G2E120-AR38-D1

AC centrifugal fan

forward-curved, single-intake

with housing (flange)

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Nominal data

Type	**G2E120-AR38-D1**
Motor	**M2E068-BF**

Phase		1~	1~
Nominal voltage	VAC	230	230
Frequency	Hz	50	60
Method of obtaining data		fa	fa
Valid for approval/standard		CE	CE
Speed (rpm)	min^{-1}	2500	2600
Power consumption	W	83	110
Current draw	A	0.37	0.5
Capacitor	µF	2	2
Capacitor voltage	VDB	450	450
Capacitor standard		S2 (CE)	S2 (CE)
Min. back pressure	Pa	0	0
Min. back pressure	inH2O	0	0
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	50	60

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	2.1 kg
Fan size	120 mm
Rotor surface	Unpainted
Impeller material	Sheet steel, sendzimir galvanized
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
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	H0 - dry environment
Max. permitted ambient temp. for motor (transport/storage)	+ 80 °C
Min. permitted ambient temp. for motor (transport/storage)	- 40 °C
Installation position	Shaft horizontal
Condensation drainage holes	None
Mode	S1
Motor bearing	Ball bearing
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	< 0.75 mA
Electrical hookup	With plug; Capacitor mounted
Motor protection	Thermal overload protector (TOP) internally connected
With cable	Axial
Protection class	I (with customer connection of protective earth)
Motor capacitor according to EN 60252-1 in safety protection class	S2
Conformity with standards	EN 60034-1; EN 60204-1; CE

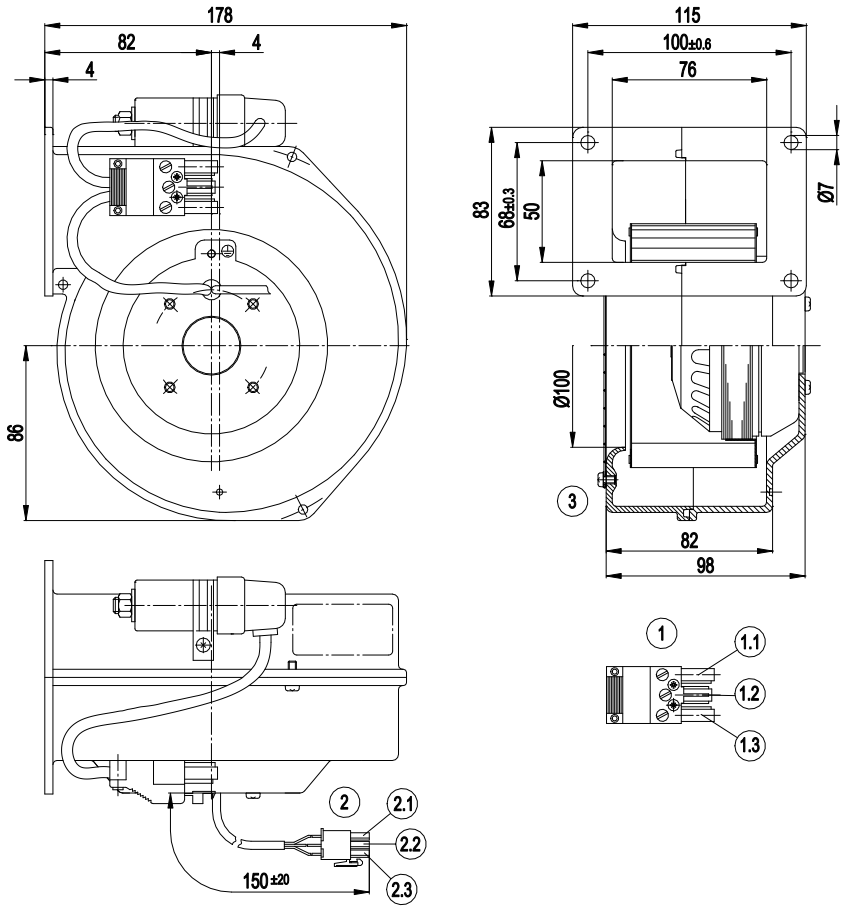
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Product drawing



1	Cable PVC 4G 0.5 mm², 3-pole connector housing Wieland 93.832.4357.0
1.1	N (black)
1.2	PE (green/yellow)
1.3	L (blue)
2	Cable Raychem Spec. 44, AWG24 with connector housing AMP Mini-Universal Mate-N-Lok 172166-1
2.1	0 V (black)
2.2	out (white)
2.3	+5 V (red)
3	View does not show capacitor and plug

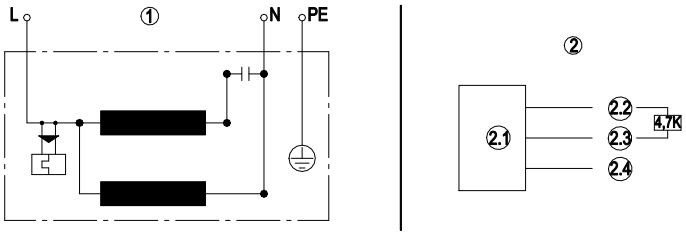
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Connection diagram



1	Fan connection diagram
L	blue
N	black
PE	green/yellow
2	Hall IC circuit
2.1	Hall IC
2.2	red (+5 V)
2.3	white (out)
2.4	black (0 V)

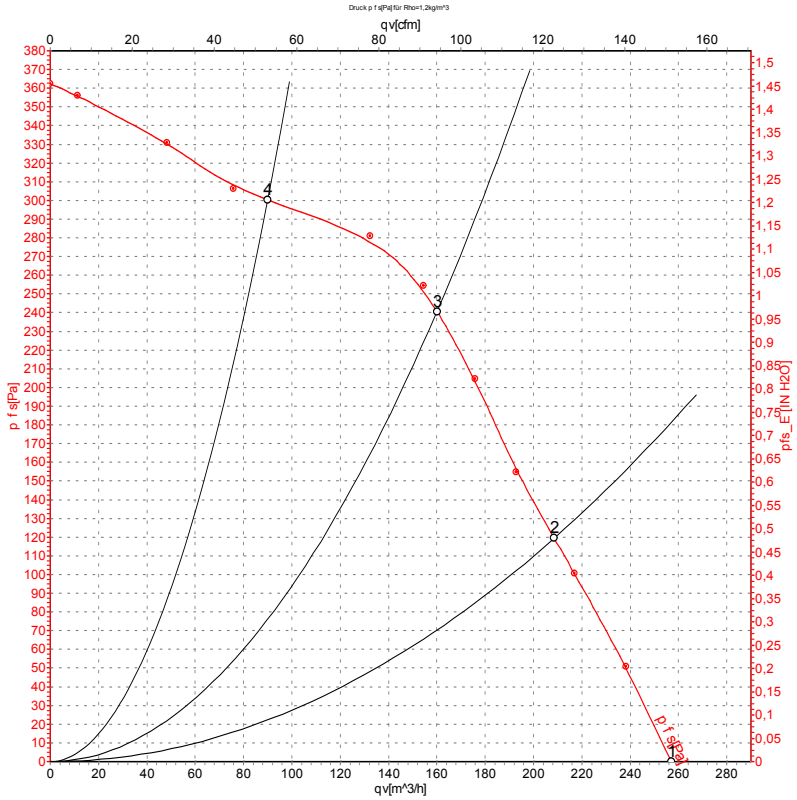
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Curves: Air performance 50 Hz



Measurement: LU-4577-1

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	inH2O
1	230	50	2500	83	0.37	255	0	150	0.00
2	230	50	2620	78	0.35	210	120	125	0.48
3	230	50	2715	73	0.33	160	240	95	0.96
4	230	50	2805	68	0.32	90	300	55	1.20

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

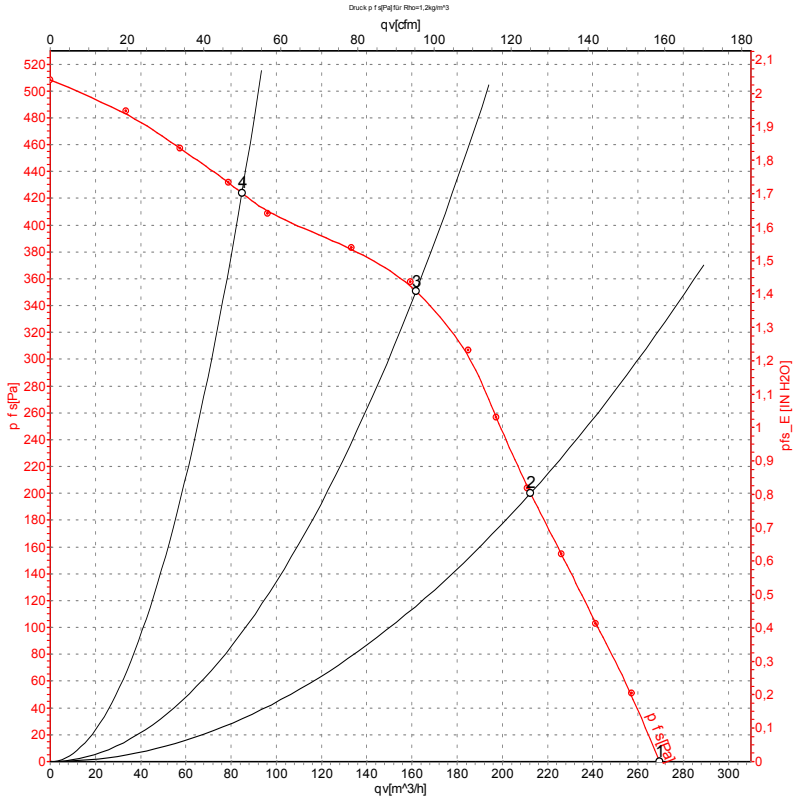
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Curves: Air performance 60 Hz



Measurement: LU-4580-1

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	inH2O
1	230	60	2600	110	0.50	270	0	160	0.00
2	230	60	2965	97	0.42	210	200	125	0.80
3	230	60	3145	89	0.39	160	350	95	1.41
4	230	60	3325	80	0.35	85	425	50	1.71

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

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