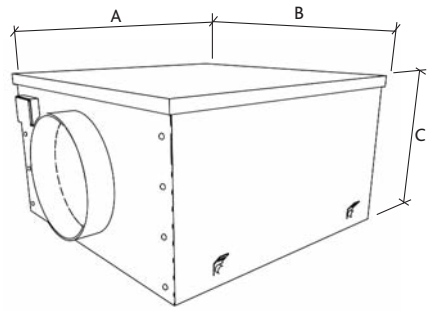


DIMENSIONS CONT.

ESX-X EXTERNAL FANS DIMENSIONS (mm)

Fan Code	A	B	C	Circular Spigot DØ	Rectangular Spigot E	F	Weight Kg
ESX1-X	705	505	355	125			22
ESX2-3X	875	720	265	200			*35
ESX4-6X	1165	980	575	250			*86
ESX9-10X	1495	1125	710	500			*133
ESX11-12X	974	974	622	400			*91
ESX13-14X	1233	1233	701	500			*134
ESX15-19X	1430	1190	780	630			*232
ESX20-26X	2030	1470	1183	-	1200	700	*750

* Approximate weight, contact Nuaire for details.



QUICK SELECTION GUIDE

XTRACTOR FANS

Fan code	A.V. Mounts	Silencer	Flexible Connectors	Acoustic Flexible Connectors
ESXL1	NAV2	ES4SIL	CFC25	ACFXRD250
ESXL2-DS	NAV3	SIL2-LDS	-	-
ESXL3-DS	NAV3	SIL2-LDS	-	-
ESXL4-DS	NAV3	SIL2-LDS	-	-
ESX1-DS	NAV2	SIL1-LDS	CFC16	ACFXRD150
ESX2-DS	NAV2	SIL2-LDS	CFC20	ACFXRD200
ESX2H-DS	NAV2	SIL2-LDS	CFC20	ACFXRD200
ESX3-DS	NAV2	SIL3-LDS	CFC20	ACFXRD200
ESX4-DS	NAV2	SIL4-LDS	CFC25	ACFXRD250
ESX5-DS	NAV2	SIL4-LDS	CFC40	ACFXRD400
ESX6-DS	NAV2	SIL4-LDS	CFC40	ACFXRD400
ESX6H-DS	NAV3	SIL4-LDS	CFC40	ACFXRD400
ESX9-DS	NAV3	SIL5-LDS	CFC50	ACFXRD500
ESX9H-DS	NAV3	SIL5-LDS	CFC50	ACFXRD500
ESX15DS - 19DS	-	SIL6-LDS*	-	-
ESX20DS - 27DS	-	SIL7-LDS*	-	-

DS = Double Skinned.

*Flexible connectors:
Sizes: 20-21 = FXSQ509
22 = FXSQ573
23-24 = FXSQ509
25-27 = FXSQ573

QUICK SELECTION GUIDE CONT.

XTRACTOR FANS

Fan code	Duct Mounted Silencer	Bottom Inlet Flexible Connector	Purlin Box
ESX1B	SIL125	FXRC1	ESPFC1
ESX2B	SIL200	FXRC4	ESPFC2
ESX3B	SIL250	FXRC4	ESPFC3
ESX4B	SIL315	FXRC5	ESPFC4
ESX5B	ES5SIL	FXRC7	ESPFC4
ESX6B	ES6SIL	FXRC7	ESPFC4
ESX9B	ES8SIL	FXRC9	ESPFC5
ESX11B	ES6SIL	FXRC7	ESPFC4
ESX12B	ES6SIL	FXRC7	ESPFC4
ESX13B	ES7SIL	FXRC9	ESPFC5B
ESX14B	ES8SIL	FXRC9	ESPFC5B
ESX15B	CA63S	FXRC10	ESPFC5B
ESX16B	CA63S	FXRC10	ESPFC6B
ESX17B	CA63S	FXRC10	ESPFC6B
ESX18B	CA63S	FXRC10	ESPFC6B
ESX19B	CA63S	FXRC10	ESPFC6B
ESX20B	CA100S	FXRC11	Note 1
ESX21B	CA100S	FXRC11	Note 1
ESX22B	CA100S	FXRC11	Note 1
ESX23B	CA100S	FXRC11	Note 1
ESX24B	CA100S	FXRC11	Note 1
ESX25B	CA100S	FXRC11	Note 1

XTRACTOR FANS

Fan code	Duct Mounted Silencer	End Inlet Flexible Connector	Roof Curb
ESX1R	CA25S	CFC12	ESPFC1
ESX2R	CA25S	CFC20	ESPFC2
ESX3R	CA25S	CFC20	ESPFC3
ESX4R	CA25S	CFC25	ESPFC4
ESX5R	CA40S	CFC40	ESPFC4
ESX6R	CA40S	CFC40	ESPFC4
ESX9R	CA50S	CFC50	ESPFC5
ESX11R	CA40S	CFC40	ESPFC4
ESX12R	CA40S	CFC40	ESPFC4
ESX13R	CA50S	CFC50	ESPFC5B
ESX14R	CA50S	CFC50	ESPFC5B
ESX15R	CA63S	CFC63	ESPFC5B
ESX16R	CA63S	CFC63	ESPFC6B
ESX17R	CA63S	CFC63	ESPFC6B
ESX18R	CA63S	CFC63	ESPFC6B
ESX19R	CA63S	CFC63	ESPFC6B
ESX20R	CA100S	FXRC11	Note 1
ESX21R	CA100S	FXRC11	Note 1
ESX22R	CA100S	FXRC11	Note 1
ESX23R	CA100S	FXRC11	Note 1
ESX24R	CA100S	FXRC11	Note 1
ESX25R	CA100S	FXRC11	Note 1

Roof curb sizes EST20R - 25R & EST20B - 25B are as builders requirements.

ANCILLARIES FOR XTRACTOR UNITS

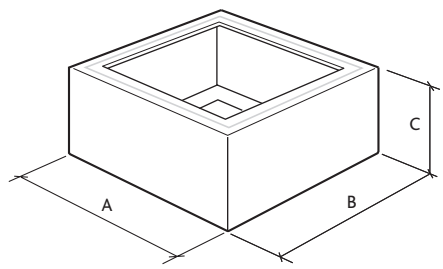
PREFABRICATED CURB DIMENSIONS (mm)

Manufactured in pre-galvanised steel these curbs will reduce design work and guarantee correct unit mounting when on site.

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

Table 3. Prefabricated curb dimensions (mm).

Unit Code	Prefab Curb Code	A	B	C
ESX1-*	ESPFC1	635	435	250
ESX2-*	ESPFC2	805	650	250
ESX3-*	ESPFC3	900	650	250
ESX4-*	ESPFC4	1095	910	250
ESX5-*	ESPFC4	1095	910	250
ESX6-*	ESPFC4	1095	910	250
ESX9-*	ESPFC5	1425	435	250
ESX11-12	ESPFC4B	917	917	250
ESX13-14	ESPFC5B	1173	1173	250
ESX15-19	ESPFC6BS	1374	1136	250



ANCILLARIES FOR XTRACTOR UNITS

MATCHED SILENCER DIMENSIONS (mm)

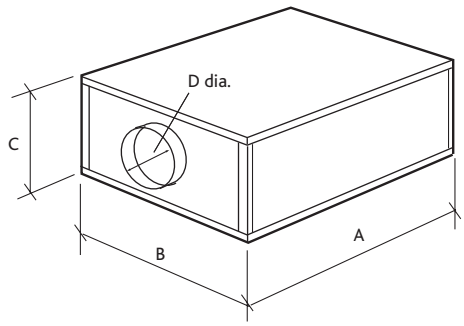
Silencers have mineral wool packed to a density greater than 45kg/m^3. The mineral wool is inert, non combustible and vermin proof for long life and safety. Case is manufactured from 'Solissime' coated galvanised steel, and designed for fixing directly to the fan outlet. Fan spigot used on open end of matched silencer.

Fan Code	Silencer ref	A	B	C	Circular Spigot DØ	Rectangular Spigot E	F
ESXL1	ES4SIL	613	764	352	250	-	-
ESXL2-DS/3-DS/4-DS	SIL2-LDS	1000	1000	350		500	350
ESX1-DS	SIL1-DS	400	462	266	125	-	-
ESX2-DS	SIL2-DS	400	524	340	200	-	-
ESX2H-DS	SIL2-DS	400	524	340	200	-	-
ESX3-DS	SIL3-DS	600	570	405	200	-	-
ESX4-DS	SIL4-DS	600	807	481	250	-	-
ESX5-DS	SIL4-DS	600	807	481	400	-	-
ESX6-DS	SIL4-DS	600	807	481	400	-	-
ESX6H-DS	SIL4-DS	600	807	481	400	-	-
ESX9-DS	SIL5-DS	700	840	630	500	-	-
ESX9H-DS	SIL5-DS	700	840	630	500	-	-
ESX15-DS TO 19-DS	SIL6-DS	900	1000	800	-	600	600
ESX20-DS TO 27DS	SIL7-DS	900	1300	1000	-	800	800

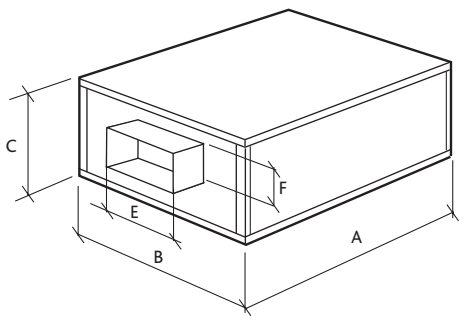
Refer to fan selector for silencer details.

Double skinned silencer Dynamic Attenuation Frequency (Hz) (for double skinned fans).

Code	125 DS	250 DS	500 DS	1K DS	2K DS	4K DS	8K DS
ES4SIL	1	4	8	12	11	14	16
S2SIL-LDS	5	8	15	25	25	25	22
SIL1-DS	10	10	17	22	23	27	25
SIL2-DS	10	10	17	22	23	27	25
SIL3-DS	7	7	15	20	23	25	21
SIL4-DS	4	6	11	17	17	20	20
SIL5-DS	4	6	11	17	17	20	20
SIL6-DS	6	8	18	22	20	16	15
SIL7-DS	6	8	18	22	20	16	15



SIL*-DS

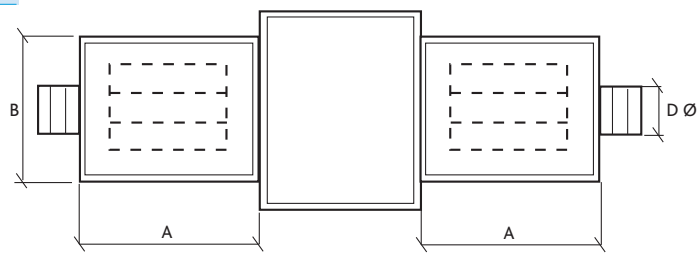


SIL2-LDS

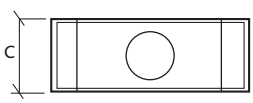
Note: In order to benefit effectively from the low casing radiated noise levels that are a feature of this range, the system design must consider acoustic breakout from adjacent components, ducting etc.

Nuaire strongly recommends that its range of matched compact double skinned attenuators is used, directly coupled to the fan.

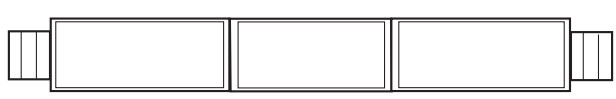
Top view



End view



Side view



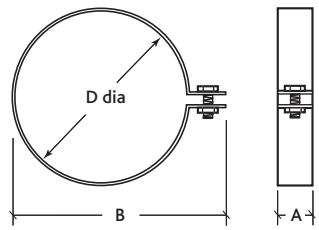
ANCILLARIES FOR XTRACTOR UNITS CONT.

FAST CLAMP DIMENSIONS (mm)

Manufactured from galvanised steel with a gasket liner to provide an air tight joint.
Matching fan spigot diameters.

Typical code: FC-100

Code	A	D	Code	A	D
FC100	90	100	FC250	90	250
FC125	90	125	FC315	90	315
FC150	90	150	FC400	90	400
FC200	90	200	-	-	-

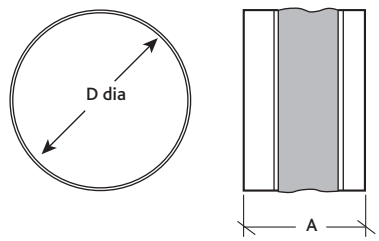


CIRCULAR FLEXIBLE CONNECTOR DIMENSIONS (mm)

Flexible material is flame resistant to BS476 part 7 with galvanised steel spigots.
Heat resistant to 132°C with excellent resistance to chemicals, oil and grease.
Connector is airtight and waterproof.

Typical code: CFC-10

Code	A	D	Code	A	D
CFC10	150	102	CFC25	150	252
CFC12	150	127	CFC31	150	317
CFC16	150	152	CFC40	150	402
CFC20	150	202	-	-	-



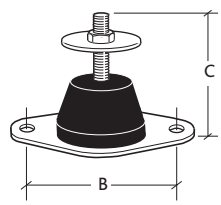
ANTI-VIBRATION MOUNTINGS DIMENSIONS (mm)

Supplied as a set of 4. To select/match isolated assembly weight to max supporting weight.

Typical code: NAV1 - Resilient Rubber

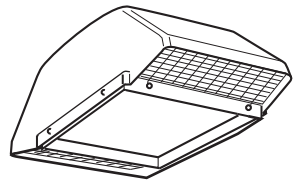
Code	Type	B	C	Max supporting weight Kg Per set of 4
NAV1	Rubber	30	50	20.0
NAV2	Rubber	40	75	80.0
NAV3	Rubber	40	75	180.0
NAV4	Rubber	40	75	260.0

Note: Belt driven fans have built-in AV's.



ANCILLARIES FOR XTRACTOR UNITS CONT.

TERMINATOR COWLS DIMENSIONS (mm)

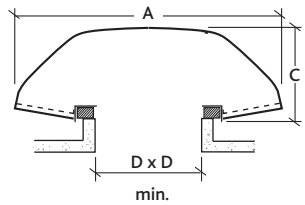


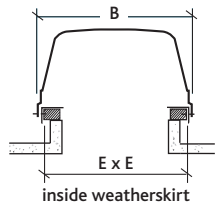
To provide a weatherproof route for supply & exhaust air to your ducted system.

Cowls are manufactured from flame retardant polymer and can be supplied with gravity backdraught shutters, bird guards and hand guards. The terminal is finished in BS00A05 Grey as standard. All BS or RAL colours are available. The cowl will normally be fitted to the upstand by a roofing contractor or builder. The Cowl can be fitted without shutters on a 0-60 degree pitched roof with its longer side running down the roof slope. The Cowl can be fitted with its longer side running across a slope of less than 85 degrees from the horizontal. When fitted to a wall the longer side must run horizontal.

Typical code: TRTS-A Note: S = Shutters

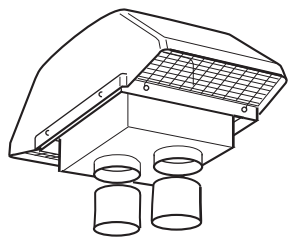
Note: Air Pressure Drop of Attenuator (Pa) = Z x Q^2
where Z = Factor listed in table below Q = Air Volume Flow Rate (m^3/s)





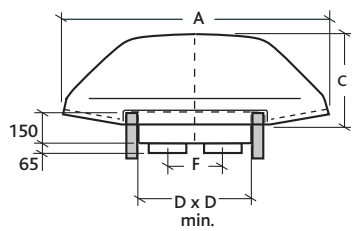
Code	A	B	C	D	E	Weight Kg	Discharge	Z Intake
TRTS-A	900	620	340	460	600	12.3	67	118
TRTS-B	1080	740	375	560	695	14.7	39	118
TRTS-C	1320	964	475	700	945	26.0	28	62
TRTS-D	1470	1076	490	800	1050	28.2	19	32
TRTS-E	1780	1170	485	900	1136	50.0	7	11.3
TRTS-F	2260	1476	600	1200	1452	88.0	2.5	3.6

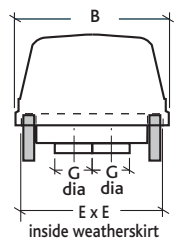
SUPPLY/EXTRACT COWLS DIMENSIONS (mm)



Supply/Extract Cowl: rigid flame retardant cowl, conforming with BS476 (Part 1 class 11) supplied in grey (BS 00 A 05) as standard (any BS or RAL colours available), fixing directly to the base using non-rusting sealed fixings. Air plenum is manufactured from galvanised steel incorporating supply & extract chambers. Rigid spigots are provided for connection of duct work. Supply & extract chamber is fitted with a bird guard.

Typical code: TRSE1



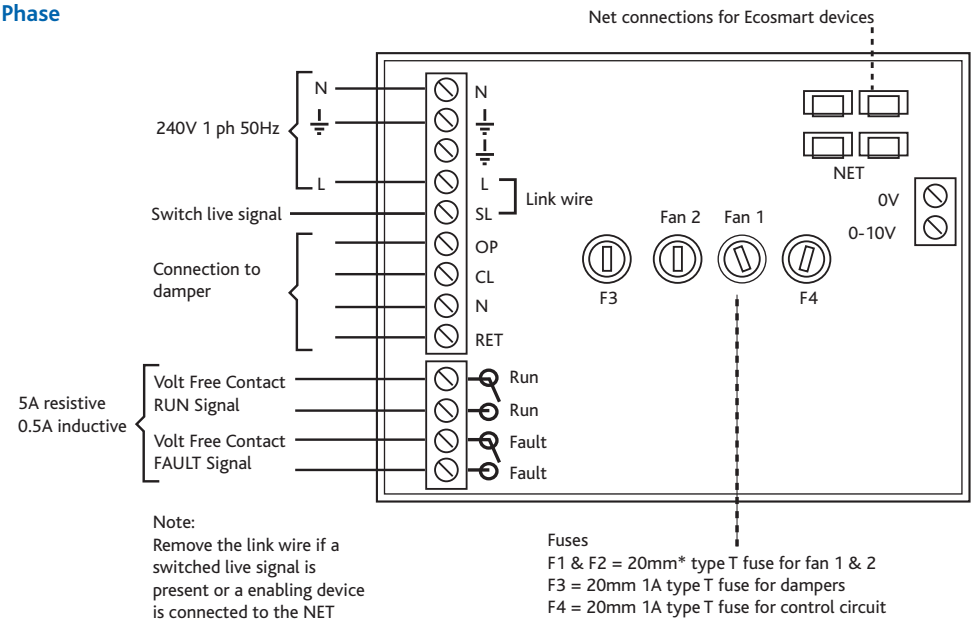


Code	A	B	C	D	E	F	G	Weight Kg
TRSE1	900	620	340	460	600	200	100	14
TRSE2	900	620	340	460	600	200	125	14
TRSE3	900	620	340	460	600	200	150	14
TRSE4	1320	964	475	700	945	345	200	30
TRSE5	1320	964	475	700	945	345	250	30
TRSE6	1320	964	475	700	945	345	315	30
TRSE7	1780	1170	489	900	1150	450	400	57

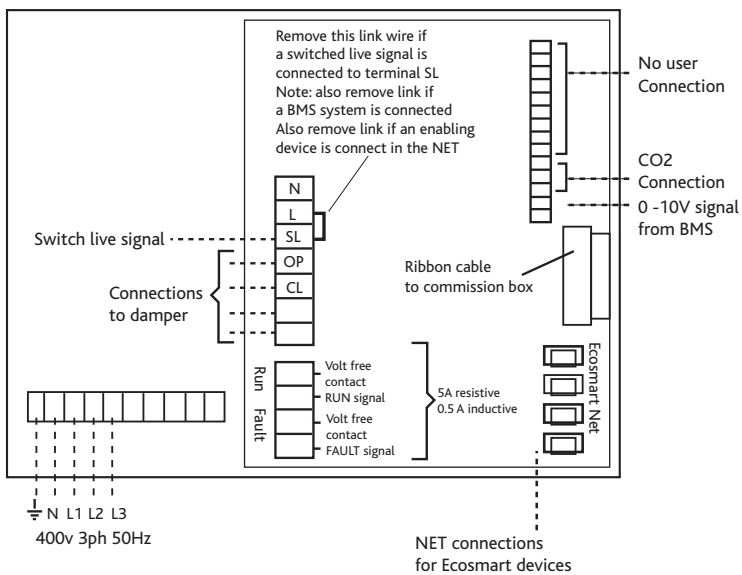
Resistance to airflow of this item is negligible.

WIRING - XTRACTOR

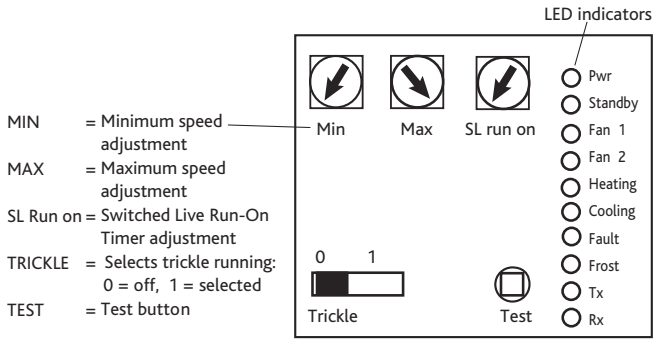
Single Phase



Three Phase



Set Up/Commissioning box



CONSULTANTS SPECIFICATION

INTERNALLY MOUNTED XTRACTOR UNIT

The ventilation fan unit shall be configured and arranged as detailed on the drawings and in accordance with the schedule of equipment. It shall be of the Xtractor type as manufactured by Nuaire.

The unit sizes 1 to 4 inc. shall be provided in heavy gauge galvanised steel double skin casework. Double skin infill shall be of V0 grade acoustic foam and inner case shell. The units shall be of a low depth configuration to enable location in shallow ceiling and floor voids, maximum depth of unit 350mm.

Unit sizes 5 to 13 inc. shall be constructed using the Nuaire floating box format and shall incorporate heavy gauge galvanised steel double skin casework. Double skin infill shall be of V0 grade acoustic foam and inner case shall mechanically isolated from the outer case. General construction shall achieve class A leakage rates. The fan enclosure shall feature V0 internal acoustic foam lining.

The stated casing breakout sound levels shall not be exceeded.

Unit sizes 15 to 27 inc shall be manufactured from a highly rigid pentapost framework with 25mm double skinned infill panels. The panels shall contain inert high density infill. Panel materials are heavy gauge Aluzinc corrosion resistant steel.

The fan/motor assembly shall be in a self contained insulated enclosure which shall be acoustically isolated from external skin providing exceptional acoustic breakout characteristics. The very low breakout noise level through the unit casing must not be exceeded. The general construction is to class A leakage.

EXTERNALLY MOUNTED XTRACTOR UNIT

The unit shall be manufactured from heavy gauge, corrosion resistant Aluzinc steel, internally coated with fire retardant acoustic material. Fully detachable panels for maintenance/service and manometer test points. It shall have an integrated upstream attenuator keeping system noise levels to an absolute minimum.

The fan/motor assembly shall be in a self contained insulated enclosure which shall be acoustically isolated from external skin providing exceptional acoustic breakout characteristics. The very low breakout noise level through the unit casing must not be exceeded. The general construction is to class A leakage.

GENERAL SPECIFICATION

Fan assemblies to incorporate fan impeller and motors selected to provide the most energy efficient solution conforming to part L regulations. The fan impeller shall be a high efficiency forward or backward curved centrifugal design and shall be direct or belt drive with IF2 high efficiency motors to EN60034-30 as standard, belt or direct drive with motors fitted with "hall effect" air flow failure monitoring. All units suitable for operation in ambient temperatures of 40 degrees C.

The contractor shall allow for all necessary ductwork transformations to and from the fan unit and any associated components, the contractor shall also ensure that all necessary builders work and weathering is provided in accordance with the manufacturer's recommendations, DW 144 and general good practice.

The mechanical contractor shall ensure that all necessary ancillaries are included e.g. AV mounts, flexible connections, attenuators, etc and shall be in accordance with the manufacturer's specification and recommendations.

CONTROL SPECIFICATION

The fan unit shall be supplied with one of the following control options:-

1. ECOSMART CONTROLS

The compact Ecosmart control system complete with all necessary controls to facilitate the operation of the ventilation system. It shall be come complete with an integral factory fitted Ecosmart PCB which will control the fan unit within the desired design parameters and provide the interface between all external control devices and the unit itself.

The fan unit shall have the following energy saving components integrally mounted, pre-wired to interface with the purpose made PCB, all components pre-wired, configured and factory fitted by the manufacturer: -

- Integral Frequency inverter/speed controller.
- Integral maximum and minimum speed adjustment for commissioning.
- Integral adjustable run on timer.
- Integral BMS interfaces – 0-10V speed adjustment.
- Integral BMS interfaces – Volt free failure and status indication.
- Integral background ventilation switch (trickle switch).
- Multiple IDC sockets for interconnection of sensors or fans using pre plugged 4-core low voltage cable.

The Ecosmart controls will enable the unit to automatically vary its speed as it receives signals from one of the interconnected sensors. When the signal is received the fan shall either increase speed gradually until the required level is achieved or it will work on a trickle and boost principle. This will then move the fan duty point from trickle/background ventilation rate to the required boost ventilation rate. Both the trickle and boost rates are infinitely variable, easy to adjust and remove the need of a main balancing damper.

CONSULTANTS SPECIFICATION

2. BMS INTERFACES

The fan unit shall be provided with the following integrated BMS interfaces:

- 0 - 10 volt contacts to provide a full BMS interface. This will enable the following functions:-

  Switch the unit on/off.

  Switch from low speed to high speed.

  Full speed control facility.

- 2 No. volt free contacts to provide fan run and failure indication to provide system status.

- An integrated commissioning/speed control to accurately commission the system, with minimum and maximum speeds easily adjusted via a miniature dial, as recommended in Part L. This will enable the unit to be configured to run between set parameters thus saving motor power and limiting noise.

3. COMMISSIONING SET UP

The fan unit shall be provided with an integrated commissioning/speed control to accurately commission the system, as recommended in Part L, minimum and maximum speeds easily adjusted via miniature dial.

Ecosmart Xtractor shall have a 5 year warranty.

The unit is to be of the Xtractor Type as manufactured by Nuaire Ltd.