

Product manual

Constant volume dampers

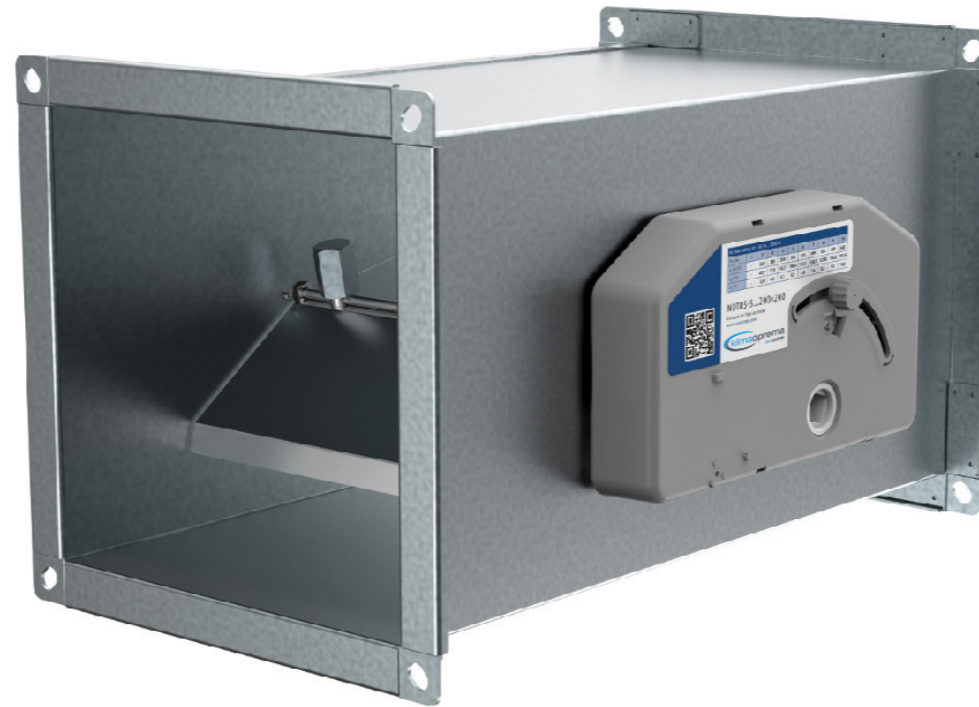
RKP-P-N

Airflow regulation

Version 1.0.3
Date: 04.11.2021

RKP-P-N

- For maintaining constant air volume in ventilation systems, without additional power supply
- Made of galvanized steel sheet, damper blade made of anodized aluminium sheet
- Recommended airflow velocity from 3 to 8 m/s, at pressure difference $\Delta p > 50$ Pa
- Adjusting required constant amount is done by turning of working screw on the right side of the cover
- Working temperature $-20...80^{\circ}\text{C}$
- Relative humidity $5...80\%$ rh
- Constant flow $\pm 10\%$ set value
- Casing airtightness Class C



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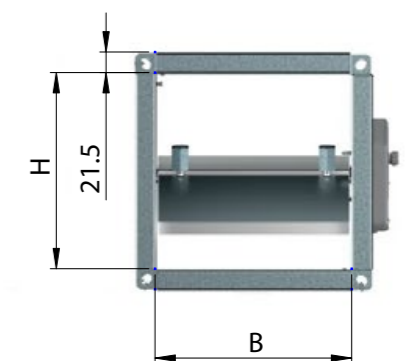
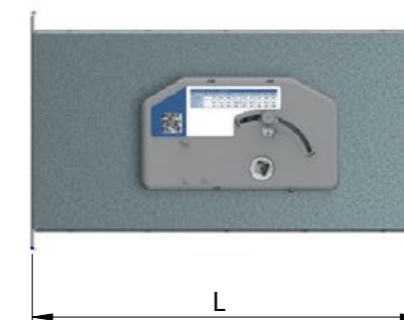
PRODUCT OVERVIEW

AIRFLOW REGULATION

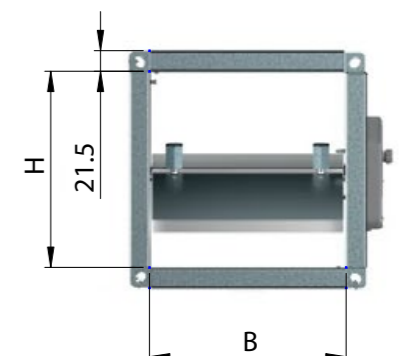
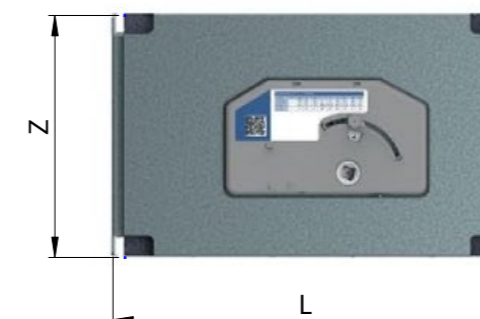
DIMENSIONS

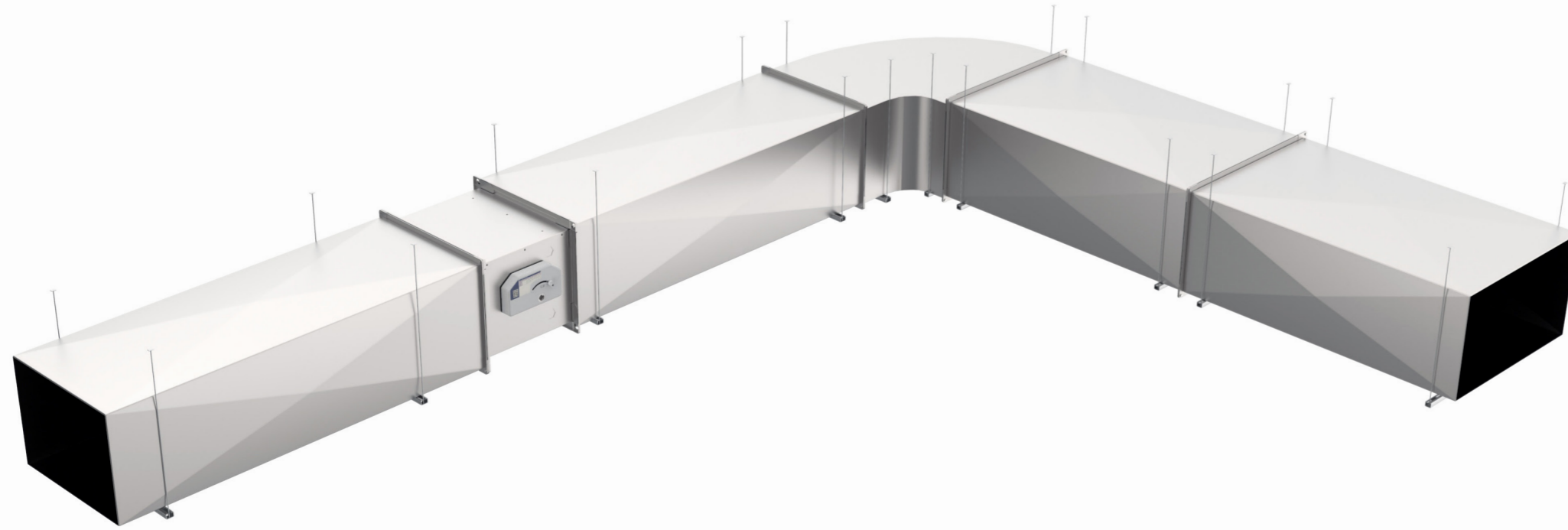
Size BxH [mm]	200x100	200x200	300x100	300x150	300x200	400x200	400x250	400x300	400x400	500x200	500x250	500x300	500x400	500x500	600x200	600x250	600x300	600x400	600x500	600x600
L [mm]	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400
Pressure drop [Pa]	732,8	956,2	694,3	794,5	758,5	825,3	833	766,5	833	933,1	797	863,8	876,6	871,2	542,9	663,5	835,6	640,4	650,7	712,3
Vmax [m³/h]	500	1161	702	1295	1705	2194	2804	3404	4598	2868	3586	4353	5795	7243	3482	4346	5215	6987	8692	10329
mass RKP-P [kg]	-	5,3	5,4	5,9	6,4	7,5	8,0	8,7	12,7	8,7	9,2	9,8	14,4	15,4	9,7	10,4	11	16,2	17,4	22,5
mass RKP-P-N [kg]	5,8	7,3	7,4	8,1	8,8	10,5	11,2	12	16,4	12	12,8	13,6	18,6	19,9	13,6	14,4	15,3	20,8	21,9	27

RKP-P-N



RKP-P-N-Z (insulated version)





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ORDERING KEY

AIRFLOW REGULATION

ORDERING KEY

(1) Constant volume damper

(2) Dimensions

(3) Drive

(4) Insulation

RKP-P-N - BxH - R - Z

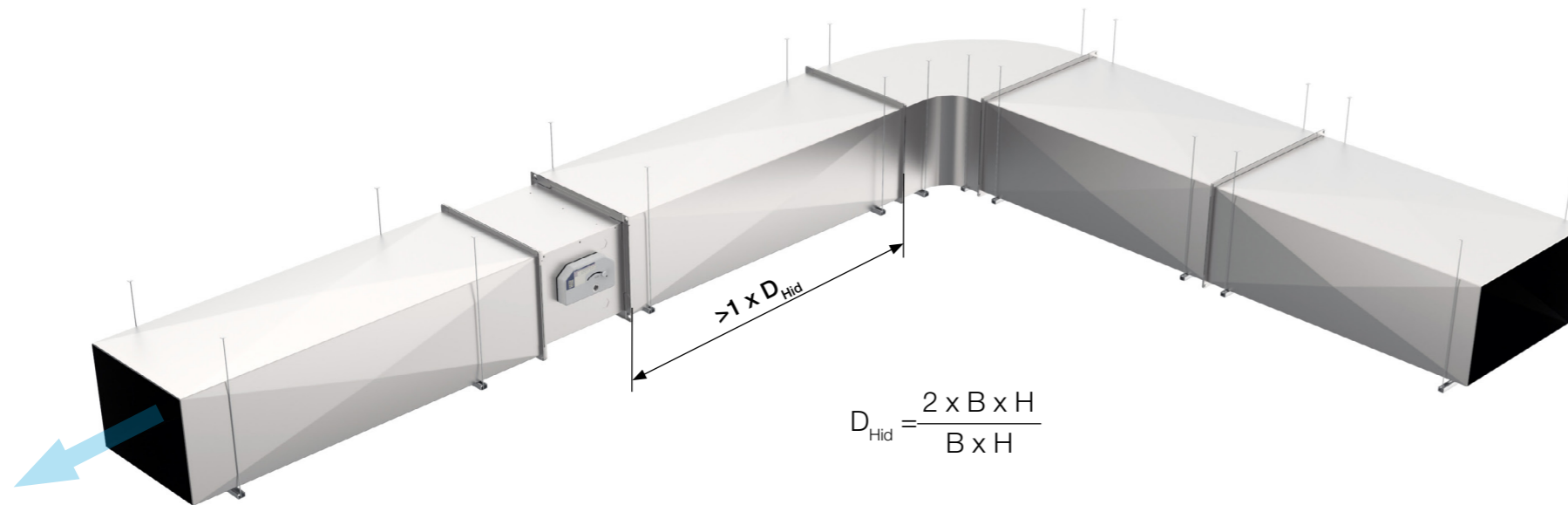
(1) **RKP-P-N**

(4) **Z** - insulation

(2) Dimensions **BxH**

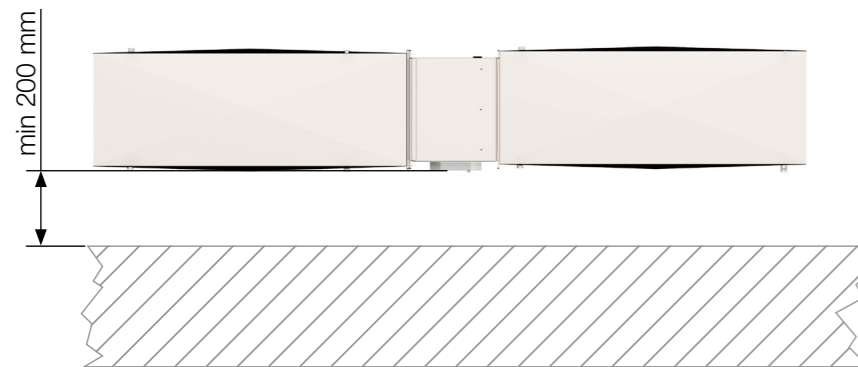
(3) **R** - manual drive

Installation process



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INSTALLATION

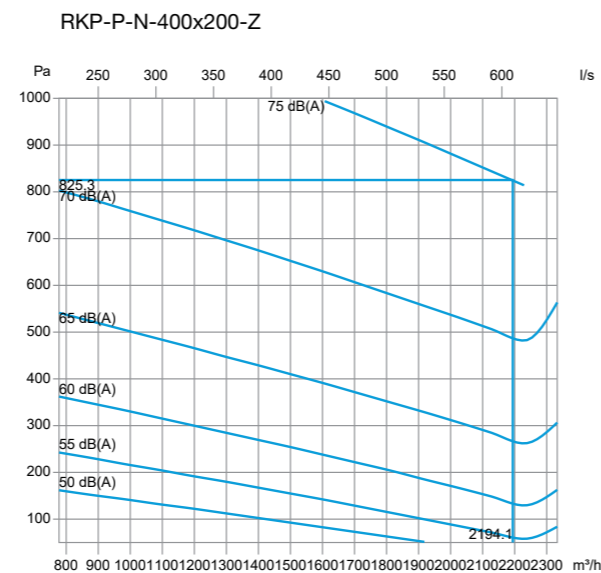
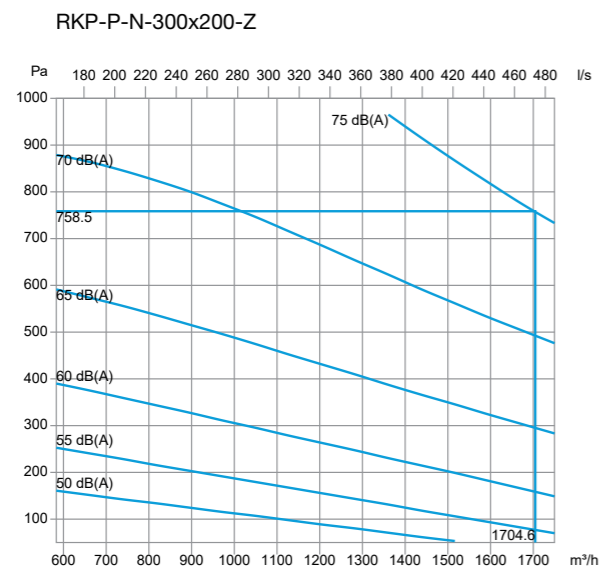
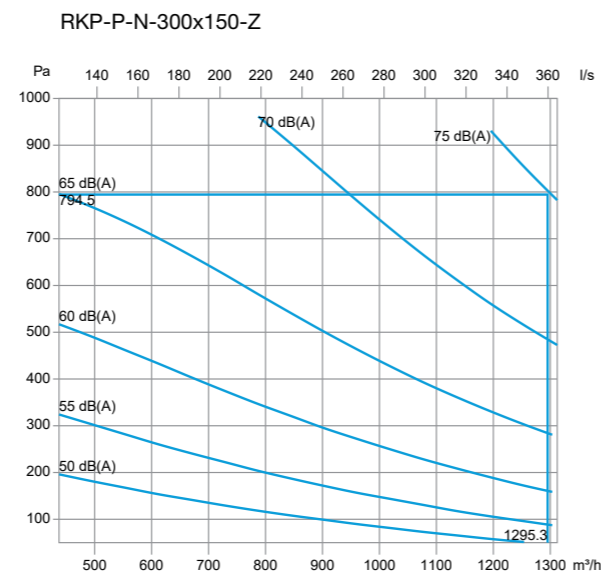
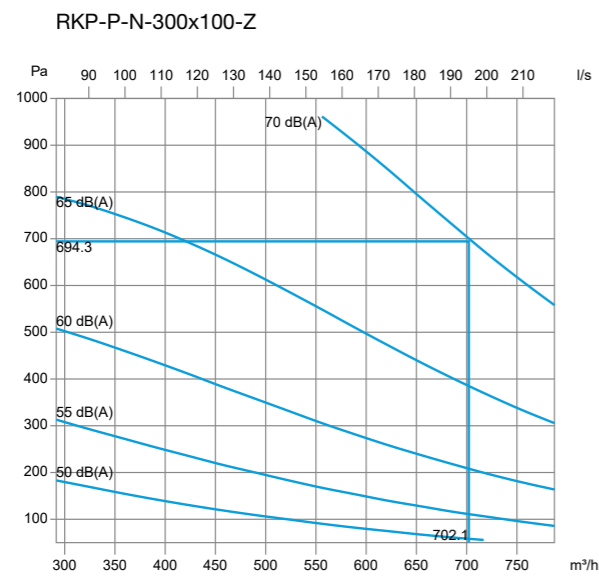
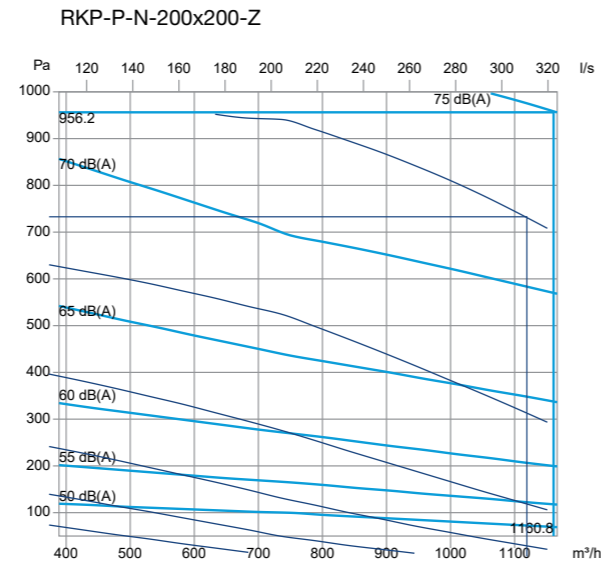
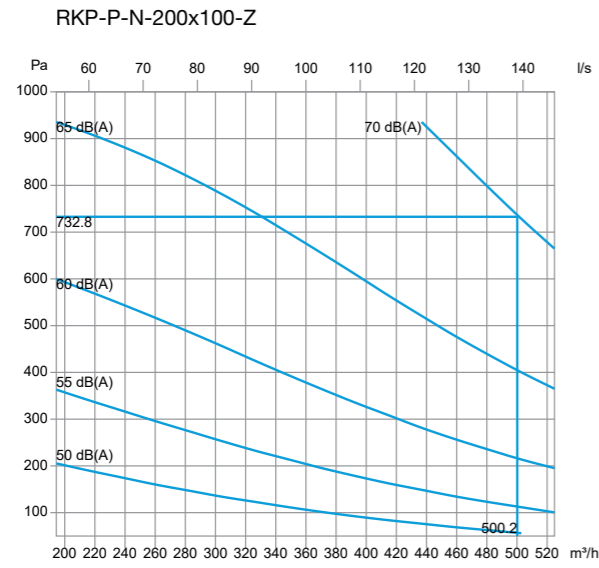


- Required length of straight section before regulator is $L > 3d$.
- If $L < 3d$, a 10% error in regulation occurs so that kind of installation is not advisable
- Pay attention to airflow direction marking on the regulator. If not correctly installed, regulator will not work
- Maintenance is not required



Installation in horizontal, angled or vertical duct so that rotation axis is always in horizontal position.

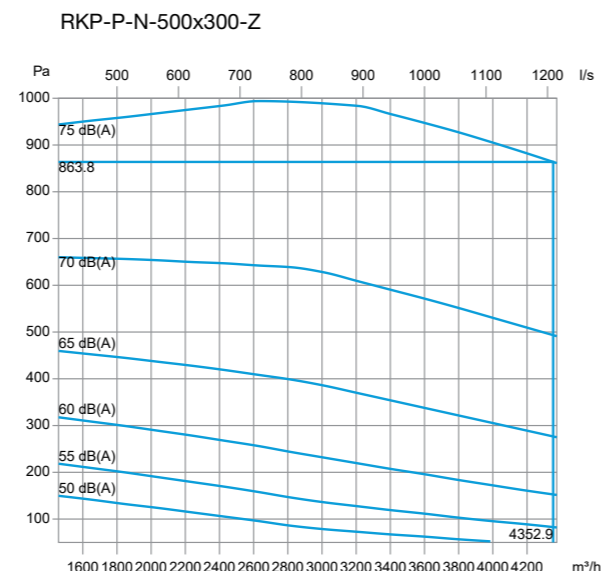
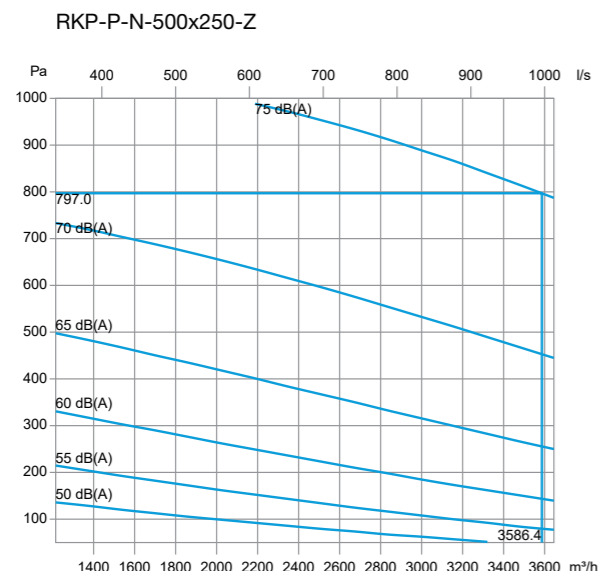
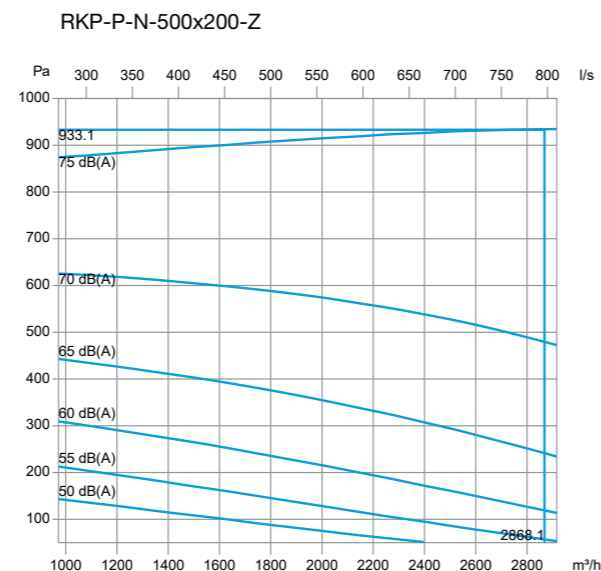
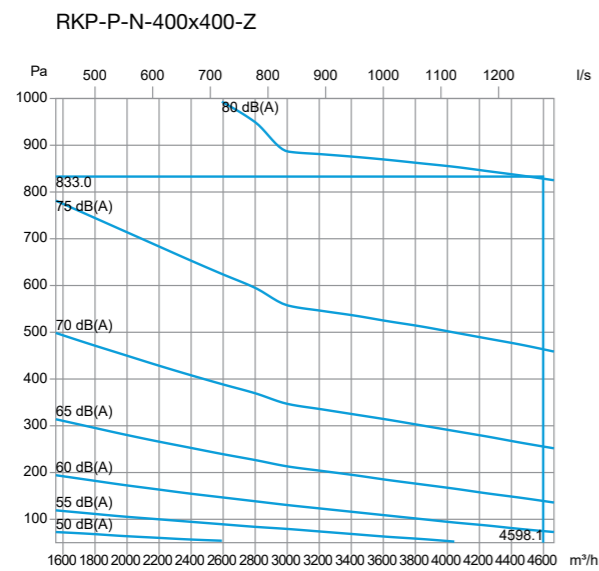
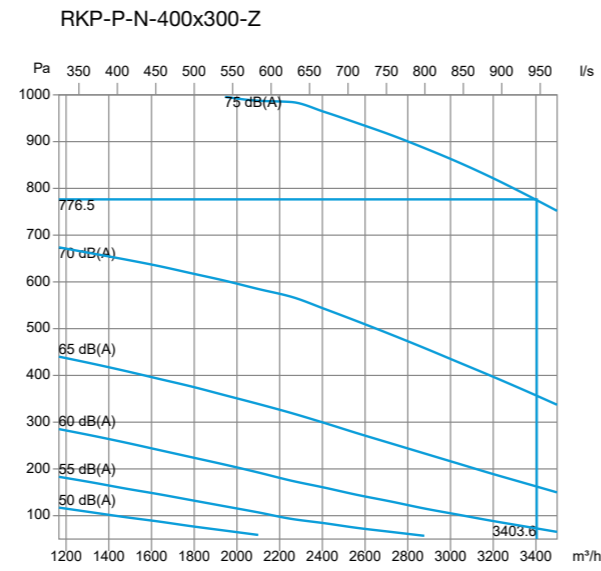
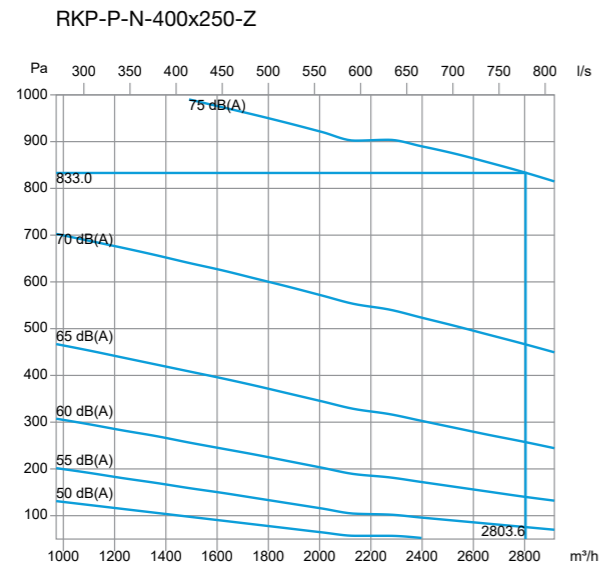
Sound power level diagrams



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DIAGRAMS

Sound power level diagrams

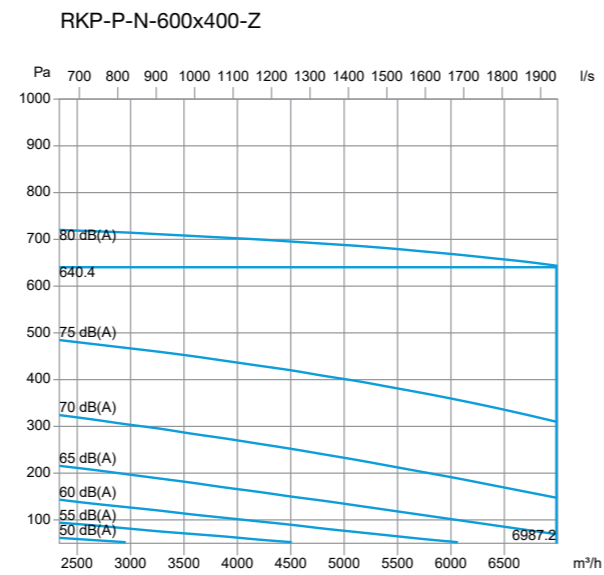
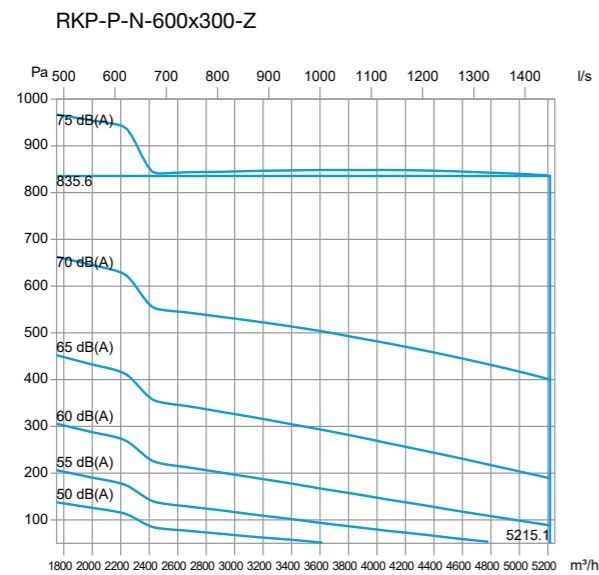
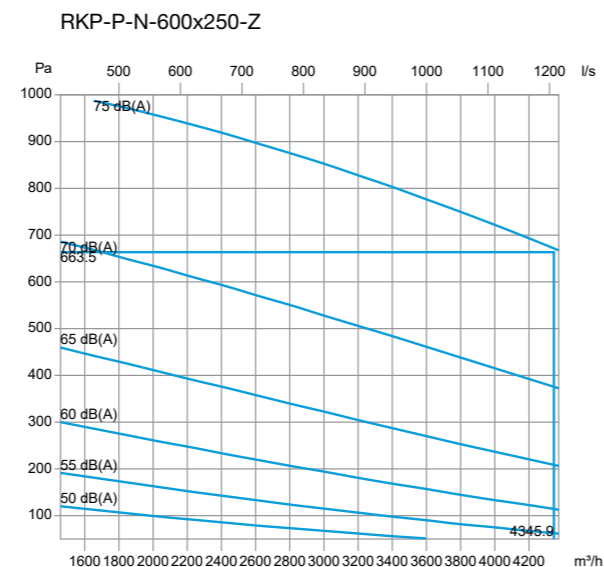
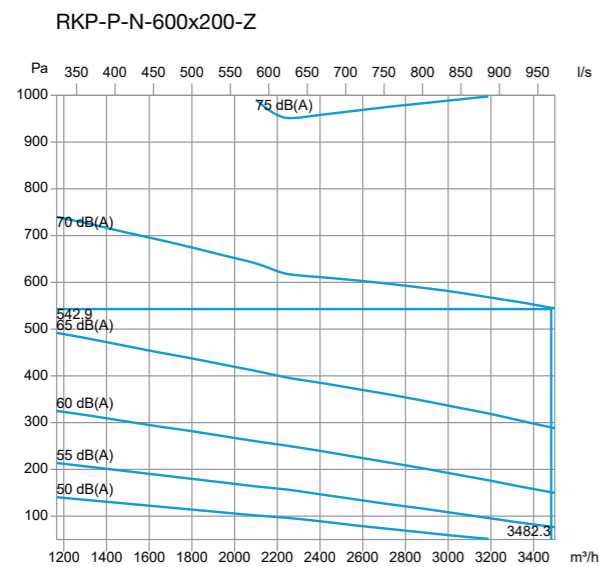
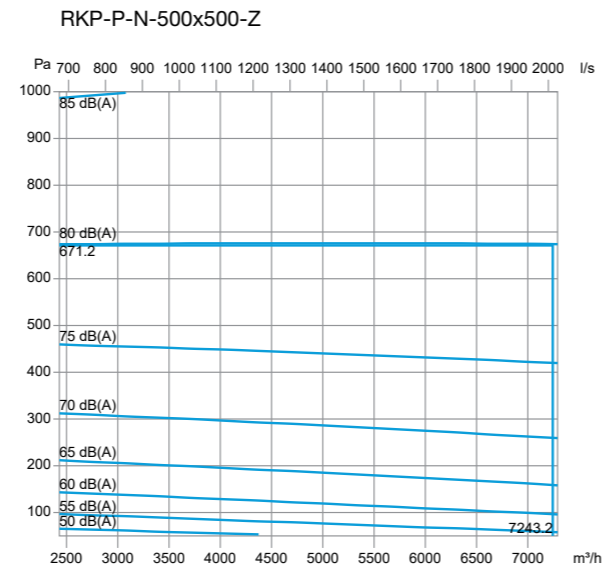
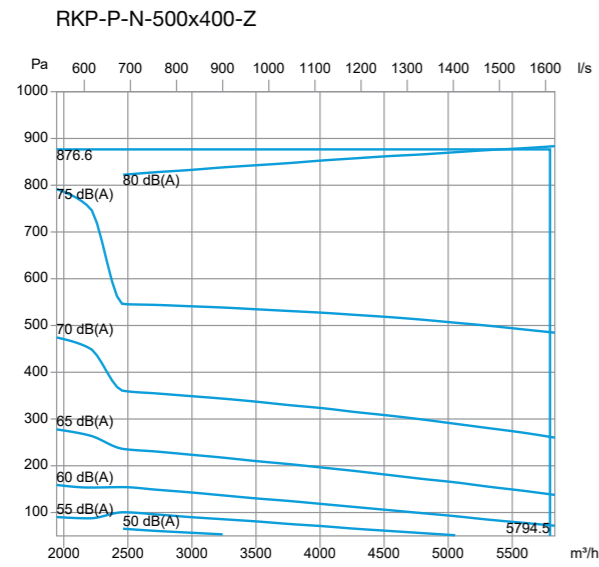


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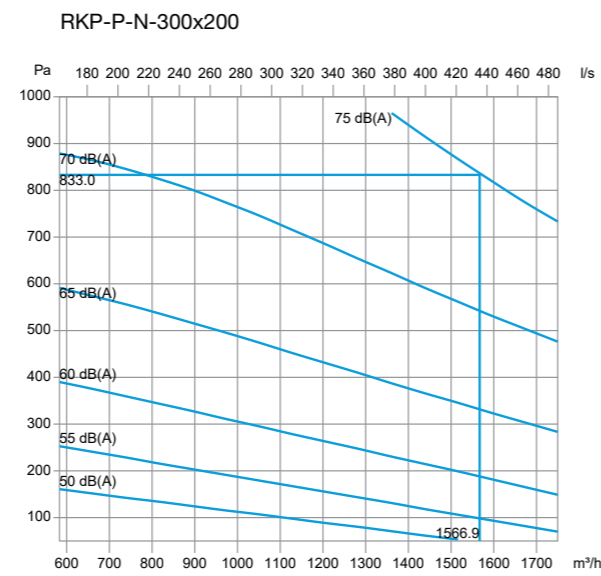
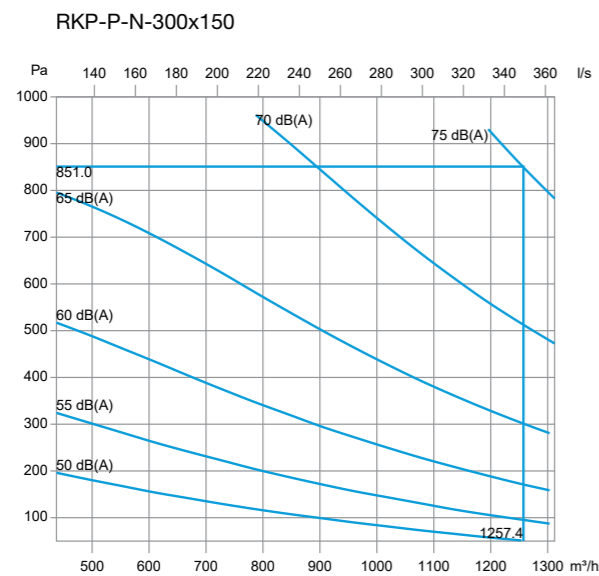
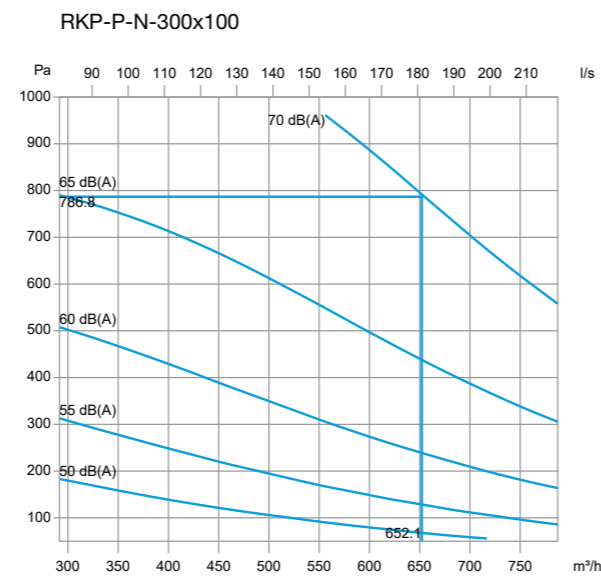
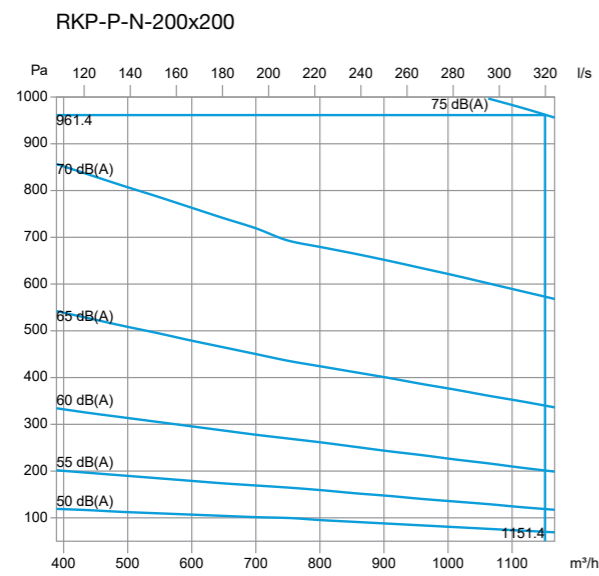
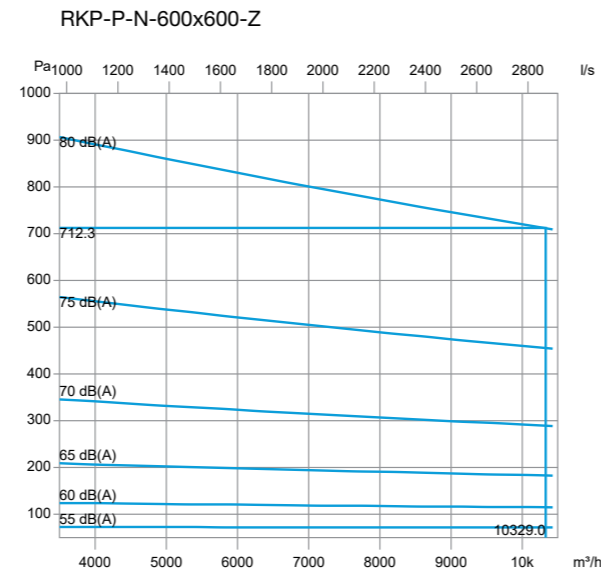
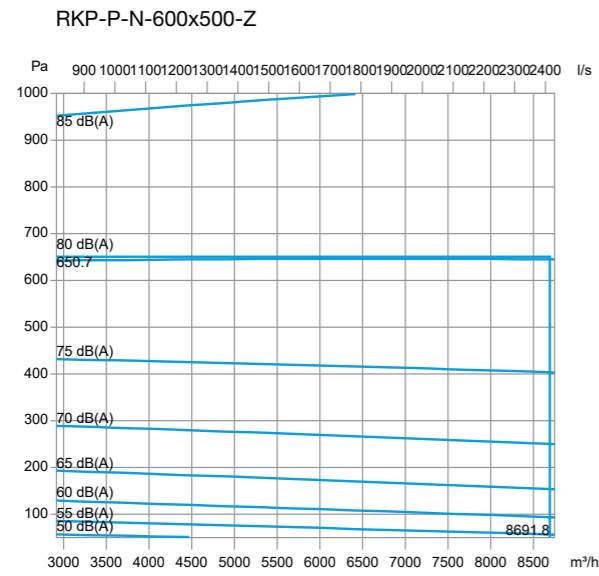
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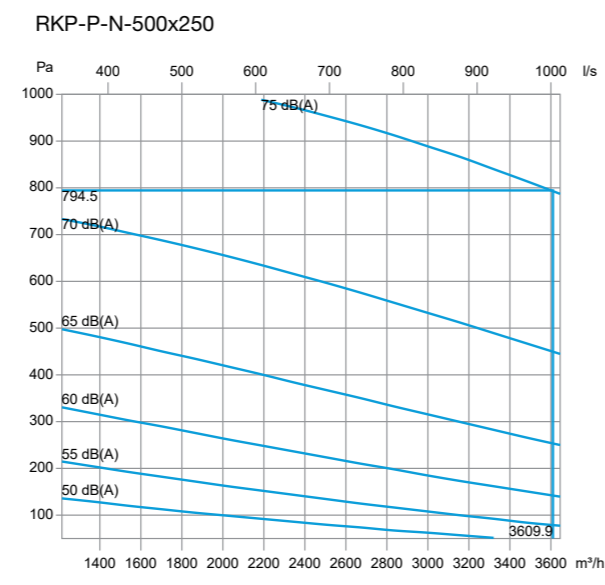
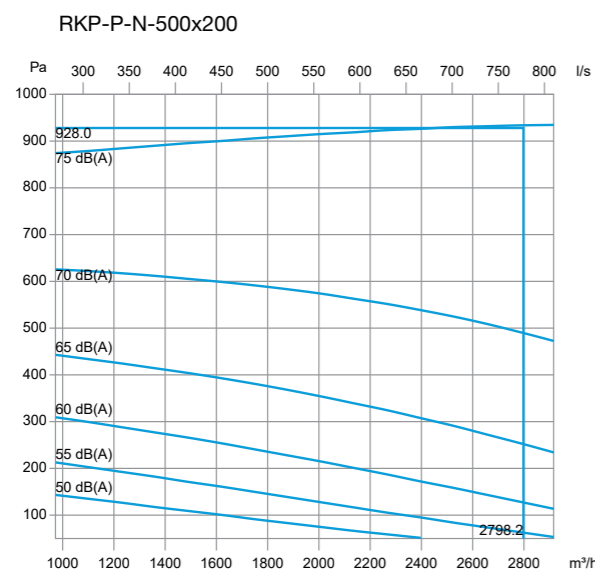
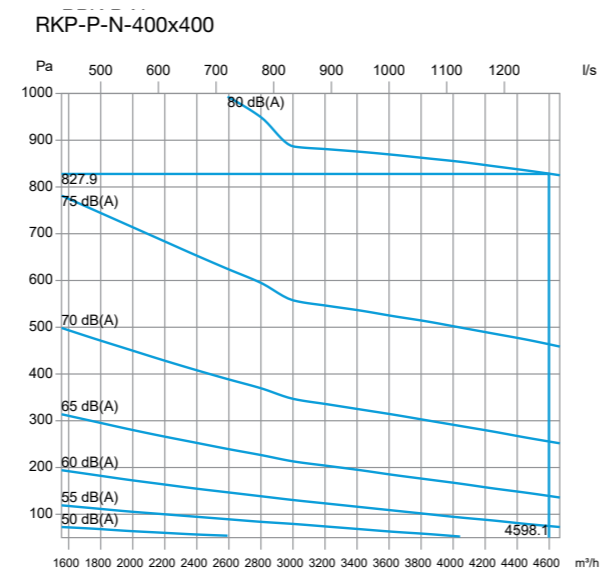
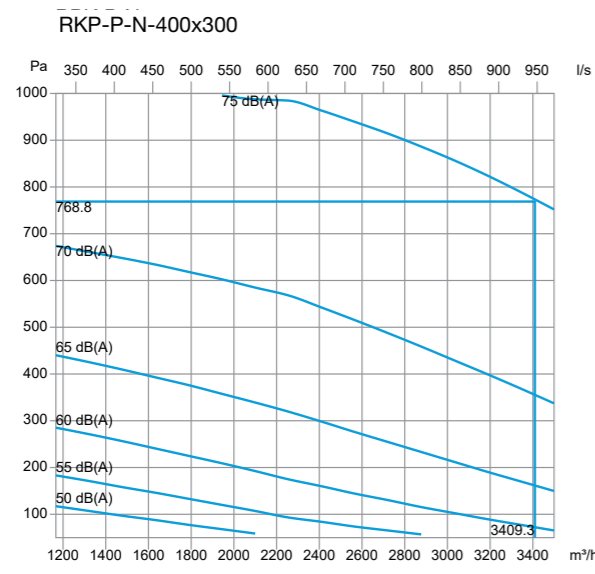
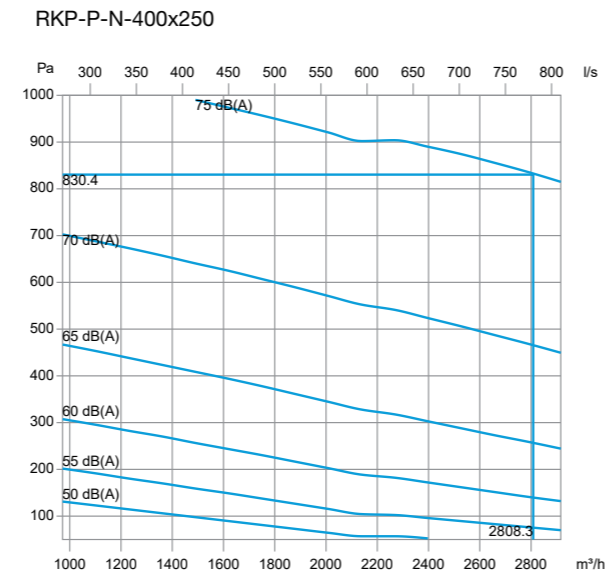
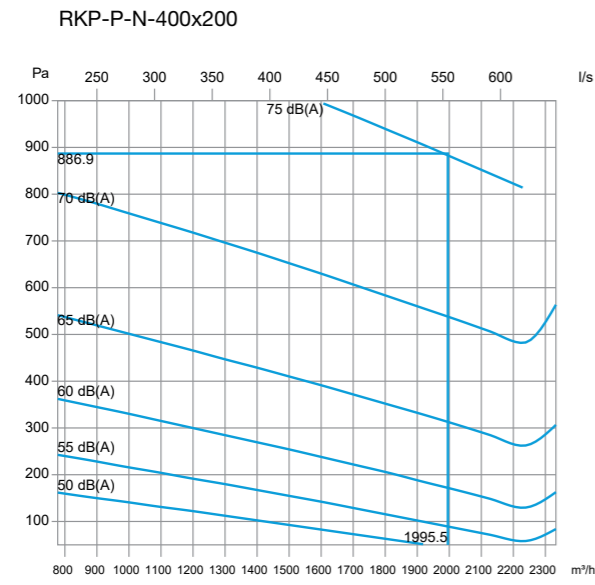
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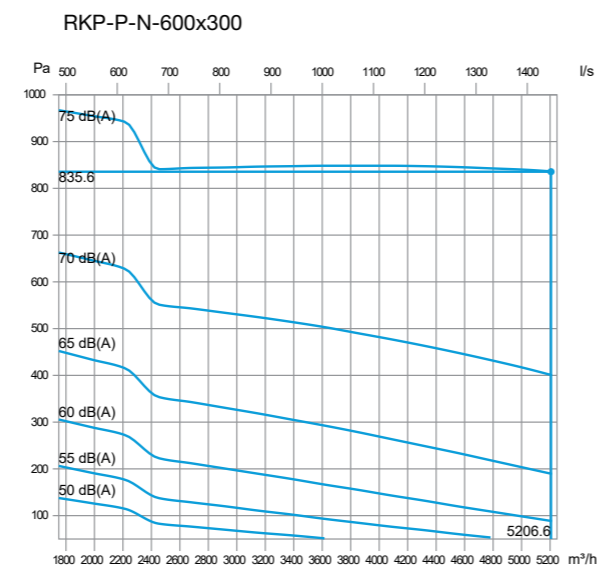
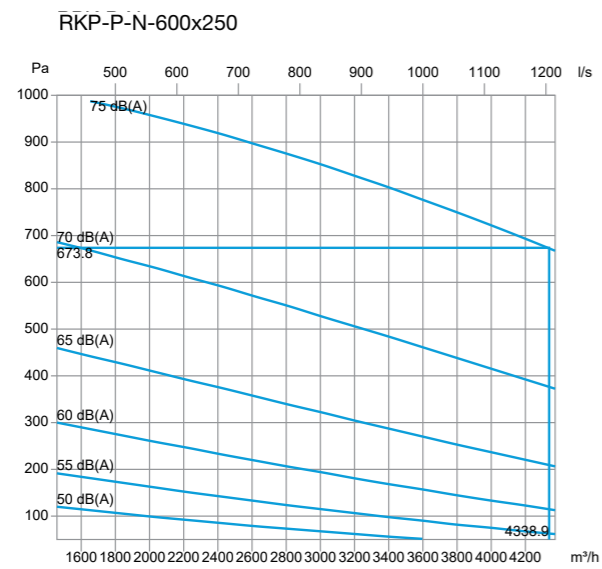
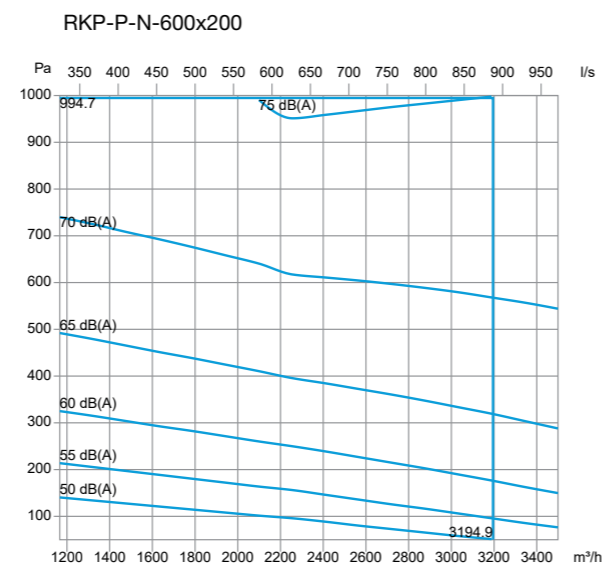
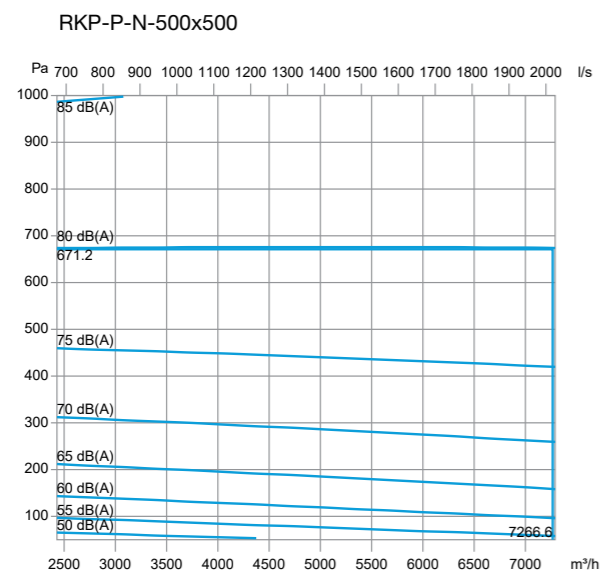
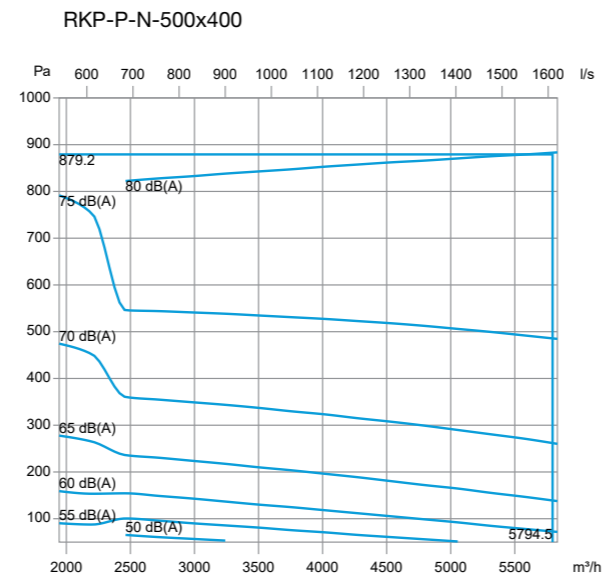
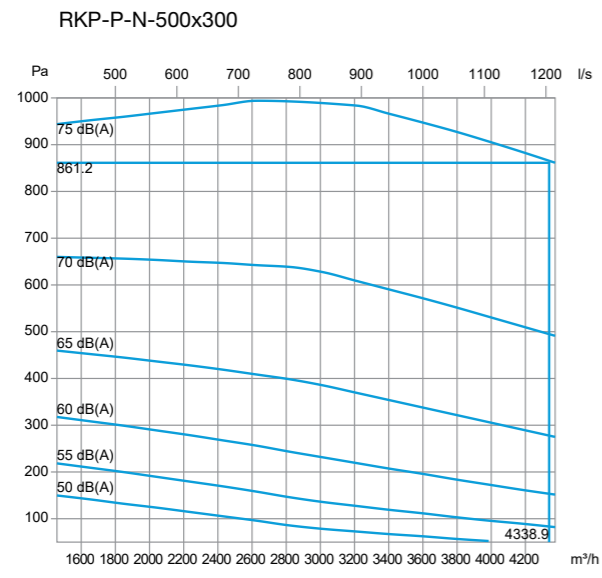
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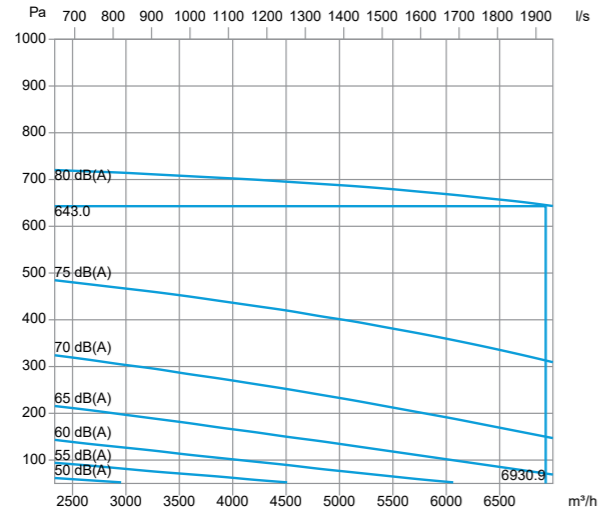


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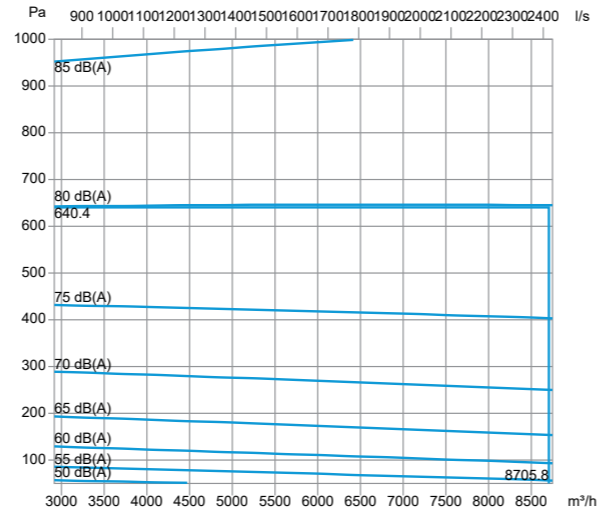
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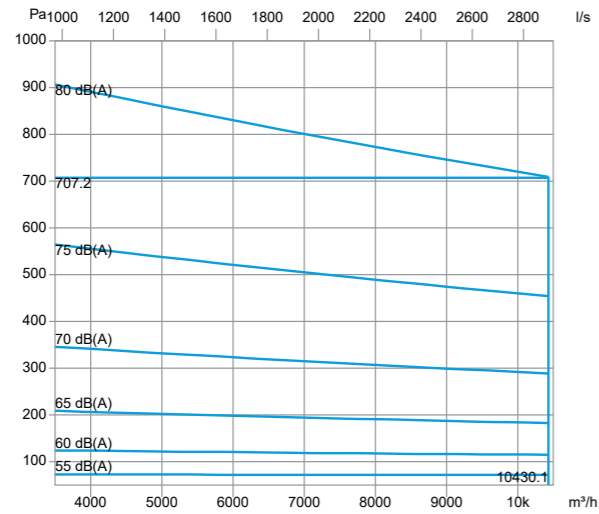
RKP-P-N-600x400



RKP-P-N-600x500



RKP-P-N-600x600



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TRANSPORT

After arrival, check the damper for transport damage and shortcomings. In case of any damage or shortcomings, immediately contact your supplier.

STORAGE

If the damper is not installed immediately:

- Remove any wrapping.
- Protect damper from dust and contamination.
- Do not expose the damper to the effects of weather - store the damper in a dry place.
- Do not store the unit below -20 °C or above 50 °C.

Please properly dispose of packaging material!

MAINTENANCE AND OPERATION

Constant volume dampers are designed with fully enclosed drive mechanism outside of the duct and as such do not require cleaning and regular maintenance.

However, activation mechanism should be inspected for proper operation on regular basis.

- Provide at least one annual check of the damper
- After each intervention, provide a systematic cleaning of dust
- Cleaning instruction: clean with a sponge, with water or a mild detergent
- Disinfection instruction: spray disinfectant (disinfectant may contain alcohol which is flammable, take precaution to avoid ignition)

It is not permitted to alter the dampers in any way nor perform any changes to their structure (except for the service procedures described in this manual) without the manufacturer's consent. Provide at least one annual check of the damper.

The functional test must be carried out in compliance with the basic maintenance principles of the European norms EN 13306, EN 15423 and EN15650.

COMMISSIONING

- Carefully unpack RKP-P - be careful of sharp edges and do not use excessive force for unpacking
- Inspect the product - check the volume flow damper for damage
- Installation of the volume flow damper - according to the installation instructions ([page 4.](#))
- Before commissioning - check the product functions



AIRFLOW REGULATION

Projektiranje, proizvodnja i održavanje opreme za klimatizaciju, ventilaciju i čiste prostore.
Design, production and service of Ventilation, Air-Conditioning and Cleanroom equipment.

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