

AC centrifugal fan

forward-curved, single-intake

with housing (flange)

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General partner Elektrobau Mulfingen GmbH · Headquarters Mulfingen

Amtsgericht (court of registration) Stuttgart · HRB 590142

Nominal data

Type	G2D180-AE02-26		
Motor	M2D068-GA		
Phase		3~	3~
Nominal voltage	VAC	400	400
Wiring		Y	Y
Frequency	Hz	50	60
Method of obtaining data		ml	ml
Valid for approval/standard		CE	CE
Speed (rpm)	min ⁻¹	2370	2850
Power consumption	W	420	385
Current draw	A	0.65	0.60
Min. back pressure	Pa	300	800
Min. back pressure	inH ₂ O	1.2	3.21
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	50	50
Starting current	A	1.66	1.65

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

Data according to ErP Directive

		Actual	Req. 2015
01 Overall efficiency η_{es}	%	37.4	33.6
02 Measurement category		A	
03 Efficiency category		Static	
04 Efficiency grade N		47.8	44
05 Variable speed drive		No	

Data obtained at optimum efficiency level.

The ErP data is determined using a motor-impeller combination in a standardized measurement setup.

09 Power consumption P_e	kW	0.23
09 Air flow q_v	m ³ /h	430
09 Pressure increase p_{fs}	Pa	727
10 Speed (rpm) n	min ⁻¹	2695
11 Specific ratio*		1.01

* Specific ratio = $1 + p_{fs} / 100\,000\text{ Pa}$

LU-56385



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Technical description

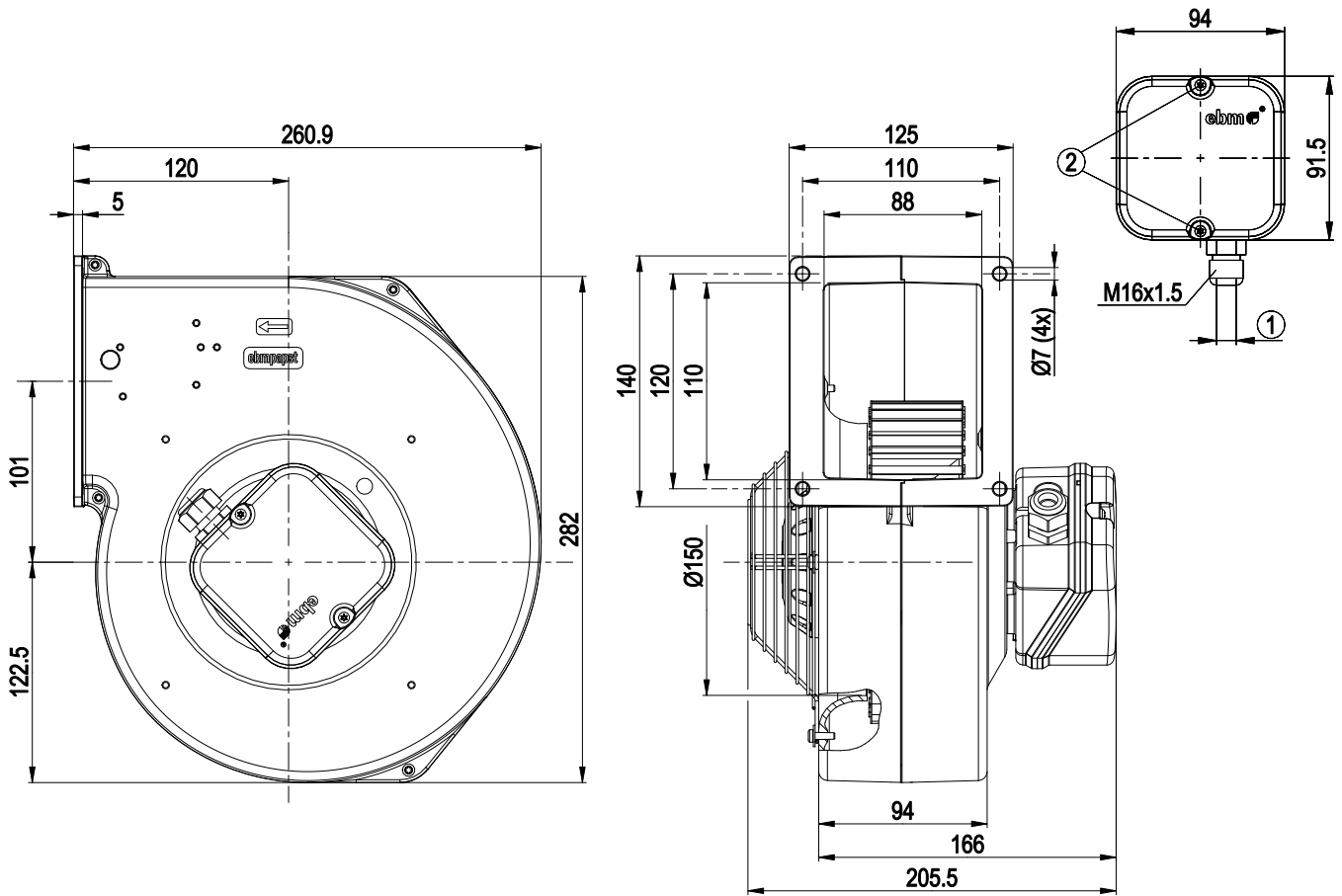
Weight	5.3 kg
Fan size	180 mm
Rotor surface	Painted black
Terminal box material	PC/ABS plastic
Impeller material	Sheet steel, galvanized and painted black
Housing material	Die-cast aluminum
Guard grille material	Steel, phosphated and coated with black plastic (RAL 9005)
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent as per EN 60034-5
Insulation class	"F"
Moisture (F) / Environmental (H) protection class	H0+
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	Via terminal box
Protection class	I (with customer connection of protective earth)
Conformity with standards	CE
Approval	CSA C22.2 No. 100; UL 1004-1



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Product drawing



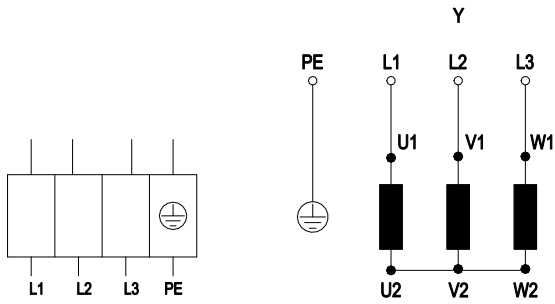
- | | |
|---|--|
| 1 | Tightening torque 0.5 ± 0.1 Nm |
| 2 | Cable diameter max. 7.5 mm, tightening torque 1.3 ± 0.2 Nm |



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Connection diagram



Y	Star connection	L1	black	L2	blue
L3	brown	PE	green/yellow		

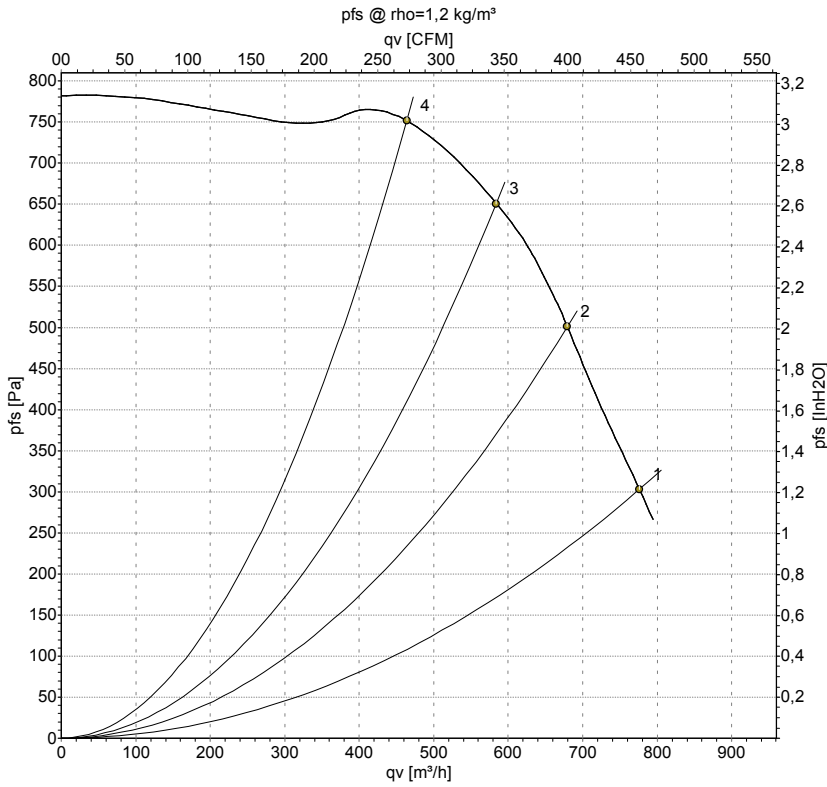


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Curves: Air performance 50 Hz Δ



Measurement: LU-22378-1

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

	Wired	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	Δ	230	50	2370	420	1.12	775	300	455	1.20
2	Δ	230	50	2485	373	1.04	680	500	400	2.01
3	Δ	230	50	2580	321	0.91	585	650	345	2.61
4	Δ	230	50	2680	260	0.77	465	750	275	3.01

Wired = Wiring · U = Power supply · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · q_v = Air flow · p_s = Pressure increase

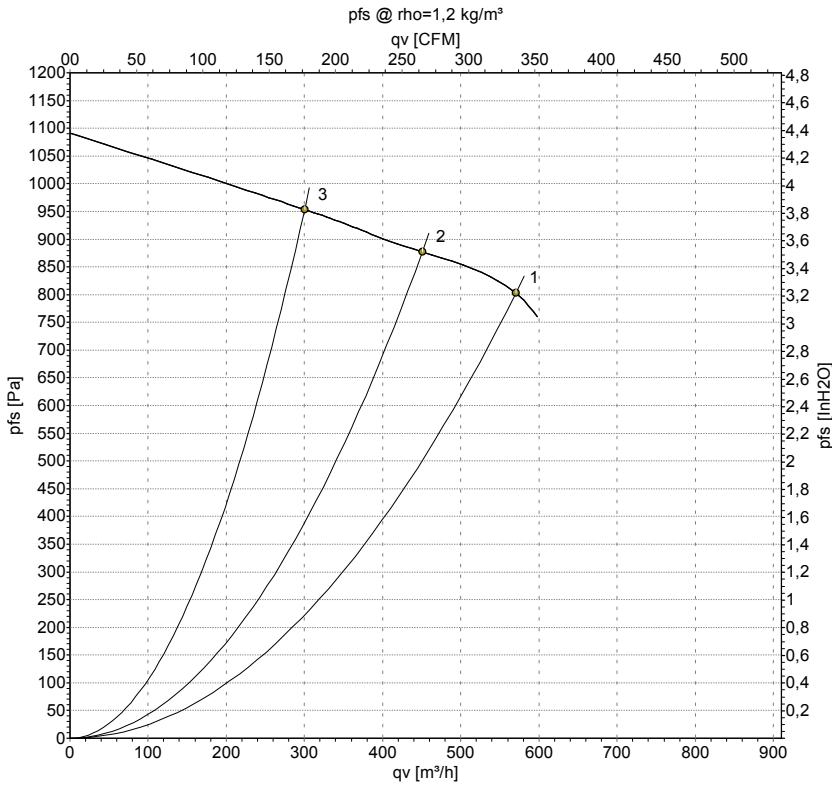


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Curves: Air performance 60 Hz Δ



Measurement: LU-22387-1

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

	Wired	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	Δ	230	60	2850	385	1.04	570	800	335	3.21
2	Δ	230	60	2965	372	1.03	450	875	265	3.51
3	Δ	230	60	3150	293	0.83	300	950	175	3.81

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

