

Serijska **KA NRVU BVU**

Izvedba **Stacked unit**

Izvedba **Zunanja enota**

**KA HSO-5-3-D-R-50F-TB2-L2**

Nadmorska višina [m]

**0**

Specifi na teža [kg/m<sup>3</sup>]

**1,20**

specifi na mo motorja [w/(m<sup>3</sup>/s)]

**2.342 SFP5**

skupna teža [kg]

**~1.591**

Pretok **6.750 m<sup>3</sup>/h**

Zun. tlak **410 Pa**

Tot. tlak **825 Pa**

Mo motorja **1x3,400 kW**

Napajanje **400V/3/50Hz**

Calibration fact **220**

Vodni grelnik **28,46 kW**

Vodni hladilnik **21,56 kW**

Vra anje toplot **82,80 / 27,00 kW**

Pretok **6.600 m<sup>3</sup>/h**

Zun. tlak **520 Pa**

Tot. tlak **875 Pa**

Mo motorja **1x3,400 kW**

Napajanje **400V/3/50Hz**

Calibration fact **220**

Vra anje toplot **82,80 / 27,00 kW**

Real **2018**

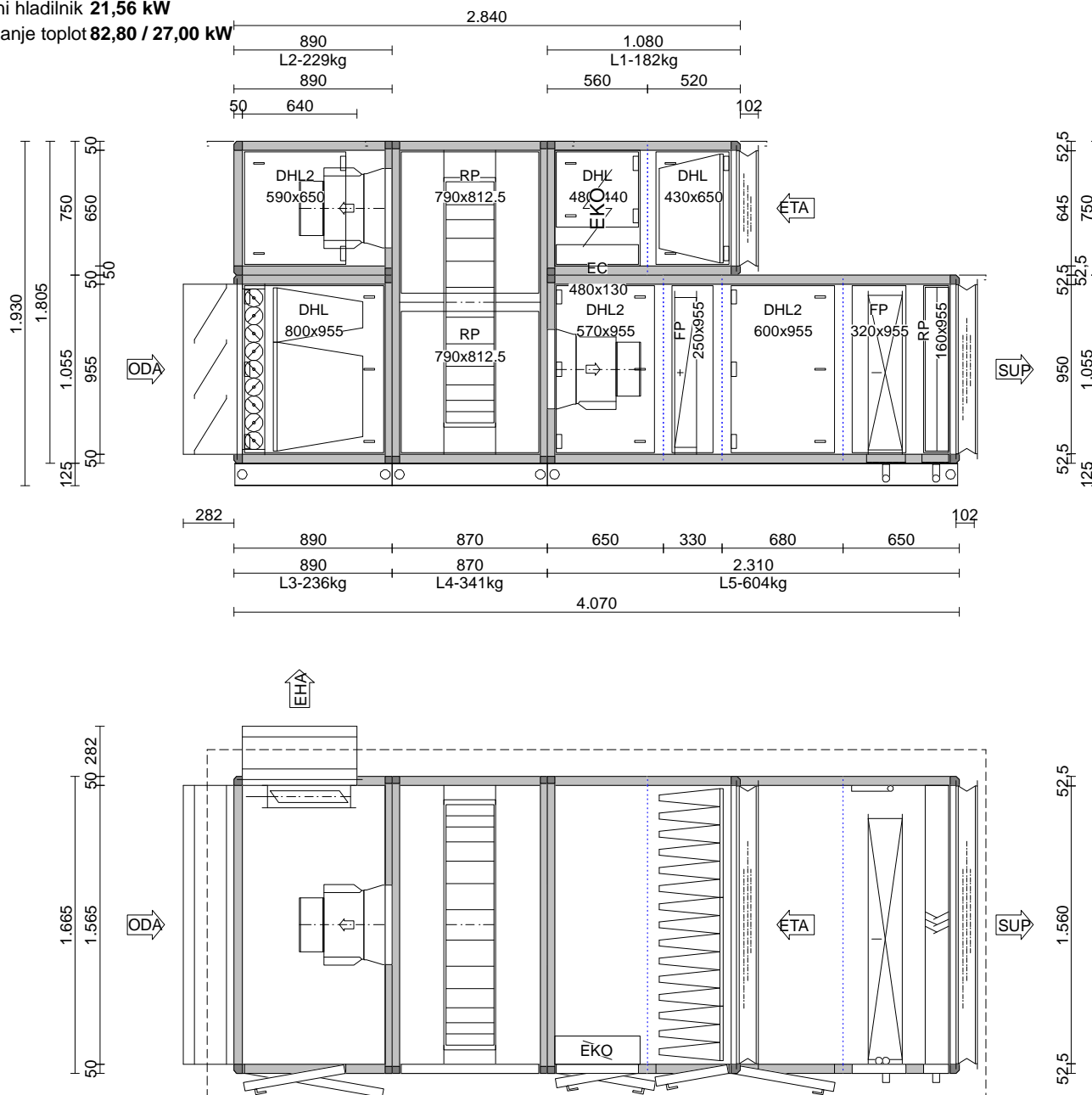
Temperaturni izk. [%] **81,50 min. 73**

SFPint **746 max. 1.077**

ErP ustrezno **Da**

SFPv **2.342** SFPe **2.396**

Podstavek je 16mm krajši od širine in dolžine naprave. Širina profila je 40



Odgovorni: **Maja anžek**  
Calc. date: **02.03.2026**

Naro nik: **Pinss d.o.o.**  
Ulica:  
Mesto:  
Projekt: **Avtobusna postaja Ljublj**  
Ulica:  
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Oddelek:

Številka projekta:  
Pozicija: **AHU.07 -**



## Dovodni zrak

| Podatki o enoti             |               |                             | Ohišje:               | Energetski razred               |                |
|-----------------------------|---------------|-----------------------------|-----------------------|---------------------------------|----------------|
| Velikost enote              | <b>KA 5-3</b> |                             | Debelina              | <b>Mineralna volna 100kg/m3</b> | <b>50,0 mm</b> |
| Pretok [m3/h]               | <b>6.750</b>  | Dolžina [mm] <b>4.070,0</b> | Mat. pokrova, znotraj | <b>ZnAlMg ZM310</b>             | <b>0,80</b>    |
| Zun. tlak [Pa]              | <b>410</b>    | Širina [mm] <b>1.665,0</b>  | Mat. pokrova, zunaj   | <b>ZnAlMg ZM310</b>             | <b>0,80</b>    |
| Tot. tlak [Pa]              | <b>825</b>    | Višina [mm] <b>1.055,0</b>  | Mat. pokrova, dno     | <b>ZnAlMg ZM310</b>             | <b>0,80</b>    |
| hitrost zraka [m/s]         | <b>1,25</b>   | Teža [kg] <b>~1.181,0</b>   | Profili               | <b>aluminium painted</b>        | <b>RAL9006</b> |
| Razred po EN 13053          | <b>V1</b>     |                             | Vodila                | <b>ZnAlMg ZM310</b>             |                |
|                             |               |                             | Fasteners int / ext   | <b>Galvanised / Galvanised</b>  |                |
| Razred prenosa toplote (M)  | <b>T2</b>     | Razred puš anja -400Pa (M)  | <b>L2</b>             | Razred mehanske stabilnosti (   | <b>D1</b>      |
| Razred toplotnega mosta (M) | <b>TB2</b>    | Razred puš anja +700Pa (M)  | <b>L2</b>             | Puš anje filtra (M)             | <b>F9</b>      |

| Filter                        | Dovodni zrak       |                                | 890,0 mm                | 4,84 m2                             | 236,00 kg          | 107 Pa |
|-------------------------------|--------------------|--------------------------------|-------------------------|-------------------------------------|--------------------|--------|
| Proizvajalec                  | <b>Deltrian</b>    |                                | dolžina filtra [mm]     | <b>500,0</b>                        |                    |        |
| Tip                           | <b>KS85-500</b>    |                                | Filterska površina [m2] | <b>17,70</b>                        |                    |        |
| Razred                        | <b>F7</b>          |                                | celice št. x velikost   | <b>2 x KS85-6/500/08 - 592,0x59</b> |                    |        |
| isti dP [Pa]                  | <b>55</b>          |                                |                         | <b>1 x KS85-3/500/04 - 287,0x59</b> |                    |        |
| Design dP [Pa]                | <b>105</b>         |                                |                         | <b>2 x KS85-1/500/08 - 592,0x28</b> |                    |        |
| Umazani dP [Pa]               | <b>155</b>         |                                |                         | <b>1 x KS85-2/500/04 - 287,0x28</b> |                    |        |
| Pretok [m3/h]                 | <b>6.750</b>       | <b>1,45 m/s</b>                | Posluževanje filtra     | <b>S strani</b>                     |                    |        |
| ISO 16890 razred              | <b>ePM2.5 70%</b>  |                                |                         |                                     |                    |        |
| ISO 16890 u inkovitost        | <b>E</b>           |                                |                         |                                     |                    |        |
| <u>Regulacijska žaluzija:</u> | Dimenzije [mm]     | <b>1.390,0 x 900,0 x 125,0</b> |                         |                                     |                    |        |
| Vrsta pogona                  | <b>motorni pog</b> | Pretok [m3/h]                  | <b>6.750</b>            | Okvir                               | <b>Aluminij</b>    |        |
| Št. Osi                       | <b>1</b>           | hitrost zraka [m/s]            | <b>1,50</b>             | Lopaticice                          | <b>Aluminij</b>    |        |
| vrtilni moment [Nm]           | <b>4,813</b>       | Padec tlaka [Pa]               | <b>2</b>                | Tip                                 | <b>Arosio 125L</b> |        |

| Rotacijski regenerator v ohišju |  |                                       |  | Dovodni zrak  |  | 870,0 mm              | 6,04 m2 | 341,00 kg         | 234 Pa |       |  |                    |  |         |  |
|---------------------------------|--|---------------------------------------|--|---|--|-----------------------|---------|-------------------|--------|-------|--|--------------------|--|---------|--|
| Tip                             |  | HM1-XL-WV-1350-SM-V7-A1-5,W1400,H1400 |  |   |  | Adsorption            |         | Energetski razred |        | H1    |  |                    |  |         |  |
| <u>Režim gretja</u>             |  |                                       |  |   |  | <u>Hladilni režim</u> |         |                   |        |       |  |                    |  |         |  |
| Dovod [m3/h]                    |  | 6.750                                 |  | dP (hum/std) [Pa]                                     |  | 199/224               |         | Dovod [m3/h]      |        | 6.750 |  | dP (hum/std) [Pa]  |  | 234/224 |  |
| Vstop [gC]                      |  | -13,00                                |  | Hum. [%]  |  | 80,0                  |         | Vstop [gC]        |        | 31,00 |  | Hum. [%]           |  | 50,0    |  |
| Izstop [gC]                     |  | 13,60                                 |  | Hum. [%]  |  | 50,5                  |         | Izstop [gC]       |        | 25,40 |  | Hum. [%]           |  | 57,8    |  |
| odvod [m3/h]                    |  | 6.600                                 |  | dP (hum/std) [Pa]                                     |  | 219/219               |         | odvod [m3/h]      |        | 6.600 |  | dP (hum/std) [Pa]  |  | 223/219 |  |
| Vstop [gC]                      |  | 20,00                                 |  | Hum. [%]  |  | 40,0                  |         | Vstop [gC]        |        | 24,00 |  | Hum. [%]           |  | 59,0    |  |
| Izstop [gC]                     |  | -7,30                                 |  | Hum. [%]  |  | 88,8                  |         | Izstop [gC]       |        | 29,80 |  | Hum. [%]           |  | 51,2    |  |
| Tot. recovery capacity [kW]     |  | 82,80                                 |  | Tot. recovery capacity [kW]                           |  |                       |         |                   |        | 27,00 |  |                    |  |         |  |
| Sens. recovery capacity [kW]    |  | 60,50                                 |  | Sens. recovery capacity [kW]                          |  |                       |         |                   |        | 12,80 |  |                    |  |         |  |
| Temperaturni izkoristek [%]     |  | 80,7                                  |  | Temperaturni izkoristek [%]                           |  |                       |         |                   |        | 80,7  |  |                    |  |         |  |
| Humidity efficiency [%]         |  | 81                                    |  | Humidity efficiency [%]                               |  |                       |         |                   |        | 77,6  |  |                    |  |         |  |
| Energetski izkoristek [%]       |  | 78,30                                 |  | Highest wet pressure is used for Eurovent calculation |  |                       |         |                   |        |       |  |                    |  |         |  |
| Purge sector [°]                |  | 5,0                                   |  | dP 22-11  |  | 250                   |         | EATR [%]          |        | 0     |  | OACF               |  | 1,09    |  |
| <u>Drive data</u>               |  | MRHX-04                               |  |   |  |                       |         |                   |        |       |  |                    |  |         |  |
| Nazivna mo [kW]                 |  |                                       |  |   |  | nazivni tok [A]       |         | 0,00              |        |       |  | nazivna napetost [ |  | 1x230   |  |

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| Prostoteko i ventilator   |   | Dovodni zrak   | 650,0 mm                  | 3,53 m2 | 210,00 kg | Pa    |
|---|---|--|---------------------------|---------|-----------|-------|
| Ventilator  | GR45I-ZID.GG.CR                         | Motor  | ECblue-IE5-50-152-0-3.4 - |         |           |       |
| Proizvajalec  | Ziehl-Abegg Standard                    | Zaš ita  | IP55                      |         |           |       |
| Pretok zraka [m3/h]   | 6.750                                   | Razred izolacije   | F                         |         |           |       |
| Zunanji dP [Pa]   | 410                                     | Nazivna mo [kW]  | 3,400                     |         |           |       |
| Additional pressure [Pa]  |   | Nominal speed [1/min]  | 2.300                     |         |           |       |
| Static pressure EN [Pa]   | 786                                     | Nominal current +-5% [A]   | 5,13                      |         |           |       |
| Totalni dP [Pa]   | 825                                     | nazivna napetost [V]   | 3x400V / 50Hz             |         |           |       |
| Hitrost [1/min]   | 1.966                                   | Razred u inkovitosti   | IE5/EC                    |         |           |       |
| Koeficient šobe   | 220                                     | Sistemska izkoristek [%]   | 71,1                      |         |           |       |
|   |   | For dimensioning of cables, fuses and other power elements, please consult with fan manufacturer |                           |         |           |       |
| Zvo na mo ventilatorja po oktavih Lokt  |   |  | Kontrolni signal (0-10V)  | 8,50    |           |       |
| Okt. Frq. Hz  | 63 125 250 500 1000 2000 4000 8000      | Absorbed power, validation [kW]  | 2,090                     |         |           |       |
| Vstop   | 66,0 74,0 76,0 71,0 66,0 65,0 62,0 60,0 | Absorbed power, selection [kW]   | 2,180                     |         |           |       |
| Izstop  | 71,0 83,0 79,0 79,0 78,0 78,0 75,0 69,0 | specifi na mo motorja [w/(m3/s)]   | 1.115                     |         |           | SFP3  |
| raven zvo ne mo i [dB (A)]  | 84,0                                    | Dvig temperature [gC]  | 1                         |         |           |       |
| Zvo na mo [dB]  | 87,2                                    | Rezerva  | 15                        |         |           |       |
| Sistemska efekta ventilatorja je upoštevan pri delovanju ventilatorja.              |   |  |                           |         |           |       |
| Odprtina  | L                                       | Dimenzije [mm] 445,0 x 445,0   |                           |         |           |       |
| Grelnik   |   | Dovodni zrak   | 330,0 mm                  | 1,8 m2  | 91,00 kg  | 14 Pa |
| Pretok [m3/h]   | 6.750                                   | Medij  | Voda                      |         |           |       |
| hitrost zraka [m/s]   | 1,68                                    | Pretok medija [l/s]  | 1,3750                    |         |           |       |
| Vstop zraka [gC]  | 13,60                                   | Hitrost medija [m/s]   | 1,20                      |         |           |       |
| Izstop zraka [gC]   | 26,10                                   | Med. vstop [gC]  | 45,00                     |         |           |       |
| Mo [kW]   | 28,46                                   | Med. izstop [gC]   | 40,00                     |         |           |       |
| Zra . pad. Tlaka [Pa]   | 14                                      | Padec tlaka medija [kPa]   | 14,30                     |         |           |       |
| Cevi  | 2                                       | Lamele   | Aluminij                  |         |           |       |
| Krogi   | 6                                       | Cevi   | baker                     |         |           |       |
| Medlamelna razdalja [m]   | 2,00                                    | Zbiralna cev   | baker                     |         |           |       |
| Vstopni priklju ek  | 1 1/2"                                  | Okvir  | pocinkana plo evina       |         |           |       |
| Izstopni priklju e  | 1 1/2"                                  | Zaš ita lamel  | -                         |         |           |       |
| HW 16 6030S2.0 14T1332 2R 6C4X1 CuAl V2 40Cu 3860Fz120 40.11.810 KGH-001 N.Cu - - - |   |  |                           |         |           |       |
| Designed for wet conditions   |   |  |                           |         |           |       |
| rpalka ni v ponudbi   |   |  |                           |         |           |       |
| Prazna enota  |   | Dovodni zrak   | 680,0 mm                  | 3,7 m2  | 113,00 kg | Pa    |

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| Hladilnik             | Dovodni zrak |              | 650,0 mm                 | 3,53 m2           | 190,00 kg | 21 Pa |
|-----------------------|--------------|--------------|--------------------------|-------------------|-----------|-------|
| Pretok [m3/h]         | <b>6.750</b> |              | Medij                    | <b>Voda</b>       |           |       |
| hitrost zraka [m/s]   | <b>1,60</b>  |              | Pretok medija [l/s]      | <b>1,0280</b>     |           |       |
| Vstop zraka [gC]      | <b>25,40</b> |              | Hitrost medija [m/s]     | <b>1,06</b>       |           |       |
| Izstop zraka [gC]     | <b>18,40</b> |              | Med. in/out [gC]         | <b>7,00/12,00</b> |           |       |
| skupna topl. mo [kW]  | <b>21,56</b> |              | Padec tlaka medija [kPa] | <b>29,29</b>      |           |       |
| Senz. topl. mo [kW]   | <b>16,11</b> |              | SHR                      | <b>0,34</b>       |           |       |
| Zra . pad. Tlaka [Pa] | <b>20/19</b> |              | Kondenzat [kg/h]         | <b>7,70</b>       |           |       |
|                       |              | (mokro/suho) |                          |                   |           |       |

|                         |               |      |                |                            |  |  |
|-------------------------|---------------|------|----------------|----------------------------|--|--|
| Cevi                    | <b>3</b>      |      | Lamele         | <b>Aluminij</b>            |  |  |
| Krogi                   | <b>9</b>      |      | Cevi           | <b>baker</b>               |  |  |
| Medlamelna razdalja [m] | <b>2,50</b>   |      | Zbiralna cev   | <b>baker</b>               |  |  |
| Vstopni priključek      | <b>1 1/4"</b> |      | Okvir          | <b>pocinkana pločevina</b> |  |  |
| Izstopni priključek     | <b>1 1/4"</b> |      | Zaščitna lamel | <b>-</b>                   |  |  |
|                         |               | Side |                |                            |  |  |
|                         |               | levo |                |                            |  |  |

**CW 12 3329S2.5 26T1352 3R 9C8X1 CuAl V2 32Cu 2550Fz190 35.11.675 KGH-00G N.Cu - - -**  
Designed for wet conditions

#### rpalka ni v ponudbi

Jadrovinasti nastavek Dimenzije [mm] **1.560,0 x 950,0 x 120,0**  
prirobnica [mm] **30**, Flange material **pocinkana pločevina** Temp. max **80,00**

**1** kpl. **Kabel za izenačitev potencialov za fleksibilni priključek**

| Bana                         | Tip   | Inclined lateral double pa | Kvaliteta | Aluminij        | Odtočna cev | Velikost    | 1 1/2"      | Sidedesno |
|------------------------------|-------|----------------------------|-----------|-----------------|-------------|-------------|-------------|-----------|
| <b>Eliminator vodnih kap</b> | Model | <b>PSG33</b>               | Okvir     | <b>Aluminij</b> | Lamele      | <b>PPTV</b> | <b>1 Pa</b> |           |

#### Izračun zvoka

| zvočni tlak [dB]          |             |             |             |             |             |             |             |             |  | Vsota [dB(A)] |
|---------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--|---------------|
| Frq. Hz                   | 63          | 125         | 250         | 500         | 1000        | 2000        | 4000        | 8000        |  |               |
| Vstop                     | <b>63,0</b> | <b>70,0</b> | <b>68,0</b> | <b>62,0</b> | <b>55,0</b> | <b>52,5</b> | <b>47,5</b> | <b>37,5</b> |  | <b>64,0</b>   |
| Izstop                    | <b>66,0</b> | <b>74,0</b> | <b>59,0</b> | <b>71,0</b> | <b>64,0</b> | <b>60,0</b> | <b>56,0</b> | <b>54,0</b> |  | <b>70,5</b>   |
| Ohišje                    | <b>58,0</b> | <b>68,0</b> | <b>67,0</b> | <b>63,0</b> | <b>65,0</b> | <b>51,0</b> | <b>43,0</b> | <b>28,0</b> |  | <b>67,1</b>   |
| sound pressure level [dB] |             |             |             |             |             |             |             |             |  | Vsota [dB(A)] |
| Frq. Hz                   | 63          | 125         | 250         | 500         | 1000        | 2000        | 4000        | 8000        |  |               |
| Vstop                     | <b>49,0</b> | <b>56,0</b> | <b>54,0</b> | <b>48,0</b> | <b>41,0</b> | <b>38,5</b> | <b>33,5</b> | <b>23,5</b> |  | <b>50,0</b>   |
| Izstop                    | <b>52,0</b> | <b>60,0</b> | <b>45,0</b> | <b>57,0</b> | <b>50,0</b> | <b>46,0</b> | <b>42,0</b> | <b>40,0</b> |  | <b>56,5</b>   |
| Ohišje                    | <b>37,5</b> | <b>47,5</b> | <b>46,5</b> | <b>42,5</b> | <b>44,5</b> | <b>30,5</b> | <b>22,5</b> | <b>7,5</b>  |  | <b>46,6</b>   |

Toleranca +/- 3 dB

## Odvodni zrak

| Podatki o enoti             |               |  |  | Ohišje:                         | Energetski razred               |  |  |
|-----------------------------|---------------|--|--|---------------------------------|---------------------------------|--|--|
| Velikost enote              | <b>KA 5-2</b> |  |  | Debelina                        | <b>Mineralna volna 100kg/m3</b> |  |  |
| Pretok [m3/h]               | <b>6.600</b>  |  |  | Mat. pokrova, znotraj           | <b>ZnAlMg ZM310</b>             |  |  |
| Zun. tlak [Pa]              | <b>520</b>    |  |  | Mat. pokrova, zunaj             | <b>ZnAlMg ZM310</b>             |  |  |
| Tot. tlak [Pa]              | <b>875</b>    |  |  | Mat. pokrova, dno               | <b>ZnAlMg ZM310</b>             |  |  |
| hitrost zraka [m/s]         | <b>1,80</b>   |  |  | Profili                         | <b>aluminium painted</b>        |  |  |
| Razred po EN 13053          | <b>V2</b>     |  |  | Vodila                          | <b>ZnAlMg ZM310</b>             |  |  |
|                             |               |  |  | Fasteners int / ext             | <b>Galvanised / Galvanised</b>  |  |  |
| Razred prenosa toplote (M)  | <b>T2</b>     |  |  | Razred pušanja -400Pa (M)       | <b>L2</b>                       |  |  |
| Razred toplotnega mosta (M) | <b>TB2</b>    |  |  | Razred pušanja +700Pa (M)       | <b>L2</b>                       |  |  |
|                             |               |  |  | Razred mehanske stabilnosti (M) | <b>D1</b>                       |  |  |
|                             |               |  |  | Pušanje filtra (M)              | <b>F9</b>                       |  |  |

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| Filter  | Odvodni zrak    | 520,0 mm                                       | 2,52 m <sup>2</sup>                 | 108,00 kg        | 58 Pa                               |
|---|-----------------|--|-------------------------------------|------------------|-------------------------------------|
| Proizvajalec <b>Deltrian</b>  |                 | dolžina filtra [mm]                            | <b>360,0</b>                        |                  |                                     |
| Tip <b>FP50-360</b>   |                 | Filterska površina [m <sup>2</sup> ]           | <b>6,51</b>                         |                  |                                     |
| Razred <b>M5</b>  |                 | celice št. x velikost                          | <b>2 x FP50-6/360/06 - 592,0x59</b> |                  |                                     |
| isti dP [Pa] <b>33</b>  |                 |  | <b>1 x FP50-3/360/03 - 287,0x59</b> |                  |                                     |
| Design dP [Pa] <b>58</b>  |                 |  |                                     |                  |                                     |
| Umazani dP [Pa] <b>83</b>   |                 |  |                                     |                  |                                     |
| Pretok [m <sup>3</sup> /h] <b>6.600</b>   | <b>2,11 m/s</b> |  |                                     |                  |                                     |
| ISO 16890 razred <b>Coarse 70%</b>  |                 | Posluževanje filtra                            | <b>S strani</b>                     |                  |                                     |
| ISO 16890 u inkovitost  |                 |  |                                     |                  |                                     |
| <b>Jadrovinski nastavek</b> Dimenzije [mm] <b>1.560,0 x 645,0 x 120,0</b><br>prirobnica [mm] <b>30</b> , Flange material <b>pocinkana pločevina</b> Temp. max <b>80,00</b>  |                 |  |                                     |                  |                                     |
| <b>1</b> kpl. <b>Kabel za izenačitev potencialov za fleksibilni priključek</b>  |                 |  |                                     |                  |                                     |
| Prazna enota  | Odvodni zrak    | 560,0 mm                                       | 2,7 m <sup>2</sup>                  | 74,00 kg         | Pa                                  |
| <b>Rotacijski regeneratorski v ohišju</b>   | Odvodni zrak    | <b>870,0 mm</b>                                | <b>6,04 m<sup>2</sup></b>           | <b>341,00 kg</b> | <b>234 Pa</b>                       |
| Prostotok i ventilator  | Odvodni zrak    | 890,0 mm                                       | 5,13 m <sup>2</sup>                 | 229,00 kg        | 38 Pa                               |
| Ventilator <b>GR45I-ZID.GG.CR</b>   |                 | Motor <b>ECblue-IE5-50-152-0-3.4</b>           | <b>-</b>                            |                  |                                     |
| Proizvajalec <b>Ziehl-Abegg Standard</b>  |                 | Zaščitna                                       | <b>IP55</b>                         |                  |                                     |
| Pretok zraka [m <sup>3</sup> /h] <b>6.600</b>   |                 | Razred izolacije                               | <b>F</b>                            |                  |                                     |
| Zunanji dP [Pa] <b>520</b>  |                 | Nazivna moč [kW]                               | <b>3,400</b>                        |                  |                                     |
| Additional pressure [Pa]  |                 | Nominal speed [1/min]                          | <b>2.300</b>                        |                  |                                     |
| Static pressure EN [Pa] <b>839</b>  |                 | Nominal current +5% [A]                        | <b>5,13</b>                         |                  |                                     |
| Totalni dP [Pa] <b>875</b>  |                 | nazivna napetost [V]                           | <b>3x400V / 50Hz</b>                |                  |                                     |
| Hitrost [1/min] <b>1.995</b>  |                 | Razred u inkovitosti                           | <b>IE5/EC</b>                       |                  |                                     |
| Koeficient šobe <b>220</b>  |                 | Sistemski izkoristek [%]                       | <b>71</b>                           |                  |                                     |
| <b>For dimensioning of cables, fuses and other power elements, please consult with fan manufacturer</b>   |                 |  |                                     |                  |                                     |
| Zvočna moč ventilatorja po oktavih Lokt   |                 | Kontrolni signal (0-10V)                       | <b>8,70</b>                         |                  |                                     |
| Okt. Frq. Hz 63 125 250 500 1000 2000 4000 8000   |                 | Absorbed power, validation [kW]                | <b>2,250</b>                        |                  |                                     |
| Vstop <b>66,0 75,0 76,0 71,0 67,0 66,0 62,0 60,0</b>  |                 | Absorbed power, selection [kW]                 | <b>2,260</b>                        |                  |                                     |
| Izstop <b>72,0 83,0 79,0 79,0 79,0 79,0 75,0 69,0</b>   |                 | specifična moč motorja [W/(m <sup>3</sup> /s)] | <b>1.227</b>                        | <b>SFP3</b>      |                                     |
| raven zvočne moči [dB (A)] <b>84,4</b>  |                 | Dvig temperature [gC]                          | <b>1</b>                            |                  |                                     |
| Zvočna moč [dB] <b>87,6</b>   |                 | Rezerva  | <b>13</b>                           |                  |                                     |
| Sistemski efekt ventilatorja je upoštevan pri delovanju ventilatorja.   |                 |  |                                     |                  |                                     |
| <b>Regulacijska žaluzija:</b> Dimenzije [mm] <b>595,0 x 465,0 x 125,0</b><br>Vrsta pogona <b>motorni pogon</b> Pretok [m <sup>3</sup> /h] <b>6.600</b> Okvir <b>Aluminij</b><br>Št. Osi <b>1</b> hitrost zraka [m/s] <b>6,63</b> Lopatice <b>Aluminij</b><br>vrtilni moment [Nm] <b>1,078</b> Padec tlaka [Pa] <b>38</b> Tip <b>Arosio 125L</b> |                 |  |                                     |                  |                                     |
| Odprtina <b>L</b>   |                 |  |                                     |                  | Dimenzije [mm] <b>445,0 x 445,0</b> |

Odgovorni: **Maja anžek**  
Calc. date: **02.03.2026**

Naročnik: **Pinss d.o.o.**  
Ulica:  
Mesto: **Avtobusna postaja Ljublj**  
Projekt:  
Ulica:  
Mesto:  
Oddelek:

Številka projekta:  
Pozicija: **AHU.07 -**



#### Izračun zvoka

| zvo na mo [dB]            |      |      |      |      |      |      |      |      |               |                                 |
|---------------------------|------|------|------|------|------|------|------|------|---------------|---------------------------------|
| Frq. Hz                   | 63   | 125  | 250  | 500  | 1000 | 2000 | 4000 | 8000 | Vsota [dB(A)] |                                 |
| Vstop                     | 63,0 | 71,0 | 68,0 | 62,0 | 56,0 | 53,5 | 47,5 | 37,5 | 64,3          |                                 |
| Izstop                    | 72,0 | 83,0 | 79,0 | 79,0 | 79,0 | 79,0 | 75,0 | 69,0 | 84,5          |                                 |
| Ohišje                    | 59,0 | 68,0 | 67,0 | 63,0 | 66,0 | 52,0 | 43,0 | 28,0 | 67,8          |                                 |
| sound pressure level [dB] |      |      |      |      |      |      |      |      |               |                                 |
| Frq. Hz                   | 63   | 125  | 250  | 500  | 1000 | 2000 | 4000 | 8000 | Vsota [dB(A)] | To ka merjenja na 2 _m razdalje |
| Vstop                     | 49,0 | 57,0 | 54,0 | 48,0 | 42,0 | 39,5 | 33,5 | 23,5 | 50,3          |                                 |
| Izstop                    | 58,0 | 69,0 | 65,0 | 65,0 | 65,0 | 65,0 | 61,0 | 55,0 | 70,5          |                                 |
| Ohišje                    | 39,2 | 48,2 | 47,2 | 43,2 | 46,2 | 32,2 | 23,2 | 8,2  | 48,0          |                                 |
| Toleranca +/- 3 dB        |      |      |      |      |      |      |      |      |               |                                 |

Točka merjenja na **2 m** razdalje

Toleranca +/- 3 dB

|                     |                   |             |                            |           |           |
|---------------------|-------------------|-------------|----------------------------|-----------|-----------|
| <u>Podstavek</u>    | <b>S125.2</b>     | Material    | <b>pocinkana pločevina</b> | Izolirano | <b>Ne</b> |
| Luknja za dvig [mm] | <b>53,0</b>       | Višina [mm] | <b>125,0</b>               | Varjen    | <b>Ne</b> |
| <b>1</b> kpl.       | <b>Streha FMA</b> |             |                            |           |           |

#### Dobavne enote

| št. | Širina  | Višina | Dolžina | Teža   | Lift points | Fits truck |
|-----|---------|--------|---------|--------|-------------|------------|
| 1   | 1.665,0 | 750    | 1.080,0 | 182,00 | 4           | Da         |
| 2   | 1.665,0 | 750    | 890,0   | 229,00 | 4           | Da         |
| 3   | 1.665,0 | 1180   | 890,0   | 236,00 | 4           | Da         |
| 4   | 1.665,0 | 1930   | 870,0   | 341,00 | 4           | Da         |
| 5   | 1.665,0 | 1180   | 2.310,0 | 604,00 | 4           | Da         |

Please consult with manufacturer about transportation options



## Regulation

**v. 18122025**

### Type of automatic on AHU

Full regulation (sensors & actuators connected to electric cabinet with controller)

### Water heating coil

Factory installed frostprotection temp. sensor (standard one)

### Voltage of water heating coil pump

230V, max. 6A

### Voltage of water cooling coil pump

### Water preheater coil valve + actuator

1 Kos 3-way valve sold Systemair Slovenia - ZMD332-16

### Water cooler 1 coil valve + actuator

1 Kos 3-way valve sold Systemair Slovenia - ZMD320-6,3

### Control cabinet

Integrated in AHU

### Type of temperature control

Extract air temperature control

### Type of fan control

CAV control (Constant Air Volumen)

### Other control

### Outdoor sensor mounting

Outdoor sensor mounted inside of the unit (intake)

### Extract temp. sensor mounting

Extract temp. sensor mounted inside of the unit

### Type of controller

Access

### Accessories for Access controller

Navidpad display (HMI) + holder

### Additional function of cabinet / AHU

Heating of electrical cabinet

**Additional sensors as field devices for visual inspection (this values are already visible on display in case of full re Control data**

**Chosen controller type: Access CU27**

## Regulation components

- 1 Kos **Cable temp. sensor TG-B440/PT1000, Outdoor, (Mounted)**
- 1 Kos **Cable temp. sensor TG-B440/PT1000, Extract, (Mounted)**
- 1 Kos **Cable temp. sensor TG-B440/PT1000, FrostProtection 1, (Mounted)**
- 1 Kos **Duct temp. sensor TG-KH/PT1000, Supply, (Attached)**
- 2 Kos **Pressure sensor Presigo DUO 2500 (ExoLine-Modbus), (Mounted)**
- 1 Kos **Outdoor damper actuator ON/OFF, spring return, (Mounted), NF24A, 10Nm**
- 1 Kos **Exhaust damper actuator ON/OFF, spring return, (Mounted), LF24A, 4Nm**
- 1 Kos **3-way valve, (Attached), ZMD332-16**
- 1 Kos **Valve actuator, (Attached)RVAZ4-24A 0-10V**
- 1 Kos **3-way valve, (Attached), ZMD320-6,0**
- 1 Kos **Valve actuator, (Attached)RVAZ4-24A 0-10V**
- 1 Kos **Controller Access CU27-C WIFI, (Mounted in cabinet)**
- 1 Kos **Display NaviPad PD70-C set, (Attached)**
- 1 Kos **Elom AHU MB: 7,6-10kW**
- 1 Kos **Main power supply 400V / 50HZ, Cable: 5x2,5mm2, Fuse: 13A**
- 1 Kos **In ele. cabinet is included: main switch, fuses for (fans, pump, etc.), relays, transformer or power supply unit, terminal block**
- 1 Kos **Access controller in electric cabinet, Secondary power supply 24V DC**
- 1 Kos **Standard communication: Modbus 485, 2-wire or TCP/IP, BACnet TCP/IP**
- 1 Kos **Temperatures: Outdoor, Supply, Extract, Frostprotection 1,**

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Pozicija: **AHU.07 -**



- 1 Kos **CAV / filter / temperature monitoring over Presigos / QBMs**
- 1 Kos **UI:**
- 1 Kos **DO: Outdoor/Exhaust damper, Sum alarm, Water heat pump x1,**
- 1 Kos **AO: SAF ventilator (modbus), EAF ventilator (modbus), Heating x1, Cooling, Exchanger,**
- 1 Kos **DI: Fire alarm, external switch off,**
- 1 Kos **Water cooler,**
- 1 Kos **Electric heating of cabinet**



## Ecodesign information

### Non Residential Unit EU1253

|   |                       |
|---|-----------------------|
| Ustreza ErP 2018  | Da                    |
| Pripombe ErP 2018   | -                     |
| Notranja specifična moč ventilatorja SFP <sub>int</sub> [W/(m <sup>3</sup> /s)] | <b>746</b>            |
| Največja dovoljena SFP <sub>int</sub> za ErP 2018 [W/(m <sup>3</sup> /s)]       | <b>1.077</b>          |
| Efektivna vhodna moč [kW]   | <b>4,440</b>          |
| Efektivna vhodna moč krmilja [kW]   |                       |
| Referenčna stopnja pretoka [m <sup>3</sup> /h]                                  | <b>6.675</b>          |
| Toplotni izkoristek [%]   | <b>81,50</b>          |
| Tip rekuperacijskega izmenjevalnika toplote                                     | <b>Other HRS</b>      |
| Najmanjši toplotni izkoristek za ErP 2018 [%]                                   | <b>73</b>             |
| Tip motorja in pogona   | <b>variable speed</b> |
| Tip enote   | <b>BVU</b>            |
| Hitrost dotoka [m/s]  | <b>1,80</b>           |
| External leakage rate at +400 Pa (R) [%]  | <b>0,27</b>           |
| External leakage rate at -400 Pa (R) [%]  | <b>0,58</b>           |
| Stopnja notranjega pušanja pri 200 Pa [%]                                       | <b>3,00</b>           |
| Notranji padec tlaka prezračevalnih elementov [Pa]                              | <b>506</b>            |
| eksterni padec tlaka [Pa]   | <b>930</b>            |
| Notranji padec tlaka neprezračevalnih elementov [Pa]                            | <b>189</b>            |
| Bonus za učinkovitost E za ErP 2018 [W/(m <sup>3</sup> /s)]                     | <b>255</b>            |
| Korekcija filtra F za ErP2018 [W/(m <sup>3</sup> /s)]                           |                       |
| Izkoristek bazne konfiguracije U1 [%]   | <b>67,6</b>           |
| Notranji padec tlaka prezračevalnih elementov U1 [Pa]                           | <b>254</b>            |
| Zunanji padec tlaka U1 [Pa]   | <b>410</b>            |
| Notranji padec tlaka neprezračevalnih elementov U1 [Pa]                         | <b>122</b>            |
| Izkoristek bazne konfiguracije U2 [%]   | <b>68,06</b>          |
| Notranji padec tlaka prezračevalnih elementov U2 [Pa]                           | <b>252</b>            |
| Zunanji padec tlaka U2 [Pa]   | <b>520</b>            |
| Notranji padec tlaka neprezračevalnih elementov U2 [Pa]                         | <b>67</b>             |

## Eurovent technical data sheet

|                                   |                                   |
|-----------------------------------|-----------------------------------|
| Air handling unit location        | <b>MARIBOR SLIVNICA, Slovenia</b> |
| Summer dry bulb temperature [gC]  | <b>31,80</b>                      |
| Summer wet bulb temperature [gC]  | <b>20,30</b>                      |
| Summer dew point temperature [gC] | <b>14,40</b>                      |
| Winter dry bulb temperature [gC]  | <b>-9,10</b>                      |

### Winter data

|  |                  |
|--|------------------|
| Pretok - dovod [m3/h]                                | <b>6750</b>      |
| Pretok - odvod [m3/h]                                | <b>6600</b>      |
| Skupni statni tlak - dovod [Pa]                      | <b>786</b>       |
| Skupni statni tlak - odvod [Pa]                      | <b>839</b>       |
| Notranji statni tlak - dovod [Pa]                    | <b>376</b>       |
| Notranji statni tlak - odvod [Pa]                    | <b>319</b>       |
| Realna vhodna moč - dovod [kW]                       | <b>2.18</b>      |
| Realna vhodna moč - odvod [kW]                       | <b>2.26</b>      |
| Hitrost - dovod [m/s]                                | <b>1.25</b>      |
| Hitrost - odvod [m/s]                                | <b>1.8</b>       |
| Temperaturni izkoristek - dovod [%]                  | <b>81.5</b>      |
| Temperaturni izkoristek - odvod [%]                  | <b>81.5</b>      |
| Padec tlaka na rekuperatorju bypass off - dovod [Pa] | <b>234</b>       |
| Padec tlaka na rekuperatorju bypass off - odvod [Pa] | <b>223</b>       |
| Mešanje [%]  | <b>0</b>         |
| Zunanja temperatura [°C]                             | <b>-9.1</b>      |
| Električni dogrelnik                                 | <b>0</b>         |
| Podskupina   | <b>1</b>         |
| Razred energetske učinkovitosti                      | <b>A+</b>        |
| o_classt   |                  |
| fpe  | <b>14.999165</b> |
| v  | <b>1.4</b>       |
| T  | <b>83</b>        |
| p  | <b>250</b>       |
| Ngref  | <b>64</b>        |
| Px - dovod   | <b>-24.4</b>     |
| Py - dovod   | <b>-16</b>       |
| Pz - dovod   | <b>22.5</b>      |
| Psup. Ref.   | <b>2.6049</b>    |
| Px - odvod   | <b>28.5</b>      |
| Py - odvod   | <b>-27</b>       |
| Pz - odvod   | <b>22.5</b>      |
| Pext. Ref.   | <b>2.5838</b>    |
| fs-Pref  | <b>0.86</b>      |

### Summer data

|  |               |
|--|---------------|
| Pretok - dovod [m3/h]                                | <b>6750</b>   |
| Pretok - odvod [m3/h]                                | <b>6600</b>   |
| Skupni statni tlak - dovod [Pa]                      | <b>786</b>    |
| Skupni statni tlak - odvod [Pa]                      | <b>839</b>    |
| Notranji statni tlak - dovod [Pa]                    | <b>376</b>    |
| Notranji statni tlak - odvod [Pa]                    | <b>319</b>    |
| Realna vhodna moč - dovod [kW]                       | <b>2.18</b>   |
| Realna vhodna moč - odvod [kW]                       | <b>2.26</b>   |
| Hitrost - dovod [m/s]                                | <b>1.25</b>   |
| Hitrost - odvod [m/s]                                | <b>1.8</b>    |
| Temperaturni izkoristek - dovod [%]                  | <b>81.5</b>   |
| Temperaturni izkoristek - odvod [%]                  | <b>81.5</b>   |
| Padec tlaka na rekuperatorju bypass off - dovod [Pa] | <b>234</b>    |
| Padec tlaka na rekuperatorju bypass off - odvod [Pa] | <b>223</b>    |
| Mešanje [%]  | <b>0</b>      |
| Zunanja temperatura [°C]                             | <b>10</b>     |
| Električni dogrelnik                                 | <b>0</b>      |
| Podskupina   | <b>2</b>      |
| Razred energetske učinkovitosti                      | <b>A+</b>     |
| o_classt   | <b>N</b>      |
| fpe  | <b>-0.15</b>  |
| v  | <b>1.4</b>    |
| T  | <b>83</b>     |
| p  | <b>250</b>    |
| Ngref  | <b>64</b>     |
| Px - dovod   | <b>-64.6</b>  |
| Py - dovod   |               |
| Pz - dovod   |               |
| Psup. Ref.   | <b>2.7448</b> |
| Px - odvod   | <b>94.6</b>   |
| Py - odvod   |               |
| Pz - odvod   |               |
| Pext. Ref.   | <b>2.3757</b> |
| fs-Pref  | <b>0.87</b>   |