



Lindab **RC14**

Integra - Swirl diffuser



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RC14



Description

RC14 is a circular diffuser with integrated swirl insert with fixed bars. The diffuser is suitable for the horizontal supply of very cold air. The integrated swirl insert ensures optimum distribution and high induction.

Installing a RC14 diffuser in a plenum box type MB can help to achieve a stable flow of air to the diffuser as well as realise the potential for individual adjustment.

Damper type B is a unique linear cone damper which allows to use the full operational area (0-100%) and allows to balance with a high pressure drop over the box with low sound generation. Furthermore the construction of the damper gives an accurate and reliable measurement.

Damper type C is with a rotating blade damper for supply air. Typically used in applications that don't require a high balancing pressure in the plenum box.

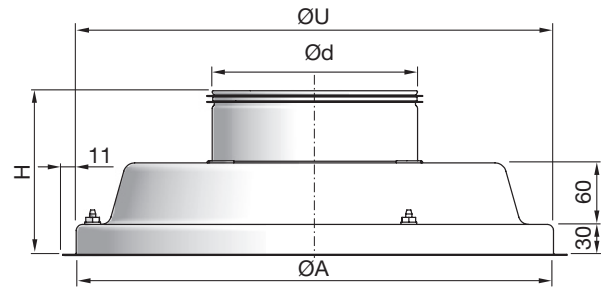
- High induction
- Discrete design
- Suitable for cooling at very low temperatures
- Plenum box with several damper options

Order code

Product	RC14	a	bbb
Type			
RC14			
Functional use			
S = Supply air			
E = Extract			
Connection dim.			
Ød 160-315			

Example: RC14-S-250

Dimensions



RC14 Ød	ØA	H	ØU*	m
mm	mm	mm	mm	kg
160	360	140	370	5.30
200	360	140	370	5.40
250	460	140	470	7.40
315	540	140	550	8.10

* ØU = ceiling grid opening.

Ød 315, No mounting holes for MB !

RC14-S



Maintenance

The face plate and swirl insert 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

Material: Galvanised steel
 Standard finish: Powder-coated
 Standard colours: RAL 9003 or RAL 9010, gloss 30

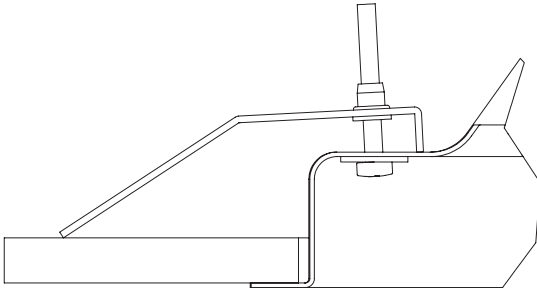
The diffuser is available in other colours. Please contact Lindab's sales department for further information.

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Accessories

DCZ - Mounting brackets



MBZ - Extension piece

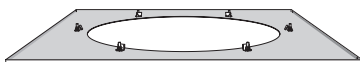


Order code - accessories

Product	aaa	bbb
Type		
Size		

Example: DCZ-200

LM - Module plate

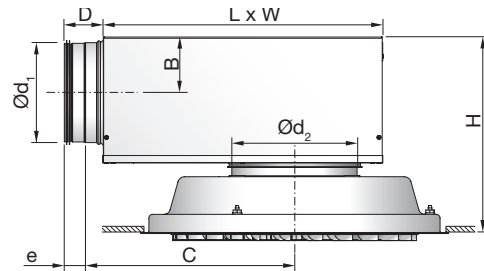


Order code - module plate

Product	LM	a	RC14	ccc
Type				
Ceiling system				
Diffuser				
Size				

Example: LM-1-RC14-250
Ceiling system - see introductory summary.

RC14 + MB plenum box

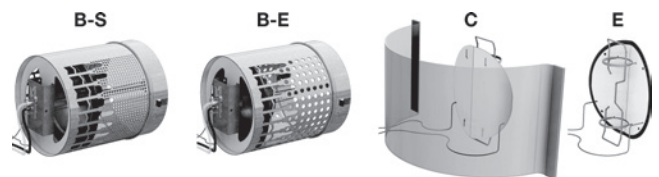


Ød ₁	Ød ₂	B	C	D	e	H*	L	W
mm		mm						
100	160	62	245	78	40	256 - 296	310	260
125	160	75	291	78	40	281 - 321	376	310
125	200	75	291	78	40	281 - 321	376	310
160	160	92	352	78	40	315 - 355	459	380
160	200	92	352	78	40	315 - 355	459	380
160	250	92	352	78	40	315 - 355	459	380
200	200	112	425	78	40	356 - 396	565	460
200	250	112	425	78	40	356 - 396	565	460
200	315	112	425	78	40	356 - 396	565	460
250	250	137	514	118	60	406 - 446	698	540
250	315	137	514	118	60	406 - 446	698	540
315	315	170	675	118	60	471 - 511	858	540

* Using accessory MBZ the H dimension will increase:

Ød₂ = 100 - 200 mm => H +40 mm
Ød₂ = 250 - 315 mm => H +60 mm

Damper options



Order code

Product	MB	a	bbb	ccc	d
Type					
Damper					
B = Linear cone damper					
C = Blade damper supply					
E = Blade damper extract					
Duct connection Ød ₁					
Ø100-315					
Diffuser dimension Ød ₂					
Ø160-315					
Function ((Only for B damper))					
S = Supply air			E = Extract		

Example 1: RC14-S-250+MBB-200-250-S
Example 2: RC14-200+MBC-125-200

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Technical data

Following RC14+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

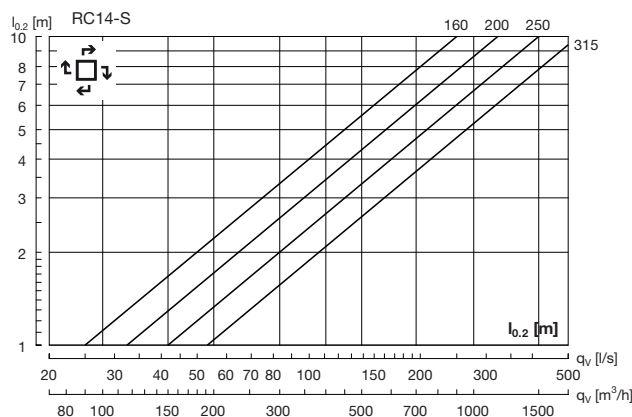
The sound power level in the frequency band is defined as $L_{WA} + K_{ok}$. K_{ok} values are specified in charts beneath the diagrams on the following pages.

Quick selection, supply air

RC14 + MBB-S		$\Delta p_t \geq 50$ Pa 30 dB(A)		$\Delta p_t \geq 50$ Pa 35 dB(A)	
duct $\varnothing d_1$	RC14 $\varnothing d_2$	l/s	m ³ /h	l/s	m ³ /h
100	160	37	133	44	158
125	160	44	158	54	194
125	200	50	180	62	223
160	160	48	173	57	205
160	200	56	202	67	241
160	250	67	241	84	302
200	200	62	223	74	266
200	250	82	295	96	346
200	315	102	367	126	454
250	250	92	331	106	382
250	315	117	421	139	500
315	315	141	508	166	598

Throw $l_{0,2}$

Throw $l_{0,2}$ [m] is specified at a terminal velocity of 0.2 m/s.



Sound attenuation

Sound attenuation of the diffusers ΔL from duct to room, including and reflection, see table below.

RC14 + MBB-S/-E		Centre frequency Hz							
duct $\varnothing d_1$	RC14 $\varnothing d_2$	63	125	250	500	1K	2K	4K	8K
100	160	18	15	5	11	18	19	18	19
125	160	15	13	8	17	17	17	18	20
125	200	13	11	6	13	14	17	17	19
160	160	16	15	11	21	18	20	21	20
160	200	17	15	9	21	18	19	20	20
160	250	17	14	4	18	14	16	18	19
200	200	14	11	8	15	19	17	20	18
200	250	14	10	5	14	18	14	18	17
200	315	14	8	3	10	16	15	17	16
250	250	14	9	7	15	18	17	19	18
250	315	12	7	6	14	16	15	17	17
315	315	8	9	9	13	17	16	18	22

Balancing

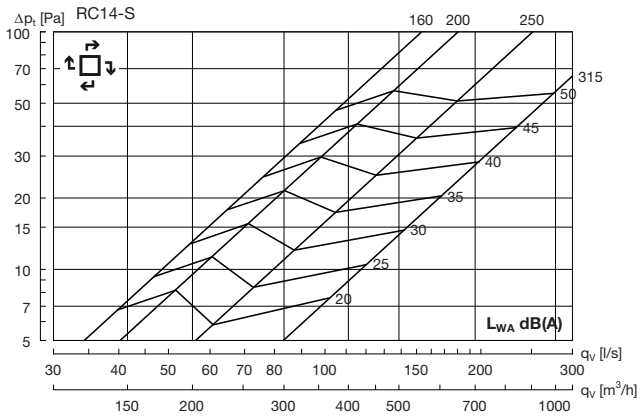
Balancing data is contained in a separate brochure.

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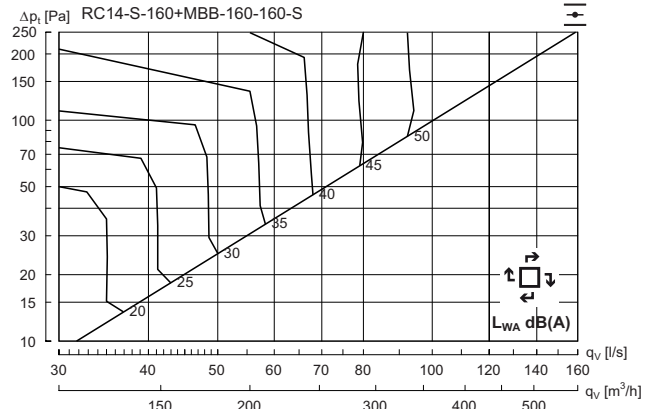
RC14

Technical data

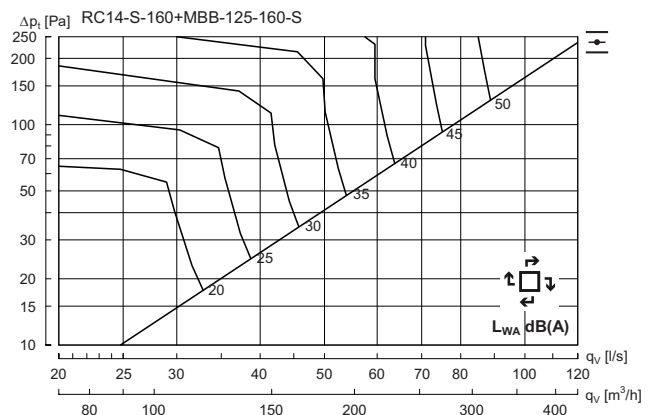
RC14 without box - Supply air



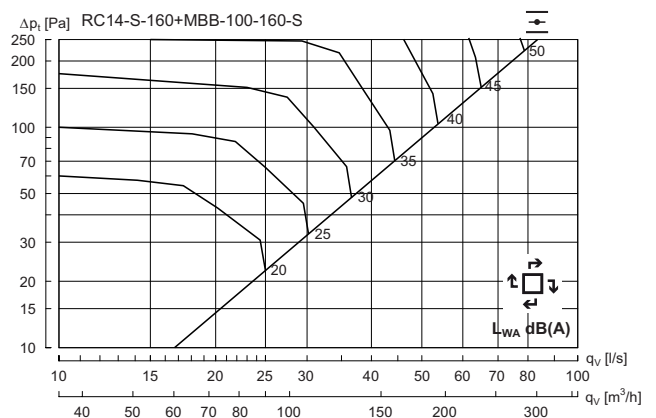
RC14 160 + MBB-S - Supply air



Hz	63	125	250	500	1K	2K	4K	8K
K _{ok}	6	2	-3	0	-4	-15	-26	-32



Hz	63	125	250	500	1K	2K	4K	8K
K _{ok}	9	5	0	-1	-5	-13	-19	-25

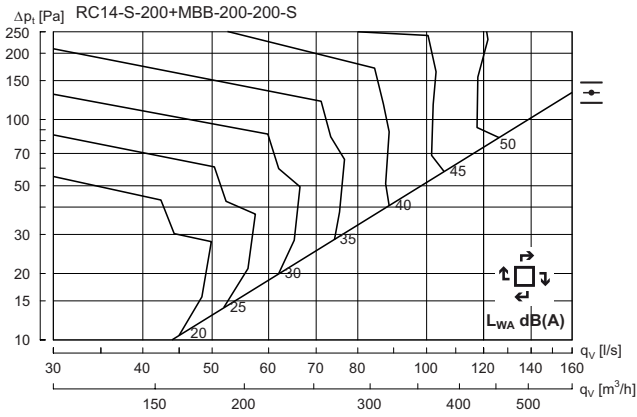


Integra - Swirl diffuser

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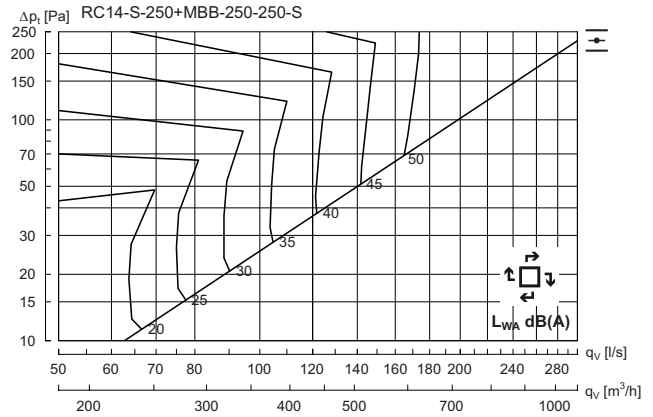
Technical data

RC14 - 200 + MBB-S - Supply air

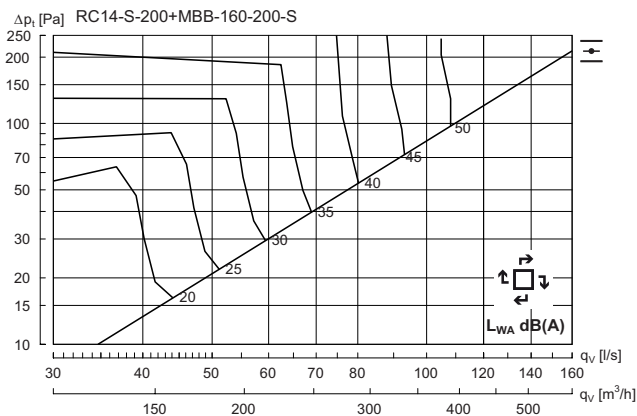


Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	11	3	-3	-1	-5	-12	-24	-33

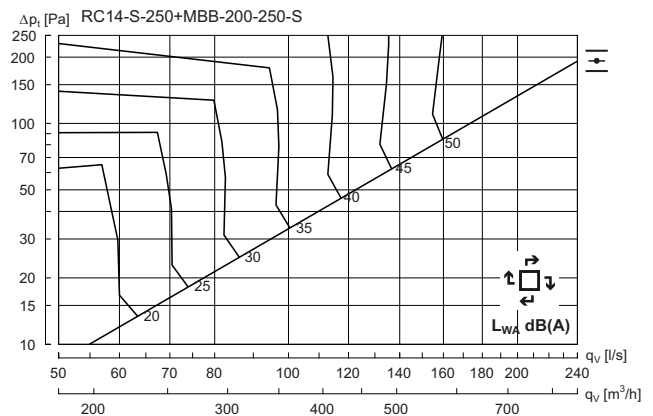
RC14 - 250 + MBB-S - Supply air



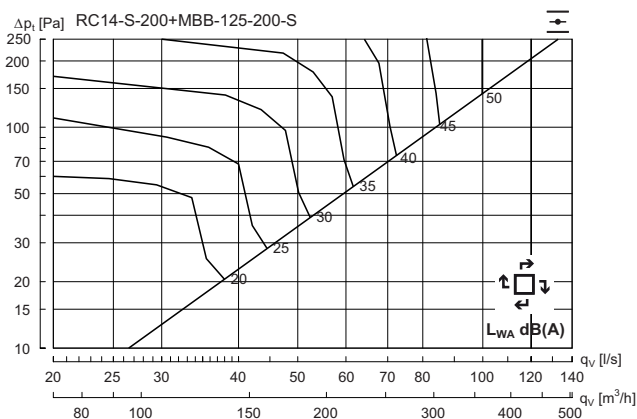
Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	10	1	-4	-1	-4	-14	-26	-37



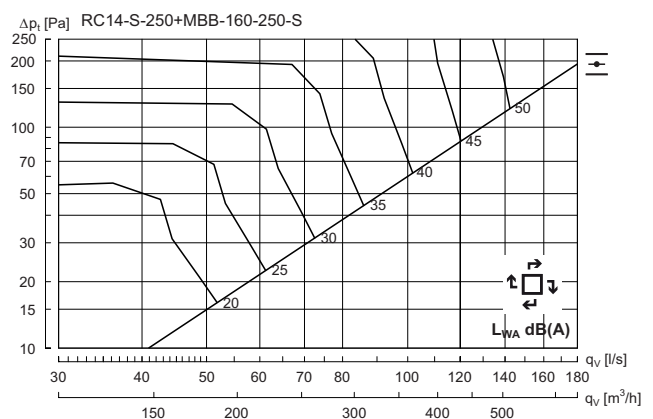
Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	14	4	-2	-2	-4	-12	-22	-30



Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	9	5	-3	-2	-3	-12	-24	-32



Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	8	6	1	-2	-6	-12	-17	-23



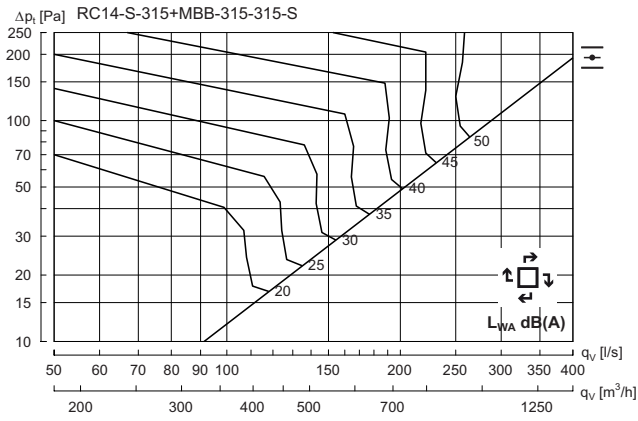
Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	13	4	-1	-3	-4	-13	-21	-26

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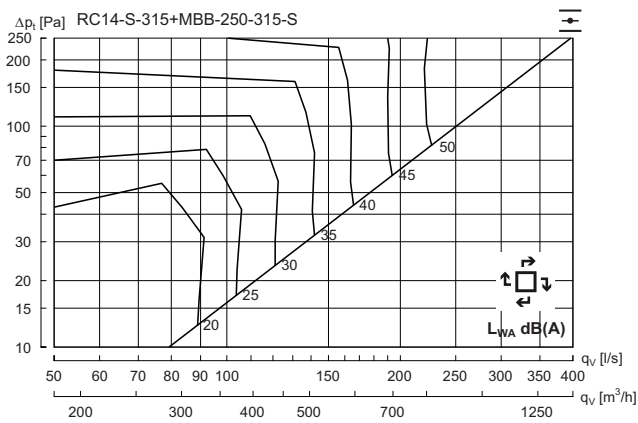
RC14

Technical data

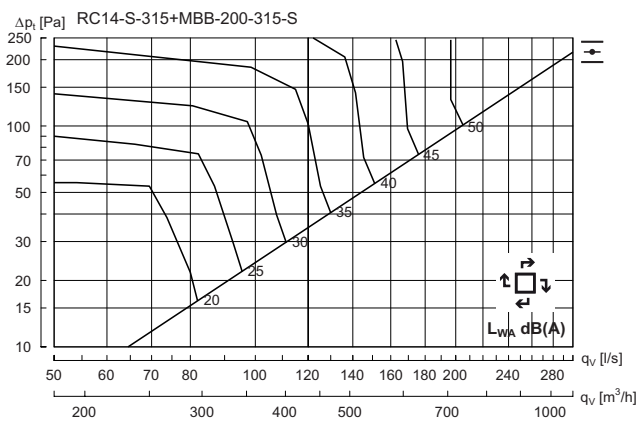
RC14 - 315 + MBB-S - Supply air



Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	14	3	-1	-1	-4	-13	-24	-33



Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	11	3	-2	-2	-4	-11	-21	-30



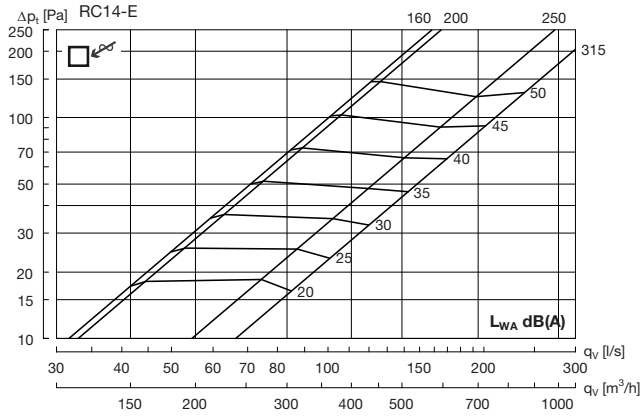
Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	10	7	-1	-2	-4	-13	-21	-27

Integra - Swirl diffuser

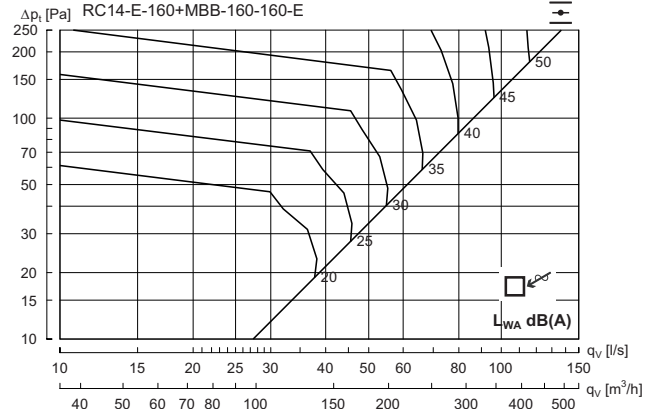
RC14

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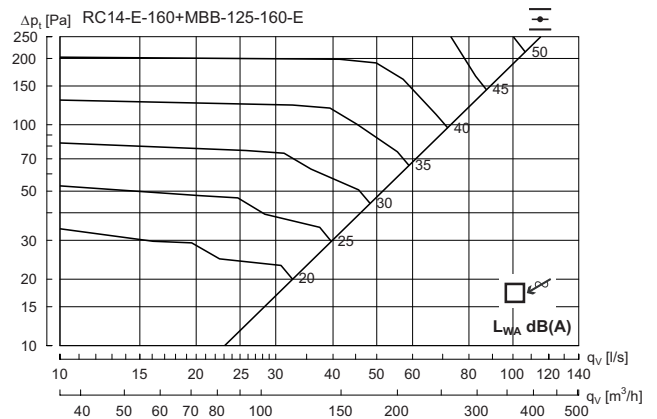
RC14 without box - Extract air



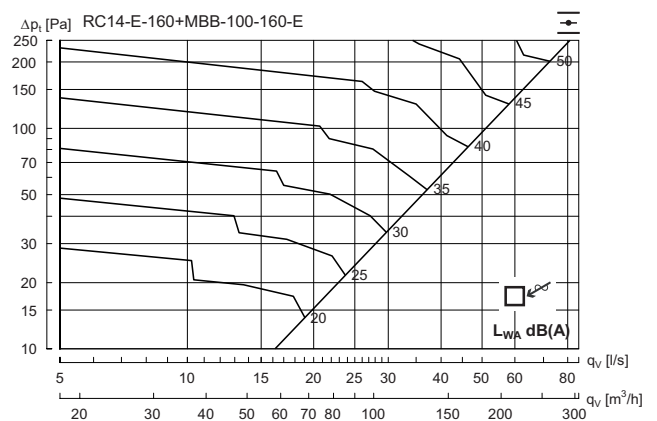
RC14 - 160 + MBB-E - Extract air



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



Hz	63	125	250	500	1K	2K	4K	8K
K_{ek}	13	6	1	-1	-6	-13	-16	-22



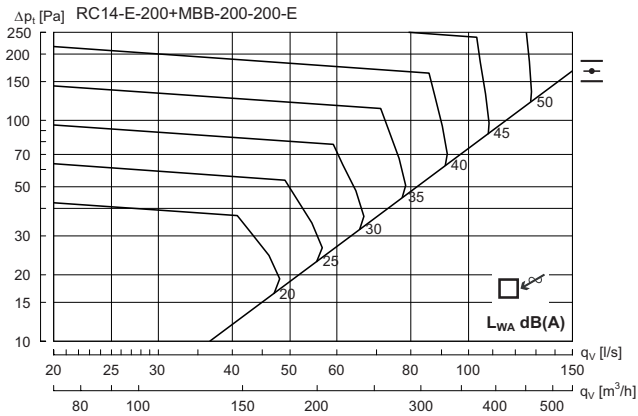
Hz	63	125	250	500	1K	2K	4K	8K
K_{ek}	9	0	4	-1	-10	-12	-18	-24

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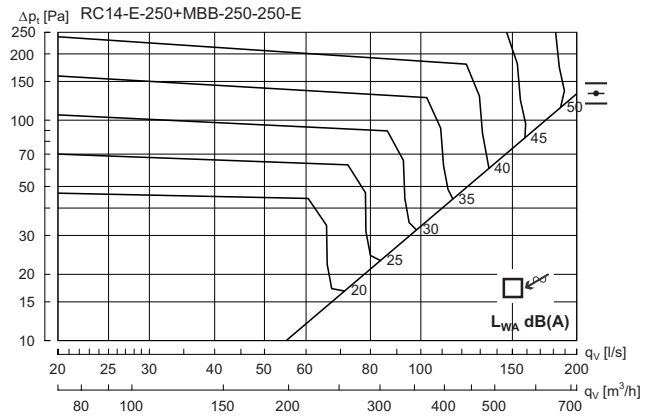
Technical data

RC14 - 200 + MBB-E - Extract air

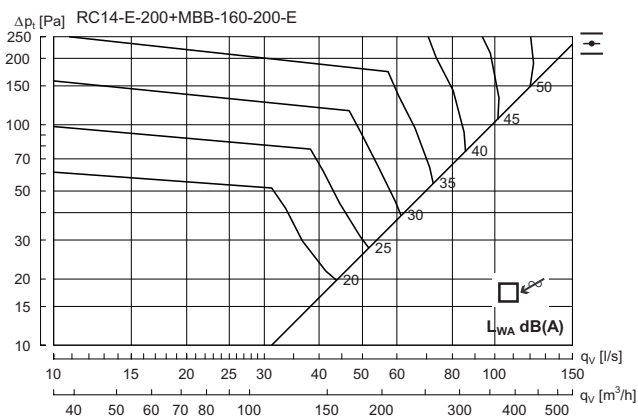


Hz	63	125	250	500	1K	2K	4K	8K
K_{sk}	13	2	-4	-2	-3	-13	-22	-31

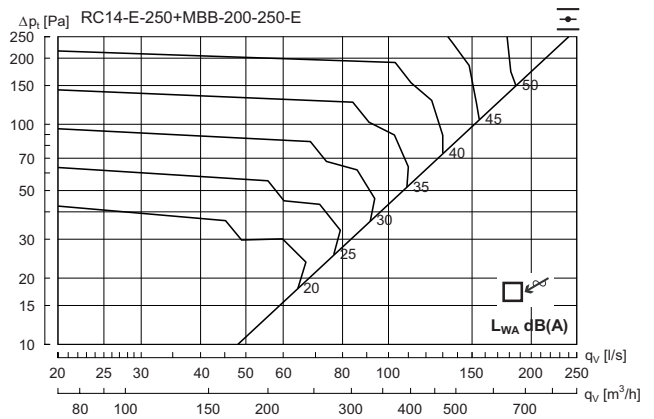
RC14 - 250 + MBB-E - Extract air



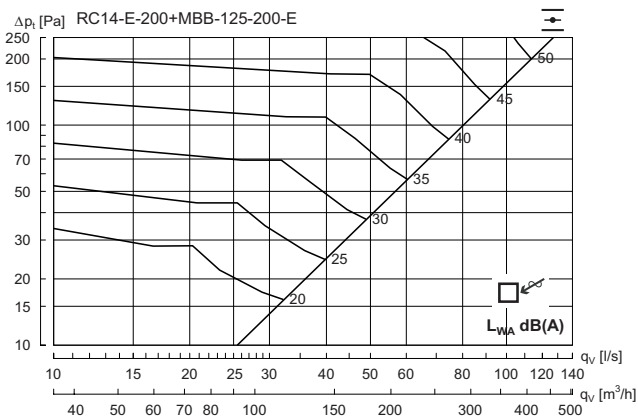
Hz	63	125	250	500	1K	2K	4K	8K
K_{sk}	13	4	0	-2	-4	-12	-22	-31



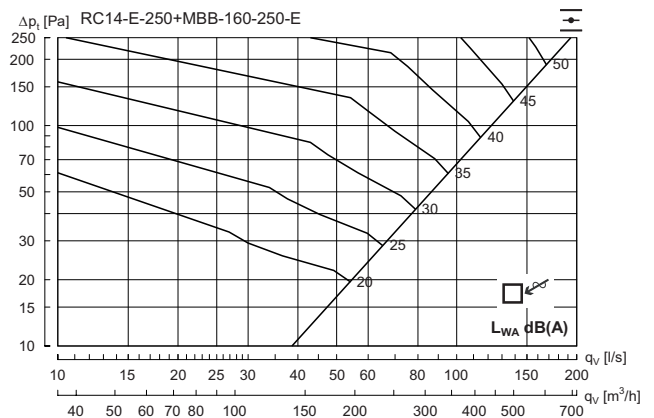
Hz	63	125	250	500	1K	2K	4K	8K
K_{sk}	16	5	-2	-3	-4	-12	-21	-26



Hz	63	125	250	500	1K	2K	4K	8K
K_{sk}	12	4	0	-2	-4	-11	-19	-27



Hz	63	125	250	500	1K	2K	4K	8K
K_{sk}	12	3	1	-1	-6	-12	-17	-23



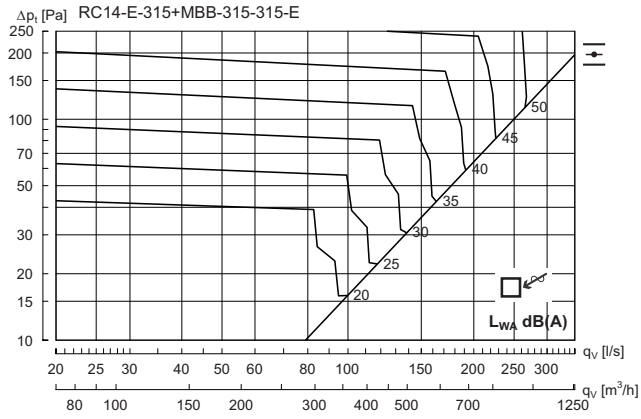
Hz	63	125	250	500	1K	2K	4K	8K
K_{sk}	15	6	0	-2	-6	-11	-16	-22

Integra - Swirl diffuser

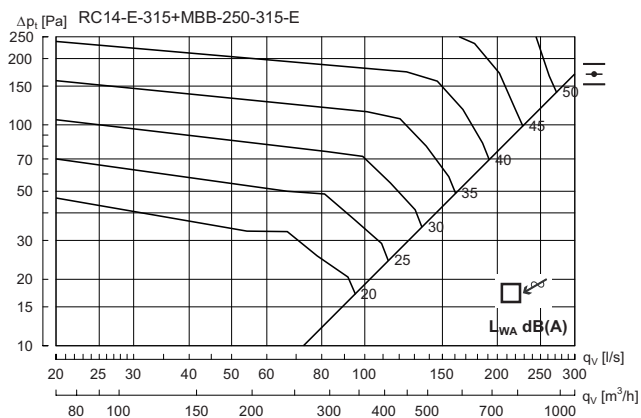
RC14

Technical data

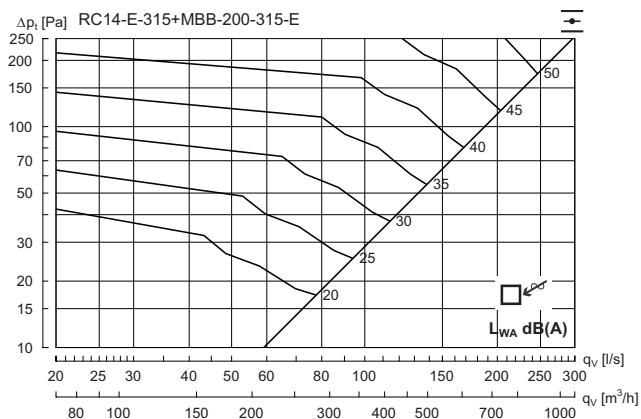
RC14 - 315 + MBB-E - Extract air



Hz	63	125	250	500	1K	2K	4K	8K
K_{sk}	10	3	1	-2	-4	-16	-24	-34



Hz	63	125	250	500	1K	2K	4K	8K
K_{sk}	9	5	1	-2	-5	-13	-18	-26



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



Most of us spend the majority of our time indoors. Indoor climate is crucial to how we feel, how productive we are and if we stay healthy.

We at Lindab have therefore made it our most important objective to contribute to an indoor climate that improves people's lives. We do this by developing energy-efficient ventilation solutions and durable building products. We also aim to contribute to a better climate for our planet by working in a way that is sustainable for both people and the environment.

[Lindab](#) | For a better climate