

Versio

RS14



RS14 with grille box type V

Description

RS14 is a square swirl diffuser with fixed bars. RS14 can be used for both supply and exhaust air. The swirl pattern ensures high induction and a large dynamic range. It is therefore ideal for the horizontal supply of very cold air.

- Large dynamic range
- High induction
- Suitable for cooling at very low temperatures
- Can be used for both supply air and exhaust

Order code

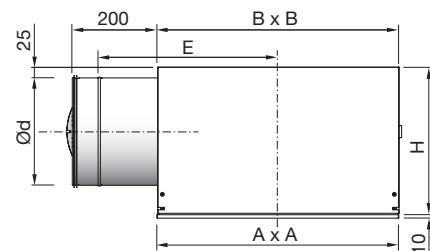
Product	RS	14	b	c	d	eee	f
Type							
RS							
Design							
14							
Box type							
V - H - R							
Functional use							
S = Supply air							
E = Exhaust							
Damper							
0 = No damper (Box : H, V)							
1 = Damper (Box : H, R)							
2 = Damper / Meas.outlets (Box : H)							
Connection dim.							
Ø160-315 (Box : V)							
Ø125-315 (Box : H)							
200x100 - 500x100 (Box : R)							
Ceiling system							
1 - 14							
Go to chapter Ceiling tile adaption							

Example: RS-14-V-S-0-200-1



RS14 with plenum box type H

Dimensions



RS14-H		A	B	H	E	Weight
Ød	Pattern	mm	mm	mm	mm	kg
125	400	*-	380	215	350	5.9
160	400	*-	380	250	350	5.9
200	500	*-	460	290	390	8.5
250	600	*-	560	340	420	12.3
315	600	*-	560	405	420	13.1

* Face plate dimension A x A depends on ceiling system. See "Ceiling adjustment" for detailed dimensions. For further details on plenum box - see "Plenum boxes".

Maintenance

The face plate can be removed to enable cleaning of internal parts or to gain access to the duct or box. The visible parts of the diffuser can be wiped with a damp cloth.

Materials and finish

Grille box/plenum box:

Material: Galvanised steel

Face plate:

Material: Galvanised steel

Standard finish: Powder-coated

Standard colour: RAL 9010, gloss 30

The diffuser is available in other colours. Please contact Lindab's sales department for further information.

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Accessories

Extension piece

MBZ



Order code

Product MBZ aaa
Type
Size

Example: MBZ-200

Mounting bracket

PBB



Suspension

MHS



Order code

Product aaa
Type

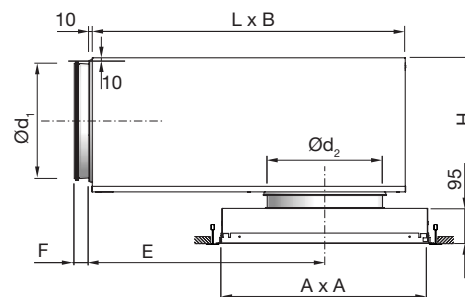
Example: MHS

Plenum box

MBB



RS14-V + MBB



RS14-V + MBB							
duct	RS14-V		B	E	F	H*	L
Ød ₁ mm	Ød ₂ mm	Pattern	mm	mm	mm	mm	mm
100	160	400	260	216	50	255 - 295	310
125	160	400	310	262	50	280 - 320	376
125	200	400	310	262	50	280 - 320	376
160	160	400	380	323	50	314 - 354	459
160	200	400	380	323	50	314 - 354	459
160	250	500	380	323	50	314 - 354	459
200	200	400	460	396	70	355 - 395	565
200	250	500	460	396	70	355 - 395	565
200	315	600	460	396	70	355 - 395	565
250	250	500	540	486	70	405 - 445	698
250	315	600	540	486	70	405 - 445	698
315	315	600	540	646	70	470 - 510	858

* Using accessory MBZ the H dimension will increase:

Ød₂ = 160 - 200 mm => H +40 mmØd₂ = 250 - 315 mm => H +60 mm

Order code

Product MBB aaa bbb c
Type
MBB
Duct connection Ød₁
Ø100-315
Diffuser dimension Ød₂
Ø160-315
Functional use
S = Supply air
E = Exhaust

Example: RS-14-V-S-0-200-1+MBB-200-200-S

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Technical data

Capacity

Air flow q_v [l/s] and [m³/h], total pressure Δp_t [Pa], throw $l_{0,2}$ [m] and sound power level L_{WA} [dB(A)] can be seen in the diagrams.

Frequency-related sound effect level

The sound effect level in the frequency band is defined as $L_{WA}+K_{ok}$. K_{ok} values are specified in charts beneath the diagrams on the following pages.

Quick selection, supply air

RS14-V + MBB

RS14-V + MBB		$\Delta p_t \geq 50$ Pa		$\Delta p_t \geq 50$ Pa	
duct	RS14-V	30 dB(A)		35 dB(A)	
$\varnothing d_1$	$\varnothing d_2$	l/s	m ³ /h	l/s	m ³ /h
100	160	33	119	41	148
125	160	44	158	52	187
125	200	49	176	59	212
160	160	38	137	46	166
160	200	51	184	62	223
160	250	67	241	85	306
200	200	65	234	77	277
200	250	77	277	95	342
200	315	100	360	124	446
250	250	89	320	104	374
250	315	110	396	132	475
315	315	129	464	151	544

Supply air

RS14 + H

RS14 + H			$\Delta p_t \geq 50$ Pa		$\Delta p_t \geq 50$ Pa	
Size Ød	Minimum		30 dB(A)		35 dB(A)	
mm	l/s	m³/h	l/s	m³/h	l/s	m³/h
125	26	93	28	101	34	122
160	33	118	53	191	63	227
200	57	204	65	234	80	288
250	71	254	89	320	107	385
315	95	342	-	-	148	533

Sound attenuation

Sound attenuation of the diffusers ΔL from duct to room, including end reflection - see tables below.

RS14-V + MBB

RS14-V + MBB		Centre frequency Hz							
duct	RS14-V	63	125	250	500	1K	2K	4K	8K
$\varnothing d_1$	$\varnothing d_2$								
100	160	20	16	5	19	20	19	18	21
125	160	16	13	9	20	18	18	19	20
125	200	14	12	6	17	16	16	18	19
160	160	17	16	10	24	20	20	21	21
160	200	15	15	7	22	21	19	20	21
160	250	15	14	5	20	16	16	17	19
200	200	14	11	7	18	21	17	20	18
200	250	13	9	5	17	18	16	18	17
200	315	13	8	3	15	17	15	17	16
250	250	15	8	7	18	18	18	18	19
250	315	15	7	6	16	16	17	17	18
315	315	8	11	8	16	18	17	17	22

RS14 + H

RS14 + H		Centre frequency Hz							
Size $\varnothing d$		63	125	250	500	1K	2K	4K	8K
mm									
125		18	13	8	18	14	11	12	14
160		17	13	3	14	13	7	7	8
200		15	10	3	13	9	6	8	10
250		12	9	6	11	8	7	10	12
315		12	7	7	13	8	7	10	12

RS14 + R

RS14 + R		Mean frequency Hz							
Size-2		63	125	250	500	1K	2K	4K	8K
mm									
200x100		19	14	9	6	5	3	3	4
300x100		16	11	5	5	6	5	3	4
400x100		13	8	2	3	4	5	4	5
500x100		12	7	2	4	2	5	5	5

Installation -and balancing instruction

For further information go to www.lindab.com and installation -and balancing instruction.

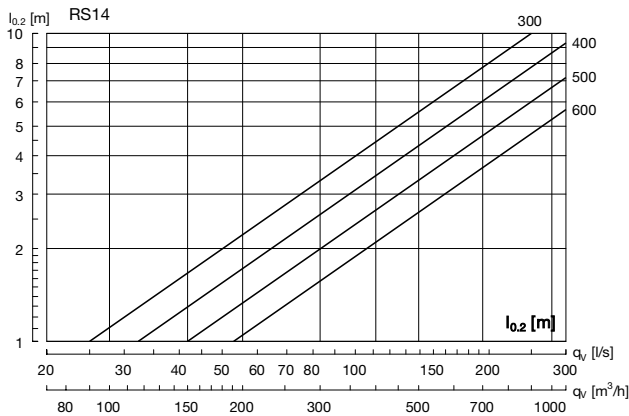
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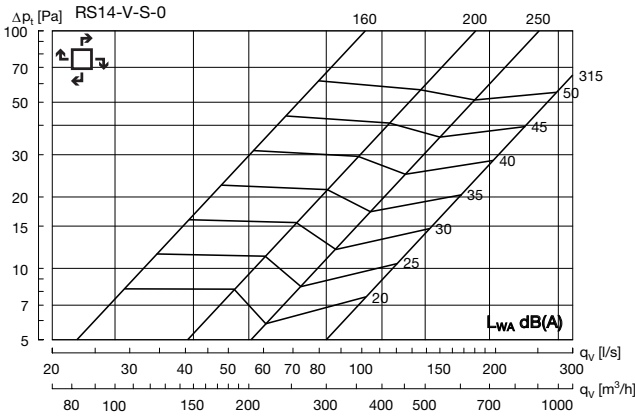
Technical data

Throw $l_{0.2}$

Throw $l_{0.2}$ [m] is specified at a terminal velocity of 0.2 m/s.
The designation by the lines specifies the pattern of dispersal.



RS14-V without plenum box – Supply air

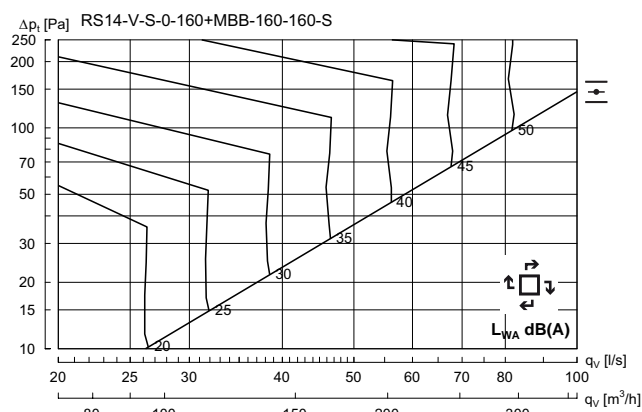


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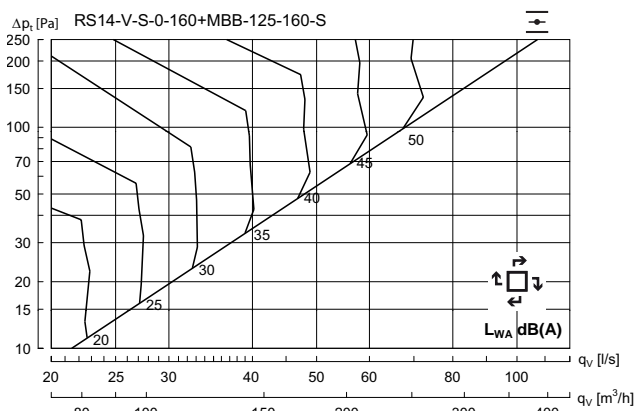
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Technical data

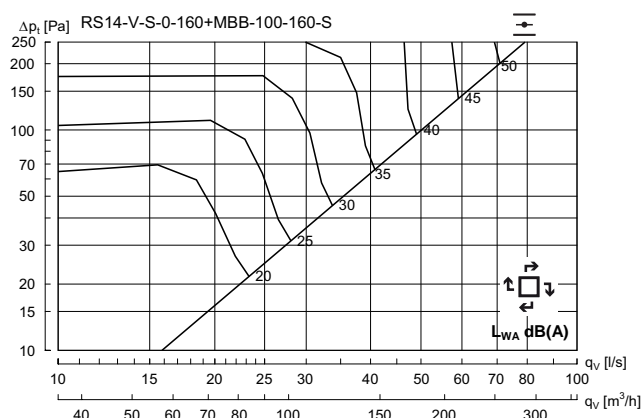
RS14-V 160 + MBB - Supply air



Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	8	2	-1	1	-7	-17	-26	-36

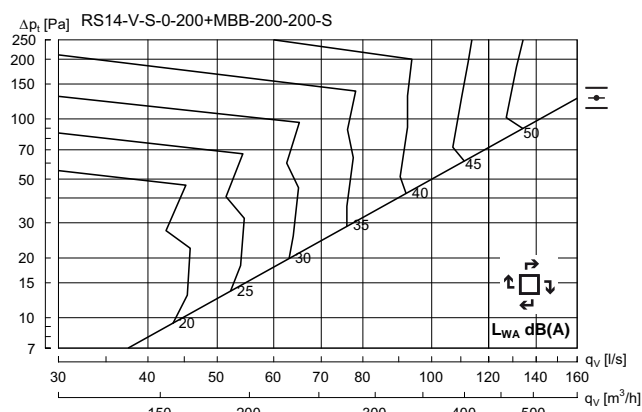


Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	10	4	-1	1	-7	-17	-24	-29

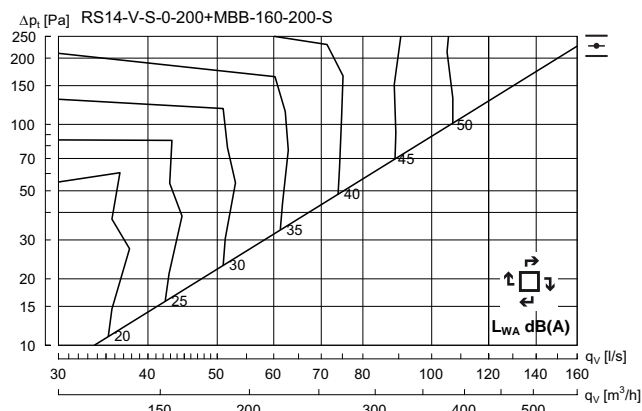


Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	10	4	2	-1	-7	-13	-18	-22

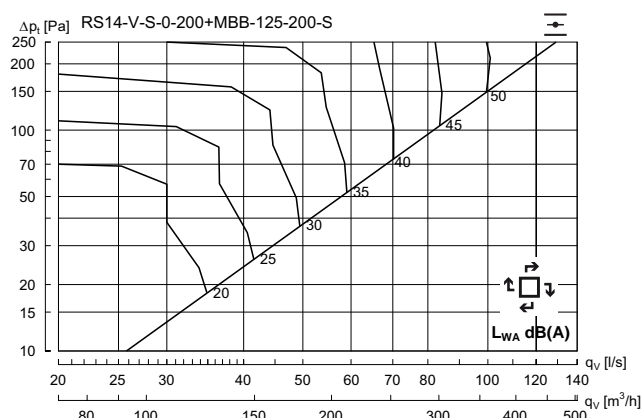
RS14-V 200 + MBB - Supply air



Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	11	0	-5	0	-4	-15	-26	-36



Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	11	2	-1	0	-6	-15	-24	-33



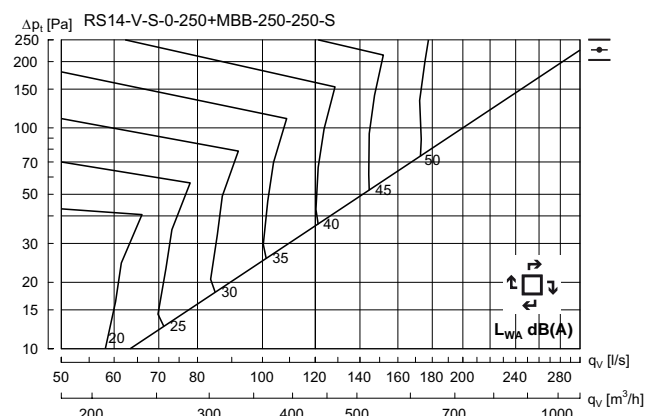
Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	10	4	2	-1	-7	-13	-18	-22

Versio

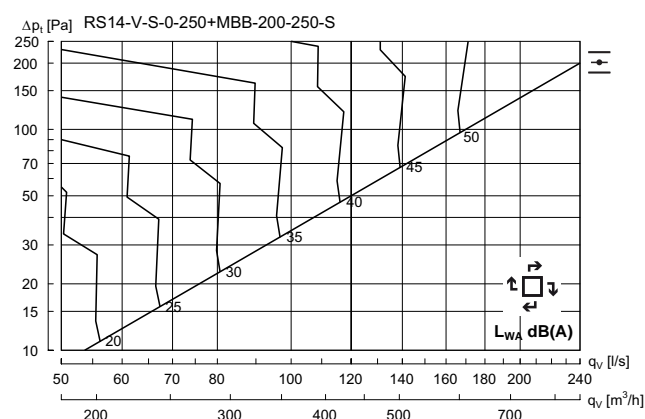
RS14

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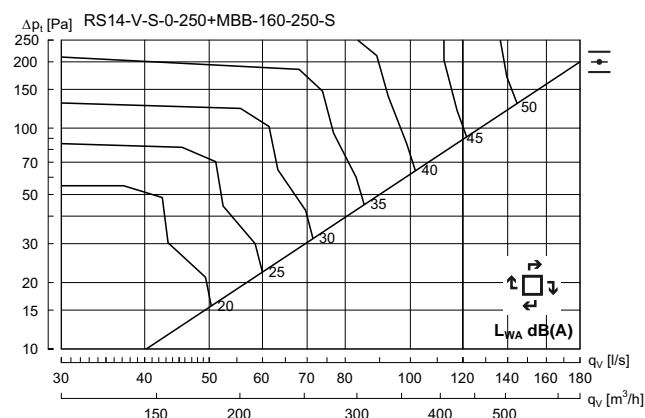
RS14-V 250 + MBB - Supply air



Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	8	-1	-6	1	-5	-18	-29	-40

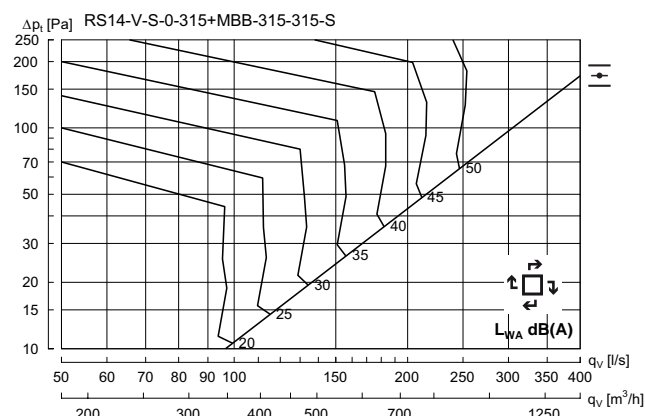


Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	9	2	-3	0	-5	-17	-26	-29

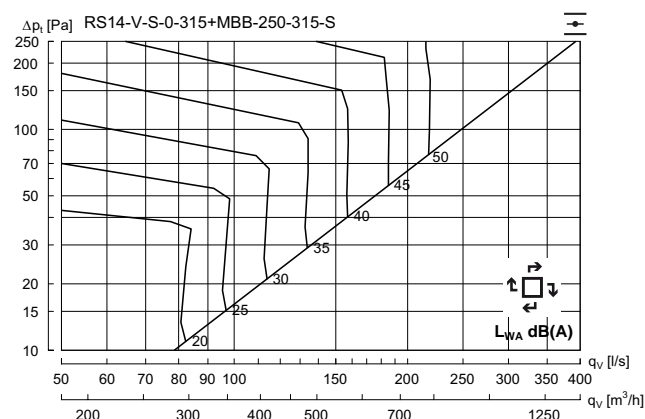


Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	13	5	-1	-1	-5	-14	-20	-26

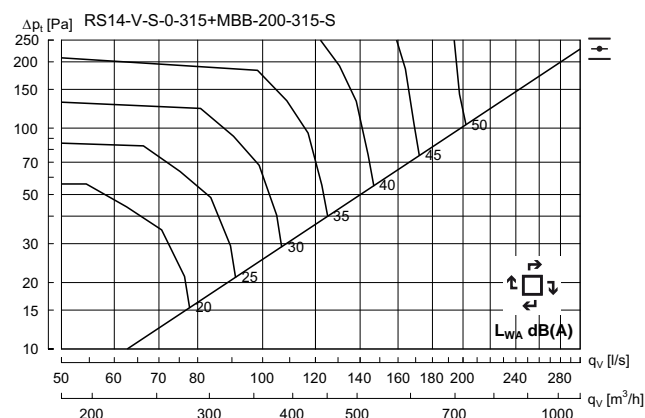
RS14-V 315 + MBB - Supply air



Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	11	-1	-3	0	-5	-17	-25	-28



Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	12	2	-3	0	-5	-15	-22	-30



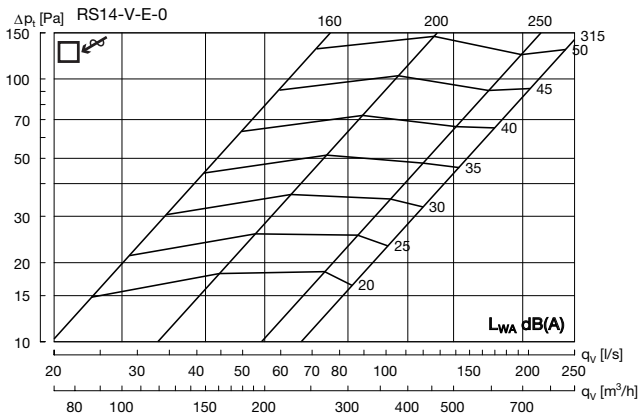
Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	13	4	-1	-1	-6	-14	-19	-25

Versio

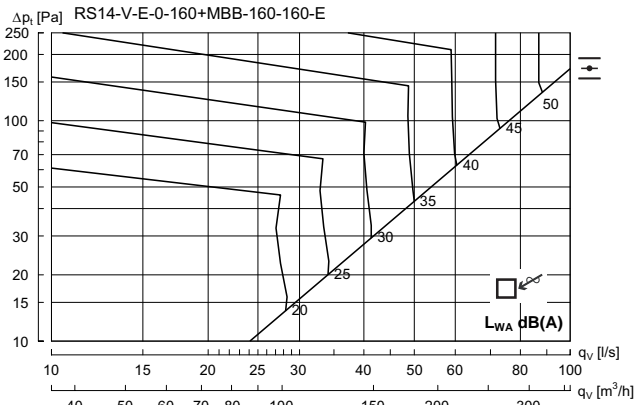
RS14

Technical data

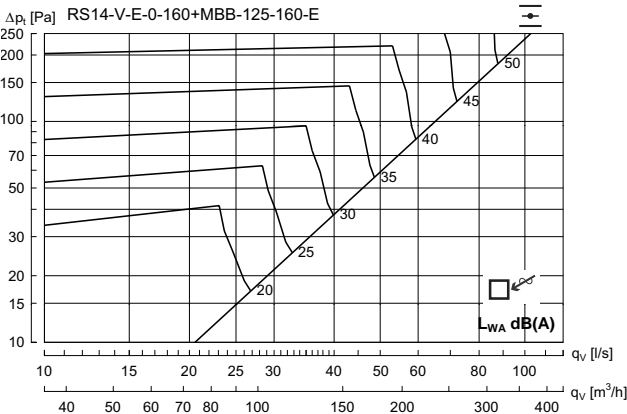
RS14-V without plenum box – Exhaust air



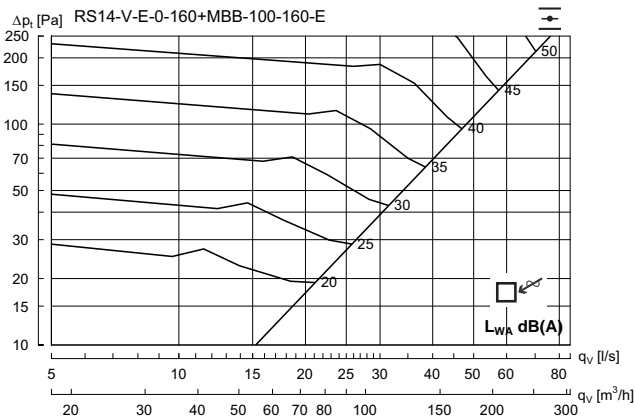
RS14-V 160 + MBB - Exhaust air



Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	12	2	-1	-1	-5	-13	-22	-31



Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	11	4	-1	-1	-5	-13	-19	-27



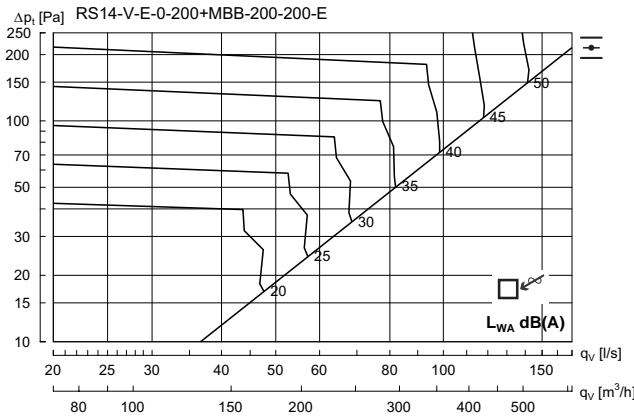
Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	11	4	4	-2	-9	-13	-17	-23

Versio

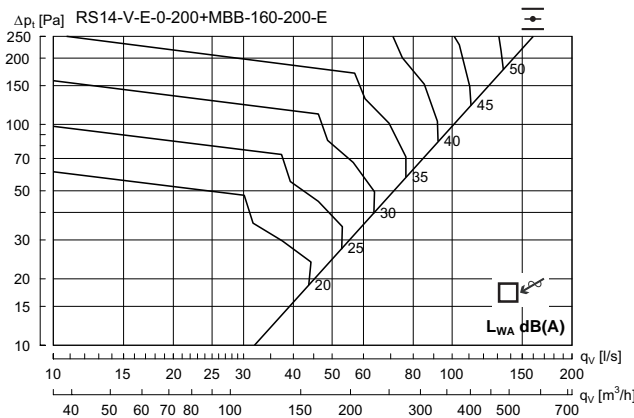
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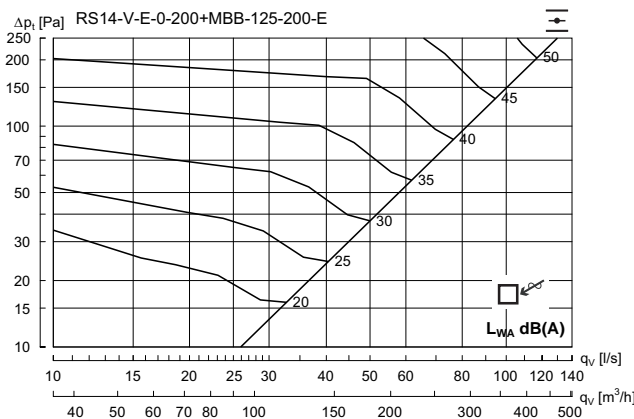
RS14-V 200 + MBB - Exhaust air



Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	13	4	-1	-1	-5	-12	-20	-28

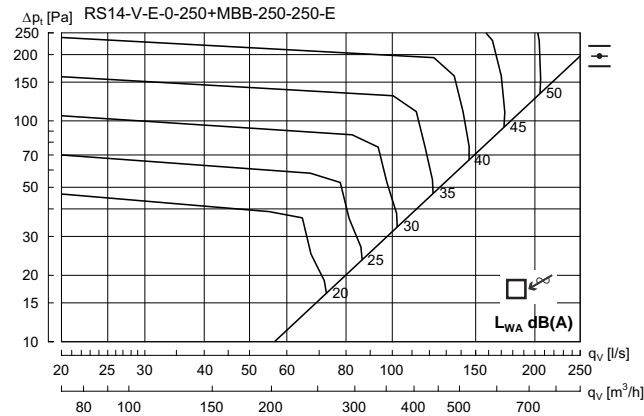


Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	16	6	0	-2	-6	-12	-18	-25

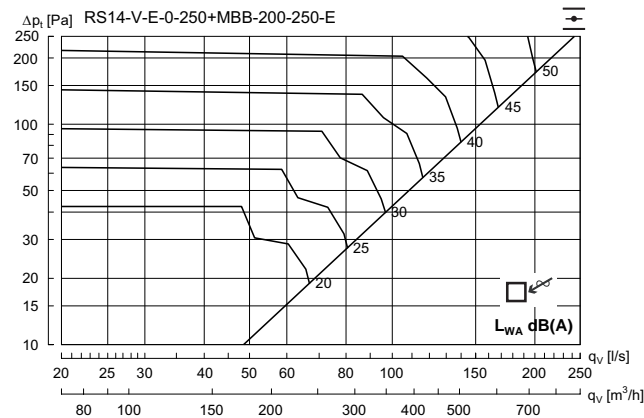


Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	11	4	2	-1	-7	-12	-16	-23

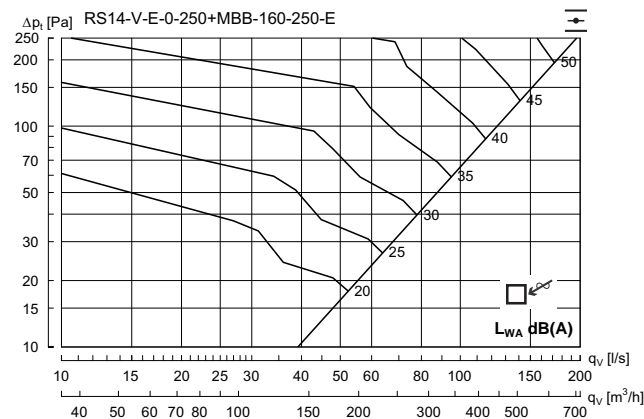
RS14-V 250 + MBB - Exhaust air



Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	8	5	0	-1	-5	-11	-20	-28



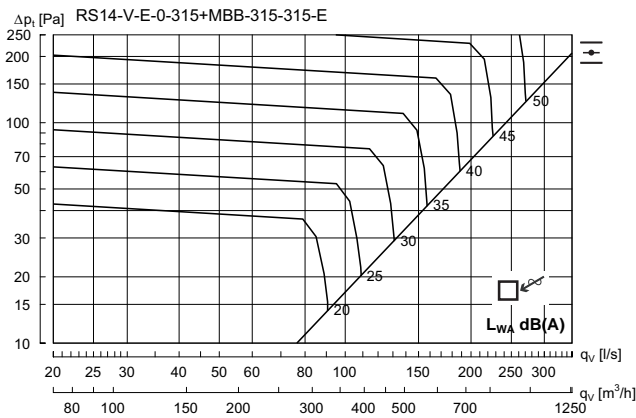
Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	14	5	1	-2	-5	-11	-19	-26



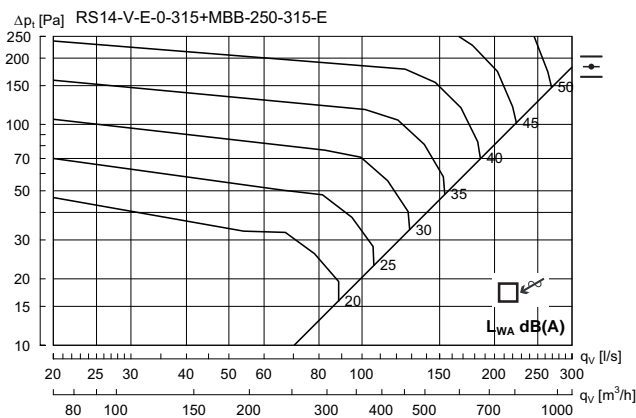
Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	15	7	1	-2	-7	-11	-17	-22

Technical data

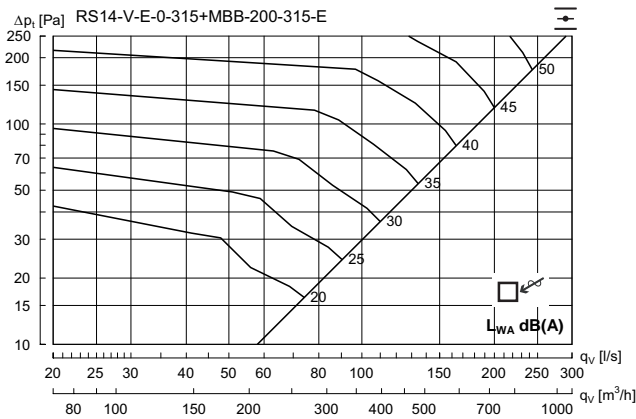
RS14-V 315 + MBB - Exhaust air



Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	11	4	1	-2	-5	-13	-22	-32



Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	10	6	2	-2	-5	-12	-19	-27



Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	14	5	2	-2	-6	-11	-16	-24

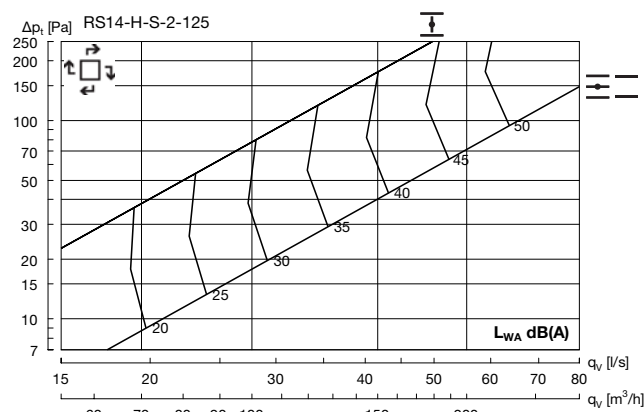
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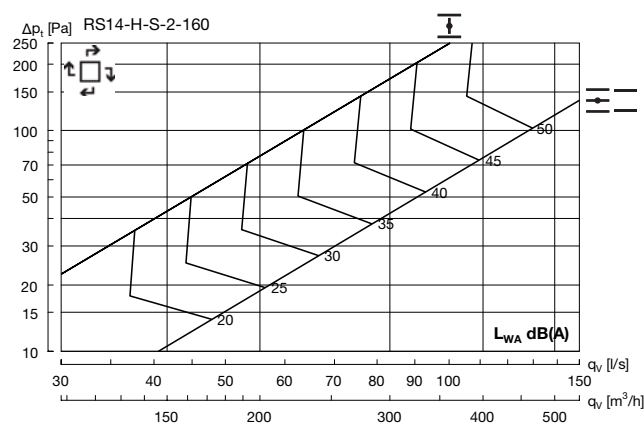
RS14

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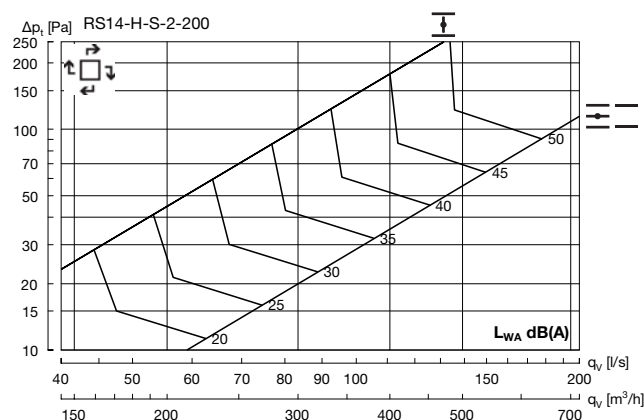
RS14 + H - Supply air



Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	14	8	5	-3	-10	-17	-23	-28

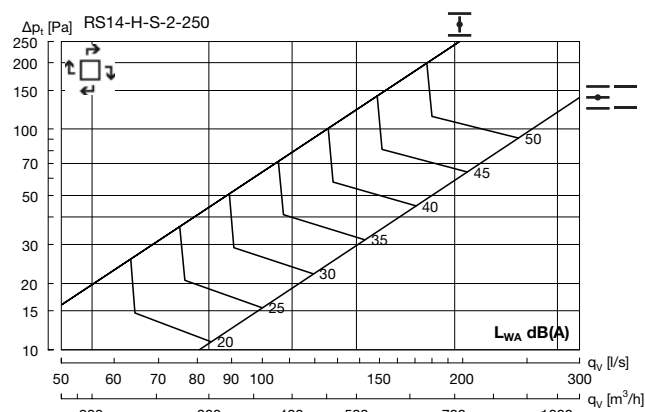


Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	2	5	5	-3	-7	-14	-20	-26

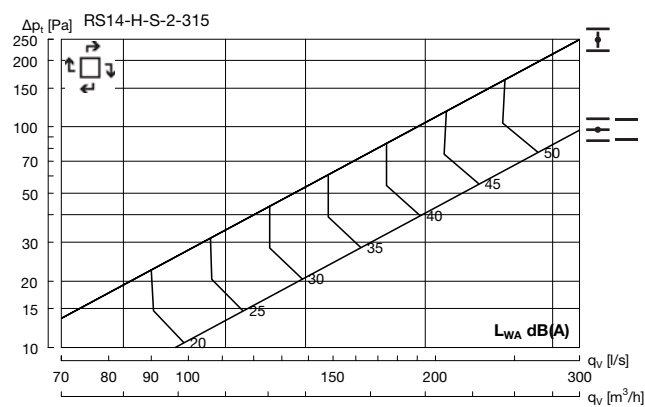


Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	10	7	2	-2	-6	-14	-21	-29

RS14 + H - Supply air



Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	5	7	3	-1	-7	-16	-23	-31



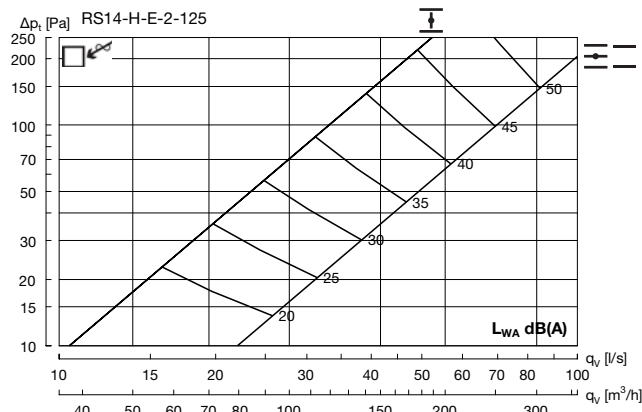
Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	7	7	2	-1	-7	-16	-25	-35

Versio

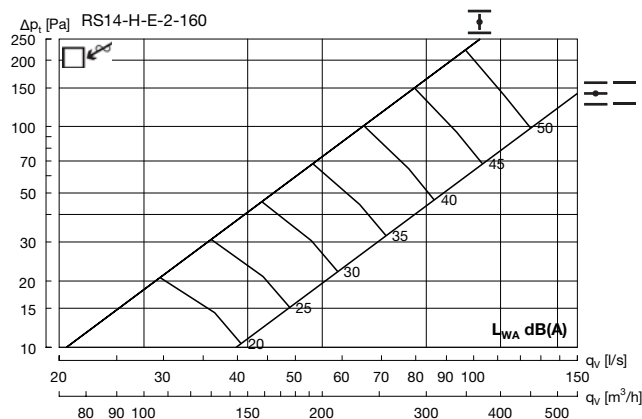
RS14

Technical data

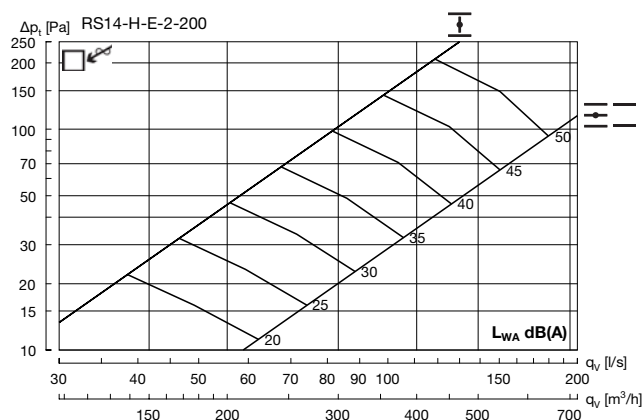
RS14 + H - Exhaust air



Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	3	7	3	-1	-8	-14	-19	-26

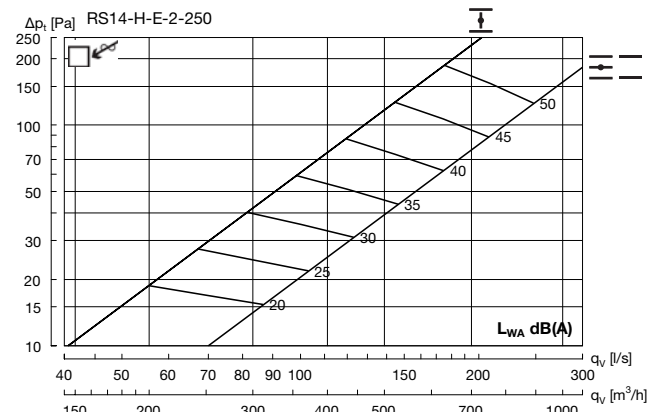


Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	2	6	5	-3	-8	-14	-22	-31

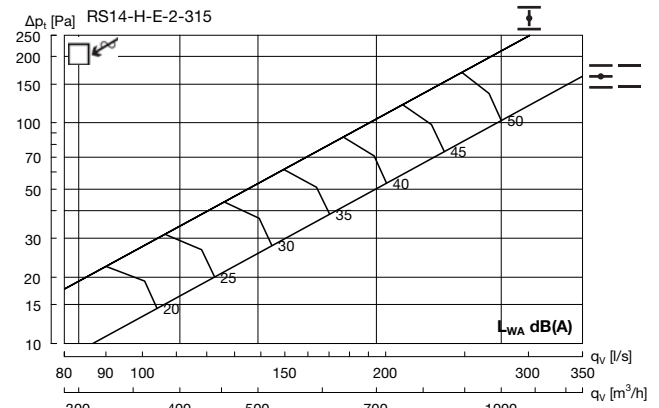


Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	7	7	4	-3	-7	-13	-20	-25

RS14 + H - Exhaust air



Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	5	7	3	-2	-7	-13	-21	-31



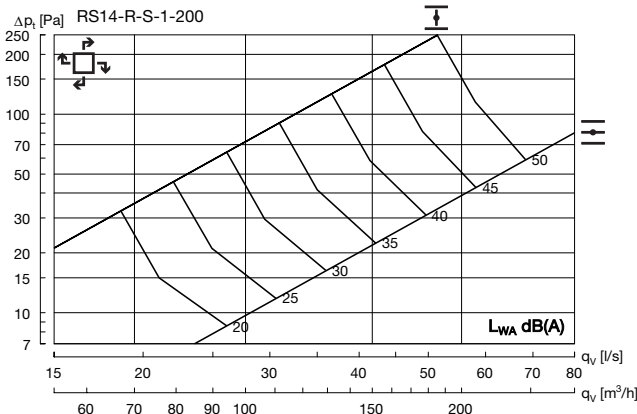
Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	7	7	2	-2	-6	-14	-24	-35

Versio

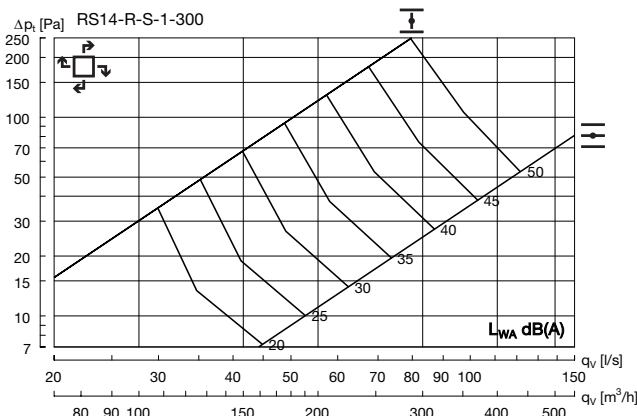
RS14

Technical data

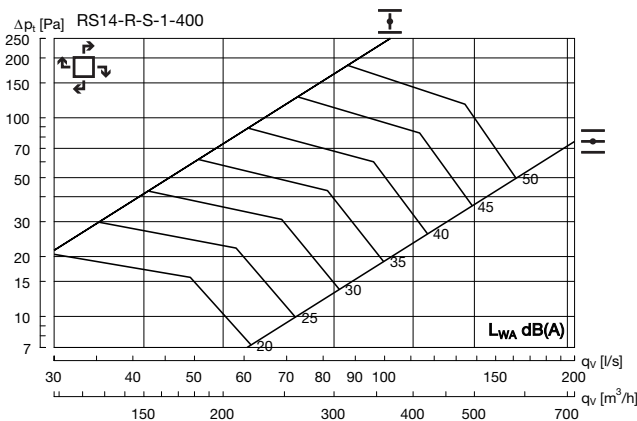
RS14 + R - Supply air



Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	6	-1	3	-1	-7	-12	-25	-33

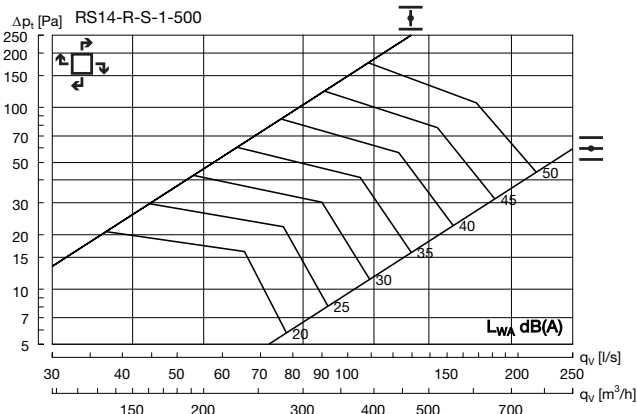


Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	7	-1	4	-1	-8	-14	-22	-31



Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	-2	-1	3	-1	-6	-11	-20	-32

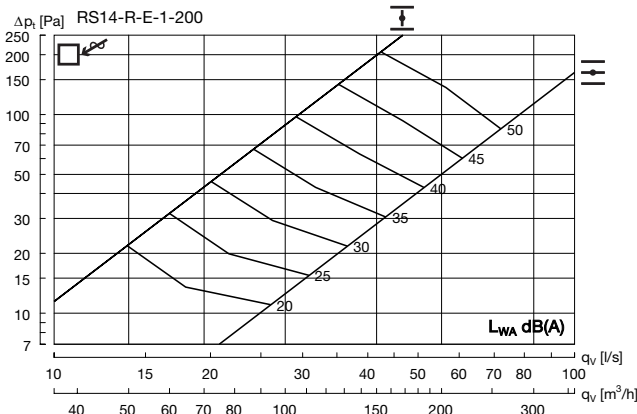
RS14 + R - Supply air



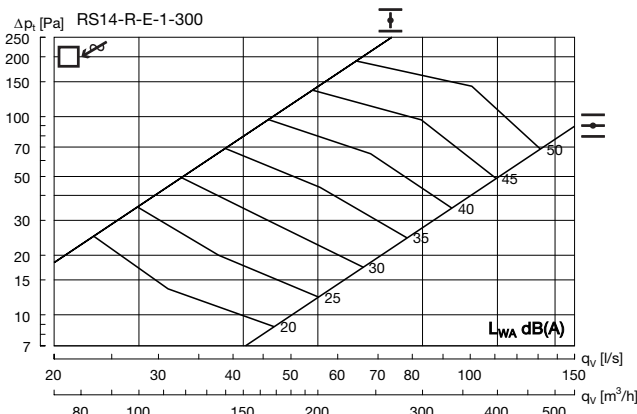
Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	3	-1	3	-1	-7	-11	-19	-31

Technical data

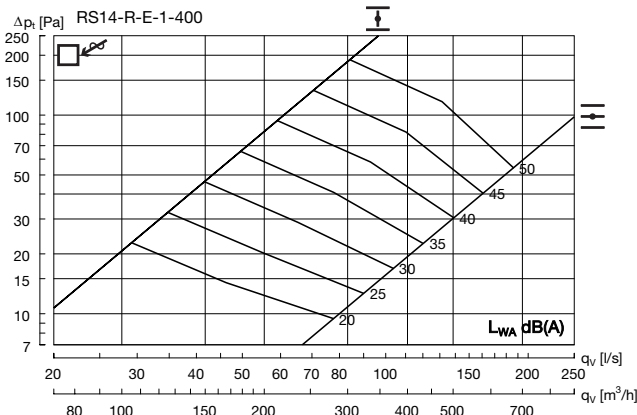
RS14 + R - Exhaust air



Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	7	-1	4	-2	-8	-10	-18	-25

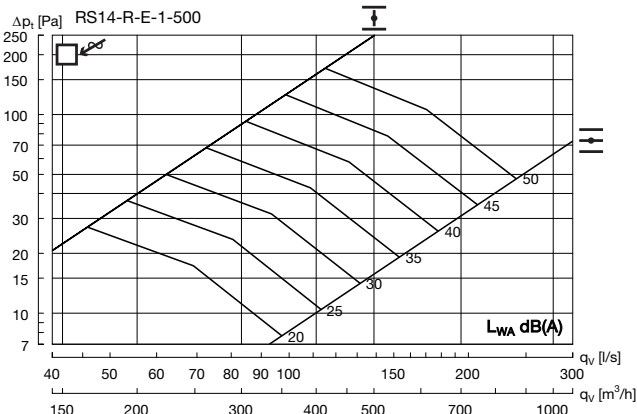


Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	6	1	4	-2	-7	-10	-17	-25



Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	2	0	2	-2	-5	-10	-16	-24

RS14 + R - Exhaust air



Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	1	1	1	-2	-6	-9	-16	-25