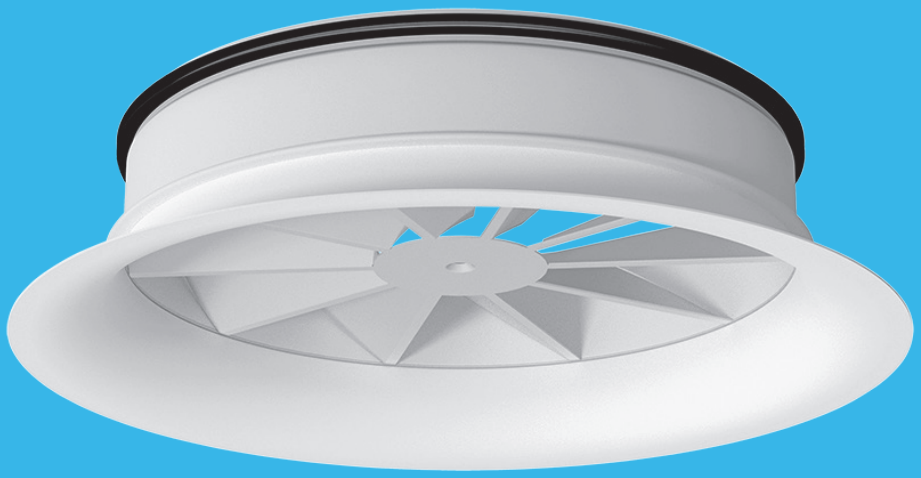


Lindab **RCG**

Integra - Swirl diffuser

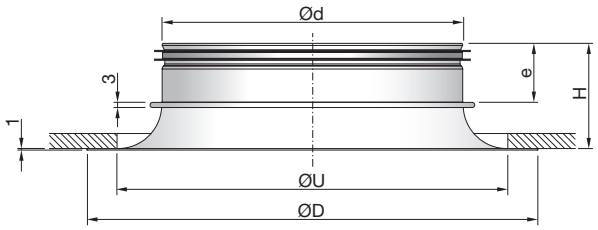
Integra - Swirl diffuser RCG

Description

RCG is a circular swirl diffuser with fixed bars. RCG is suitable for the horizontal supply of very cold air. The swirl pattern ensures optimum distribution and high induction, as well as a large dynamic range.
Installing a RCG 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.
RCG can also be installed directly in the duct using the traverse bracket GRZ1, which is available as an accessory.
Damper type B is an 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.

- Large dynamic range
- High induction
- Suitable for cooling at very low temperatures
- Plenum box with several damper options

Dimensions



RCG Ød	ØD	H	e	ØU*	Free area A	m
mm	mm	mm	mm	mm	m^2	kg
125	225	70	40	200	0.0091	0.5
160	250	70	40	225	0.0146	0.6
200	300	70	40	275	0.0225	0.8
250	350	90	60	325	0.0345	1.2
315	415	90	60	390	0.0537	1.6
400	520	120	80	485	0.085	2.4

* ØU = ceiling grid opening.

Maintenance

Diffusers are removed to enable cleaning of the plenum box or duct system. The visible parts of the diffuser can be wiped with a damp cloth.

Order code

Product	**RCG**	**aaa**
Type		
RCG		
Connection dim.		
Ød 125-400		

Example: RCG-315

Materials and finish

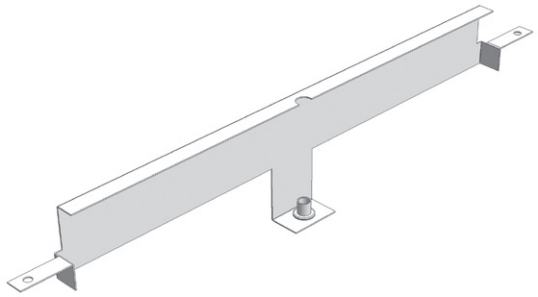
Material: Steel
Standard finish: Powder-coated
Standard colours: RAL 9003 or RAL 9010, gloss 30

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

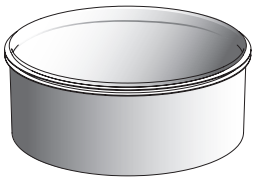
Integra - Swirl diffuser RCG

Accessories

GRZ1 - Traverse bracket



MBZ - Extension piece

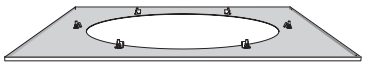


Order code - accessories

Product	aaa	bbb
Type		
GRZ1, MBZ		
Size		
Ø125-400		

Example: GRZ1-315

LM - Piastra modulare per controsoffitti



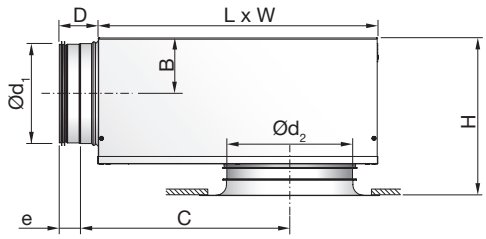
Order code - module plate

Product	LM	aa	RCG	ccc
Type				
LM				
Ceiling system				
1 -21 *				
Diffuser				
RCG				
Size				
125 - 400				

Example: LM-1-RCG-315

* Ceiling system - see introductory summary

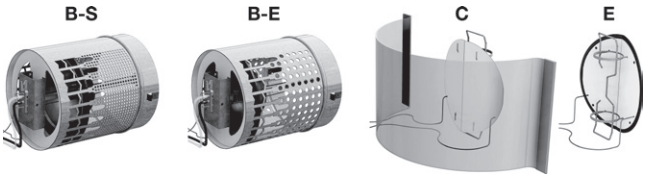
RCG + MB plenum box



$Ød_1$	$Ød_2$	B	C	D	e	H*	L	W
mm		mm						
100	125	62	245	78	40	246 - 286	310	260
100	160	62	245	78	40	246 - 286	310	260
125	125	75	291	78	40	271 - 311	376	310
125	160	75	291	78	40	271 - 311	376	310
125	200	75	291	78	40	271 - 311	376	310
160	160	92	352	78	40	305 - 345	459	380
160	200	92	352	78	40	305 - 345	459	380
160	250	92	352	78	40	325 - 385	459	380
200	200	112	425	78	40	346 - 386	565	460
200	250	112	425	78	40	366 - 426	565	460
200	315	112	425	78	40	366 - 426	565	460
250	250	137	514	118	60	416 - 476	698	540
250	315	137	514	118	60	416 - 476	698	540
250	400	137	514	118	60	436 - 516	698	540
315	315	170	675	118	60	481 - 541	858	540
315	400	170	675	118	60	501 - 581	858	540

* Using accessory MBZ the H dimension will increase:
$Ød_2$ = 100 - 200 mm => H + 40 mm
$Ød_2$ = 250 - 315 mm => H + 60 mm
$Ød_2$ = 400 mm => H + 80 mm

Damper options



Order code

Product	MB	a	bbb	ccc	S
Type					
MB					
Damper					
B = Linear cone damper C = Blade damper supply					
Duct connection $Ød_1$					
Ø100-315					
Diffuser dimension $Ød_2$					
Ø125-400					
Function (Only for B damper)					
S = Supply air					

Example 1: RCG-S-315+MBB-250-315-S
Example 2: RCG-200+MBC-125-200

Integra - Swirl diffuser RCG

Technical data

Following RCG+plenum box data are valid for MBB-S.
For MBC 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

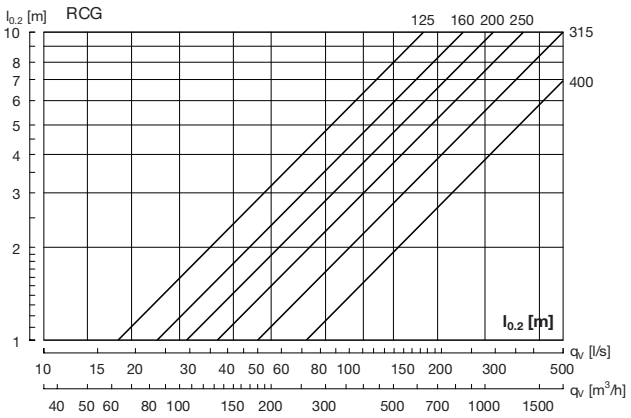
The sound power level in the frequency band is defined as $L_{WA}+K_{ok}$. K_{ok} values are specified in charts beneath the diagrams on the following pages.

Quick selection, supply air

RCG + MBB-S		$\Delta p_t \geq 50$ Pa		$\Delta p_t \geq 50$ Pa	
duct	RCG	30 dB(A)		35 dB(A)	
$Ød_1$	$Ød_2$	l/s	m³/h	l/s	m³/h
100	125	17	61	20	72
100	160	28	101	33	119
125	125	20	72	24	86
125	160	32	115	39	140
125	200	42	151	52	187
160	160	34	122	41	148
160	200	48	173	59	212
160	250	60	216	76	274
200	200	50	180	63	227
200	250	67	241	84	302
200	315	90	324	111	400
250	250	76	274	93	335
250	315	99	356	122	439
250	400	109	392	143	515
315	315	119	428	142	511
315	400	142	511	177	637

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.

RCG + MBB-S									
duct	RCG	Centre frequency Hz							
$Ød_1$	$Ød_2$	63	125	250	500	1K	2K	4K	8K
100	125	20	16	7	18	19	18	17	21
100	160	19	16	5	17	17	16	16	19
125	125	17	15	9	21	17	19	18	20
125	160	13	14	8	20	14	16	16	20
125	200	13	12	5	17	13	14	15	18
160	160	18	15	9	22	18	17	19	20
160	200	17	15	8	21	17	16	18	19
160	250	16	15	4	17	14	14	16	18
200	200	14	9	8	18	18	15	18	17
200	250	13	10	5	15	17	14	17	16
200	315	11	8	3	13	15	13	16	16
250	250	15	8	8	15	17	16	17	18
250	315	15	7	6	13	15	14	16	17
250	400	14	5	4	12	13	13	14	16
315	315	7	10	9	13	16	15	17	21
315	400	7	8	9	12	15	15	16	19

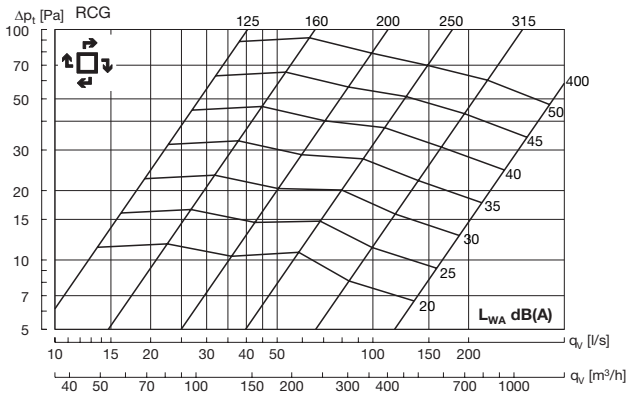
Balancing

Balancing data is contained in a separate brochure.

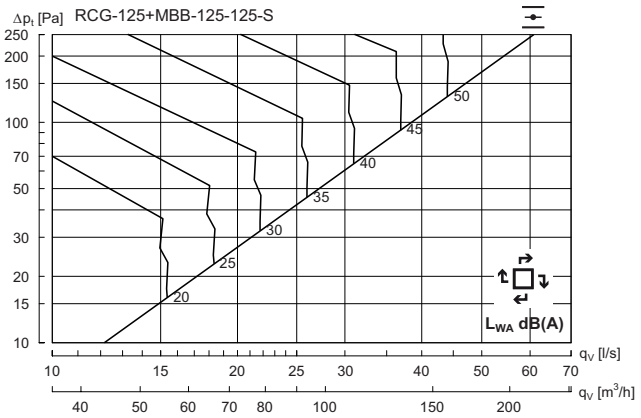
Integra - Swirl diffuser RCG

Technical data

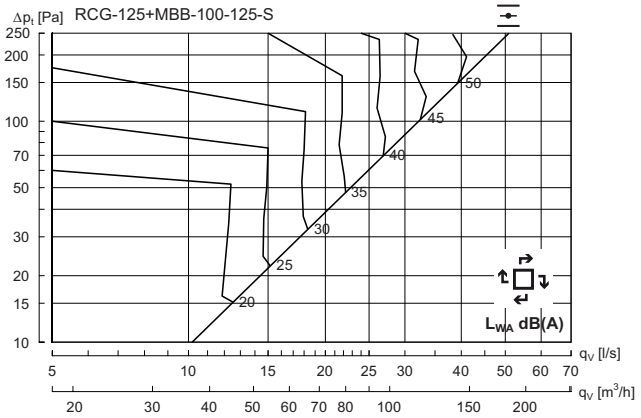
RCG without box – supply air



RCG 125 + MBB-S - Supply air



Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	14	5	2	-3	-7	-10	-20	-31

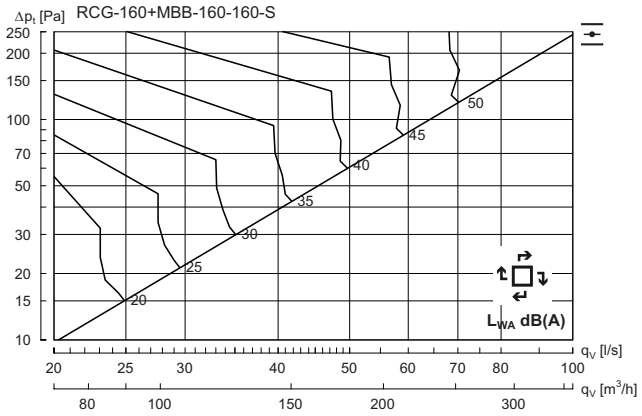


Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	9	4	4	-3	-7	-11	-22	-33

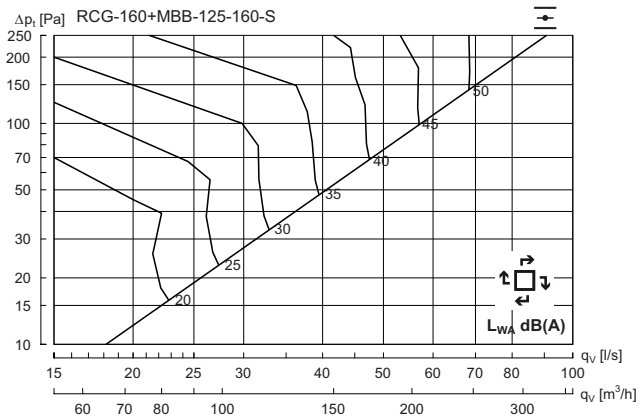
Integra - Swirl diffuser RCG

Technical data

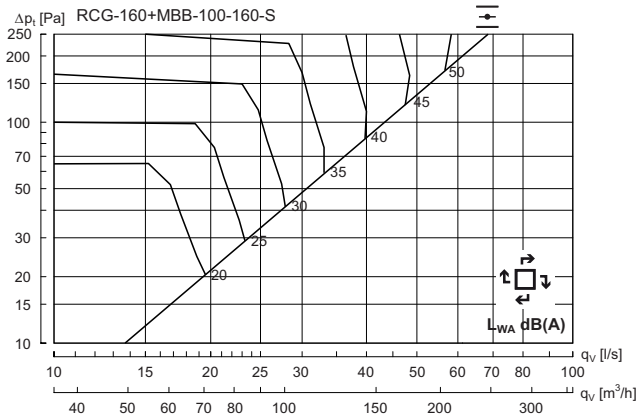
RCG 160 + MBB-S - Supply air



Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	5	7	3	-2	-7	-11	-22	-34

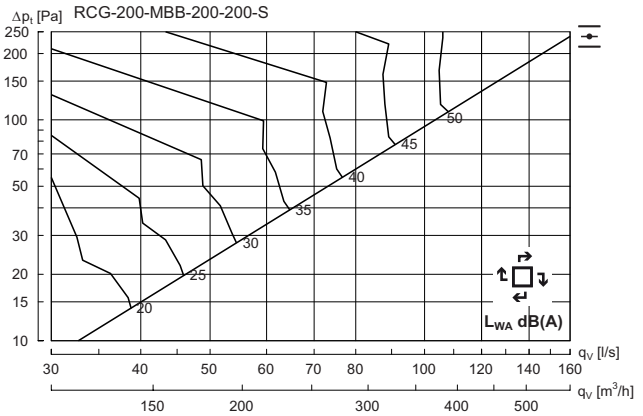


Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	8	5	4	-3	-7	-12	-22	-34

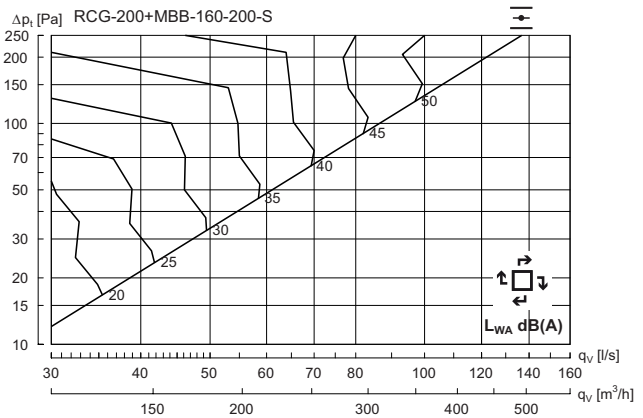


Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	12	4	4	-3	-7	-12	-20	-27

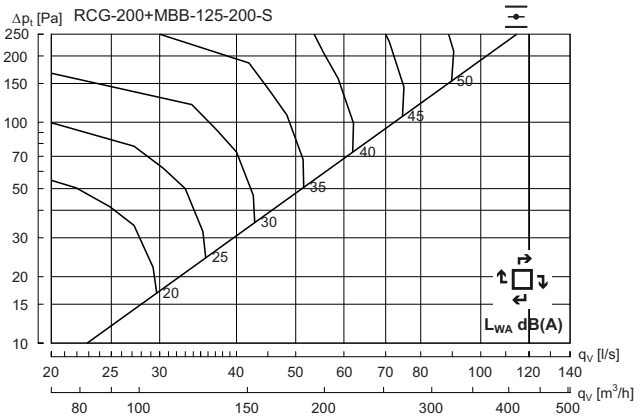
RCG - 200 + MBB-S - Supply air



Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	14	7	2	-2	-6	-13	-24	-35



Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	11	7	3	-3	-7	-12	-22	-34

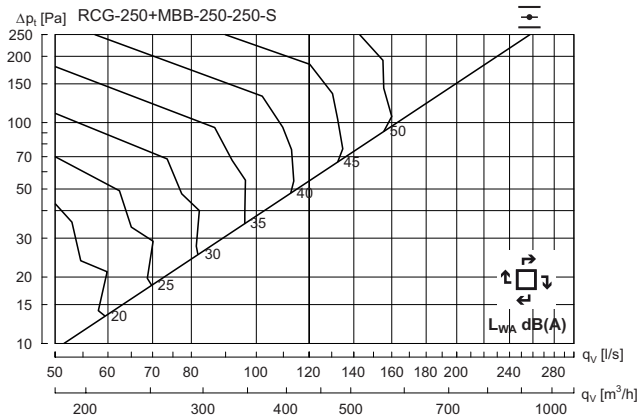


Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	10	5	5	-4	-8	-12	-18	-27

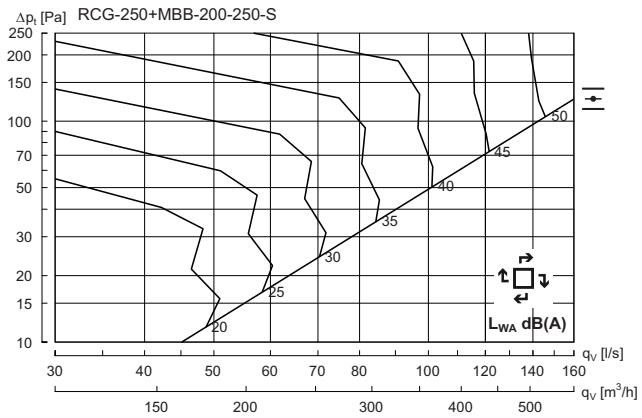
Integra - Swirl diffuser RCG

Technical data

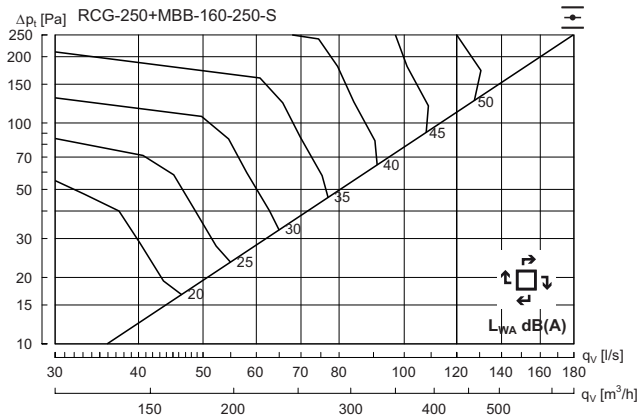
RCG - 250 + MBB-S - Supply air



Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	10	6	2	-3	-5	-12	-21	-29

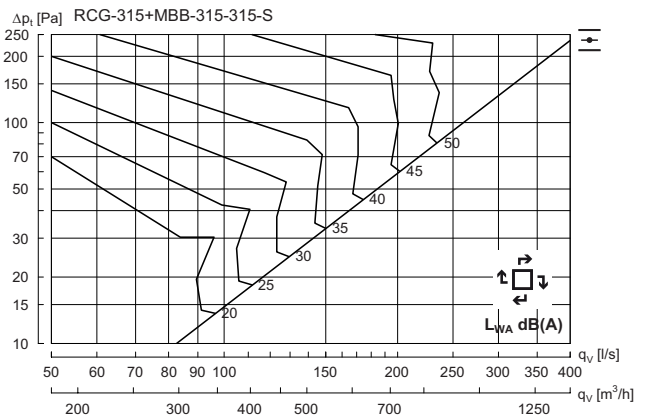


Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	8	7	3	-2	-6	-12	-22	-34

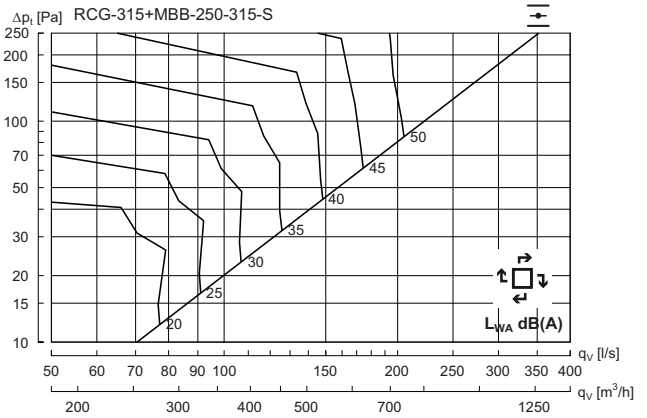


Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	12	6	3	-3	-7	-12	-20	-29

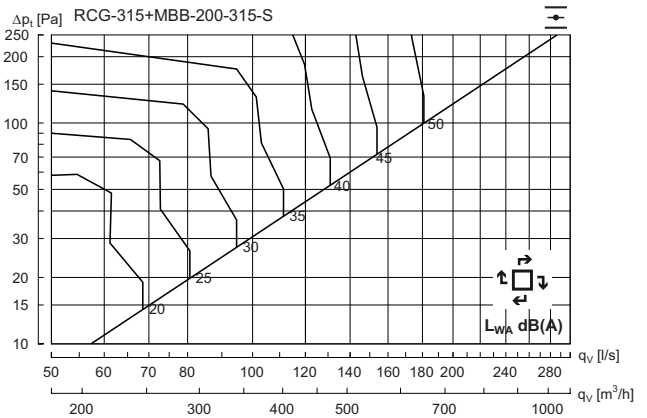
RCG - 315 + MBB-S - Supply air



Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	12	4	2	-3	-4	-14	-22	-32



Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	10	7	3	-3	-6	-14	-22	-32

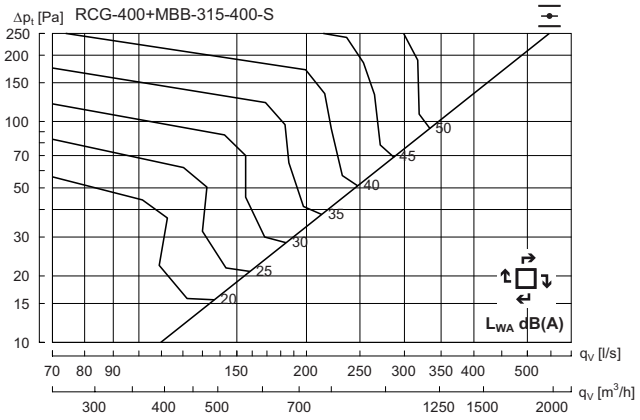


Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	9	7	3	-2	-6	-13	-22	-31

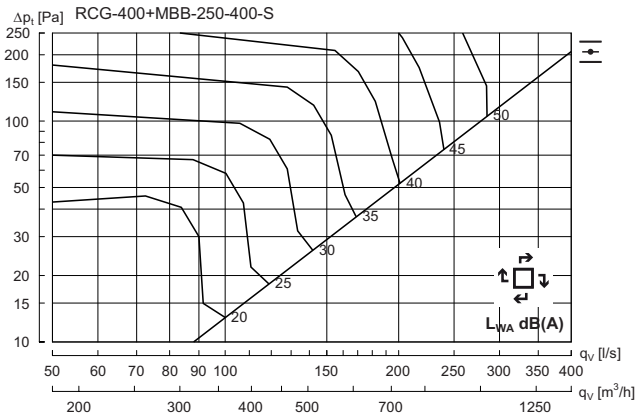
Integra - Swirl diffuser RCG

Technical data

RCG 400 + MBB-S - Supply air



Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	10	5	2	-4	-5	-11	-20	-28



Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	9	6	2	-3	-5	-11	-19	-28

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