

K1G190-AD50-02

EC centrifugal module - ESM

backward-curved
with support bracket



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Nominal data

Type	K1G190-AD50-02		
Motor	M1G055-BD		
Phase		1~	1~
Nominal voltage	VAC	115	115
Frequency	Hz	50/60	50/60
Method of obtaining data		ml	
Speed (rpm)	min ⁻¹	2000	1600
Power consumption	W	30	
Current draw	A	0.45	
Min. ambient temperature	°C	-30	-30
Max. ambient temperature	°C	50	50

ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment
Subject to change



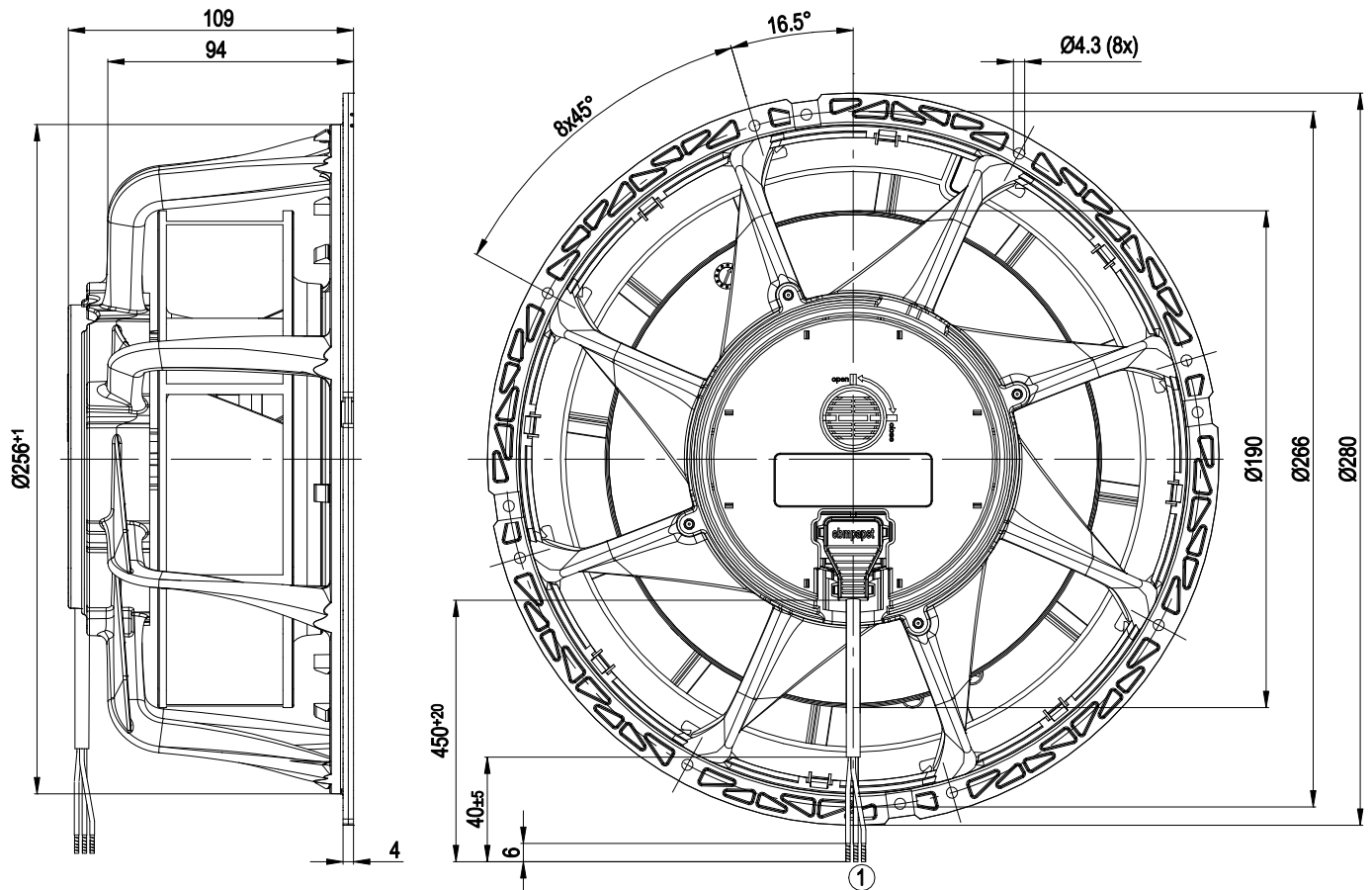
Technical description

Weight	1.3 kg
Fan size	190 mm
Rotor surface	Galvanized
Blade material	PA plastic
Support bracket material	PA plastic
Inlet nozzle material	PA plastic
Number of blades	7
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP54
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	H1
Max. permitted ambient temp. for motor (transport/storage)	+ 80 °C
Min. permitted ambient temp. for motor (transport/storage)	- 40 °C
Installation position	Any
Condensation drainage holes	On rotor side
Mode	S1
Motor bearing	Ball bearing
Technical features	- Speed selection max./min. - ESM+ expandable with plug-in module - Soft start - Thermal overload protection for motor
Speed levels	2
EMC immunity to interference	According to EN 61000-6-2
EMC circuit feedback	According to EN 61000-3-2/3
EMC interference emission	According to EN 61000-6-3 (household environment)
Motor protection	Thermal overload protector (TOP) internally connected
Protection class	II
Conformity with standards	EN 60335-1; EN 60335-2-24; EN 60335-2-80; EN 60335-2-89; CE
Approval	UL 1004-3; VDE; EAC; CSA C22.2 No. 77

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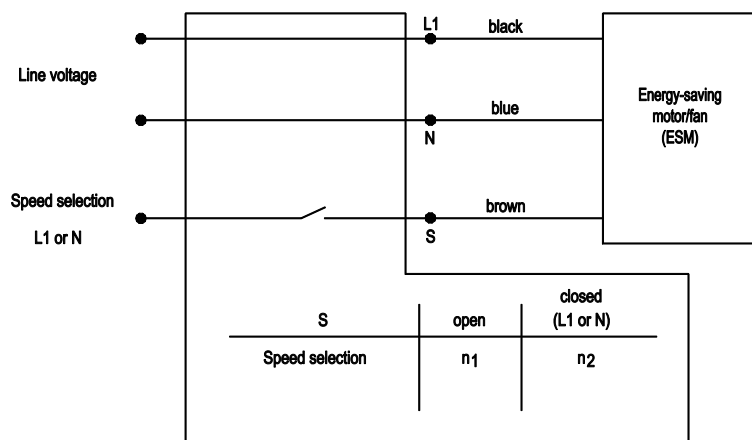
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Product drawing

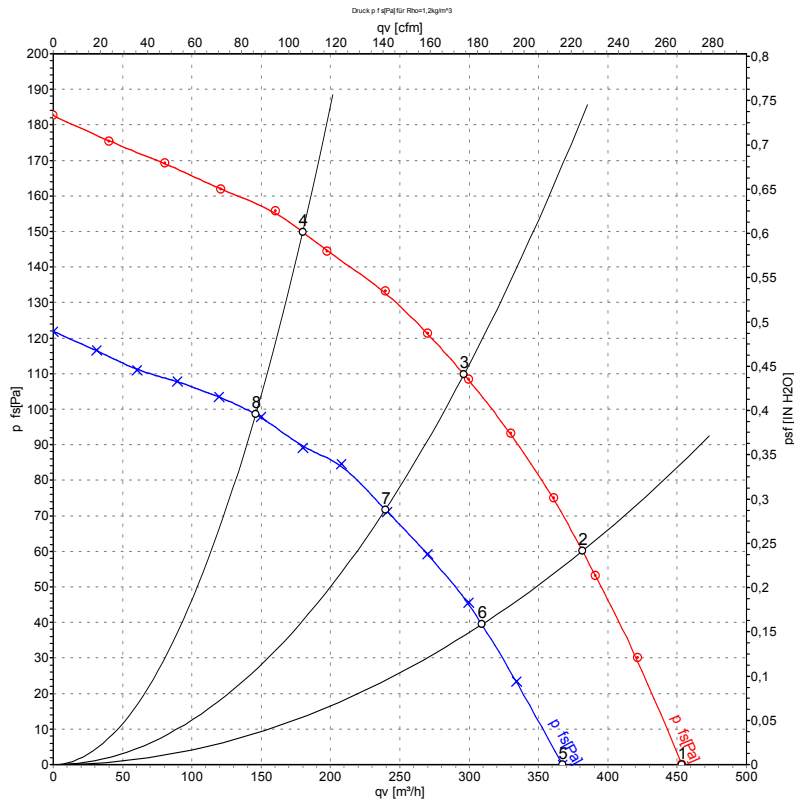


1 Cable AWG20, 3x crimped splices

Connection diagram



Curves: Air performance 50 Hz



Measurement: LU-135445-1
Measurement: LU-135450-1

Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebm-papst. Intake sound level: Sound power level according to ISO 13347 / sound pressure level measured at 1 m distance from fan axis. The values given are valid under the specified measuring conditions and may vary due to conditions of installation. For deviations from the standard configuration, the parameters have to be checked on the installed unit.

Measured values

	U	f	n	P _{ed}	I	q _V	p _{1s}	q _V	p _{1s}
	V	Hz	min ⁻¹	W	A	m ³ /h	Pa	cfm	inH ₂ O
1	115	50	2000	21	0.34	455	0	265	0.00
2	115	50	2000	25	0.38	380	60	225	0.24
3	115	50	2000	30	0.45	295	110	175	0.44
4	115	50	2000	26	0.39	180	150	105	0.60
5	115	50	1600	13	0.19	365	0	215	0.00
6	115	50	1600	15	0.25	310	40	180	0.16
7	115	50	1600	17	0.27	240	72	140	0.29
8	115	50	1600	15	0.26	145	99	85	0.40

U = Power supply · f = Frequency · n = Speed (rpm) · P_{ed} = Power consumption · I = Current draw · q_V = Air flow · p_{1s} = Pressure increase