R3G400-AL28-71

EC centrifugal fan

backward-curved, single-intake

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ErP2015 EXCEEDS THE NORM

Nominal data

Type	**R3G400-AL28-71**
Motor	**M3G084-FA**

Phase		1~
Nominal voltage	VAC	230
Nominal voltage range	VAC	200 .. 277
Frequency	Hz	50/60
Method of obtaining data		ml
Speed (rpm)	min^{-1}	1365
Power consumption	W	395
Current draw	A	2.5
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}	%	58.2	47.2
02 Measurement category		A	
03 Efficiency category		Static	
04 Efficiency grade N		73	62
05 Variable speed drive		Yes	

09 Power consumption P_{ed}	kW	0.39
09 Air flow q_v	m^3/h	2405
09 Pressure increase p_{fs}	Pa	308
10 Speed (rpm) n	min^{-1}	1365
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-69017

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Technical description

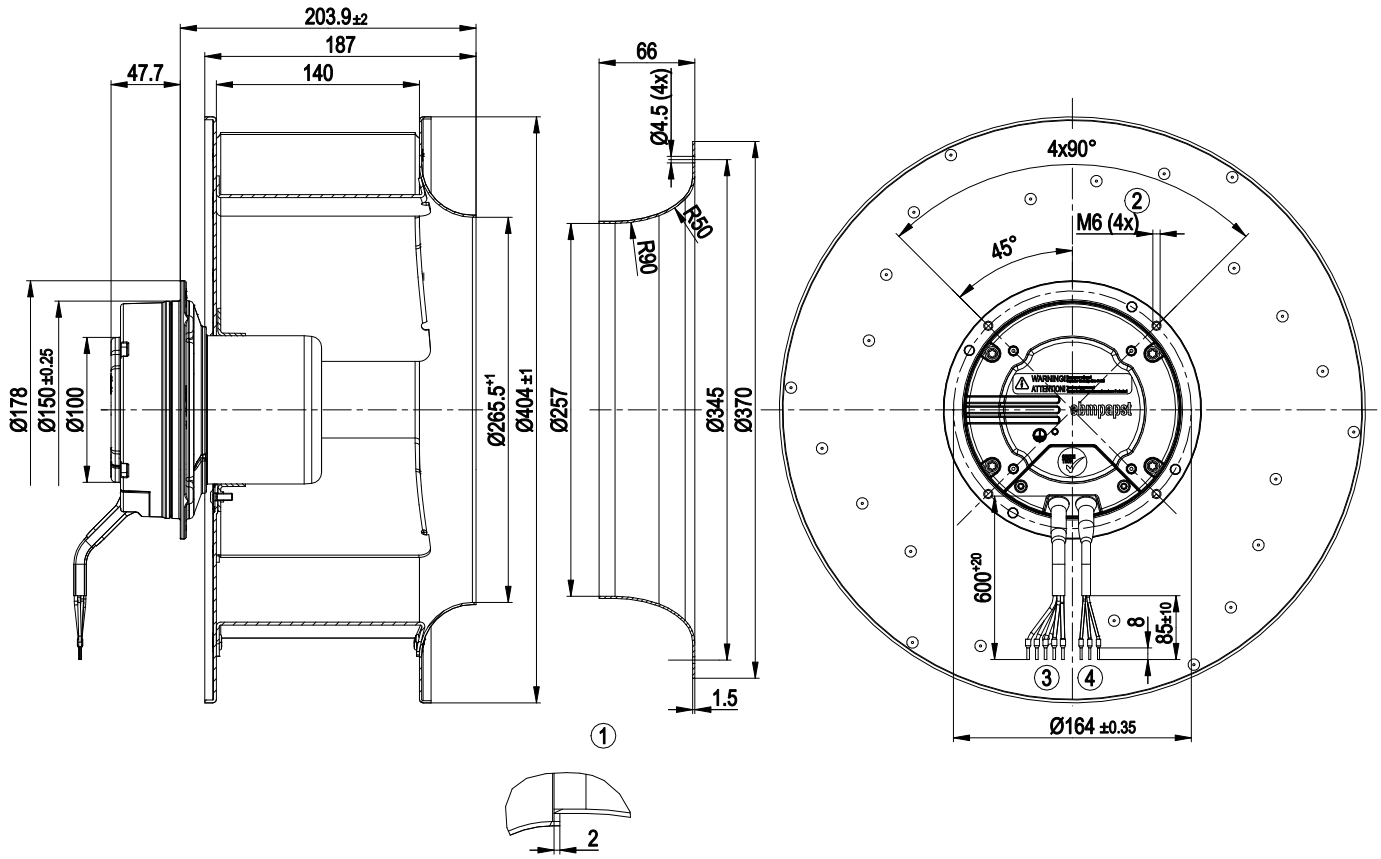
Weight	6 kg
Fan size	400 mm
Rotor surface	Painted black
Impeller material	Sheet aluminum
Number of blades	6
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP54; installation- and position-dependent
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	F3-1
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 bearing	Ball bearing
Technical features	- Output 10 VDC, max. 1.1 mA - Alarm relay - Motor current limitation - Soft start - Control input 0-10 VDC / PWM - Thermal overload protection for electronics/motor - Line undervoltage detection
EMC immunity to interference	According to EN 61000-6-2 (industrial environment)
EMC circuit feedback	According to EN 61000-3-2/3
EMC interference emission	According to EN 61000-6-3 (household environment)
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	<= 3.5 mA
Motor protection	Thermal overload protector (TOP) internally connected
With cable	Variable
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 61800-5-1; CE
Approval	CSA C22.2 No. 77; UL 2111

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Product drawing



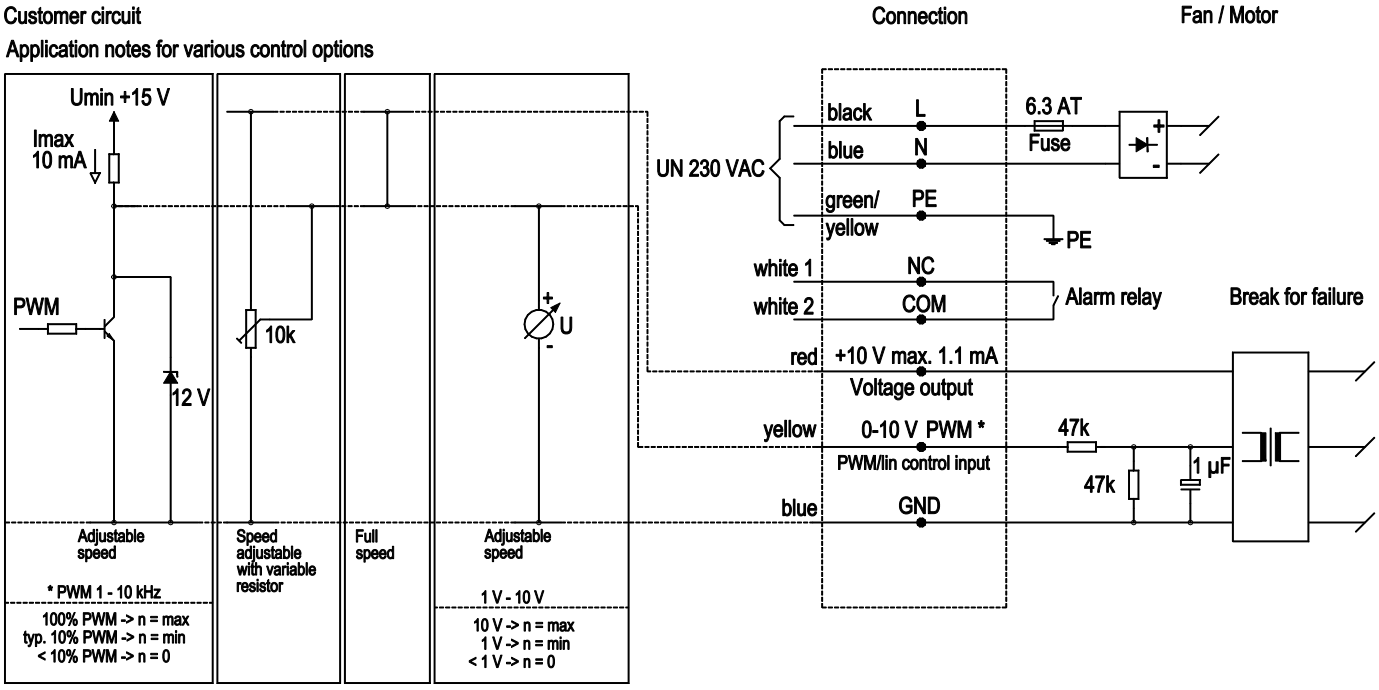
1	Accessory part: Inlet ring 54476-2-4013 not included in scope of delivery, other inlet rings on request
2	Clearance for screw 8 - 10 mm
3	Cable PVC AWG18, 5 x crimped ferrules
4	Cable PVC AWG 22, 3 x crimped ferrules

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Connection diagram

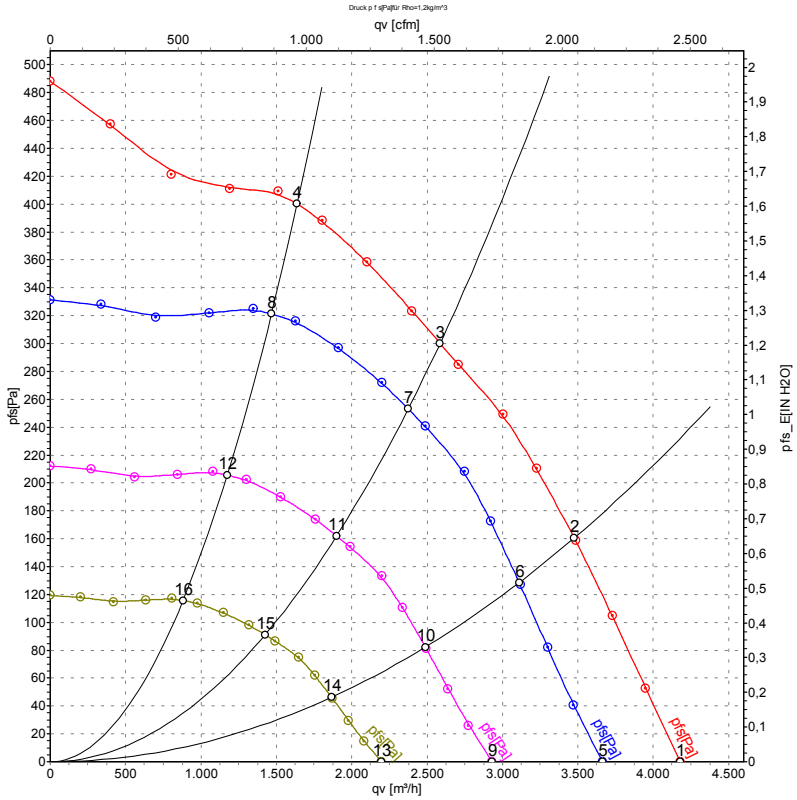


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Curves: Air performance 50 Hz



Measurement: LU-69017-1

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	f	n	P_{ed}	I	qv	p_{fs}	qv	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa	CFM	inH2O
1	230	50	1425	324	2.10	4180	0	2460	0.00
2	230	50	1395	358	2.31	3475	160	2045	0.64
3	230	50	1365	395	2.50	2585	300	1520	1.20
4	230	50	1395	366	2.36	1640	400	965	1.61
5	230	50	1250	219	1.41	3665	0	2155	0.00
6	230	50	1250	256	1.65	3110	129	1830	0.52
7	230	50	1250	304	1.96	2375	253	1400	1.02
8	230	50	1250	264	1.70	1470	321	865	1.29
9	230	50	1000	112	0.72	2930	0	1725	0.00
10	230	50	1000	131	0.85	2490	82	1465	0.33
11	230	50	1000	155	1.00	1900	162	1120	0.65
12	230	50	1000	135	0.87	1175	206	690	0.83
13	230	50	750	47	0.31	2200	0	1295	0.00
14	230	50	750	55	0.36	1865	46	1100	0.18
15	230	50	750	66	0.42	1425	91	840	0.37
16	230	50	750	57	0.37	880	116	520	0.47

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

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