

Perforeret armatur

PCA



Beskrivelse

PCA er et cirkulært armatur med perforeret bundplade. PCA kan anvendes til såvel indblæsning som udsugning. PCA er velegnet til horisontal indblæsning af undertempereret luft og kan udrustes med flere typer tilbehør for at opnå optimal funktion. PCA kan med fordel monteres i trykfordelingsboks type MBB for at opnå stabil tilstrømning til armaturet samt mulighed for individuel indregulering.

- Velegnet til både indblæsning og udsugning
- Velegnet til horisontal indblæsning med undertempereret luft
- Mulighed for 1-, 2 og 3-vejs indblæsning
- Diskret formgivning

Vedligeholdelse

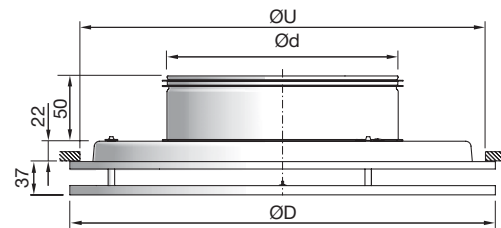
Bundplade kan demonteres i forbindelse med rengøring af indvendige dele eller for at opnå fri adgang til kanal eller boks. De synlige dele af armaturet kan aftørres med en fugtig klud.

Bestillingskode

Produkt	PCA	aaa
Type	PCA	
Tilslutnings dim. Ød		
Ød 100-400		

Eksempel: PCA-200

Dimensioner



PCA Ød mm	ØD mm	ØU* mm	Friareal A m ²	Vægt kg
100	240	200	0.016	1,00
125	240	200	0.018	1,00
160	300	260	0.023	1,50
200	360	320	0.03	2,30
250	460	420	0.042	3,40
315	540	500	0.058	4,60
400	540	500	0.066	4,60

ØU = Udskæringsmål i loft

Materialer og finish

Materiale: Galvaniseret stål
 Standardfinish: Pulverlakeret
 Standardfarve: Hvid RAL 9003, glans 30

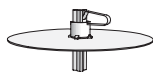
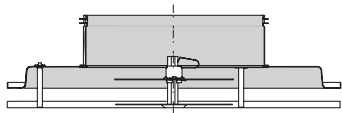
Armaturet kan leveres i andre farver. Kontakt venligst Lindabs salgsafdeling for nærmere information.

Perforeret armatur

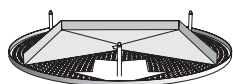
PCA

Tilbehør

DRZ - Balanceret spjæld



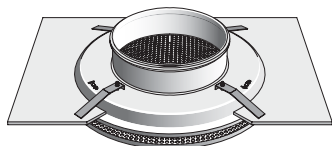
Luftmønsterafdækning (sæt)



MBZ - Forlængerstykke



DDZ - Monteringsbøjler (sæt)

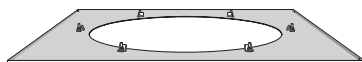


Bestillingskode - Tilbehør

Produkt	aaa	bbb
Type		
Størrelse		

Eksempel: DRZ-200

LM - Modulplade



Bestillingskode - Modulplade

Produkt	LM	a	PCA	ccc
Type				
Loft system				
Armatur				
Størrelse				

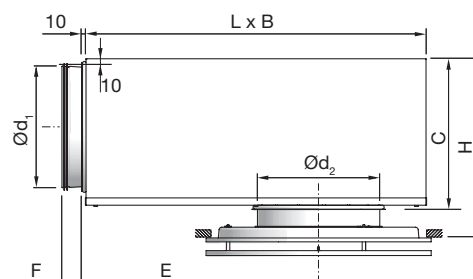
Eksempel: LM-1-PCA-200

Loftsystem - se indledende oversigt.

MBB - Trykfordelingsboks



PCA + MBB



PCA + MBB		B	C	E	F	H*	L
Kanal	PCA	mm	mm	mm	mm	mm	mm
Ød ₁ mm	Ød ₂ mm						
100	100	260	159	216	50	180 - 220	310
100	125	260	159	216	50	180 - 220	310
100	160	260	159	216	50	180 - 220	310
125	125	310	184	262	50	205 - 245	376
125	160	310	184	262	50	205 - 245	376
125	200	310	184	262	50	205 - 245	376
160	160	380	220	323	50	239 - 279	459
160	200	380	220	323	50	239 - 279	459
160	250	380	220	323	50	239 - 279	459
200	200	460	259	396	70	280 - 320	565
200	250	460	259	396	70	280 - 320	565
200	315	460	259	396	70	280 - 320	565
250	250	540	309	486	70	330 - 370	698
250	315	540	309	486	70	330 - 370	698
250	400	540	309	486	70	330 - 370	698
315	315	540	373	646	70	395 - 435	858
315	400	540	373	646	70	395 - 435	858

* Anvendes tilbehør MBZ vil H-mål øges:

Ød₂ = 100 - 200 mm => H + 40 mm

Ød₂ = 250 - 315 mm => H + 60 mm

Ød₂ = 400 mm => H + 80 mm

Bestillingskode

Produkt	MBB	aaa	bbb	c
Type				
MBB				
Kanaltilslutning Ød ₁				
Ø100-315				
Armaturtilslutning Ød ₂				
Ø100-400				
Funktion				
S = Indblæsning				
E = Udsugning				

Eksempel: PCA-200+MBB-160-200-S

Perforeret armatur

PCA

Tekniske data

Kapacitet

Volumenstrøm q_v [l/s] og [m³/h], totaltryk Δp_t [Pa], kaste-længde $l_{0,2}$ [m] samt lydeffektniveau L_{WA} [dB(A)] aflæses i diagrammerne.

Frekvensopdelt lydeffektniveau

Lydeffektniveauet i frekvensbånd er defineret som $L_{WA} + K_{ok}$. K_{ok} -værdierne er angivet i skemaform under diagrammerne på de følgende sider.

Hurtigvalg, Indblæsning

PCA + MBB		Max. Volumenstrøm		Max. Volumenstrøm	
Kanal	PCA	30dB(A)		35dB(A)	
Ød ₁	Ød ₂	l/s	m ³ /h	l/s	m ³ /h
100	100	26	94	31	112
100	125	33	119	39	140
100	160	39	140	47	169
125	125	40	144	48	173
125	160	51	184	61	220
125	200	58	209	70	252
160	160	57	207	71	255
160	200	67	241	84	302
160	250	77	277	99	356
200	200	83	299	100	360
200	250	96	346	118	425
200	315	112	403	139	500
250	250	118	425	139	500
250	315	133	479	163	587
250	400	146	526	193	695
315	315	145	522	173	623
315	400	187	673	225	810

Egendæmpning

Armaturets egendæmpning ΔL fra kanal til rum inklusive enderefleksion, se nedenstående tabel.

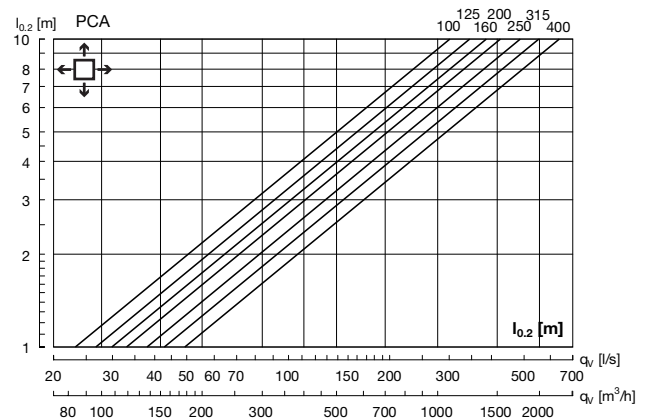
PCA + MBB		Middelfrekvens Hz							
Kanal	PCA	63	125	250	500	1K	2K	4K	8K
Ød ₁	Ød ₂								
100	100	18	17	8	20	19	20	19	23
100	125	19	16	7	19	18	18	18	21
100	160	21	16	5	15	17	18	16	19
125	125	18	13	9	20	13	19	18	19
125	160	12	13	8	19	13	16	17	19
125	200	16	11	5	16	13	15	15	17
160	160	17	17	11	19	18	17	20	20
160	200	14	14	7	21	15	16	18	19
160	250	15	15	5	17	13	15	16	18
200	200	15	10	6	16	17	15	19	18
200	250	12	9	5	14	17	15	17	17
200	315	12	7	4	11	15	14	16	15
250	250	14	8	8	14	16	17	17	18
250	315	12	6	6	15	15	15	16	17
250	400	13	5	4	13	14	14	15	15
315	315	7	9	8	14	17	16	17	21
315	400	7	8	8	12	16	16	16	18

indregulering

Indreguleringsdata findes i separat hæfte.

Kastelængde $l_{0,2}$

Kastelængden er angivet ved en sluthastighed på 0,2 m/s.



Korrektion af kastelængde $l_{0,2}$

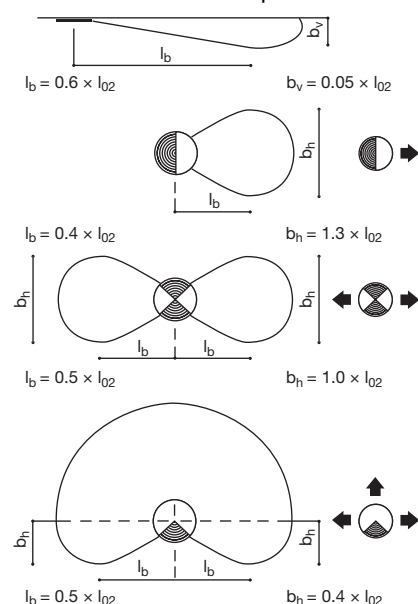
PCA Ød	1 - vejs	2 - vejs	3 - vejs
100	2.3	1.7	1.3
125	2.6	1.8	1.4
160	2.5	1.7	1.3
200	2.4	1.7	1.3
250	2.3	1.7	1.3
315	2.2	1.7	1.2
400	2.3	1.7	1.2

Stråleudbredelse

l_b = Afstand fra armaturet til det punkt, hvor spredningen er maksimal.

b_v = Strålens tykkelse i vertikalt plan.

b_h = Strålens bredde i horisontalt plan.

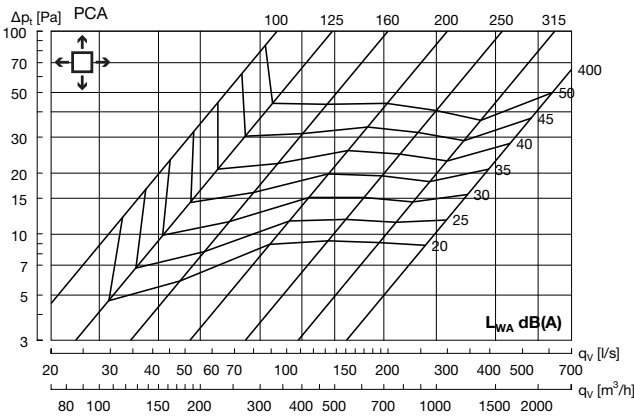


Perforeret armatur

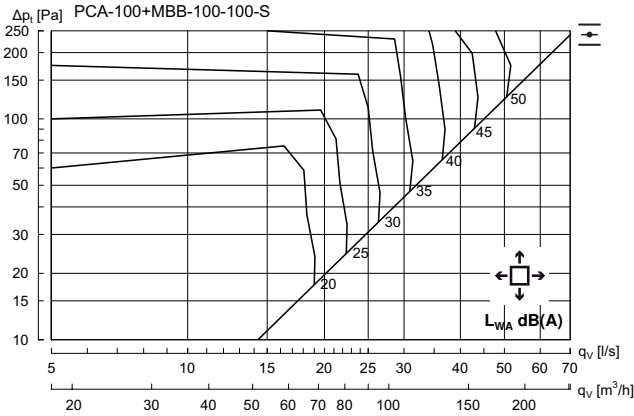
PCA

Tekniske data

PCA uden boks - Indblæsning



PCA 100 + MBB - Indblæsning



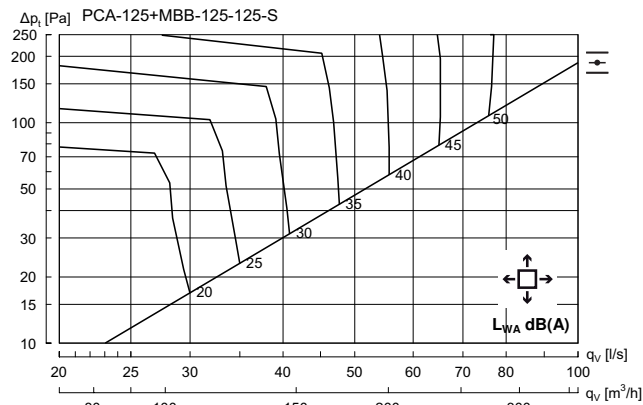
Hz	63	125	250	500	1K	2K	4K	8K
K _{ok}	12	5	2	-5	-4	-11	-20	-26

Perforeret armatur

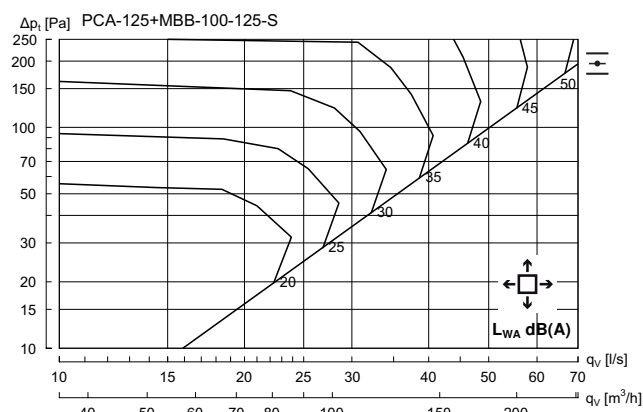
PCA

Tekniske data

PCA 125 + MBB - Indblæsning

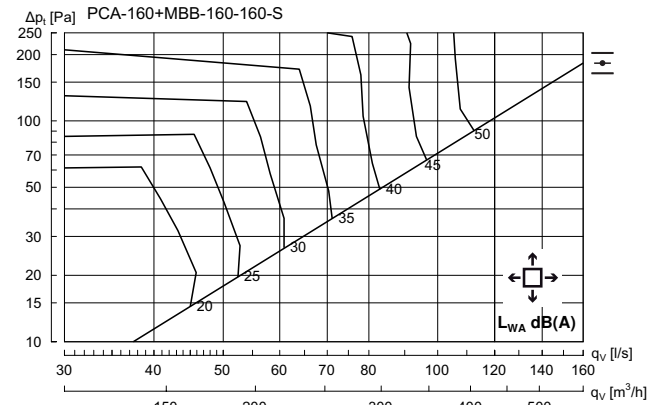


Hz	63	125	250	500	1K	2K	4K	8K
K_{uk}	9	5	-1	-4	-3	-11	-20	-26

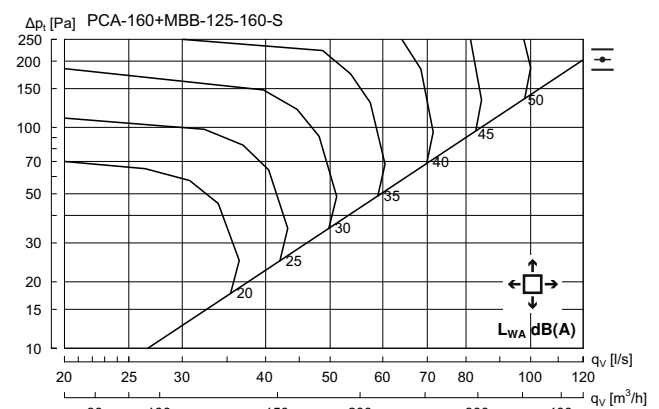


Hz	63	125	250	500	1K	2K	4K	8K
K_{uk}	11	7	3	-5	-5	-11	-18	-25

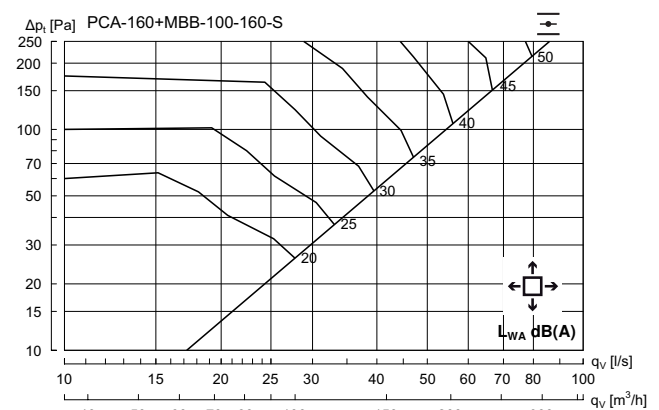
PCA 160 + MBB - Indblæsning



Hz	63	125	250	500	1K	2K	4K	8K
K_{uk}	8	5	-2	-4	-3	-11	-21	-29



Hz	63	125	250	500	1K	2K	4K	8K
K_{uk}	9	5	1	-4	-4	-10	-17	-25



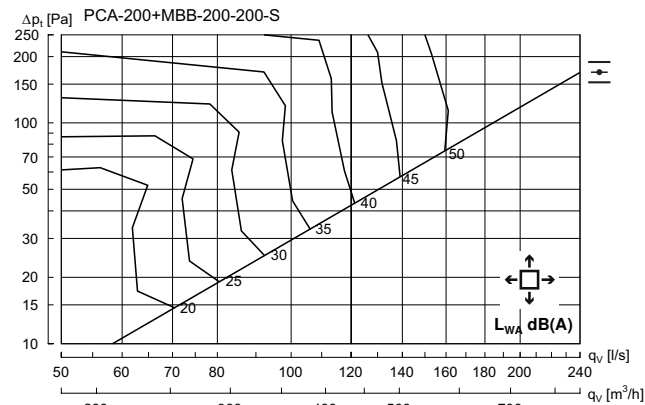
Hz	63	125	250	500	1K	2K	4K	8K
K_{uk}	9	4	1	-3	-5	-10	-15	-19

Perforeret armatur

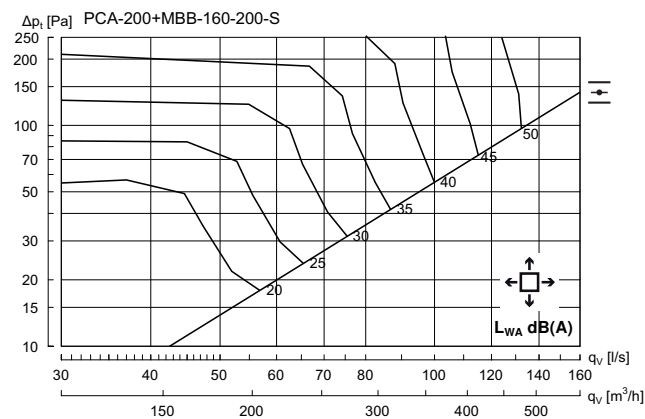
PCA

Tekniske data

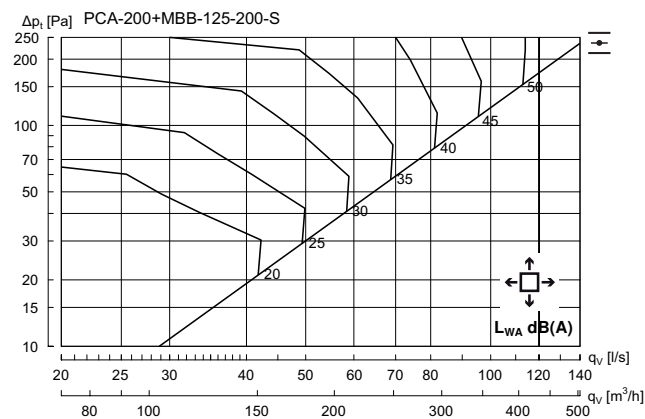
PCA 200 + MBB - Indblæsning



Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	11	5	-3	-3	-3	-11	-22	-29

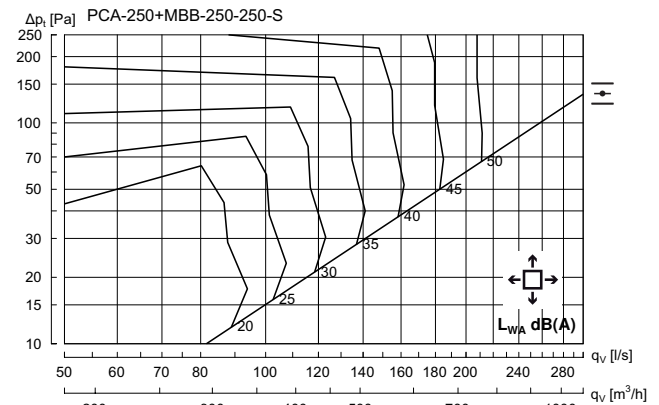


Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	10	5	-2	-4	-3	-10	-20	-26

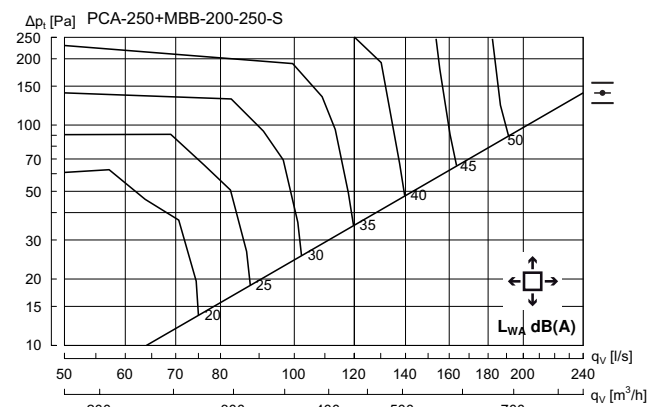


Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	10	5	1	-4	-5	-10	-15	-22

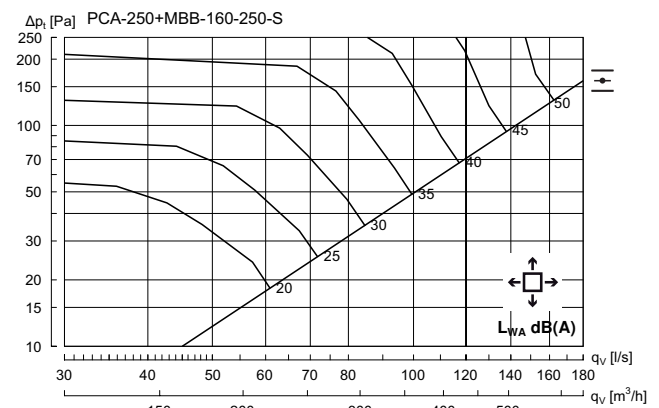
PCA 250 + MBB - Indblæsning



Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	11	3	-4	-3	-3	-12	-22	-30



Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	10	5	-2	-3	-3	-11	-20	-28



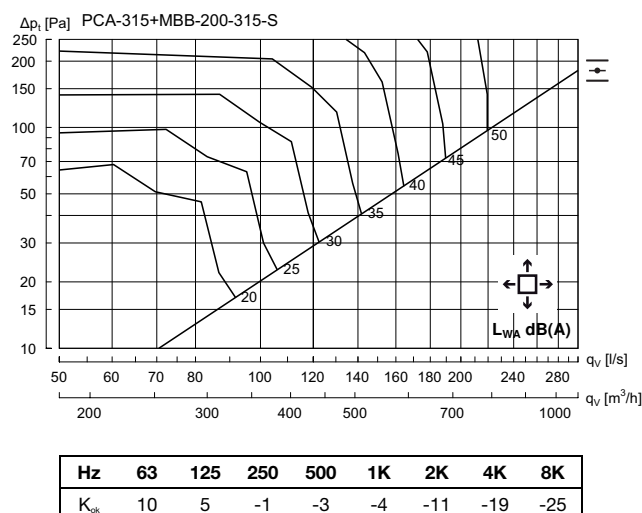
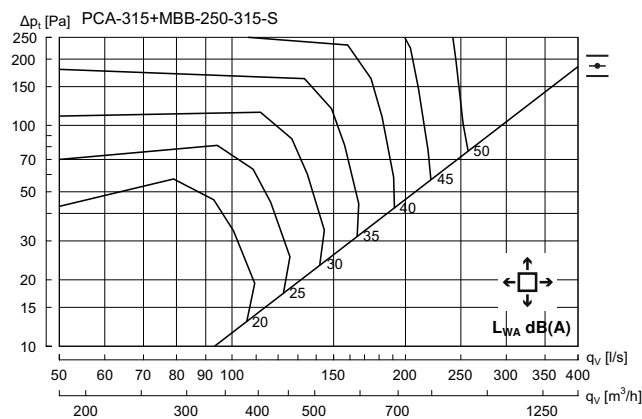
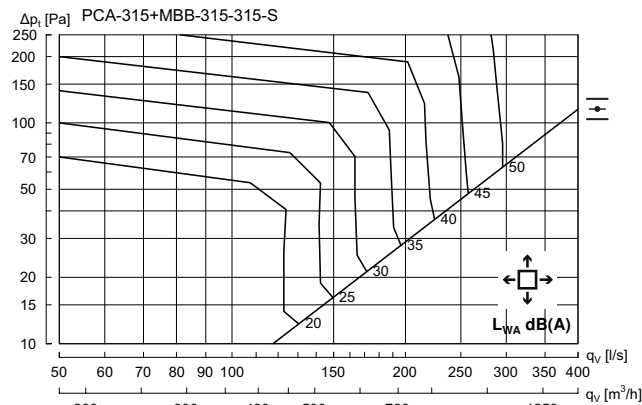
Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	8	5	0	-4	-4	-10	-17	-23

Perforeret armatur

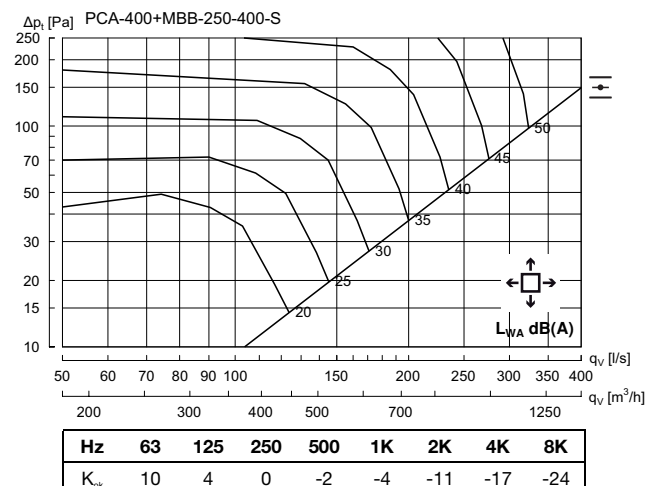
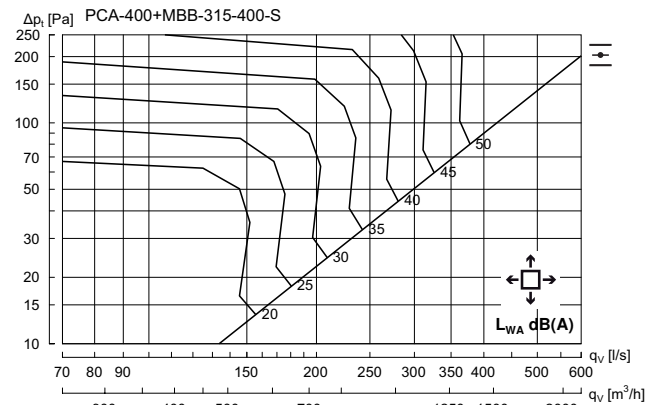
PCA

Tekniske data

PCA 315 + MBB - Indblæsning



PCA 400 + MBB - Indblæsning



Korrektion af lydeffektniveau (L_{WA}) og tryktab (ΔP_t)

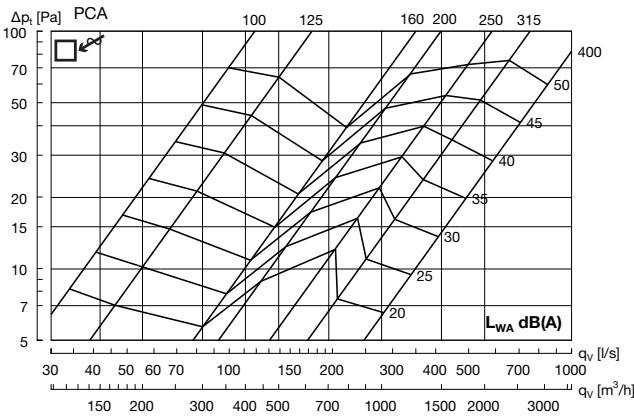
PCA + MBB		1 - vejs		2 - vejs		3 - vejs	
Kanal	PCA	L _{WA}	ΔP _t	L _{WA}	ΔP _t	L _{WA}	ΔP _t
Ød ₁	Ød ₂						
100	100	+ 10	x 1,35	+ 6	x 1,1	+ 4	x 1,05
100	125	+ 10	x 1,3	+ 4	x 1,1	+ 2	x 1,05
100	160	+ 5	x 1,1	+ 2	x 1,05	+ 1	x 1
125	125	+ 10	x 1,35	+ 6	x 1,1	+ 4	x 1,05
125	160	+ 10	x 1,4	+ 4	x 1,1	+ 1	x 1
125	200	+ 4	x 1,2	+ 2	x 1,05	+ 1	x 1
160	160	+ 13	x 1,8	+ 6	x 1,3	+ 2	x 1,1
160	200	+ 16	x 1,7	+ 10	x 1,2	+ 4	x 1,05
160	250	+ 10	x 1,3	+ 6	x 1,1	+ 3	x 1
200	200	+ 17	x 2,3	+ 11	x 1,4	+ 7	x 1,1
200	250	+ 13	x 1,8	+ 6	x 1,2	+ 4	x 1,1
200	315	+ 9	x 1,5	+ 4	x 1,1	+ 0	x 1,05
250	250	+ 21	x 2,1	+ 11	x 1,4	+ 7	x 1,2
250	315	+ 19	x 1,8	+ 7	x 1,2	+ 3	x 1,1
250	400	+ 10	x 1,5	+ 6	x 1,2	+ 0	x 1
315	315	+ 21	x 2,1	+ 10	x 1,3	+ 4	x 1,1
315	400	+ 21	x 1,8	+ 8	x 1,5	+ 3	x 1,2

Perforeret armatur

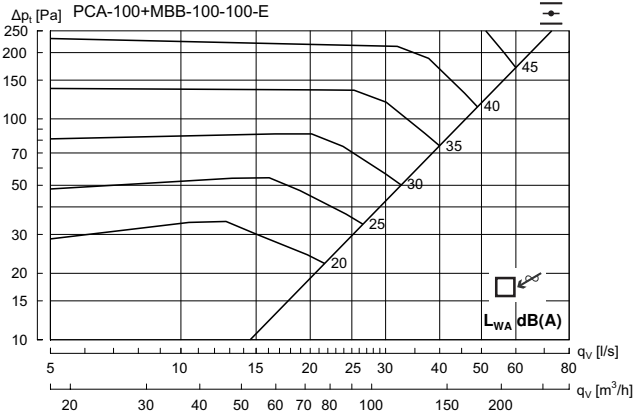
PCA

Tekniske data

PCA uden boks - Udsugning



PCA 100 + MBB - Udsugning



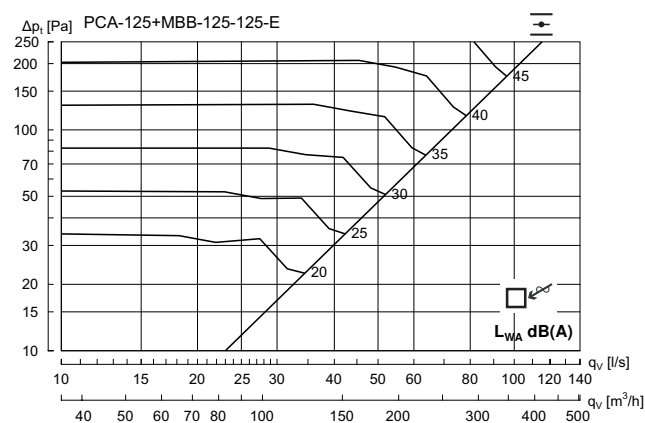
Hz	63	125	250	500	1K	2K	4K	8K
K _{ok}	11	0	3	-3	-6	-10	-15	-22

Perforeret armatur

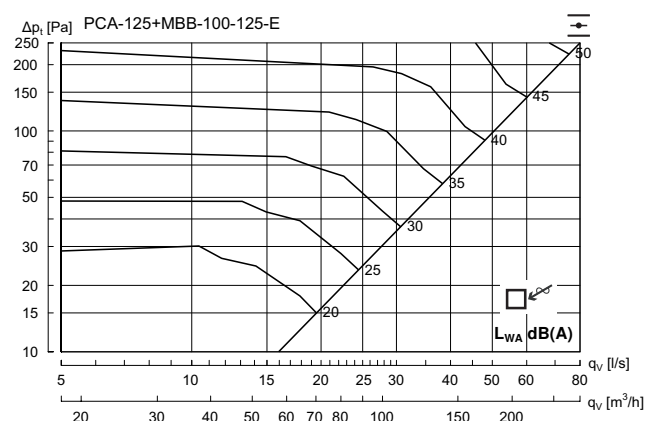
PCA

Tekniske data

PCA 125 + MBB - Udsugning

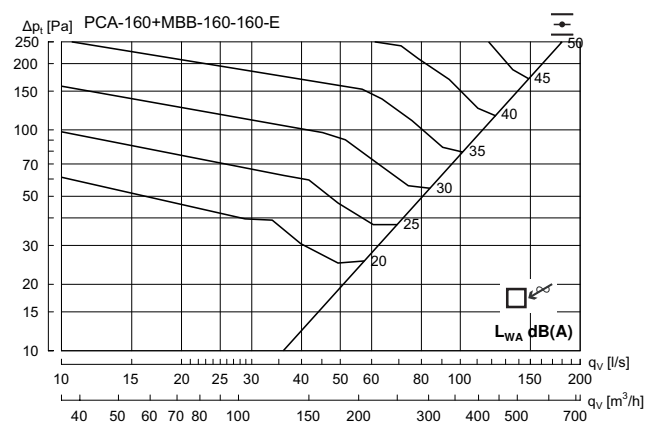


Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	13	5	-1	-4	-4	-11	-15	-20

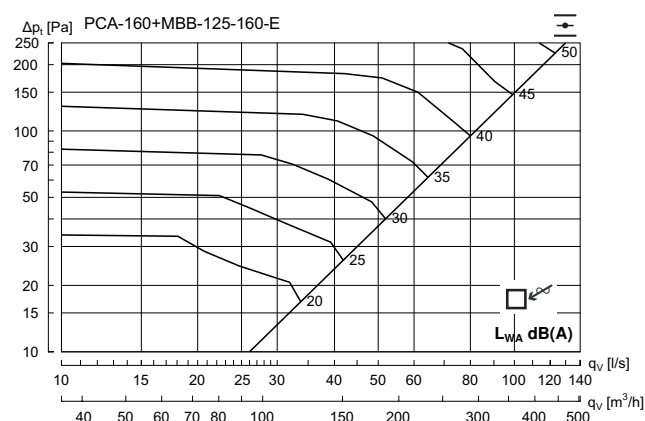


Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	13	-1	3	-3	-6	-10	-16	-19

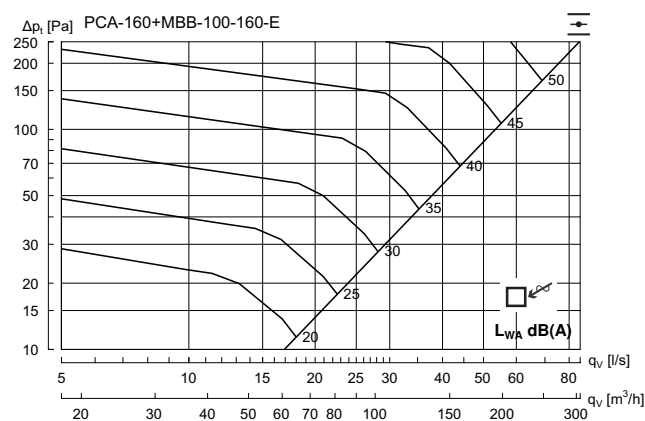
PCA 160 + MBB - Udsugning



Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	16	6	-1	-5	-4	-10	-15	-19



Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	13	5	0	-3	-5	-11	-15	-22



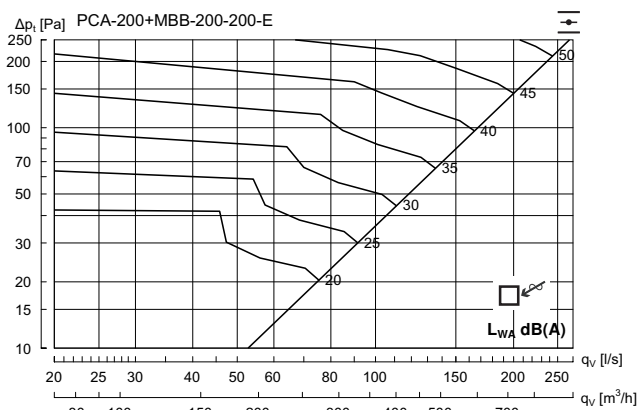
Hz	63	125	250	500	1K	2K	4K	8K
K_{ok}	10	-1	5	-3	-8	-11	-18	-25

Perforeret armatur

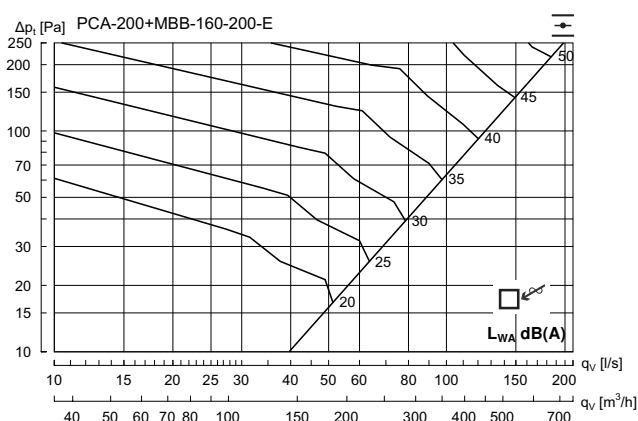
PCA

Tekniske data

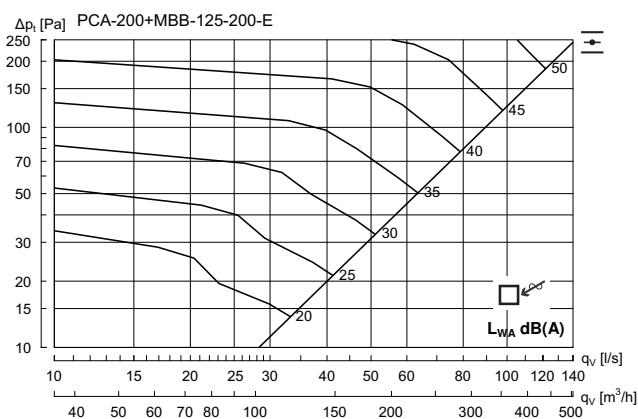
PCA 200 + MBB - Udsugning



Hz	63	125	250	500	1K	2K	4K	8K
K_{ek}	15	4	-1	-4	-5	-9	-16	-25

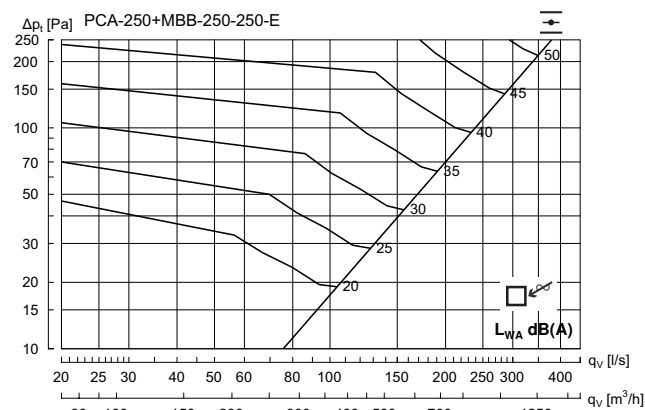


Hz	63	125	250	500	1K	2K	4K	8K
K_{ek}	15	6	-1	-5	-5	-9	-14	-20

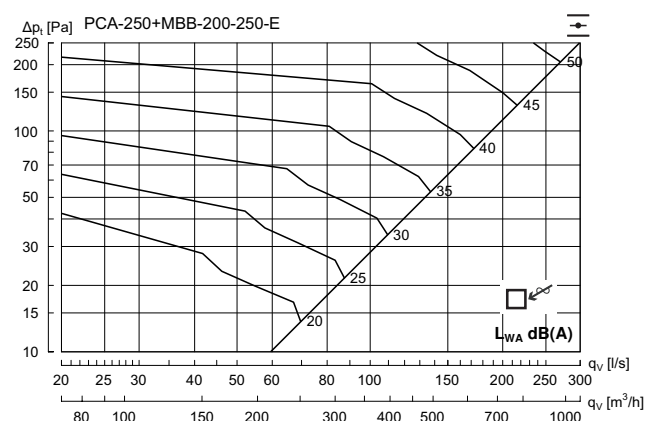


Hz	63	125	250	500	1K	2K	4K	8K
K_{ek}	9	3	1	-4	-5	-10	-14	-21

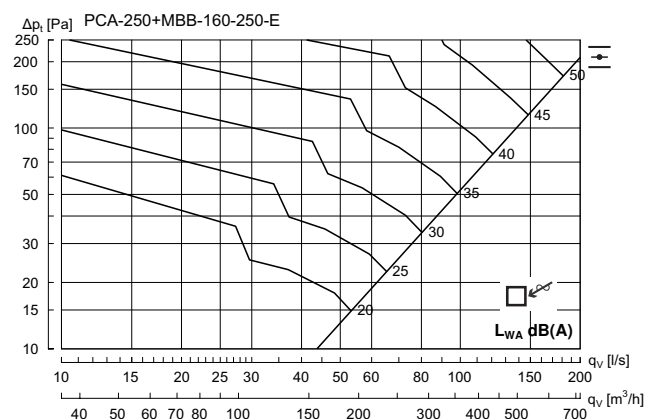
PCA 250 + MBB - Udsugning



Hz	63	125	250	500	1K	2K	4K	8K
K_{ek}	10	5	2	-3	-5	-11	-16	-25



Hz	63	125	250	500	1K	2K	4K	8K
K_{ek}	12	5	0	-3	-5	-10	-14	-23



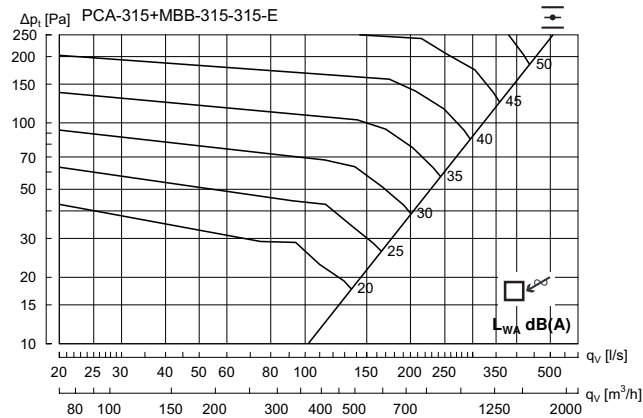
Hz	63	125	250	500	1K	2K	4K	8K
K_{ek}	16	6	0	-5	-5	-9	-15	-21

Perforeret armatur

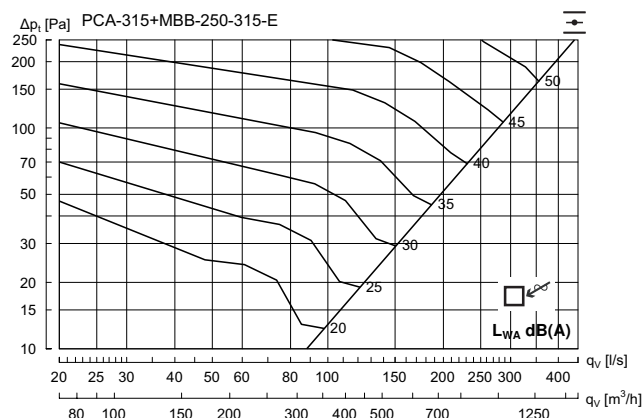
PCA

Tekniske data

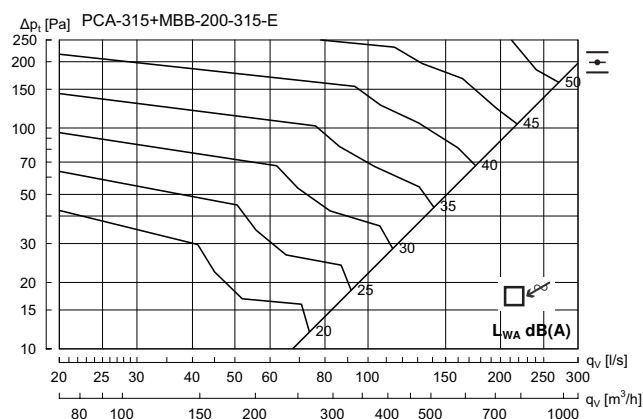
PCA 315 + MBB - Udsugning



Hz	63	125	250	500	1K	2K	4K	8K
K_{ek}	13	5	3	-4	-6	-10	-16	-26

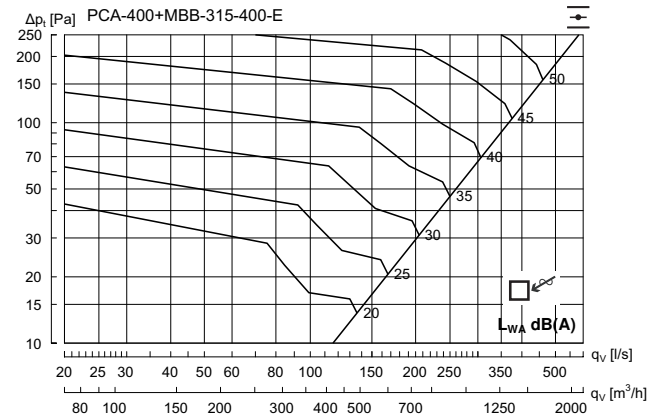


Hz	63	125	250	500	1K	2K	4K	8K
K_{ek}	7	5	2	-3	-6	-10	-16	-24

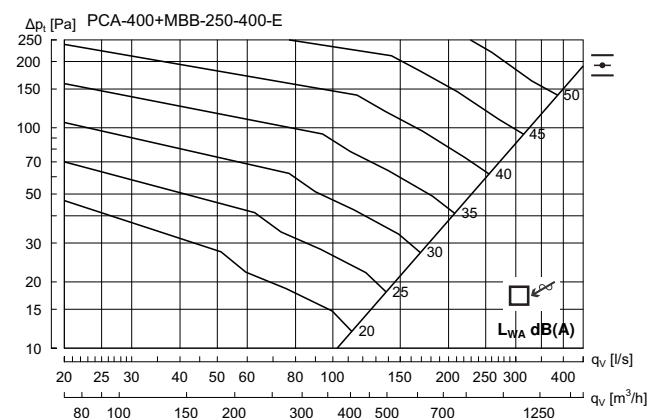


Hz	63	125	250	500	1K	2K	4K	8K
K_{ek}	13	5	0	-3	-5	-9	-15	-23

PCA 400 + MBB - Udsugning



Hz	63	125	250	500	1K	2K	4K	8K
K_{ek}	10	4	2	-3	-6	-9	-14	-25



Hz	63	125	250	500	1K	2K	4K	8K
K_{ek}	10	5	2	-4	-5	-10	-15	-23