G2E146-DW07-12

AC centrifugal fan

forward-curved, single-intake

with housing (flange)



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Nominal data

Type	**G2E146-DW07-12**
Motor	**M2E068-CA**

Phase		1~	1~	1~	1~
Nominal voltage	VAC	230	230	240	240
Frequency	Hz	50	60	50	60
Method of obtaining data		fa	ml	ml	ml
Valid for approval/standard		CE	CE	CE	CE
Speed (rpm)	min^{-1}	1550	1750	1775	2150
Power consumption	W	140	155	130	140
Current draw	A	0.62	0.68	0.55	0.59
Capacitor	µF	3	3	2.5	2.5
Capacitor voltage	VDB	450	450	450	450
Capacitor standard		S0 (CE)	S0 (CE)	S0 (CE)	S0 (CE)
Min. back pressure	Pa	0	100	50	250
Min. back pressure	inH2O	0	0.4	0.2	1
Min. ambient temperature	°C	-25	-25	-25	-25
Max. ambient temperature	°C	65	50	65	65
Starting current	A	0.69	0.71	0.67	0.7

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	2.9 kg
Fan size	146 mm
Impeller material	Sheet steel, hot-dip galvanized
Housing material	Die-cast aluminum
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP44
Insulation class	"F"
Moisture (F) / Environmental (H) protection class	F5
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
Motor protection	Thermal overload protector (TOP) with basic insulation
With cable	Axial
Protection class	I (with customer connection of protective earth)
Conformity with standards	CE

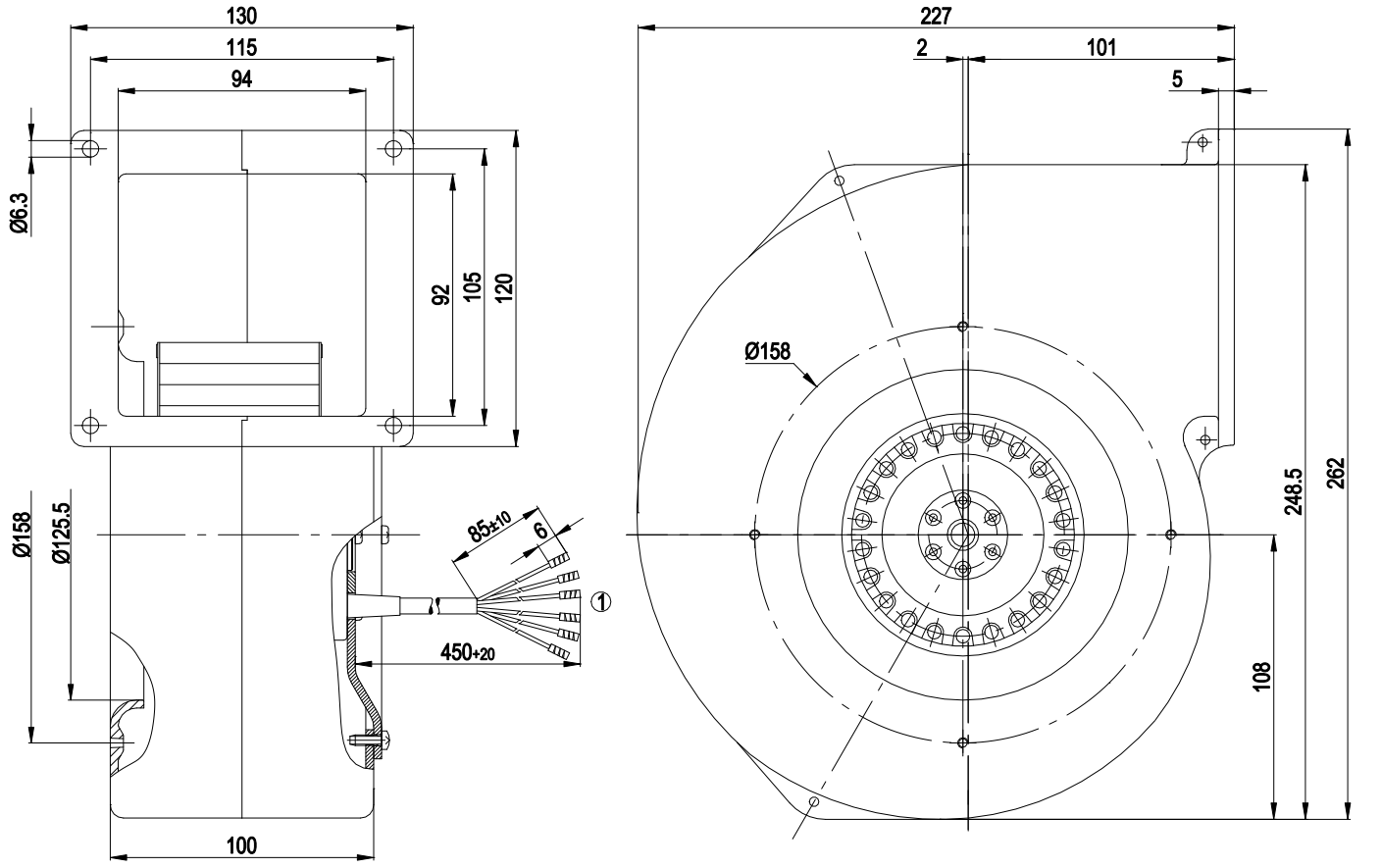
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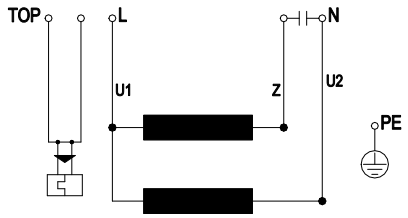
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Product drawing



1	Cable halogen-free 6G 0.5 mm², 6x crimped splices

Connection diagram



TOP	2x gray	U1	blue	Z	brown
U2	black	PE	green/yellow		

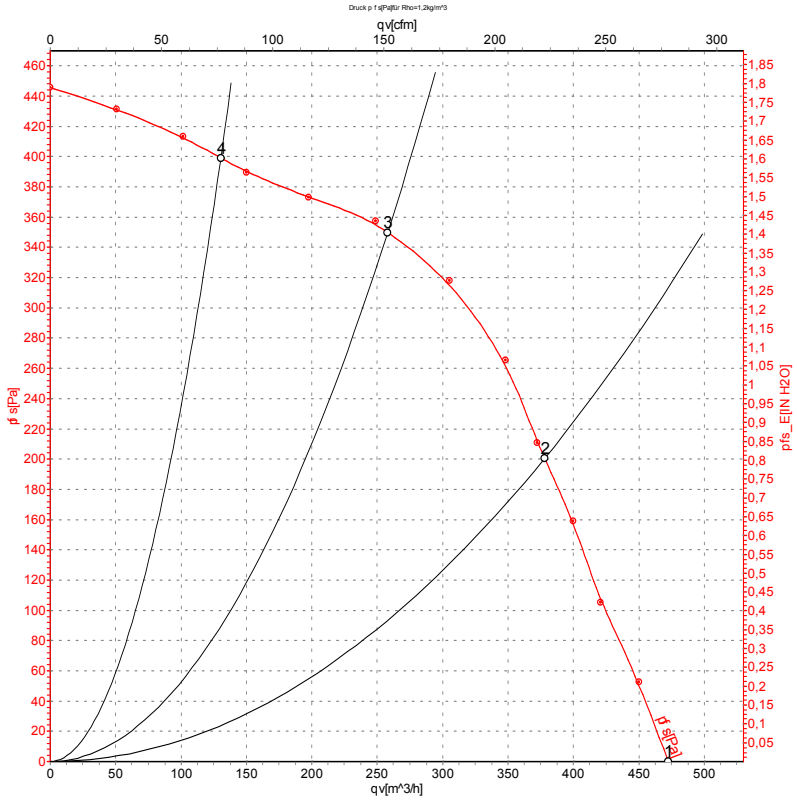
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Curves: Air performance 50 Hz



Measurement: LU-105087-1

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	1550	140	0.62	475	0	280	0.00
2	230	50	2035	122	0.53	380	200	220	0.80
3	230	50	2395	104	0.45	260	350	150	1.41
4	230	50	2605	91	0.40	130	400	75	1.61

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

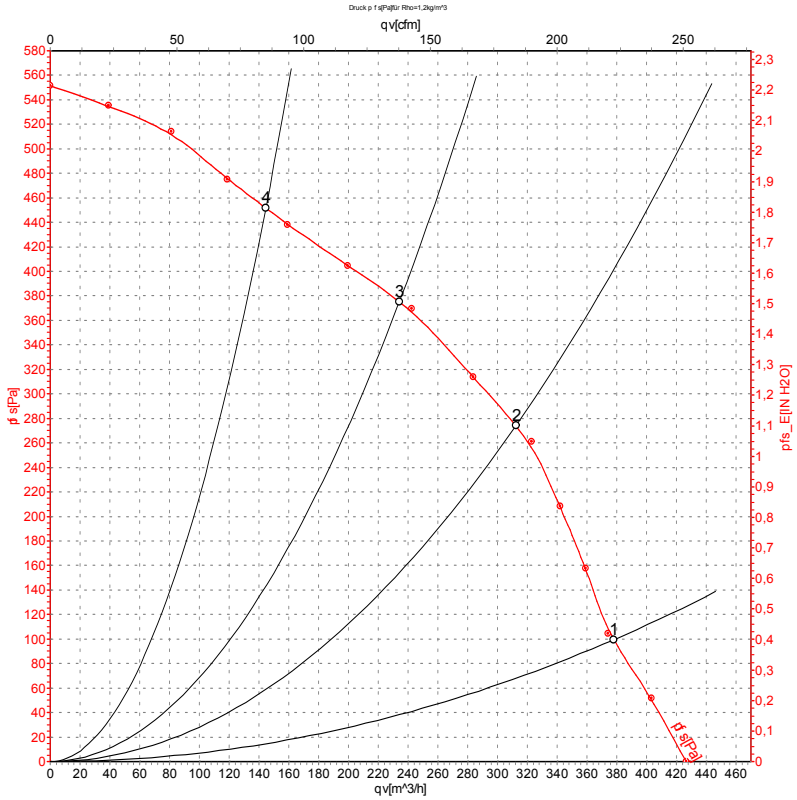
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Curves: Air performance 60 Hz



Measurement: LU-105090-1

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	1750	155	0.68	380	100	225	0.40
2	230	60	2145	144	0.62	310	275	185	1.10
3	230	60	2500	137	0.59	235	375	140	1.51
4	230	60	2775	130	0.57	145	450	85	1.81

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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