

# AC centrifugal fan

forward curved, single inlet

with housing (flange)

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## Nominal data

Type	G2E180-EH03-01		
Motor	M2E074-EI		
Phase		1~	1~
Nominal voltage	VAC	230	230
Frequency	Hz	50	60
Type of data definition		fa	ml
Valid for approval / standard		CE	CE
Speed	min <sup>-1</sup>	1950	2150
Power input	W	400	415
Current draw	A	1.75	1.82
Motor capacitor	µF	8	8
Capacitor voltage	VDB	400	400
Capacitor standard		P0 (CE)	P0 (CE)
Min. back pressure	Pa	0	250
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	40	30
Starting current	A	2.2	2

ml = max. load · me = max. efficiency · fa = running at free air · cs = customer specs · cu = customer unit  
Subject to alterations

## Data according to ErP directive

		Actual	Request 2013	Request 2015
Installation category	A			
Efficiency category	Static			
Variable speed drive	No			
Specific ratio*	1.01			
Overall efficiency $\eta_{es}$		33.5	26.5	33.5
Efficiency grade N		44	37	44
Power input $P_e$	kW	0.22		
Air flow $q_v$	m <sup>3</sup> /h	400		
Pressure increase $p_{fs}$	Pa	665		
Speed n	min <sup>-1</sup>	2705		

Data established at point of optimum efficiency

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



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## Technical features

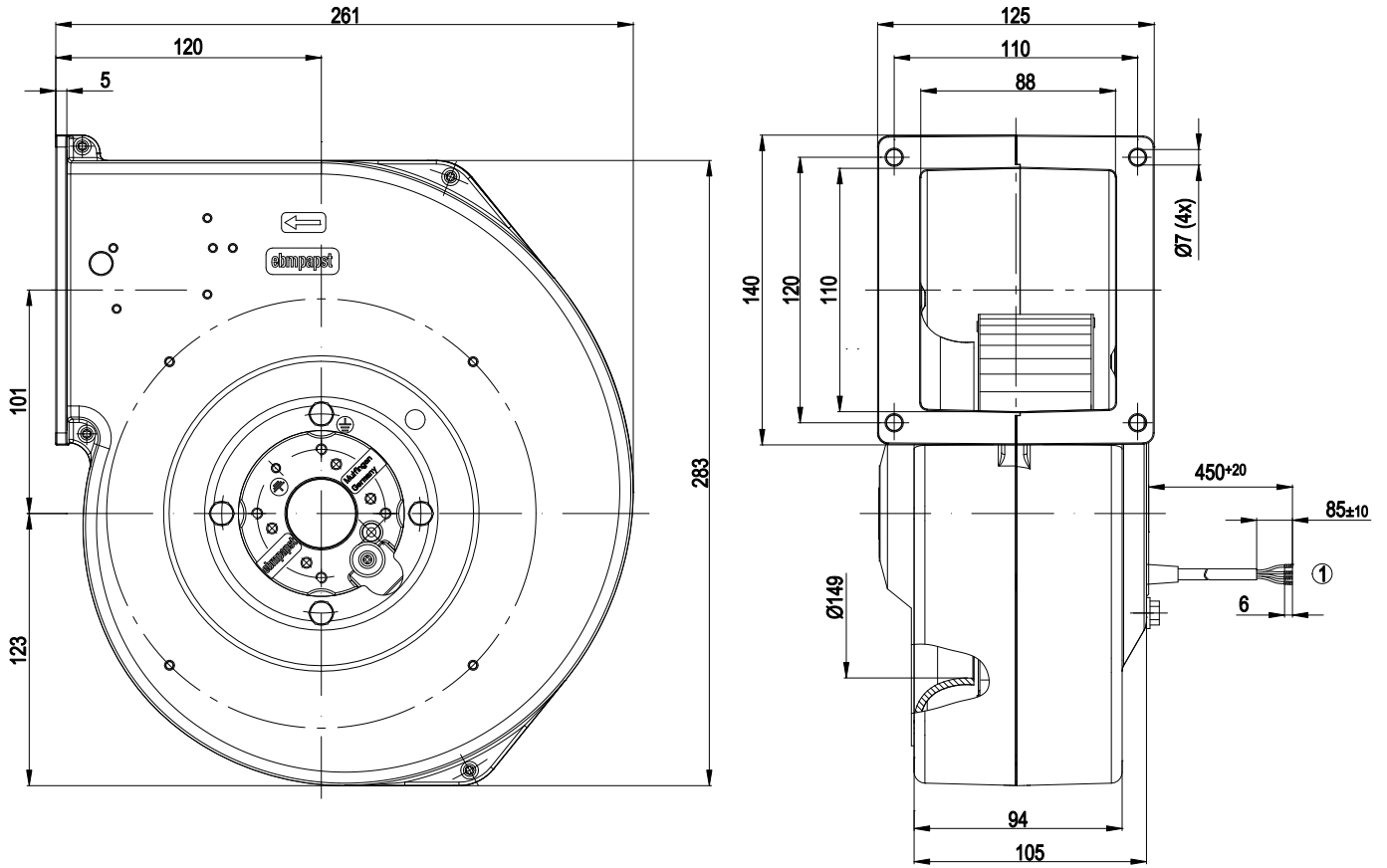
<b>Mass</b>	5.6 kg
<b>Size</b>	180 mm
<b>Surface of rotor</b>	Coated in black
<b>Material of impeller</b>	Sheet steel, galvanized
<b>Housing material</b>	Die-cast aluminium
<b>Direction of rotation</b>	Clockwise, seen on rotor
<b>Type of protection</b>	IP 44; Depending on installation and position as per EN 60034-5
<b>Insulation class</b>	"B"
<b>Humidity class</b>	F0
<b>Max. permissible ambient motor temp. (transp./ storage)</b>	+ 80 °C
<b>Min. permissible ambient motor temp. (transp./storage)</b>	- 40 °C
<b>Mounting position</b>	Any
<b>Condensate discharge holes</b>	Rotor-side
<b>Operation mode</b>	S1
<b>Motor bearing</b>	Ball bearing
<b>Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)</b>	< 0.75 mA
<b>Motor protection</b>	Thermal overload protector (TOP) wired internally
<b>Protection class</b>	I (if protective earth is connected by customer)
<b>Product conforming to standard</b>	EN 60335-1; CE
<b>Approval</b>	CCC



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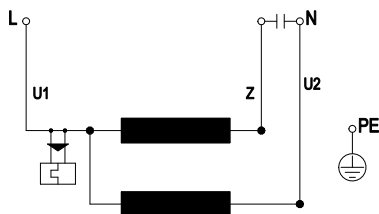
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## Product drawing



1 Connection line PVC, 4x brass lead tips crimped

## Connection screen



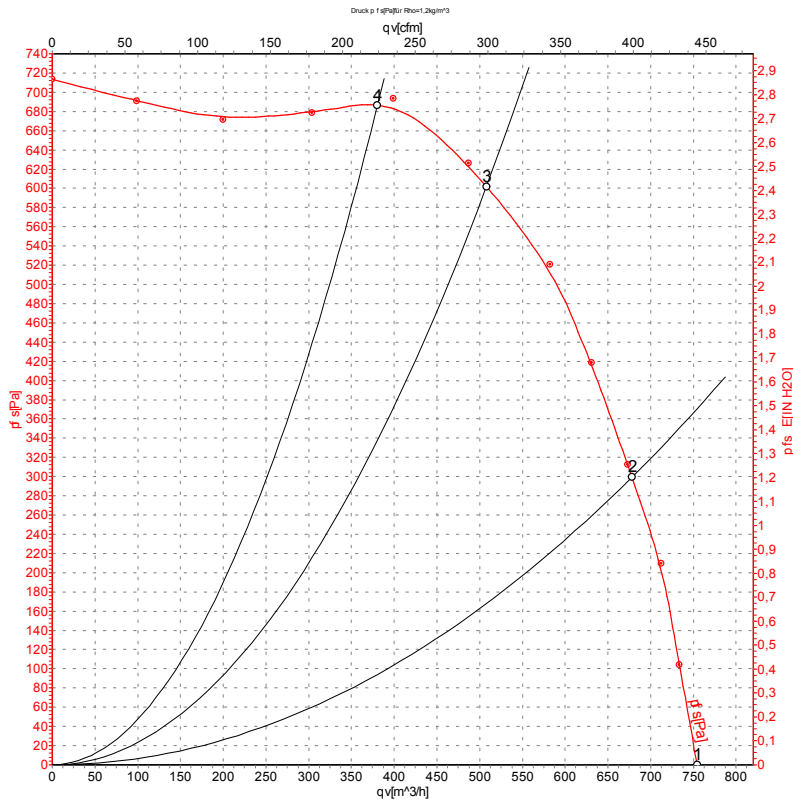
U1	blue	Z	brown	U2	black
PE	green/yellow				



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## Charts: Air flow 50 Hz



Measurement: LU-105271

Air performance measured as per ISO 5801 Installation category A. For detailed information on the measuring set-up, please contact ebm-papst. Suction-side noise levels: L<sub>wA</sub> measured as per ISO 13347 / L<sub>pA</sub> measured with 1m distance to fan axis. The values given are valid under the measuring conditions mentioned above and may vary according to the actual installation situation. With any deviation from the standard set-up, the specific values have to be checked and reviewed with the unit installed.

## Measured values

	U	f	n	P <sub>e</sub>	I	qv	P <sub>fs</sub>
	V	Hz	min <sup>-1</sup>	W	A	m <sup>3</sup> /h	Pa
1	230	50	1950	400	1.75	755	0
2	230	50	2300	344	1.49	680	300
3	230	50	2595	265	1.18	510	600
4	230	50	2710	224	1.02	380	690

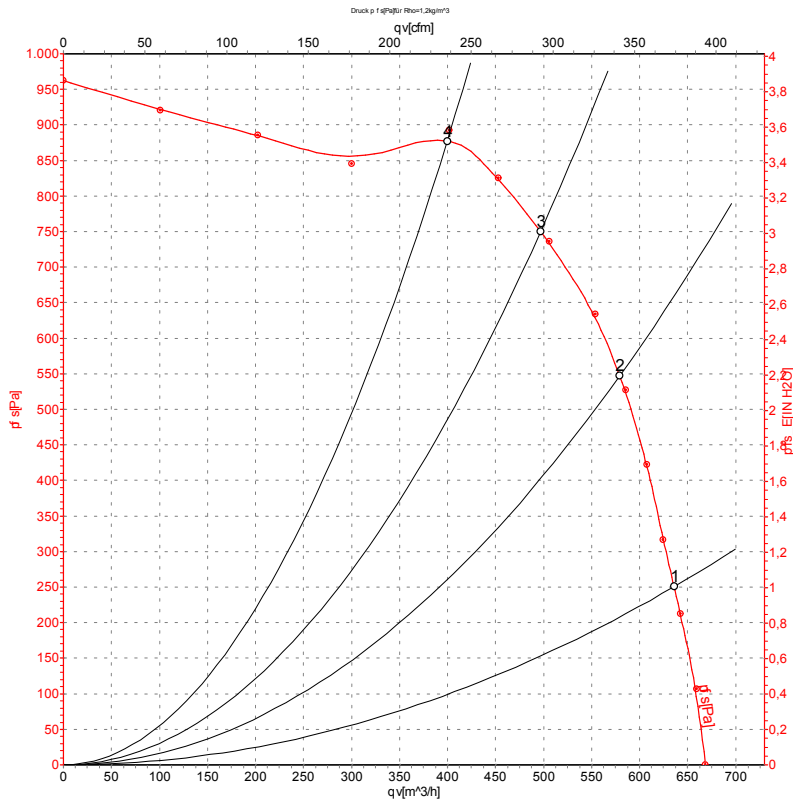
U = Supply voltage · f = Frequency · n = Speed · P<sub>e</sub> = Power input · I = Current draw · qv = Air flow · P<sub>fs</sub> = Pressure increase



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## Charts: Air flow 60 Hz



Measurement: LU-105273

Air performance measured as per ISO 5801 Installation category A. For detailed information on the measuring set-up, please contact ebm-papst. Suction-side noise levels: LwA measured as per ISO 13347 / LpA measured with 1m distance to fan axis. The values given are valid under the measuring conditions mentioned above and may vary according to the actual installation situation. With any deviation from the standard set-up, the specific values have to be checked and reviewed with the unit installed.

## Measured values

	U	f	n	P <sub>e</sub>	I	qv	P <sub>fs</sub>
	V	Hz	min <sup>-1</sup>	W	A	m <sup>3</sup> /h	Pa
1	230	60	2150	415	1.82	635	250
2	230	60	2555	390	1.70	580	550
3	230	60	2825	360	1.60	495	750
4	230	60	3040	324	1.48	400	890

U = Supply voltage · f = Frequency · n = Speed · P<sub>e</sub> = Power input · I = Current draw · qv = Air flow · P<sub>fs</sub> = Pressure increase



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