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ZN080-ZIL.GQ.V7P3 | 182421 | 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

24.09.2022

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	ZN080-ZIL.GQ.V7P3
artiklové č.	182421   Portfolio STD-WWW

## technická data

motor	ECblue
Efficiency class	IE5
napájení	-
maximální okolní teplota ( $t_r$ )	°C
účinnost $\eta_{statA}$	%
účinnost $N_{actual}$   $N_{SOLL}$	59,7   40
ErP - třída	2015   EC regulátor integrovaný
grille   influence	pressure side   measured

## data ventilátoru

SFP-class   SFP-třída ( $P_{SFP}$ )	-   $Ws/m^3$	1   358
průtok vzduchu ( $q_v$ )	$m^3/h$	31425
tlak, stat. ( $p_{sF}$ )   celk. ( $p_F$ )	Pa	8   182
elektrický příkon ( $P_{sys}$ )	W	3129
účinnost syst., stat. ( $\eta_{sF,sys}$ )   celk. ( $\eta_{F,sys}$ )	%	2.2   50.7
otáčky ventilátoru ( $n$ )   max. ( $n_{max}$ )	1/min	1250   1250
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	4.78
hlučnost, sací strana ( $L_{w(A),s}$ )   ( $L_{w,5}$ )	dB	86   88
hlučnost, výtlačná strana ( $L_{w(A),6}$ )   ( $L_{w,6}$ )	dB	89   90
rozměry ( $\text{š} \times \text{v} \times \text{d}$ )	mm	1000 x 998 x 328
hmotnost výrobku ( $m_{Pr}$ )	kg	49

PF:PF\_50; Ano:182421; STol:+-10 %



## charakteristika / hlučnost

24.09.2022

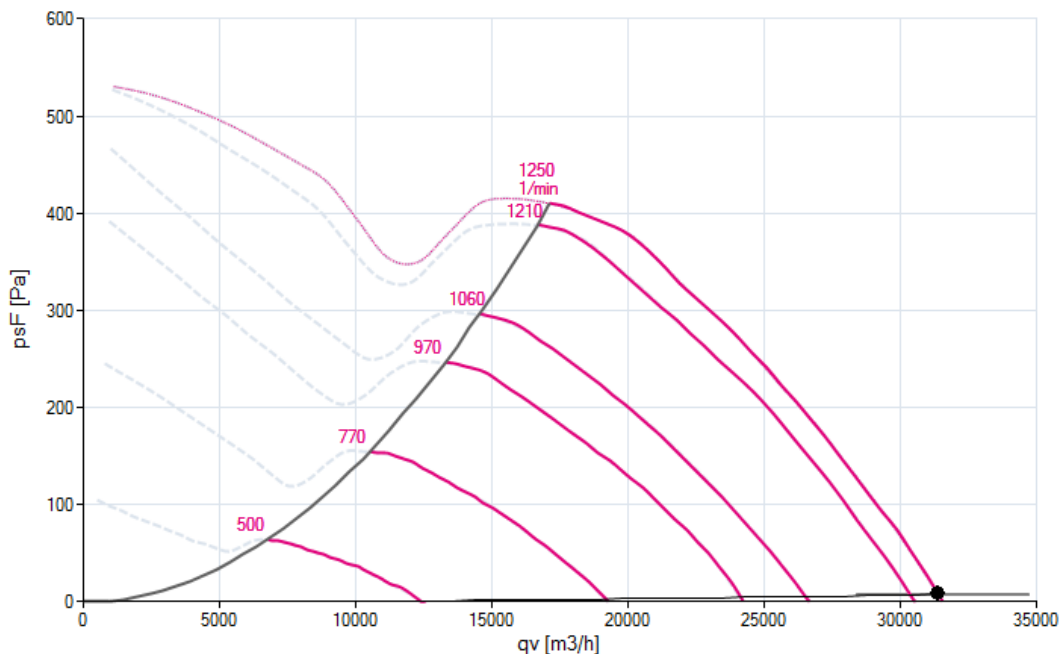
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### 1 ZN080-ZIL.GQ.V7P3

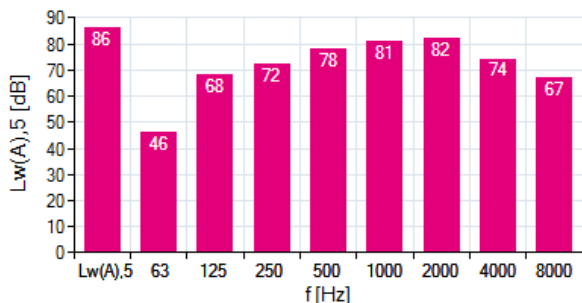
Measured in ZPlus with pressure side guard grille in air flow direction V in installation type A according to ISO5801

182421 | Portfolio STD-WW měřená hustota 1.16 [kg/m³]

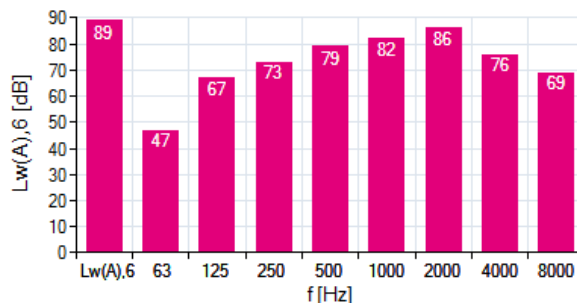
### vzduchový výkon $p_{sF}$



### hlučnost ( $L_{w(A),5}$ )



### hlučnost ( $L_{w(A),6}$ )



### 1 ZN080-ZIL.GQ.V7P3

f [Hz]	sum	63	125	250	500	1000	2000	4000	8000
$L_{w(A),5}$	86	46	68	72	78	81	82	74	67
$L_{w,5}$	88	71	82	80	81	81	81	73	68

f [Hz]	sum	63	125	250	500	1000	2000	4000	8000
$L_{w(A),6}$	89	47	67	73	79	82	86	76	69
$L_{w,6}$	90	72	82	81	82	82	85	75	70

## účinnost / příkon

24.09.2022

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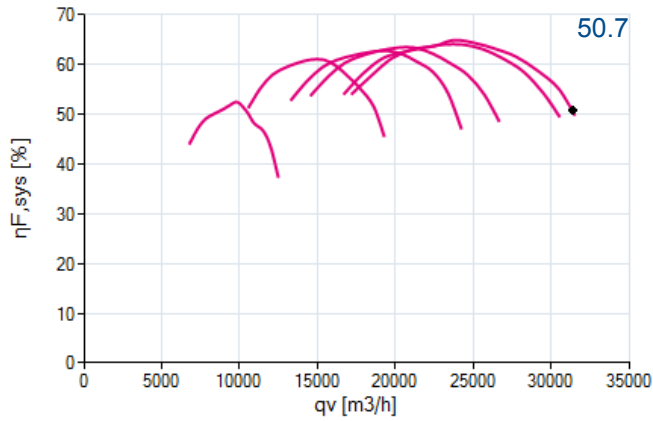
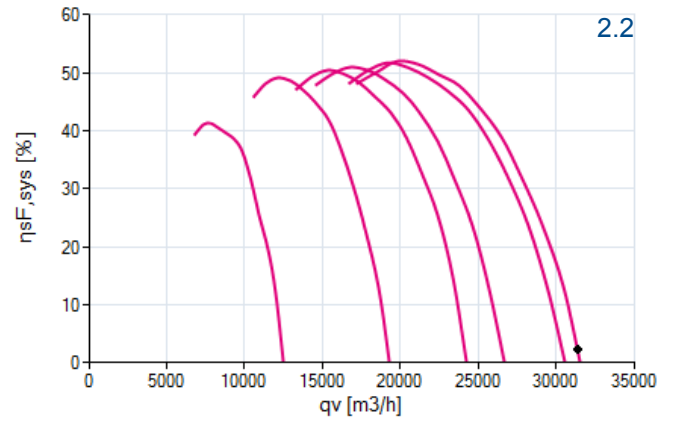
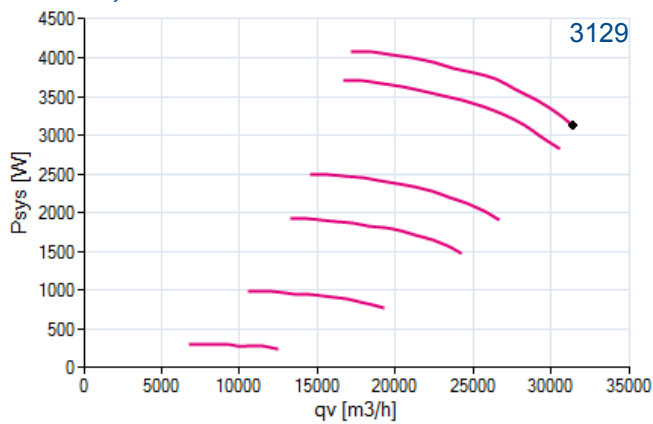
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ZN080-ZIL.GQ.V7P3

Measured in ZPlus with pressure side guard grille in air flow direction V in installation type A according to ISO5801

182421 | Portfolio STD-WW

měřená hustota 1.16 [kg/m³]

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



## nominální hodnoty

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**ZN080-ZIL.GQ.V7P3**

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3~ 380-480V 50Hz P1 4.00kW  
6.60-5.20A 1250/MIN 55°C  
3~ 380-480V 60Hz P1 4.00kW  
6.60-5.20A 1250/MIN 55°C  
IP55 THCL155

## výkres

24.09.2022

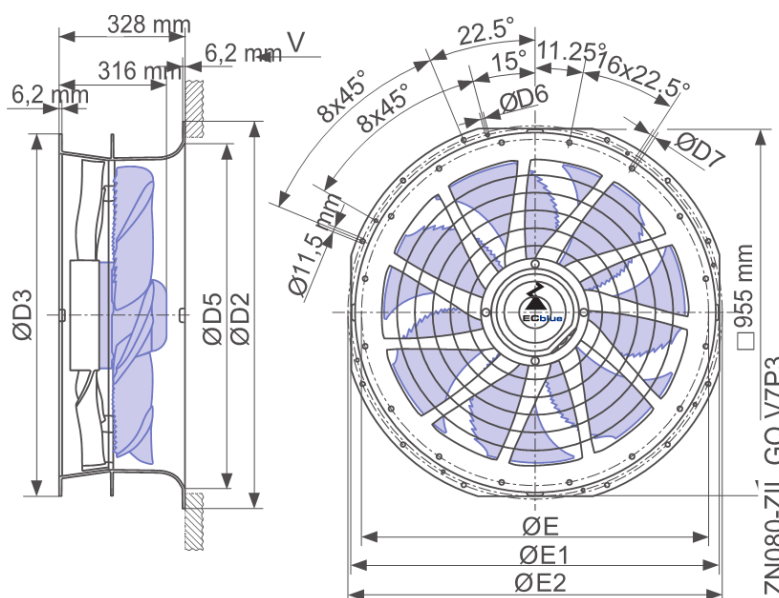
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## schéma zapojení

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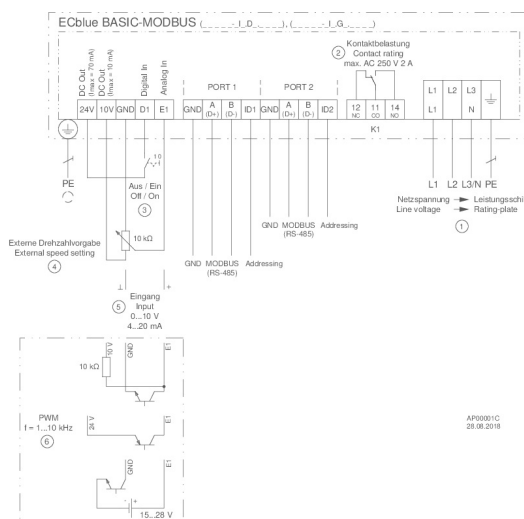
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příslušenství

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## 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

<b>Fan type</b>	_____	
<b>Fan size (Ø)</b>	_____	mm
<b>Design</b>	_____	
<b>Air flow (q<sub>v</sub>)</b>	_____	m <sup>3</sup> /h
<b>Static pressure rise (Δp<sub>sF</sub>)</b>	_____	Pa
<b>Rated voltage (U)</b>	_____	V
<b>Mains frequency (f)</b>	_____	Hz
<b>Rated power (P<sub>N</sub>)</b>	_____	kW
<b>Efficiency (η<sub>sF</sub>)</b>	_____	%
<b>Rated speed (n)</b>	_____	min <sup>-1</sup>
<b>Media temperature (t<sub>R</sub>)</b>	_____	°C
<b>Sound power level (L<sub>WA</sub>)</b>	_____	dB(A)
<b>Weight (m)</b>	_____	kg

Further designs on request



# FANselect



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.

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elektrický příkon ( $P_1$ )	W	3129
otáčky ventilátoru, max. ( $n_{max}$ )	%	100
průtok vzduchu ( $q_v$ )	m <sup>3</sup> /h	31425
tlak, stat. ( $p_{sF}$ )	Pa	8

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
inface	00	%

