G4E280-CA21-06

AC centrifugal fan

forward curved, single inlet

with housing (large flange)

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ErP2013 EXCEEDS THE NORM

Nominal data

Type	**G4E280-CA21-06**	
Motor	**M4E094-HA**	
Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50
Type of data definition		ml
Valid for approval / standard		CE
Speed	min^{-1}	1280
Power input	W	790
Current draw	A	3.94
Motor capacitor	µF	12
Capacitor voltage	VDB	400
Capacitor standard		P0 (CE)
Min. back pressure	Pa	350
Min. ambient temperature	°C	-40
Max. ambient temperature	°C	40
Starting current	A	7.4

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

Installation category	A
Efficiency category	Static
Variable speed drive	No
Specific ratio*	1.01

* Specific ratio = 1 + p_{fs} / 100 000 Pa

		Actual	Request 2013	Request 2015
Overall efficiency η_{es}		33.5	29.1	36.1
Efficiency grade N		41.4	37	44
Power input P_e	kW	0.57		
Air flow q_v	m^3/h	1405		
Pressure increase p_{fs}	Pa	492		
Speed n	min^{-1}	1375		

Data established at point of optimum efficiency

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Technical features

Mass	14.6 kg
Size	280 mm
Surface of rotor	Coated in black
Material of impeller	Sheet steel, hot-galvanised
Housing material	Sheet steel, hot-galvanised
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 44
Insulation class	"F"
Humidity class	F4-1
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Mounting position	Shaft horizontal or rotor on top; rotor on bottom on request
Condensate discharge holes	On the stator side
Operation mode	S1
Motor bearing	Ball bearing
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	<= 3.5 mA
Motor protection	Thermal overload protector (TOP) brought out
Cable exit	Variable
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	CE

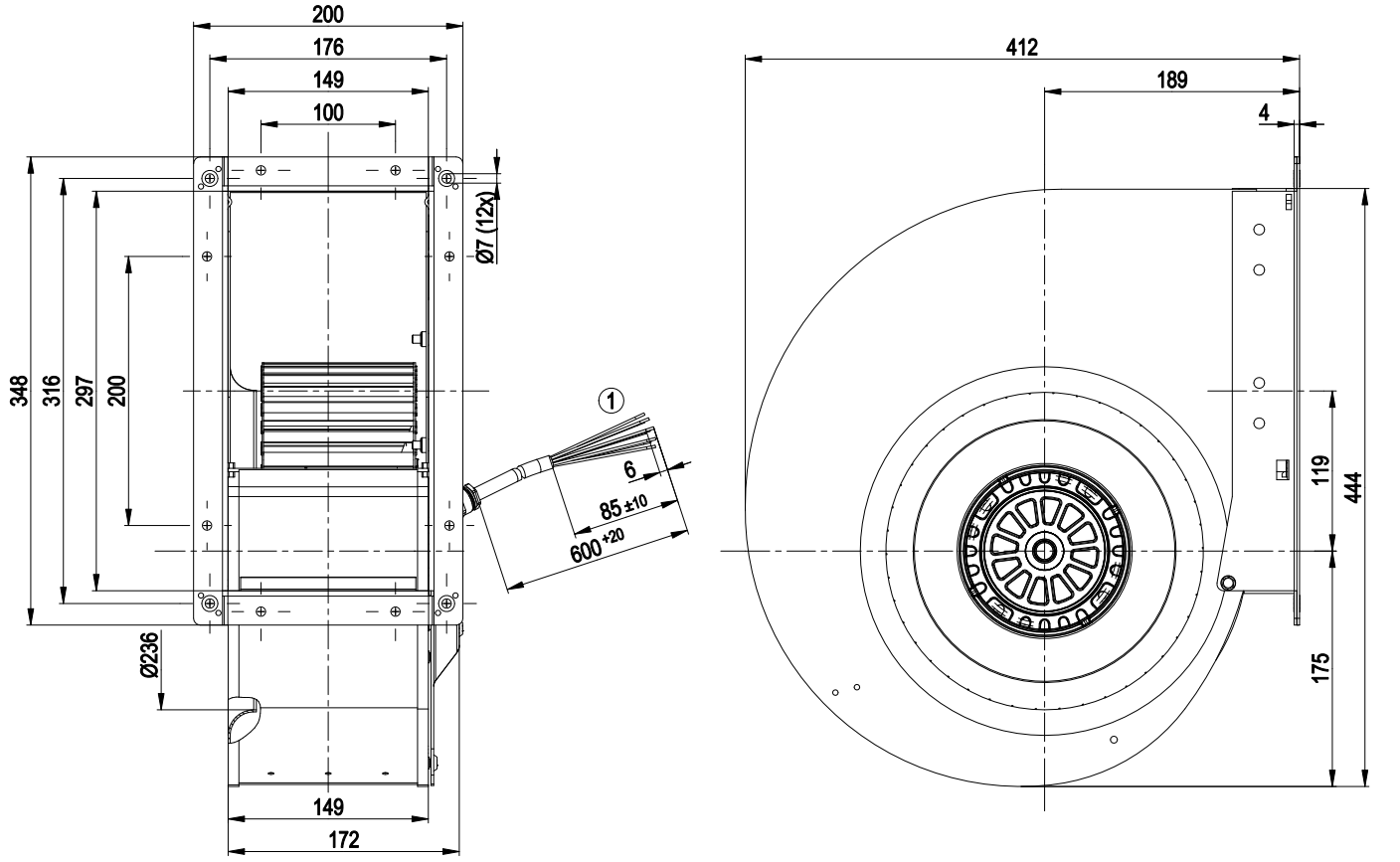
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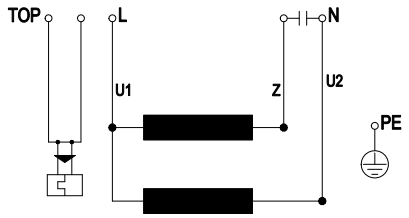
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Product drawing



1	Connection line silicone 6G0.5; 6 x brass lead tips crimped

Connection screen



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

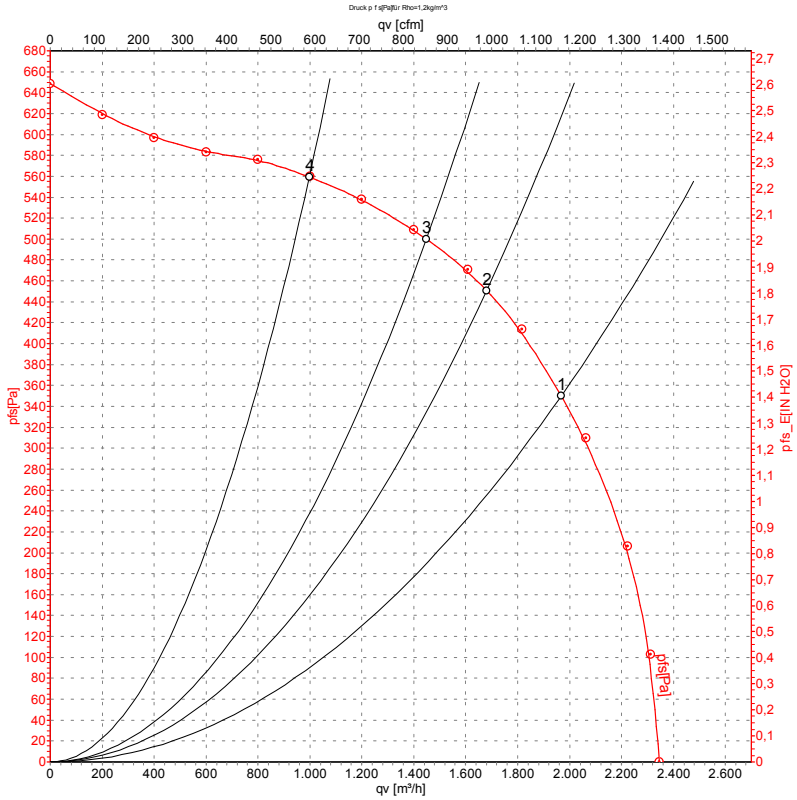
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Charts: Air flow 50 Hz



Measurement: LU-67652

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_e	I	qv	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa
1	230	50	1280	790	3.94	1970	350
2	230	50	1335	677	3.46	1680	450
3	230	50	1370	589	3.13	1450	500
4	230	50	1405	480	2.78	995	560

U = Supply voltage · f = Frequency · n = Speed · P_e = Power input · I = Current draw · qv = Air flow · p_{fs} = Pressure increase

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