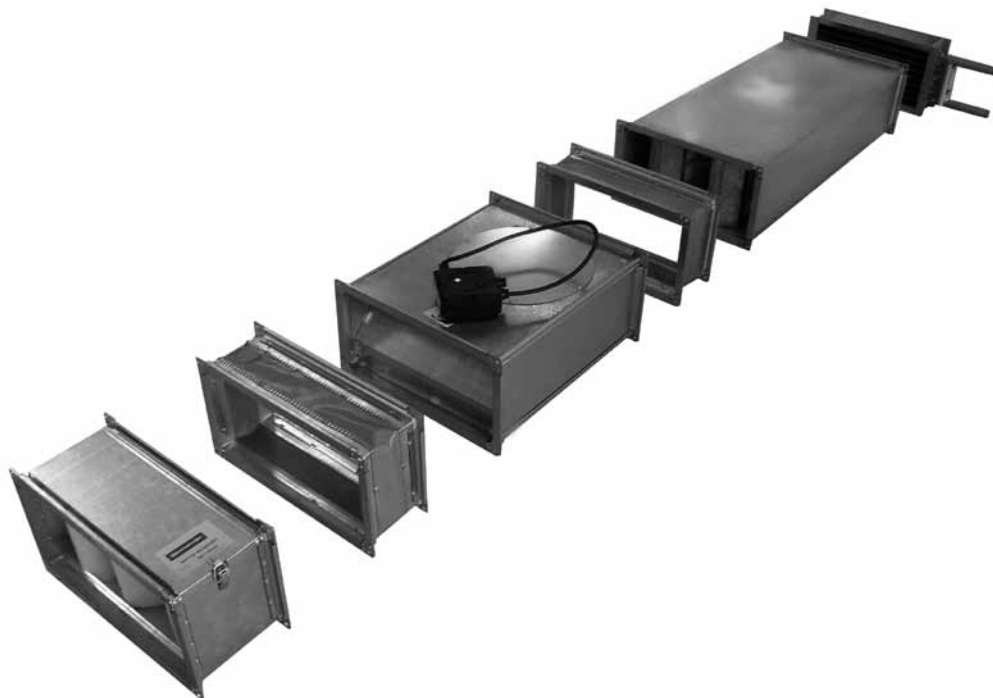


PKS – RECTANGULAR IN-LINE SYSTEM



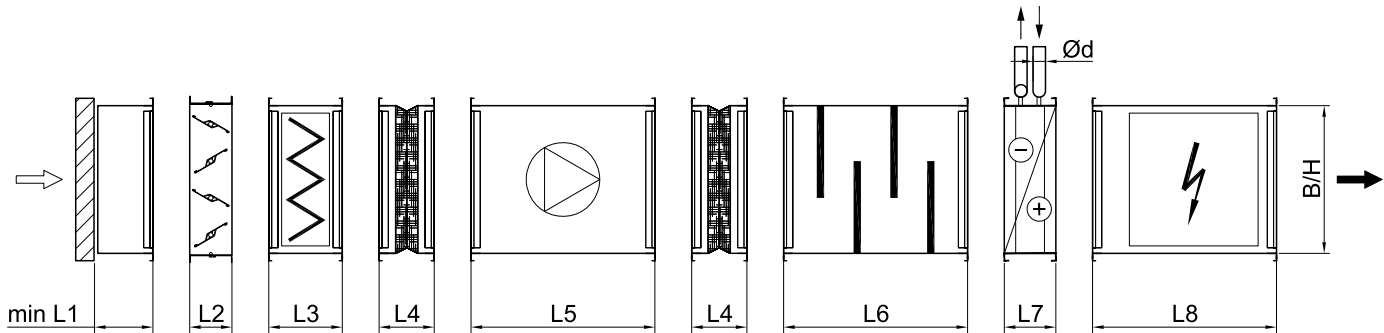
Description

- Systems PKS are designed for building of independent supply or exhaust installation with air flow range from 500m³/h to 9000m³/h.
- Completed with rectangular in-line fan, single - or three phases, produced by "Soler&Palau" - Spain.
- Constructed of ventilation elements for direct connection with standard rectangular air ducts.
- **System is not suitable for transportation of explosion-proof and aggressive gases.**

System elements

1. Ventilation grille for external installation – VGR / NJR - section 01.12
2. Multiple leaf damper - PJR - section 02.09
3. Air filter - AFR-V (G3) - section 02.03
4. Flexible connector - Accessories
5. In-line duct fan „Soler&Palas”- Spain
 - ILB - single phase motor
 - ILT - three phase motor
6. Sound attenuator DSA - Section 02.01
7. Heat exchanger "water-air" – COT / COX - Section 02.05
 - Heat.=6÷60kW ; T=80/60°C
 - Qcool=4÷44kW ; T=7/12°C
8. Duct type electric heater – EK-N (N=6÷48kW - Section 02.06

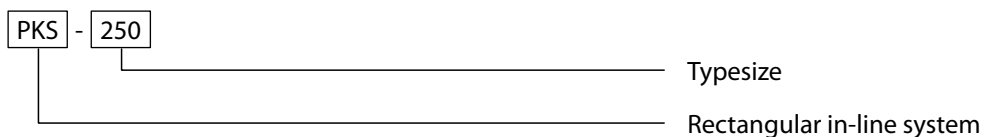
Overall and joined dimensions



Model	Air flow [m ³ /h]	Joined dimensions	Inlet plenum	Multiple leaf damper PJR	Air filter AER-V	Flexible connector	Fan ILB / ILT	Sound attenuator DSA-R	COT / COX	Connections to the pipe line		Duct type electric heater EK - N _{EL} [kW]
										2R	4R	
PKS 200	500÷900	B/H [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]			L8 [mm]
PKS 225	600÷1400	400/200	100	115	200	130	505	1000	120	½"	¾"	650÷950
PKS 250	1200÷2200	500/250	100	115	200	130	535	1000	120	¾"	1"	500÷950
PKS 285	1400÷3000	500/300	100	115	200	130	645	1000	120	1"	1"	500÷950
PKS 315	2000÷3600	600/300	100	115	200	130	725	1000	120	1"	1"	500÷950
PKS 355	1500÷5000	600/350	100	115	200	130	785	1000	140	1"	1¼"	500÷950
PKS 400	3000÷6300	700/400	100	115	200	130	885	1000	140	1¼"	1½"	450÷750
PKS 450	5000÷9000	800/500	100	115	200	130	985	1000	140	1½"	1½"	450÷750

Note: When the water section works in cooling mode (COX), drop-separator and condensation tray have to be mounted. For more information, please, contact us.

Order designation



RECTANGULAR IN-LINE FAN - ILB / ILT - „SOLER&PALAU“

ILB / ILT – Description



- Range of rectangular in-line duct fan manufactured from galvanized steel sheet and provided with an inspection cover that can be removed to access the motor / impeller assembly without having to remove the complete fan casing from the ducting.
- All model incorporate direct-drive forward curved centrifugal impeller.
- All motors are IP55, class F insulation with thermal protection.
- Electric supply:
 - Single phase: 230V, 50Hz
 - Three phase: 400V, 50Hz
- Suitable for speed control using autotransformer.

ILB / ILT – Technical characteristics

Model	Nominal ducting dimensions [mm]	Speed [min ⁻¹]	Maximum power abs. [W]	Maximal current [A]		Maximum air flow [m ³ /h]	Sound pressure level* [dB(A)]	Weight [kg]
				220V	Y 400V			

4-poles single phase

ILB/4-200	400 x 200	1240	240	1.15	–	1090	59	15
ILB/4-225	500 x 250	1130	520	2.45	–	1670	56	20
ILB/4-250	500 x 300	1130	950	4.40	–	2350	60	25

6-poles single phase

ILB/6-225	500 x 250	800	200	1.00	–	1080	48	20
ILB/6-250	500 x 300	800	310	1.50	–	1500	49	25
ILB/6-285	600 x 300	825	660	3.20	–	2650	55	32
ILB/6-315	600 x 350	810	710	3.40	–	2780	57	40
ILB/6-355	700 x 400	800	1300	6.30	–	4070	60	60

4-poles three phase

ILT/4-200	400 x 200	1270	260	–	0.52	1150	59	15
ILT/4-225	500 x 250	1160	500	–	0.98	1700	58	20
ILT/4-250	500 x 300	1170	930	–	1.77	2650	62	25
ILT/4-285	600 x 300	1070	1260	–	2.40	3100	61	32
ILT/4-315	600 x 350	1390	2440	–	4.60	4160	68	42
ILT/4-355	700 x 400	1330	5690	–	9.10	7760	70	65

6-poles three phase

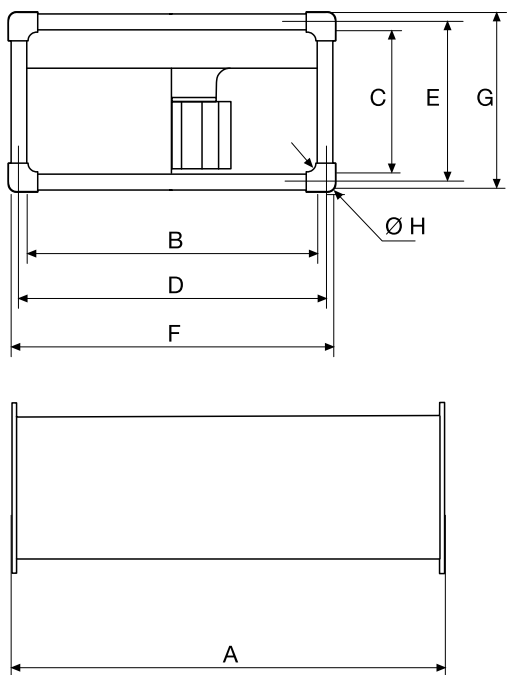
ILT/6-225	500 x 250	840	220	–	0.57	1185	50	20
ILT/6-250	500 x 300	800	280	–	0.57	1630	51	25
ILT/6-285	600 x 300	840	670	–	1.33	2700	56	32
ILT/6-315	600 x 350	900	710	–	1.44	2820	57	40
ILT/6-355	700 x 400	875	1380	–	3.00	4200	61	65
ILT/6-400	800 x 500	950	3000	–	6.37	7400	66	80
ILT/6-450	1000 x 500	900	5350	–	10.00	10850	67	100

8-poles three phase

ILT/8-355	700 x 400	660	614	–	1.33	3030	52	65
ILT/8-400	800 x 500	700	1340	–	3.94	5350	59	80
ILT/8-450	1000 x 500	675	2380	–	4.45	8000	61	100

* Measured at 1m at free field, with ducted inlet I outlet.

ILB / ILT – Dimensions [mm]



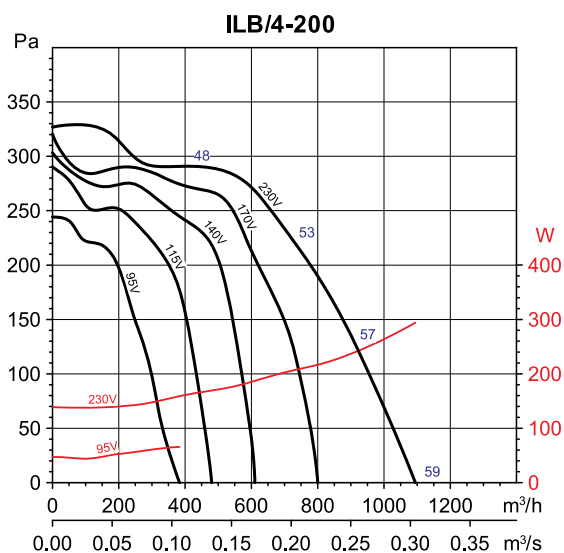
Model	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	ØH [mm]
IL*/**-200	505	400	198	440	220	440	240	9
IL*/**-225	535	500	248	520	270	540	290	9
IL*/**-250	565	500	298	520	320	540	340	9
IL*/**-285	645	600	298	620	320	640	340	9
IL*/**-315	725	600	348	620	370	640	390	9
IL*/**-355	785	700	398	720	420	740	440	9
IL*/**-400	885	800	498	820	520	840	540	9
IL*/**-450	985	1000	498	1020	520	1040	540	9

* = B – Single phase motor
 * = T – three phase motor
 ** = 4, 6 or 8 poles motor

ILB / ILT – Aerodynamic and acoustic characteristics

- Air flow range in m³/h and m³/s
- Static pressure in Pa
- Dry air at 20°C and 760 mmHg

Air flow data in accordance with the following standards: UNE 100-212-89, BS 848, Part 1; AMCA 210-85 and ASHRAE 51-1985.



Sound power level by frequency bands [dB]

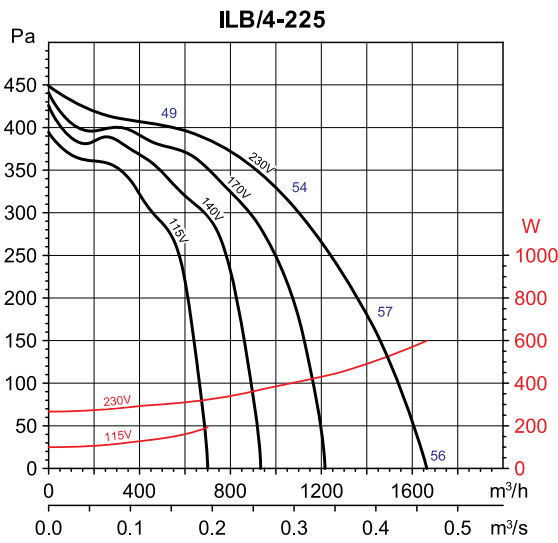
		Frequency [Hz]							
		63	125	250	500	1000	2000	4000	8000
Inlet	A	50	61	65	70	71	67	62	54
	B	50	61	65	70	71	67	62	54
	C	46	57	61	66	67	63	58	50
	D	41	52	56	61	62	58	53	45
Discharge	A	46	61	64	70	76	72	70	63
	B	46	61	64	70	76	72	70	63
	C	43	58	61	67	73	69	67	60
	D	39	54	57	63	69	65	63	56
Radiated	A	50	54	56	58	63	63	58	48
	B	49	53	55	57	62	62	57	47
	C	46	50	52	54	59	59	54	44
	D	41	45	47	49	54	54	49	39

Inlet, discharge and radiated sound power level [dB] for every frequency band in free field conditions in 4 operating points:

- A = Q_{max} [m³/h] – maximal air flow
- B = 0.75 x Q_{max} [m³/h]
- C = 0.50 x Q_{max} [m³/h]
- D = 0.25 x Q_{max} [m³/h] – minimum air flow

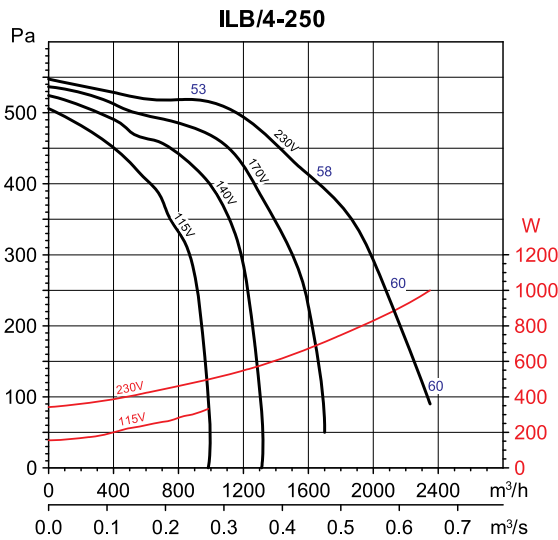
Sound pressure level dB(A) at 1 m, in free field conditions, are shown on the curves.

ILB – Aerodynamic and acoustic characteristics



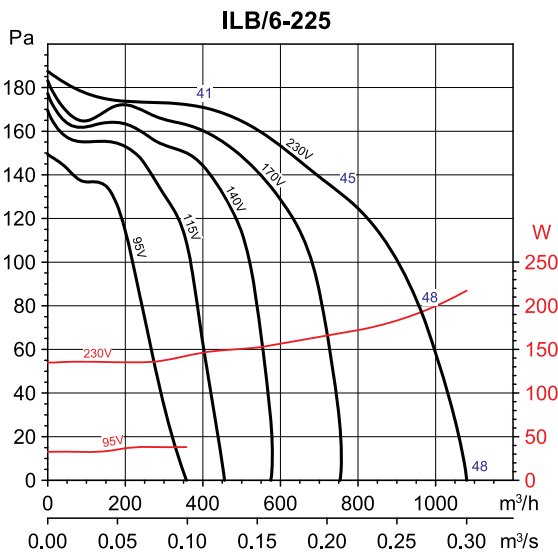
Sound power level by frequency bands [dB]

		Frequency [Hz]							
		63	125	250	500	1000	2000	4000	8000
Inlet	A	51	63	66	71	72	69	64	55
	B	52	64	67	72	73	70	65	56
	C	49	61	64	69	70	67	62	53
	D	45	57	60	65	66	63	58	49
Discharge	A	47	62	65	71	76	73	71	64
	B	48	63	66	72	77	74	72	65
	C	46	61	64	70	75	72	70	63
	D	42	57	60	66	71	68	66	59
Radiated	A	51	56	57	59	62	62	57	47
	B	52	57	58	60	63	63	58	48
	C	49	54	55	57	60	60	55	45
	D	44	49	50	52	55	55	50	40



Sound power level by frequency bands [dB]

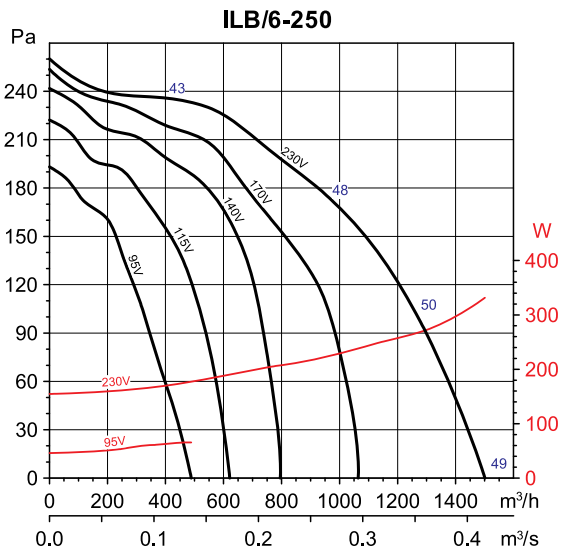
		Frequency [Hz]							
		63	125	250	500	1000	2000	4000	8000
Inlet	A	55	67	69	74	75	74	69	60
	B	55	67	69	74	75	74	69	60
	C	53	65	67	72	73	72	67	58
	D	49	61	63	68	69	68	63	54
Discharge	A	51	66	68	76	79	78	75	68
	B	52	67	69	77	80	79	76	69
	C	50	65	67	75	78	77	74	67
	D	46	61	63	71	74	73	70	63
Radiated	A	56	61	61	64	65	64	60	51
	B	56	61	61	64	65	64	60	51
	C	54	59	59	62	63	62	58	49
	D	49	54	54	57	58	57	53	44



Sound power level by frequency bands [dB]

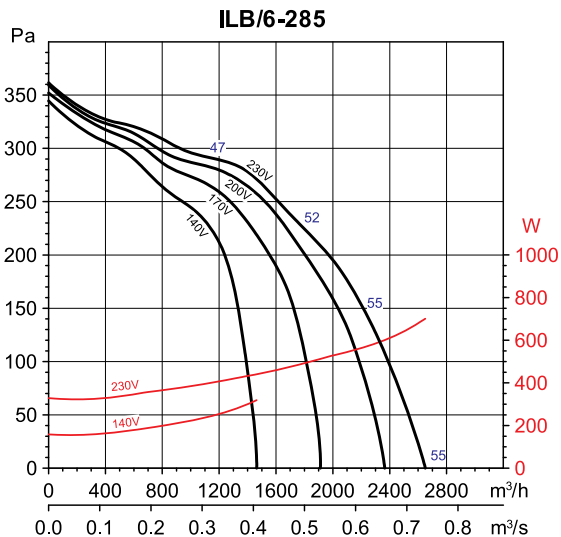
		Frequency [Hz]							
		63	125	250	500	1000	2000	4000	8000
Inlet	A	46	54	57	62	63	60	55	43
	B	47	55	58	63	64	61	56	44
	C	44	52	55	60	61	58	53	41
	D	39	47	50	55	56	53	48	36
Discharge	A	40	53	56	62	67	64	62	53
	B	41	54	57	63	68	65	63	54
	C	38	51	54	60	65	62	60	51
	D	34	47	50	56	61	58	56	47
Radiated	A	46	47	48	50	53	53	48	35
	B	46	47	48	50	53	53	48	35
	C	43	44	45	47	50	50	45	32
	D	39	40	41	43	46	46	41	28

ILB – Aerodynamic and acoustic characteristics



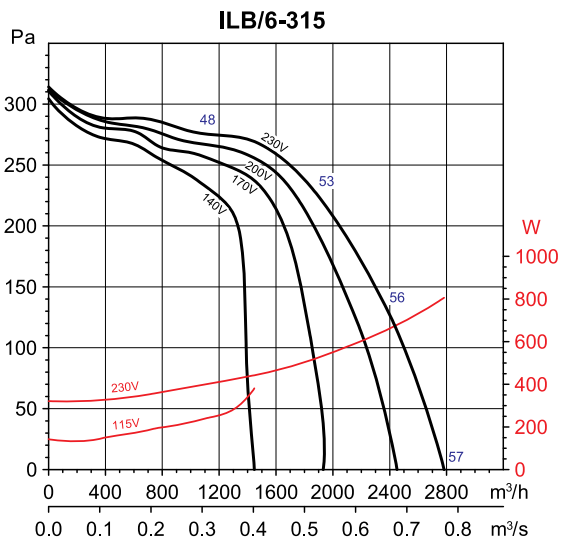
Sound power level by frequency bands [dB]

		Frequency [Hz]							
		63	125	250	500	1000	2000	4000	8000
Inlet	A	49	57	59	64	65	64	59	47
	B	50	58	60	65	66	65	60	48
	C	47	55	57	62	63	62	57	45
	D	43	51	53	58	59	58	53	41
Discharge	A	43	56	58	66	69	68	65	56
	B	44	57	59	67	70	69	66	57
	C	42	55	57	65	68	67	64	55
	D	38	51	53	61	64	63	60	51
Radiated	A	49	50	50	53	53	53	49	37
	B	50	51	51	54	54	54	50	38
	C	48	49	49	52	52	52	48	36
	D	43	44	44	47	47	47	43	31



Sound power level by frequency bands [dB]

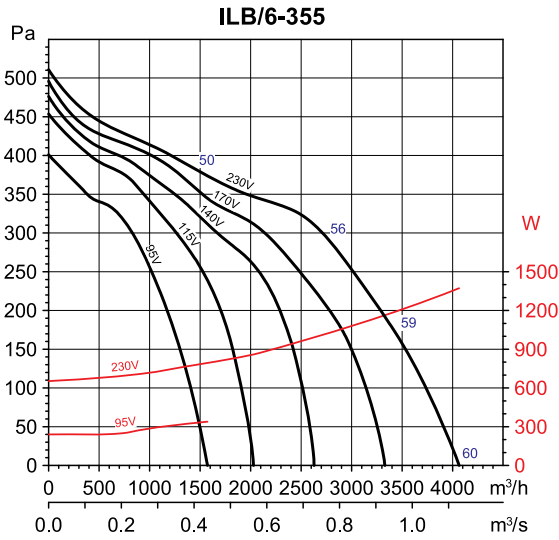
		Frequency [Hz]							
		63	125	250	500	1000	2000	4000	8000
Inlet	A	54	64	66	70	71	71	67	60
	B	54	64	66	70	71	71	67	60
	C	51	61	63	67	68	68	64	57
	D	46	56	58	62	63	63	59	52
Discharge	A	50	63	65	74	76	75	72	63
	B	50	63	65	74	76	75	72	63
	C	47	60	62	71	73	72	69	60
	D	43	56	58	67	69	68	65	56
Radiated	A	54	58	59	60	56	56	54	49
	B	54	58	59	60	56	56	54	49
	C	51	55	56	57	53	53	51	46
	D	46	50	51	52	48	48	46	41



Sound power level by frequency bands [dB]

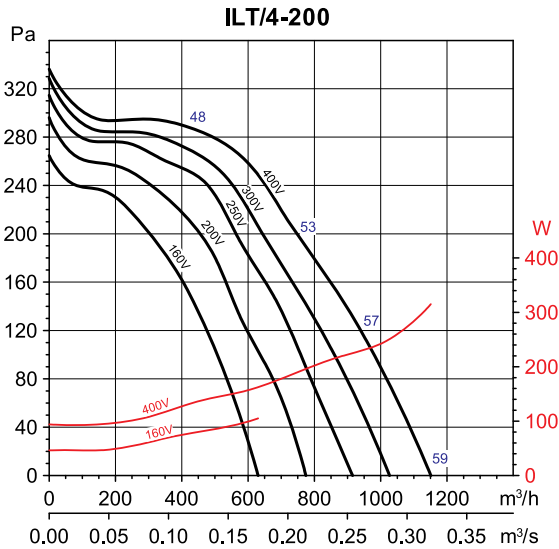
		Frequency [Hz]							
		63	125	250	500	1000	2000	4000	8000
Inlet	A	56	66	68	72	73	73	69	62
	B	55	65	67	71	72	72	68	61
	C	52	62	64	68	69	69	65	58
	D	52	62	64	68	69	69	65	58
Discharge	A	52	65	67	76	78	77	74	65
	B	51	64	66	75	77	76	73	64
	C	48	61	63	72	74	73	70	61
	D	44	57	59	68	70	69	66	57
Radiated	A	56	60	61	62	58	58	56	51
	B	55	59	60	61	57	57	55	50
	C	52	56	57	58	54	54	52	47
	D	47	51	52	53	49	49	47	42

ILB / ILT – Aerodynamic and acoustic characteristics



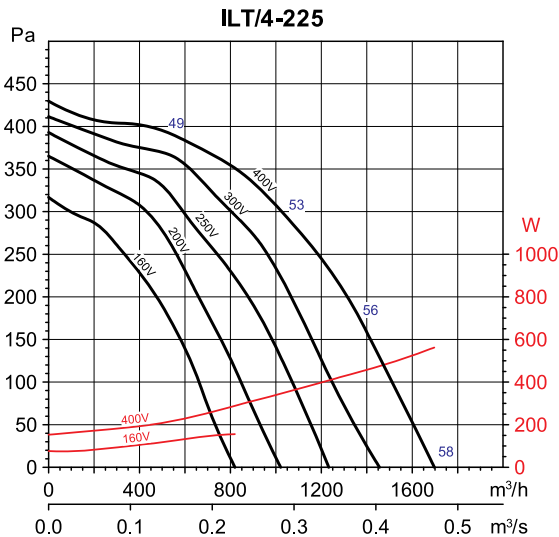
Sound power level by frequency bands [dB]

		Frequency [Hz]							
		63	125	250	500	1000	2000	4000	8000
Inlet	A	60	69	72	76	77	77	73	67
	B	59	68	71	75	76	76	72	66
	C	56	65	68	72	73	73	69	63
	D	50	59	62	66	67	67	63	57
Discharge	A	58	70	73	81	83	82	79	71
	B	57	69	72	80	82	81	78	70
	C	54	66	69	77	79	78	75	67
	D	49	61	64	72	74	73	70	62
Radiated	A	58	63	65	64	61	60	58	55
	B	57	62	64	63	60	59	57	54
	C	54	59	61	60	57	56	54	51
	D	48	53	55	54	51	50	48	45



Sound power level by frequency bands [dB]

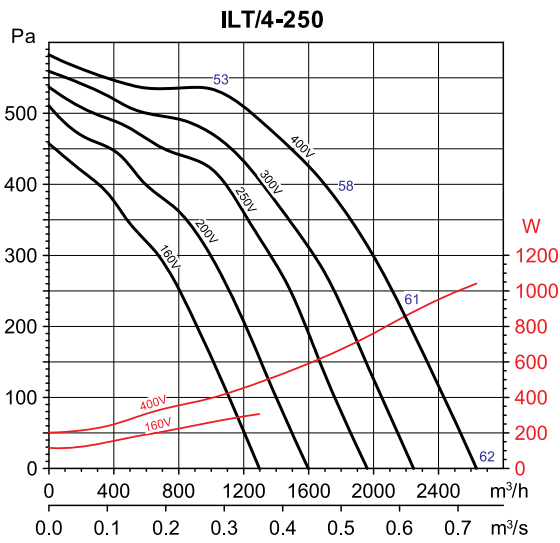
		Frequency [Hz]							
		63	125	250	500	1000	2000	4000	8000
Inlet	A	52	63	67	72	73	69	64	56
	B	50	61	65	70	71	67	62	54
	C	46	57	61	66	67	63	58	50
	D	41	52	56	61	62	58	53	45
Discharge	A	48	63	66	72	78	74	72	65
	B	46	61	64	70	76	72	70	63
	C	43	58	61	67	73	69	67	60
	D	39	54	57	63	69	65	63	56
Radiated	A	52	56	58	60	65	65	60	50
	B	50	54	56	58	63	63	58	48
	C	46	50	52	54	59	59	54	44
	D	41	45	47	49	54	54	49	39



Sound power level by frequency bands [dB]

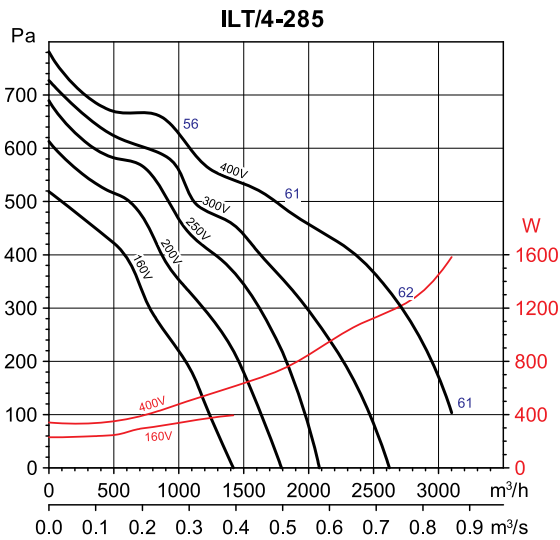
		Frequency [Hz]							
		63	125	250	500	1000	2000	4000	8000
Inlet	A	52	64	67	72	73	70	65	56
	B	51	63	66	71	72	69	64	55
	C	48	60	63	68	69	66	61	52
	D	44	56	59	64	65	62	57	48
Discharge	A	48	63	66	72	77	74	72	65
	B	48	63	66	72	77	74	72	65
	C	45	60	63	69	74	71	69	62
	D	42	57	60	66	71	68	66	59
Radiated	A	52	57	58	60	63	63	58	48
	B	51	56	57	59	62	62	57	47
	C	48	53	54	56	59	59	54	44
	D	44	49	50	52	55	55	50	40

ILT – Aerodynamic and acoustic characteristics



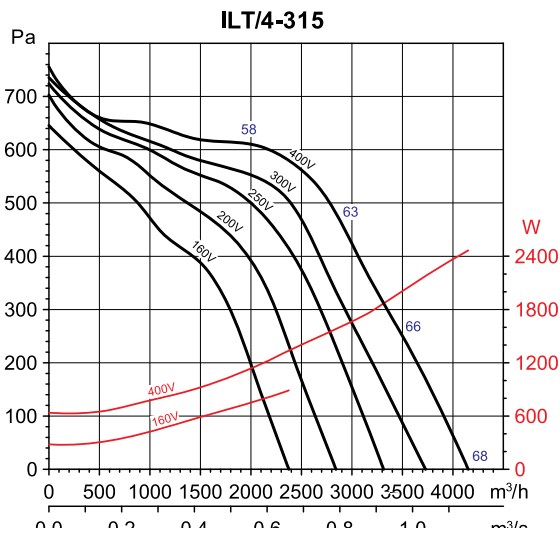
Sound power level by frequency bands [dB]

		Frequency [Hz]							
		63	125	250	500	1000	2000	4000	8000
Inlet	A	58	70	72	77	78	77	72	63
	B	57	69	71	76	77	76	71	62
	C	54	66	68	73	74	73	68	59
	D	49	61	63	68	69	68	63	54
Discharge	A	54	69	71	79	82	81	78	71
	B	53	68	70	78	81	80	77	70
	C	51	66	68	76	79	78	75	68
	D	47	62	64	72	75	74	71	64
Radiated	A	58	63	63	66	67	66	62	53
	B	57	62	62	65	66	65	61	52
	C	54	59	59	62	63	62	58	49
	D	49	54	54	57	58	57	53	44



Sound power level by frequency bands [dB]

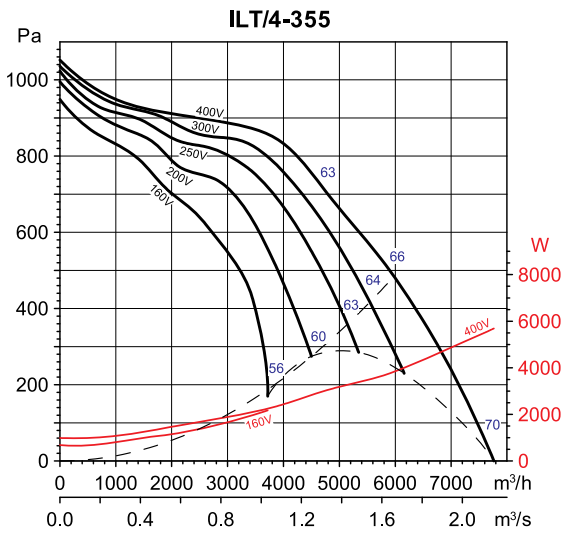
		Frequency [Hz]							
		63	125	250	500	1000	2000	4000	8000
Inlet	A	58	70	72	76	77	77	73	68
	B	59	71	73	77	78	78	74	69
	C	58	70	72	76	77	77	73	68
	D	54	66	68	72	73	73	69	64
Discharge	A	54	69	71	80	82	81	78	71
	B	56	71	73	82	84	83	80	73
	C	55	70	72	81	83	82	79	72
	D	51	66	68	77	79	78	75	68
Radiated	A	58	65	65	66	62	62	60	57
	B	59	66	66	67	63	63	61	58
	C	58	65	65	66	62	62	60	57
	D	53	60	60	61	57	57	55	52



Sound power level by frequency bands [dB]

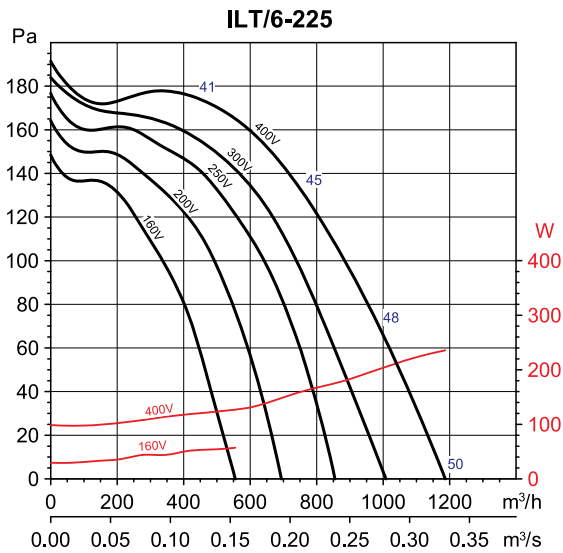
		Frequency [Hz]							
		63	125	250	500	1000	2000	4000	8000
Inlet	A	65	77	79	83	84	84	80	75
	B	63	75	77	81	82	82	78	73
	C	60	72	74	78	79	79	75	70
	D	54	66	68	72	73	73	69	64
Discharge	A	61	76	78	87	89	88	85	78
	B	60	75	77	86	88	87	84	77
	C	57	72	74	83	85	84	81	74
	D	52	67	69	78	80	79	76	69
Radiated	A	65	72	72	73	69	69	67	64
	B	63	70	70	71	67	67	65	62
	C	60	67	67	68	64	64	62	59
	D	55	62	62	63	59	59	57	54

ILT – Aerodynamic and acoustic characteristics



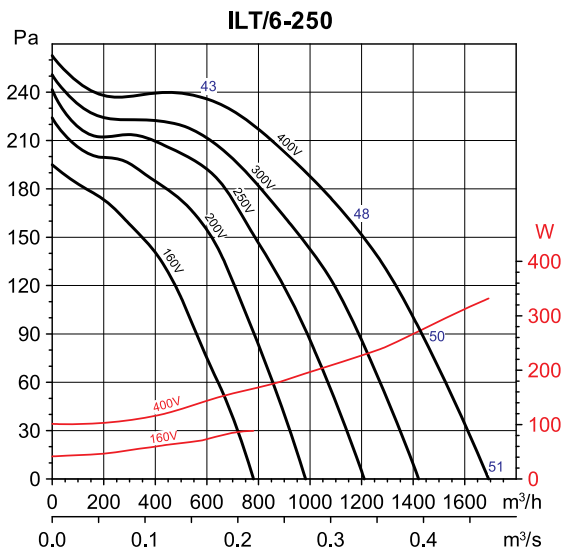
Sound power level by frequency bands [dB]

		Frequency [Hz]							
		63	125	250	500	1000	2000	4000	8000
Inlet	A	66	78	83	86	89	90	87	83
	B	65	77	80	82	85	85	83	79
	C	64	77	75	78	81	80	78	73
	D	65	77	79	81	84	84	82	78
Discharge	A	71	79	85	90	94	93	90	85
	B	67	78	81	86	91	89	86	81
	C	62	75	75	81	86	83	81	74
	D	66	77	80	85	90	88	85	80
Radiated	A	66	71	71	72	74	76	73	68
	B	65	70	68	68	70	71	69	64
	C	64	70	63	64	66	66	64	58
	D	65	70	67	67	69	70	68	63



Sound power level by frequency bands [dB]

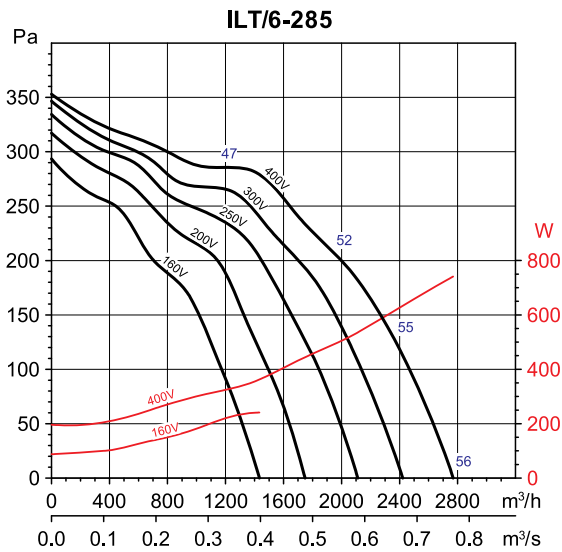
		Frequency [Hz]							
		63	125	250	500	1000	2000	4000	8000
Inlet	A	48	56	59	64	65	62	57	45
	B	46	54	57	62	63	60	55	43
	C	44	52	55	60	61	58	53	41
	D	39	47	50	55	56	53	48	36
Discharge	A	41	54	57	63	68	65	63	54
	B	40	53	56	62	67	64	62	53
	C	38	51	54	60	65	62	60	51
	D	34	47	50	56	61	58	56	47
Radiated	A	48	49	50	52	55	55	50	37
	B	46	47	48	50	53	53	48	35
	C	43	44	45	47	50	50	45	32
	D	39	40	41	43	46	46	41	28



Sound power level by frequency bands [dB]

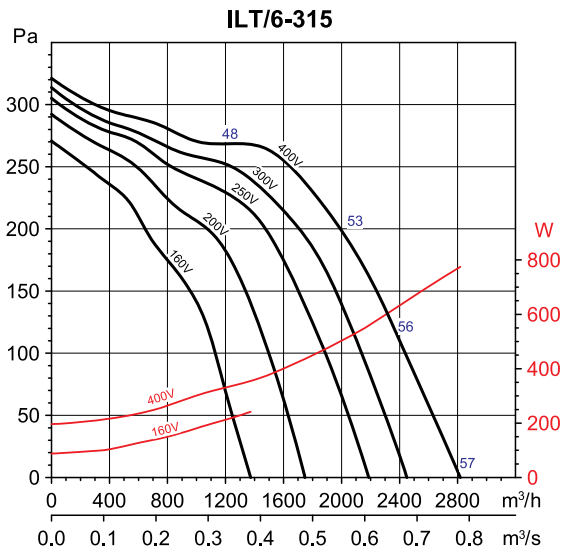
		Frequency [Hz]							
		63	125	250	500	1000	2000	4000	8000
Inlet	A	51	59	61	66	67	66	61	49
	B	50	58	60	65	66	65	60	48
	C	47	55	57	62	63	62	57	45
	D	43	51	53	58	59	58	53	41
Discharge	A	44	57	59	67	70	69	66	57
	B	44	57	59	67	70	69	66	57
	C	42	55	57	65	68	67	64	55
	D	38	51	53	61	64	63	60	51
Radiated	A	51	52	52	55	55	55	51	39
	B	50	51	51	54	54	54	50	38
	C	48	49	49	52	52	52	48	36
	D	43	44	44	47	47	47	43	31

ILT – Aerodynamic and acoustic characteristics



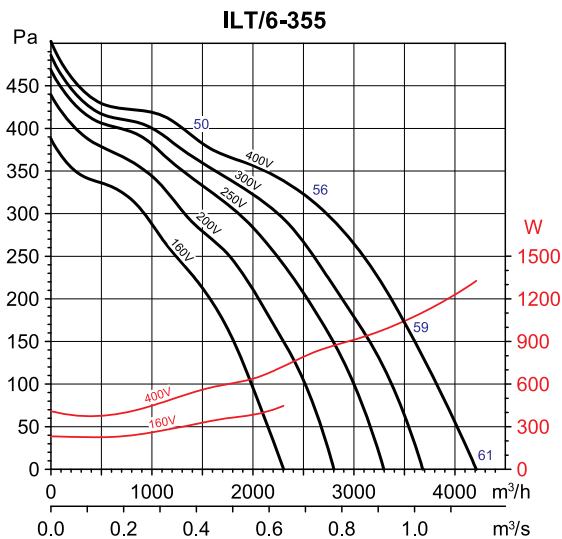
Sound power level by frequency bands [dB]

		Frequency [Hz]							
		63	125	250	500	1000	2000	4000	8000
Inlet	A	55	65	67	71	72	72	68	61
	B	54	64	66	70	71	71	67	60
	C	51	61	63	67	68	68	64	57
	D	45	55	57	61	62	62	58	51
Discharge	A	51	64	66	75	77	76	73	64
	B	51	64	66	75	77	76	73	64
	C	47	60	62	71	73	72	69	60
	D	43	56	58	67	69	68	65	56
Radiated	A	55	59	60	61	57	57	55	50
	B	54	58	59	60	56	56	54	49
	C	51	55	56	57	53	53	51	46
	D	46	50	51	52	48	48	46	41



Sound power level by frequency bands [dB]

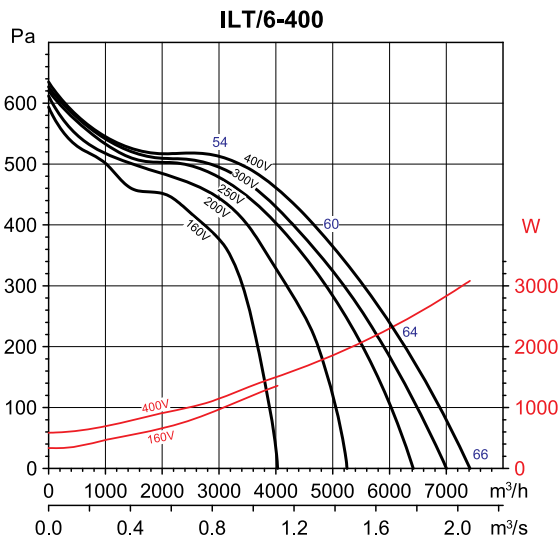
		Frequency [Hz]							
		63	125	250	500	1000	2000	4000	8000
Inlet	A	56	66	68	72	73	73	69	62
	B	55	65	67	71	72	72	68	61
	C	51	61	63	67	68	68	64	57
	D	46	56	58	62	63	63	59	52
Discharge	A	52	65	67	76	78	77	74	65
	B	51	64	66	75	77	76	73	64
	C	48	61	63	72	74	73	70	61
	D	44	57	59	68	70	69	66	57
Radiated	A	56	60	61	62	58	58	56	51
	B	55	59	60	61	57	57	55	50
	C	52	56	57	58	54	54	52	47
	D	47	51	52	53	49	49	47	42



Sound power level by frequency bands [dB]

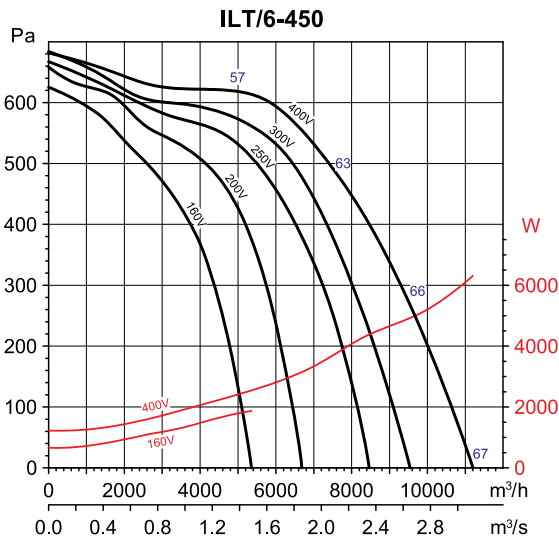
		Frequency [Hz]							
		63	125	250	500	1000	2000	4000	8000
Inlet	A	61	70	73	77	78	78	74	68
	B	59	68	71	75	76	76	72	66
	C	56	65	68	72	73	73	69	63
	D	50	59	62	66	67	67	63	57
Discharge	A	58	70	73	81	83	82	79	71
	B	57	69	72	80	82	81	78	70
	C	54	66	69	77	79	78	75	67
	D	49	61	64	72	74	73	70	62
Radiated	A	59	64	66	65	62	61	59	56
	B	57	62	64	63	60	59	57	54
	C	54	59	61	60	57	56	54	51
	D	48	53	55	54	51	50	48	45

ILT – Aerodynamic and acoustic characteristics



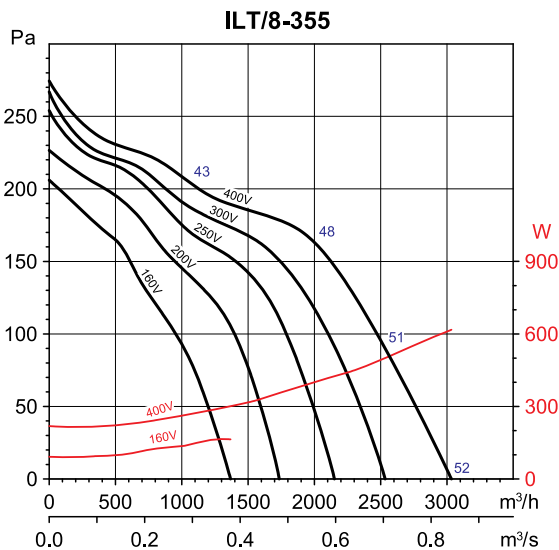
Sound power level by frequency bands [dB]

		Frequency [Hz]							
		63	125	250	500	1000	2000	4000	8000
Inlet	A	70	75	79	83	86	85	81	75
	B	68	73	77	81	84	83	79	73
	C	64	69	73	77	80	79	75	69
	D	58	63	67	71	74	73	69	63
Discharge	A	69	76	81	88	90	89	85	77
	B	68	75	80	87	89	88	84	76
	C	64	71	76	83	85	84	80	72
	D	59	66	71	78	80	79	75	67
Radiated	A	66	68	70	71	69	67	64	62
	B	64	66	68	69	67	65	62	60
	C	64	66	68	69	67	65	62	60
	D	54	56	58	59	57	55	52	50



Sound power level by frequency bands [dB]

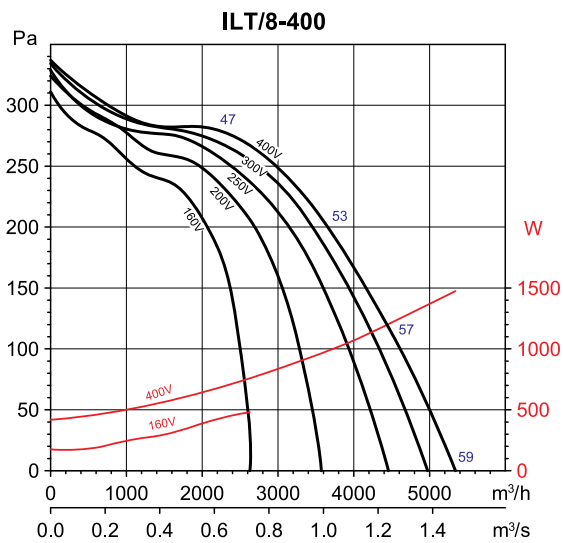
		Frequency [Hz]							
		63	125	250	500	1000	2000	4000	8000
Inlet	A	74	76	81	85	88	87	83	77
	B	73	75	80	84	87	86	82	76
	C	70	72	77	81	84	83	79	73
	D	64	66	71	75	78	77	73	67
Discharge	A	75	79	85	91	93	92	87	80
	B	74	78	84	90	92	91	86	79
	C	71	75	81	87	89	88	83	76
	D	66	70	76	82	84	83	78	71
Radiated	A	68	69	72	73	70	67	65	63
	B	67	68	71	72	69	66	64	62
	C	64	65	68	69	66	63	61	59
	D	58	59	62	63	60	57	55	53



Sound power level by frequency bands [dB]

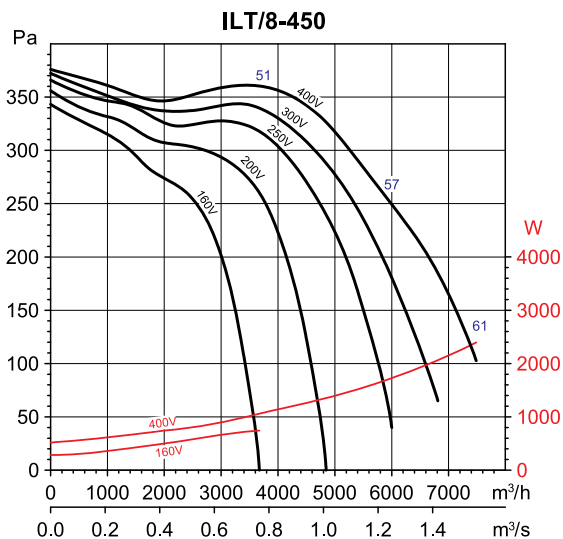
		Frequency [Hz]							
		63	125	250	500	1000	2000	4000	8000
Inlet	A	54	61	64	68	69	69	65	56
	B	53	60	63	67	68	68	64	55
	C	50	57	60	64	65	65	61	52
	D	45	52	55	59	60	60	56	47
Discharge	A	50	61	64	72	74	73	70	60
	B	50	61	64	72	74	73	70	60
	C	47	58	61	69	71	70	67	57
	D	42	53	56	64	66	65	62	52
Radiated	A	52	54	57	56	53	52	50	44
	B	51	53	56	55	52	51	49	43
	C	48	50	53	52	49	48	46	40
	D	43	45	48	47	44	43	41	35

ILT – Aerodynamic and acoustic characteristics



Sound power level by frequency bands [dB]

		Frequency [Hz]							
		63	125	250	500	1000	2000	4000	8000
Inlet	A	64	67	71	75	78	77	73	64
	B	62	65	69	73	76	75	71	62
	C	50	57	60	64	65	65	61	52
	D	53	56	60	64	67	66	62	53
Discharge	A	63	69	74	81	83	82	78	69
	B	61	67	72	79	81	80	76	67
	C	58	64	69	76	78	77	73	64
	D	52	58	63	70	72	71	67	58
Radiated	A	61	61	63	64	62	60	57	52
	B	59	59	61	62	60	58	55	50
	C	55	55	57	58	56	54	51	46
	D	49	49	51	52	50	48	45	40



Sound power level by frequency bands [dB]

		Frequency [Hz]							
		63	125	250	500	1000	2000	4000	8000
Inlet	A	70	71	75	79	82	81	77	68
	B	68	69	73	77	80	79	75	66
	C	65	66	70	74	77	76	72	63
	D	59	60	64	68	71	70	66	57
Discharge	A	69	72	78	84	86	85	80	72
	B	69	72	78	84	86	85	80	72
	C	65	68	74	80	82	81	76	68
	D	59	62	68	74	76	75	70	62
Radiated	A	64	64	66	66	64	61	59	54
	B	63	63	65	65	63	60	58	53
	C	59	59	61	61	59	56	54	49
	D	53	53	55	55	53	50	48	43