ISO-RB

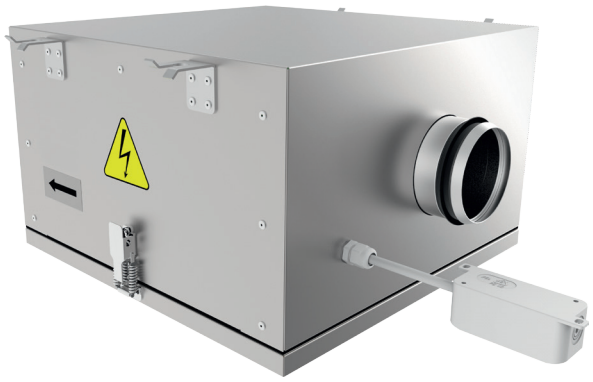
Sound-insulated centrifugal fans

Air flow: up to 7000 m³/h
Noise level from 34 dBA

BLAUBERG Ventilatoren

Iso-RB

Sound-insulated centrifugal fans



Use

- Supply and exhaust ventilation systems in premises with high requirements to the noise level and with limited space for mounting.
- Possibility of space-restricted installation above suspended ceilings.
- Mounting into Ø 100–500 mm air ducts.

Air flow: up to 7000 m³/h 1945 l/s

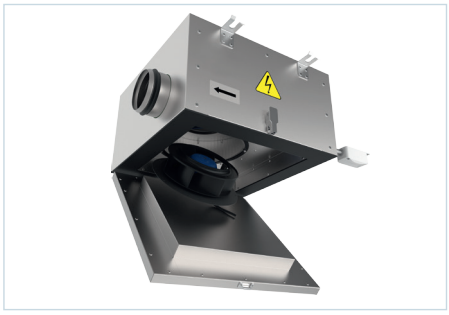
Power: from 58 W

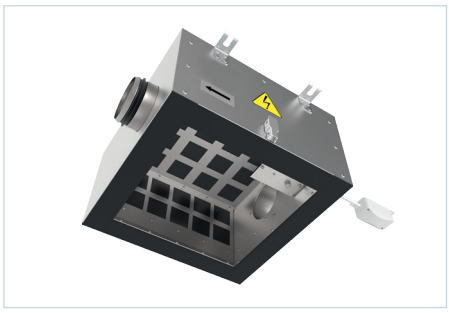
Noise level: from 34 dBA

ErP 2018

Design

- The fan casing is made of aluzinc. For easy installation and operation, the top cover of the fan is secured with a special lock.
- Heat- and sound insulation is made of non-combustible 50 mm mineral wool layer. To ensure better noise absorption, the inner surface of the insulation is made of a perforated metal sheet.
- The round connecting spigots are rubber sealed.





Motor

- The fans are equipped with asynchronous motors with an external rotor and centrifugal impellers with backward curved blades.
- The motors are equipped with an integrated overheating protection with automatic restart.
- The use of ball bearings with specially selected lubricating oil guarantees low noise and makes the fan completely maintenance-free.

Speed control

- Smooth or step speed control by means of a thyristor or autotransformer speed controller.
- Several fans can be connected to one controller, provided that the total power and operating current do not exceed the nominal parameters of the controller.

Mounting

- The round inline fans are designed for connection to round air ducts. The fans are installed at an air duct junction. The use of flexible connectors requires fixation of the fan on the building structure by means of supports, mounts or fixing brackets.
- The fan can be fixed in any position with respect to the air flow direction indicated by the arrow on the fan casing. While mounting the fan provide enough access for servicing and repair operations.

Designation key

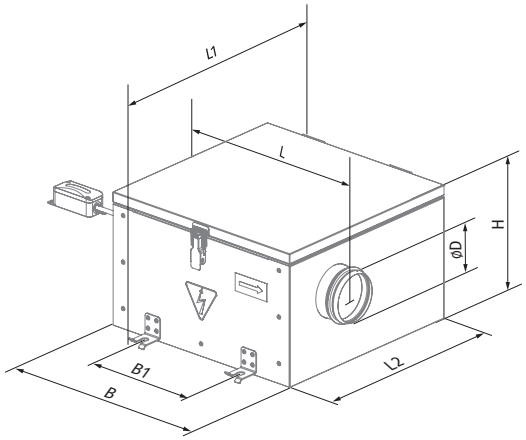
Series	Spigot diameter	Motor	Options
Iso-RB	100; 125; 150; 160; 200; 250; 315; 355; 400; 450; 500	**max:** high-powered motor **L:** low noise modification	**W:** power cable with IEC C14 plug

Accessories

Silencer	Filters		Heaters		Backdraft damper	Air shutter	Speed controllers	Sensor
SD	KFBK	KFBT	EKH	WKH	VRV	VKA	CDT E1.8	TE(TI)/SE(HSI)/ LSE(LSI)/IRSE(IRSI)

Overall dimensions [mm]

Type	∅D	B	B1	H	L	L1	L2	Weight [kg]
Iso-RB 100	99	420	228	258	517	507	414	13
Iso-RB 125	124	420	228	258	517	507	414	13
Iso-RB 125 max	124	533	333	280	630	617	525	19
Iso-RB 150	149	470	278	282	566	586	493	17
Iso-RB 160	159	470	278	282	566	586	493	17
Iso-RB 200	198	535	357.5	355	632	628	535	22.6
Iso-RB 250	248	677	537	429	774	759	666	33
Iso-RB 315 max	313	760	560	460	857	747	666	48
Iso-RB 355	354	830	641	500	927	885	804	58
Iso-RB 400	399	927	737	578	1024	957	876	78.5
Iso-RB 450 L	449	1049	858	607	1152	1049	968	84
Iso-RB 500	499	1203	993	724	1300	1263	1182	123

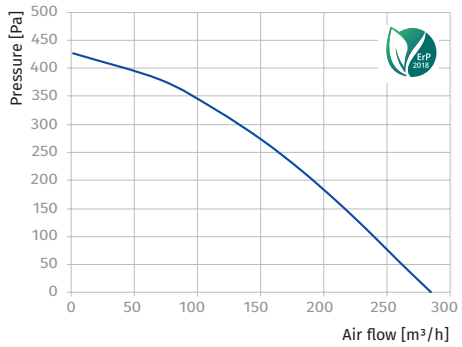


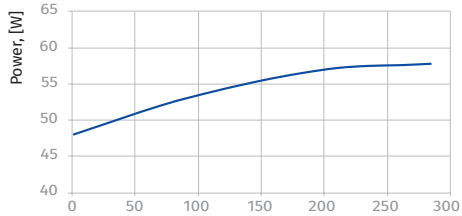
Technical data

Parameters	Iso-RB 100	Iso-RB 125	Iso-RB 125 max	Iso-RB 150
Unit voltage [V/50 Hz]	1~ 230	1~ 230	1~ 230	1~ 230
Power [W]	58	61	88	84
Current [A]	0.25	0.28	0.37	0.37
Maximum air flow [m³/h (l/s)]	285 (79)	330 (92)	484 (134)	485 (135)
RPM [min⁻¹]	2530	2560	2670	2620
Sound pressure level at 3 m distance [dBA]	34	35	40	38
Transported air temperature [°C]	-25 up to +55	-25 up to +55	-25 up to +55	-25 up to +55
Ingress protection rating	IPX4	IPX4	IPX4	IPX4
Motor IP rating	IP44	IP44	IP44	IP44
SEC class	C	C	C	C

ISO-RB 100

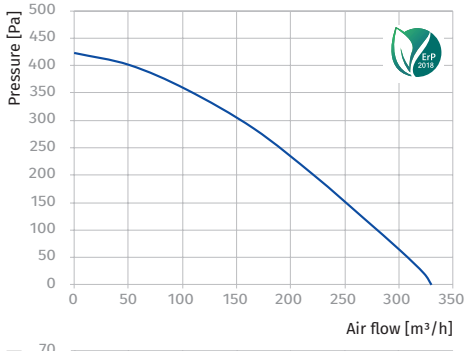
Sound power level, A-weighted	Octave frequency bands [Hz]									LpA, 3 m [dBA]	LpA, 1 m [dBA]
	Gen.	63	125	250	500	1000	2000	4000	8000		
LwA to inlet	62	48	57	60	52	48	42	42	32	42	52
LwA to outlet	79	65	74	76	72	58	51	53	44	59	69
LwA to environment [dBA]	54	40	44	50	50	42	41	39	39	34	44

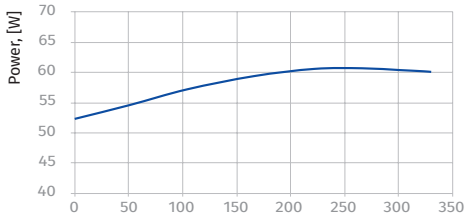




ISO-RB 125

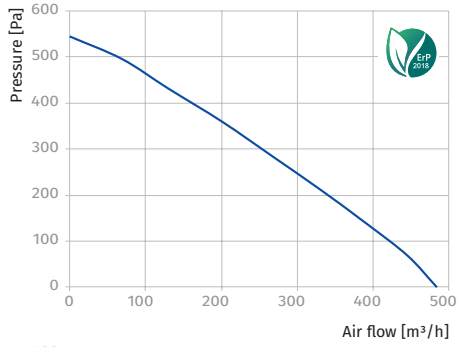
Sound power level, A-weighted	Octave frequency bands [Hz]									LpA, 3 m [dBA]	LpA, 1 m [dBA]
	Gen.	63	125	250	500	1000	2000	4000	8000		
LwA to inlet	63	49	57	61	52	48	42	42	33	43	53
LwA to outlet	81	66	76	78	73	60	52	54	45	61	71
LwA to environment [dBA]	55	41	45	51	51	43	42	40	39	35	45

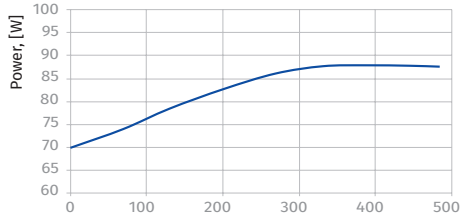




ISO-RB 125 MAX

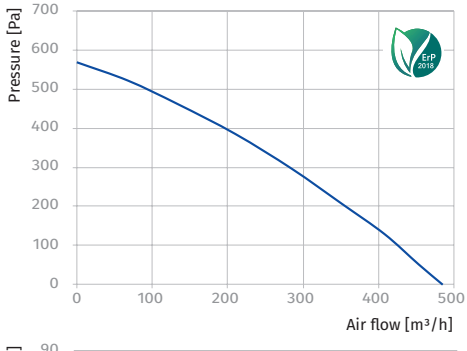
Sound power level, A-weighted	Octave frequency bands [Hz]									LpA, 3 m [dBA]	LpA, 1 m [dBA]
	Gen.	63	125	250	500	1000	2000	4000	8000		
LwA to inlet	71	56	65	70	60	55	48	48	37	51	61
LwA to outlet	88	72	83	85	80	65	57	59	50	68	78
LwA to environment [dBA]	60	43	52	58	53	44	42	40	40	40	50

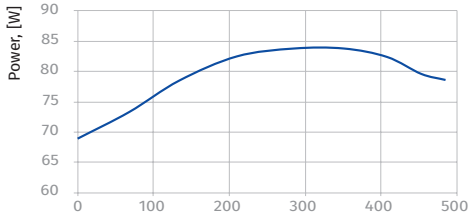




ISO-RB 150

Sound power level, A-weighted	Octave frequency bands [Hz]									LpA, 3 m [dBA]	LpA, 1 m [dBA]
	Gen.	63	125	250	500	1000	2000	4000	8000		
LwA to inlet	70	55	64	68	59	54	47	47	37	50	60
LwA to outlet	86	71	81	83	78	64	55	58	49	66	76
LwA to environment [dBA]	59	42	50	57	52	43	41	39	39	38	48



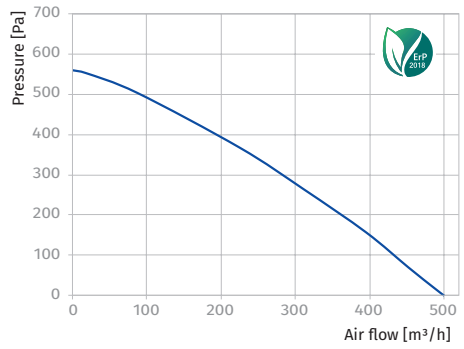


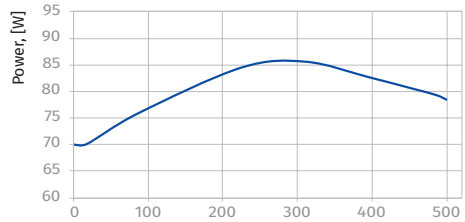
CENTRIFUGAL FANS

Parameters	Iso-RB 160	Iso-RB 200	Iso-RB 250	Iso-RB 315 max
Unit voltage [V/50 Hz]	1~ 230	1~ 230	1~ 230	3~ 380
Power [W]	86	164	320	654
Current [A]	0.38	0.71	1.40	1.10
Maximum air flow [m³/h (l/s)]	500 (139)	770 (314)	1515 (421)	2700 (750)
RPM [min⁻¹]	2670	2580	2615	2600
Sound pressure level at 3 m distance [dBA]	38	42	45	48
Transported air temperature [°C]	-25 up to +55	-25 up to +55	-25 up to +55	-25 up to +55
Ingress protection rating	IPX4	IPX4	IPX4	IPX4
Motor IP rating	IP44	IP44	IP44	IP54
SEC class	C	C	-	-

ISO-RB 160

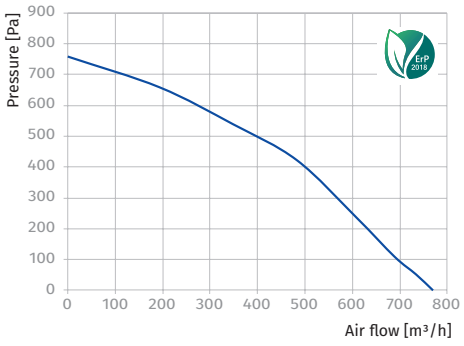
Sound power level, A-weighted	Octave frequency bands [Hz]									LpA, 3 m [dBA]	LpA, 1 m [dBA]
	Gen.	63	125	250	500	1000	2000	4000	8000		
L_{WA} to inlet	70	55	64	68	59	54	47	47	37	50	60
L_{WA} to outlet	87	72	83	84	79	65	56	59	49	67	77
L_{WA} to environment [dBA]	58	42	50	57	52	43	42	39	39	38	48

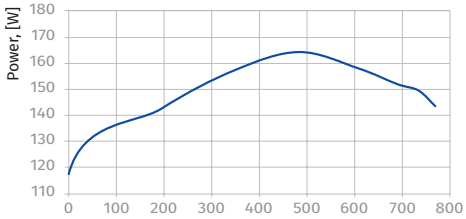




ISO-RB 200

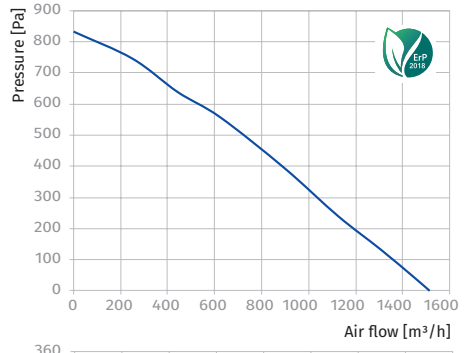
Sound power level, A-weighted	Octave frequency bands [Hz]									LpA, 3 m [dBA]	LpA, 1 m [dBA]
	Gen.	63	125	250	500	1000	2000	4000	8000		
L_{WA} to inlet	73	57	67	71	61	57	49	49	38	53	63
L_{WA} to outlet	81	67	77	78	74	60	52	54	46	61	71
L_{WA} to environment [dBA]	62	39	46	62	51	45	45	35	34	42	52

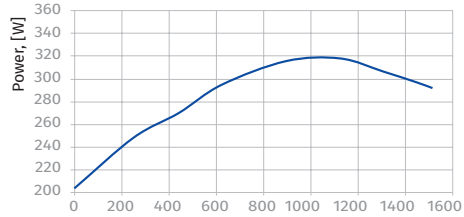




ISO-RB 250 MAX

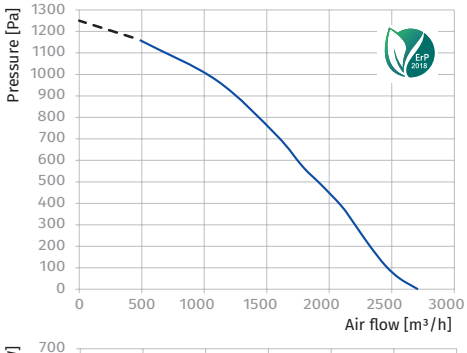
Sound power level, A-weighted	Octave frequency bands [Hz]									LpA, 3 m [dBA]	LpA, 1 m [dBA]
	Gen.	63	125	250	500	1000	2000	4000	8000		
L_{WA} to inlet	77	60	70	75	64	59	52	52	40	56	66
L_{WA} to outlet	81	67	77	79	74	60	52	55	46	61	71
L_{WA} to environment [dBA]	65	46	60	63	55	48	33	33	34	45	55

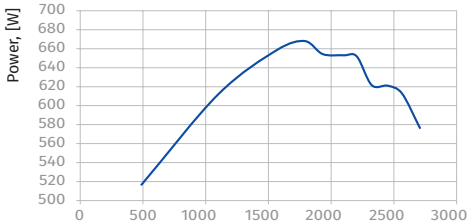




ISO-RB 315 MAX

Sound power level, A-weighted	Octave frequency bands [Hz]									LpA, 3 m [dBA]	LpA, 1 m [dBA]
	Gen.	63	125	250	500	1000	2000	4000	8000		
L_{WA} to inlet	87	80	83	81	77	70	66	64	62	66	76
L_{WA} to outlet	90	80	80	79	83	81	83	80	76	69	79
L_{WA} to environment [dBA]	68	55	56	67	58	50	53	52	53	48	58

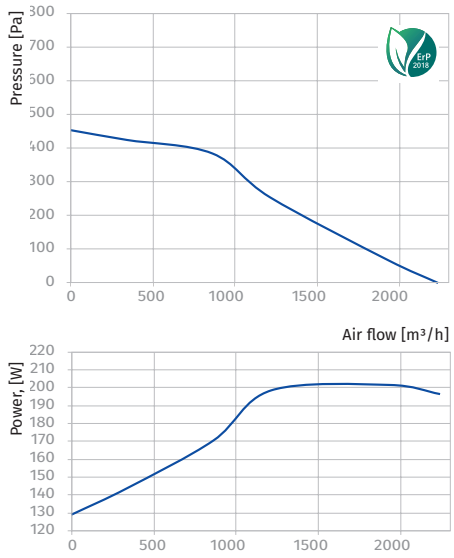




Parameters	Iso-RB 355	Iso-RB 400	Iso-RB 450 L
Unit voltage [V/50 Hz]	1~ 230	1~ 230	1~ 230
Power [W]	202	349	473
Current [A]	0.89	2.00	2.35
Maximum air flow [m³/h (l/s)]	2235 (621)	2860 (795)	2760 (767)
RPM [min⁻¹]	1330	1380	1350
Sound pressure level at 3 m distance [dBA]	48	48	48
Transported air temperature [°C]	-25 up to +55	-25 up to +55	-25 up to +55
Ingress protection rating	IPX4	IPX4	IPX4
Motor IP rating	IP44	IP54	IP54
SEC class	-	-	-

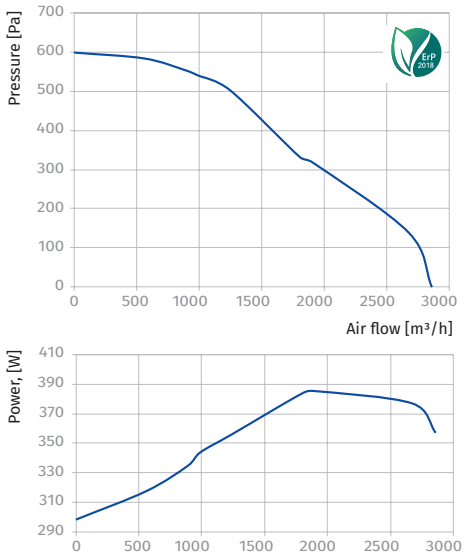
ISO-RB 355

Sound power level, A-weighted	Octave frequency bands [Hz]									LpA, 3 m [dBA]	LpA, 1 m [dBA]
	Gen.	63	125	250	500	1000	2000	4000	8000		
L_{WA} to inlet	78	61	72	77	66	61	53	53	41	58	68
L_{WA} to outlet	83	68	78	80	76	61	53	56	47	63	73
L_{WA} to environment [dBA]	68	52	66	64	47	41	32	33	33	48	58



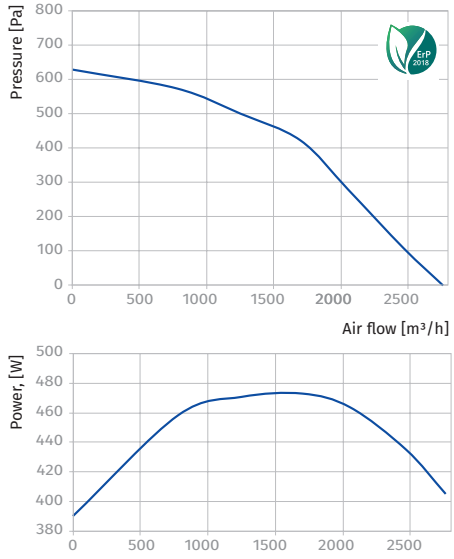
ISO-RB 400

Sound power level, A-weighted	Octave frequency bands [Hz]									LpA, 3 m [dBA]	LpA, 1 m [dBA]
	Gen.	63	125	250	500	1000	2000	4000	8000		
L_{WA} to inlet	84	66	78	83	71	66	57	57	44	64	74
L_{WA} to outlet	90	74	85	87	82	66	58	60	51	69	79
L_{WA} to environment [dBA]	69	63	65	64	54	46	34	35	35	48	58



ISO-RB 450 L

Sound power level, A-weighted	Octave frequency bands [Hz]									LpA, 3 m [dBA]	LpA, 1 m [dBA]
	Gen.	63	125	250	500	1000	2000	4000	8000		
L_{WA} to inlet	80	63	74	79	68	63	54	55	42	60	70
L_{WA} to outlet	87	72	83	84	79	65	56	59	49	67	77
L_{WA} to environment [dBA]	69	56	65	66	53	51	42	40	35	48	58

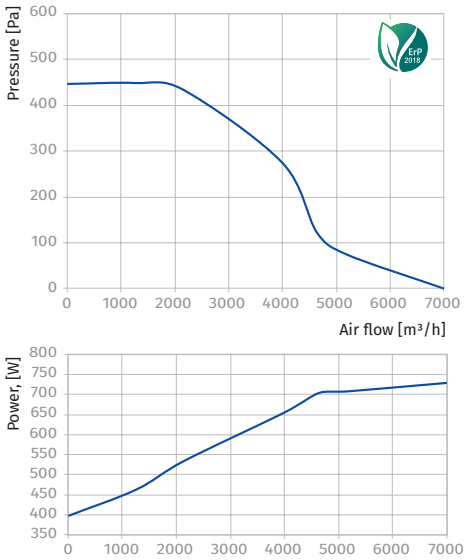


CENTRIFUGAL FANS

Parameters	Iso-RB 500 (Δ)	Iso-RB 500 (Y)
Unit voltage [V/50 Hz]	1~ 230	3~ 380
Power [W]	730	780
Current [A]	2.82	1.60
Maximum air flow [m³/h (l/s)]	7000 (1945)	6720 (1867)
RPM [min⁻¹]	980	948
Sound pressure level at 3 m distance [dBA]	56	54
Transported air temperature [°C]	-25 up to +55	-25 up to +55
Ingress protection rating	IPX4	IPX4
Motor IP rating	IP54	IP54
SEC class	-	-

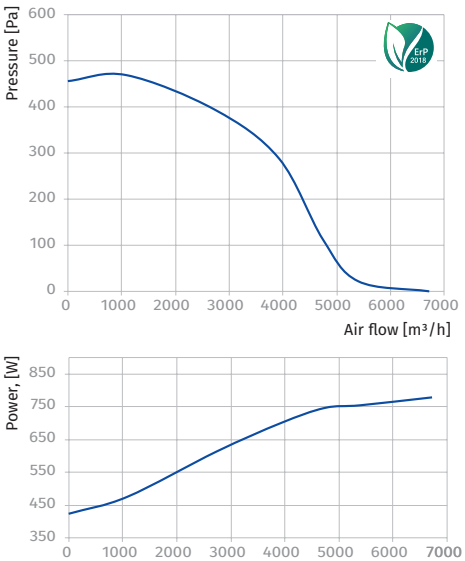
ISO-RB 500 (Δ)

Sound power level, A-weighted	Octave frequency bands [Hz]									LpA, 3 m [dBA]	LpA, 1 m [dBA]
	Gen.	63	125	250	500	1000	2000	4000	8000		
L_{WA} to inlet	87	69	80	86	74	68	59	59	46	67	77
L_{WA} to outlet	92	76	88	90	84	69	60	62	52	72	82
L_{WA} to environment [dBA]	76	68	75	67	52	50	48	46	40	56	66



ISO-RB 500 (Y)

Sound power level, A-weighted	Octave frequency bands [Hz]									LpA, 3 m [dBA]	LpA, 1 m [dBA]
	Gen.	63	125	250	500	1000	2000	4000	8000		
L_{WA} to inlet	85	66	78	83	71	66	57	57	44	64	74
L_{WA} to outlet	90	75	86	88	83	67	58	61	51	70	80
L_{WA} to environment [dBA]	74	66	73	65	51	49	47	45	39	54	64



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