

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 extract 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 and extract air
- Plenum box with several damper options

Order code

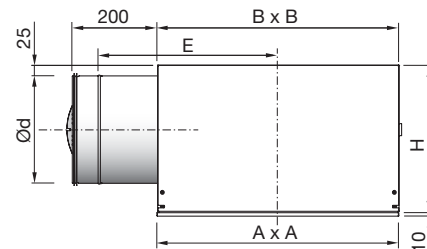
Product	RS	14	b	c	d	eee	f
Type	RS						
Design		14					
Box type			V - H - R				
Functional use				S = Supply air E = Extract			
Damper					0 = No damper (Box : H, V) 1 = Damper (Box : H, R) 2 = Damper / Meas.outlets (Box : H)		
Connection dim.					Ø160-315 (Box : V) Ø125-315 (Box : H) 200x100 - 500x100 (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	m
Ød	Pattern	mm	mm	mm	kg
125	400	*-	380	215	5.9
160	400	*-	380	250	5.9
200	500	*-	460	290	8.5
250	600	*-	560	340	12.3
315	600	*-	560	405	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 colours: RAL 9003 and 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



Order code

Product	MBZ	aaa
Type		
Size		

Example: MBZ-200

Mounting bracket



Suspension



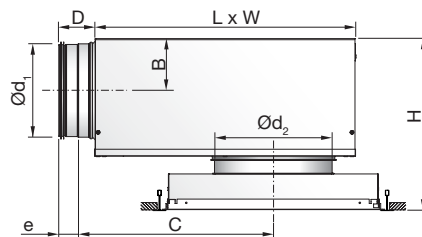
Order code

Product	MHS
Type	

Example: MHS

MBZ

RS14-V + MB plenum box



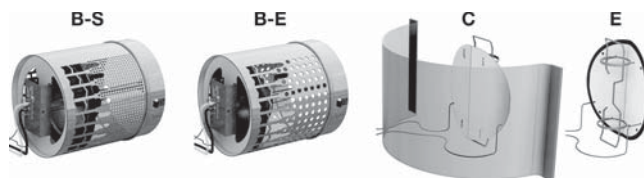
Ød ₁ mm	Ød ₂ mm	Pattern	B	C	D	e	H*	L	W
100	160	400	62	245	78	40	255 - 295	310	260
125	160	400	75	291	78	40	280 - 320	376	310
125	200	400	75	291	78	40	280 - 320	376	310
160	160	400	92	352	78	40	314 - 354	459	380
160	200	400	92	352	78	40	314 - 354	459	380
160	250	500	92	352	78	40	314 - 354	459	380
200	200	400	112	425	78	40	355 - 395	565	460
200	250	500	112	425	78	40	355 - 395	565	460
200	315	600	112	425	78	40	355 - 395	565	460
250	250	500	137	514	118	60	405 - 445	698	540
250	315	600	137	514	118	60	405 - 445	698	540
315	315	600	170	675	118	60	470 - 510	858	540

* Using accessory MBZ the H dimension will increase:

Ød₂ = 160 - 200 mm => H +40 mm

Ød₂ = 250 - 315 mm => H +60 mm

Damper options



Order code

Product	MB	a	bbb	ccc	d
Type	MB				
Damper					
B = Linear cone damper					
C = Blade damper supply					
E = Blade damper extract					
Duct connection Ød₁					
Ø100-315					
Diffuser dimension Ød₂					
Ø160-315					
Function (Only for B damper)					
S = Supply air					
E = Extract					

Example 1: RS-14-V-S-0-200-1+MBB-160-200-S

Example 2: RS-14-S-0-200-1+MBC-160-200

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Technical data

Following RS14-V+plenum box data are valid for MBB-S/-E

For MBC and MBE data, got to www.lindQST.com

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 power level

The sound power 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-S

RS14-V + MBB-S		$\Delta p_t \geq 50$ Pa 30 dB(A)		$\Delta p_t \geq 50$ Pa 35 dB(A)	
duct $\varnothing d_1$	RS14-V $\varnothing d_2$	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 Size $\varnothing d$ mm	Minimum		$\Delta p_t \geq 50$ Pa 30 dB(A)		$\Delta p_t \geq 50$ Pa 35 dB(A)	
	l/s	m ³ /h	l/s	m ³ /h	l/s	m ³ /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-S/-E

RS14-V + MBB-S/-E		Centre frequency Hz							
duct $\varnothing d_1$	RS14-V $\varnothing d_2$	63	125	250	500	1K	2K	4K	8K
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 $\varnothing d$ mm		63	125	250	500	1K	2K	4K	8K
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 mm		63	125	250	500	1K	2K	4K	8K
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.lindQST.com and installation -and balancing instruction.

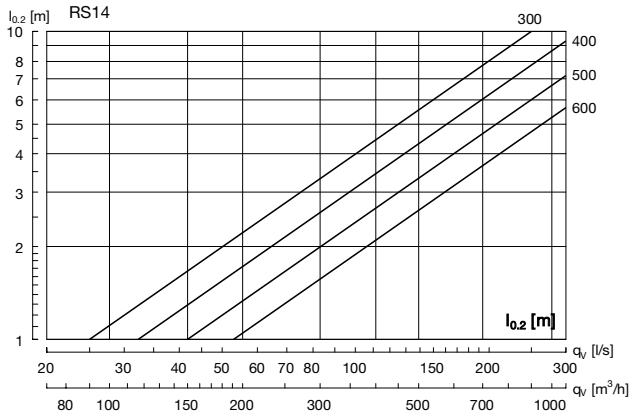
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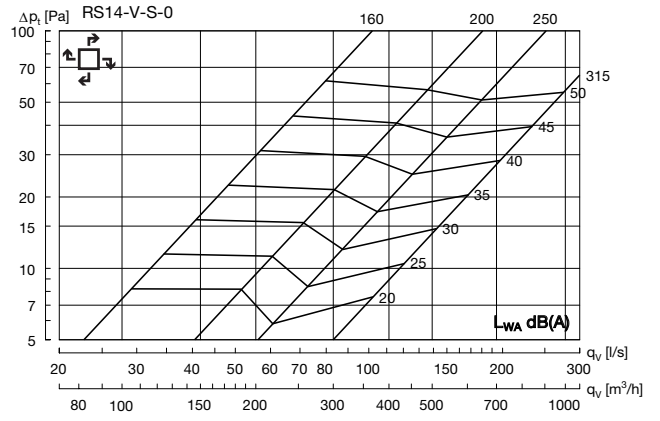
Technical data

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

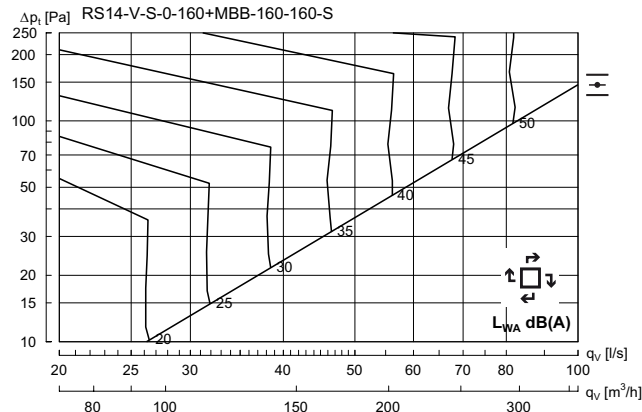


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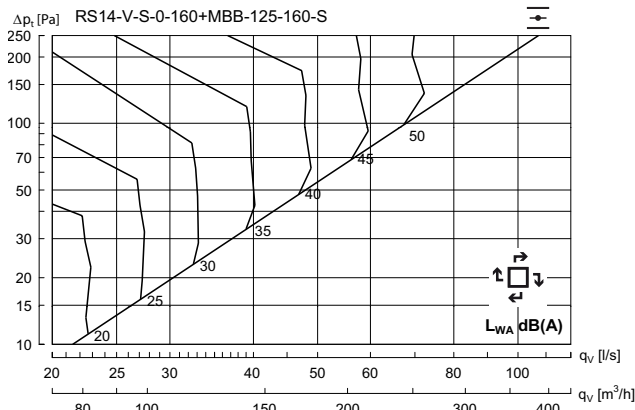
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Technical data

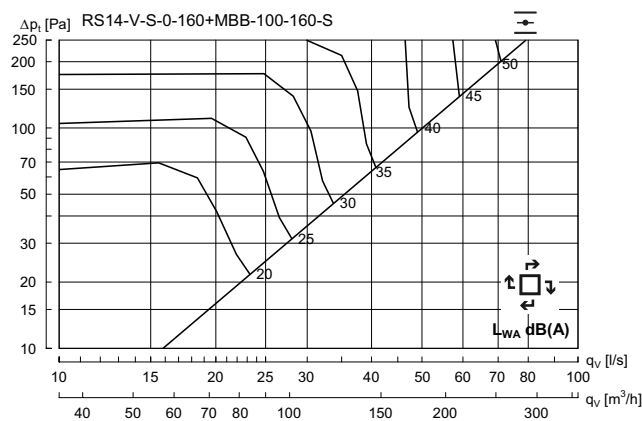
RS14-V 160 + MBB-S - Supply air



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

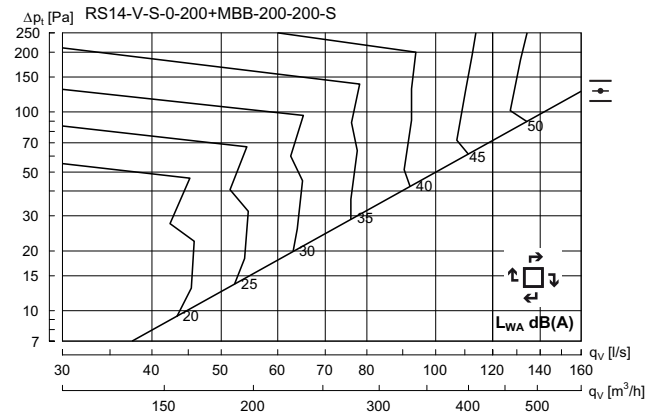


Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	10	4	-1	1	-7	-17	-24	-29

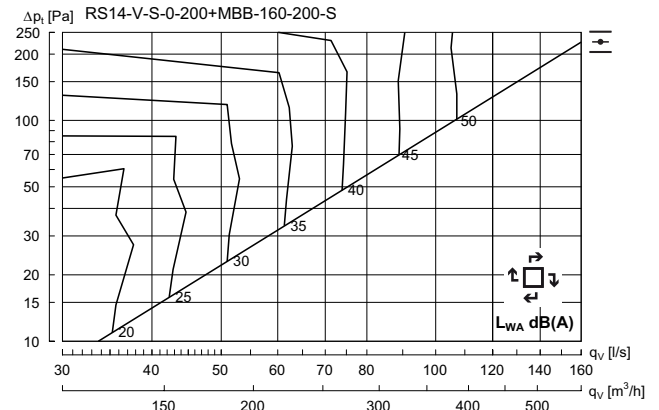


Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	10	4	2	-1	-7	-13	-18	-22

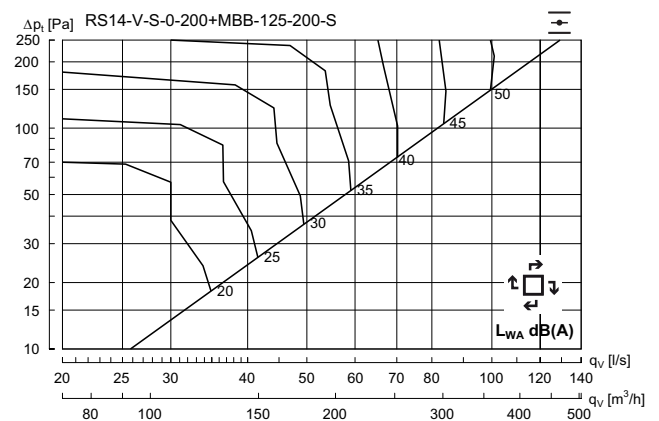
RS14-V 200 + MBB-S - Supply air



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



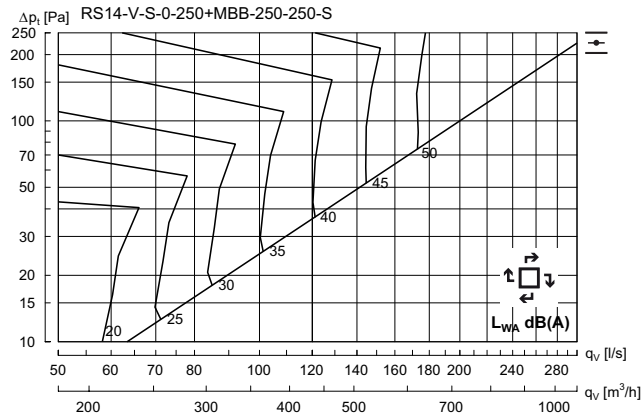
Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	8	5	1	-1	-7	-13	-17	-22

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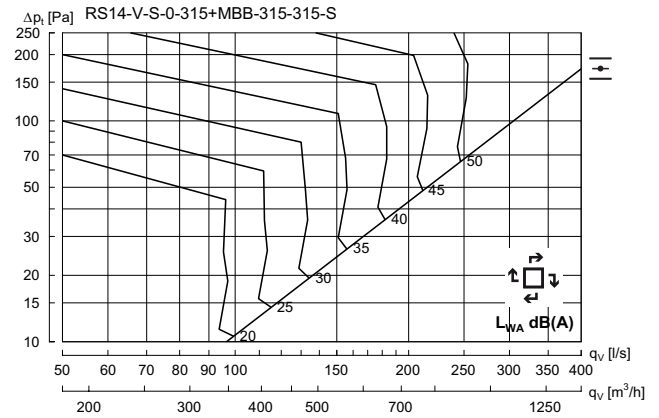
Technical data

RS14-V 250 + MBB-S - Supply air

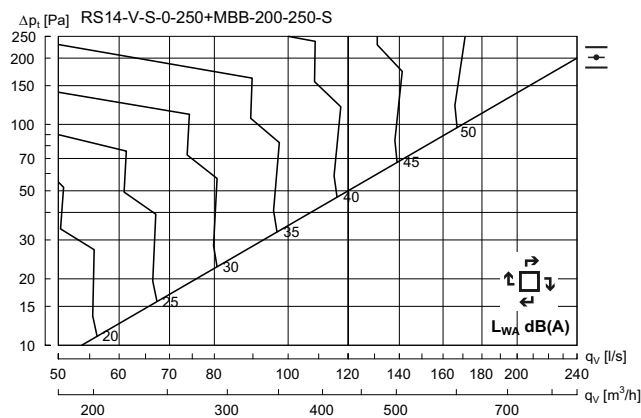


Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	8	-1	-6	1	-5	-18	-29	-40

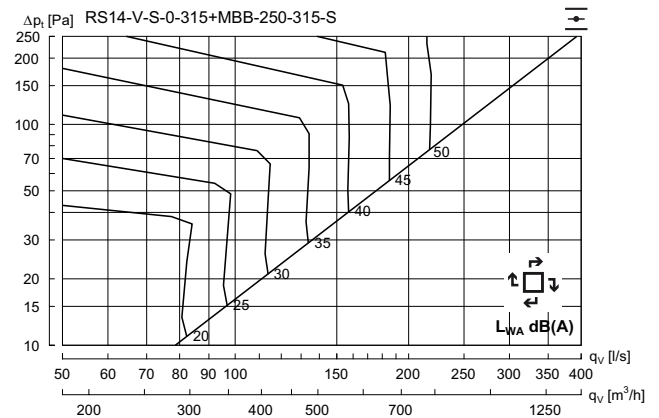
RS14-V 315 + MBB-S - Supply air



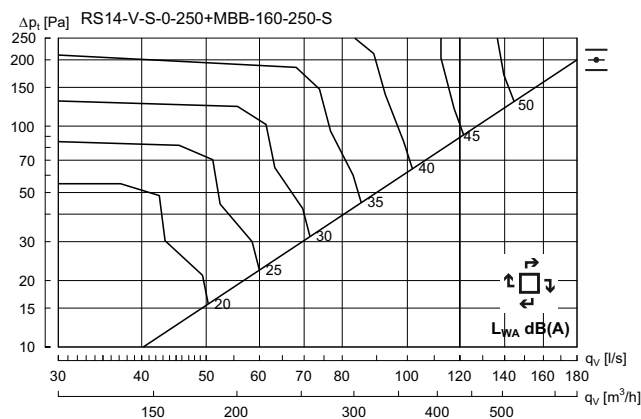
Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	11	-1	-3	0	-5	-17	-25	-28



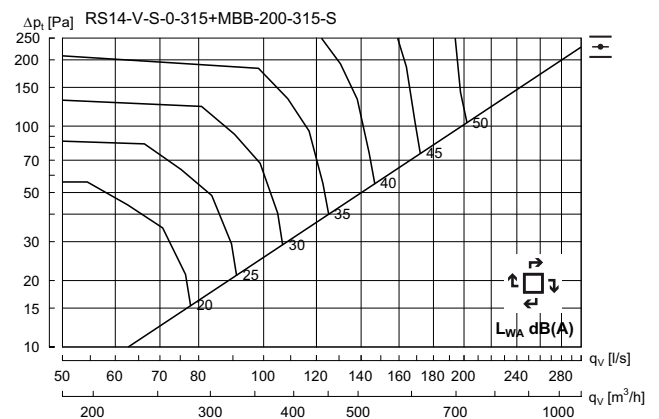
Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	9	2	-3	0	-5	-17	-26	-29



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	5	-1	-1	-5	-14	-20	-26



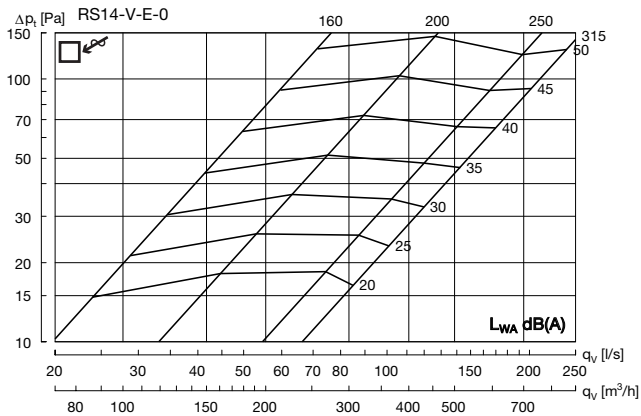
Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	13	4	-1	-1	-6	-14	-19	-25

Versio

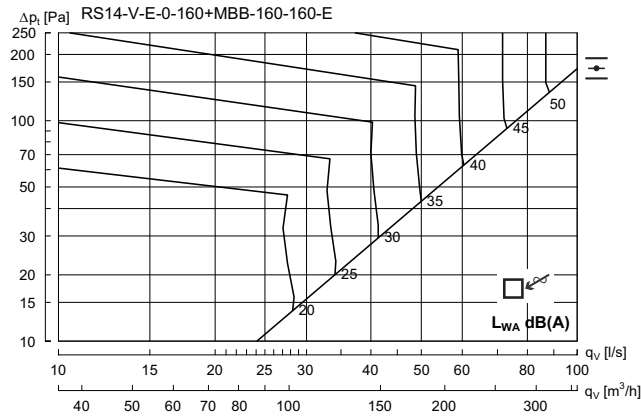
RS14

Technical data

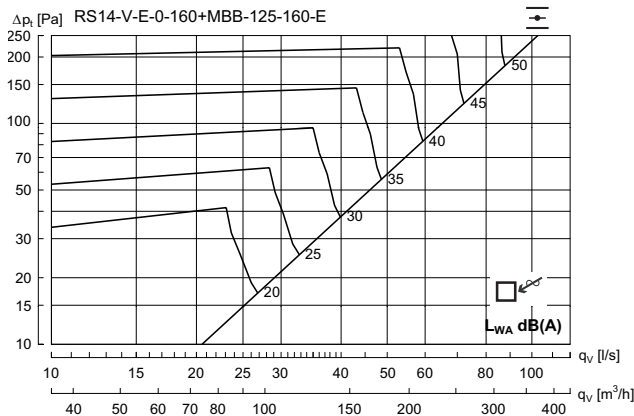
RS14-V without plenum box – Extract air



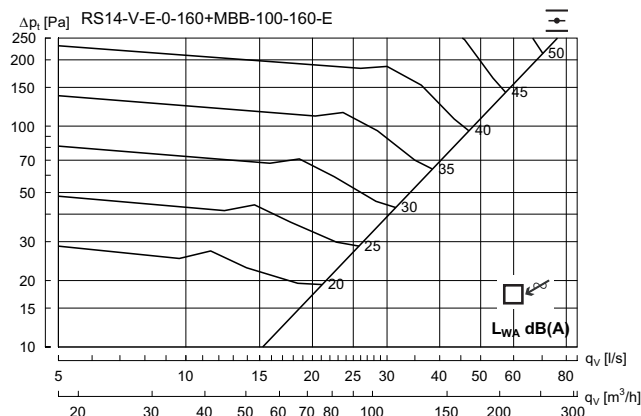
RS14-V 160 + MBB-E - Extract air



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



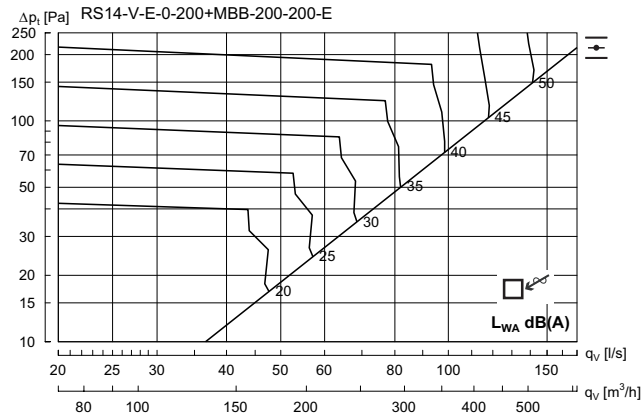
Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	11	4	4	-2	-9	-13	-17	-23

Versio

RS14

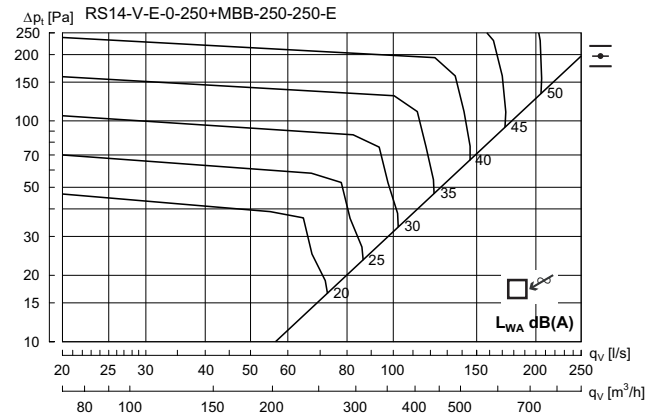
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RS14-V 200 + MBB-E - Extract air

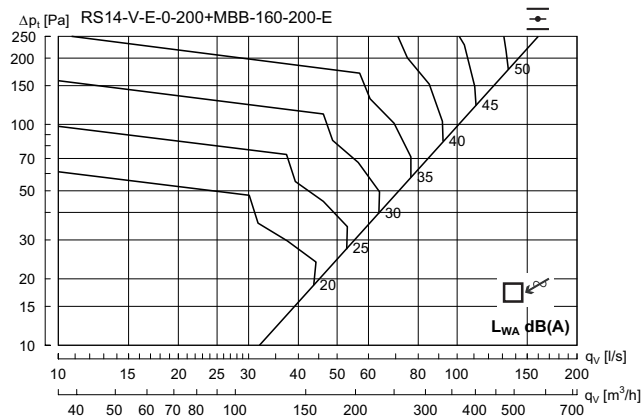


Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	13	4	-1	-1	-5	-12	-20	-28

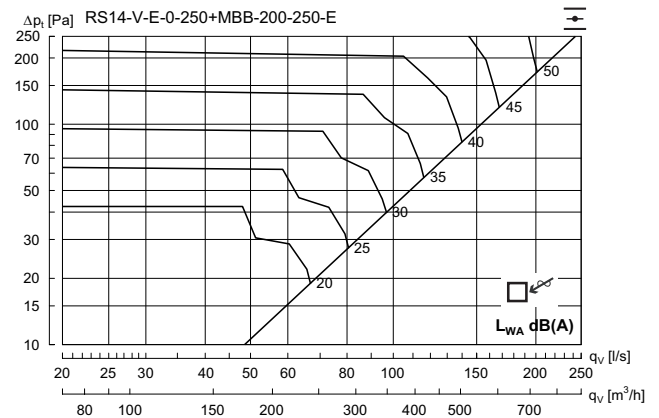
RS14-V 250 + MBB-E - Extract air



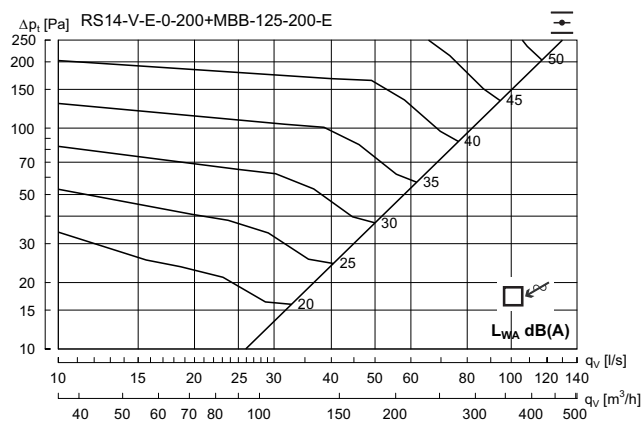
Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	8	5	0	-1	-5	-11	-20	-28



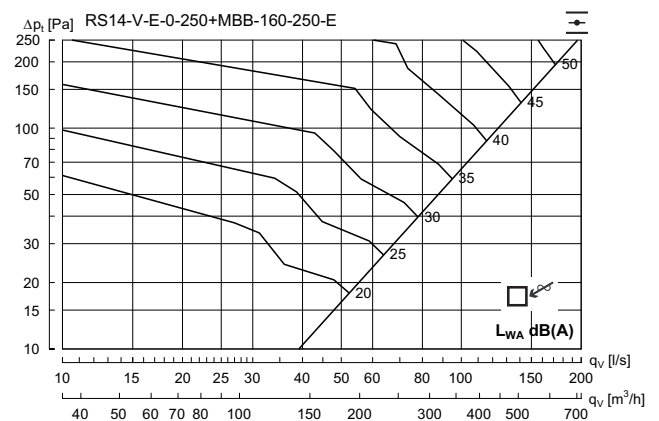
Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	16	6	0	-2	-6	-12	-18	-25



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}	11	4	2	-1	-7	-12	-16	-23



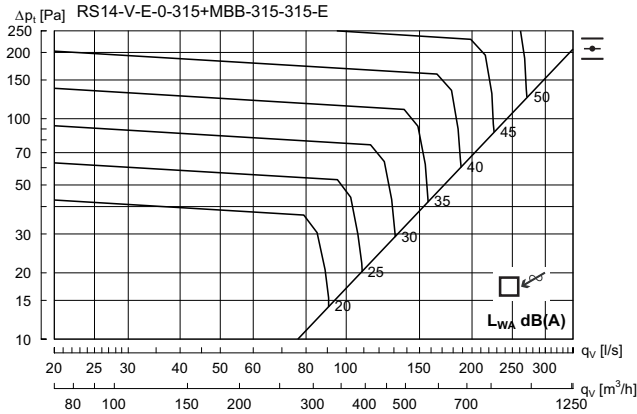
Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	15	7	1	-2	-7	-11	-17	-22

Versio

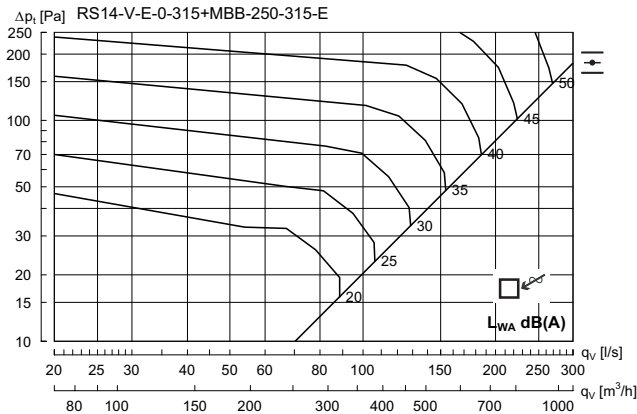
RS14

Technical data

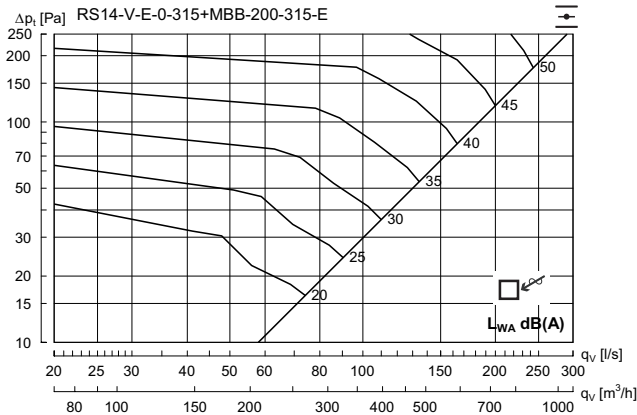
RS14-V 315 + MBB-E - Extract air



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



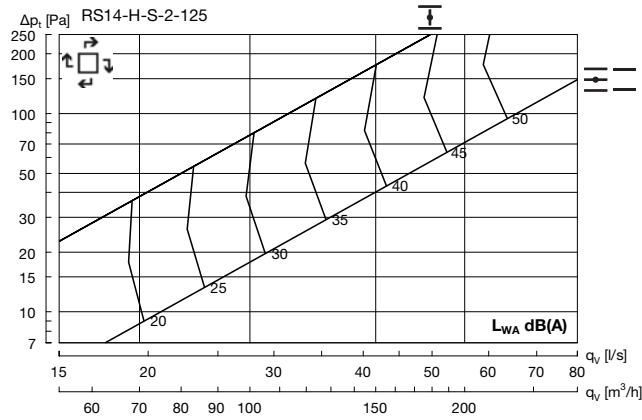
Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	14	5	2	-2	-6	-11	-16	-24

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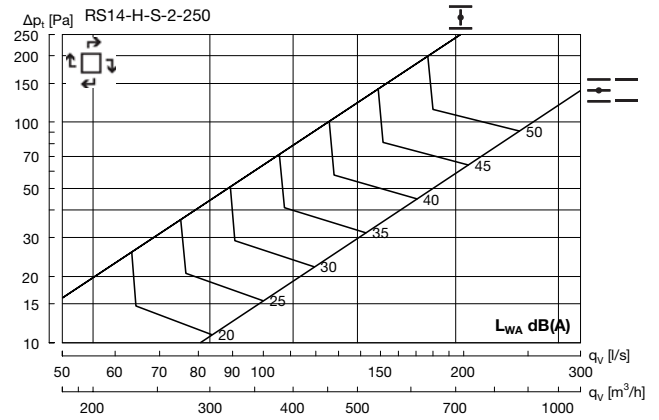
Technical data

RS14 + H - Supply air

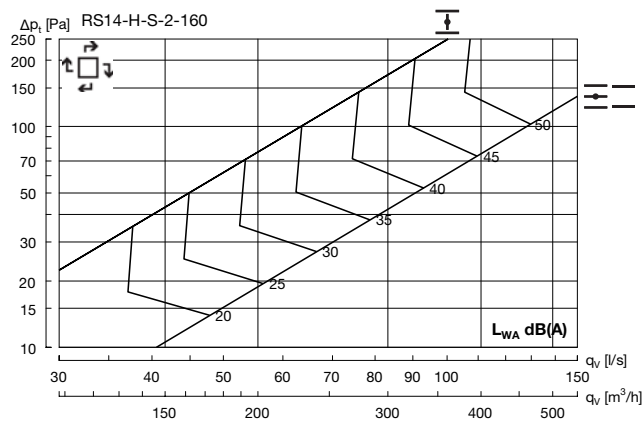


Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	14	8	5	-3	-10	-17	-23	-28

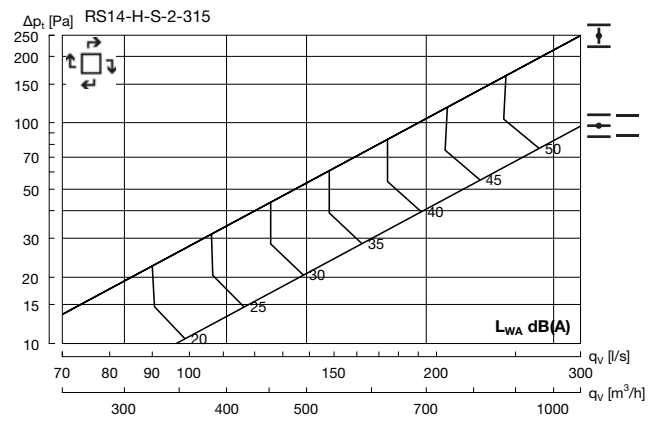
RS14 + H - Supply air



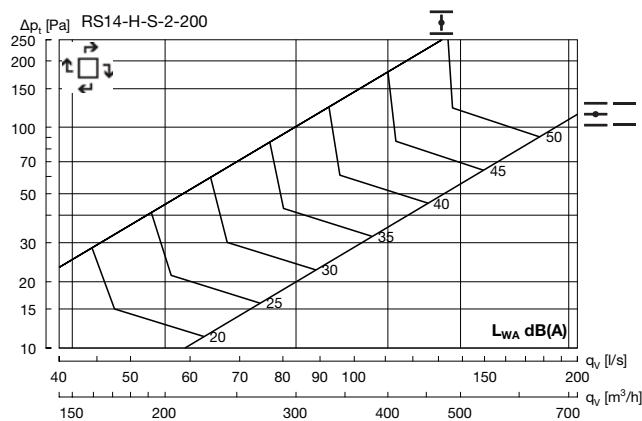
Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	5	7	3	-1	-7	-16	-23	-31



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



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



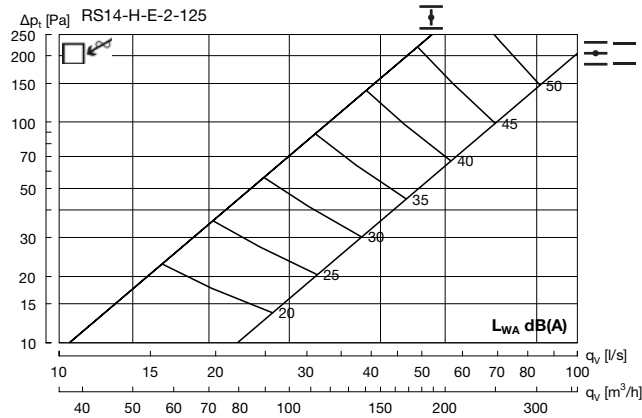
Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	10	7	2	-2	-6	-14	-21	-29

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RS14

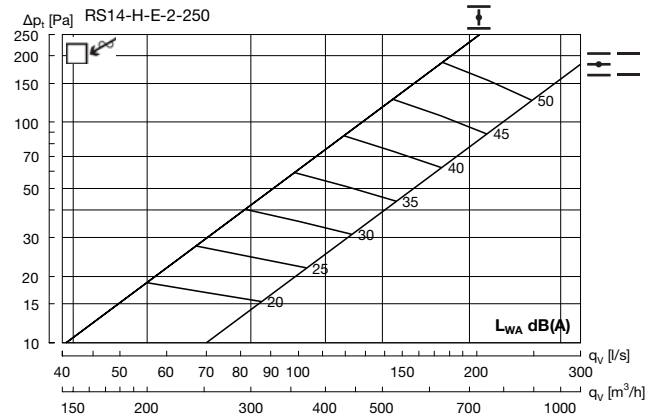
Technical data

RS14 + H - Extract air

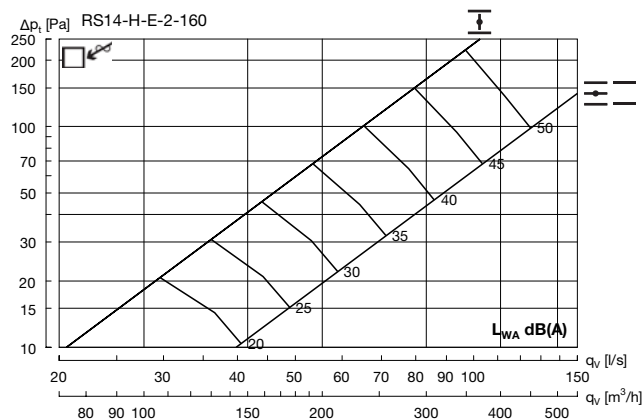


Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	3	7	3	-1	-8	-14	-19	-26

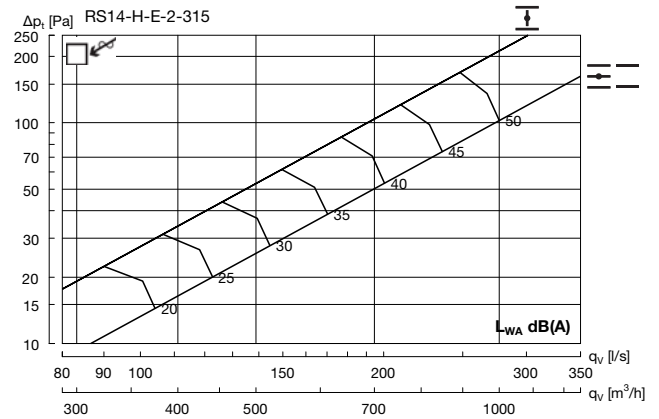
RS14 + H - Extract air



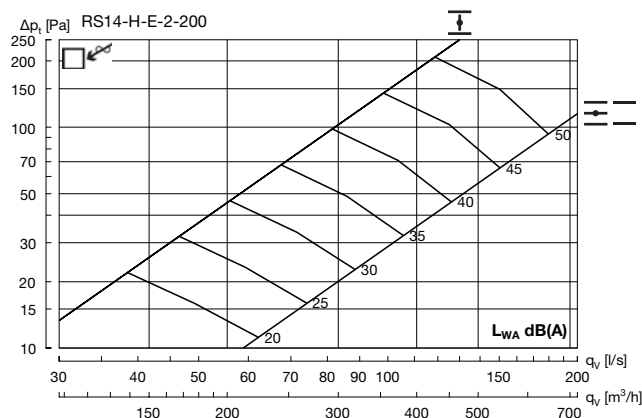
Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	5	7	3	-2	-7	-13	-21	-31



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



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



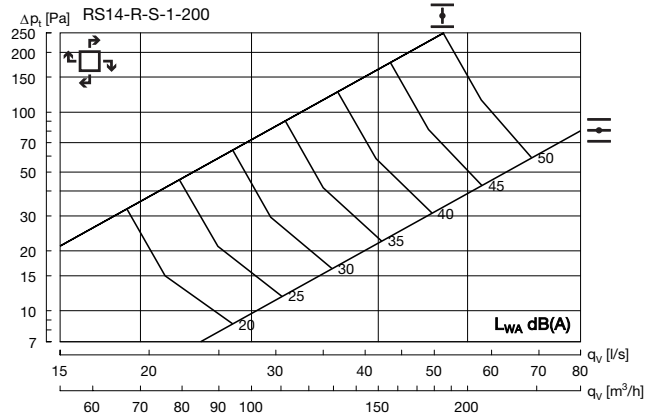
Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	7	7	4	-3	-7	-13	-20	-25

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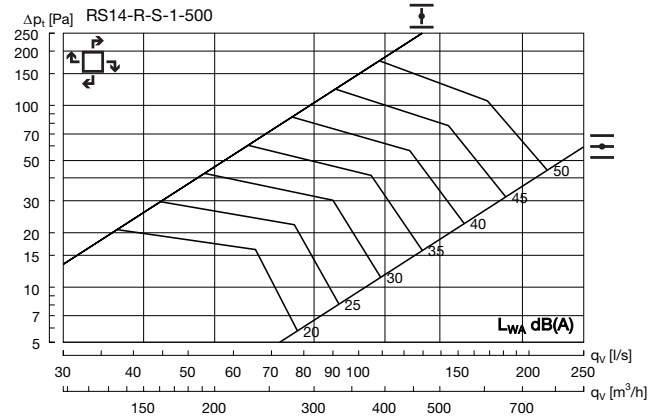
Technical data

RS14 + R - Supply air

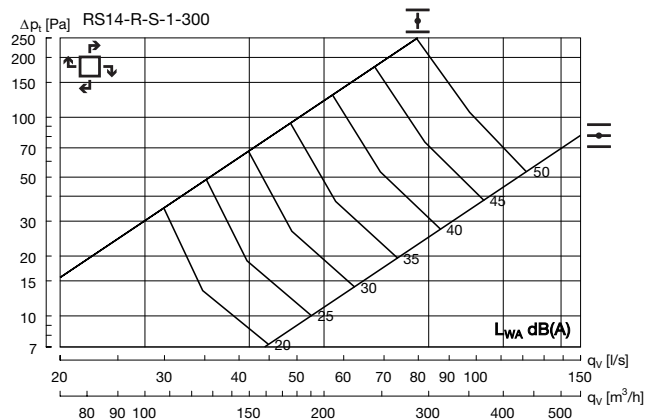


Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	6	-1	3	-1	-7	-12	-25	-33

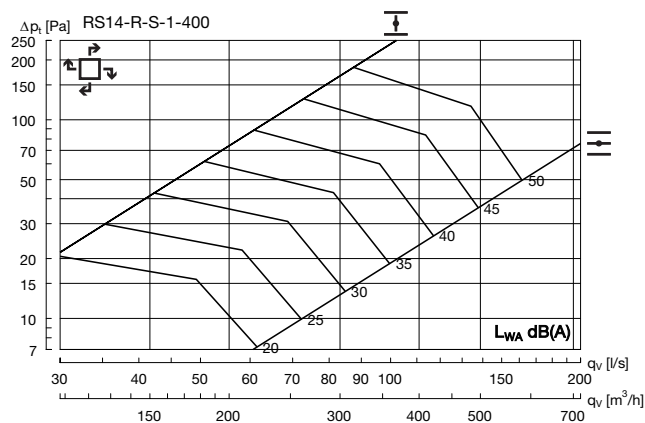
RS14 + R - Supply air



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



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



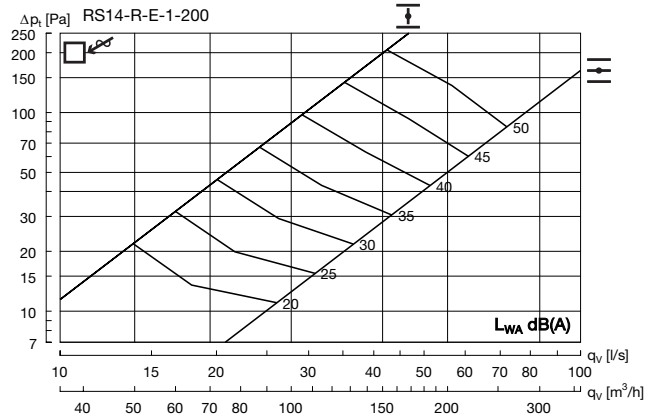
Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	-2	-1	3	-1	-6	-11	-20	-32

Versio

RS14

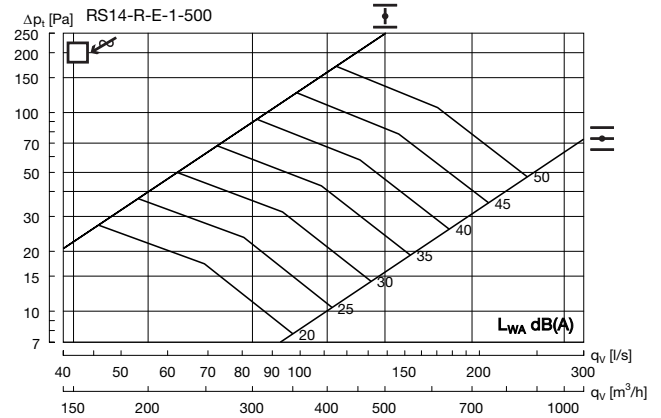
Technical data

RS14 + R - Extract air

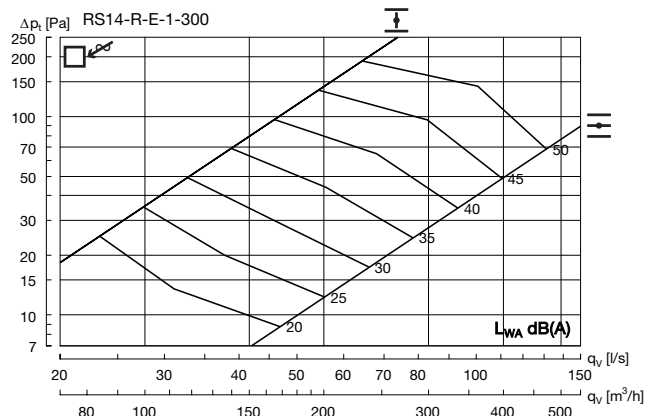


Hz	63	125	250	500	1K	2K	4K	8K
K_{ek}	7	-1	4	-2	-8	-10	-18	-25

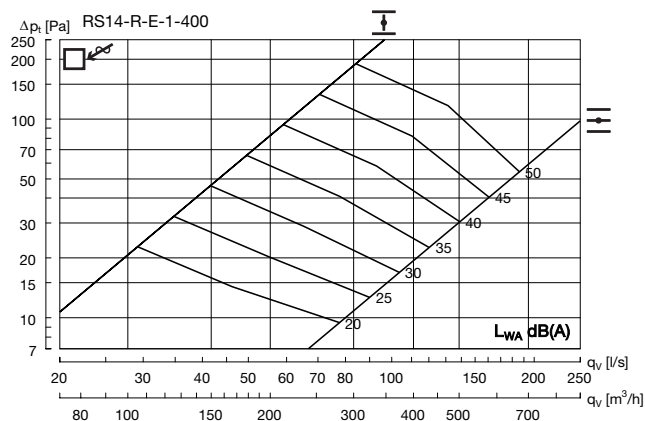
RS14 + R - Extract air



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



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



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