

R3G310-AL09-30

EC centrifugal fan

backward curved, single inlet



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Nominal data

Type	R3G310-AL09-30	
Motor	M3G084-FA	
Nominal voltage	[VDC]	48
Nominal voltage range	[VDC]	36 .. 57
Type of data definition		rfa
Speed	[min ⁻¹]	1930
Power input	[W]	208
Current draw	[A]	4.35
Min. ambient temperature	[°C]	- 25
Max. ambient temperature	[°C]	+60

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

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Technical features

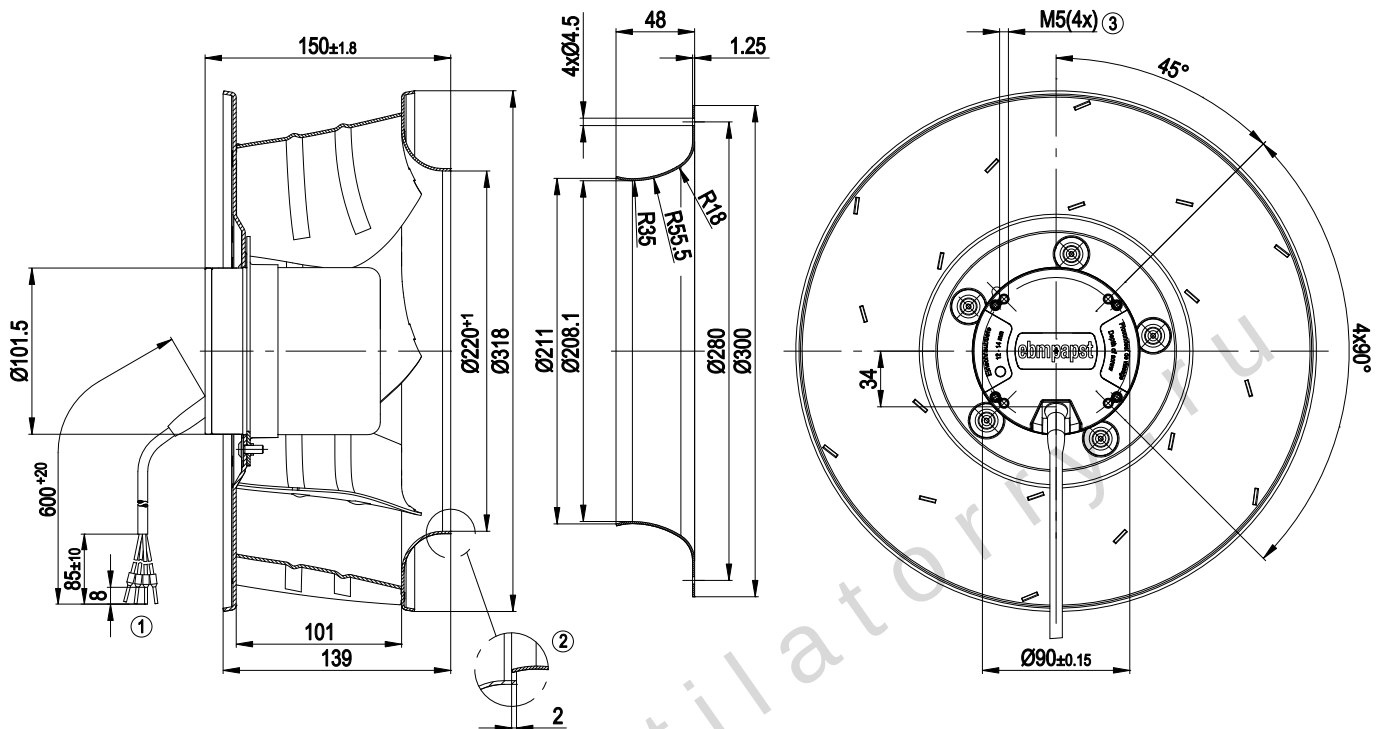
Size	310 mm
Operation mode	S1
Direction of rotation	Clockwise, seen on rotor
Mounting position	Any
EMC interference emission	Acc. to EN 55022 (Class B)
EMC interference immunity	Acc. to EN 61000-6-2 (industrial environment)
Insulation class	"B"
Cable exit	Variable
Condensate discharge holes	None
Bearing motor	Ball bearing
Mass	4.4 kg
Material of impeller	Aluminium sheet
Motor protection	Thermal overload protector (TOP) wired internally
Product conforming to standard	EN 60950-1
Surface of rotor	Coated in black
Number of blades	6
Type of protection	IP 42
Technical features	- Control input 0-10 VDC / PWM - Tach output - Over-temperature protected motor - Motor current limit - Soft start
Max. permissible ambient motor temp. (transp./ storage)	+80 °C
Min. permissible ambient motor temp. (transp./storage)	-40 °C
Approval	CCC; CSA C22.2 Nr.77; UL 2111

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Product drawing



1	Connection line AWG16, 4 x crimped core-end sleeves
2	Accessory part: Inlet nozzle 31050-2-4013 not included in the standard scope of delivery, other inlet nozzles on request
3	Depth of screw 12 - 14 mm

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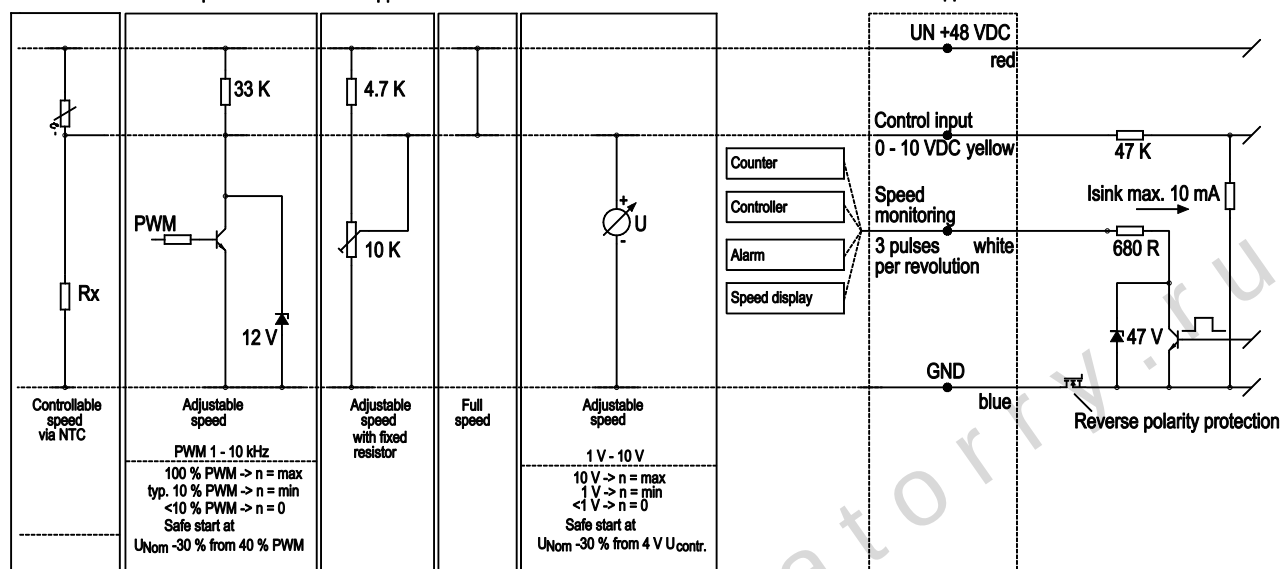
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Connection screen

Customer circuit

Notes on various control possibilities and their applications

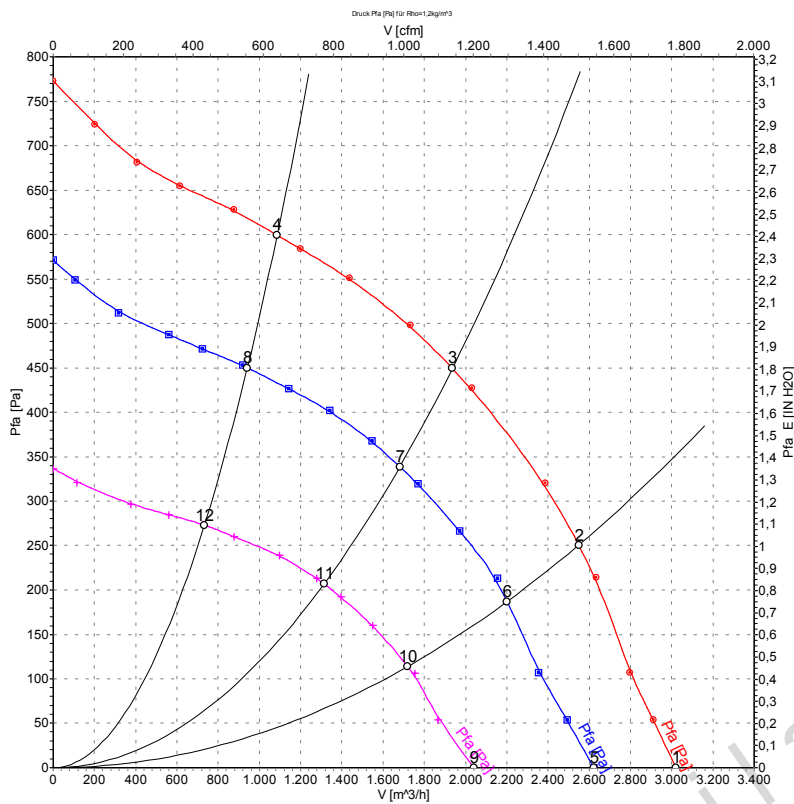


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Charts: Air flow



Measured values

	U	n	P ₁	I	$\hat{V}$	P _{fa}
	[V]	[min ⁻¹]	[W]	[A]	[m³/h]	[Pa]
1	57	2235	317	5.60	3020	0
2	57	2180	380	6.72	2550	250
3	57	2155	414	7.33	1935	450
4	57	2190	370	6.54	1085	600
5	48	1930	208	4.35	2620	0
6	48	1895	250	5.26	2200	188
7	48	1870	273	5.74	1680	339
8	48	1900	245	5.14	940	450
9	36	1500	100	2.81	2040	0
10	36	1480	121	3.39	1720	115
11	36	1465	133	3.72	1315	207
12	36	1480	118	3.30	735	273