

R3G160-AC70-01

EC centrifugal fan

forward curved, single inlet

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Nominal data

Type	R3G160-AC70-01	
Motor	M3G074-CF	
Phase		1~
Nominal voltage	VAC	115
Frequency	Hz	50/60
Type of data definition		ml
Speed	min ⁻¹	2110
Power input	W	170
Current draw	A	2.2
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	60

ml = max. load · me = max. efficiency · fa = running at free air · cs = customer specs · cu = customer unit
Subject to alterations



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Technical features

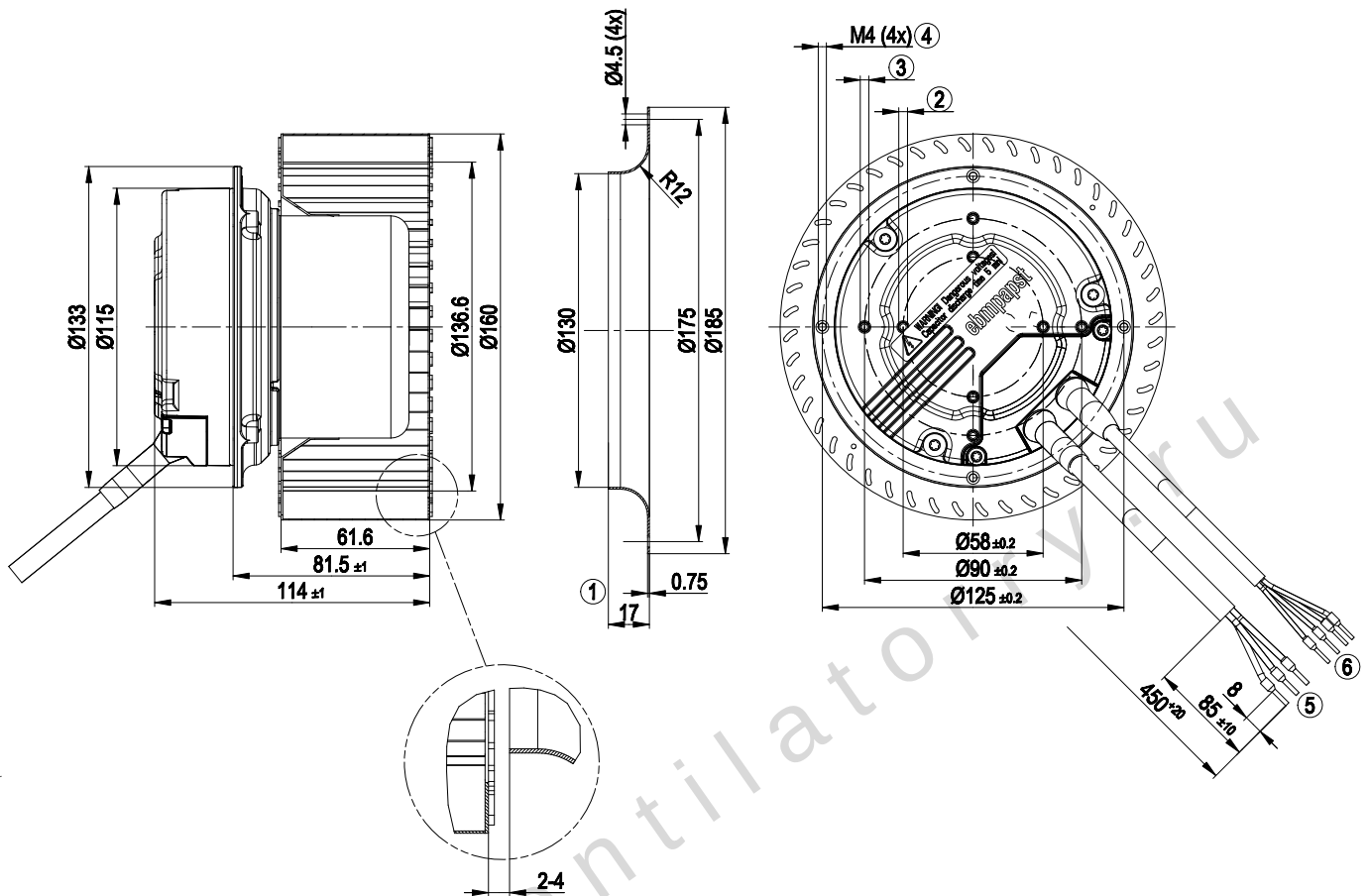
Mass	2.1 kg
Size	160 mm
Material of electronics housing	Die-cast aluminium
Material of impeller	Sheet steel, galvanised
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 44
Insulation class	"B"
Humidity class	F3-1
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Mounting position	Shaft horizontal or rotor on top; rotor on bottom on request
Condensate discharge holes	None
Operation mode	S1
Motor bearing	Ball bearing
Technical features	- Tach output - Motor current limit - Soft start - Control input 0-10 VDC / PWM - Control interface with SELV potential safely disconnected from the mains - Over-temperature protected electronics / motor
EMC interference immunity	Acc. to EN 61000-6-2 (industrial environment)
EMC interference emission	Acc. to EN 55022 (Class B, household environment)
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	<= 3.5 mA
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 60335-1
Approval	UL 2111; CSA C22.2 Nr.77

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Product drawing



1	Accessory part: Inlet nozzle 09588-2-4013, not included in the standard scope of delivery
2	Pilot hole prepared for self-tapping screw M4, depth of screw max. 8 mm
3	Pilot hole prepared for self-tapping screw M4, depth of screw max. 6 mm
4	Depth of screw 8 -10 mm; tightening torque 2.5 ± 0.2 Nm; gluing the screws is recommended
5	Connection line PVC AWG18, 3x crimped core-end sleeves
6	Connection line PVC AWG22, 4x crimped core-end sleeves

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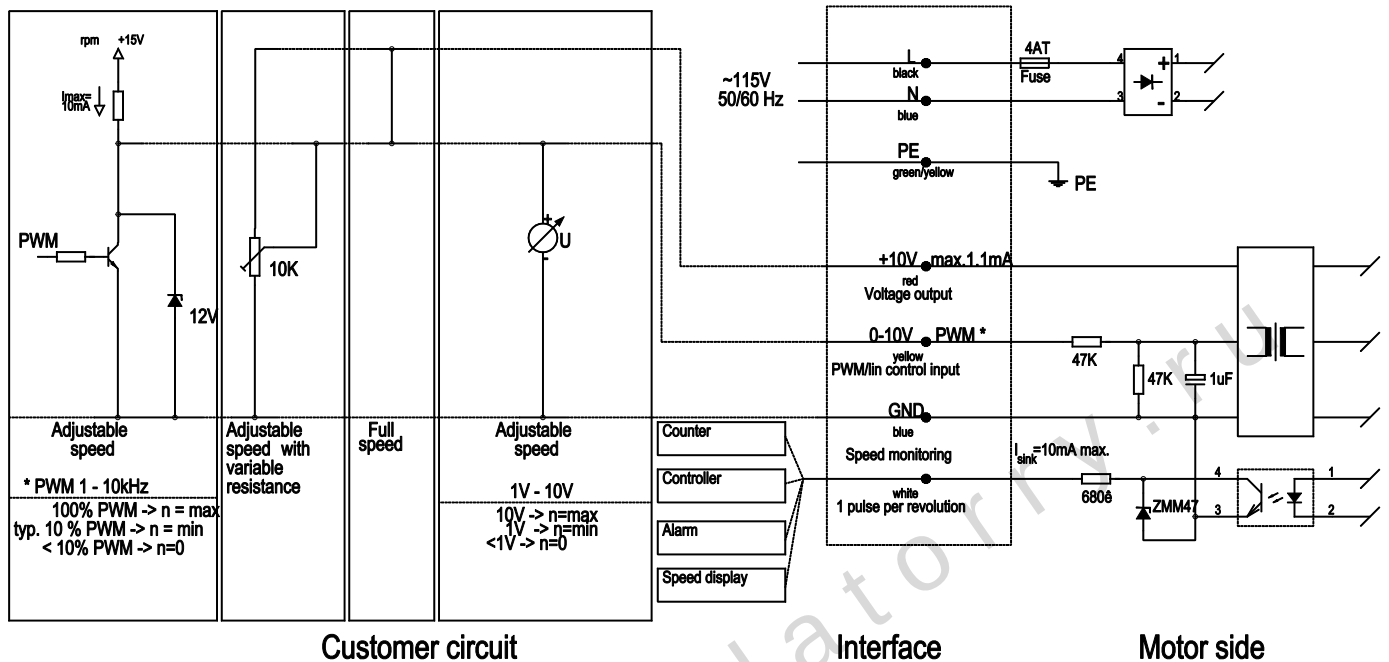
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Connection screen

Notes on various control possibilities

and their applications



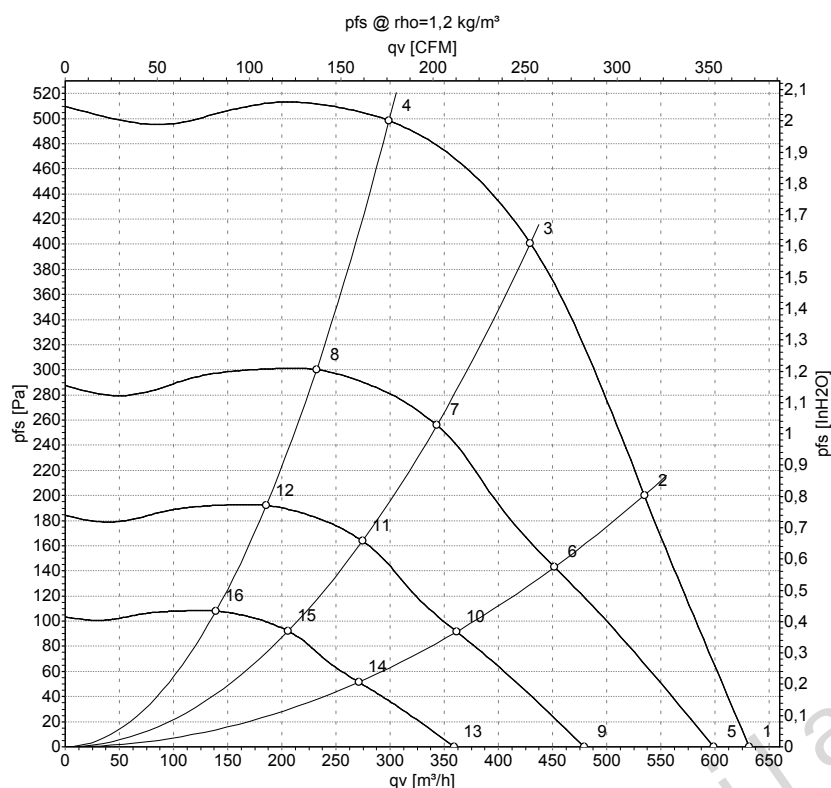
Not switchable via the supply voltage. Restart only after 5 minute delay via input voltage.

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Charts: Air flow 50 Hz



Measurement: LU-141592

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	m³/h	Pa
1	115	50	2110	170	2.20	630	0
2	115	50	2365	171	2.16	535	200
3	115	50	2500	146	1.89	430	400
4	115	50	2575	113	1.50	300	500
5	115	50	2000	145	1.85	600	0
6	115	50	2000	104	1.31	450	143
7	115	50	2000	74	0.96	345	256
8	115	50	2000	53	0.70	230	301
9	115	50	1600	74	0.95	480	0
10	115	50	1600	53	0.67	360	92
11	115	50	1600	38	0.49	275	164
12	115	50	1600	27	0.36	185	193
13	115	50	1200	31	0.40	360	0
14	115	50	1200	22	0.28	270	52
15	115	50	1200	16	0.21	205	92
16	115	50	1200	11	0.15	140	108

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