

BOX RLF F400



BACKWARD CURVED CENTRIFUGAL FAN IN SOUNDPROOF CABINET 400°C/2H

MANUFACTURING FEATURES

- Box manufactured in galvanised steel sheet.
- Circular inlet flange.
- Backward impeller, direct coupling motor.
- Standard asynchronous squirrel-cage motor with IP-55 protection and Class H insulation type F400 2h.
- Manufactured with standard voltages: 230/400V 50Hz in three phase motors up to 3kW, and 400/690V 50Hz for higher powers.
- Exchangeable pannels
- Open drive.

APPLICATIONS

Designed for inline installation, they are suitable for:

- Air renewal in buildings and industries.
- Maximum working temperature: 60°C.
- Removing smoke in case of fire. The motor inside the hazardous area (400 °C / 2 h)

UNDER REQUEST

- Double skin insulation.

Official homologation by the European laboratory APPLUS according to EN 12101-3:2002, EN 12101-3:2002/AC:2005
Certification Nr: 0370-CPR-0582

Accessories



BA-400



CPM



FILTRO
EMC



INT



INT 400



JE-45



SFC



SIL-C /
SIL-CN



TIAC

Technical data

Three-phase motor / 4 poles

Code	Model	R.P.M.	Rated I. (A) 400V	Rated power kW	Max. Airflow m3/h	Sound db (A)*	Weight	Connect. diagram
241390186	BOX RLF 400 T4 0,75kW	1415	1,95	0,75	4.960	50	115	1
241460186	BOX RLF 450 T4 1,1kW	1430	2,7	1,10	6.580	55	142	1
241520186	BOX RLF 500 T4 1,5kW	1435	3,6	1,50	8.490	60	147	1
241600186	BOX RLF 560 T4 2,2kW	1455	4,55	2,20	12.850	62	187	1
241670186	BOX RLF 630 T4 5,5kW	1455	10,5	5,50	19.250	66	198	1
241770186	BOX RLF 710 T4 7,5kW	1455	14,1	7,50	21.350	75	263	1
241830186	BOX RLF 800 T4 15kW	1455	28,7	15	32.250	83	339	1

Three-phase motor / 6 poles

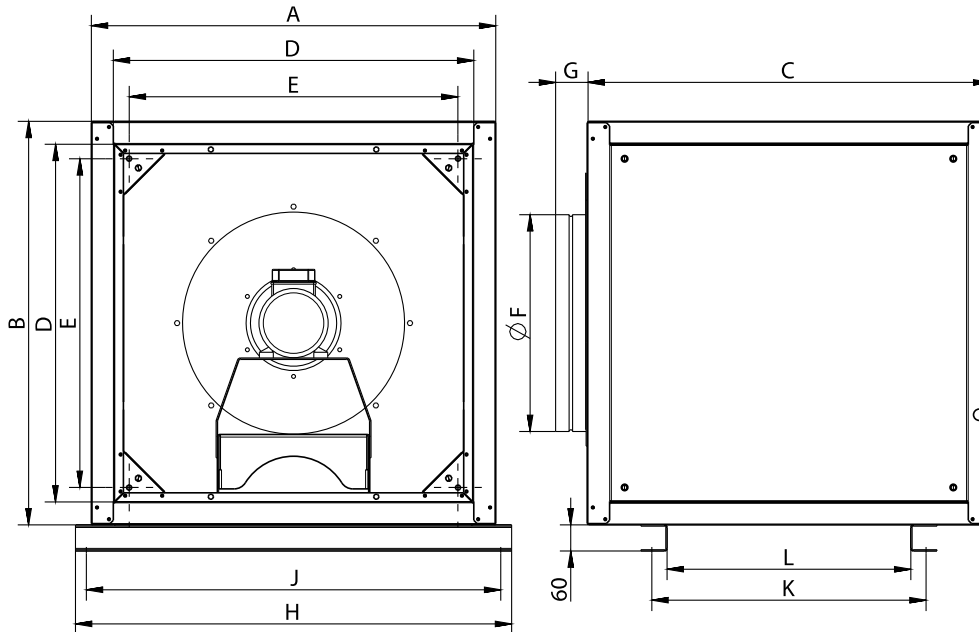
Code	Model	R.P.M.	Rated I. (A) 400V	Rated power kW	Max. Airflow m3/h	Sound db (A)*	Weight	Connect. diagram
241440186	BOX RLF 400 T6 0,55kW	920	1,69	0,55	2.770	40	115	1
241470186	BOX RLF 450 T6 0,55kW	920	1,69	0,55	4.370	45	141	1
241540186	BOX RLF 500 T6 0,55kW	920	1,69	0,55	5.590	50	146	1
241620186	BOX RLF 560 T6 0,75kW	920	2,2	0,75	8.130	52	176	1
241660186	BOX RLF 630 T6 1,5kW	960	3,6	1,50	12.710	42	218	1
241760186	BOX RLF 710 T6 2,2kW	960	5,23	2,20	16.560	46	273	1
241840186	BOX RLF 800 T6 4kW	945	8,97	4	20.950	48	339	1

2 SPEED MOTOR / 4/8 poles

Code	Model	R.P.M.	Rated I. (A) 400V	Rated power kW	Max. Airflow m3/h	Sound db (A)*	Weight	Connect. diagram
2415201862V	BOX RLF 500 T4/T8 1,5/0,3kW	1400	3,26/0,88	1,5/ 0,3	8.400	17	147	2
2416001862V	BOX RLF 560 T4/T8 2,2/0,45kW	1430	5,08/1,28	2,2/ 0,45	12.850	34	187	2
2416701862V	BOX RLF 630 T4/T8 5,5/1,1kW	1440	10,9/3,32	5,5/ 1,1	19.190	51	198	2
2417701862V	BOX RLF 710 T4/T8 7,5/1,5kW	1440	14,9/3,7	7,5/ 1,5	21.350	39	273	2

Notes:
 * Total sound pressure level at the point of maximum flow measured in dB(A) in the suction measured in free field at a distance of 6m from the source

Dimensions



Model	A	B	C	D	E	G	H	J	K
BOX RLF 400 T4 0,75kW	800	800	800	696	628,5	74	1002	952	628,5
BOX RLF 400 T6 0,55kW	800	800	800	696	628,5	74	1002	952	628,5
BOX RLF 450 T4 1,1kW	800	800	800	696	628,5	74	1002	952	628,5
BOX RLF 450 T6 0,55kW	800	800	800	696	628,5	74	1002	952	628,5
BOX RLF 500 T4 1,5kW	925	925	925	821	753	74	1127	1077	753
BOX RLF 500 T6 0,55kW	925	925	925	821	753	74	1127	1077	753
BOX RLF 500 T4/T8 1,5/0,3kW	925	925	925	821	753	74	1127	1077	753
BOX RLF 560 T4 2,2kW	925	925	925	821	753	74	1127	1077	753
BOX RLF 560 T6 0,75kW	925	925	925	821	753	74	1127	1077	753
BOX RLF 560 T4/T8 2,2/0,45kW	925	925	925	821	753	74	1127	1077	753
BOX RLF 630 T4 5,5kW	1000	1000	1000	892	828	74	1203	1153	828
BOX RLF 630 T6 1,5kW	1000	1000	1000	892	828	74	1203	1153	828
BOX RLF 630 T4/T8 5,5/1,1kW	1000	1000	1000	892	828	74	1203	1153	828
BOX RLF 710 T4 7,5kW	1000	1000	1000	892	828	74	1203	1153	828
BOX RLF 710 T6 2,2kW	1000	1000	1000	892	828	74	1203	1153	828
BOX RLF 710 T4/T8 7,5/1,5kW	1000	1000	1000	892	828	74	1203	1153	828
BOX RLF 800 T4 15kW	1060	1060	1060	952	887	74	1262	1212	887
BOX RLF 800 T6 4kW	1060	1060	1060	952	887	74	1262	1212	887

Model	L	ØF
BOX RLF 400 T4 0,75kW	558,5	398
BOX RLF 400 T6 0,55kW	558,5	398

Model	L	ØF
BOX RLF 450 T4 1,1kW	558,5	448
BOX RLF 450 T6 0,55kW	558,5	448
BOX RLF 500 T4 1,5kW	683	498
BOX RLF 500 T6 0,55kW	683	498
BOX RLF 500 T4/T8 1,5/0,3kW	683	498
BOX RLF 560 T4 2,2kW	683	548
BOX RLF 560 T6 0,75kW	683	548
BOX RLF 560 T4/T8 2,2/0,45kW	683	548
BOX RLF 630 T4 5,5kW	758	628
BOX RLF 630 T6 1,5kW	758	628
BOX RLF 630 T4/T8 5,5/1,1kW	758	628
BOX RLF 710 T4 7,5kW	758	698
BOX RLF 710 T6 2,2kW	758	698
BOX RLF 710 T4/T8 7,5/1,5kW	758	698
BOX RLF 800 T4 15kW	817	798
BOX RLF 800 T6 4kW	817	798

Wiring diagram

DIAGRAM Nº 1

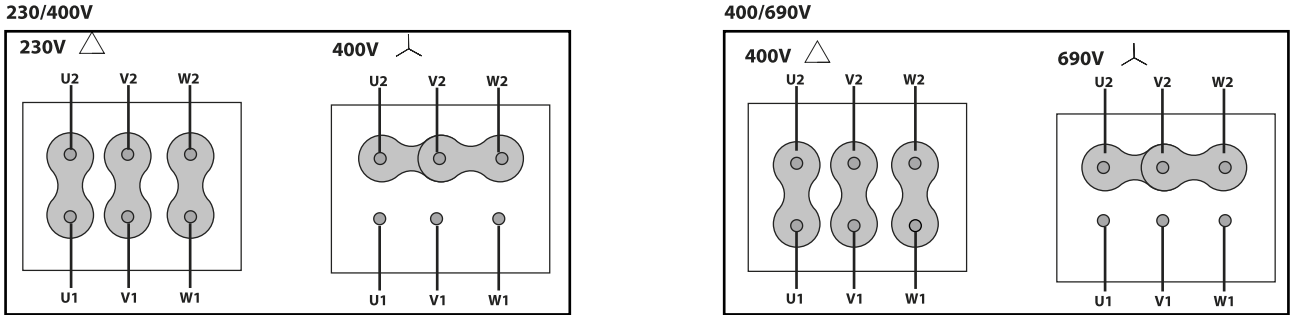
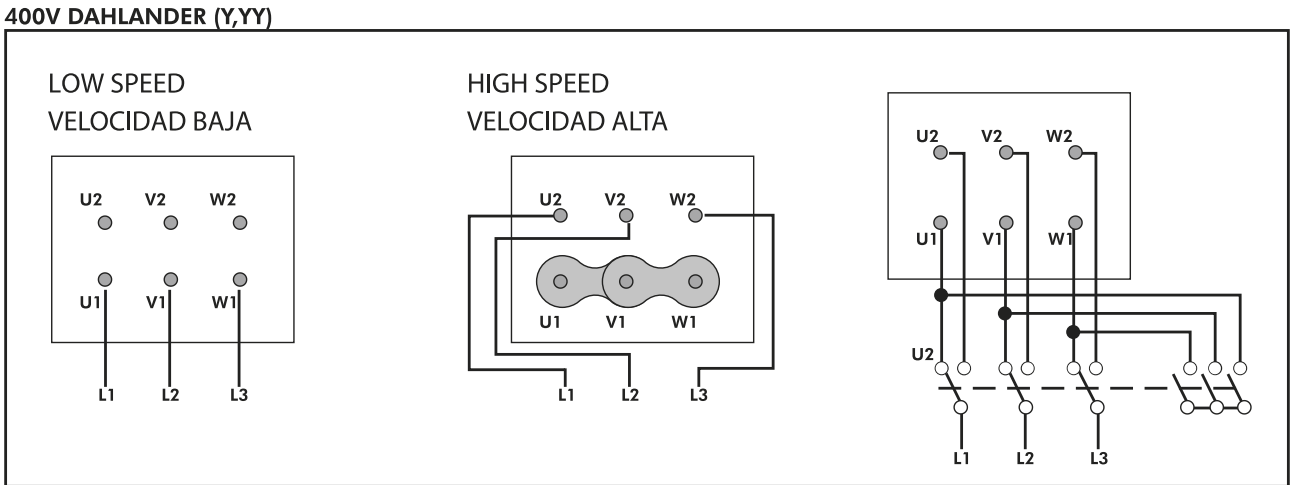


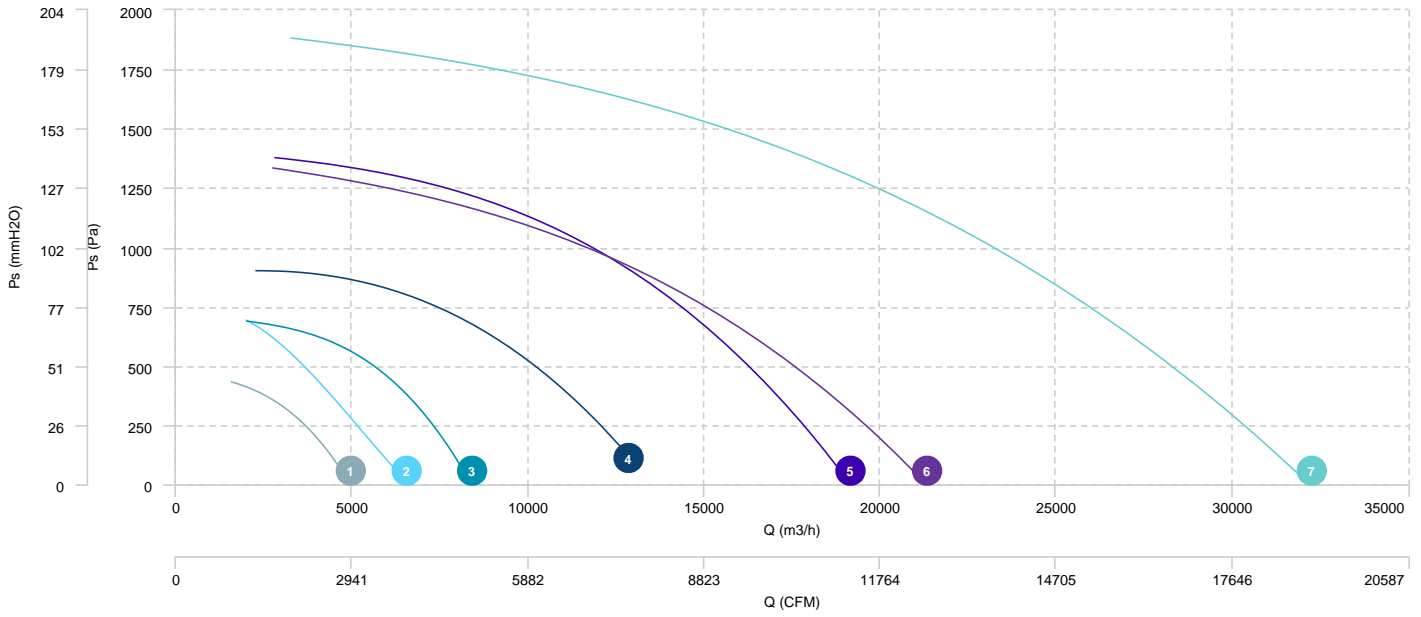
DIAGRAM Nº 2



CHARACTERISTIC CURVE

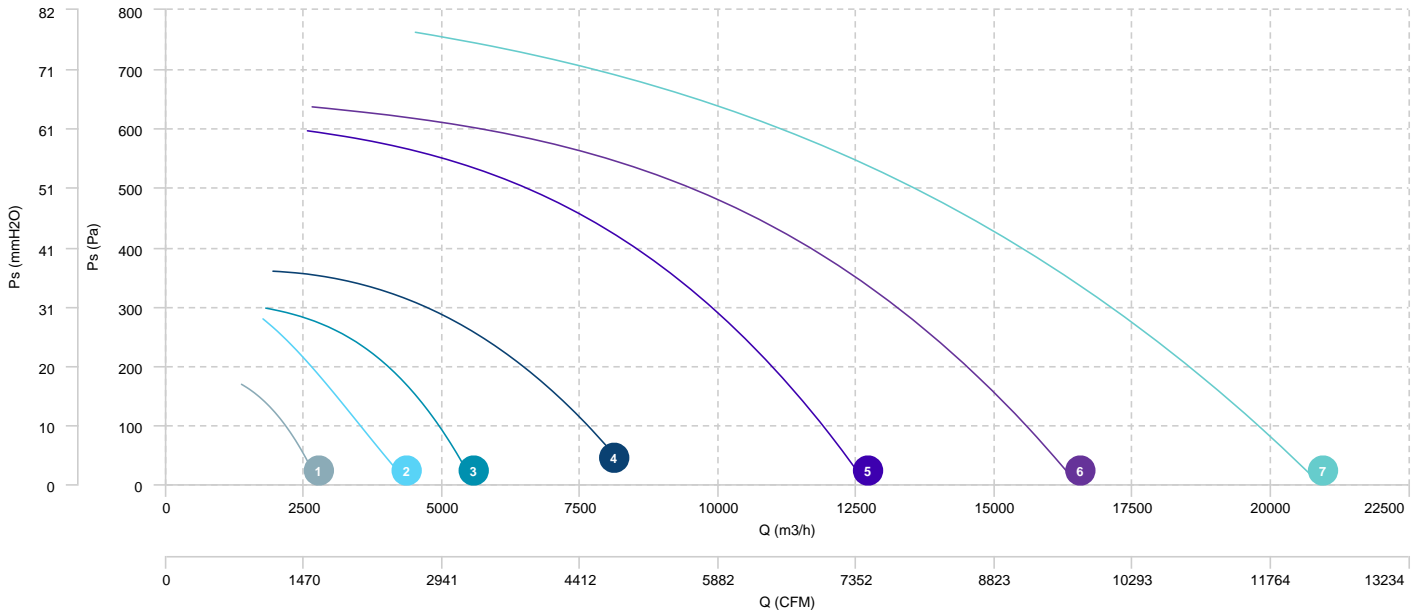
1	BOX RLF 400 T4 0,75kW	2	BOX RLF 450 T4 1,1kW	3	BOX RLF 500 T4 1,5kW	4	BOX RLF 560 T4 2,2kW
5	BOX RLF 630 T4 5,5kW	6	BOX RLF 710 T4 7,5kW	7	BOX RLF 800 T4 15kW		

AIR FLOW - PRESSURE



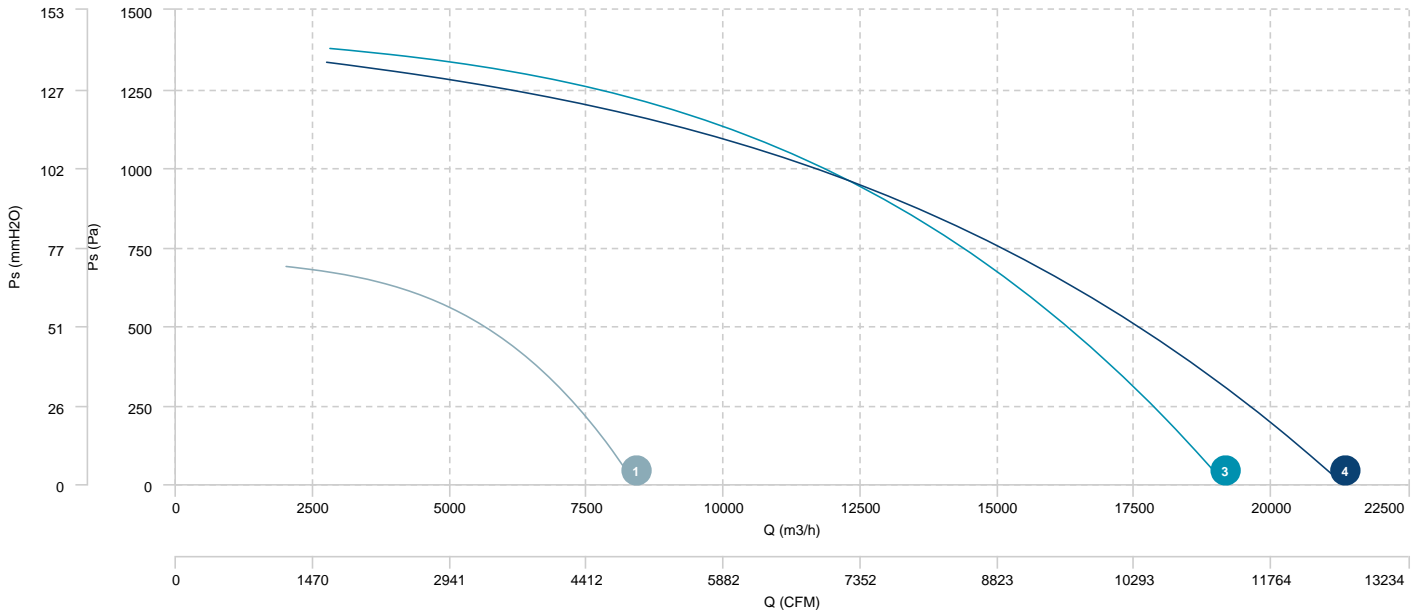
1	BOX RLF 400 T6 0,55kW	2	BOX RLF 450 T6 0,55kW	3	BOX RLF 500 T6 0,55kW	4	BOX RLF 560 T6 0,75kW
5	BOX RLF 630 T6 1,5kW	6	BOX RLF 710 T6 2,2kW	7	BOX RLF 800 T6 4kW		

AIR FLOW - PRESSURE



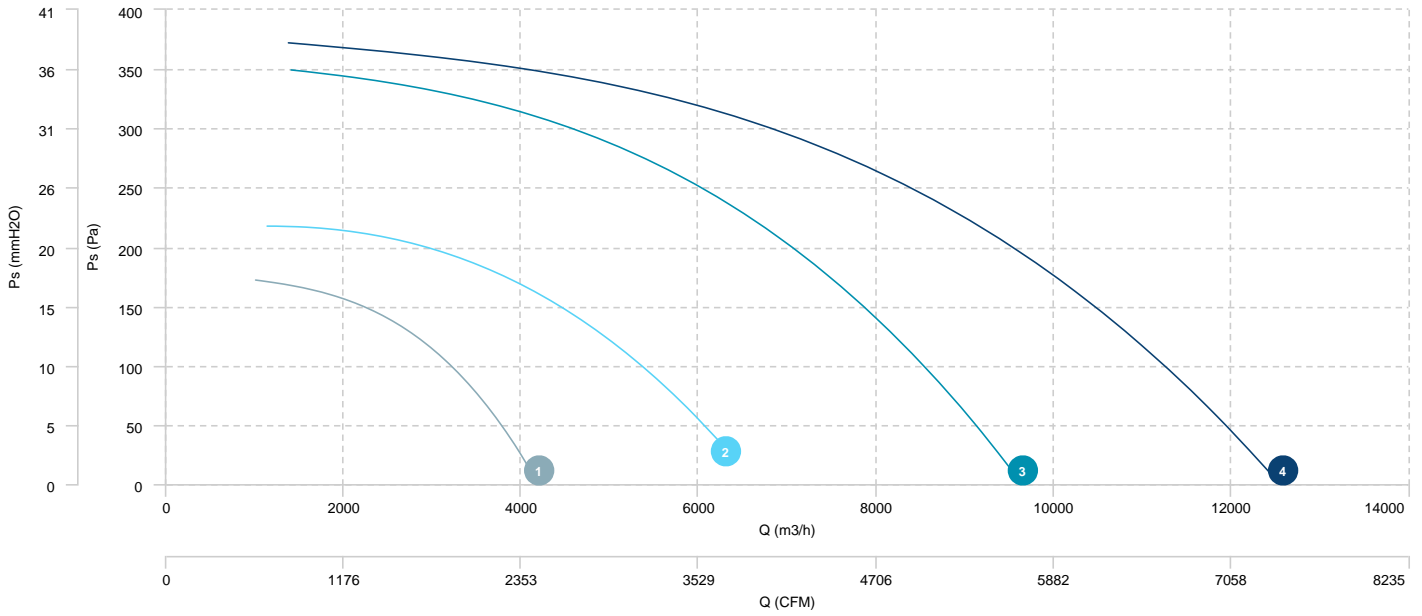
- 1 BOX RLF 500 T4/T8 1,5/0, 3kW
- 2 BOX RLF 560 T4/T8 2,2/0, 45kW
- 3 BOX RLF 630 T4/T8 5,5/1, 1kW
- 4 BOX RLF 710 T4/T8 7,5/1, 5kW

AIR FLOW - PRESSURE (4 poles)



- 1 BOX RLF 500 T4/T8 1,5/0, 3kW
- 2 BOX RLF 560 T4/T8 2,2/0, 45kW
- 3 BOX RLF 630 T4/T8 5,5/1, 1kW
- 4 BOX RLF 710 T4/T8 7,5/1, 5kW

AIR FLOW - PRESSURE (8 poles)



Sound data

Sound / 4 poles

Sound power Lw dB (A)										
Model		63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	Total
BOX RLF 400 T4 0,75kW	Inlet	47	61	67	70	70	71	61	50	76
BOX RLF 450 T4 1,1kW	Inlet	56	66	72	74	75	75	67	59	81
BOX RLF 500 T4 1,5kW (1430 RPM)	Inlet	66	72	77	78	81	80	73	68	86
BOX RLF 560 T4 2,2kW	Inlet	67	73	79	79	83	83	75	68	88
BOX RLF 630 T4 5,5kW (1460 RPM)	Inlet	74	79	85	87	85	82	75	67	92
BOX RLF 710 T4 7,5kW (1460 RPM)	Inlet	80	81	89	92	95	96	92	78	101
BOX RLF 800 T4 15kW	Inlet	88	94	99	100	104	103	96	89	109

Sound / 6 poles

Sound power Lw dB (A)										
Model		63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	Total
BOX RLF 400 T6 0,55kW	Inlet	37	51	57	60	60	61	51	40	66
BOX RLF 450 T6 0,55kW	Inlet	46	56	62	64	65	65	57	49	71
BOX RLF 500 T6 0,55kW	Inlet	56	62	67	68	71	70	63	58	76
BOX RLF 560 T6 0,75kW	Inlet	57	63	69	69	73	73	65	58	78
BOX RLF 630 T6 1,5kW	Inlet	56	59	58	62	64	49	46	46	68
BOX RLF 710 T6 2,2kW	Inlet	61	64	63	66	68	53	50	44	72
BOX RLF 800 T6 4kW	Inlet	60	65	65	67	71	55	52	47	74

Sound / 4/8 poles

Sound power Lw dB (A)										
Model		63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	Total
BOX RLF 500 T4/T8 1,5/0,3kW (1430 RPM)	Inlet	66	72	77	78	81	80	73	68	86
BOX RLF 560 T4/T8 2,2/0,45kW (0 RPM)	Inlet	67	73	79	79	83	83	75	68	88
BOX RLF 630 T4/T8 5,5/1,1kW (1460 RPM)	Inlet	74	79	85	87	85	82	75	67	92
BOX RLF 710 T4/T8 7,5/1,5kW (1460 RPM)	Inlet	80	81	89	92	95	96	92	78	101

Notes:

* To calculate the sound power level at different rpm from those indicated above, use the following formula:

$$Lw \text{ dB(A)}_{rpmA} = Lw \text{ dB(A)}_{rpmB} + 52.5 \cdot \log_{10} \frac{rpmA}{rpmB}$$

