

Slimline Range (SL)

Features & Benefits

- Performance range up to 0.92m³/s
- Speed control included
- EC Backward curved fans
- Anodised aluminium pentapost frame
- Double skinned Aluzinc panels
- Low profile direct drive units
- 2 Year guarantee

Low profile direct drive Air Handling Unit - Duties from 0.05m³/s to 0.92m³/s

Updated to incorporate modern energy efficient EC motors these units are designed specifically for applications with limited available height such as ceiling voids. Access can be from above or below with heater and motor connections on the left or right hand side.

The casing comprises of an AA25 anodised aluminium frame with high density glass reinforced nylon corners and double skinned Aluzinc panels enclosing 25mm of 60kg/m³ mineral fibre insulation. All panels are retained by proprietary fasteners. All panels are sealed by a purpose designed leak seal gasket fully retained into the aluminium framework.

Specification

Direct driven backward curved centrifugal fans with energy efficient EC motors statically and dynamically balanced to G6.3 for smooth long life operation. All motors incorporate EC motor controls to provide fully variable speed control.

Motors and control electronics are protected to IP44 as a minimum and suitable for operating in ambient conditions of 40°C and up to 95% RH. Electrical supply is 230/1/50 for all units.

Standard units contain either an electric heater battery or LPHW heater battery (specified at time of order) and an M5 filter. Units are suitable for internal mounting only.

Electric heating units include a simple heater control enabling the off coil temperature to be set and either adjusted by external or internal controls (external controls at additional cost). LPHW heating controls are by others.

Flexible Connectors

The Flexible Connectors are manufactured from Revertex JPT 20 with ductmate flanges to DW142.

Bag Filters

Bag Filters are manufactured from fire retardant synthetic material with galvanised steel frames. The filter grade is M5.

L.P.H.W. Heater Batteries

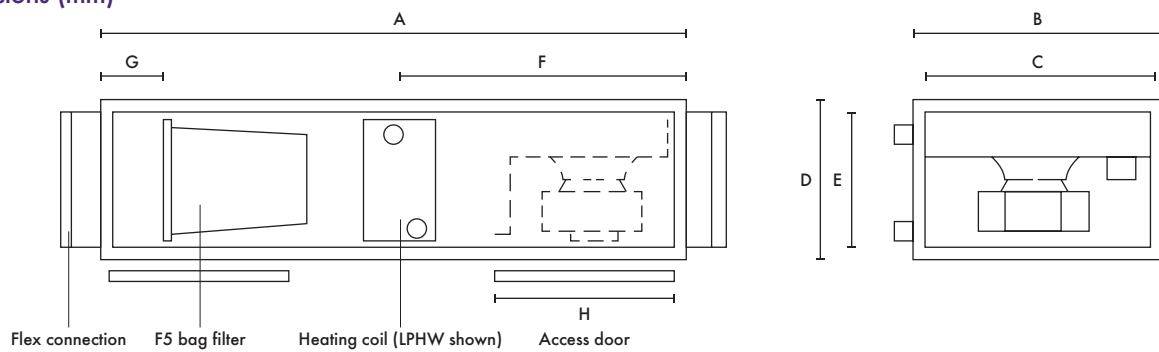
L.P.H.W. Heater Batteries are constructed from copper tube, mechanically bonded to aluminium fins with the complete assembly housed in a galvanised steel casing. The coil headers and return bends are totally enclosed within the air handling unit casing. Flow and return connections are located on the same side of the unit and have male B.S.P. thread. L.P.H.W. Heater Batteries are pressure tested under water to 250p.s.i.

Electric Heater Batteries

Electric Heater Battery elements are constructed from Nichrome 5 spiral resistance wire surrounded by magnesium oxide powder and sheathed in stainless steel. The elements are carried on a galvanised steel frame. All electric heaters incorporate a thermal cut out device. Electrical connections are via a flush mounted terminal box on the outside of the air handling unit casing.



Unit Dimensions (mm)



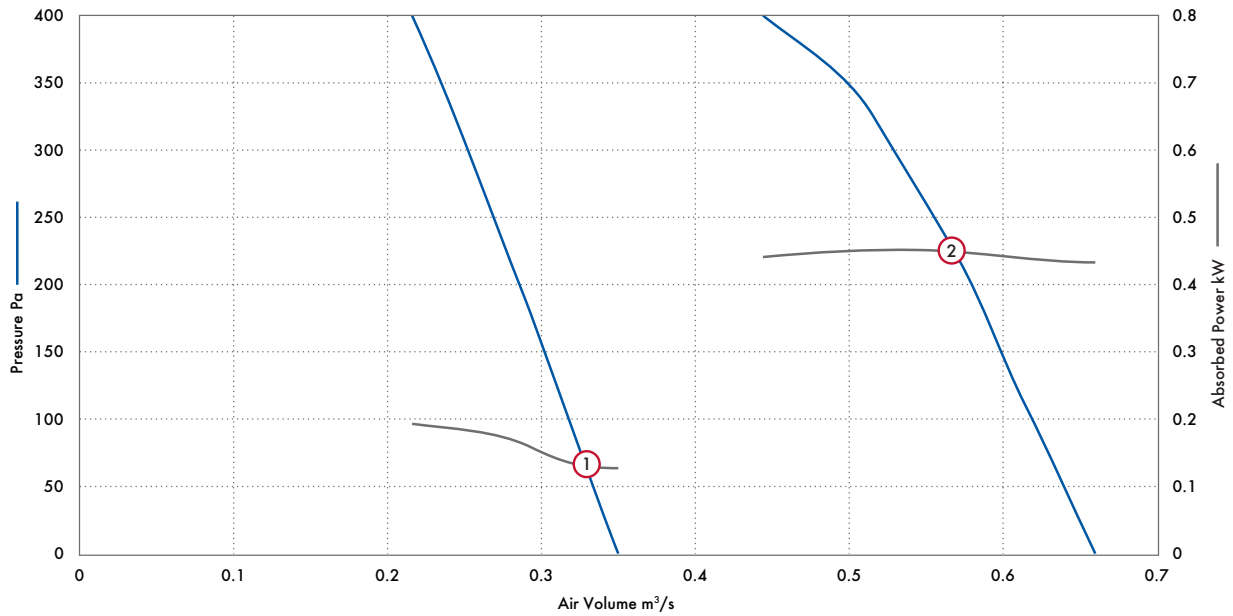
Unit Ref	A	B	C	D	E	F	G	H
SL6-22	1560	660	600	360	300	758	220	480
SL8-31	1560	810	750	360	300	758	220	480

Electrical / Heating Data

	Fan Supply	Speed	Max Fan Input kW	Heater Supply	Max Heater KW (Electric)	Heater Current Amps	LPHW Heater max Flow l/s	Temperature Rise at Max Airflow
SL6-22	230/1/50	3220	230	230/1/50	9	34	5.8	22
SL8-31	230/1/50	2600	450	400/3/50	18	25	12.9	22

Slimline Range (SL)

Performance Curve



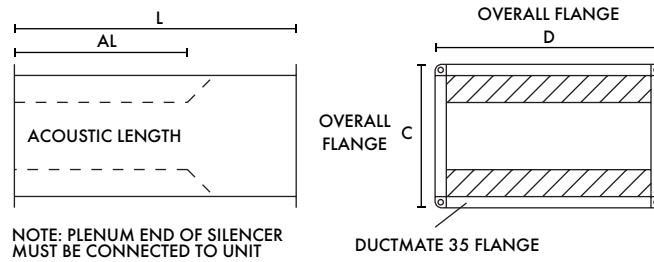
Performance Guide

Model	Curve Ref	Airflow, m ³ /s @ Pa									
		0	50	100	150	200	250	300	350	400	
SL6-22	①	m ³ /s	0.350	0.332	0.317	0.300	0.286	0.266	0.255	0.236	0.216
		kW	0.13	0.13	0.14	0.15	0.17	0.18	0.18	0.19	0.19
		SFP	0.36	0.39	0.43	0.49	0.59	0.66	0.71	0.79	0.89
SL8-31	②	m ³ /s	0.660	0.639	0.619	0.597	0.580	0.555	0.528	0.500	0.444
		kW	0.43	0.43	0.44	0.45	0.45	0.45	0.45	0.45	0.44
		SFP	0.66	0.68	0.71	0.75	0.77	0.81	0.86	0.91	0.99

Sound Data

Model		dBW re 10 ⁻¹² W								dBA @ 3.0m
		63	125	250	500	1k	2k	4k	8k	
SL6-22	Inlet	64	59	69	62	59	54	52	48	35
	Outlet	66	61	73	65	65	63	57	55	
	Breakout	58	53	57	35	35	30	24	24	
SL8-31	Inlet	62	65	70	69	60	63	59	56	40
	Outlet	65	68	73	72	69	66	62	59	
	Breakout	57	60	57	42	39	33	29	26	

Silencer Dimensions (mm)



Unit Size	Dimensions in mm				Approx Wgt kg
	L	AL	C	D	
SL6-22	1500	1200	360	660	33
	1800	1500	360	660	39
	1200	900	360	810	37
SL8-31	1500	1200	360	810	42
	1800	1500	360	810	48

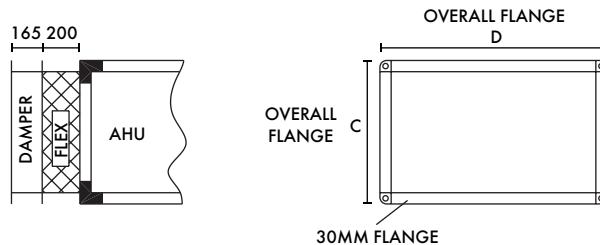
Silencer resistance (Pa) standard length silencer

Unit Size	0.1	0.15	0.2	0.25	0.3	0.35	0.4	0.45	0.5	0.55	0.6	0.65	0.7	0.8	0.9	1.0
SL6-22	2	4	7	11	16	22	29	37	-	-	-	-	-	-	-	-
SL8-31	1.5	3	5	8	11	15	19	24	30	36	43	51	59	77	97	120

Insertion loss for standard silencers

Unit Size	Length mm	Octave band mid frequency Hz							
		63	125	250	500	1k	2k	4k	8k
SL6-22	1200	-5	-9	-17	-28	-37	-37	-29	-24
	1500	-7	-12	-25	-35	-50	-50	-38	-30
	1800	-8	-15	-28	-42	-50	-50	-46	-34
SL8-31	1200	-5	-9	-17	-28	-37	-37	-29	-24
	1500	-7	-12	-25	-35	-50	-50	-38	-30
	1800	-8	-15	-28	-42	-50	-50	-46	-34

Damper Dimensions (mm)



Dampers are supplied with extended spindles - suitable for motorisation as standard.

Unit Size	Inlet Damper		Dim in mm		Approx Wgt kg
	Stock Ref		C	D	
SL6-22	57CD-66		360	660	6
SL8-31	57CD-81		360	810	7