



## general description

15/12/2021

version FANselect V 1.01 (211209), AMCA V 1.03 September, 2021 / 1.21.12.09 | 53567 | (user ZAFS43567)

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GR40C-ZID.DC.CR | 116174/A01 | Portfolio STD-WW | Cpro ECblue

**Standard design with ECblue motor and integrated electronics**

**Material of impeller:**

- ZAmid - high performance composite material

**Color Coating:**

- Color coating in RAL5002 (Ultra marine-blue)

**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:**

- THCL155

**Thermal protection:**

- Protection with active temperature management

**Protection:**

- IP55

**Coating:**

- Motor painted in RAL5002 (Ultra marine-blue)

**Controller (only motor size B\_):**

- Activation via external speed setting 0-10 V / PWM, Communication interface on request
- Standard cable length: 60 cm

**Controller (only motor size D\_, G\_):**



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- **BASIC:**

Activation via external speed setting 0-10 V / PWM Art. no. ER- and GR-module  
in basic version

- **PREMIUM:**

Integrated control functionality, Communication interface on request

**Cable glands:**

- Motor size D: 3 x M16 x 1.5
- Motor size G: 3 x M20 x 1.5

**Ambient temperature:**

- Minimum permissible ambient temperature: -20 °C\*
- Maximum permissible ambient temperature: 40 °C or see data sheet

**\*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.**

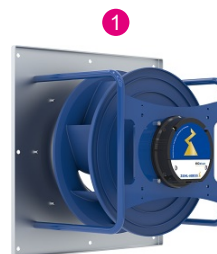
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## fan data

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|             |                               |
|-------------|-------------------------------|
| type        | GR40C-ZID.DC.CR               |
| article no. | 116174/A01   Portfolio STD-WW |

## technical data

|                                              |                                 |
|----------------------------------------------|---------------------------------|
| motor                                        | ECblue                          |
| Efficiency class                             | IE5                             |
| mains supply                                 | - 3~ 400V 50Hz                  |
| ambient temperature, max. limit ( $t_r$ )    | °C 40                           |
| efficiency grade $\eta_{statA}$              | % 68,3                          |
| efficiency grade $N_{actual}$   $N_{target}$ | 74,9   62                       |
| ErP-conformity                               | 2015   EC controller integrated |
| grille   influence                           | no                              |

## fan data

|                                                                  |                       |                       |
|------------------------------------------------------------------|-----------------------|-----------------------|
| SFP-class   SFP-value ( $P_{SFP}$ )                              | -   Ws/m <sup>3</sup> | 3   1172              |
| airflow volume ( $q_v$ )                                         | ft <sup>3</sup> /min  | 3949.0                |
| air velocity                                                     | ft/s                  | 40.63                 |
| pressure, stat. ( $p_{sF}$ )   tot. ( $p_F$ )                    | in.wg.                | 2.865   3.221         |
| electrical power input ( $P_{sys}$ )                             | W                     | 2184                  |
| system eff., stat. ( $\eta_{sF,sys}$ )   tot. ( $\eta_{F,sys}$ ) | %                     | 60.9   68.5           |
| fan speed ( $n$ )   max. ( $n_{max}$ )                           | rpm                   | 2398   2400           |
| fan speed, set value (% $n_{max}$ )                              | %                     | 100                   |
| frequency ( $f_{BP}$ )   ( $f_{max}$ )                           | Hz                    | 50   60               |
| voltage ( $U_{DP}$ )                                             | V                     | 400                   |
| current ( $I_{DP}$ )                                             | A                     | 3.41                  |
| acoustics, suction side ( $L_{w(A),5}$ )   ( $L_{w,5}$ )         | dB                    | 82   85               |
| acoustics, pressure side ( $L_{w(A),6}$ )   ( $L_{w,6}$ )        | dB                    | 88   90               |
| dimensions (w x h x d)                                           | in                    | 21.65 x 21.65 x 14.45 |
| product weight ( $m_{pr}$ )                                      | lb                    | 52.9                  |
| k-factor nozzle pres. (k)                                        | -                     | 154                   |
| differential pres. nozzle ( $p_{sF \text{ nozzle}}$ )            | Pa                    | 1898                  |

PF:PF\_50; Ano:116174; STot:±10 %





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performance curve / acoustics

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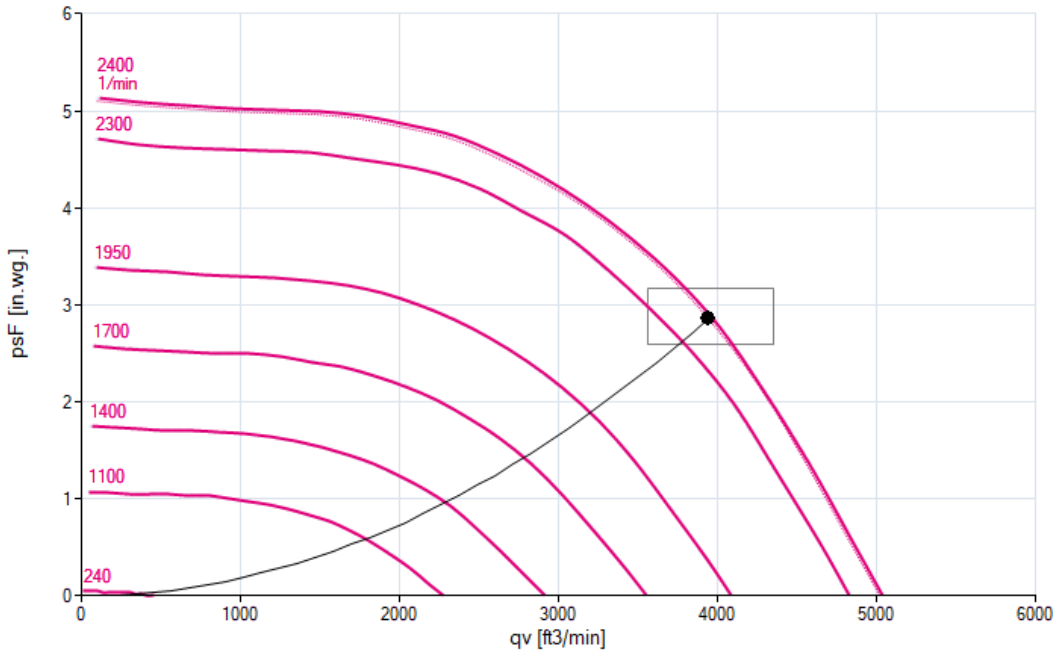
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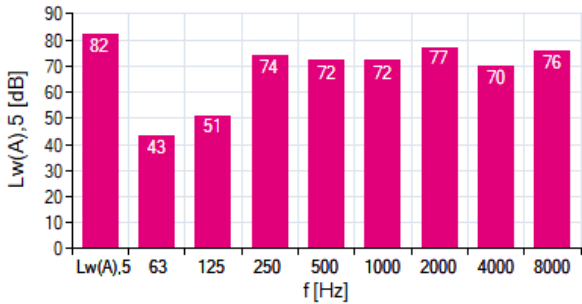
**GR40C-ZID.DC.CR**  
116174/A01 | Portfolio  
STD-WW

measured in standard nozzle in installation type A according to ISO 5801  
measurement density 0.072 [lbs/ft³]

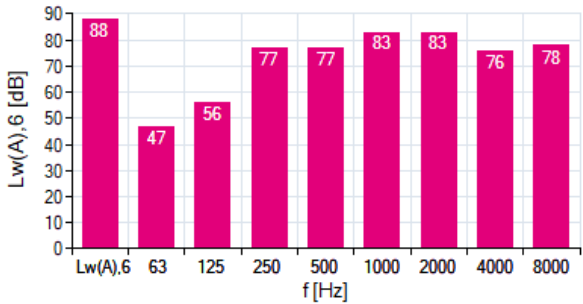
air performance  $p_{sF}$



acoustics ( $L_{w(A),5}$ )



acoustics ( $L_{w(A),6}$ )



| 1 GR40C-ZID.DC.CR |     |    |     |     |     |      |      |      |      |
|-------------------|-----|----|-----|-----|-----|------|------|------|------|
| f [Hz]            | sum | 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 |
| $L_{w(A),5}$      | 82  | 43 | 51  | 74  | 72  | 72   | 77   | 70   | 76   |
| $L_{w,5}$         | 85  | 69 | 67  | 82  | 75  | 72   | 76   | 69   | 77   |

| f [Hz]       | sum | 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 |
|--------------|-----|----|-----|-----|-----|------|------|------|------|
| $L_{w(A),6}$ | 88  | 47 | 56  | 77  | 77  | 83   | 83   | 76   | 78   |
| $L_{w,6}$    | 90  | 72 | 72  | 85  | 80  | 83   | 82   | 75   | 79   |



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## efficiency grade / power input

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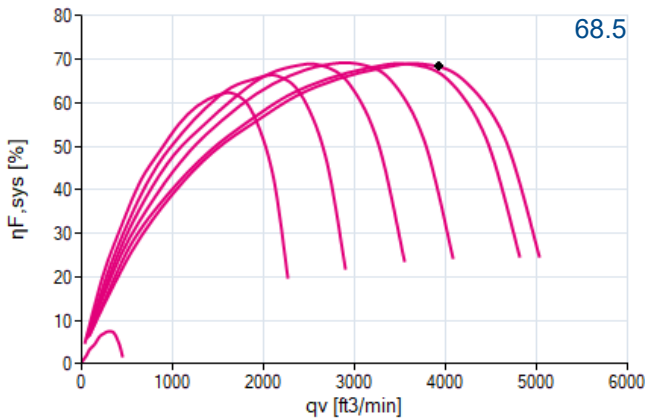
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GR40C-ZID.DC.CR

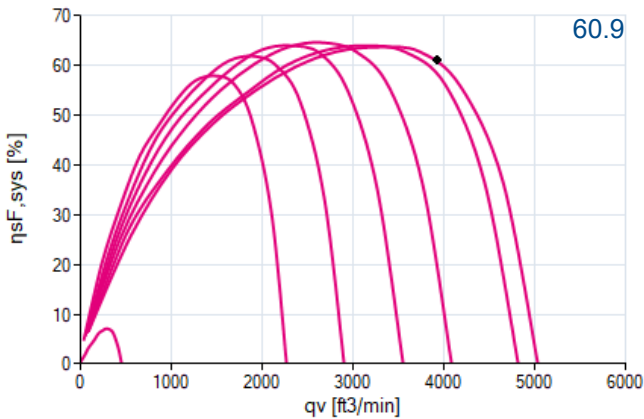
116174/A01 | Portfolio  
STD-WW
- measured in standard nozzle in installation type A according to ISO 5801

measurement density 0.072 [lbs/ft³]

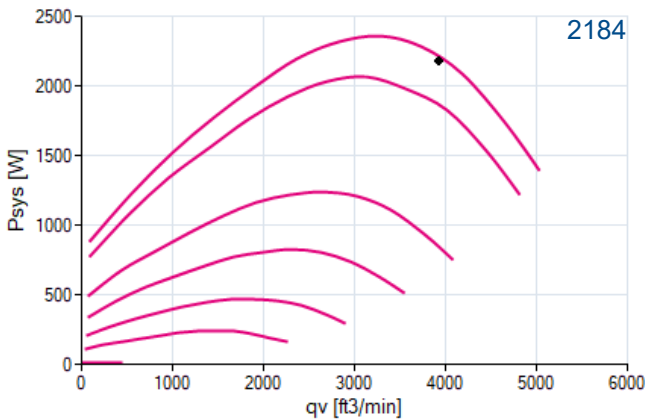
efficiency grade  $\eta_{F,sys}$



efficiency grade  $\eta_{sF,sys}$



power input  $P_{sys}$



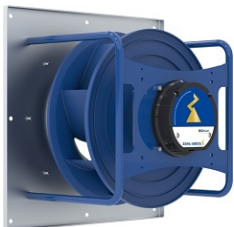


## nominal values

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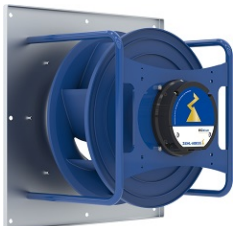
3~ 380-480V 50Hz P1 2.40kW  
 3.90-3.10A 2400/MIN 40°C  
 3~ 380-480V 60Hz P1 2.40kW  
 3.90-3.10A 2400/MIN 40°C  
 IP55 THCL155

## drawing

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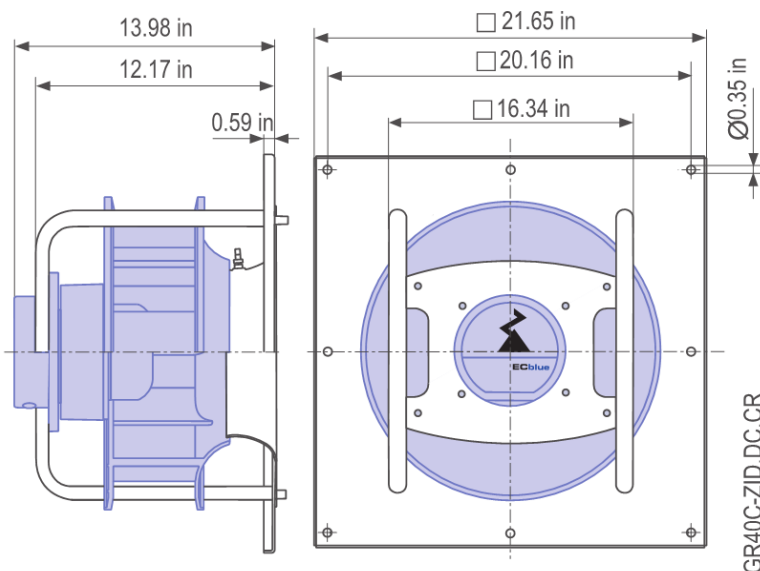
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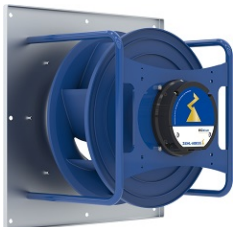


## wiring diagram

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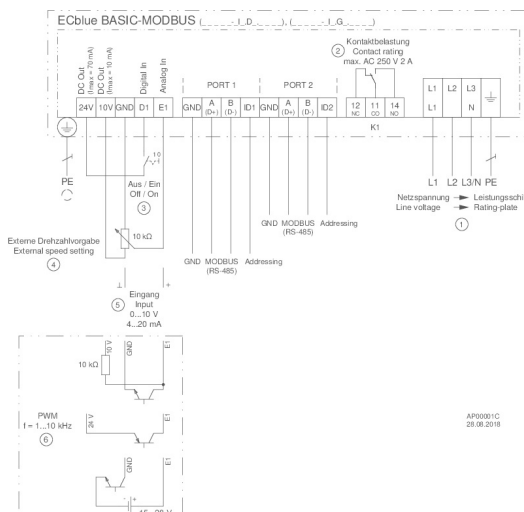
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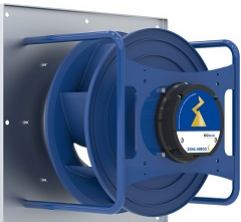


system components

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