

1



ZN071-ZIL.GG.V7P4 | 183855 | Portfolio STD-WW | FE2owlet ECblue

Technical Description FE2owlet with ZAplus

## Range ZN

### Standard design with AC motor

- Profiled, sickle shaped blades designed with bionical know how
- Sizes 450 ... 900 mm (in 6 standard sizes)
- Highest efficiency with optimized full bell mouth with guide vane and diffusor
- Integrated speed control
- ZIEHL-ABEGG FE2owlet ECblue with ZAplus fans can be used with active temperature management from -35°C\* up to 70°C.

### Mains voltage motor size B:

- 1~ 200...277 V; 50/60 Hz

### Mains voltage motor size D:

- 1~ 200...277 V; 50/60 Hz
- 3~ 200...240 V; 50/60 Hz
- 3~ 380...480 V; 50/60 Hz

### Mains voltage motor size G:

- 3~ 200...240 V; 50/60 Hz
- 3~ 380...480 V; 50/60 Hz

### Thermal class:

- THCL 155

### Protection:

- IP55

### Material of impeller:

- Aluminium die-cast or high performance composite material

### Painting:

- Fan unpainted
- ZAplus made from high performance composite material in black, unpainted

### On request:

- Guard grille suction side
- Additional diffusor (increase of efficiency)
- Different paintings
- Heater (de-icing of the nozzle)
- 4 different built in versions

# FANselect



**\*Continuous operation with occasional starts (S1) according to DIN EN 60034-1: 2011-02. Occasional starting between -35 ° C and -25 ° C is permissible. Permanent operation below -25 ° C only possible with special bearings for refrigeration applications on request.**

## data ventilátoru

23.09.2022

verze FANselect V 1.01 (220922), AMCA V 1.03 September, 2021&lt;br&gt;RLT V 1.00 Dezember, 2021 / 1.22.09.22 | 68370 | (uživatel ZAFS58370)

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|              |                           |
|--------------|---------------------------|
| typ          | ZN071-ZIL.GG.V7P4         |
| artiklové č. | 183855   Portfolio STD-WW |

## technická data

|                                    |                                 |
|------------------------------------|---------------------------------|
| motor                              | ECblue                          |
| Efficiency class                   | IE5                             |
| napájení                           | -                               |
| maximální okolní teplota ( $t_r$ ) | °C                              |
| účinnost $\eta_{statA}$            | %                               |
| účinnost $N_{actual}$   $N_{SOLL}$ | 59,5   40                       |
| ErP - třída                        | 2015   EC regulátor integrovaný |
| grille   influence                 | ne                              |

## data ventilátoru

|                                                                      |              |                 |
|----------------------------------------------------------------------|--------------|-----------------|
| SFP-class   SFP-třída ( $P_{SFP}$ )                                  | -   $Ws/m^3$ | 1   237         |
| průtok vzduchu ( $q_v$ )                                             | $m^3/h$      | 20689           |
| tlak, stat. ( $p_{sF}$ )   celk. ( $p_F$ )                           | Pa           | 3   127         |
| elektrický příkon ( $P_{sys}$ )                                      | W            | 1362            |
| účinnost syst., stat. ( $\eta_{sF,sys}$ )   celk. ( $\eta_{F,sys}$ ) | %            | 1.3   53.7      |
| otáčky ventilátoru ( $n$ )   max. ( $n_{max}$ )                      | 1/min        | 1153   1150     |
| otáčky ventilátoru, pož. hodn. ( $\%n_{max}$ )                       | %            | 100             |
| frekvence v prac.bodě ( $f_{DP}$ )   ( $f_{max}$ )                   | Hz           | 50   60         |
| napětí v pracovním bodě ( $U_{DP}$ )                                 | V            | 400             |
| proud v pracovním bodě ( $I_{DP}$ )                                  | A            | 2.14            |
| hlučnost, sací strana ( $L_{w(A),5}$ )   ( $L_{w,5}$ )               | dB           | 81   84         |
| hlučnost, výtlačná strana ( $L_{w(A),6}$ )   ( $L_{w,6}$ )           | dB           | 82   86         |
| rozměry ( $\text{š} \times \text{v} \times \text{d}$ )               | mm           | 835 x 835 x 312 |
| hmotnost výrobku ( $m_{Pr}$ )                                        | kg           | 30.7            |

PF:PF\_50; Ano:183855; STol:+-10 %

## charakteristika / hlučnost

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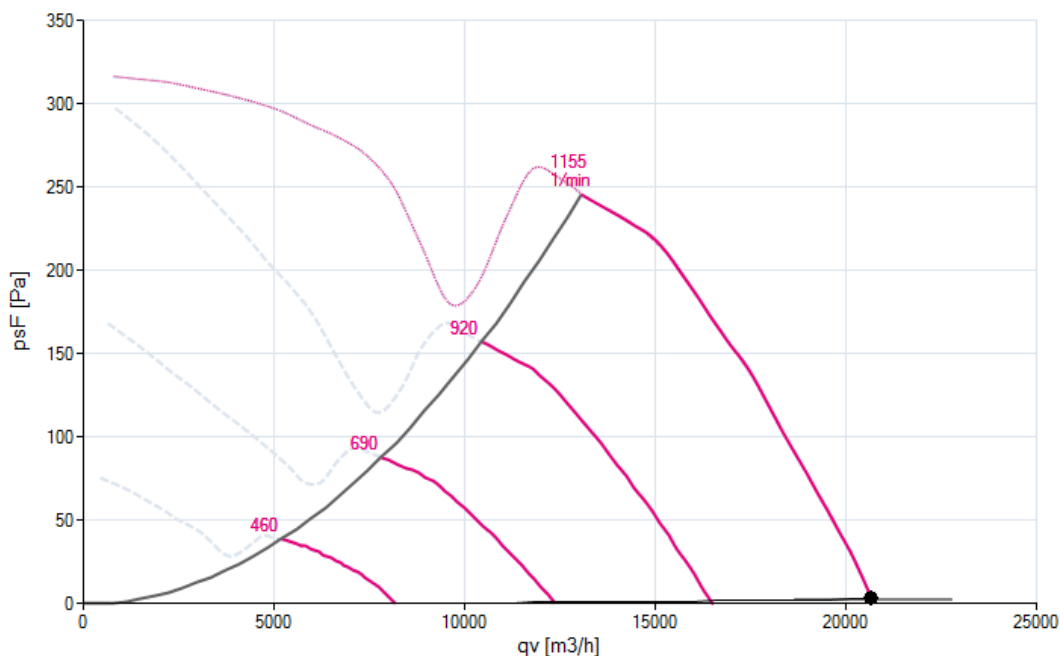
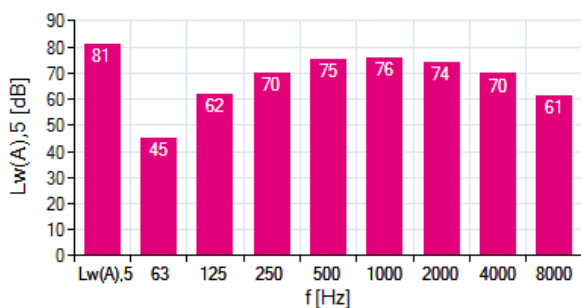
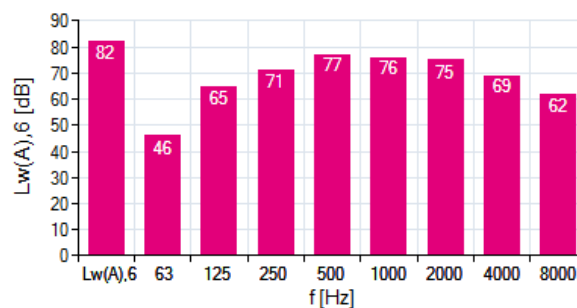
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ZN071-ZIL.GG.V7P4

Measured in ZApplus without guard grille in air flow direction V in installation type A according to ISO5801

183855 | Portfolio STD-WW

měřená hustota 1.16 [kg/m³]

vzduchový výkon  $p_{sF}$ hlučnost ( $L_{w(A),5}$ )hlučnost ( $L_{w(A),6}$ )

## 1 ZN071-ZIL.GG.V7P4

| f [Hz]       | sum | 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 |
|--------------|-----|----|-----|-----|-----|------|------|------|------|
| $L_{w(A),5}$ | 81  | 45 | 62  | 70  | 75  | 76   | 74   | 70   | 61   |
| $L_{w,5}$    | 84  | 70 | 77  | 78  | 79  | 76   | 73   | 69   | 62   |

| f [Hz]       | sum | 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 |
|--------------|-----|----|-----|-----|-----|------|------|------|------|
| $L_{w(A),6}$ | 82  | 46 | 65  | 71  | 77  | 76   | 75   | 69   | 62   |
| $L_{w,6}$    | 86  | 71 | 81  | 80  | 81  | 77   | 74   | 68   | 63   |

## účinnost / příkon

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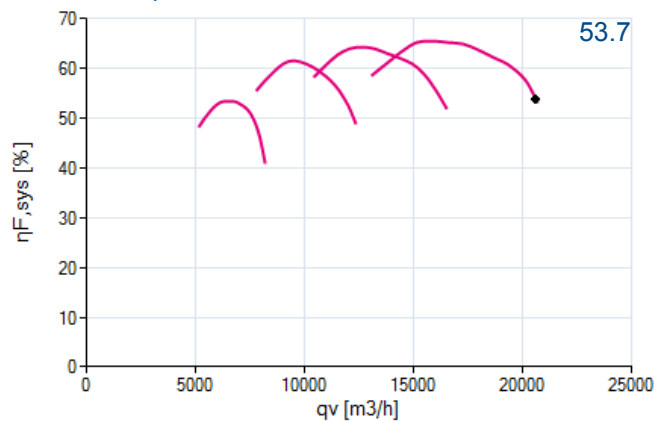
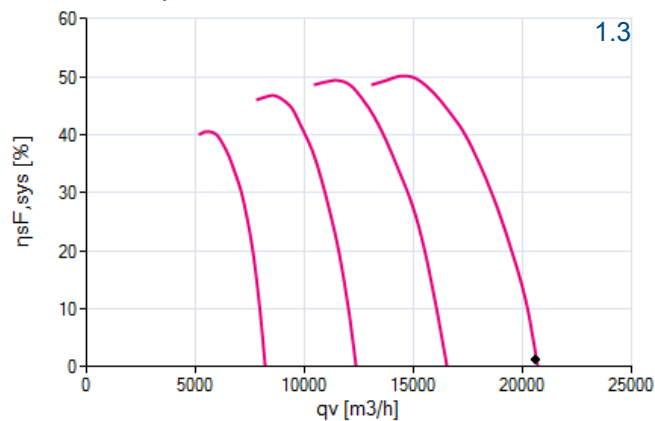
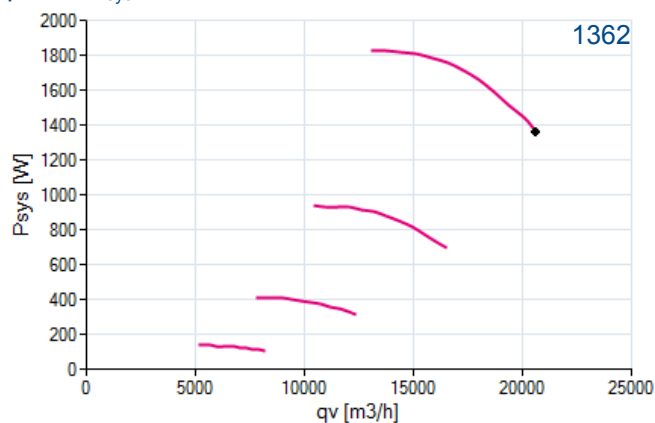
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ZN071-ZIL.GG.V7P4

Measured in ZApplus without guard grille in air flow direction V in installation type A according to ISO5801

183855 | Portfolio STD-WW

měřená hustota 1.16 [kg/m³]

účinnost  $\eta_{F,sys}$ účinnost  $\eta_{sF,sys}$ příkon  $P_{sys}$ 



## nominální hodnoty

23.09.2022

verze FANselect V 1.01 (220922), AMCA V 1.03 September, 2021&lt;br&gt;RLT V 1.00 Dezember, 2021 / 1.22.09.22 | 68370 | (uživatel ZAFS58370)

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3~ 380-480V 50Hz P1 1.85kW  
 3.00-2.40A 1150/MIN 75°C  
 3~ 380-480V 60Hz P1 1.85kW  
 3.00-2.40A 1150/MIN 75°C  
 IP55 THCL155

## výkres

23.09.2022

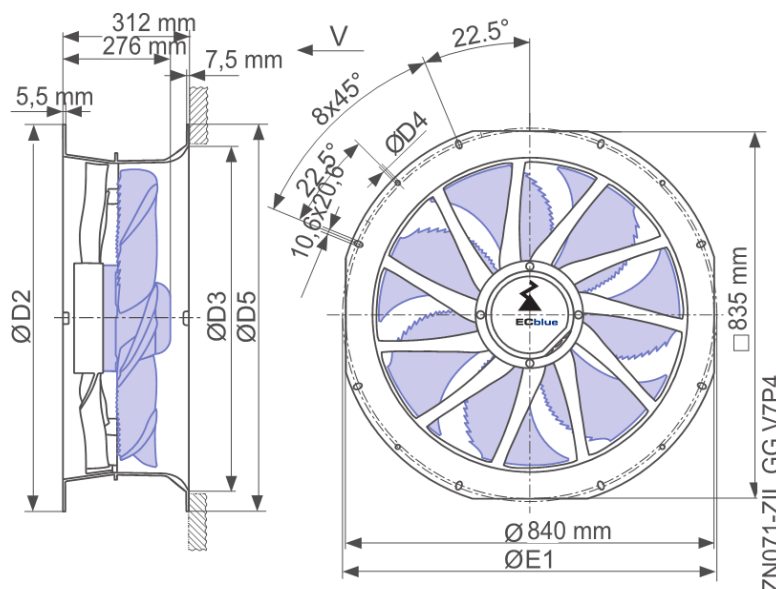
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## schéma zapojení

23.09.2022

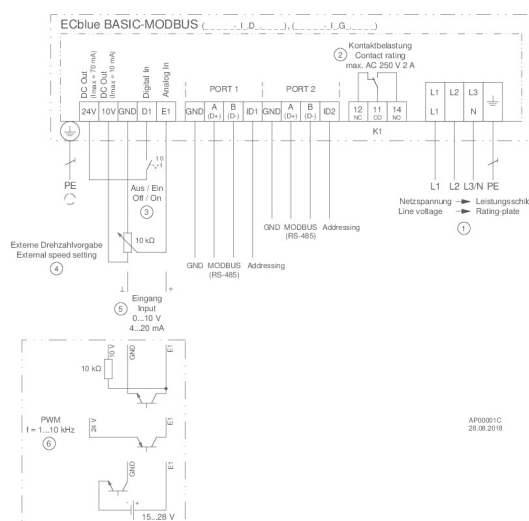
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příslušenství

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| artiklové č. | 183855            |



Series

ZN

Design

FE2owlet-ECblue with ZAplus

Specification

- Direct-driven axial fan
- Aerodynamic-optimised, sickle-blade profile, patterned with serrated trailing edge and winglets on the blade outer edge for energy and noise-optimised operation
- High efficient external rotor motor with innovative bionic blade in die-cast aluminium or composite injection moulded
- Highest efficiency with an optimized full bell mouth with guide vane and diffusor
- Impeller: Ø 450 – 1000 mm
- Balanced in Class G 6.3 acc DIN ISO 21940, dynamic on two levels.
- Any fitting position
- Drive motor in external rotor principle, sealed in protection class IP55
- Version with integrated electronics (IP65)
- Fan overtemperature protection through active temperature management
- Motor painted in RAL 5002
- Thermal class THCL 155
- The motor efficiency class complies with IE5
- The permissible ambient temperature is -35°C\* to max. +40°C (see data sheet)
- Maintenance-free ball bearings sealed on both sides with long-term lubrication
- Fan characteristic curve refer to measurements made on a combined air performance and acoustic test rig according DIN EN ISO 5801, or AMCA 210-99
- Make the electrical connection according to the operating instructions
- Highest efficiency with optimized full bell mouth with guide vane and diffusor
- ZAplus made from high performance composite material
- Modbus integrated as standard

System components

Guard grille, inlet rings

Technical data

|                                          |       |                   |
|------------------------------------------|-------|-------------------|
| Fan type                                 | _____ |                   |
| Fan size (Ø)                             | _____ | mm                |
| Design                                   | _____ |                   |
| Air flow (q <sub>v</sub> )               | _____ | m³/h              |
| Static pressure rise (Δp <sub>sF</sub> ) | _____ | Pa                |
| Rated voltage (U)                        | _____ | V                 |
| Mains frequency (f)                      | _____ | Hz                |
| Rated power (P <sub>N</sub> )            | _____ | kW                |
| Efficiency (η <sub>sF</sub> )            | _____ | %                 |
| Rated speed (n)                          | _____ | min <sup>-1</sup> |
| Media temperature (t <sub>R</sub> )      | _____ | °C                |
| Sound power level (L <sub>WA</sub> )     | _____ | dB(A)             |
| Weight (m)                               | _____ | kg                |

Further designs on request





All frame sizes are available in various grill and nozzle versions (designs).

\*Continuous operation with occasional starts (S1) according to DIN EN 60034-1: 2011-02. Occasional starting between -35 ° C and -25 ° C is permissible. Permanent operation below -25 ° C only possible with special bearings for refrigeration applications on request.

## Life-Cycle-Costs

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typ

artiklové č.

1

ZN071-ZIL.GG.V7P4

183855

|                                        |                   |       |
|----------------------------------------|-------------------|-------|
|                                        |                   | 1     |
| elektrický příkon ( $P_1$ )            | W                 | 1362  |
| otáčky ventilátoru, max. ( $n_{max}$ ) | %                 | 100   |
| průtok vzduchu ( $q_v$ )               | m <sup>3</sup> /h | 20689 |
| tlak, stat. ( $p_{sF}$ )               | Pa                | 3     |

| náklady |     |   |
|---------|-----|---|
| 1 roky  | EUR | 0 |
| 2 roky  | EUR | 0 |
| 3 roky  | EUR | 0 |
| 4 roky  | EUR | 0 |
| 5 roky  | EUR | 0 |

| načíst profil      |                |         |
|--------------------|----------------|---------|
| prov. hodiny       | % otáček       |         |
| 1000               | 100            | %       |
| 1000               | 50             | %       |
| 1000               | 25             | %       |
|                    |                | %       |
| 5760               | zbývající doba |         |
| náklady na energii | 0.10           | EUR/kWh |
| inflace            | 00             | %       |

