

Section 1 - Demand Control Ventilation



- Volume flow up to 2.5m³/s
- Static pressures up to 650 Pa
- Can be either Direct or Belt driven
- Automatic shutters pivoted in semi-shrouded fan outlets, preventing recirculation
- ICU display to assist in set up
- Robust construction
- Low sound levels
- Fan operation up to 40°C
- Intelligent Control Unit
- Twin fan duty sharing facility.
- Auto-changeover facility in the event of fan failure

Sizes

Single Phase 220 - 240V / 50Hz

iFDDSF single fan or iFDDPF twin fan sizes 1,2,3,4,5,6 using ICU1.5 remote mounted.
Available later in 2006 sizes 7 & 8 using ICM1.12 casing mounted.

iFDRSF single fan or iFDRPF twin fan sizes 1,2,3,4,5,6 using ICU1.5 remote mounted in weatherproof area.
Available later in 2006 sizes 7 & 8 using ICM1.12 remote mounted in weatherproof area.

Three phase 380 - 420V / 50Hz

iFBDSF single fan or iFBDPF twin fan sizes 6,7,8,9 using ICM3 casing mounted.
iFBRSF single fan or iFBRPF twin fan sizes 6,7,8,9 using ICM3 remote mounted in weatherproof area.

Construction

Manufactured from pre-galvanised sheet steel, arranged for horizontal air discharge. Aluminium units are available - please enquire.
Electrical isolators are available on request. Duct connections can be provided in a variety of positions and sizes.

Motors

The motors are manufactured to BS5000. On direct driven units anti-vibration mounts are fitted between the motor mounting arms and impeller scroll. Overheat protection is a standard fitment to direct drive single phase motors. Belt driven units have the mounts fitted between a common fan base frame and the unit casing.

Electrical Supply

220 - 240V / 50Hz / 1 ϕ using ICU1.5.
380 - 420V / 50Hz / 3 ϕ using ICM3.

Temperature Range

up to 40°C.

Wiring/Controls

All units are speed controllable using the Fläkt Woods iFan Intelligent Control Unit, ICU1.5 for remote mounting and ICM3 for integral mounting.

Servicing

The top panel of each unit allows easy access for inspection. The fan assembly can also be easily removed for cleaning purposes.

Mounting

Suitable for horizontal mounting. Mounting kit for ICU1.5 available, refer section 1.8.

Noise Levels

All units can either be acoustically lined or unlined, using prefix *-AL (lined) or *-A (unlined).



Electrical Data

Product Code	220-240V/50Hz/1 ϕ			
	Nominal Speed RPM	Motor Output Watts	Nominal SC (AMPS)	FLC (AMPS)
DRPF/DDPF 1A (AL) or DRSF/DDSF 1A (AL)	1900	14.7	1.4 x 2	0.62
DRPF/DDPF 2A (AL) or DRSF/DDSF 2A (AL)	1250	35	2.0 x 2	0.94
DRPF/DDPF 3A (AL) or DRSF/DDSF 3A (AL)	1300	150	2.7 x 2	1.2
DRPF/DDPF 4A (AL) or DRSF/DDSF 4A (AL)	1300	150	4.0 x 2	1.8
DRPF/DDPF 5A (AL) or DRSF/DDSF 5A (AL)	1300	198	7.0 x 2	3.2
DRPF/DDPF 6A (AL) or DRSF/DDSF 6A (AL)	900	335	6.8 x 2	3.1
Available later in 2006				
DRPF/DDPF 7A (AL) or DRSF/DDSF 7A (AL)	1300	550	13.7 x 2	6.2
DRPF/DDPF 8A (AL) or DRSF/DDSF 8A (AL)	900	736	19.5 x 2	8.7
DRPF/DDPF 8/4A (AL) or DRSF/DDSF 8/4A (AL)	1250	550	15.0 x 2	6.8
DRPF/DDPF 8/6A (AL) or DRSF/DDSF 8/6A (AL)	900	550	12.1 x 2	5.5

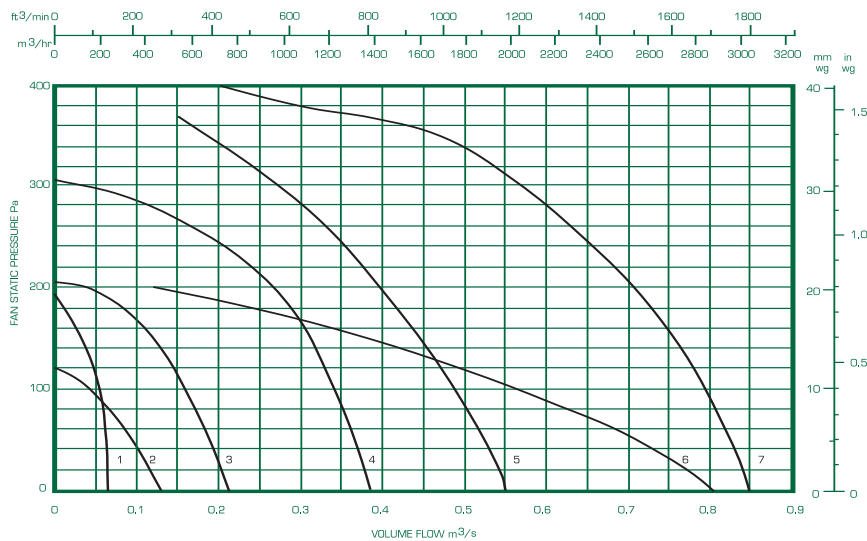
Sound Data

Product Code	Sound Power Levels (dB)								Break out Sound Level dBA @ 3m	
	In Octave Bands Centre Frequency - Hz								Lined	Unlined
	125	250	500	1000	2000	4000	8000			
DRPF/DDPF 1A (AL) or DRSF/DDSF 1A (AL)	65	62	59	55	53	50	47	34	34	
DRPF/DDPF 2A (AL) or DRSF/DDSF 2A (AL)	65	58	51	53	52	50	47	31	31	
DRPF/DDPF 3A (AL) or DRSF/DDSF 3A (AL)	66	59	50	54	53	51	48	31	31	
DRPF/DDPF 4A (AL) or DRSF/DDSF 4A (AL)	70	63	54	58	57	55	52	35	35	
DRPF/DDPF 5A (AL) or DRSF/DDSF 5A (AL)	72	65	56	60	59	57	54	37	37	
DRPF/DDPF 6A (AL) or DRSF/DDSF 6A (AL)	75	73	70	71	71	65	63	37	37	
DRPF/DDPF 7A (AL) or DRSF/DDSF 7A (AL)	78	75	75	79	80	76	70	51	53	
DRPF/DDPF 8A (AL) or DRSF/DDSF 8A (AL)	77	75	77	75	74	71	66	51	52	
DRPF/DDPF 8/4A (AL) or DRSF/DDSF 8/4A (AL)	79	78	74	76	74	71	65	50	52	
DRPF/DDPF 8/6A (AL) or DRSF/DDSF 8/6A (AL)	73	74	74	75	73	69	64	49	50	

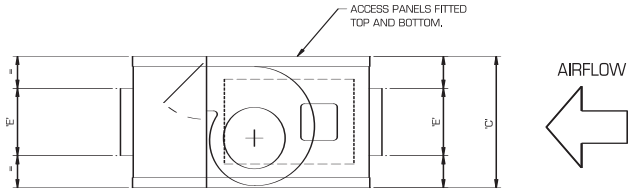
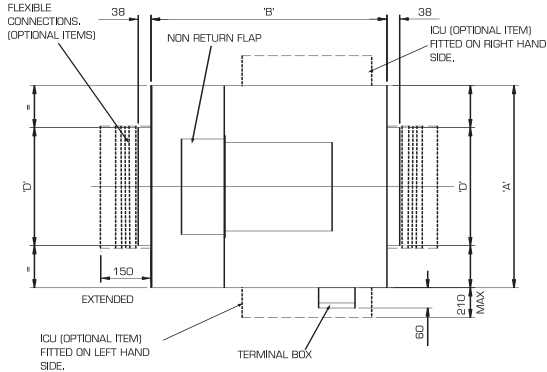
Sound pressure levels are measured in dB(A) @ 20 μ Pa.

The break out sound levels are based on a fully ducted unit.

Performance Data

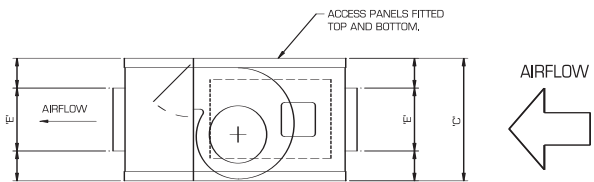
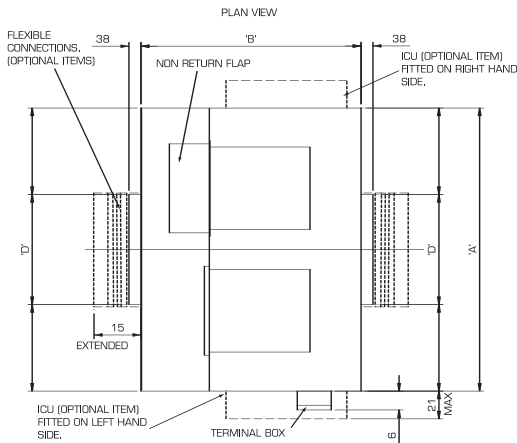


Single Fan Duct Mounting - Model DDSF (A) and (AL)



Product Code	Dimensions					Unit (AL) Weight kg
	A	B	C	D	E	
DDSF1.A(AL)	340	452	210	175	100	11
DDSF2.A(AL)	470	525	260	225	150	13
DDSF3.A(AL)	490	600	330	230	150	19
DDSF4.A(AL)	580	700	390	350	200	32
DDSF5.A(AL)	620	800	440	400	325	42
DDSF6.A(AL)	620	800	440	450	350	42
Available in 2006						
DDSF7.A(AL)	620	800	440	450	350	42
DDSF 8A (AL)	800	1000	575	700	400	73
DDSF 8/4A (AL)	800	1000	575	700	400	66
DDSF 8/6A (AL)	800	1000	575	700	400	66

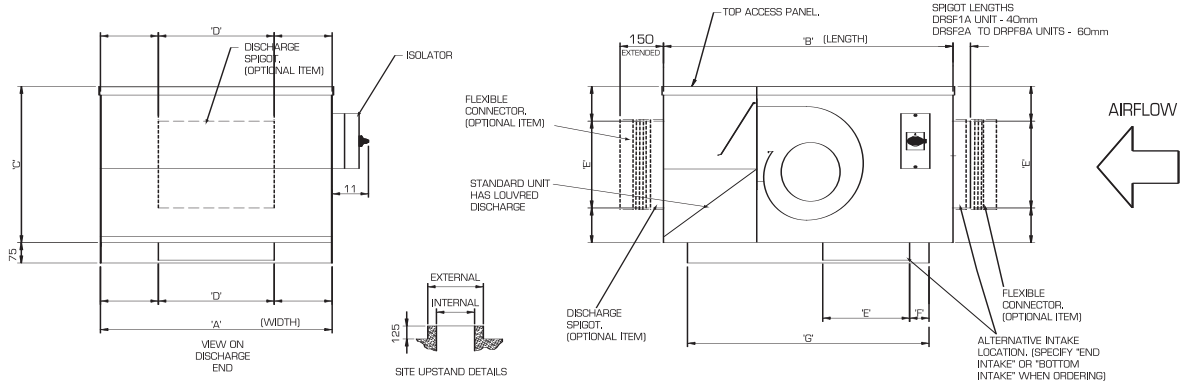
Twin Fan Duct Mounting - Model DDPF (A) and (AL)



Product Code	Dimensions					Unit (AL) Weight kg
	A	B	C	D	E	
DDPF1A(AL)	530	450	260	175	100	20
DDPF2A(AL)	740	525	310	250	150	25
DDPF3A(AL)	740	600	380	250	150	37
DDPF4A(AL)	900	700	440	350	200	52
DDPF5A(AL)	1000	800	490	400	325	61
DDPF6A(AL)	1000	800	490	450	350	75
Available in 2006						
DDPF7A(AL)	1000	800	490	450	350	75
DDPF8A (AL)	1375	1150	625	700	400	130
DDPF8/4A (AL)	1375	1150	625	700	400	117
DDPF8/6A (AL)	1375	1150	625	700	400	117

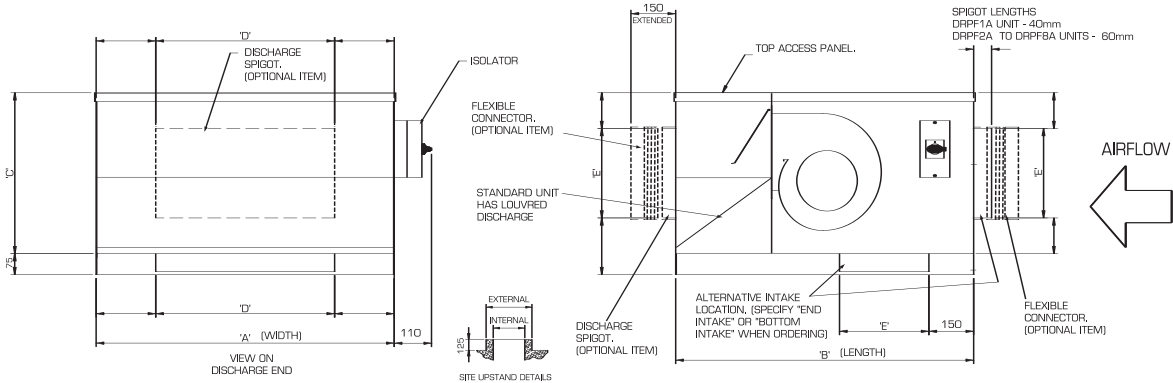
Dimensions

Single Fan Roof Mounting Unit - Model DRSF (A) and (AL)



Product Code	Dimensions							Unit (AL) Weight kg	Upstand Dimensions			
	A	B	C	D	E	F	G		Width		Length	
									External	Internal	External	Internal
DRSF1A (AL)	340	500	250	150	100	150	330	17	320	270	310	260
DRSF2A (AL)	470	700	340	225	150	150	460	22	450	400	440	390
DRSF3A (AL)	490	700	390	250	150	150	480	25	470	420	460	410
DRSF4A (AL)	580	800	450	300	200	150	570	40	560	510	550	500
DRSF5A (AL)	620	950	550	400	300	155	610	58	600	550	590	540
DRSF6A (AL)	620	1050	550	400	300	155	610	70	600	550	590	540
Available in 2006												
DRSF7A (AL)	620	1050	550	400	300	155	610	70	600	550	590	540
DRSF8A (AL)	800	1150	625	600	400	150	1150	92	780	680	1130	1030
DRSF8/4A (AL)	800	1150	625	600	400	150	1150	83	780	680	1130	1030
DRSF8/6A (AL)	800	1150	625	600	400	150	1150	83	780	680	1130	1030

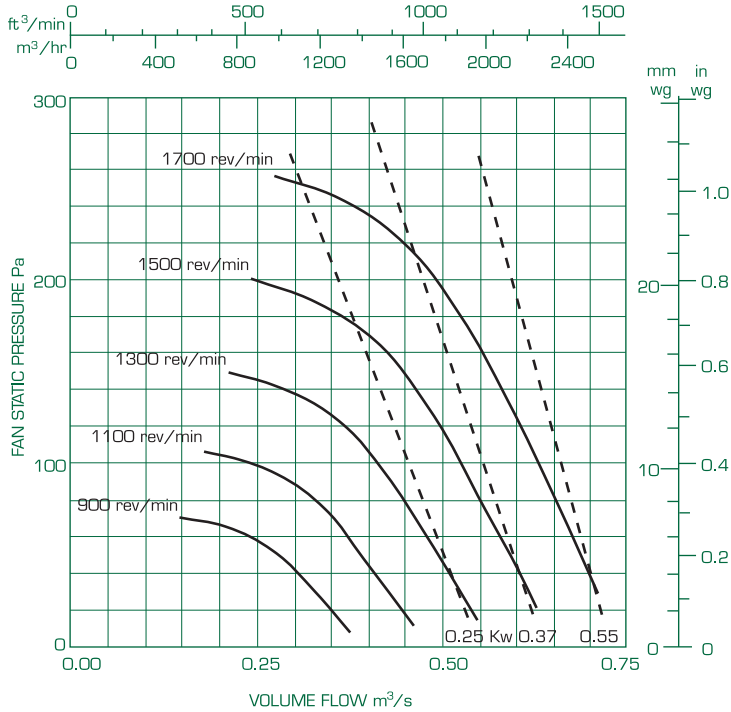
Twin Fan Roof Mounting Unit - Model DRPF (A) and (AL)



Product Code	Dimensions					Unit (AL) Weight kg	Upstand Dimensions			
	A	B	C	D	E		Width		Length	
							External	Internal	External	Internal
DRPF 1A (AL)	670	500	250	150	100	17	650	500	480	330
DRPF 2A (AL)	750	700	340	225	150	22	730	580	680	530
DRPF 3A (AL)	750	700	390	250	150	25	730	580	680	530
DRPF 4A (AL)	850	800	450	300	200	40	830	630	780	580
DRPF 5A (AL)	1000	950	550	500	250	58	980	780	930	730
DRPF 6A (AL)	1050	1050	550	600	300	70	1030	830	1030	830
Available in 2006										
DRPF 7A (AL)	1050	1050	550	600	300	70	1030	830	1030	830
DRPF 8A (AL)	1100	1100	600	700	350	122	1080	880	1080	880
DRPF 8/4A (AL)	1100	1100	600	700	350	110	1080	880	1080	880
DRPF 8/6A (AL)	1100	1100	600	700	350	110	1080	880	1080	880

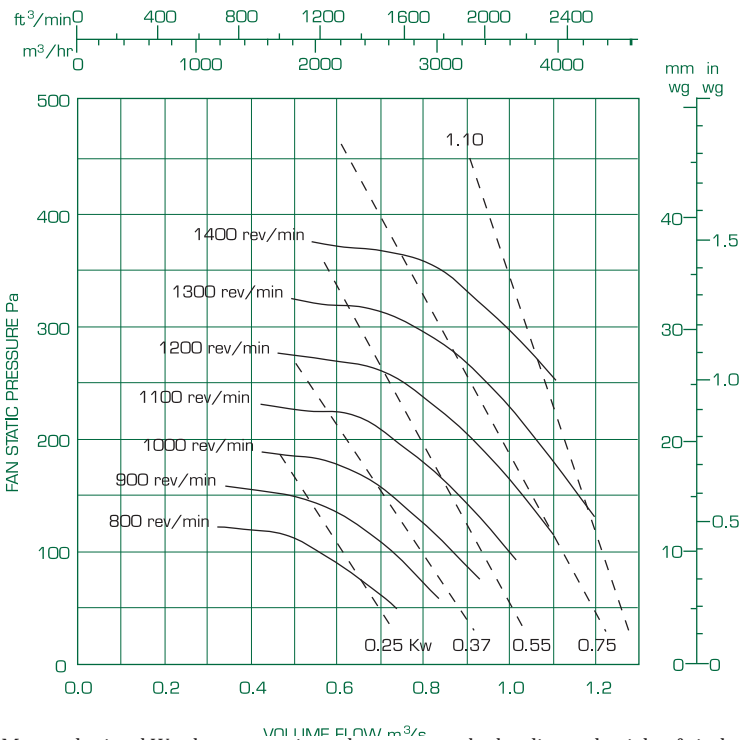
Performance Data

BRSF6 (A) and (AL) or BDSF6 (A) and (AL)



* Average dBA ratings measured hemispherically under free field conditions at 3m from the unit. Lw is the sound power level in dB Ref. 1pW. To obtain sound power levels in octave bands, deduct the octave band correction from the appropriate Lw for the speed in use.

BRSF7 (A) and (AL) or BDSF7 (A) and (AL)



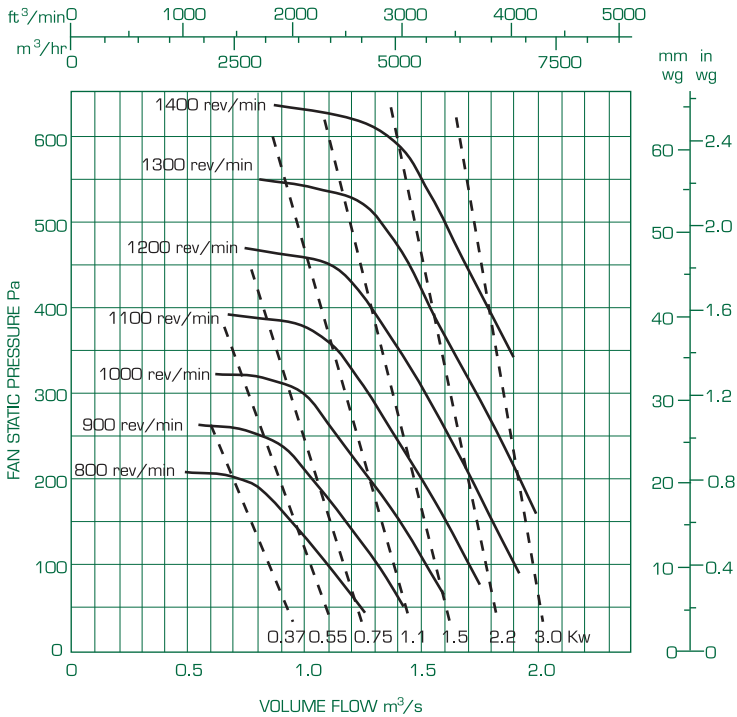
* Average dBA ratings measured hemispherically under free field conditions at 3m from the unit. Lw is the sound power level in dB Ref. 1pW. To obtain sound power levels in octave bands, deduct the octave band correction from the appropriate Lw for the speed in use.

Motor selection, kW, take motor rating value on nearest broken line to the right of air duty point.

- Example:
 Duty required - 0.5 m³/sec at 120 Pa - Duct Mounted Unit
 Selections - BDPF-6A, 1500 rev/min, 0.37kW
 Unit Code - BDPF-6A/1500/0.37. (Unlined).
 - BDPF-6AL/1500/0.37. (Acoustically Lined).

Performance Data

BRSF8 (A) and (AL) or BDSF8 (A) and (AL)

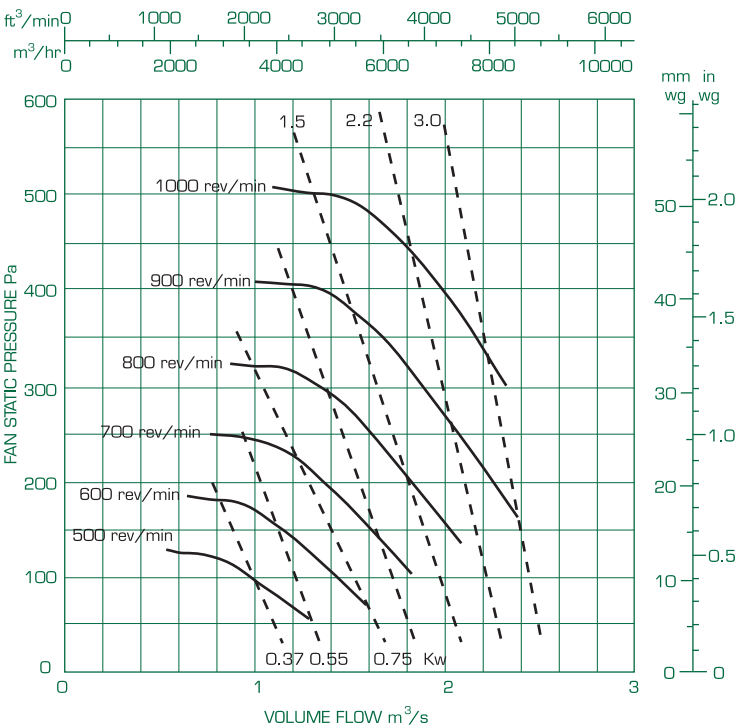


Octave Band Correction							
63	125	250	500	1K	2K	4K	8K
-6	-6	-9	-9	-7	-10	-14	-18

Speed	Lw	dBA
800	81	60
900	83	63
1000	86	65
1100	88	67
1200	90	70
1300	92	72
1400	94	73

* Average dBA ratings measured hemispherically under free field conditions at 3m from the unit. Lw is the sound power level in dB Ref. 1pW. To obtain sound power levels in octave bands, deduct the octave band correction from the appropriate Lw for the speed in use.

BRSF9 (A) and (AL) or BDSF9 (A) and (AL)



Octave Band Correction							
63	125	250	500	1K	2K	4K	8K
-6	-6	-7	-7	-10	-12	-13	-19

Speed	Lw	dBA
500	75	53
600	79	57
700	83	61
800	86	64
900	89	67
1000	91	70

* Average dBA ratings measured hemispherically under free field conditions at 3m from the unit. Lw is the sound power level in dB Ref. 1pW. To obtain sound power levels in octave bands, deduct the octave band correction from the appropriate Lw for the speed in use.

Motor selection, kW, take motor rating value on nearest broken line to the right of air duty point.

Example:
 Duty required - 0.5 m³/sec at 120 Pa - Duct Mounted Unit.
 Selections - BDPPF-6A, 1500 rev/min, 0.37kW.
 Unit Code - BDPPF-6A/1500/0.37. (Unlined).
 - BDPPF-6AL/1500/0.37. (Acoustically Lined).



4 Pole Motors (1400 rev/min approx.)

Motor Rating (kW)	440V/50Hz/3 ϕ		
	Full Load Current	Starting Current (A)	Starting Current* (A)
		Single Fan	Twin Fan
0.25	0.87	2.8	2.8 x 2
0.37	1.4	4.7	4.7 x 2
0.55	1.6	7	7.0 x 2
0.75	2	9.5	9.5 x 2
1.1	2.9	14.5	14.5 x 2
1.5	3.5	20.7	20.7 x 2
2.2	4.9	27.9	27.9 x 2
3	6.6	38.9	38.9 x 2

6 Pole Motors (900 rev/min approx.)

Motor Rating (kW)	440V/50Hz/3 ϕ		
	Full Load Current	Starting Current (A)	Starting Current* (A)
		Single Fan	Twin Fan
0.37	1.2	4	4 x 2
0.55	1.7	6.6	6.6 x 2
0.75	1.9	1.9	8.5 x 2

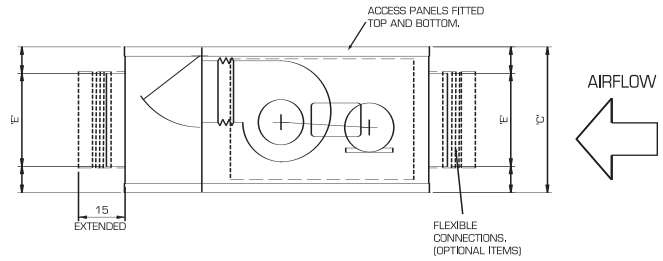
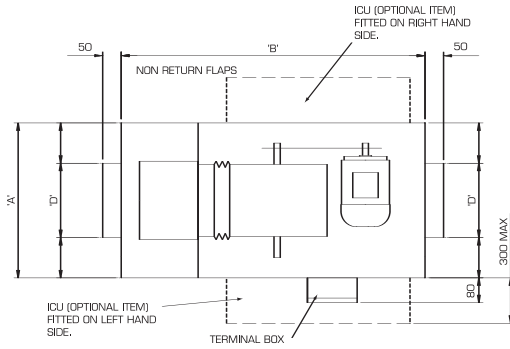
For Fan speed less than 700 rpm select 6 pole motors.

*Momentarily both fans will start (initial start only)



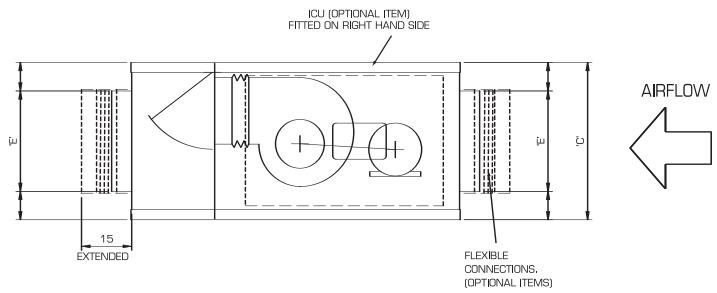
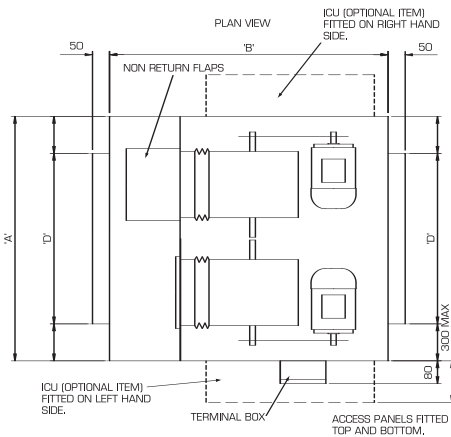
Dimensions

Single Fan Duct Mounting Unit - Model BDSF (A) and (AL)



Product Code	Dimensions					Unit (AL) Weight kg
	A	B	C	D	E	
BDSF6A (AL)	550	1000	480	500	325	70
BDSF7A (AL)	675	1175	590	625	370	95
BDSF8A (AL)	835	1450	675	785	460	135
BDSF9A (AL)	1035	1500	765	985	460	160
BDSF10A (AL)	1200	2000	1100	1100	800	260
BDSF11 (AL)	1200	2000	1100	1100	800	270
BDSF12A (AL)	1200	2000	1100	1100	800	300

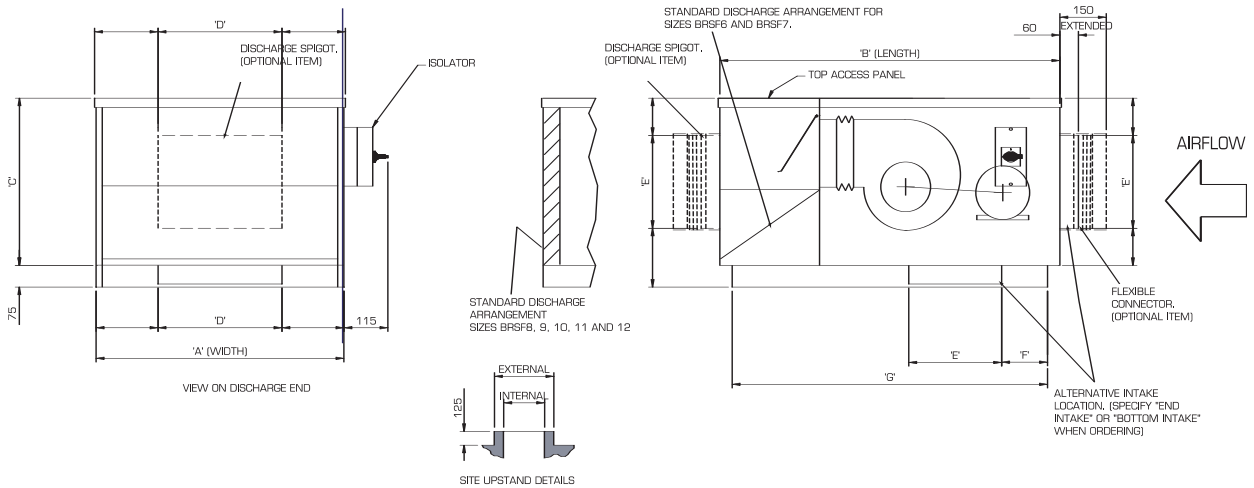
Twin Fan Duct Mounting Unit - Model BDPF (A) and (AL)



Product Code	Dimensions					Unit (AL) Weight kg
	A	B	C	D	E	
BDPF6A (AL)	850	1000	480	650	250	128
BDPF7A (AL)	1100	1175	540	762	305	155
BDPF8A (AL)	1250	1450	675	900	400	200
BDPF9A (AL)	1500	1500	765	1000	457	264
BDPF10A (AL)	2100	2000	1100	1500	600	505
BDPF11A (AL)	2100	2000	1100	1500	600	525
BDPF12A (AL)	2100	2000	1100	1500	600	590

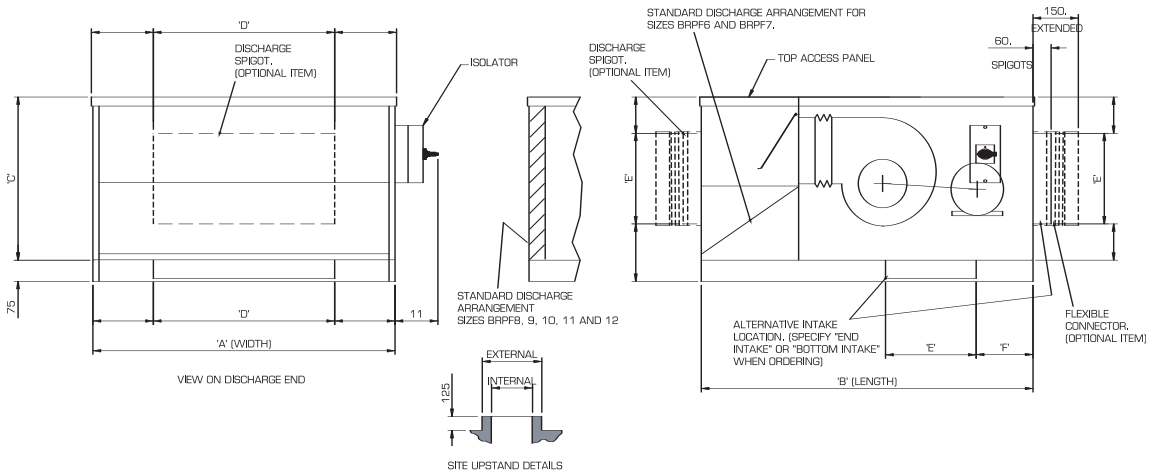
Dimensions

Single Roof Mounting Unit - Model BRSF6 - 12 (A) and (AL)



Product Code	Dimensions							Unit (AL) Weight kg	Upstand Dimensions			
	A	B	C	D	E	F	G		Width		Length	
	External	Internal	External	Internal	External	Internal	External		Internal			
BRSF6A(AL)	550	1100	525	300	415	150	1100	60	530	380	1080	930
BRSF7A(AL)	675	1175	625	430	540	150	1120	80	655	505	1100	950
BRSF8A(AL)	835	1450	725	590	610	150	1450	105	815	665	1430	1280
BRSF9A(AL)	1035	1550	825	790	670	150	1550	125	1015	865	1530	1380
BRSF10A(AL)	1300	2100	1100	1050	900	150	2100	220	1280	1080	2080	1880
BRSF11A(AL)	1300	2100	1100	1050	900	150	2100	230	1280	1080	2080	1880
BRSF12A(AL)	1300	2100	1100	1050	900	150	2100	260	1280	1080	2080	1880

Twin Roof Mounting Unit - Model BRPF6 - 10 (A) and (AL)



Product Code	Dimensions					Unit (AL) Weight kg	Upstand Dimensions			
	A	B	C	D	E		Width		Length	
	External	Internal	External	Internal	External		Internal	External	Internal	
BRPF-6A (AL)	900	1100	500	500	250	150	880	730	1080	930
BRPF-7A (AL)	1150	1175	600	762	305	150	1130	930	1155	955
BRPF-8A (AL)	1450	1450	700	900	400	150	1430	1230	1430	1230
BRPF-9A (AL)	1550	1550	800	1000	450	150	1530	1330	1530	1330
BRPF10A (AL)	2100	2100	1100	1500	800	527	2080	1880	2080	1830
BRPF11A (AL)	2100	2100	1100	1500	800	527	2080	1880	2080	1830
BRPF12A (AL)	2100	2100	1100	1500	800	527	2080	1880	2080	1830