R3G400-AC13-30

EC centrifugal fan

backward-curved, single-intake



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ErP2015 EXCEEDS THE NORM

Nominal data

Type	**R3G400-AC13-30**	
Motor	**M3G084-FA**	
Nominal voltage	VDC	48
Nominal voltage range	VDC	36 .. 57
Method of obtaining data		fa
Speed	min^{-1}	1160
Power consumption	W	192
Current draw	A	3.9
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	60

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 η_{es}	%	61.7	44.2
02 Measurement category		A	
03 Efficiency category		Static	
04 Efficiency grade N		79.5	62
05 Variable speed drive		Yes	

09 Power consumption P_e	kW	0.2
09 Air flow q_v	m^3/h	1565
09 Pressure increase p_{fs}	Pa	250
10 Speed n	min^{-1}	1135
11 Specific ratio*		1.00

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 Pa

LU-57658

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Technical description

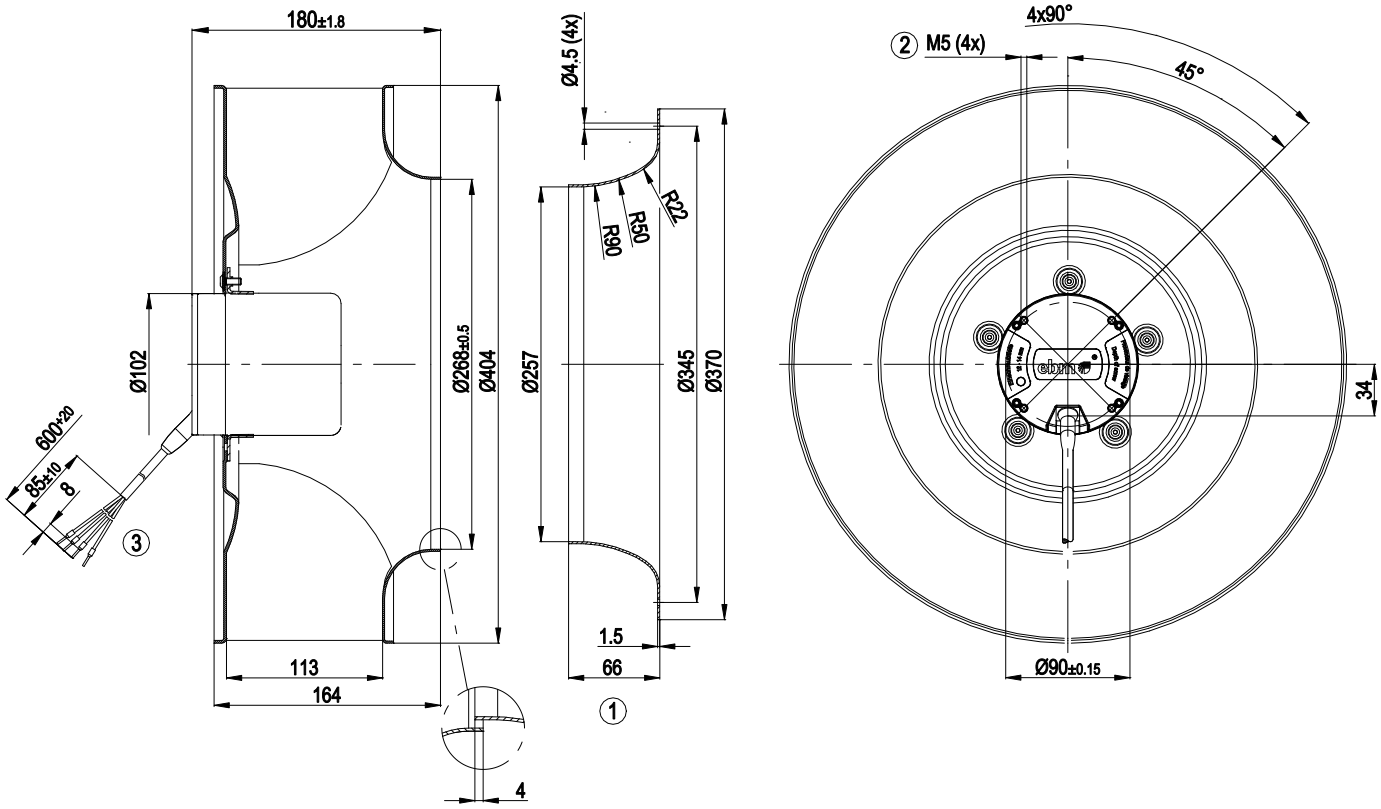
Weight	5 kg
Fan size	400 mm
Electronics housing material	Die-cast aluminum
Impeller material	Sheet aluminum
Number of blades	6
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP42
Insulation class	"B"
Max. permitted ambient temp. for motor (transport/storage)	+80 °C
Min. permitted ambient temp. for motor (transport/storage)	-40 °C
Installation position	Any
Condensation drainage holes	None
Mode	S1
Motor storage	Ball bearing
Technical features	- Tach output - Power limiter - Motor current limitation - Soft start - Control input 0-10 VDC / PWM - Thermal overload protection for motor
Motor protection	Thermal overload protector (TOP) internally connected
With cable	Variable
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60950-1
Approval	CCC; CSA C22.2 No. 100; EAC; UL 1004-1

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Product drawing



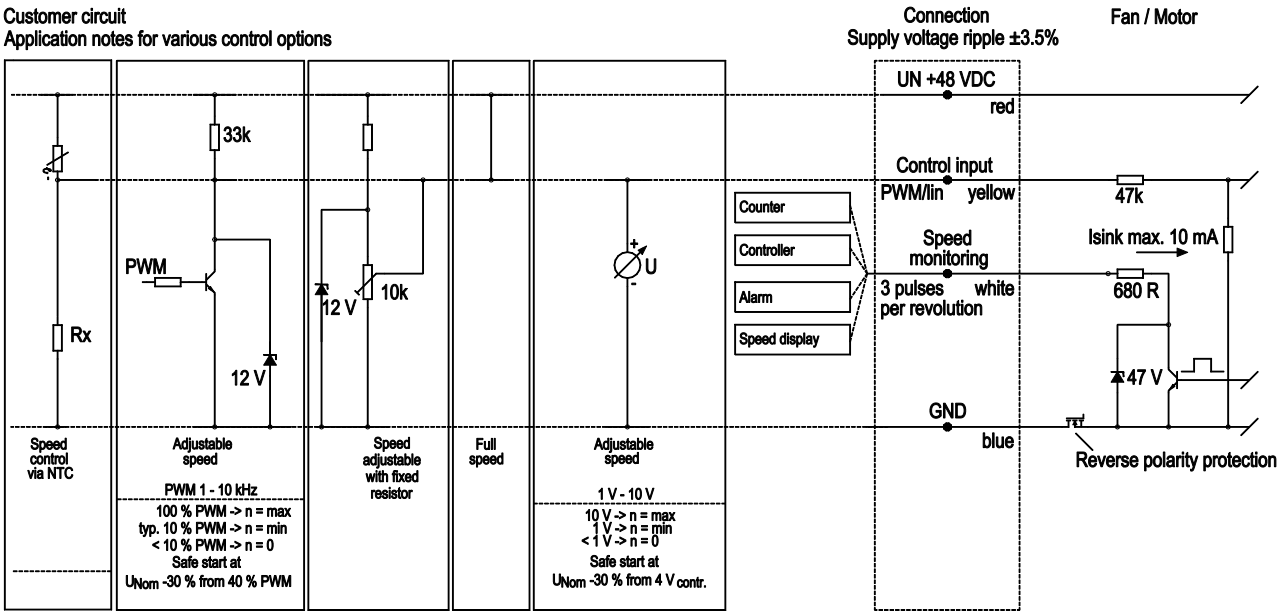
1	Accessory part: inlet ring 54476-2-4013 not included in scope of delivery
2	Max. clearance for screw 14 mm
3	Cable PVC AWG16, 4x crimped ferrules

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Connection diagram

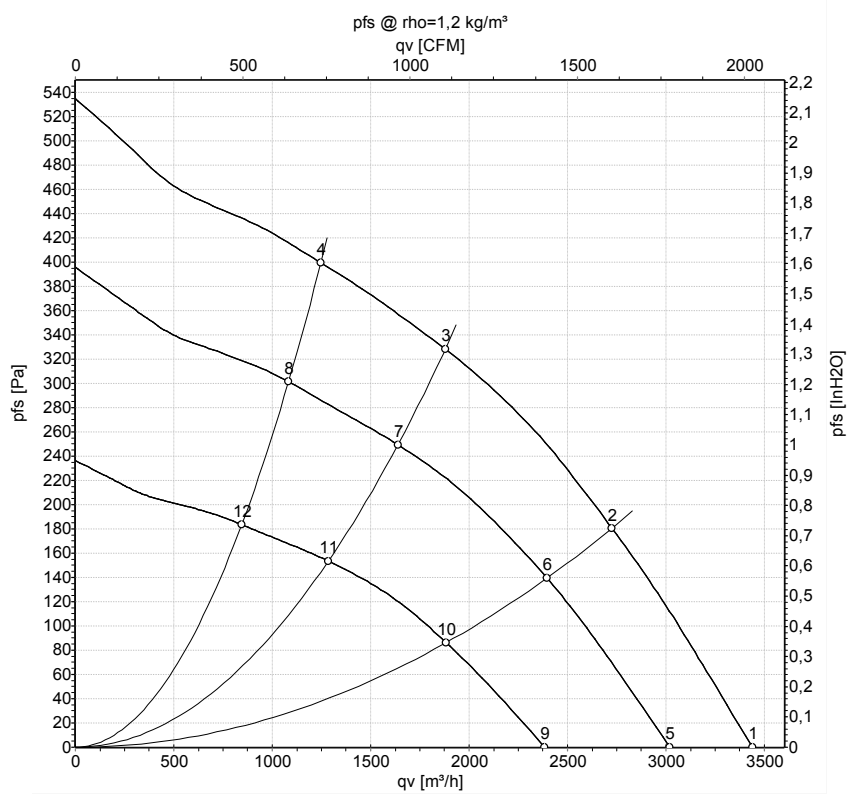


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Curves: Air performance



Measurement: LU-57659
Measurement: LU-57658
Measurement: LU-57660

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

	U	n	P_{ed}	I	qv	p_{fs}
	V	min^{-1}	W	A	m^3/h	Pa
1	57	1320	284	5.04	3435	0
2	57	1290	321	5.71	2725	181
3	57	1300	309	5.49	1880	328
4	57	1330	275	4.87	1245	399
5	48	1160	192	3.90	3020	0
6	48	1125	211	4.43	2395	140
7	48	1135	203	4.27	1640	250
8	48	1155	180	3.78	1085	300
9	36	900	91	2.53	2385	0
10	36	890	102	2.85	1885	86
11	36	895	99	2.76	1285	154
12	36	905	88	2.46	845	184

U = Power supply · n = Speed · P_{ed} = Power consumption · I = Current draw · qv = Air flow · p_{fs} = Pressure increase

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