

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

Nominal data

Model	BL-F120B-EC-20	
Motor model	MEC3E-72-95-00	

Phase		1~
Nominal Voltage	VAC	230
Nominal voltage range	VAC	184~276
Frequency	Hz	50/60

Speed	RPM	2900
Power consumption	W	90
Current draw	A	0.8
Min. ambient temperature	°C	-25
Max. ambient temperature	°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		
Measurement category		
Overall efficiency, η_s	%	
Minimum efficiency, η_n	%	

Working point		
Power	W	
Flow rate	m ³ /h	
Pressure (Ps)	Pa	

Technical Data

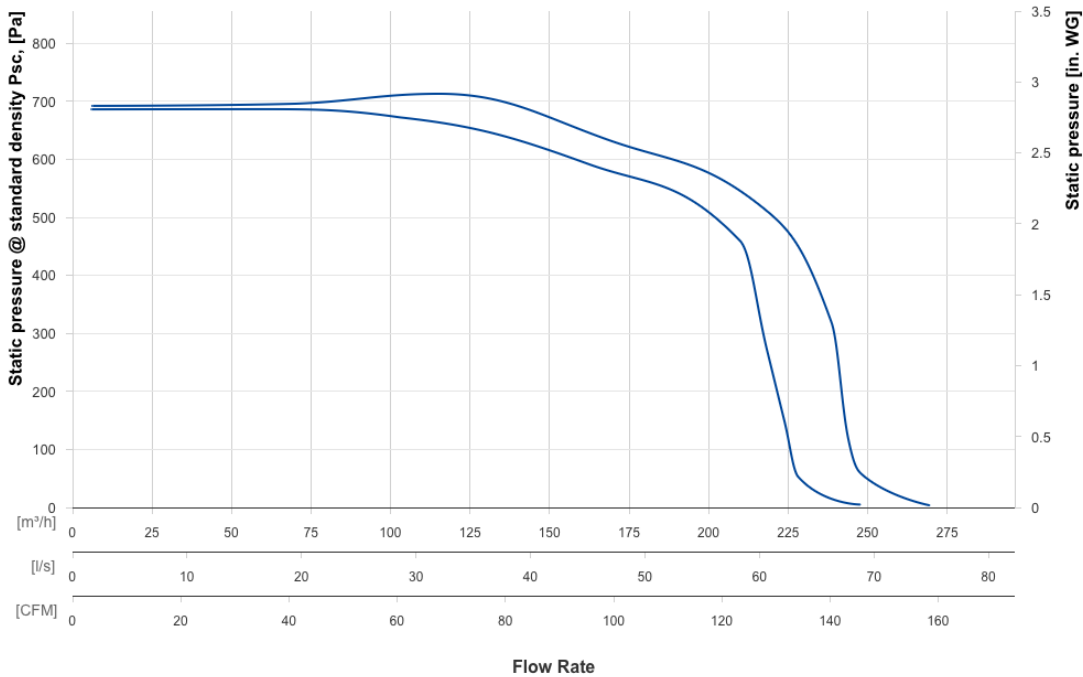
Weight	1.1 kg
Impeller size	120 mm
Impeller material	Galvanized steel
Number of blades	34
Direction of rotation	Clockwise, seen on rotor
Motor size	72
Bearing type	Ball bearings
Insulation class	B
Degree of protection	IP55
Motor protection	Self-resetting TOP wired internally
Operation mode	Continuous duty (S1)
Installation position	Any
Min. permitted ambient temp. for motor (transport/storage)	-40 °C
Max. permitted ambient temp. for motor (transport/storage)	+80 °C
Cable length	1500 ±20 mm
Technical features	<ul style="list-style-type: none"> - Output 10 VDC, Max. 10 mA - Control Input 0-10 VDC / PWM - Locked Rotor Protection - Thermal Protection - Excessive Voltage Protection - Less Voltage Protection - Overcurrent Protection - Soft Start
Conformity with standards	<ul style="list-style-type: none"> - Safety standards: EN 60335-1, EN 60335-2-80 - Electromagnetic compatibility: EN IEC 61000-3-2, EN 61000-3-3, EN IEC 61000-6-1, EN IEC 61000-6-3, EN IEC 55014-1, EN IEC 55014-2 - EU compliance: CE, RoHS, REACH - Quality certification: ISO 9001
Warranty period	2 years / 40 000 motor hours

Connection diagram

	Designation	Color	Function / assignment
Line 1 - Power connections	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
Line 2 - Control connections	+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 ⁻¹	Psc, Pa	Psc, in.WG	Q, L/s	Q, m³/h	Q, CFM	W/(l/s)	ηt [%]
10V	230	23,1	0,22	1500	3,8	0,02	74,8	269,3	158,3	0,31	1,2
10V	230	25,0	0,24	1686	54,0	0,22	69,1	248,8	146,3	0,36	14,9
10V	230	32,3	0,29	1998	118,1	0,47	67,7	243,9	143,4	0,48	24,8
10V	230	57,8	0,49	2862	319,1	1,28	66,3	238,6	140,3	0,87	36,6
8V	230	19,0	0,19	1404	5,0	0,02	68,8	247,5	145,5	0,28	1,8
8V	230	20,7	0,20	1614	52,4	0,21	63,4	228,2	134,2	0,33	16,0
8V	230	32,0	0,29	2124	149,2	0,60	62,2	223,8	131,6	0,52	29,0
8V	230	46,1	0,40	2652	270,0	1,08	60,7	218,4	128,4	0,76	35,5