

# AC centrifugal fan

forward-curved, single-intake

with housing (flange)

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## Nominal data

<b>Type</b>	<b>G2D180-AE02-26</b>		
<b>Motor</b>	<b>M2D068-GA</b>		
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 <sup>-1</sup>	2370	2850
Power consumption	W	420	385
Current draw	A	0.65	0.60
Min. back pressure	Pa	300	800
Min. back pressure	inH <sub>2</sub> 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 $\eta_{es}$	%	37.4	33.6	09 Power consumption $P_e$	kW	0.23
02 Measurement category		A		09 Air flow $q_v$	m <sup>3</sup> /h	430
03 Efficiency category		Static		09 Pressure increase $p_{fs}$	Pa	727
04 Efficiency grade N		47.8	44	10 Speed (rpm) n	min <sup>-1</sup>	2695
05 Variable speed drive		No		11 Specific ratio*		1.01

Data obtained at optimum efficiency level.

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

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

LU-56385



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## Technical description

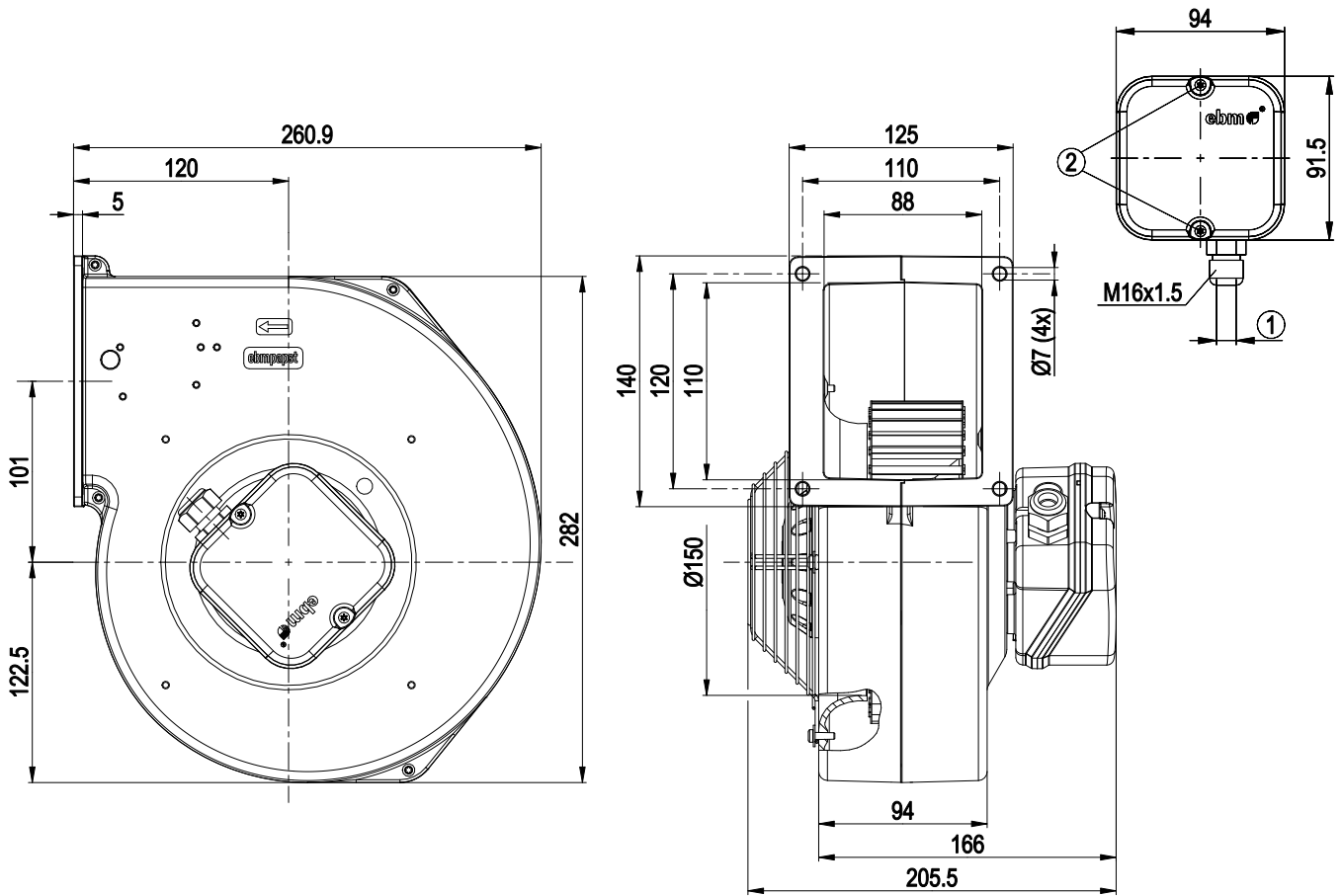
<b>Weight</b>	5.3 kg
<b>Fan size</b>	180 mm
<b>Rotor surface</b>	Painted black
<b>Terminal box material</b>	PC/ABS plastic
<b>Impeller material</b>	Sheet steel, galvanized and painted black
<b>Housing material</b>	Die-cast aluminum
<b>Guard grille material</b>	Steel, phosphated and coated with black plastic (RAL 9005)
<b>Direction of rotation</b>	Clockwise, viewed toward rotor
<b>Degree of protection</b>	IP44; installation- and position-dependent as per EN 60034-5
<b>Insulation class</b>	"F"
<b>Moisture (F) / Environmental (H) protection class</b>	H0+
<b>Max. permitted ambient temp. for motor (transport/storage)</b>	+ 80 °C
<b>Min. permitted ambient temp. for motor (transport/storage)</b>	- 40 °C
<b>Installation position</b>	Shaft horizontal or rotor on bottom; rotor on top on request
<b>Condensation drainage holes</b>	On rotor side
<b>Mode</b>	S1
<b>Motor bearing</b>	Ball bearing
<b>Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)</b>	< 0.75 mA
<b>Electrical hookup</b>	Via terminal box
<b>Protection class</b>	I (with customer connection of protective earth)
<b>Conformity with standards</b>	CE
<b>Approval</b>	CSA C22.2 No. 100; UL 1004-1



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## Product drawing



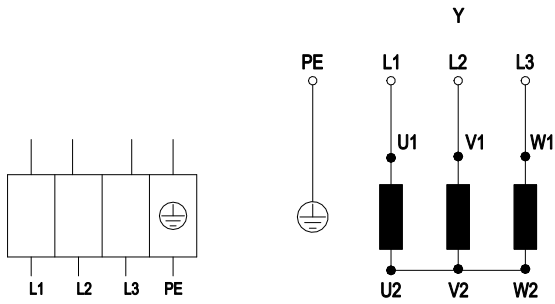
- |   |  |
|---|--|
| 1 | Tightening torque $0.5 \pm 0.1$ Nm                             |
| 2 | Cable diameter max. 7.5 mm, tightening torque $1.3 \pm 0.2$ Nm |



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## Connection diagram



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

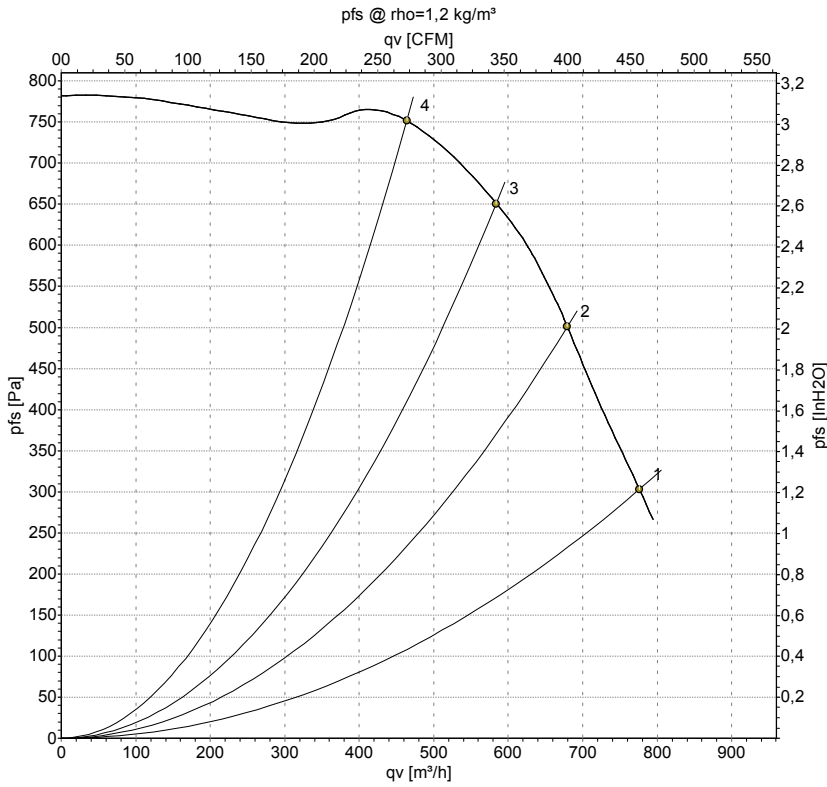


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## Curves: Air performance 50 Hz Δ



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 <sub>e</sub>	I	q <sub>v</sub>	P <sub>fs</sub>	q <sub>v</sub>	P <sub>fs</sub>
		V	Hz	min <sup>-1</sup>	W	A	m <sup>3</sup> /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<sub>e</sub> = Power consumption · I = Current draw · q<sub>v</sub> = Air flow · p<sub>fs</sub> = Pressure increase

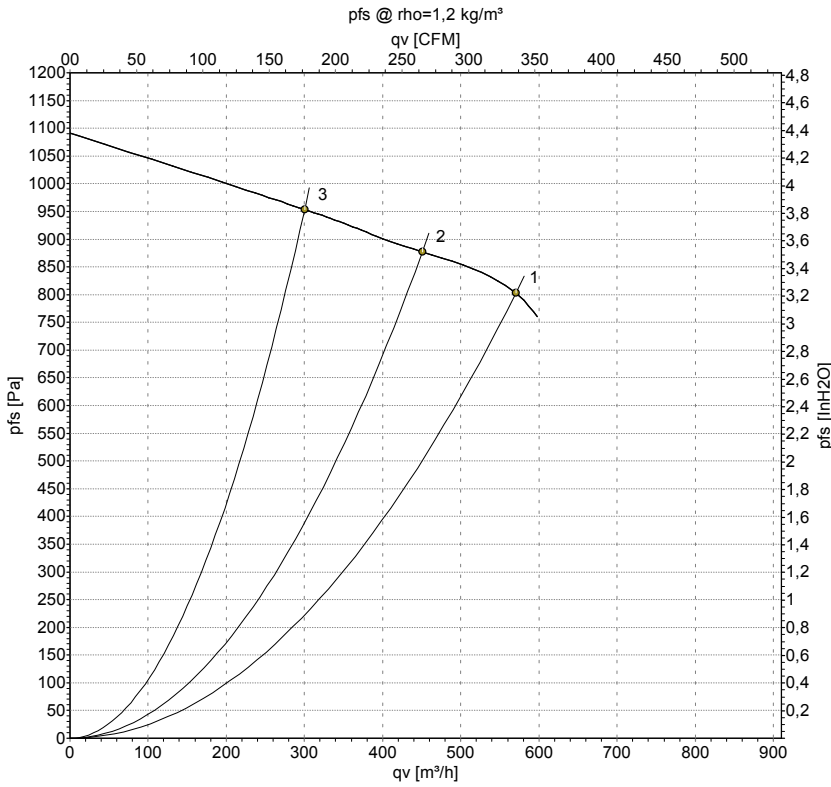


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## Curves: Air performance 60 Hz Δ



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 <sub>e</sub>	I	q <sub>v</sub>	p <sub>fs</sub>	q <sub>v</sub>	p <sub>fs</sub>
		V	Hz	min <sup>-1</sup>	W	A	m <sup>3</sup> /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<sub>e</sub> = Power consumption · I = Current draw · q<sub>v</sub> = Air flow · p<sub>fs</sub> = Pressure increase

