



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

### Nominal data

<b>Model</b>	<b>BC-F97A-EC-00</b>	
<b>Motor model</b>	<b>MEC3C-59-55-02</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	3000
<b>Power consumption</b>	W	35
<b>Current draw</b>	A	0.5
<b>Min. ambient temperature</b>	°C	-25
<b>Max. ambient temperature</b>	°C	+60

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>	0.57 kg
<b>Impeller size</b>	97 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>	59
<b>Bearing type</b>	Ball bearings
<b>Insulation class</b>	B
<b>Degree of protection</b>	IP55
<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>	1250 ±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>- Material compliance: RoHS, REACH</li><li>- Quality certification: ISO 9001</li></ul>
<b>Warranty period</b>	2 years / 40 000 motor hours

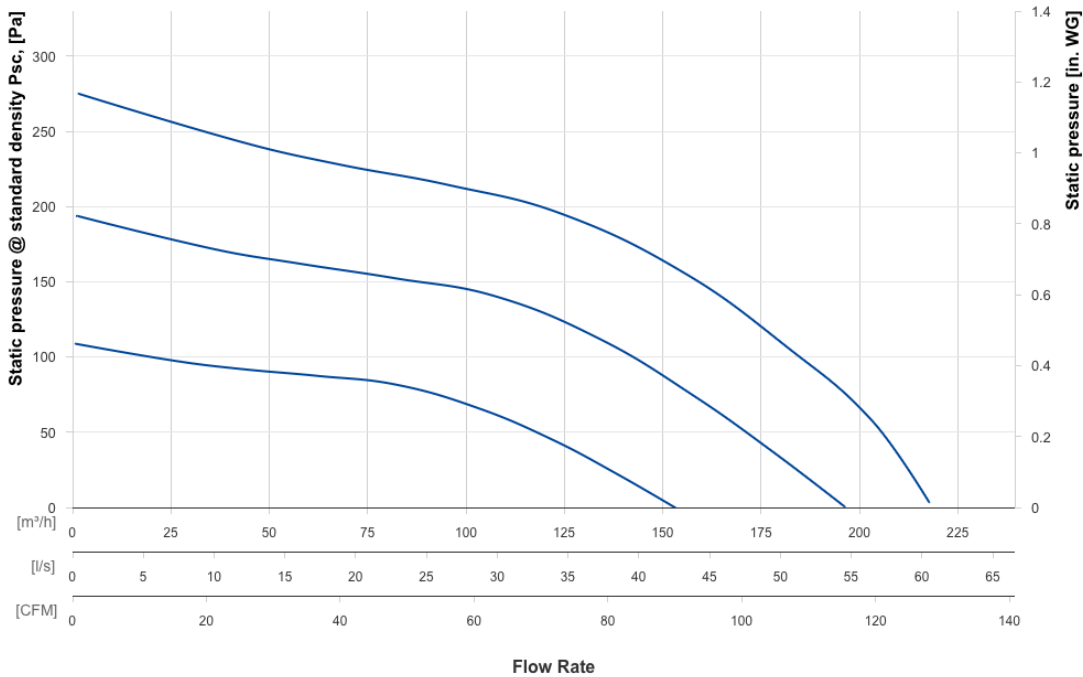
## Connection diagram

	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**



V	U, V	P, W	I, A	n, min <sup>-1</sup>	Psc, Pa	Psc, in.WG	Q, L/s	Q, m³/h	Q, CFM	W/(l/s)	ηt [%]
10V	119	33,9	0,49	2282	3,5	0,01	60,5	217,7	128,0	0,56	0,6
10V	119	34,4	0,49	2478	57,4	0,23	56,5	203,3	119,5	0,61	9,4
10V	119	30,9	0,45	2584	105,6	0,42	50,6	182,1	107,1	0,61	17,3
10V	119	26,8	0,40	2708	154,9	0,62	43,4	156,1	91,8	0,62	25,1
8V	119	24,8	0,37	2078	0,6	0,00	54,5	196,2	115,4	0,45	0,1
8V	119	22,3	0,34	2150	36,6	0,15	49,5	178,2	104,8	0,45	8,1
8V	119	19,7	0,31	2230	73,7	0,30	43,9	158,2	93,0	0,45	16,4
8V	119	17,0	0,28	2326	111,2	0,45	37,4	134,6	79,1	0,46	24,5
6V	119	11,9	0,20	1640	-0,2	0,00	42,6	153,2	90,1	0,28	-0,1
6V	119	10,7	0,19	1692	22,2	0,09	38,4	138,4	81,4	0,28	8,0
6V	119	9,5	0,17	1748	45,0	0,18	33,9	122,0	71,7	0,28	16,1
6V	119	8,3	0,15	1812	66,1	0,27	28,6	103,0	60,6	0,29	22,8