

R3G400-AC30-61

# EC centrifugal fan

backward curved, single inlet



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## Nominal data

Type	R3G400-AC30-61	
Motor	M3G084-FA	
Phase		1~
Nominal voltage	VAC	230
Nominal voltage range	VAC	200 .. 277
Frequency	Hz	50/60
Type of data definition		ml
Speed	min <sup>-1</sup>	1370
Power input	W	380
Current draw	A	1.7
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	30

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	Yes
Specific ratio*	1.00

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

		Actual	Request 2013	Request 2015
Overall efficiency $\eta_{es}$	%	58.4	43.1	47.1
Efficiency grade N		73.3	58	62
Power input $P_{ed}$	kW	0.38		
Air flow $q_v$	m <sup>3</sup> /h	2390		
Pressure increase $p_{fs}$	Pa	300		
Speed n	min <sup>-1</sup>	1370		

Data definition with optimum efficiency. LU-73076  
The ErP data is determined using a motor-impeller combination in a standardised measurement configuration.



## Technical features

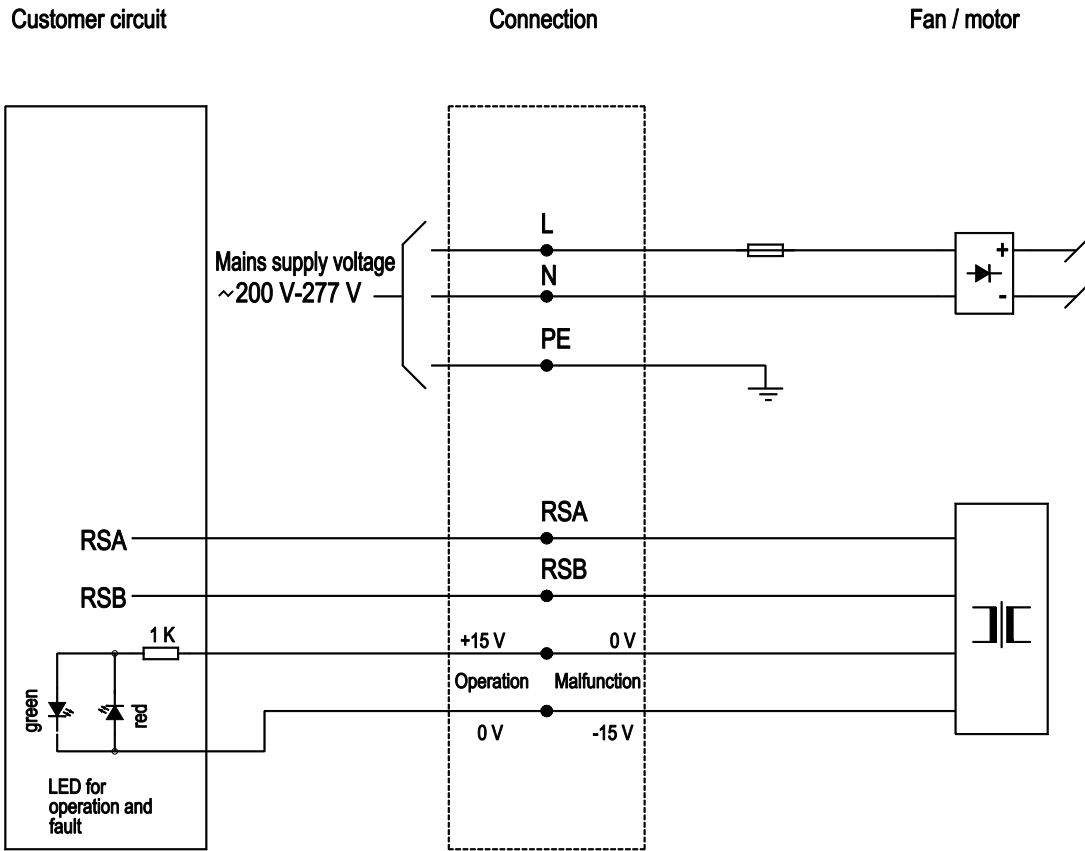
<b>Mass</b>	5.78 kg
<b>Size</b>	400 mm
<b>Surface of rotor</b>	Coated in black
<b>Material of electronics housing</b>	Die-cast aluminium
<b>Material of impeller</b>	Aluminium sheet
<b>Number of blades</b>	6
<b>Direction of rotation</b>	Clockwise, seen on rotor
<b>Type of protection</b>	IP 20
<b>Insulation 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>	Shaft horizontal or rotor on top; rotor on bottom on request
<b>Condensate discharge holes</b>	None
<b>Operation mode</b>	S1
<b>Motor bearing</b>	Ball bearing
<b>Technical features</b>	<ul style="list-style-type: none"> <li>- Operation and alarm display: reversible voltage output 0 V / +15 V</li> <li>- Integrated PID controller</li> <li>- Motor current limit</li> <li>- PFC, active</li> <li>- RS485 ebmBUS</li> <li>- Soft start</li> <li>- Control interface with SELV potential safely disconnected from the mains</li> <li>- Over-temperature protected electronics / motor</li> <li>- Line undervoltage / phase failure detection</li> </ul>
<b>EMC interference immunity</b>	Acc. to EN 61000-6-2 (industrial environment)
<b>EMC harmonics</b>	Acc. to EN 61000-3-2/3
<b>EMC interference emission</b>	Acc. to EN 61000-6-4 (industrial environment)
<b>Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)</b>	<= 3.5 mA
<b>Electrical leads</b>	With plug
<b>Motor protection</b>	Thermal overload protector (TOP) wired internally
<b>Cable exit</b>	Variable
<b>Protection class</b>	I (if protective earth is connected by customer)
<b>Product conforming to standard</b>	EN 61800-5-1; CE
<b>Approval</b>	CCC; CSA C22.2 Nr.113; EAC; UL 507



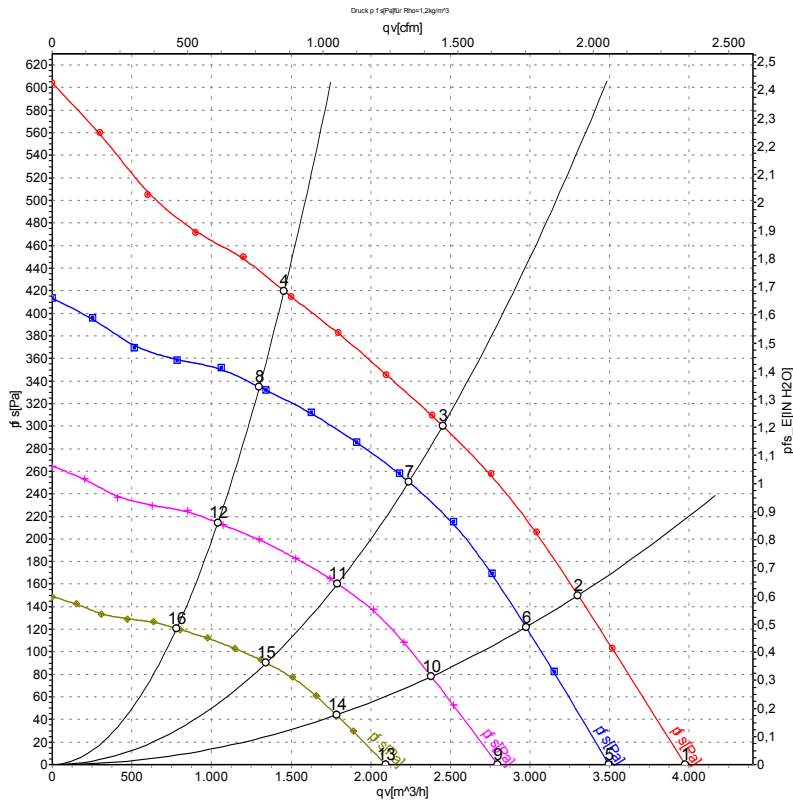
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## Connection screen



## Charts: Air flow 50 Hz



Measurement: LU-73076

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>ed</sub>	I	qv	P <sub>fs</sub>
	V	Hz	min <sup>-1</sup>	W	A	m <sup>3</sup> /h	Pa
1	230	50	1420	327	1.45	3975	0
2	230	50	1385	362	1.60	3300	150
3	230	50	1370	380	1.70	2450	300
4	230	50	1400	351	1.55	1455	420
5	230	50	1250	222	0.99	3495	0
6	230	50	1250	264	1.17	2975	122
7	230	50	1250	290	1.28	2240	251
8	230	50	1250	250	1.10	1300	335
9	230	50	1000	114	0.50	2795	0
10	230	50	1000	135	0.60	2380	78
11	230	50	1000	149	0.66	1790	160
12	230	50	1000	128	0.56	1040	214
13	230	50	750	48	0.21	2095	0
14	230	50	750	57	0.25	1785	44
15	230	50	750	63	0.28	1345	90
16	230	50	750	54	0.24	780	120

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

