G2E120-AR77-23

AC centrifugal fan

forward-curved, single-intake

with housing (flange)

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Amtsgericht (court of registration) Stuttgart · HRA 590344

General partner Elektrobau Mulfingen GmbH · Headquarters Mulfingen
Amtsgericht (court of registration) Stuttgart · HRB 590142

Nominal data

Type	**G2E120-AR77-23**
Motor	**M2E068-BF**

Phase		1~	1~
Nominal voltage	VAC	240	240
Nominal voltage range	VAC	220 .. 240	220 .. 240
Frequency	Hz	50	60
Method of obtaining data		fa	ml
Valid for approval/standard		CE	CE
Speed (rpm)	min^{-1}	2600	2950
Power consumption	W	90	115
Current draw	A	0.39	0.49
Capacitor	µF	2	2
Capacitor voltage	VDB	450	450
Capacitor standard		S0 (CE)	S0 (CE)
Min. back pressure	Pa	0	50
Min. back pressure	in. wg	0	0.2
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	30	30

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

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Technical description

Weight	2.18 kg
Size	120 mm
Motor size	68
Rotor surface	Painted black
Terminal box material	PC/ABS plastic
Impeller material	Sheet steel, painted black
Housing material	Die-cast aluminum
Guard grille material	Hot-dip galvanized and spot-welded net
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent as per EN 60034-5
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	Shaft horizontal or rotor on bottom; rotor on top on request
Condensation drainage holes	On rotor side
Mode	S1
Motor bearing	Ball bearing
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	< 0.75 mA
Electrical hookup	Terminal box; Via terminal box, capacitor integrated and connected
Motor protection	Thermal overload protector (TOP) internally connected
Protection class	I (with customer connection of protective earth)
Motor capacitor according to EN 60252-1 in safety protection class	S0
Conformity with standards	EN 60335-1; CE
Approval	CSA C22.2 No. 100; UL 1004-1; EAC

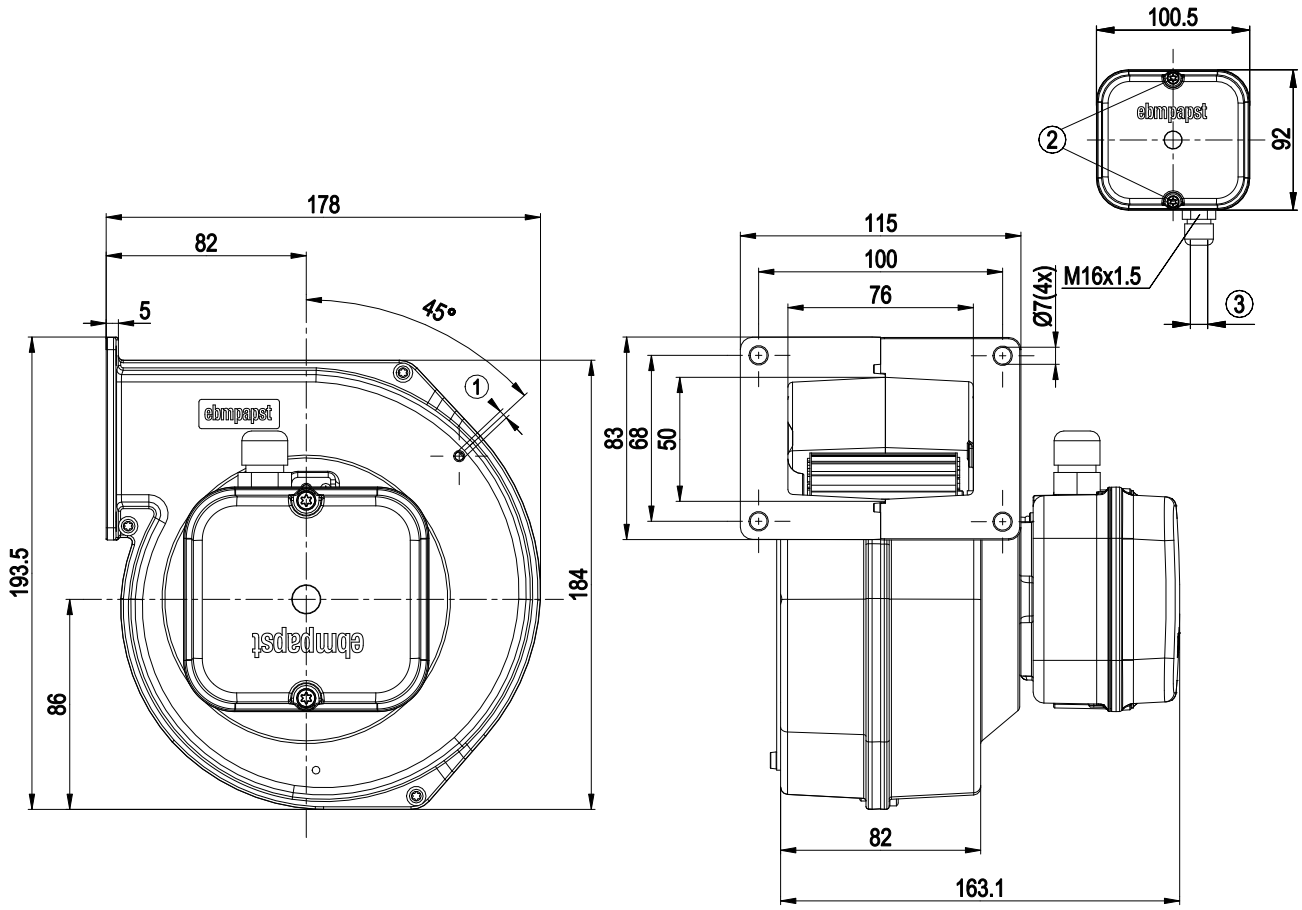
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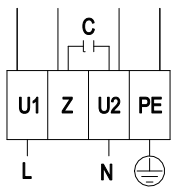
with housing (flange)

Product drawing



1	Tapping hole ready for self-tapping M4 screw
2	Tightening torque 1.5 ± 0.2 Nm
3	Cable diameter: max. 7.5 mm; tightening torque 1.3±0.2 Nm

Connection diagram



L	= U1 = blue	Z	brown	N	= U2 = black
PE	green/yellow				

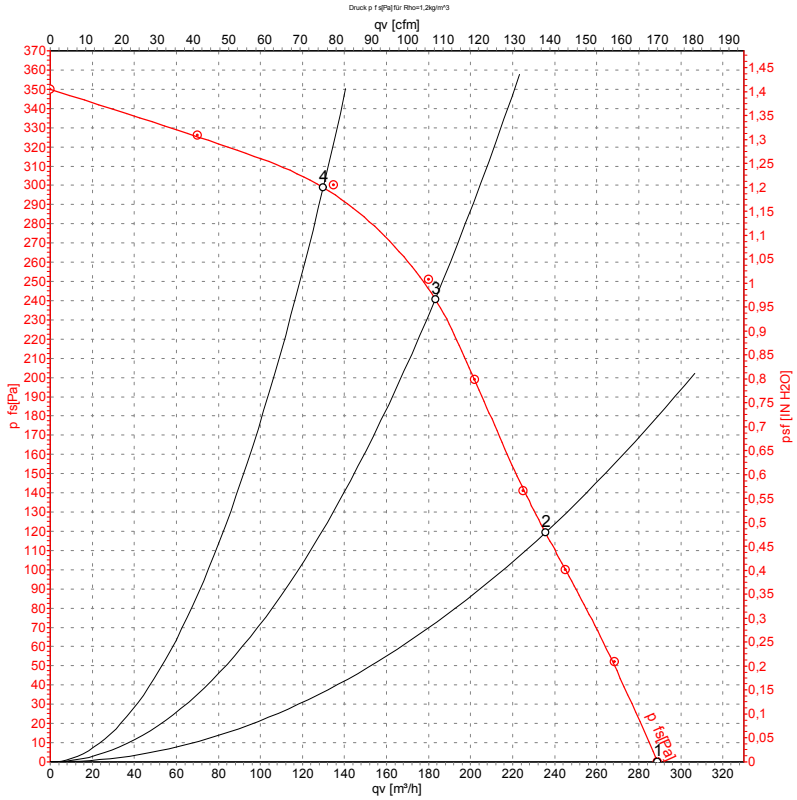
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Curves: Air performance 50 Hz



Measurement: LU-11645-1

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_e	I	q_V	p_{fs}	q_V	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa	cfm	in. wg
1	240	50	2600	90	0.39	290	0	170	0.00
2	240	50	2735	84	0.36	235	120	140	0.48
3	240	50	2800	79	0.35	185	240	110	0.96
4	240	50	2855	75	0.34	130	300	75	1.20

U = Voltage · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · q_V = Air flow · p_{fs} = Pressure increase

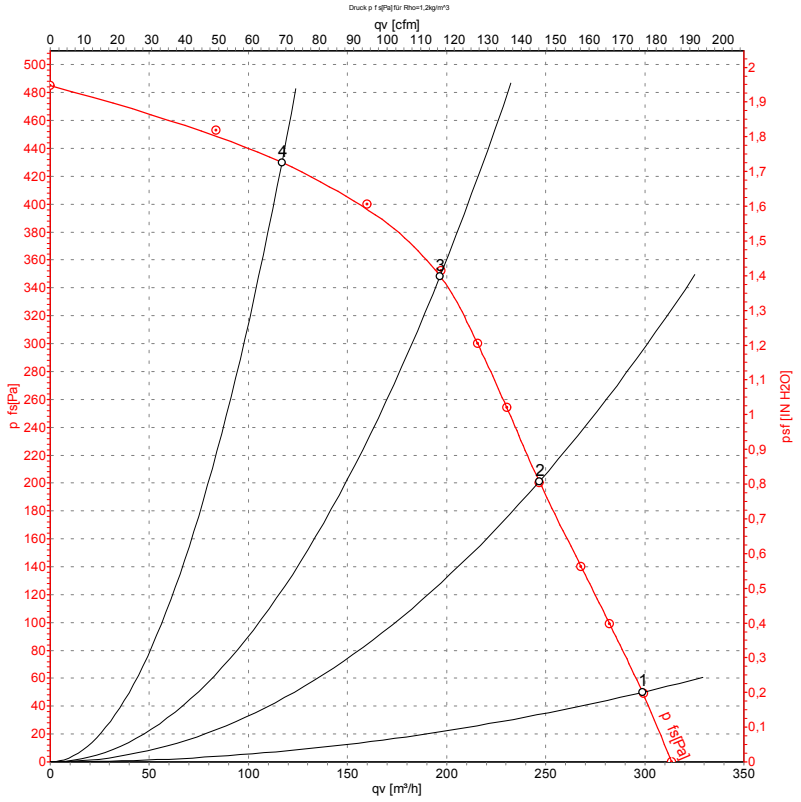
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Curves: Air performance 60 Hz



Measurement: LU-11647-1

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_e	I	q_V	p_{fs}	q_V	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa	cfm	in. wg
1	240	60	2950	115	0.49	300	50	175	0.20
2	240	60	3115	104	0.43	245	200	145	0.80
3	240	60	3235	94	0.40	195	350	115	1.41
4	240	60	3360	83	0.35	115	430	70	1.73

U = Voltage · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · q_V = Air flow · p_{fs} = Pressure increase

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