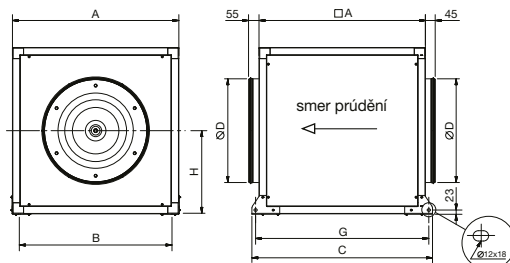


## CVAB/CVAT



## Technické parametre

## ■ Skriňa

je rámová konštrukcia s bočnými sendvičovými panelmi hrúbky 25 mm, ktoré sú k rámu skrine prichytené samoreznými skrutkami. Sendvičové panely sa skladajú z vonkajšieho aj vnútorného pozinkovaného plechu, vo vnútri sa zvukovo izolačnou výplňou zo sklenej minerálnej vlny. Pre prevádzanie revízií a čistenia je možné jednotlivé panely sňať. Ventilátor je uložený v skriní na odpružených prefiloch, aby sa obmedzil prenos vibrácií. Na skriní sú kruhové hrdlá s jednobritým tesnením. Pod skriňou je oceľový montážny rám. Jednotlivé panely sú zameniteľné za panel s výtláčnym hrdlom. Pri prevoze ventilátora je skriňa v pretlaku.

## ■ Obežné koleso

je radiálne so dozadu zahnutými lopatkami, je staticky a dynamicky vyvážené. Obežné koleso je vyrobené z hliníka (CVAB) alebo z ocelového plechu (CVAT).

## ■ Motor

Motory ventilátorov CVAB sú 1-fázové pre napätie 230 V, motory CVAT sú 3-fázové pre napätie 230/400 V alebo 3-fázové pre napätie 400 V. Motory sú vybavené tepelnou ochranou. Uzavretie bezúdržbové guľôčkové ložiská s tukovou náplňou po dobu životnosti. Krytie IP55, izolácia triedy F, pracovná teplota -40 až +60 °C.

| Veľkosť | A [mm] | B [mm] | C [mm] | D [mm] | G [mm] | H [mm] |
|---------|--------|--------|--------|--------|--------|--------|
| 250     | 500    | 440    | 578    | 250    | 534    | 250    |
| 315     | 500    | 440    | 578    | 315    | 534    | 250    |
| 355     | 600    | 540    | 678    | 355    | 634    | 300    |
| 400     | 600    | 540    | 678    | 400    | 634    | 300    |
| 450     | 700    | 620    | 779    | 450    | 734    | 350    |
| 500     | 800    | 720    | 879    | 500    | 834    | 400    |
| 560     | 1000   | 920    | 1079   | 560    | 1039   | 500    |
| 630     | 1000   | 920    | 1079   | 630    | 1039   | 500    |
| 710     | 1000   | 920    | 1079   | 710    | 1039   | 500    |
| 800     | 1000   | 920    | 1079   | 800    | 1039   | 500    |

## ■ Regulácia otáčok

zmenu napätia (CVAB) alebo frekvenčnými meničmi (CVAT).

## ■ Svorkovnica

je na plašti, pri CVAT 710 a 800 na motore.

## ■ Montáž

sa vykonáva iba v polohe zobrazenej na rozmerovom náčrtku s osou motora vodorovne. Umiestnenie výtláčného hrdla je možné zmeniť pri montáži zamenou panelu s hrdlom s niektorým bočným alebo horným plným panelom.

## ■ Pokyny

Ventilátory sú vhodné pre vzduchotechnické aplikácie, kde sa s výhodou uplatní nízka hlučnosť ventilátora, najmä na odvetranie reštaurácií, priemyselných kuchýň, športových hál, nemocníc, skladov a bazénov.

## ■ Príslušenstvo VZT

- VBM, KAA spojovacia manžeta (K 7.1)
- MSK škrtiace klapky (K 7.1)
- MAA, MTS tlmiče (K 7.1)
- MBE elektrické ohrievače (K 7.1)
- MBW vodné ohrievače (K 7.1)
- MRW HE doskový rekuperátor (K 7.1)
- MFL filtre do kruhového potrubia (K 7.1)
- PER vonkajšie samostatné klapky (K 7.1)
- CSC-N vonkajšia strieška (K 7.1)

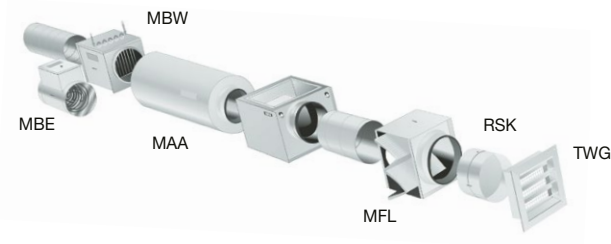
## ■ Príslušenstvo EL

- VFVB, VFTM frekvenčné meniče (K 8.1)
- VFVN frekvenčné meniče (K 8.1)
- REB, REV regulátory otáčok (K 8.1)
- DTS PSA tlakový spínač (K 8.2)
- RTR prestorový termostat (K 8.2)
- HYG, HIG hygrometry (K 8.2)
- TDP tlakové snímače (K 8.2)

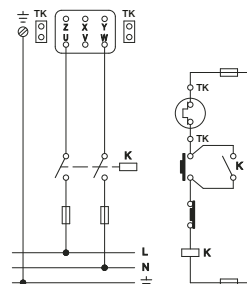
| Typ        | otáčky<br>[min <sup>-1</sup> ] | max. výkon<br>[W] | napätie<br>[V] | max. prúd<br>[A] | max. prietok<br>[m³/h] | akust. tlak**<br>[dB(A)] | hmot.<br>[kg] | regulácia          |
|------------|--------------------------------|-------------------|----------------|------------------|------------------------|--------------------------|---------------|--------------------|
| CVAB/4-250 | 1430                           | 125               | 230            | 0,6              | 1550                   | 49/50/34                 | 23            | REB 1, REV 1,5     |
| CVAB/4-315 | 1440                           | 188               | 230            | 0,8              | 2080                   | 53/54/38                 | 29            | REB 2,5, REV 1,5   |
| CVAB/4-355 | 1430                           | 344               | 230            | 1,5              | 3170                   | 59/58/43                 | 45            | REB 5, REV 3       |
| CVAB/4-400 | 1420                           | 590               | 230            | 2,8              | 4520                   | 63/61/47                 | 44            | REB 5, REV 5       |
| CVAB/4-450 | 1420                           | 1016              | 230            | 4,3              | 6620                   | 66/65/50                 | 70            | REB 10, REV 7      |
| CVAT/4-250 | 1420                           | 125               | 230/400        | 0,5/0,3*         | 1560                   | 48/50/33                 | 23            | VFVN-020-3L-1      |
| CVAT/4-315 | 1370                           | 170               | 230/400        | 0,7/0,4*         | 2110                   | 51/53/36                 | 28            | VFVN-020-3L-1      |
| CVAT/4-355 | 1450                           | 351               | 230/400        | 1,7/1,0*         | 3280                   | 59/58/39                 | 45            | VFVN-020-3L-3      |
| CVAT/4-400 | 1410                           | 562               | 230/400        | 2,1/1,2*         | 4540                   | 62/61/42                 | 44            | VFVN-020-3L-4      |
| CVAT/4-450 | 1430                           | 983               | 230/400        | 3,3/1,9*         | 6600                   | 65/65/46                 | 68            | VFVN-020-3L-5      |
| CVAT/4-500 | 1430                           | 1616              | 230/400        | 5,7/3,3*         | 8920                   | 71/67/54                 | 91            | VFVN-020-3L-6      |
| CVAT/4-560 | 1430                           | 2420              | 230/400        | 7,3/4,2*         | 11920                  | 73/70/56                 | 130           | VFVN-020-3L-8      |
| CVAT/4-710 | 1480                           | 5320              | 400            | 9,5              | 19505                  | 81/76/71                 | 213           | VFVN-020-3L-16-PTC |
| CVAT/6-560 | 930                            | 947               | 230/400        | 3,6/2,1*         | 9920                   | 63/61/51                 | 123           | VFVN-020-3L-5      |
| CVAT/6-630 | 940                            | 1823              | 230/400        | 6,1/3,5*         | 14210                  | 69/68/58                 | 135           | VFVN-020-3L-8      |
| CVAT/6-800 | 980                            | 2976              | 230/400        | 10,4/6,0*        | 18200                  | 72/69/65                 | 211           | VFVN-020-3L-9-PTC  |

\* 230 V / 400 V; \*\* akust. tlak meraný vo voľnom poli vo vzdialenosti 1,5 m v pracovnom bode 2 výkonovej charakteristiky (výtlak / do okolia / sania)

## Doplňujúce vyobrazenie



prívodná zostava



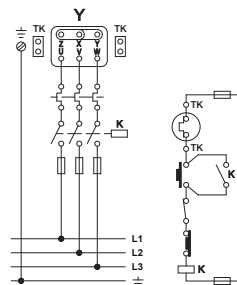
pripojenie ventilátora k sieti 1x230V



MRW-HE (high efficiency)  
– rekuperačné výmenníky tepla z Al,  
vhodné pre kruhové potrubie, viz K 3



RRW – regeneračné výmenníky  
s vysokou účinnosťou  
do štvorhranného potrubia



pripojenie ventilátora k sieti 3x400V

MR meracie kruhy a IRIS clony s meracími odbermi pre diferenciálny tlakový snímač sú v K 7.2.



CSC-N vonkajšia strieška (K 7.1)



IRIS clona (K 7.2)



MR merací kruh (K 7.2)  
s TDP-D pre meranie prietoku (K 8.2)

### Výkonové charakteristiky

- Q: prietok v m<sup>3</sup>/h
- p<sub>st</sub>: statický tlak v Pa
- P: príkon ve W
- SFP: merný výkon ventilátora ve W/m<sup>3</sup>/s (modrá krivka)
- charakteristiky merané v súlade so štandardmi ISO 5801 a AMCA 210-99

**EASY VENT**  
selekční program

možnosť návrhu cez online  
selekčný softvér Easyvent



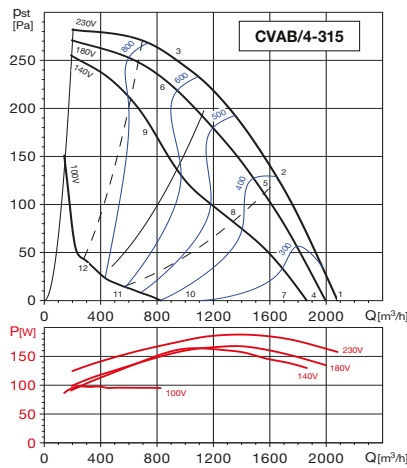
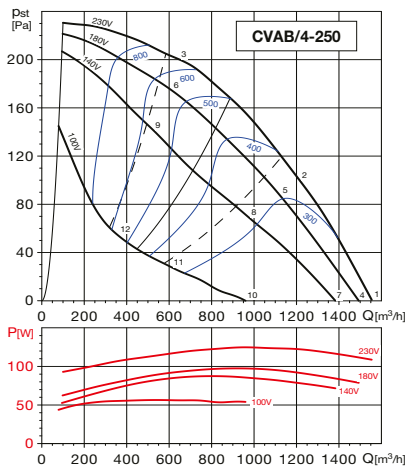
na otázku  
nevýbušné prevedenie

### Hlukové parametre

- akustický výkon v oktavových pásmach na sania, výtlaku a do okolia v dB(A)
- udávané hodnoty platia pre pracovné body na charakteristikách
- merané v koncentrácii s ISO 13347-3 2004

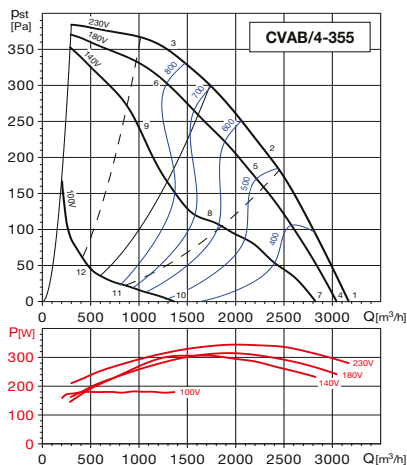
CVAB/CVAT

Charakteristiky

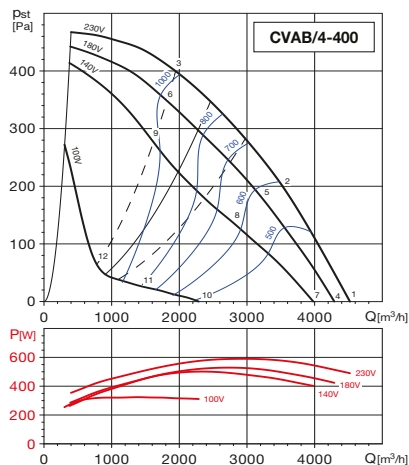


|    | prac. bod | 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 | L <sub>WA</sub> |
|----|-----------|----|-----|-----|-----|------|------|------|------|-----------------|
| 1  | sanie     | 34 | 62  | 59  | 60  | 60   | 57   | 60   | 46   | 68              |
|    | výtlak    | 29 | 50  | 54  | 57  | 60   | 62   | 61   | 46   | 67              |
|    | do okolia | 28 | 44  | 45  | 44  | 43   | 41   | 49   | 34   | 53              |
| 2  | sanie     | 32 | 61  | 56  | 57  | 56   | 55   | 54   | 43   | 65              |
|    | výtlak    | 29 | 47  | 50  | 55  | 58   | 60   | 56   | 43   | 64              |
|    | do okolia | 27 | 42  | 42  | 41  | 40   | 40   | 42   | 31   | 49              |
| 3  | sanie     | 31 | 61  | 54  | 57  | 55   | 54   | 50   | 42   | 64              |
|    | výtlak    | 29 | 48  | 49  | 65  | 58   | 59   | 53   | 42   | 67              |
|    | do okolia | 25 | 43  | 40  | 39  | 39   | 39   | 38   | 30   | 48              |
| 4  | sanie     | 33 | 61  | 58  | 59  | 59   | 56   | 59   | 45   | 67              |
|    | výtlak    | 28 | 49  | 53  | 56  | 59   | 61   | 60   | 45   | 66              |
|    | do okolia | 27 | 43  | 44  | 43  | 42   | 41   | 48   | 33   | 52              |
| 5  | sanie     | 31 | 59  | 55  | 56  | 55   | 53   | 52   | 42   | 64              |
|    | výtlak    | 28 | 46  | 49  | 54  | 57   | 58   | 54   | 42   | 62              |
|    | do okolia | 26 | 40  | 40  | 40  | 39   | 38   | 41   | 30   | 48              |
| 6  | sanie     | 30 | 59  | 53  | 55  | 54   | 53   | 48   | 41   | 63              |
|    | výtlak    | 27 | 47  | 47  | 64  | 57   | 58   | 52   | 41   | 66              |
|    | do okolia | 24 | 42  | 38  | 38  | 38   | 38   | 36   | 29   | 47              |
| 7  | sanie     | 31 | 60  | 57  | 58  | 57   | 54   | 57   | 43   | 65              |
|    | výtlak    | 26 | 47  | 52  | 55  | 58   | 60   | 59   | 43   | 65              |
|    | do okolia | 26 | 41  | 42  | 42  | 41   | 39   | 46   | 31   | 50              |
| 8  | sanie     | 28 | 57  | 52  | 53  | 52   | 51   | 50   | 39   | 61              |
|    | výtlak    | 25 | 43  | 46  | 51  | 54   | 56   | 52   | 39   | 60              |
|    | do okolia | 23 | 38  | 38  | 37  | 36   | 36   | 38   | 27   | 45              |
| 9  | sanie     | 28 | 57  | 51  | 53  | 51   | 50   | 46   | 38   | 60              |
|    | výtlak    | 25 | 44  | 45  | 61  | 55   | 56   | 49   | 39   | 63              |
|    | do okolia | 21 | 40  | 36  | 36  | 35   | 35   | 34   | 27   | 44              |
| 10 | sanie     | 23 | 52  | 49  | 50  | 49   | 46   | 49   | 36   | 57              |
|    | výtlak    | 18 | 39  | 44  | 47  | 50   | 52   | 51   | 35   | 57              |
|    | do okolia | 18 | 33  | 34  | 34  | 33   | 31   | 38   | 24   | 42              |
| 11 | sanie     | 18 | 47  | 42  | 44  | 42   | 41   | 40   | 30   | 51              |
|    | výtlak    | 15 | 33  | 36  | 41  | 44   | 46   | 42   | 29   | 50              |
|    | do okolia | 13 | 28  | 28  | 27  | 26   | 26   | 28   | 18   | 35              |
| 12 | sanie     | 18 | 47  | 41  | 43  | 42   | 40   | 36   | 29   | 51              |
|    | výtlak    | 15 | 35  | 35  | 51  | 45   | 46   | 39   | 29   | 54              |
|    | do okolia | 11 | 30  | 26  | 26  | 25   | 25   | 24   | 17   | 34              |

|    | prac. bod | 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 | L <sub>WA</sub> |
|----|-----------|----|-----|-----|-----|------|------|------|------|-----------------|
| 1  | sanie     | 37 | 66  | 63  | 64  | 63   | 60   | 63   | 50   | 71              |
|    | výtlak    | 32 | 54  | 58  | 61  | 64   | 66   | 65   | 49   | 71              |
|    | do okolia | 32 | 48  | 48  | 48  | 47   | 45   | 52   | 38   | 56              |
| 2  | sanie     | 36 | 65  | 60  | 61  | 60   | 59   | 57   | 47   | 69              |
|    | výtlak    | 33 | 51  | 54  | 59  | 62   | 63   | 59   | 47   | 68              |
|    | do okolia | 31 | 46  | 46  | 45  | 44   | 43   | 46   | 35   | 53              |
| 3  | sanie     | 35 | 65  | 58  | 60  | 59   | 58   | 54   | 46   | 68              |
|    | výtlak    | 33 | 52  | 53  | 69  | 62   | 63   | 57   | 46   | 71              |
|    | do okolia | 29 | 47  | 43  | 43  | 43   | 43   | 42   | 34   | 52              |
| 4  | sanie     | 36 | 65  | 62  | 63  | 63   | 59   | 62   | 49   | 71              |
|    | výtlak    | 32 | 53  | 57  | 60  | 63   | 65   | 64   | 48   | 70              |
|    | do okolia | 31 | 47  | 47  | 47  | 46   | 44   | 51   | 37   | 56              |
| 5  | sanie     | 35 | 63  | 59  | 60  | 59   | 57   | 56   | 46   | 68              |
|    | výtlak    | 32 | 50  | 53  | 58  | 60   | 62   | 58   | 45   | 66              |
|    | do okolia | 30 | 44  | 44  | 44  | 43   | 42   | 44   | 34   | 52              |
| 6  | sanie     | 34 | 63  | 57  | 59  | 58   | 56   | 52   | 45   | 67              |
|    | výtlak    | 31 | 51  | 51  | 68  | 61   | 62   | 55   | 45   | 70              |
|    | do okolia | 27 | 46  | 42  | 42  | 42   | 41   | 40   | 33   | 51              |
| 7  | sanie     | 35 | 64  | 60  | 61  | 61   | 58   | 61   | 47   | 69              |
|    | výtlak    | 30 | 51  | 55  | 58  | 62   | 64   | 62   | 47   | 68              |
|    | do okolia | 30 | 45  | 46  | 45  | 45   | 43   | 50   | 35   | 54              |
| 8  | sanie     | 32 | 60  | 56  | 57  | 56   | 54   | 53   | 43   | 64              |
|    | výtlak    | 29 | 46  | 49  | 54  | 57   | 59   | 55   | 42   | 63              |
|    | do okolia | 26 | 41  | 41  | 40  | 39   | 39   | 41   | 31   | 48              |
| 9  | sanie     | 31 | 60  | 54  | 56  | 55   | 53   | 49   | 42   | 64              |
|    | výtlak    | 28 | 48  | 48  | 64  | 58   | 59   | 52   | 42   | 66              |
|    | do okolia | 24 | 43  | 39  | 39  | 38   | 38   | 37   | 30   | 47              |
| 10 | sanie     | 18 | 46  | 43  | 44  | 44   | 41   | 44   | 30   | 52              |
|    | výtlak    | 13 | 34  | 38  | 41  | 44   | 46   | 45   | 30   | 51              |
|    | do okolia | 12 | 28  | 29  | 28  | 27   | 25   | 33   | 18   | 37              |
| 11 | sanie     | 13 | 41  | 37  | 38  | 37   | 35   | 34   | 24   | 46              |
|    | výtlak    | 10 | 28  | 31  | 35  | 38   | 40   | 36   | 23   | 44              |
|    | do okolia | 8  | 22  | 22  | 22  | 21   | 20   | 22   | 12   | 30              |
| 12 | sanie     | 13 | 42  | 36  | 38  | 37   | 35   | 31   | 24   | 46              |
|    | výtlak    | 10 | 30  | 30  | 47  | 40   | 41   | 34   | 24   | 49              |
|    | do okolia | 6  | 25  | 21  | 21  | 21   | 20   | 19   | 12   | 29              |

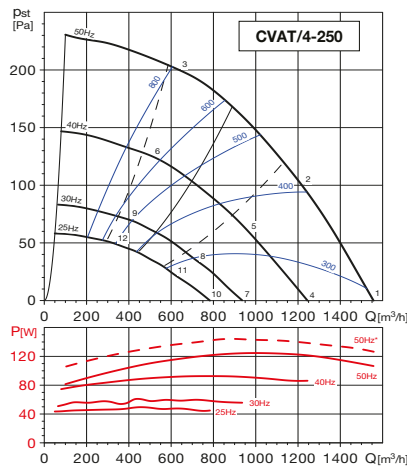
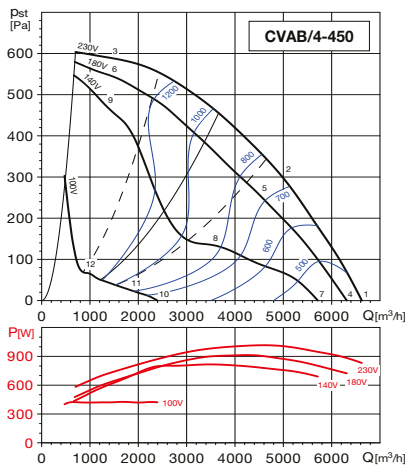


| prac. bod | 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 | L <sub>WA</sub> |
|-----------|----|-----|-----|-----|------|------|------|------|-----------------|
| 1 sanie   | 41 | 63  | 68  | 71  | 68   | 66   | 65   | 59   | 75              |
| 1 výtlak  | 37 | 53  | 60  | 63  | 73   | 71   | 66   | 58   | 76              |
| do okolia | 32 | 53  | 57  | 51  | 58   | 43   | 44   | 38   | 62              |
| 2 sanie   | 37 | 60  | 64  | 66  | 65   | 64   | 63   | 55   | 72              |
| 2 výtlak  | 36 | 50  | 57  | 64  | 70   | 69   | 65   | 54   | 74              |
| do okolia | 29 | 49  | 53  | 47  | 54   | 42   | 41   | 34   | 58              |
| 3 sanie   | 35 | 60  | 61  | 64  | 64   | 65   | 62   | 55   | 71              |
| 3 výtlak  | 30 | 50  | 53  | 60  | 70   | 69   | 64   | 53   | 73              |
| do okolia | 28 | 47  | 50  | 44  | 53   | 42   | 40   | 33   | 56              |
| 4 sanie   | 40 | 62  | 67  | 70  | 67   | 65   | 64   | 58   | 74              |
| 4 výtlak  | 36 | 52  | 59  | 62  | 72   | 70   | 65   | 57   | 75              |
| do okolia | 31 | 52  | 56  | 50  | 57   | 42   | 43   | 37   | 61              |
| 5 sanie   | 36 | 59  | 62  | 65  | 63   | 63   | 62   | 54   | 71              |
| 5 výtlak  | 34 | 48  | 55  | 63  | 69   | 67   | 63   | 52   | 72              |
| do okolia | 28 | 48  | 52  | 45  | 53   | 40   | 39   | 33   | 56              |
| 6 sanie   | 33 | 58  | 60  | 63  | 62   | 64   | 61   | 53   | 70              |
| 6 výtlak  | 29 | 49  | 52  | 59  | 68   | 68   | 63   | 52   | 72              |
| do okolia | 27 | 46  | 49  | 43  | 52   | 41   | 39   | 32   | 55              |
| 7 sanie   | 38 | 60  | 66  | 68  | 66   | 63   | 63   | 57   | 73              |
| 7 výtlak  | 34 | 50  | 57  | 61  | 71   | 68   | 64   | 56   | 74              |
| do okolia | 29 | 51  | 54  | 49  | 55   | 41   | 41   | 36   | 59              |
| 8 sanie   | 31 | 54  | 58  | 60  | 58   | 58   | 57   | 49   | 66              |
| 8 výtlak  | 29 | 43  | 50  | 58  | 64   | 62   | 58   | 48   | 68              |
| do okolia | 23 | 43  | 47  | 41  | 48   | 36   | 35   | 28   | 52              |
| 9 sanie   | 30 | 55  | 57  | 59  | 59   | 60   | 58   | 50   | 66              |
| 9 výtlak  | 25 | 45  | 49  | 55  | 65   | 64   | 59   | 49   | 69              |
| do okolia | 23 | 42  | 46  | 40  | 48   | 38   | 35   | 29   | 51              |
| 10 sanie  | 23 | 45  | 50  | 53  | 50   | 47   | 47   | 41   | 57              |
| 10 výtlak | 19 | 34  | 42  | 45  | 55   | 53   | 48   | 40   | 58              |
| do okolia | 14 | 35  | 39  | 33  | 40   | 25   | 25   | 20   | 44              |
| 11 sanie  | 14 | 37  | 41  | 44  | 42   | 41   | 40   | 32   | 49              |
| 11 výtlak | 13 | 27  | 34  | 41  | 47   | 46   | 42   | 31   | 51              |
| do okolia | 6  | 26  | 30  | 24  | 31   | 19   | 18   | 11   | 35              |
| 12 sanie  | 13 | 38  | 40  | 43  | 42   | 44   | 41   | 33   | 50              |
| 12 výtlak | 9  | 29  | 32  | 39  | 49   | 48   | 43   | 32   | 52              |
| do okolia | 7  | 26  | 29  | 23  | 32   | 21   | 19   | 12   | 35              |



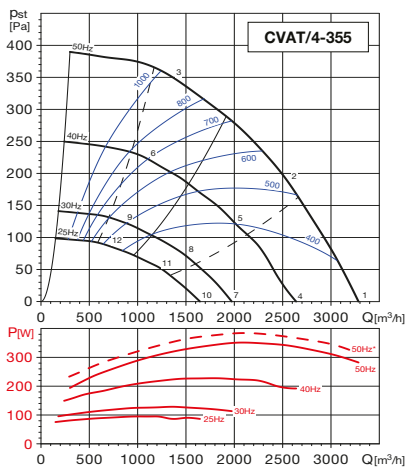
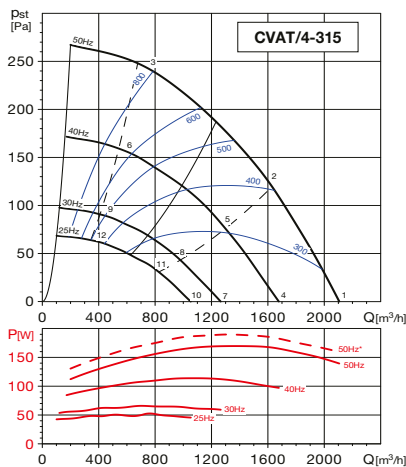
| prac. bod | 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 | L <sub>WA</sub> |
|-----------|----|-----|-----|-----|------|------|------|------|-----------------|
| sanie     | 44 | 66  | 71  | 74  | 72   | 69   | 69   | 63   | 79              |
| 1 výtlak  | 40 | 56  | 63  | 67  | 77   | 74   | 70   | 61   | 80              |
| do okolia | 35 | 56  | 60  | 54  | 61   | 47   | 47   | 42   | 65              |
| 2 sanie   | 41 | 64  | 67  | 70  | 68   | 68   | 66   | 59   | 75              |
| 2 výtlak  | 39 | 53  | 60  | 68  | 74   | 72   | 68   | 57   | 77              |
| do okolia | 33 | 53  | 56  | 50  | 57   | 45   | 44   | 37   | 61              |
| 3 sanie   | 38 | 63  | 65  | 67  | 67   | 68   | 66   | 58   | 74              |
| 3 výtlak  | 33 | 53  | 57  | 63  | 73   | 72   | 67   | 57   | 77              |
| do okolia | 31 | 50  | 54  | 48  | 56   | 46   | 43   | 37   | 59              |
| 4 sanie   | 43 | 65  | 70  | 73  | 71   | 68   | 68   | 62   | 78              |
| 4 výtlak  | 39 | 55  | 62  | 66  | 76   | 73   | 69   | 60   | 79              |
| do okolia | 34 | 55  | 59  | 53  | 60   | 46   | 46   | 41   | 64              |
| 5 sanie   | 39 | 62  | 66  | 68  | 67   | 66   | 65   | 57   | 74              |
| 5 výtlak  | 38 | 51  | 58  | 66  | 72   | 71   | 67   | 56   | 76              |
| do okolia | 31 | 51  | 55  | 49  | 56   | 44   | 43   | 36   | 60              |
| 6 sanie   | 36 | 62  | 63  | 66  | 66   | 67   | 64   | 57   | 73              |
| 6 výtlak  | 32 | 52  | 55  | 62  | 72   | 71   | 66   | 55   | 75              |
| do okolia | 30 | 49  | 52  | 46  | 55   | 44   | 42   | 35   | 58              |
| 7 sanie   | 42 | 63  | 69  | 72  | 69   | 66   | 66   | 60   | 76              |
| 7 výtlak  | 38 | 53  | 61  | 64  | 74   | 72   | 67   | 59   | 77              |
| do okolia | 33 | 54  | 58  | 52  | 59   | 44   | 44   | 39   | 62              |
| 8 sanie   | 36 | 59  | 63  | 65  | 64   | 63   | 62   | 54   | 71              |
| 8 výtlak  | 34 | 48  | 55  | 63  | 69   | 68   | 64   | 53   | 73              |
| do okolia | 28 | 48  | 52  | 46  | 53   | 41   | 40   | 33   | 57              |
| 9 sanie   | 34 | 59  | 61  | 63  | 63   | 64   | 62   | 54   | 70              |
| 9 výtlak  | 29 | 49  | 53  | 59  | 69   | 68   | 63   | 53   | 73              |
| do okolia | 27 | 46  | 50  | 44  | 52   | 42   | 39   | 33   | 55              |
| 10 sanie  | 30 | 52  | 57  | 60  | 57   | 54   | 54   | 48   | 64              |
| 10 výtlak | 26 | 41  | 49  | 52  | 62   | 60   | 55   | 47   | 65              |
| do okolia | 21 | 42  | 46  | 40  | 47   | 32   | 32   | 27   | 50              |
| 11 sanie  | 21 | 44  | 47  | 50  | 48   | 48   | 46   | 39   | 55              |
| 11 výtlak | 19 | 33  | 40  | 47  | 54   | 52   | 48   | 37   | 57              |
| do okolia | 13 | 33  | 36  | 30  | 37   | 25   | 24   | 17   | 41              |
| 12 sanie  | 19 | 44  | 45  | 48  | 48   | 49   | 46   | 39   | 55              |
| 12 výtlak | 14 | 34  | 37  | 44  | 54   | 53   | 48   | 37   | 57              |
| do okolia | 12 | 31  | 34  | 28  | 37   | 27   | 24   | 17   | 40              |

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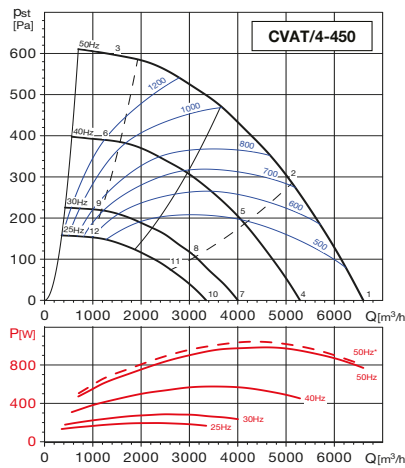
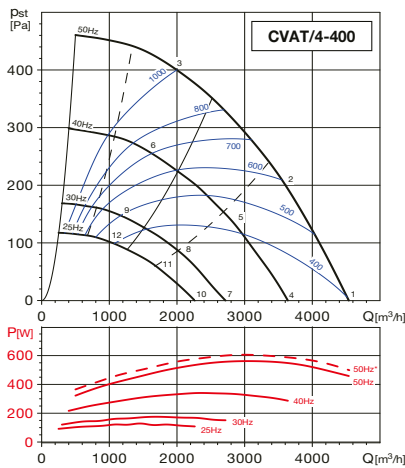


|    | prac. bod | 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 | L <sub>WA</sub> |
|----|-----------|----|-----|-----|-----|------|------|------|------|-----------------|
| 1  | sanie     | 48 | 70  | 75  | 78  | 75   | 73   | 72   | 66   | 82              |
|    | výtlak    | 44 | 60  | 67  | 70  | 80   | 78   | 73   | 65   | 83              |
|    | do okolia | 39 | 60  | 64  | 58  | 65   | 50   | 51   | 45   | 69              |
| 2  | sanie     | 44 | 67  | 71  | 73  | 72   | 71   | 70   | 62   | 79              |
|    | výtlak    | 43 | 57  | 64  | 71  | 77   | 76   | 72   | 61   | 81              |
|    | do okolia | 36 | 56  | 60  | 54  | 61   | 49   | 48   | 41   | 65              |
| 3  | sanie     | 42 | 67  | 68  | 71  | 71   | 72   | 69   | 62   | 78              |
|    | výtlak    | 37 | 57  | 60  | 67  | 77   | 76   | 71   | 60   | 80              |
|    | do okolia | 35 | 54  | 57  | 51  | 60   | 50   | 47   | 40   | 63              |
| 4  | sanie     | 47 | 69  | 74  | 77  | 74   | 72   | 71   | 65   | 81              |
|    | výtlak    | 43 | 59  | 66  | 69  | 79   | 77   | 72   | 64   | 82              |
|    | do okolia | 38 | 59  | 63  | 57  | 64   | 49   | 50   | 44   | 68              |
| 5  | sanie     | 42 | 65  | 69  | 72  | 70   | 69   | 68   | 60   | 77              |
|    | výtlak    | 41 | 55  | 62  | 69  | 76   | 74   | 70   | 59   | 79              |
|    | do okolia | 35 | 54  | 58  | 52  | 59   | 47   | 46   | 39   | 63              |
| 6  | sanie     | 40 | 65  | 67  | 70  | 69   | 71   | 68   | 60   | 77              |
|    | výtlak    | 36 | 56  | 59  | 66  | 76   | 75   | 70   | 59   | 79              |
|    | do okolia | 34 | 53  | 56  | 50  | 59   | 48   | 46   | 39   | 62              |
| 7  | sanie     | 45 | 67  | 72  | 75  | 72   | 69   | 69   | 63   | 79              |
|    | výtlak    | 41 | 56  | 64  | 67  | 77   | 75   | 70   | 62   | 80              |
|    | do okolia | 36 | 57  | 61  | 55  | 62   | 47   | 47   | 42   | 66              |
| 8  | sanie     | 36 | 58  | 62  | 65  | 63   | 63   | 61   | 54   | 70              |
|    | výtlak    | 34 | 48  | 55  | 62  | 69   | 67   | 63   | 52   | 72              |
|    | do okolia | 28 | 48  | 51  | 45  | 52   | 40   | 39   | 32   | 56              |
| 9  | sanie     | 37 | 62  | 64  | 66  | 66   | 67   | 65   | 57   | 73              |
|    | výtlak    | 32 | 52  | 56  | 62  | 72   | 71   | 66   | 56   | 76              |
|    | do okolia | 30 | 49  | 52  | 47  | 55   | 45   | 42   | 36   | 58              |
| 10 | sanie     | 27 | 48  | 54  | 56  | 54   | 51   | 51   | 45   | 61              |
|    | výtlak    | 23 | 38  | 46  | 49  | 59   | 57   | 52   | 44   | 62              |
|    | do okolia | 18 | 39  | 43  | 37  | 44   | 29   | 29   | 24   | 47              |
| 11 | sanie     | 30 | 53  | 56  | 59  | 57   | 57   | 55   | 48   | 64              |
|    | výtlak    | 28 | 42  | 49  | 57  | 63   | 61   | 57   | 46   | 66              |
|    | do okolia | 22 | 42  | 45  | 39  | 46   | 34   | 33   | 26   | 50              |
| 12 | sanie     | 43 | 68  | 70  | 73  | 72   | 74   | 71   | 63   | 80              |
|    | výtlak    | 39 | 59  | 62  | 69  | 78   | 78   | 73   | 62   | 82              |
|    | do okolia | 37 | 56  | 59  | 53  | 62   | 51   | 49   | 42   | 65              |

|    | prac. bod | 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 | L <sub>WA</sub> |
|----|-----------|----|-----|-----|-----|------|------|------|------|-----------------|
| 1  | sanie     | 32 | 53  | 60  | 61  | 61   | 57   | 58   | 51   | 67              |
|    | výtlak    | 40 | 49  | 53  | 57  | 59   | 62   | 55   | 46   | 65              |
|    | do okolia | 25 | 42  | 45  | 44  | 41   | 41   | 43   | 38   | 51              |
| 2  | sanie     | 31 | 54  | 58  | 59  | 58   | 55   | 52   | 47   | 64              |
|    | výtlak    | 39 | 45  | 51  | 57  | 56   | 59   | 52   | 43   | 63              |
|    | do okolia | 24 | 39  | 42  | 41  | 38   | 39   | 37   | 34   | 48              |
| 3  | sanie     | 32 | 53  | 58  | 60  | 57   | 53   | 50   | 44   | 64              |
|    | výtlak    | 46 | 48  | 50  | 55  | 55   | 57   | 50   | 42   | 62              |
|    | do okolia | 24 | 38  | 42  | 41  | 37   | 37   | 34   | 31   | 47              |
| 4  | sanie     | 27 | 48  | 55  | 56  | 56   | 52   | 53   | 46   | 62              |
|    | výtlak    | 35 | 44  | 49  | 52  | 54   | 57   | 51   | 41   | 61              |
|    | do okolia | 20 | 37  | 40  | 39  | 36   | 37   | 38   | 34   | 46              |
| 5  | sanie     | 26 | 49  | 53  | 54  | 53   | 50   | 47   | 42   | 60              |
|    | výtlak    | 34 | 40  | 46  | 52  | 51   | 54   | 47   | 39   | 58              |
|    | do okolia | 19 | 34  | 37  | 36  | 33   | 34   | 32   | 29   | 43              |
| 6  | sanie     | 27 | 48  | 53  | 55  | 52   | 48   | 45   | 39   | 59              |
|    | výtlak    | 41 | 43  | 45  | 50  | 50   | 52   | 46   | 37   | 57              |
|    | do okolia | 19 | 33  | 37  | 37  | 33   | 32   | 29   | 27   | 42              |
| 7  | sanie     | 21 | 42  | 49  | 50  | 50   | 46   | 47   | 40   | 56              |
|    | výtlak    | 29 | 38  | 42  | 46  | 48   | 51   | 44   | 35   | 54              |
|    | do okolia | 14 | 31  | 34  | 33  | 30   | 30   | 32   | 27   | 40              |
| 8  | sanie     | 20 | 43  | 47  | 48  | 47   | 44   | 41   | 36   | 54              |
|    | výtlak    | 28 | 34  | 40  | 46  | 45   | 48   | 41   | 32   | 52              |
|    | do okolia | 13 | 28  | 31  | 30  | 27   | 28   | 26   | 23   | 37              |
| 9  | sanie     | 21 | 42  | 47  | 49  | 46   | 42   | 39   | 33   | 53              |
|    | výtlak    | 35 | 37  | 39  | 44  | 44   | 46   | 39   | 31   | 51              |
|    | do okolia | 13 | 27  | 31  | 30  | 26   | 26   | 23   | 20   | 36              |
| 10 | sanie     | 17 | 38  | 45  | 46  | 46   | 42   | 43   | 36   | 52              |
|    | výtlak    | 25 | 34  | 39  | 42  | 44   | 47   | 41   | 31   | 51              |
|    | do okolia | 10 | 27  | 30  | 29  | 26   | 27   | 28   | 24   | 36              |
| 11 | sanie     | 16 | 39  | 43  | 44  | 43   | 40   | 37   | 32   | 50              |
|    | výtlak    | 24 | 31  | 36  | 42  | 41   | 44   | 37   | 29   | 48              |
|    | do okolia | 9  | 24  | 27  | 26  | 24   | 24   | 22   | 19   | 33              |
| 12 | sanie     | 17 | 38  | 43  | 45  | 42   | 38   | 35   | 29   | 49              |
|    | výtlak    | 31 | 33  | 35  | 40  | 40   | 42   | 36   | 27   | 47              |
|    | do okolia | 10 | 23  | 27  | 27  | 23   | 22   | 20   | 17   | 32              |

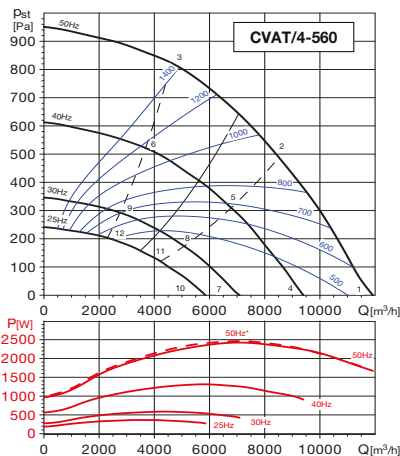
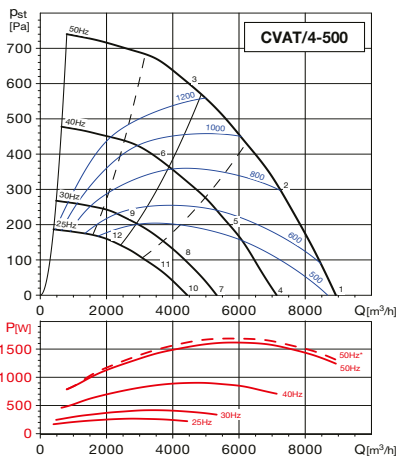


CVAB / CVAT



|    | prac. bod | 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 | L <sub>WA</sub> |
|----|-----------|----|-----|-----|-----|------|------|------|------|-----------------|
| 1  | sanie     | 41 | 70  | 71  | 73  | 72   | 69   | 67   | 63   | 79              |
|    | výtlak    | 40 | 54  | 63  | 66  | 77   | 74   | 69   | 62   | 80              |
|    | do okolia | 34 | 53  | 55  | 48  | 49   | 49   | 48   | 48   | 60              |
| 2  | sanie     | 37 | 67  | 68  | 69  | 68   | 66   | 64   | 58   | 75              |
|    | výtlak    | 34 | 51  | 59  | 63  | 73   | 71   | 66   | 57   | 76              |
|    | do okolia | 31 | 51  | 52  | 45  | 46   | 47   | 46   | 43   | 57              |
| 3  | sanie     | 38 | 63  | 65  | 66  | 66   | 65   | 62   | 57   | 73              |
|    | výtlak    | 36 | 52  | 56  | 60  | 71   | 69   | 64   | 54   | 74              |
|    | do okolia | 34 | 50  | 50  | 41  | 44   | 45   | 43   | 41   | 55              |
| 4  | sanie     | 36 | 65  | 67  | 69  | 67   | 64   | 62   | 58   | 74              |
|    | výtlak    | 35 | 49  | 58  | 61  | 72   | 70   | 64   | 57   | 75              |
|    | do okolia | 29 | 48  | 51  | 43  | 44   | 44   | 43   | 43   | 55              |
| 5  | sanie     | 32 | 62  | 63  | 65  | 63   | 62   | 59   | 53   | 70              |
|    | výtlak    | 30 | 46  | 54  | 58  | 68   | 66   | 61   | 52   | 71              |
|    | do okolia | 26 | 46  | 47  | 40  | 41   | 42   | 41   | 39   | 52              |
| 6  | sanie     | 33 | 58  | 60  | 62  | 61   | 60   | 57   | 52   | 68              |
|    | výtlak    | 31 | 47  | 51  | 55  | 66   | 64   | 59   | 49   | 69              |
|    | do okolia | 29 | 45  | 45  | 37  | 39   | 41   | 38   | 36   | 50              |
| 7  | sanie     | 30 | 59  | 60  | 62  | 61   | 58   | 56   | 52   | 68              |
|    | výtlak    | 29 | 43  | 52  | 55  | 66   | 63   | 58   | 51   | 69              |
|    | do okolia | 23 | 42  | 44  | 37  | 38   | 38   | 37   | 37   | 49              |
| 8  | sanie     | 26 | 56  | 57  | 59  | 57   | 56   | 53   | 47   | 64              |
|    | výtlak    | 24 | 40  | 48  | 52  | 62   | 60   | 55   | 46   | 65              |
|    | do okolia | 20 | 40  | 41  | 34  | 35   | 36   | 35   | 33   | 46              |
| 9  | sanie     | 27 | 52  | 54  | 55  | 55   | 54   | 51   | 46   | 62              |
|    | výtlak    | 25 | 41  | 45  | 49  | 60   | 58   | 53   | 43   | 63              |
|    | do okolia | 23 | 39  | 39  | 31  | 33   | 35   | 32   | 30   | 44              |
| 10 | sanie     | 26 | 55  | 57  | 59  | 57   | 54   | 52   | 48   | 64              |
|    | výtlak    | 25 | 39  | 48  | 51  | 62   | 60   | 54   | 47   | 65              |
|    | do okolia | 19 | 38  | 41  | 33  | 34   | 34   | 34   | 33   | 45              |
| 11 | sanie     | 22 | 53  | 53  | 55  | 53   | 52   | 49   | 43   | 61              |
|    | výtlak    | 20 | 37  | 44  | 48  | 58   | 56   | 51   | 42   | 61              |
|    | do okolia | 16 | 36  | 37  | 30  | 31   | 32   | 31   | 29   | 42              |
| 12 | sanie     | 23 | 48  | 50  | 52  | 51   | 50   | 47   | 42   | 58              |
|    | výtlak    | 21 | 38  | 41  | 45  | 56   | 54   | 49   | 40   | 59              |
|    | do okolia | 19 | 35  | 35  | 27  | 29   | 31   | 28   | 26   | 40              |

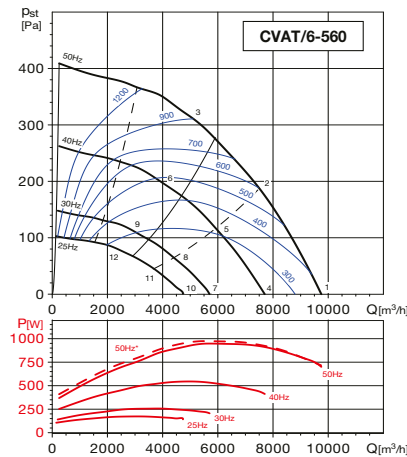
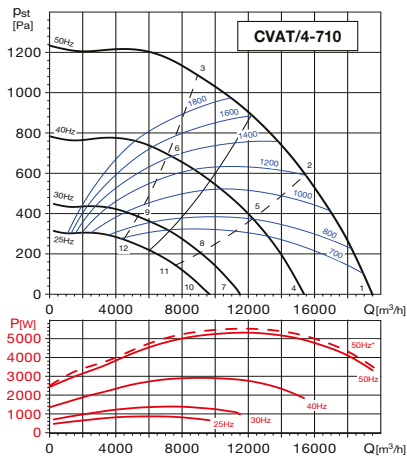
|    | prac. bod | 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 | L <sub>WA</sub> |
|----|-----------|----|-----|-----|-----|------|------|------|------|-----------------|
| 1  | sanie     | 45 | 73  | 75  | 77  | 75   | 73   | 71   | 67   | 83              |
|    | výtlak    | 44 | 58  | 67  | 70  | 81   | 78   | 73   | 66   | 83              |
|    | do okolia | 37 | 57  | 59  | 52  | 53   | 53   | 52   | 52   | 63              |
| 2  | sanie     | 41 | 71  | 72  | 73  | 72   | 70   | 68   | 62   | 79              |
|    | výtlak    | 38 | 55  | 63  | 67  | 77   | 75   | 70   | 61   | 80              |
|    | do okolia | 35 | 55  | 56  | 49  | 50   | 51   | 49   | 47   | 61              |
| 3  | sanie     | 42 | 67  | 69  | 70  | 70   | 69   | 66   | 61   | 77              |
|    | výtlak    | 40 | 56  | 60  | 64  | 75   | 73   | 68   | 58   | 78              |
|    | do okolia | 38 | 54  | 54  | 45  | 48   | 49   | 47   | 45   | 59              |
| 4  | sanie     | 40 | 69  | 71  | 73  | 71   | 68   | 66   | 63   | 78              |
|    | výtlak    | 39 | 53  | 62  | 65  | 76   | 74   | 68   | 61   | 79              |
|    | do okolia | 33 | 53  | 55  | 48  | 49   | 48   | 46   | 47   | 59              |
| 5  | sanie     | 37 | 67  | 67  | 69  | 67   | 66   | 63   | 58   | 75              |
|    | výtlak    | 34 | 51  | 59  | 62  | 73   | 71   | 65   | 56   | 76              |
|    | do okolia | 30 | 50  | 52  | 44  | 46   | 47   | 45   | 43   | 56              |
| 6  | sanie     | 37 | 63  | 64  | 66  | 65   | 65   | 61   | 56   | 72              |
|    | výtlak    | 35 | 52  | 56  | 60  | 70   | 68   | 63   | 54   | 73              |
|    | do okolia | 33 | 49  | 49  | 41  | 43   | 45   | 42   | 40   | 54              |
| 7  | sanie     | 34 | 63  | 65  | 67  | 65   | 62   | 60   | 56   | 72              |
|    | výtlak    | 33 | 47  | 56  | 59  | 70   | 68   | 62   | 55   | 73              |
|    | do okolia | 27 | 46  | 49  | 42  | 42   | 42   | 42   | 41   | 53              |
| 8  | sanie     | 31 | 61  | 61  | 63  | 61   | 60   | 57   | 52   | 69              |
|    | výtlak    | 28 | 45  | 53  | 56  | 67   | 64   | 59   | 50   | 69              |
|    | do okolia | 24 | 44  | 46  | 38  | 40   | 41   | 39   | 37   | 50              |
| 9  | sanie     | 31 | 57  | 58  | 60  | 59   | 59   | 55   | 50   | 66              |
|    | výtlak    | 29 | 46  | 50  | 53  | 64   | 62   | 57   | 48   | 67              |
|    | do okolia | 27 | 43  | 43  | 35  | 37   | 39   | 36   | 34   | 48              |
| 10 | sanie     | 31 | 59  | 61  | 63  | 61   | 58   | 56   | 53   | 68              |
|    | výtlak    | 29 | 44  | 52  | 55  | 66   | 64   | 58   | 51   | 69              |
|    | do okolia | 23 | 43  | 45  | 38  | 39   | 39   | 38   | 37   | 49              |
| 11 | sanie     | 27 | 57  | 58  | 59  | 57   | 56   | 54   | 48   | 65              |
|    | výtlak    | 24 | 41  | 49  | 52  | 63   | 61   | 56   | 46   | 66              |
|    | do okolia | 20 | 41  | 42  | 34  | 36   | 37   | 35   | 33   | 46              |
| 12 | sanie     | 27 | 53  | 54  | 56  | 55   | 55   | 51   | 46   | 62              |
|    | výtlak    | 25 | 42  | 46  | 50  | 60   | 59   | 53   | 44   | 63              |
|    | do okolia | 23 | 39  | 39  | 31  | 33   | 35   | 32   | 30   | 44              |



|    | prac. bod | 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 | L <sub>WA</sub> |
|----|-----------|----|-----|-----|-----|------|------|------|------|-----------------|
| 1  | sanie     | 51 | 74  | 75  | 80  | 76   | 76   | 75   | 70   | 84              |
|    | výtlak    | 53 | 66  | 74  | 80  | 87   | 81   | 79   | 71   | 89              |
|    | do okolia | 45 | 61  | 66  | 60  | 64   | 58   | 66   | 61   | 72              |
| 2  | sanie     | 49 | 72  | 73  | 75  | 73   | 74   | 71   | 66   | 81              |
|    | výtlak    | 50 | 63  | 71  | 76  | 83   | 78   | 74   | 67   | 85              |
|    | do okolia | 43 | 58  | 62  | 56  | 61   | 57   | 62   | 58   | 68              |
| 3  | sanie     | 45 | 70  | 69  | 71  | 71   | 72   | 68   | 65   | 79              |
|    | výtlak    | 50 | 61  | 67  | 72  | 79   | 75   | 72   | 66   | 82              |
|    | do okolia | 40 | 54  | 58  | 53  | 58   | 55   | 60   | 56   | 65              |
| 4  | sanie     | 46 | 69  | 70  | 75  | 71   | 71   | 71   | 65   | 80              |
|    | výtlak    | 49 | 61  | 69  | 75  | 82   | 76   | 74   | 66   | 84              |
|    | do okolia | 40 | 56  | 61  | 55  | 59   | 54   | 61   | 56   | 67              |
| 5  | sanie     | 44 | 67  | 68  | 71  | 68   | 69   | 66   | 61   | 76              |
|    | výtlak    | 46 | 58  | 66  | 71  | 78   | 73   | 69   | 62   | 80              |
|    | do okolia | 38 | 53  | 57  | 51  | 56   | 52   | 58   | 53   | 63              |
| 6  | sanie     | 40 | 65  | 64  | 67  | 67   | 67   | 64   | 60   | 74              |
|    | výtlak    | 45 | 56  | 62  | 67  | 74   | 70   | 67   | 61   | 77              |
|    | do okolia | 35 | 49  | 53  | 48  | 53   | 50   | 55   | 51   | 60              |
| 7  | sanie     | 40 | 63  | 64  | 69  | 65   | 65   | 64   | 59   | 73              |
|    | výtlak    | 42 | 55  | 63  | 69  | 75   | 70   | 68   | 60   | 78              |
|    | do okolia | 34 | 50  | 55  | 49  | 52   | 47   | 55   | 50   | 61              |
| 8  | sanie     | 38 | 60  | 61  | 64  | 62   | 63   | 60   | 55   | 70              |
|    | výtlak    | 39 | 51  | 60  | 65  | 72   | 67   | 62   | 55   | 74              |
|    | do okolia | 32 | 47  | 51  | 45  | 50   | 45   | 51   | 47   | 57              |
| 9  | sanie     | 34 | 59  | 58  | 60  | 60   | 61   | 57   | 54   | 67              |
|    | výtlak    | 39 | 50  | 56  | 61  | 68   | 64   | 60   | 55   | 71              |
|    | do okolia | 29 | 43  | 47  | 42  | 47   | 44   | 49   | 45   | 54              |
| 10 | sanie     | 36 | 59  | 60  | 65  | 61   | 61   | 60   | 55   | 69              |
|    | výtlak    | 38 | 51  | 59  | 65  | 71   | 66   | 64   | 56   | 74              |
|    | do okolia | 30 | 46  | 51  | 45  | 49   | 43   | 51   | 46   | 57              |
| 11 | sanie     | 34 | 56  | 57  | 60  | 58   | 59   | 56   | 51   | 66              |
|    | výtlak    | 35 | 47  | 56  | 61  | 68   | 63   | 59   | 52   | 70              |
|    | do okolia | 28 | 43  | 47  | 41  | 46   | 42   | 47   | 43   | 53              |
| 12 | sanie     | 30 | 55  | 54  | 56  | 56   | 57   | 53   | 50   | 64              |
|    | výtlak    | 35 | 46  | 52  | 57  | 64   | 60   | 57   | 51   | 67              |
|    | do okolia | 25 | 39  | 43  | 38  | 43   | 40   | 45   | 41   | 50              |

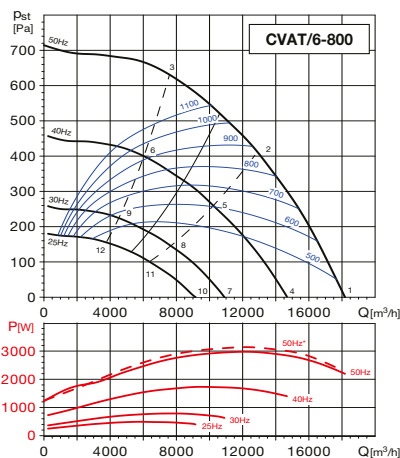
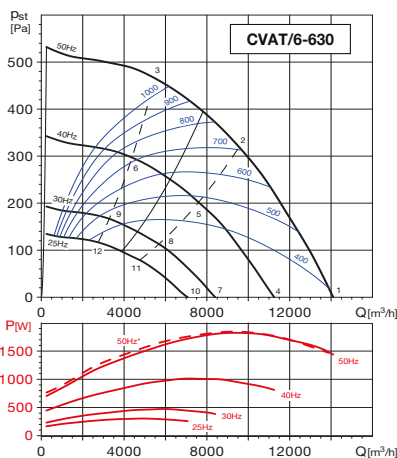
|    | prac. bod | 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 | L <sub>WA</sub> |
|----|-----------|----|-----|-----|-----|------|------|------|------|-----------------|
| 1  | sanie     | 51 | 75  | 79  | 84  | 80   | 80   | 81   | 73   | 89              |
|    | výtlak    | 53 | 67  | 76  | 86  | 92   | 85   | 84   | 73   | 94              |
|    | do okolia | 42 | 70  | 69  | 70  | 67   | 70   | 72   | 61   | 78              |
| 2  | sanie     | 50 | 73  | 76  | 78  | 77   | 79   | 75   | 70   | 85              |
|    | výtlak    | 51 | 61  | 70  | 78  | 85   | 80   | 75   | 69   | 87              |
|    | do okolia | 37 | 62  | 60  | 61  | 60   | 66   | 63   | 56   | 70              |
| 3  | sanie     | 53 | 77  | 76  | 79  | 78   | 80   | 79   | 73   | 86              |
|    | výtlak    | 61 | 71  | 70  | 78  | 84   | 79   | 74   | 68   | 87              |
|    | do okolia | 43 | 70  | 63  | 61  | 60   | 65   | 62   | 55   | 73              |
| 4  | sanie     | 46 | 70  | 75  | 79  | 76   | 75   | 76   | 68   | 84              |
|    | výtlak    | 49 | 62  | 72  | 81  | 87   | 81   | 79   | 68   | 89              |
|    | do okolia | 37 | 65  | 64  | 65  | 62   | 65   | 67   | 56   | 73              |
| 5  | sanie     | 45 | 68  | 71  | 73  | 72   | 74   | 71   | 65   | 80              |
|    | výtlak    | 46 | 56  | 65  | 74  | 80   | 75   | 70   | 64   | 82              |
|    | do okolia | 32 | 57  | 55  | 56  | 55   | 61   | 58   | 51   | 66              |
| 6  | sanie     | 48 | 72  | 71  | 74  | 73   | 76   | 74   | 68   | 82              |
|    | výtlak    | 56 | 66  | 65  | 73  | 79   | 74   | 69   | 63   | 82              |
|    | do okolia | 38 | 65  | 58  | 57  | 55   | 61   | 57   | 50   | 68              |
| 7  | sanie     | 40 | 64  | 68  | 73  | 69   | 69   | 70   | 62   | 77              |
|    | výtlak    | 42 | 56  | 65  | 75  | 81   | 74   | 73   | 62   | 83              |
|    | do okolia | 31 | 59  | 58  | 58  | 56   | 59   | 61   | 50   | 67              |
| 8  | sanie     | 39 | 62  | 65  | 67  | 66   | 68   | 64   | 59   | 74              |
|    | výtlak    | 40 | 50  | 59  | 67  | 74   | 69   | 64   | 58   | 76              |
|    | do okolia | 26 | 51  | 49  | 50  | 49   | 55   | 52   | 45   | 59              |
| 9  | sanie     | 42 | 66  | 65  | 68  | 67   | 69   | 68   | 62   | 75              |
|    | výtlak    | 50 | 60  | 59  | 67  | 73   | 68   | 63   | 57   | 76              |
|    | do okolia | 32 | 59  | 52  | 50  | 49   | 54   | 51   | 44   | 62              |
| 10 | sanie     | 36 | 60  | 64  | 69  | 65   | 65   | 66   | 58   | 73              |
|    | výtlak    | 38 | 52  | 61  | 71  | 77   | 70   | 69   | 58   | 79              |
|    | do okolia | 27 | 55  | 54  | 54  | 52   | 55   | 57   | 46   | 63              |
| 11 | sanie     | 35 | 58  | 61  | 63  | 62   | 64   | 60   | 55   | 70              |
|    | výtlak    | 36 | 46  | 55  | 64  | 70   | 65   | 60   | 54   | 72              |
|    | do okolia | 22 | 47  | 45  | 46  | 45   | 51   | 48   | 41   | 56              |
| 12 | sanie     | 38 | 62  | 61  | 64  | 63   | 65   | 64   | 58   | 71              |
|    | výtlak    | 46 | 56  | 55  | 63  | 69   | 64   | 59   | 53   | 72              |
|    | do okolia | 28 | 55  | 48  | 46  | 45   | 50   | 47   | 40   | 58              |

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|    | prac. bod | 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 | L <sub>WA</sub> |
|----|-----------|----|-----|-----|-----|------|------|------|------|-----------------|
| 1  | sanie     | 56 | 74  | 84  | 81  | 85   | 94   | 86   | 79   | 95              |
|    | výtlak    | 57 | 71  | 82  | 92  | 95   | 96   | 91   | 80   | 100             |
|    | do okolia | 55 | 79  | 81  | 79  | 76   | 82   | 74   | 65   | 87              |
| 2  | sanie     | 56 | 77  | 84  | 81  | 84   | 85   | 82   | 77   | 91              |
|    | výtlak    | 54 | 69  | 80  | 89  | 92   | 89   | 84   | 78   | 95              |
|    | do okolia | 51 | 79  | 80  | 79  | 75   | 75   | 71   | 64   | 85              |
| 3  | sanie     | 58 | 78  | 83  | 80  | 83   | 85   | 85   | 79   | 91              |
|    | výtlak    | 60 | 70  | 79  | 85  | 89   | 86   | 83   | 78   | 93              |
|    | do okolia | 53 | 78  | 77  | 76  | 73   | 73   | 70   | 64   | 83              |
| 4  | sanie     | 51 | 69  | 79  | 76  | 80   | 89   | 81   | 74   | 90              |
|    | výtlak    | 52 | 66  | 77  | 87  | 90   | 91   | 86   | 75   | 95              |
|    | do okolia | 50 | 74  | 76  | 75  | 71   | 77   | 69   | 60   | 82              |
| 5  | sanie     | 50 | 71  | 78  | 75  | 78   | 80   | 77   | 72   | 85              |
|    | výtlak    | 49 | 64  | 74  | 83  | 86   | 83   | 78   | 73   | 90              |
|    | do okolia | 45 | 74  | 75  | 73  | 69   | 69   | 65   | 58   | 80              |
| 6  | sanie     | 53 | 72  | 77  | 74  | 77   | 79   | 79   | 73   | 85              |
|    | výtlak    | 54 | 65  | 73  | 79  | 83   | 80   | 77   | 72   | 87              |
|    | do okolia | 48 | 72  | 71  | 70  | 67   | 67   | 65   | 58   | 77              |
| 7  | sanie     | 45 | 63  | 73  | 70  | 74   | 82   | 75   | 68   | 84              |
|    | výtlak    | 45 | 60  | 71  | 80  | 84   | 85   | 80   | 69   | 89              |
|    | do okolia | 44 | 68  | 70  | 68  | 65   | 71   | 63   | 54   | 76              |
| 8  | sanie     | 44 | 65  | 72  | 69  | 72   | 73   | 70   | 65   | 79              |
|    | výtlak    | 42 | 57  | 68  | 76  | 80   | 77   | 72   | 66   | 83              |
|    | do okolia | 39 | 67  | 68  | 67  | 63   | 63   | 59   | 52   | 73              |
| 9  | sanie     | 46 | 66  | 71  | 68  | 71   | 73   | 73   | 67   | 79              |
|    | výtlak    | 48 | 58  | 67  | 73  | 77   | 74   | 71   | 66   | 81              |
|    | do okolia | 41 | 66  | 65  | 64  | 61   | 61   | 58   | 52   | 71              |
| 10 | sanie     | 41 | 59  | 69  | 66  | 70   | 79   | 71   | 64   | 80              |
|    | výtlak    | 42 | 56  | 67  | 77  | 80   | 81   | 76   | 65   | 85              |
|    | do okolia | 40 | 64  | 66  | 65  | 61   | 67   | 59   | 50   | 72              |
| 11 | sanie     | 40 | 61  | 68  | 65  | 68   | 69   | 67   | 62   | 75              |
|    | výtlak    | 38 | 53  | 64  | 73  | 76   | 73   | 68   | 62   | 80              |
|    | do okolia | 35 | 63  | 65  | 63  | 59   | 59   | 55   | 48   | 70              |
| 12 | sanie     | 42 | 62  | 67  | 64  | 67   | 69   | 69   | 63   | 75              |
|    | výtlak    | 44 | 55  | 63  | 69  | 73   | 70   | 67   | 62   | 77              |
|    | do okolia | 37 | 62  | 61  | 60  | 57   | 57   | 54   | 48   | 67              |

|    | prac. bod | 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 | L <sub>WA</sub> |
|----|-----------|----|-----|-----|-----|------|------|------|------|-----------------|
| 1  | sanie     | 47 | 75  | 71  | 73  | 70   | 72   | 68   | 62   | 80              |
|    | výtlak    | 48 | 63  | 69  | 76  | 82   | 76   | 70   | 63   | 84              |
|    | do okolia | 39 | 66  | 61  | 66  | 54   | 53   | 48   | 46   | 70              |
| 2  | sanie     | 42 | 72  | 67  | 68  | 66   | 66   | 65   | 57   | 76              |
|    | výtlak    | 43 | 55  | 64  | 70  | 74   | 70   | 66   | 60   | 77              |
|    | do okolia | 33 | 63  | 55  | 60  | 50   | 48   | 43   | 41   | 66              |
| 3  | sanie     | 53 | 70  | 67  | 69  | 66   | 67   | 68   | 61   | 76              |
|    | výtlak    | 58 | 58  | 66  | 70  | 75   | 69   | 65   | 59   | 78              |
|    | do okolia | 45 | 61  | 59  | 62  | 50   | 46   | 42   | 39   | 66              |
| 4  | sanie     | 42 | 70  | 66  | 68  | 65   | 67   | 63   | 57   | 75              |
|    | výtlak    | 43 | 58  | 64  | 71  | 77   | 71   | 65   | 58   | 79              |
|    | do okolia | 34 | 61  | 56  | 61  | 50   | 48   | 44   | 41   | 65              |
| 5  | sanie     | 47 | 76  | 72  | 73  | 70   | 71   | 70   | 62   | 81              |
|    | výtlak    | 47 | 60  | 69  | 75  | 79   | 74   | 71   | 65   | 82              |
|    | do okolia | 37 | 68  | 60  | 65  | 54   | 52   | 48   | 45   | 70              |
| 6  | sanie     | 57 | 74  | 71  | 73  | 70   | 71   | 72   | 65   | 80              |
|    | výtlak    | 62 | 63  | 70  | 75  | 79   | 73   | 69   | 63   | 82              |
|    | do okolia | 49 | 65  | 64  | 66  | 55   | 50   | 46   | 43   | 70              |
| 7  | sanie     | 36 | 64  | 60  | 62  | 59   | 61   | 57   | 51   | 69              |
|    | výtlak    | 37 | 52  | 58  | 65  | 71   | 65   | 59   | 52   | 73              |
|    | do okolia | 28 | 55  | 50  | 55  | 43   | 41   | 37   | 35   | 59              |
| 8  | sanie     | 40 | 70  | 66  | 67  | 64   | 65   | 64   | 56   | 74              |
|    | výtlak    | 41 | 53  | 63  | 68  | 72   | 68   | 65   | 58   | 76              |
|    | do okolia | 31 | 61  | 54  | 59  | 48   | 46   | 41   | 39   | 64              |
| 9  | sanie     | 51 | 68  | 65  | 67  | 64   | 65   | 65   | 59   | 74              |
|    | výtlak    | 56 | 56  | 64  | 68  | 73   | 67   | 63   | 57   | 76              |
|    | do okolia | 43 | 59  | 57  | 60  | 48   | 44   | 40   | 37   | 64              |
| 10 | sanie     | 32 | 60  | 56  | 58  | 55   | 57   | 53   | 47   | 65              |
|    | výtlak    | 33 | 48  | 54  | 61  | 67   | 61   | 55   | 48   | 69              |
|    | do okolia | 24 | 51  | 46  | 51  | 40   | 38   | 34   | 31   | 55              |
| 11 | sanie     | 37 | 66  | 62  | 63  | 60   | 61   | 60   | 52   | 70              |
|    | výtlak    | 37 | 50  | 59  | 64  | 68   | 64   | 61   | 55   | 72              |
|    | do okolia | 27 | 57  | 50  | 55  | 44   | 42   | 38   | 35   | 60              |
| 12 | sanie     | 47 | 64  | 61  | 63  | 60   | 61   | 62   | 55   | 70              |
|    | výtlak    | 52 | 52  | 60  | 64  | 69   | 63   | 59   | 53   | 72              |
|    | do okolia | 39 | 55  | 54  | 56  | 45   | 40   | 36   | 33   | 60              |



|    | prac. bod | 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 | L <sub>wa</sub> |
|----|-----------|----|-----|-----|-----|------|------|------|------|-----------------|
| 1  | sanie     | 53 | 78  | 75  | 74  | 74   | 76   | 71   | 67   | 83              |
|    | výtlak    | 52 | 66  | 71  | 83  | 85   | 80   | 72   | 66   | 88              |
|    | do okolia | 49 | 73  | 67  | 61  | 57   | 59   | 57   | 58   | 75              |
| 2  | sanie     | 49 | 80  | 72  | 71  | 72   | 72   | 66   | 63   | 82              |
|    | výtlak    | 49 | 63  | 67  | 78  | 80   | 75   | 69   | 62   | 83              |
|    | do okolia | 44 | 71  | 65  | 58  | 54   | 57   | 52   | 55   | 72              |
| 3  | sanie     | 63 | 73  | 72  | 71  | 72   | 71   | 67   | 61   | 79              |
|    | výtlak    | 63 | 62  | 67  | 77  | 78   | 73   | 67   | 61   | 82              |
|    | do okolia | 54 | 65  | 62  | 57  | 53   | 53   | 49   | 53   | 68              |
| 4  | sanie     | 48 | 73  | 70  | 69  | 69   | 71   | 66   | 62   | 78              |
|    | výtlak    | 48 | 62  | 67  | 78  | 80   | 75   | 68   | 61   | 83              |
|    | do okolia | 44 | 68  | 62  | 56  | 52   | 54   | 53   | 54   | 70              |
| 5  | sanie     | 53 | 84  | 76  | 75  | 76   | 76   | 70   | 67   | 86              |
|    | výtlak    | 54 | 67  | 71  | 83  | 84   | 79   | 73   | 67   | 88              |
|    | do okolia | 48 | 75  | 69  | 62  | 58   | 61   | 56   | 60   | 77              |
| 6  | sanie     | 67 | 77  | 76  | 75  | 76   | 75   | 71   | 65   | 83              |
|    | výtlak    | 67 | 66  | 71  | 81  | 82   | 77   | 71   | 65   | 86              |
|    | do okolia | 58 | 69  | 66  | 61  | 57   | 57   | 53   | 57   | 72              |
| 7  | sanie     | 42 | 67  | 63  | 62  | 63   | 64   | 60   | 56   | 72              |
|    | výtlak    | 41 | 55  | 60  | 72  | 74   | 69   | 61   | 55   | 77              |
|    | do okolia | 38 | 62  | 56  | 50  | 46   | 48   | 46   | 47   | 64              |
| 8  | sanie     | 47 | 78  | 70  | 69  | 70   | 70   | 64   | 61   | 80              |
|    | výtlak    | 48 | 61  | 65  | 77  | 78   | 73   | 67   | 60   | 81              |
|    | do okolia | 42 | 69  | 63  | 56  | 52   | 55   | 50   | 53   | 71              |
| 9  | sanie     | 61 | 71  | 70  | 69  | 70   | 68   | 65   | 59   | 77              |
|    | výtlak    | 61 | 60  | 65  | 74  | 76   | 70   | 65   | 59   | 79              |
|    | do okolia | 52 | 62  | 60  | 54  | 51   | 51   | 47   | 51   | 66              |
| 10 | sanie     | 38 | 63  | 60  | 58  | 59   | 61   | 56   | 52   | 68              |
|    | výtlak    | 37 | 51  | 56  | 68  | 70   | 65   | 57   | 51   | 73              |
|    | do okolia | 34 | 58  | 52  | 46  | 42   | 44   | 42   | 43   | 60              |
| 11 | sanie     | 43 | 74  | 66  | 65  | 66   | 66   | 60   | 57   | 76              |
|    | výtlak    | 44 | 57  | 61  | 73  | 74   | 69   | 63   | 56   | 78              |
|    | do okolia | 38 | 65  | 59  | 52  | 48   | 51   | 46   | 49   | 67              |
| 12 | sanie     | 57 | 67  | 66  | 65  | 66   | 64   | 61   | 55   | 73              |
|    | výtlak    | 57 | 56  | 61  | 71  | 72   | 67   | 61   | 55   | 75              |
|    | do okolia | 48 | 59  | 56  | 50  | 47   | 47   | 43   | 47   | 62              |

|    | prac. bod | 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 | L <sub>wa</sub> |
|----|-----------|----|-----|-----|-----|------|------|------|------|-----------------|
| 1  | sanie     | 54 | 75  | 78  | 74  | 79   | 80   | 72   | 67   | 85              |
|    | výtlak    | 54 | 68  | 72  | 85  | 85   | 82   | 73   | 66   | 89              |
|    | do okolia | 55 | 77  | 76  | 72  | 71   | 70   | 65   | 59   | 81              |
| 2  | sanie     | 54 | 75  | 78  | 74  | 79   | 73   | 70   | 68   | 84              |
|    | výtlak    | 53 | 66  | 70  | 84  | 82   | 77   | 71   | 65   | 87              |
|    | do okolia | 52 | 77  | 74  | 70  | 67   | 64   | 61   | 60   | 80              |
| 3  | sanie     | 62 | 75  | 75  | 75  | 81   | 76   | 74   | 68   | 85              |
|    | výtlak    | 61 | 64  | 68  | 79  | 78   | 73   | 68   | 64   | 82              |
|    | do okolia | 64 | 76  | 72  | 67  | 64   | 62   | 58   | 54   | 78              |
| 4  | sanie     | 49 | 70  | 73  | 69  | 74   | 75   | 67   | 62   | 80              |
|    | výtlak    | 49 | 64  | 68  | 80  | 80   | 77   | 68   | 61   | 84              |
|    | do okolia | 50 | 72  | 71  | 67  | 66   | 65   | 61   | 54   | 76              |
| 5  | sanie     | 57 | 78  | 81  | 78  | 82   | 77   | 73   | 71   | 87              |
|    | výtlak    | 56 | 69  | 73  | 87  | 85   | 80   | 74   | 68   | 90              |
|    | do okolia | 55 | 80  | 77  | 73  | 70   | 67   | 64   | 63   | 83              |
| 6  | sanie     | 65 | 78  | 78  | 79  | 84   | 79   | 77   | 71   | 88              |
|    | výtlak    | 64 | 67  | 71  | 82  | 81   | 76   | 71   | 67   | 85              |
|    | do okolia | 67 | 79  | 75  | 70  | 67   | 65   | 61   | 57   | 81              |
| 7  | sanie     | 43 | 64  | 67  | 63  | 67   | 69   | 61   | 56   | 74              |
|    | výtlak    | 43 | 57  | 61  | 74  | 74   | 71   | 62   | 55   | 78              |
|    | do okolia | 44 | 66  | 65  | 61  | 59   | 59   | 54   | 48   | 70              |
| 8  | sanie     | 51 | 72  | 74  | 71  | 75   | 70   | 67   | 65   | 80              |
|    | výtlak    | 49 | 63  | 67  | 81  | 79   | 74   | 67   | 62   | 84              |
|    | do okolia | 49 | 73  | 71  | 67  | 64   | 61   | 58   | 56   | 77              |
| 9  | sanie     | 59 | 71  | 72  | 72  | 78   | 72   | 71   | 65   | 82              |
|    | výtlak    | 58 | 61  | 65  | 75  | 74   | 70   | 65   | 61   | 79              |
|    | do okolia | 61 | 72  | 69  | 64  | 61   | 59   | 55   | 51   | 75              |
| 10 | sanie     | 39 | 60  | 63  | 59  | 63   | 65   | 57   | 52   | 70              |
|    | výtlak    | 39 | 53  | 57  | 70  | 70   | 67   | 58   | 51   | 74              |
|    | do okolia | 40 | 62  | 61  | 57  | 56   | 55   | 50   | 44   | 66              |
| 11 | sanie     | 47 | 68  | 71  | 67  | 72   | 66   | 63   | 61   | 77              |
|    | výtlak    | 46 | 59  | 63  | 77  | 75   | 70   | 64   | 58   | 80              |
|    | do okolia | 45 | 70  | 67  | 63  | 60   | 57   | 54   | 53   | 73              |
| 12 | sanie     | 55 | 67  | 68  | 68  | 74   | 68   | 67   | 61   | 78              |
|    | výtlak    | 54 | 57  | 61  | 71  | 71   | 66   | 61   | 57   | 75              |
|    | do okolia | 57 | 68  | 65  | 60  | 57   | 55   | 51   | 47   | 71              |