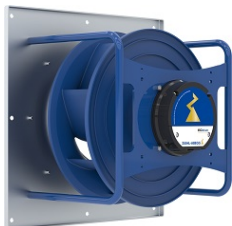


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GR31C-ZID.DC.CR | 116166/A01 | Portfolio STD-WW | Cpro ECblue

**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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|             |                               |
|-------------|-------------------------------|
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| article no. | 116166/A01   Portfolio STD-WW |

## technical data

|                                              |                                 |
|----------------------------------------------|---------------------------------|
| motor                                        | ECblue                          |
| Efficiency class                             | IE5                             |
| mains supply                                 | - 3~ 400V 50Hz                  |
| ambient temperature, max. limit ( $t_r$ )    | °C 45                           |
| efficiency grade $\eta_{statA}$              | % 65,0                          |
| efficiency grade $N_{actual}$   $N_{target}$ | 69,6   62                       |
| ErP-conformity                               | 2015   EC controller integrated |
| grille   influence                           | no                              |

## fan data

|                                                                  |                       |                       |
|------------------------------------------------------------------|-----------------------|-----------------------|
| SFP-class   SFP-value ( $P_{SFP}$ )                              | -   Ws/m <sup>3</sup> | 4   1947              |
| airflow volume ( $q_v$ )                                         | ft <sup>3</sup> /min  | 3507.6                |
| air velocity                                                     | ft/s                  | 56.87                 |
| pressure, stat. ( $p_{sF}$ )   tot. ( $p_F$ )                    | in.wg.                | 3.862   4.579         |
| electrical power input ( $P_{sys}$ )                             | W                     | 3223                  |
| system eff., stat. ( $\eta_{sF,sys}$ )   tot. ( $\eta_{F,sys}$ ) | %                     | 49.4   58.6           |
| fan speed ( $n$ )   max. ( $n_{max}$ )                           | rpm                   | 4096   4100           |
| fan speed, set value (% $n_{max}$ )                              | %                     | 100                   |
| frequency ( $f_{BP}$ )   ( $f_{max}$ )                           | Hz                    | 50   60               |
| voltage ( $U_{DP}$ )                                             | V                     | 400                   |
| current ( $I_{DP}$ )                                             | A                     | 4.92                  |
| acoustics, suction side ( $L_{w(A),5}$ )   ( $L_{w,5}$ )         | dB                    | 90   93               |
| acoustics, pressure side ( $L_{w(A),6}$ )   ( $L_{w,6}$ )        | dB                    | 97   98               |
| dimensions (w x h x d)                                           | in                    | 17.72 x 17.72 x 13.50 |
| product weight ( $m_{pr}$ )                                      | lb                    | 44.1                  |
| k-factor nozzle pres. (k)                                        | -                     | 95                    |
| differential pres. nozzle ( $p_{sF \text{ nozzle}}$ )            | Pa                    | 3935                  |

PF:PF\_50; BR:BR\_40;  $q_v$ :3000.0 ft<sup>3</sup>/min;  $p_{sF}$ :2.000 in.wg.; mains:3~ / 400V / 50 Hz;  $t_r$ :40 °C; size:315 mm;  $p$ :0.072 lbs/ft<sup>3</sup>; STol:+-10 %; BF:





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## performance curve / acoustics

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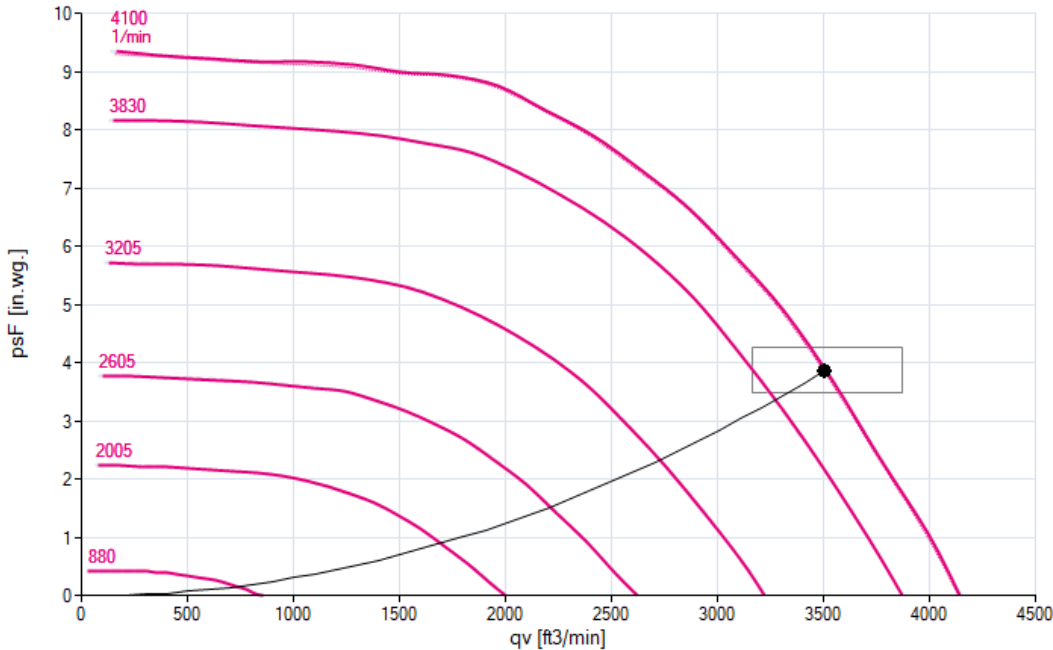
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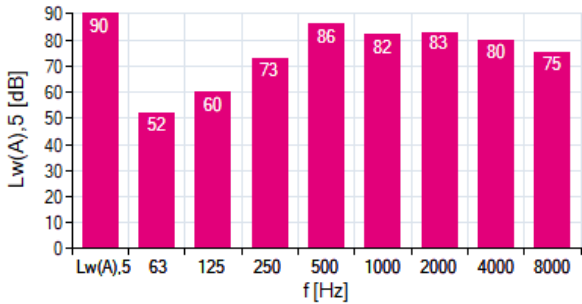
STD-WW
- measured in standard nozzle in installation type A according to ISO 5801

measurement density 0.072 [lbs/ft³]

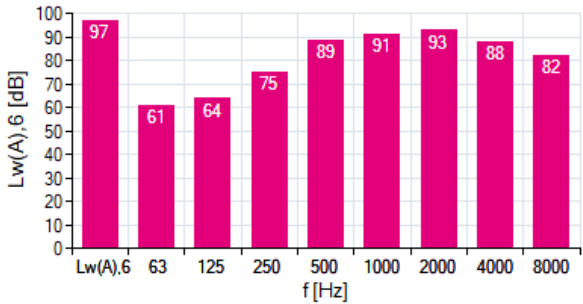
### air performance $p_{sF}$



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



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



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| f [Hz]       | sum | 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 |
|--------------|-----|----|-----|-----|-----|------|------|------|------|
| $L_{w(A),5}$ | 90  | 52 | 60  | 73  | 86  | 82   | 83   | 80   | 75   |
| $L_{w,5}$    | 93  | 79 | 76  | 80  | 89  | 82   | 82   | 79   | 76   |

| f [Hz]       | sum | 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 |
|--------------|-----|----|-----|-----|-----|------|------|------|------|
| $L_{w(A),6}$ | 97  | 61 | 64  | 75  | 89  | 91   | 93   | 88   | 82   |
| $L_{w,6}$    | 98  | 89 | 79  | 83  | 92  | 91   | 92   | 87   | 83   |





## efficiency grade / power input

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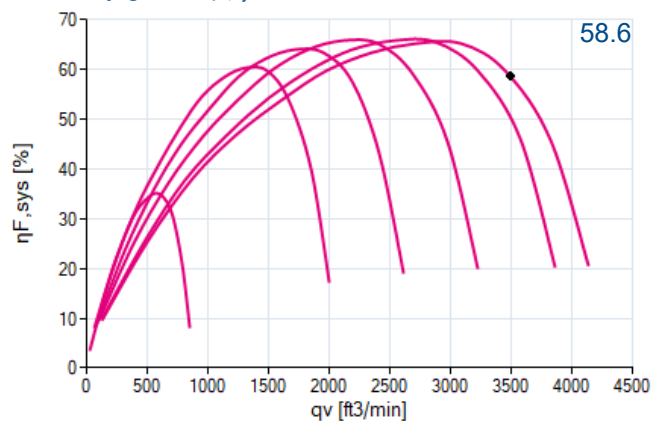
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STD-WW

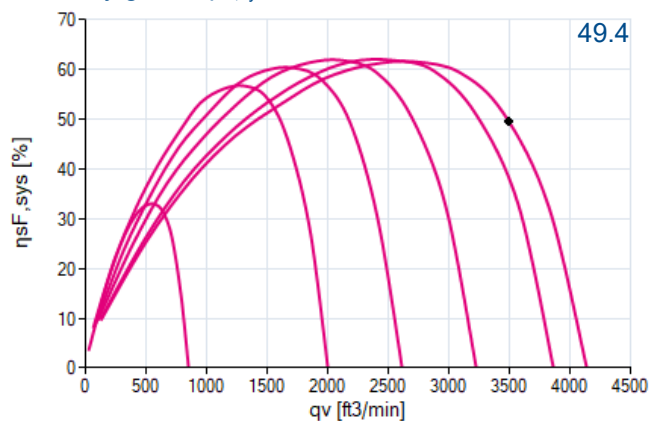
measured in standard nozzle in installation type A according to ISO 5801

measurement density 0.072 [lbs/ft³]

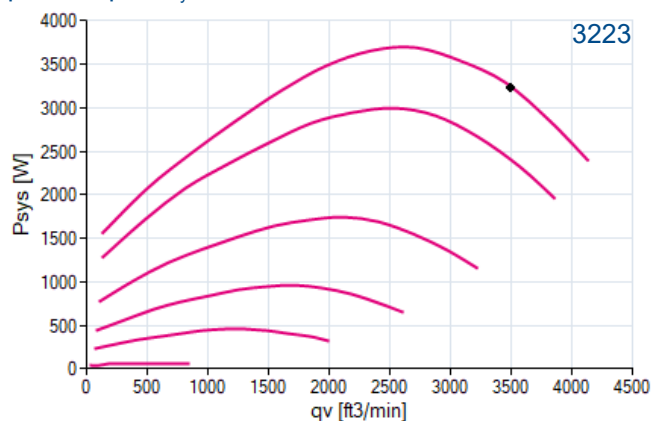
efficiency grade  $\eta_{F,sys}$



efficiency grade  $\eta_{sF,sys}$



power input  $P_{sys}$



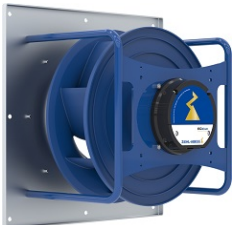


nominal values

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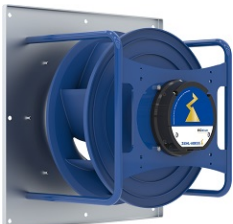
3~ 380-480V 50Hz P1 3.70kW  
6.00-4.60A 4100/MIN 45°C  
3~ 380-480V 60Hz P1 3.70kW  
6.00-4.60A 4100/MIN 45°C  
IP55 THCL155

drawing

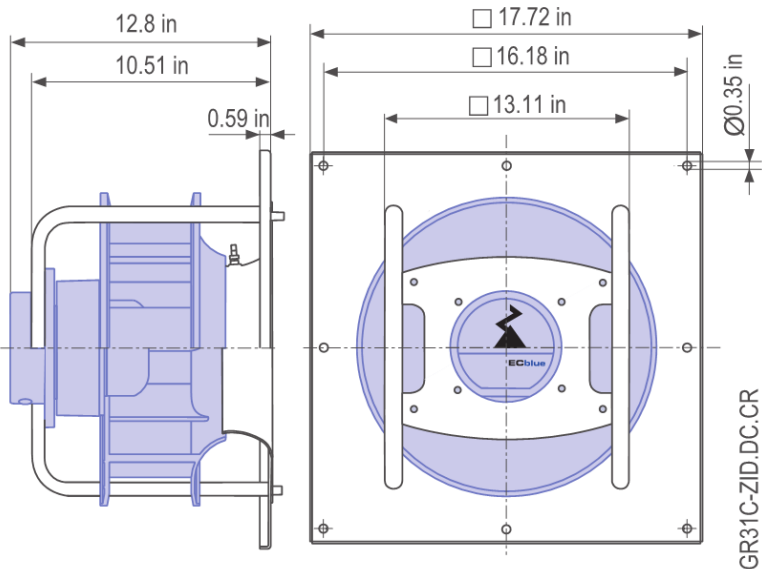
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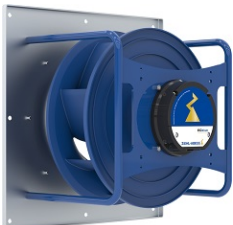


wiring diagram

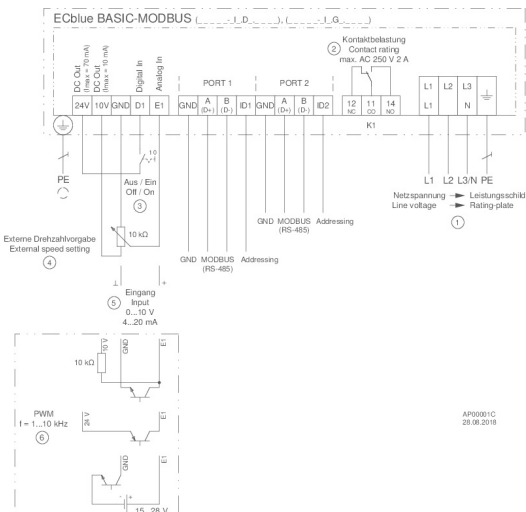
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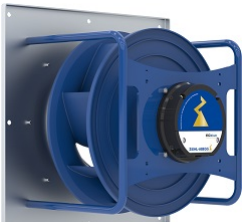


system components

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