

Versio

RS15



RS15 with grille box type V

Description

RS15 is a square swirl diffuser with adjustable bars that 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. The diffuser can also be set to a vertical supply air pattern, enabling supply of heated air. The diffuser is supplied as standard with inward swirl. For extract, the diffuser is supplied as standard without bars.

- Large dynamic range
- High induction
- Ideal for the supply of very cold air
- Adjustable for horizontal or vertical supply air pattern
- Can be used for both supply and extract air
- Plenum box with several damper options

Order code

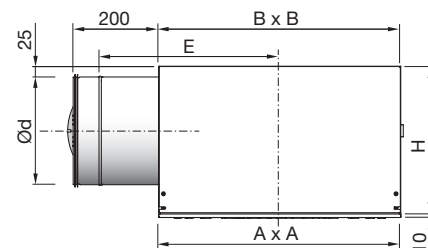
Product	RS	15	b	c	d	eee	f
Type	RS						
Design		15					
Box type			V - H - R				
Functional use				S = Supply air E = Extract			
Damper				0 = No damper (Box : H, V) 1 = Damper (Box : H, R) 2 = Damper / Meas.outlets (Box : H)			
Connection dim.				Ø200-315 (Box : V) Ø160-315 (Box : H) 300x100 - 500x100 (Box : R)			
Ceiling system				1 - 14	Go to chapter Ceiling tile adaption		

Example: RS-15-V-S-0-200-1



RS15 with plenum box type H

Dimensions



RS15-H		A	B	H	E	m
Ød	Pattern	mm	mm	mm	mm	kg
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
 Bars: Black ABS-plastic
 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

MBZ



Order code

Product MBZ aaa
Type
Size

Example: MBZ-200

Mounting bracket

PBB



Suspension

MHS

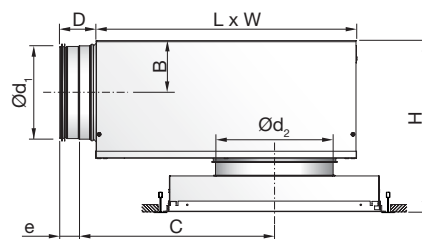


Order code

Product aaa
Type

Example: MHS

RS15-V + MB plenum box

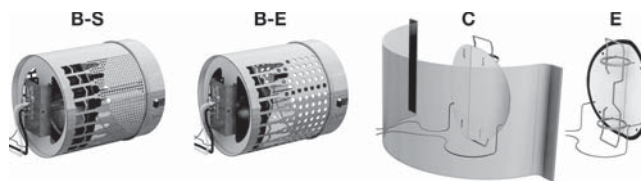


Ød ₁ mm	Ød ₂ mm	Pattern	B	C	D	e	H*	L	W
125	200	400	75	291	78	40	280 - 320	376	310
160	200	400	92	352	78	40	314 - 354	459	380
160	250	500	92	352	78	40	314 - 354	459	380
200	200	400	112	425	78	40	355 - 395	565	460
200	250	500	112	425	78	40	355 - 395	565	460
200	315	600	112	425	78	40	355 - 395	565	460
250	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 = 200 mm => H +40 mmØd₂ = 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
Ø125-315
Diffuser dimension Ød₂
Ø200-315
Function (Only for B damper)
S = Supply air E = Extract

Example 1: RS-15-V-S-200-1+MBB-160-200-S

Example 2: RS-15-V-S-200-1+MBC-160-200

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Technical data

Following RS15-V+plenum box data are valid for MBB-S/-E

For MBC and MBE data, go 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

RS15-V + MBB-S

RS15-V + MBB-S		$\Delta p_t \geq 50$ Pa 30 dB(A)		$\Delta p_t \geq 50$ Pa 35 dB(A)	
duct $\varnothing d_1$	RS15-V $\varnothing d_2$	l/s	m ³ /h	l/s	m ³ /h
125	200	53	191	63	227
160	200	56	202	67	241
160	250	72	259	91	328
200	200	60	216	73	263
200	250	84	302	102	367
200	315	94	338	119	428
250	250	94	338	112	403
250	315	107	385	128	461
315	315	123	443	144	518

Supply air

RS15 + H

RS15 + H		$\Delta p_t \geq 50$ Pa 30 dB(A)		$\Delta p_t \geq 50$ Pa 35 dB(A)	
Size $\varnothing d$ mm	Minimum l/s m ³ /h	l/s	m ³ /h	l/s	m ³ /h
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 table below.

RS15-V + MBB-S/-E

RS15-V + MBB-S/-E		Centre frequency Hz							
duct $\varnothing d_1$	RS15-V $\varnothing d_2$	63	125	250	500	1K	2K	4K	8K
125	200	14	13	6	16	18	17	18	19
160	200	15	15	8	22	21	20	20	20
160	250	15	14	4	20	17	18	18	20
200	200	14	11	8	17	21	18	21	18
200	250	14	9	5	17	18	16	18	17
200	315	12	9	4	16	17	16	17	16
250	250	15	9	8	19	19	18	18	18
250	315	16	7	5	15	16	17	17	18
315	315	10	10	8	16	18	17	17	23

RS15 + H

RS15 + H		Centre frequency Hz							
Size $\varnothing d$ mm		63	125	250	500	1K	2K	4K	8K
160		17	12	5	15	14	10	9	9
200		14	8	4	13	10	7	8	11
250		12	8	6	9	7	7	8	10
315		12	6	7	12	6	6	8	10

RS15 + R

RS15 + R		Mean frequency Hz							
Size-2 mm		63	125	250	500	1K	2K	4K	8K
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.

Versio

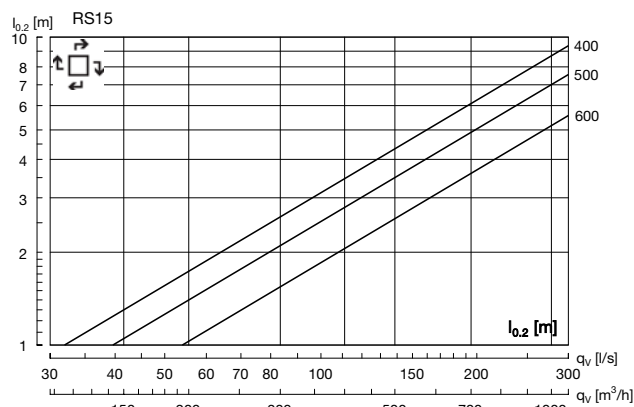
RS15

Technical data

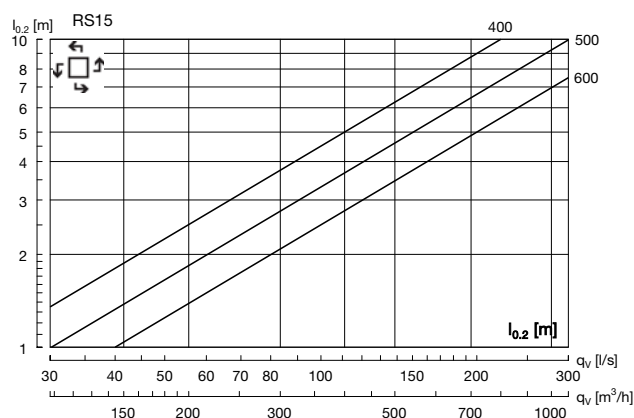
Throw $l_{0.2}$

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.

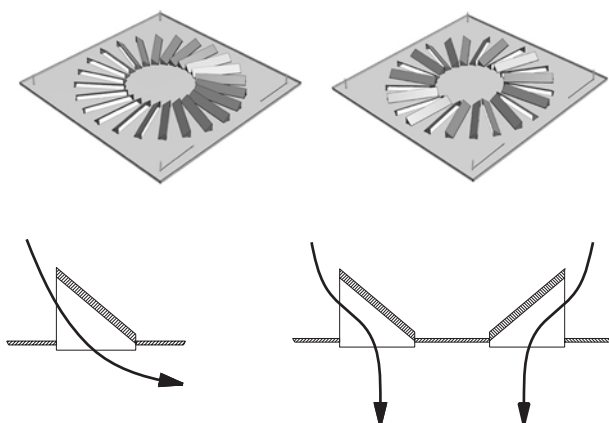
Inward swirl



Outward swirl



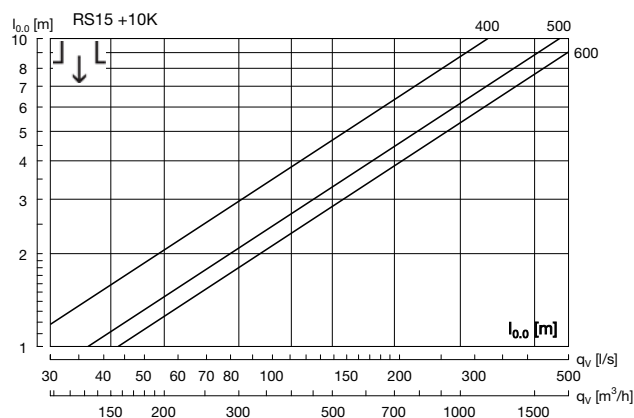
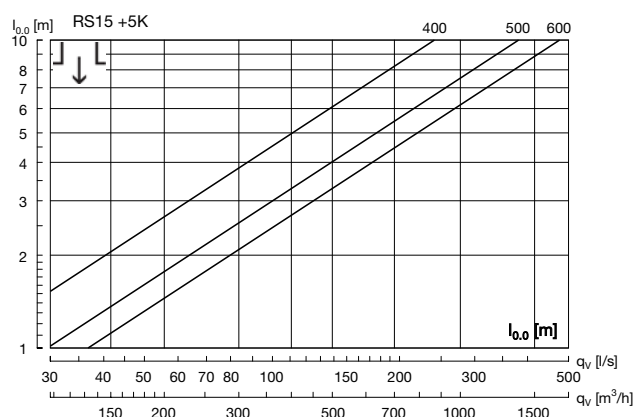
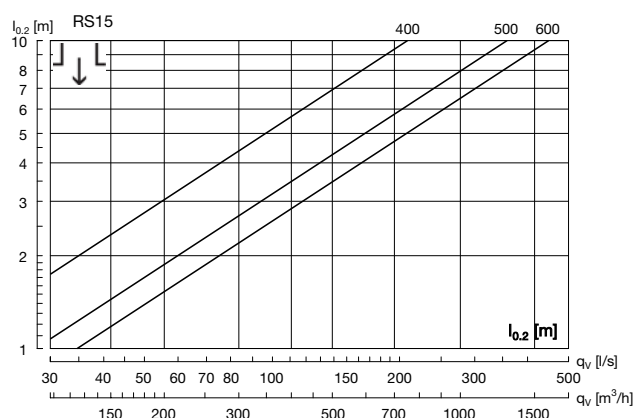
Horizontal and vertical bars



Throws/turning points

Throw $l_{0.2}$ [m] can be seen in the diagram. The throw applies for isothermal air at a terminal velocity of 0.2 m/s. Turning point $l_{0.0}$ (m) can be seen in the diagram for heated air, +5 K and +10 K respectively.

The designation by the lines specifies the pattern of dispersal.

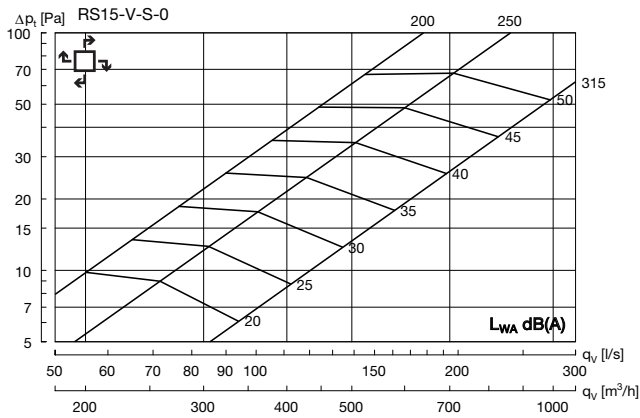


Versio

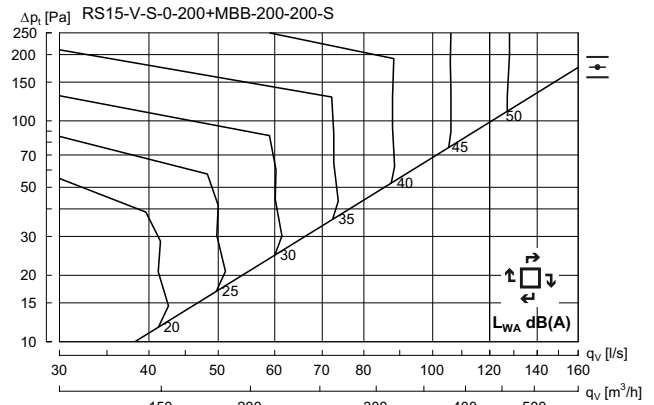
RS15

Technical data

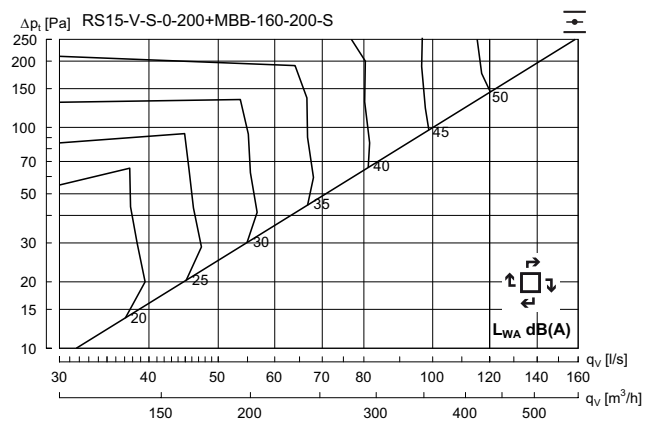
RS15-V without plenum box - Supply air



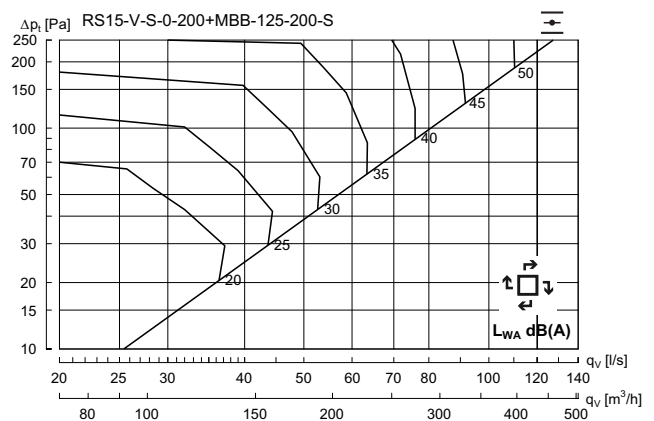
RS15-V 200 + MBB-S - Supply air



Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	13	2	-4	0	-5	-14	-21	-29



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



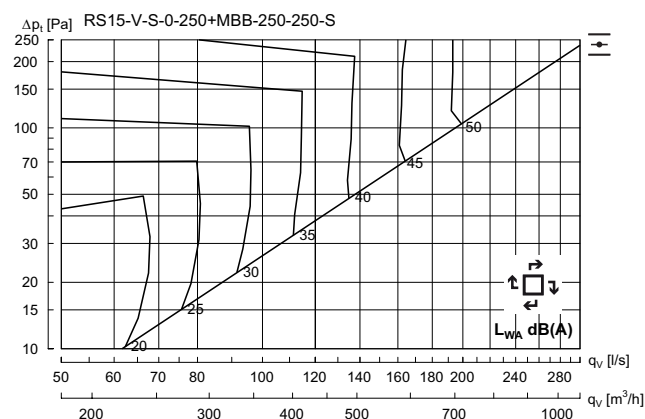
Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	12	5	1	-1	-6	-11	-16	-22

Versio

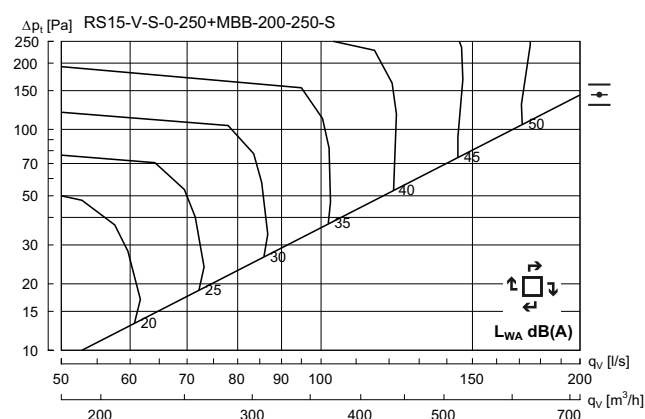
RS15

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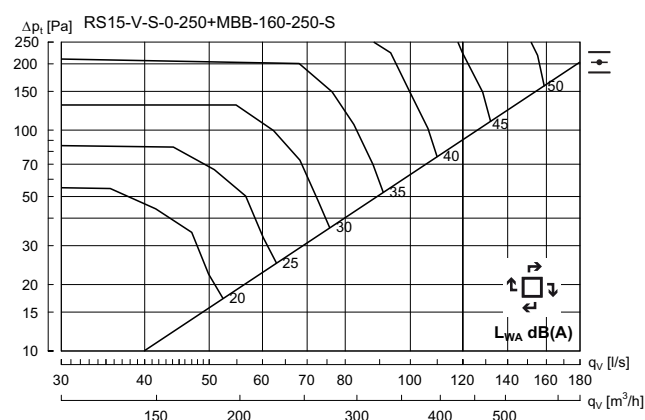
RS15-V 250 + MBB-S - Supply air



Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	10	2	-3	0	-5	-14	-20	-30

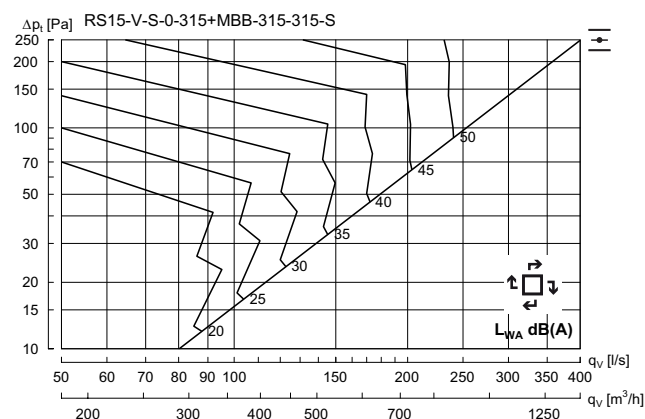


Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	11	4	-1	0	-7	-14	-22	-30

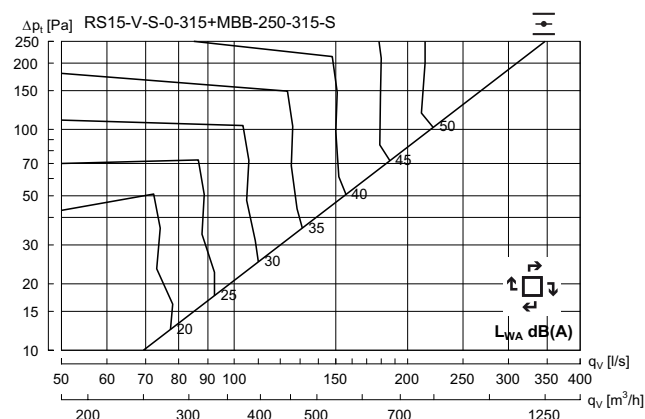


Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	12	4	0	-2	-5	-11	-18	-24

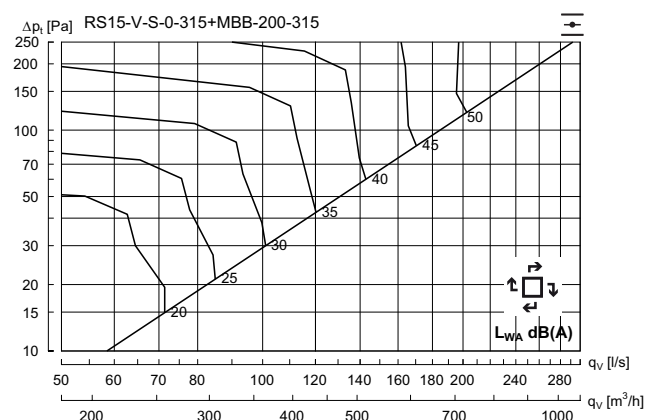
RS15-V 315 + MBB-S - Supply air



Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	9	3	0	0	-6	-13	-20	-30



Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	10	4	-1	-1	-5	-13	-19	-28



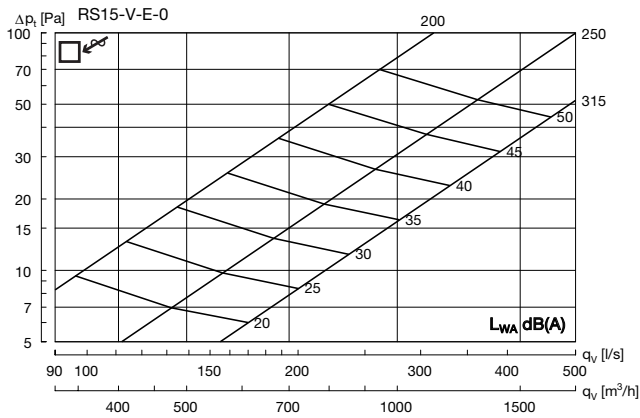
Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	10	6	0	-1	-6	-12	-18	-27

Versio

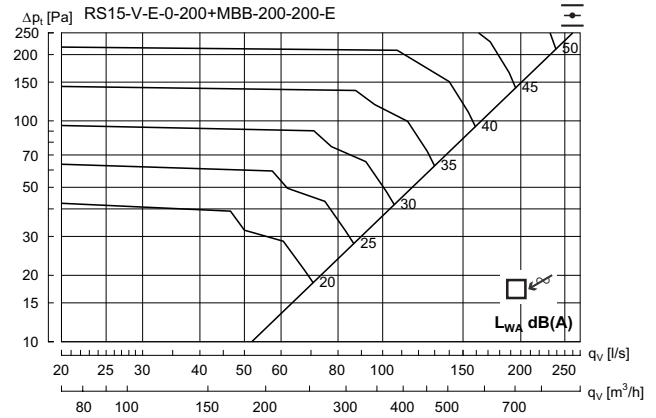
RS15

Technical data

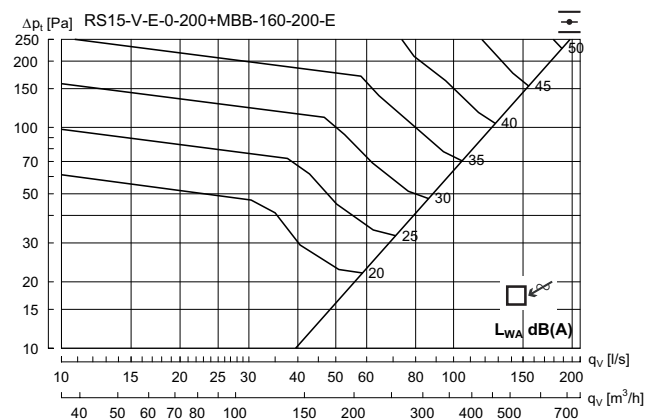
RS15-V without plenum box - Extract air



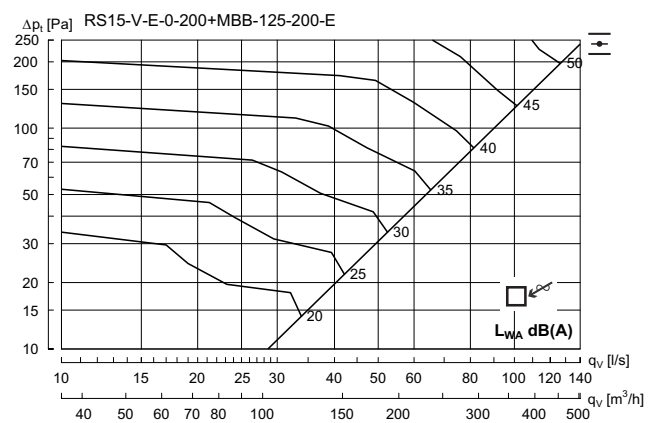
RS15-V 200 + MBB-E - Extract air



Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	14	5	1	-3	-6	-10	-15	-23



Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	14	6	0	-2	-7	-9	-15	-19



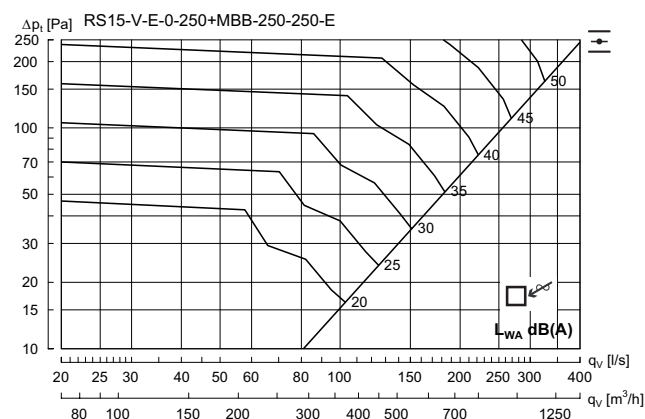
Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	13	4	1	-1	-7	-11	-15	-22

Versio

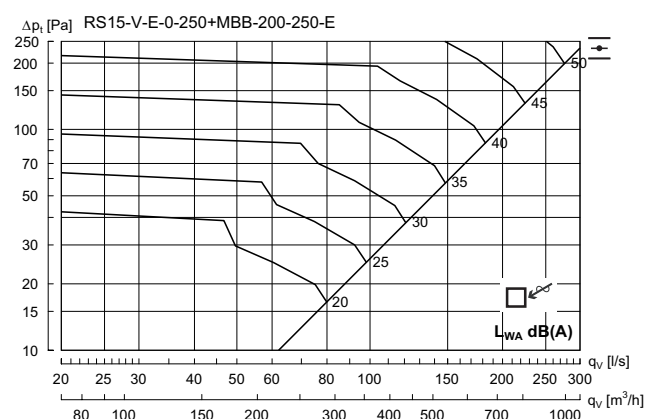
RS15

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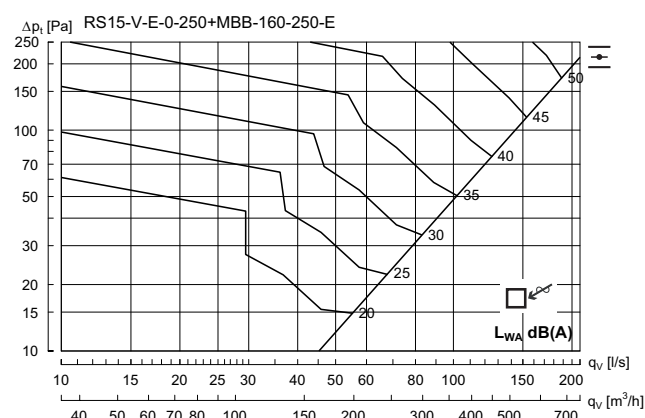
RS15-V 250 + MBB-E - Extract air



Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	10	6	3	-4	-6	-10	-16	-24

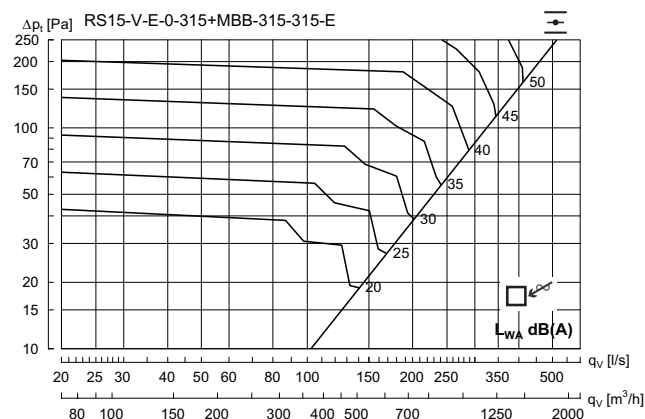


Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	14	5	1	-3	-6	-10	-13	-21

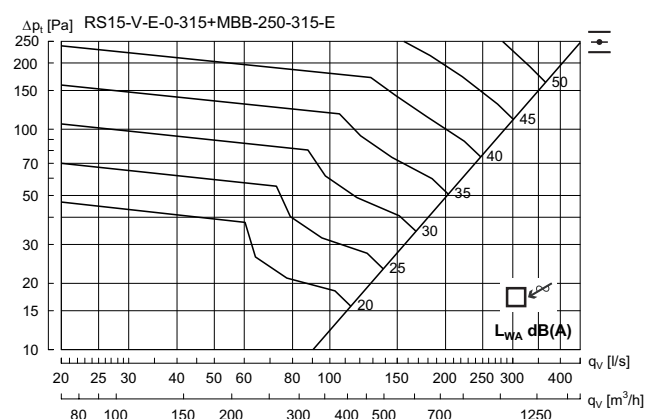


Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	15	7	1	-3	-6	-10	-16	-19

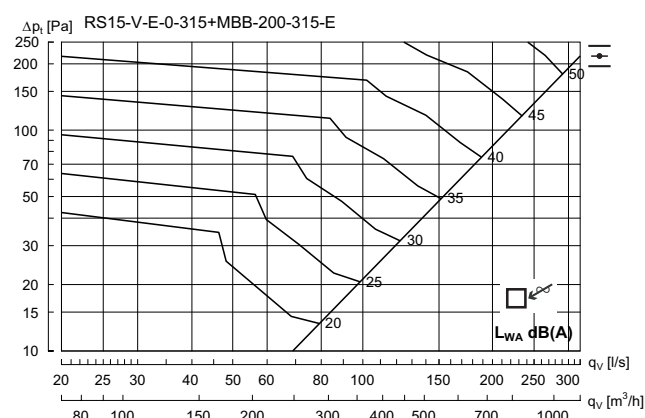
RS15-V 315 + MBB-E - Extract air



Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	12	6	3	-3	-6	-11	-16	-26



Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	11	6	2	-4	-6	-10	-16	-23



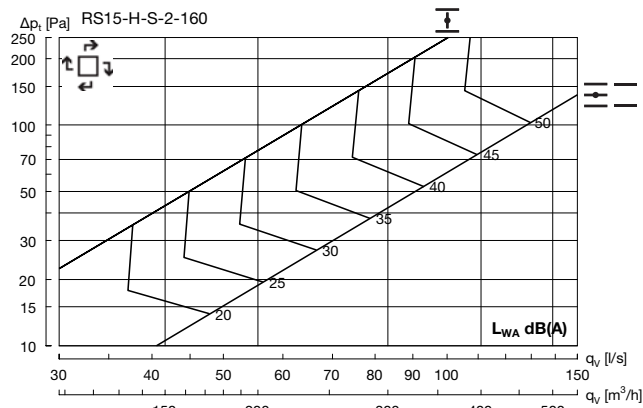
Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	14	5	1	-3	-6	-10	-14	-22

Versio

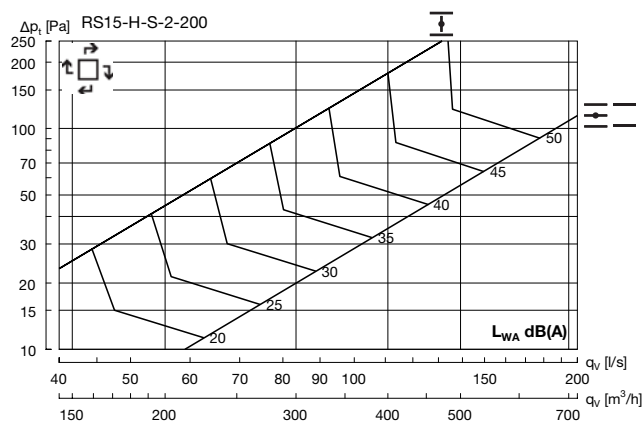
RS15

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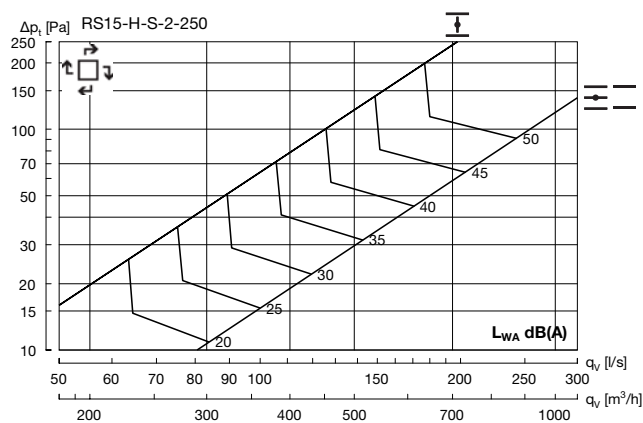
RS15 + H - Supply air



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

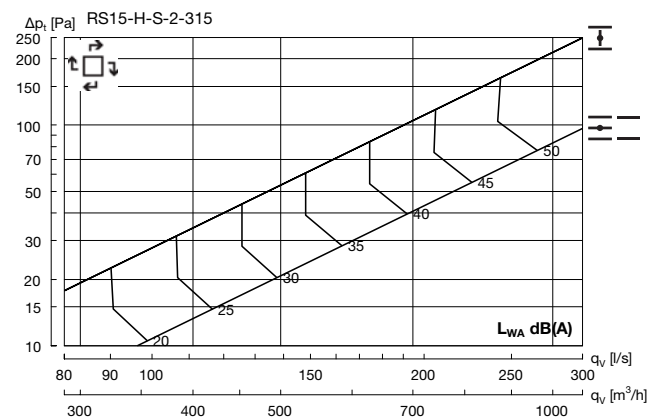


Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	10	7	2	-2	-6	-14	-21	-29



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

RS15 + H - Supply air



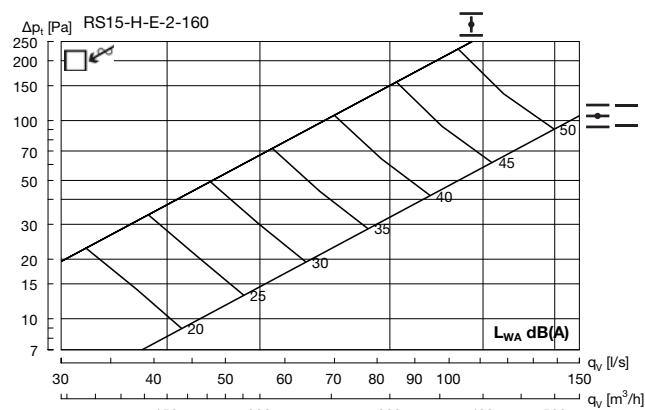
Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	7	7	2	-1	-7	-16	-25	-35

Versio

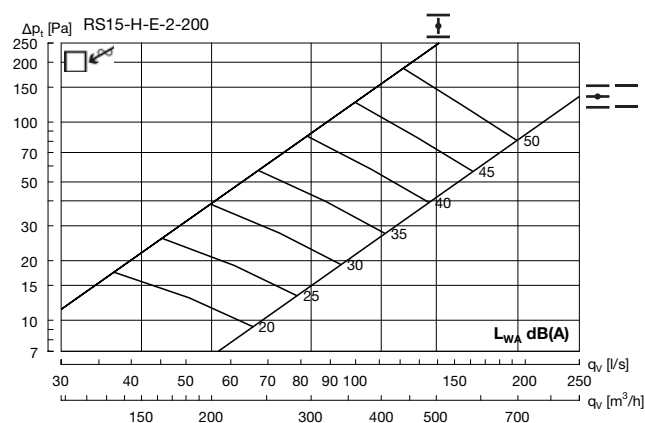
RS15

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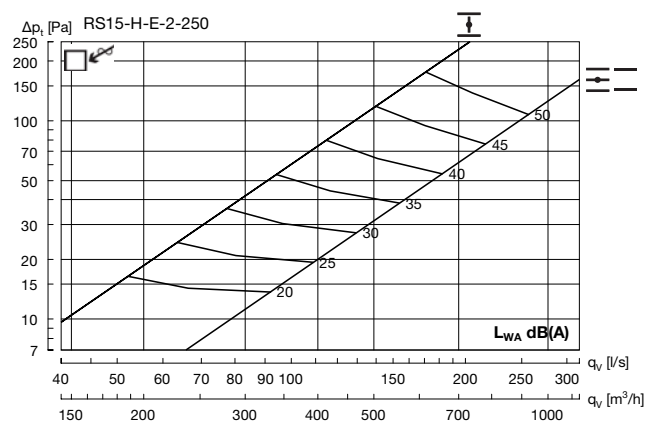
RS15 + H - Extract air



Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	9	7	6	-4	-10	-13	-22	-31

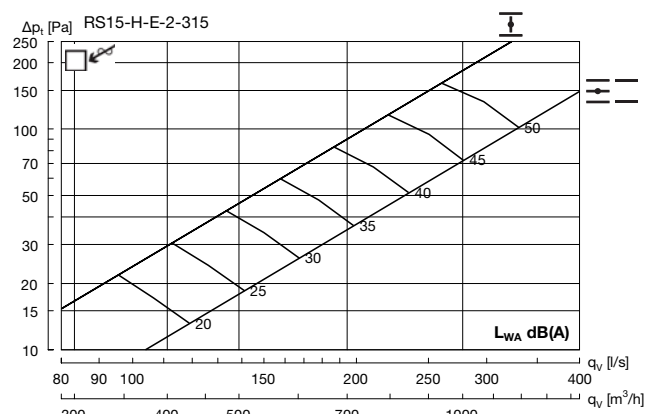


Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	6	9	4	-4	-8	-12	-19	-29



Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	6	7	2	-2	-6	-13	-22	-31

RS15 + H - Extract air



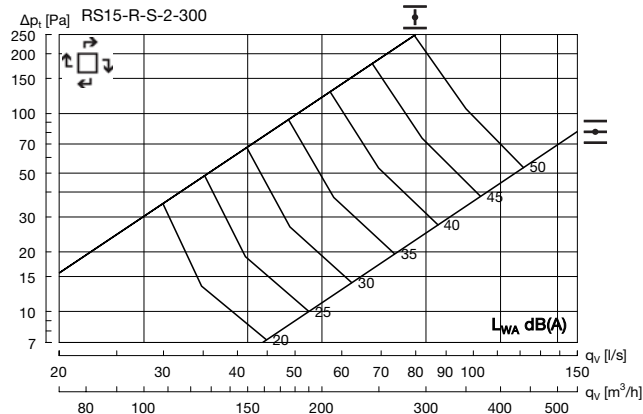
Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	7	6	2	-2	-5	-12	-24	-33

Versio

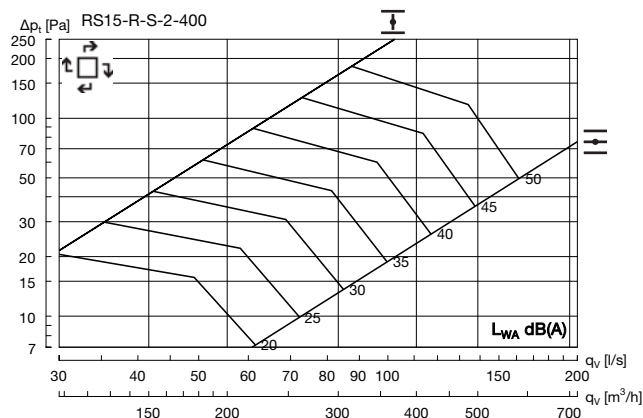
RS15

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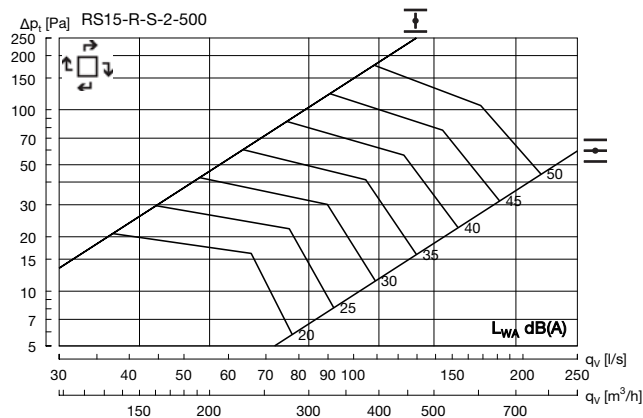
RS15 + R - Supply air



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

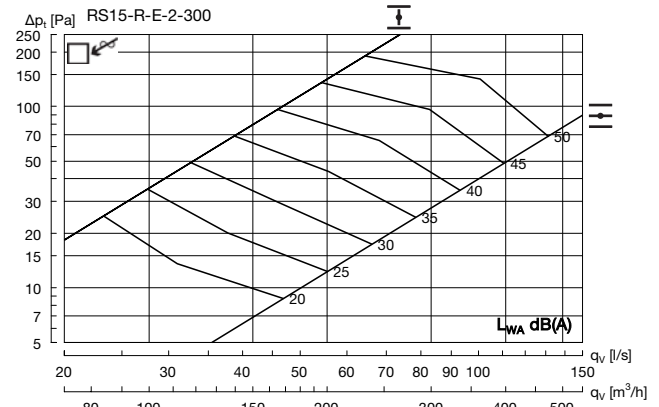


Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	-2	-1	3	-1	-6	-11	-20	-32

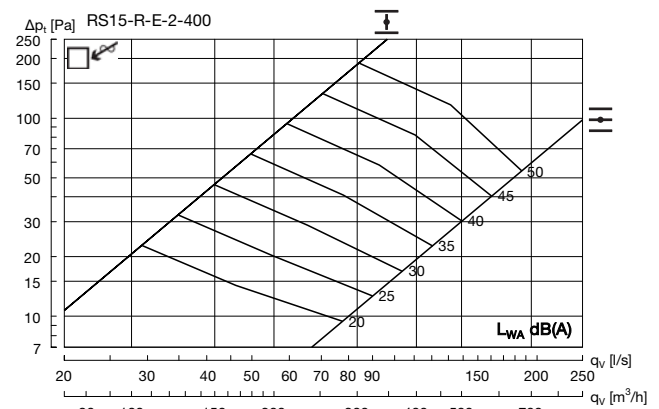


Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	3	-1	3	-1	-7	-11	-19	-31

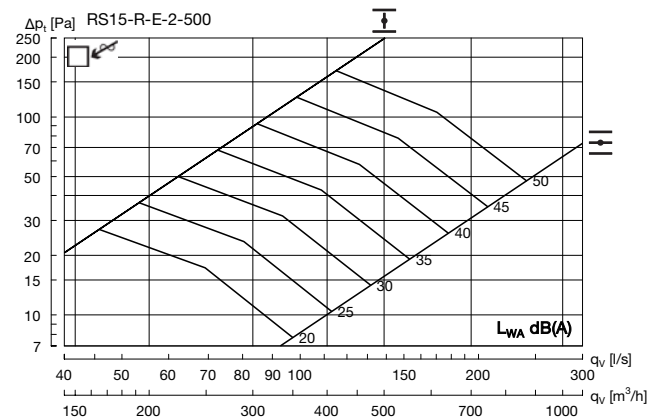
RS15 + R - Extract air



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



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