

## SQURBO SINGLE FANS

LOW DEPTH SOLUTION IDEAL FOR SPACE  
RESTRICTED APPLICATIONS.



## BENEFITS

### 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. Meeting all your requirements.

### QUIET SOLUTION

Fan/silencer combinations available to meet our design requirements.

### PEACE OF MIND

Sqrbo fans are tested to comply with all relevant standards.

### 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.

### 'PERFECT MATCH' CONTROLS & ANCILLARIES

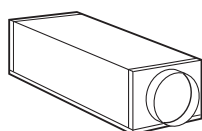
Controls and ancillaries are available to suit exact requirements.

### FOR BUILT-IN CONTROLS PLEASE SEE ECOSMART SQRBO

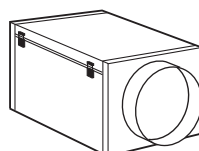
### WARRANTY

Sqrbo has a 3 year warranty.

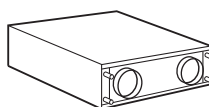
## SQRBO ANCILLARIES



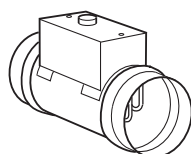
In-line Attenuator.



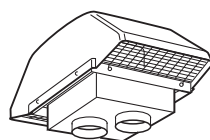
Filter Cassette.



Heat Exchanger.

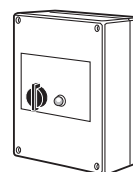


Duct Heater.

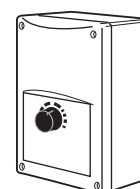


Supply/Extract Cowl.

## CONTROLS



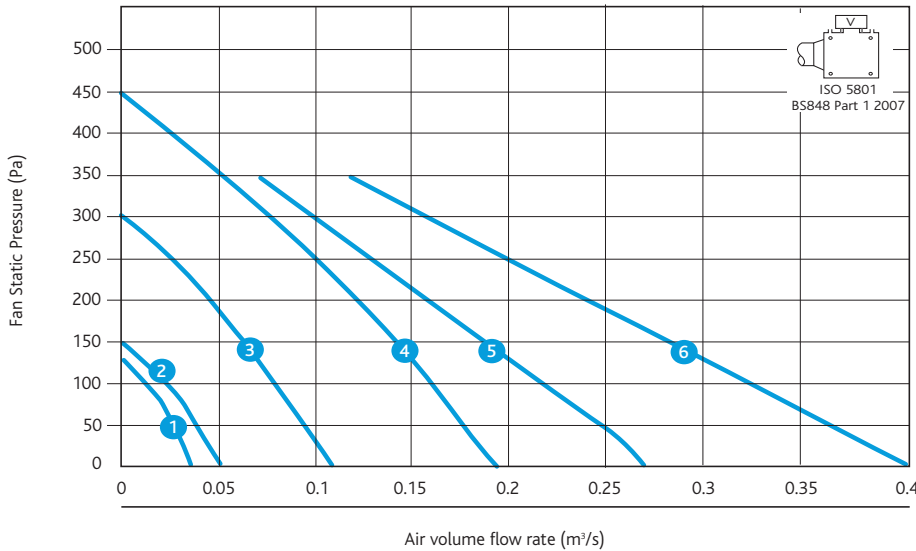
Auto Transformer.



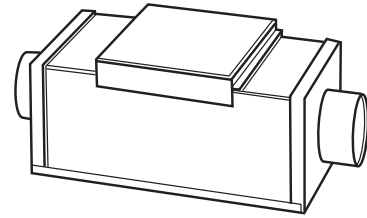
Electronic Speed Control.

PERFORMANCE - SQRBO SINGLE FANS

Sqrbo Fan Unit



Casing



Sqrbo Centrifugal Single Fan

Code descriptions

S 2 - SIL 125



1. Sqrbo Centrifugal Single Fan
2. Case Size
3. Fan/silencer combination
4. Spigot Diameter

SQRBO UNITS

ELECTRICAL & SOUND

Curve	Code	Phase	RPM	Input Power (watts)	FLC (amps)	SC (amps)	Data Type	Sound Power Levels (dB re 10 <sup>-12</sup> W)							dBa @ 3m
								Octave band mid frequency (Hz)							
								125	250	500	1K	2K	4K	8K	
1	S1-100	1	2724	43	0.32	0.47	I O	65 66	59 59	60 65	49 51	44 47	36 42	30 36	30
1	S1-SIL100	1	2724	43	0.32	0.47	I O	51 66	47 59	47 65	22 51	17 47	15 42	26 36	30
2	S2-125	1	2724	43	0.32	0.47	I O	65 73	59 64	60 59	49 48	44 48	36 43	30 37	30
2	S2-SIL125	1	2724	43	0.32	0.47	I O	60 73	50 64	49 59	22 48	26 48	22 43	24 37	30
3	S3-150	1	2285	75	0.34	0.47	I O	65 69	62 64	65 65	56 56	50 53	45 49	37 41	34
3	S3-SIL150	1	2285	75	0.34	0.47	I O	64 69	56 64	48 65	21 56	16 53	32 49	33 41	34
4	S4-200	1	2544	150	0.72	1.49	I O	70 76	75 74	73 75	65 68	60 65	56 62	49 57	42
4	S4-SIL200	1	2544	150	0.72	1.49	I O	67 76	66 74	61 75	39 68	42 65	50 62	43 57	42
5	S5-250	1	2313	170	0.92	1.54	I O	71 74	74 75	75 75	67 70	65 70	61 67	57 62	43
5	S5-SIL250	1	2313	170	0.92	1.54	I O	69 74	70 75	63 75	45 70	55 70	57 67	53 62	43
6	S6-315	1	2313	170	0.92	1.54	I O	76 70	72 74	73 76	67 71	67 70	65 67	61 63	43
6	S6-SIL315	1	2313	170	0.92	1.54	I O	67 70	70 74	66 76	49 71	56 70	57 67	52 63	43

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.

\* Motor electrical supply, 1=1 phase (230V, 50Hz) 3=3phase (400V, 50Hz). I = Induct inlet. O = Induct outlet.

QUICK SELECTION GUIDE

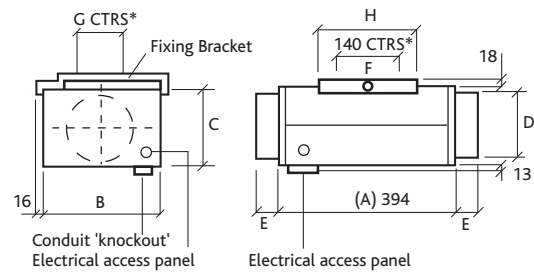
SQRBO SINGLE FANS

Code	Silencer	Filter Cassette	Electric Duct Heater	Heat Exchanger	Flexible Connector	Fast Clamp	Speed Control
S1-100	SIL-100	SF-100	SH-100	HX100	CFC10	FC-100	NSC1-3A
S2-125	SIL-125	SF-125	SH-125	HX125	CFC12	FC-125	NSC1-3A
S3-150	SIL-150	SF-150	SH-150	HX150	CFC15	FC-150	NSC1-3A
S4-200	SIL-200	SF-200	SH-200	HX200	CFC20	FC-200	NSC1-3A
S5-250	SIL-250	SF-250	SH-250	HX250	CFC25	FC-250	NSC1-3A
S6-315	SIL-315	SF-315	SH-315	HX315	CFC31	FC-315	NSC1-3A

\* For filter, fan & heater in a single case with all the necessary controls in-built, please refer to the Ecosmart Sqrbo supply unit in the AHU section.  
 Note: Also available to suit all models: 230-RTIM Run On Timer; 230 - PIR Passive Infra Red; 230 - TSTATR Room Thermostat; Humisen Humidistat).

SQRBO DIMENSIONS (mm) & WEIGHT

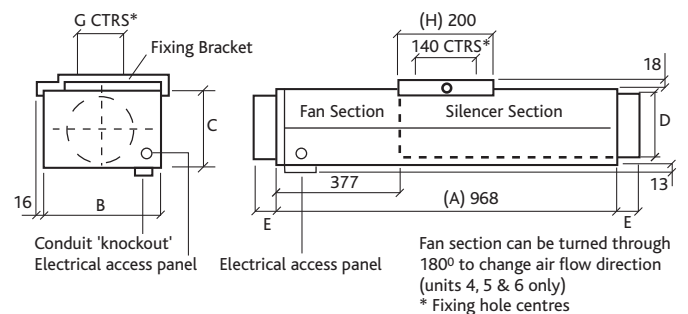
Fan Unit	A	B	C	D	E	F	G	H	Weight Kg
S1-100	394	230	159	100	50	140	115	200	6.0
S2-125	394	230	159	125	50	140	115	200	6.0
S3-150	394	300	184	150	50	140	150	200	7.0
S4-200	394	350	234	200	50	140	170	200	12.0
S5-250	394	350	284	250	50	140	170	200	13.0
S6-315	394	400	349	315	50	140	200	200	14.0



SILENCER COMBINATION DIMENSIONS (mm) & WEIGHT

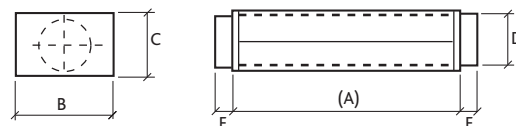
Fan Unit	A	B	C	D	E	F	G	H	Weight Kg
S1-SIL100	968	230	159	100	50	140	115	200	8.0
S2-SIL125	968	230	159	125	50	140	115	200	8.0
S3-SIL150	968	300	184	150	50	140	150	200	11.0
S4-SIL200	968	350	234	200	50	140	170	200	17.0
S5-SIL250	968	350	284	250	50	140	170	200	19.0
S6-SIL315	968	400	349	315	50	140	200	200	22.0

From Fan Selector



MATCHING SILENCERS DIMENSIONS (mm)

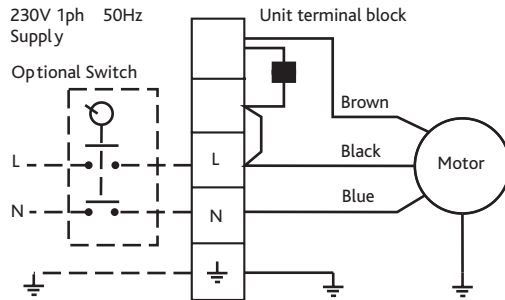
Fan Unit	A	B	C	D	E	Weight Kg
SIL-100	600	230	159	100	50	4.9
SIL125	600	230	159	125	50	4.8
SIL-150	600	300	184	150	50	6.6
SIL-200	600	350	234	200	50	9.9
SIL-250	600	350	284	250	50	10.9
SIL-315	600	400	349	315	50	12.2



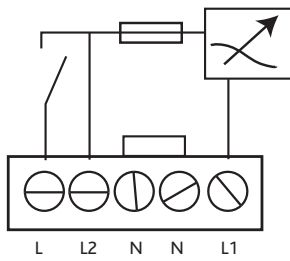
SILENCER INSERTION LOSSES

Code	Sound Reduction in dB						
	Octave band mid frequency Hz						
	125	250	500	1K	2K	4K	8K
SIL-100	15	12	18	29	45	27	15
SIL-125	13	9	16	26	39	21	13
SIL-150	5	8	17	35	40	17	8
SIL-200	9	8	14	29	23	12	14
SIL-250	5	5	12	25	15	10	9
SIL-315	3	4	10	22	14	10	11

WIRING - SQRBO UNIT

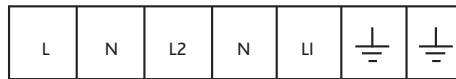


Electronic Speed Control



L = Mains LIVE connection  
 L2 = Unregulated 230V output  
 (or switch live to eg damper)  
 N = Mains NEUTRAL  
 N = Motor NEUTRAL  
 L1 = Regulated output to motor

Transformer Speed Control



L = Mains LIVE connection  
 L2 = Unregulated 230V output  
 (or switch live to eg damper)  
 N = Mains NEUTRAL  
 N = Motor NEUTRAL  
 L1 = Regulated output to motor  
 Earth = Earth  
 Earth = Earth

## CONSULTANTS SPECIFICATION

The ventilation fan Unit shall be configured and arranged as detailed on the drawings and in accordance with the schedule of equipment and shall be of the SQRBO type as manufactured by Nuair. The units shall be manufactured heavy gauge Aluzinc corrosion resistant steel, acoustically lined with class 'O' flame retardant acoustic foam and fitted with rigid circular spigots. The general construction is to class A leakage.

The fan performance and noise levels shall be as detailed in the fan schedule and in accordance with the manufacturers details.

The fan impeller and motor shall be selected to provide the most energy efficient solution conforming to part L regulations and shall be backward curve, direct drive with high efficiency motors to BS5000 as standard, class B insulation and IP44 protection. It shall be capable of operating at an ambient temperature of up to 50 degrees C (40 degrees C with speed control). The unit shall incorporate an access panel for removal of fan module and for general maintenance.

For ease of installation the unit shall be provided with a single fixing mounting bracket with integrated anti vibration seals.

The unit shall be supplied, where indicated, with an integrated silencer to form a compact package, avoiding unnecessary sound breakout from fan/silencer connections.

The contractor shall allow for all necessary ductwork transformations to and from the fan unit and any associated components in accordance with the manufacturers recommendations, DW 144 and general good practice.

The Fan unit shall have a 3 year warranty.

The fan and ancillaries shall be of the SQRBO type as manufactured by Nuair Limited.

All other components shall be in accordance with the manufacturer's specification.