R3G400-AC30-61

EC centrifugal fan

backward curved, single inlet

R3G400-AC30-61 ebmpapst Datasheet FansCo
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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^{-1}	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 Pa

		Actual	Request 2013	Request 2015
Overall efficiency η_{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^3/h	2390		
Pressure increase p_{fs}	Pa	300		
Speed n	min^{-1}	1370		

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

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Technical features

Mass	5.78 kg
Size	400 mm
Surface of rotor	Coated in black
Material of electronics housing	Die-cast aluminium
Material of impeller	Aluminium sheet
Number of blades	6
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 20
Insulation class	"B"
Humidity class	F0
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	None
Operation mode	S1
Motor bearing	Ball bearing
Technical features	- Operation and alarm display: reversible voltage output 0 V / +15 V - Integrated PID controller - Motor current limit - PFC, active - RS485 ebmBUS - Soft start - Control interface with SELV potential safely disconnected from the mains - Over-temperature protected electronics / motor - Line undervoltage / phase failure detection
EMC interference immunity	Acc. to EN 61000-6-2 (industrial environment)
EMC harmonics	Acc. to EN 61000-3-2/3
EMC interference emission	Acc. to EN 61000-6-4 (industrial environment)
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	<= 3.5 mA
Electrical leads	With plug
Motor protection	Thermal overload protector (TOP) wired internally
Cable exit	Variable
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 61800-5-1; CE
Approval	CCC; CSA C22.2 Nr.113; EAC; UL 507

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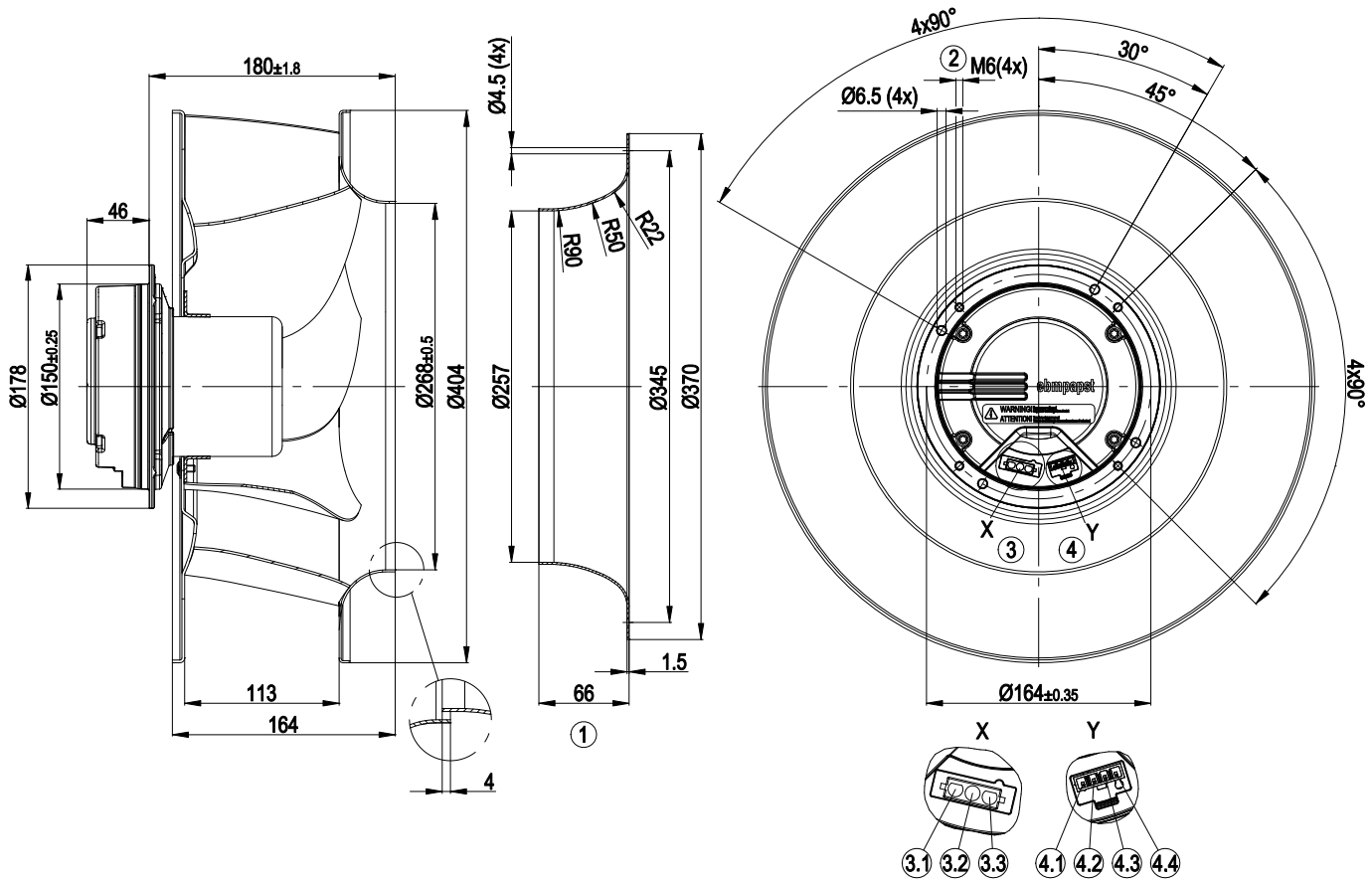
Product drawing



1	Accessory part: Inlet nozzle 54476-2-4013 not included in scope of delivery
2	Screw depth max. 10 mm
3	Strip Lonco No. C63502-3A, mating connectors with female terminals are not included in the standard scope of delivery
3.1	PE
3.2	N
3.3	L
4	Strip 4-pole Molex 39-30-2040, mating connectors with female connectors not included in scope of delivery
4.1	RSB
4.2	RSA
4.3	+15 V; in the event of fault: 0 V
4.4	0 V; in the event of fault: +15 V

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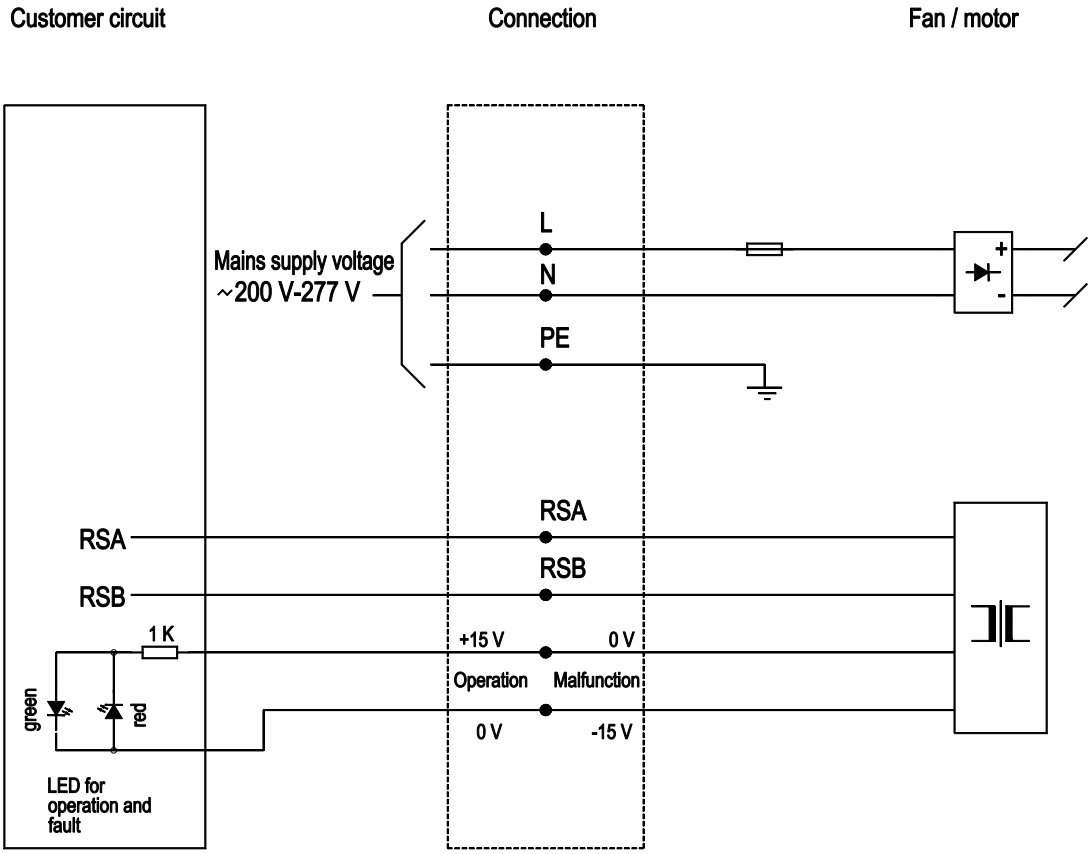
Connection screen



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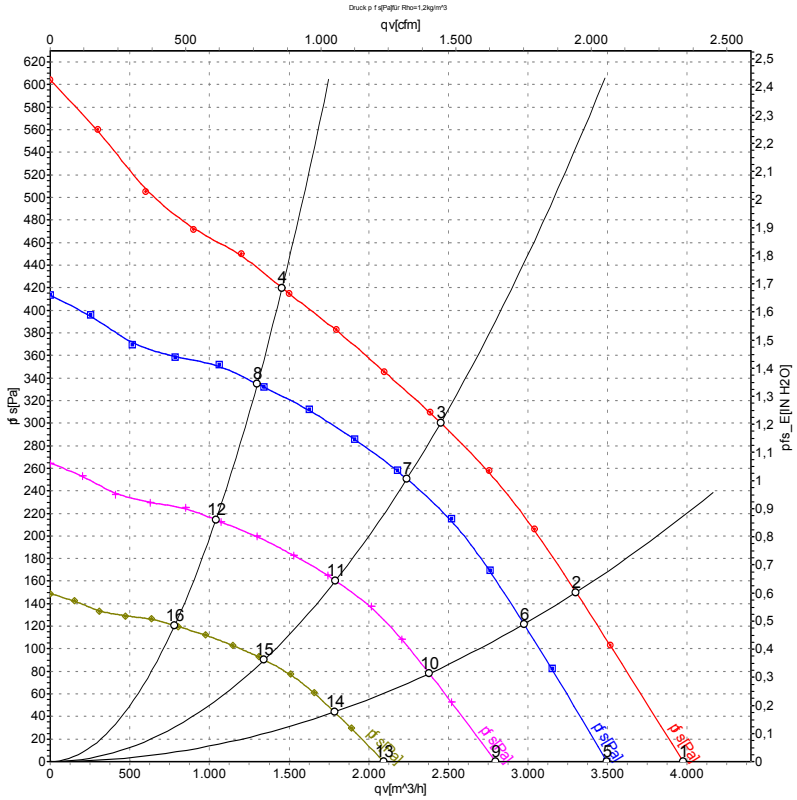
Charts: Air flow 50 Hz



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_{ed}	I	qv	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/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_{ed} = Power input · I = Current draw · qv = Air flow · p_{fs} = Pressure increase