



Image is for illustrative purposes only. Actual product may vary.

### Nominal data

<b>Model</b>	<b>BC-F120B-EC-02</b>	
<b>Motor model</b>	<b>MEC3C-72-84-01</b>	

<b>Phase</b>		1~
<b>Nominal Voltage</b>	VAC	120
<b>Nominal voltage range</b>	VAC	92~138
<b>Frequency</b>	Hz	50/60

<b>Speed</b>	RPM	3800
<b>Power consumption</b>	W	84
<b>Current draw</b>	A	1.2
<b>Min. ambient temperature</b>	°C	-25
<b>Max. ambient temperature</b>	°C	+50

Power and current values represent maximum ratings; speed values are specified at maximum efficiency point.

### Data according to Commission Regulation (EU) 2024/1834

General parameters		
<b>Measurement category</b>		
<b>Overall efficiency, ns</b>	%	
<b>Minimum efficiency, n</b>	%	

Working point		
<b>Power</b>	W	
<b>Flow rate</b>	m <sup>3</sup> /h	
<b>Pressure (Ps)</b>	Pa	

## Technical Data

<b>Weight</b>	1.05 kg
<b>Impeller size</b>	120 mm
<b>Impeller material</b>	Galvanized steel
<b>Number of blades</b>	34
<b>Direction of rotation</b>	Clockwise, seen on rotor
<b>Motor size</b>	72
<b>Bearing type</b>	Ball bearings
<b>Insulation class</b>	B
<b>Degree of protection</b>	IP54
<b>Motor protection</b>	Self-resetting TOP wired internally
<b>Operation mode</b>	Continuous duty (S1)
<b>Installation position</b>	Any
<b>Min. permitted ambient temp. for motor (transport/storage)</b>	-40 °C
<b>Max. permitted ambient temp. for motor (transport/storage)</b>	+80 °C
<b>Cable length</b>	500 ±20 mm
<b>Technical features</b>	<ul style="list-style-type: none"> <li>- Output 10 VDC, Max. 10 mA</li> <li>- Control Input 0-10 VDC / PWM</li> <li>- Locked Rotor Protection</li> <li>- Thermal Protection</li> <li>- Excessive Voltage Protection</li> <li>- Less Voltage Protection</li> <li>- Overcurrent Protection</li> <li>- Soft Start</li> </ul>
<b>Conformity with standards</b>	<ul style="list-style-type: none"> <li>- Safety standards: UL 507, CSA C22.2 № 113</li> <li>- North America compliance: cETLus (3166456)</li> <li>- Material compliance: RoHS, REACH</li> <li>- Quality certification: ISO 9001</li> </ul>
<b>Warranty period</b>	2 years / 40 000 motor hours

## Connection diagram

	Designation	Color	Function / assignment
<b>Line 1 - Power connections</b>	PE	Green/Yellow	Protective Earth
	L	Brown	Power supply, live wire see nameplate for voltage range
	N	Blue	Power supply, neutral wire see nameplate for voltage range

	Designation	Color	Purpose / Function
<b>Line 2 - Control connections</b>	+10V DC	Red	Fixed voltage output 10 VDC ±5%, max. 10mA, power supply for external devices (e.g. potentiometers), SELV
	Speed Control	Yellow	0-10V/PWM (max. amplitude of PWM 10V) control input, SELV
	Signal Feedback	White	Tach output, 2 pulse per revolution (pulses can be customized, or changed to RD signal), SELV
	GND	Blue	Reference ground for control interface, SELV

CAUTION: incorrect connection may lead to product malfunction or permanent damage.

**Curves: Air performance 50 Hz**

