

R3G310-AN12-30

# EC centrifugal fan

backward curved, single inlet



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## Nominal data

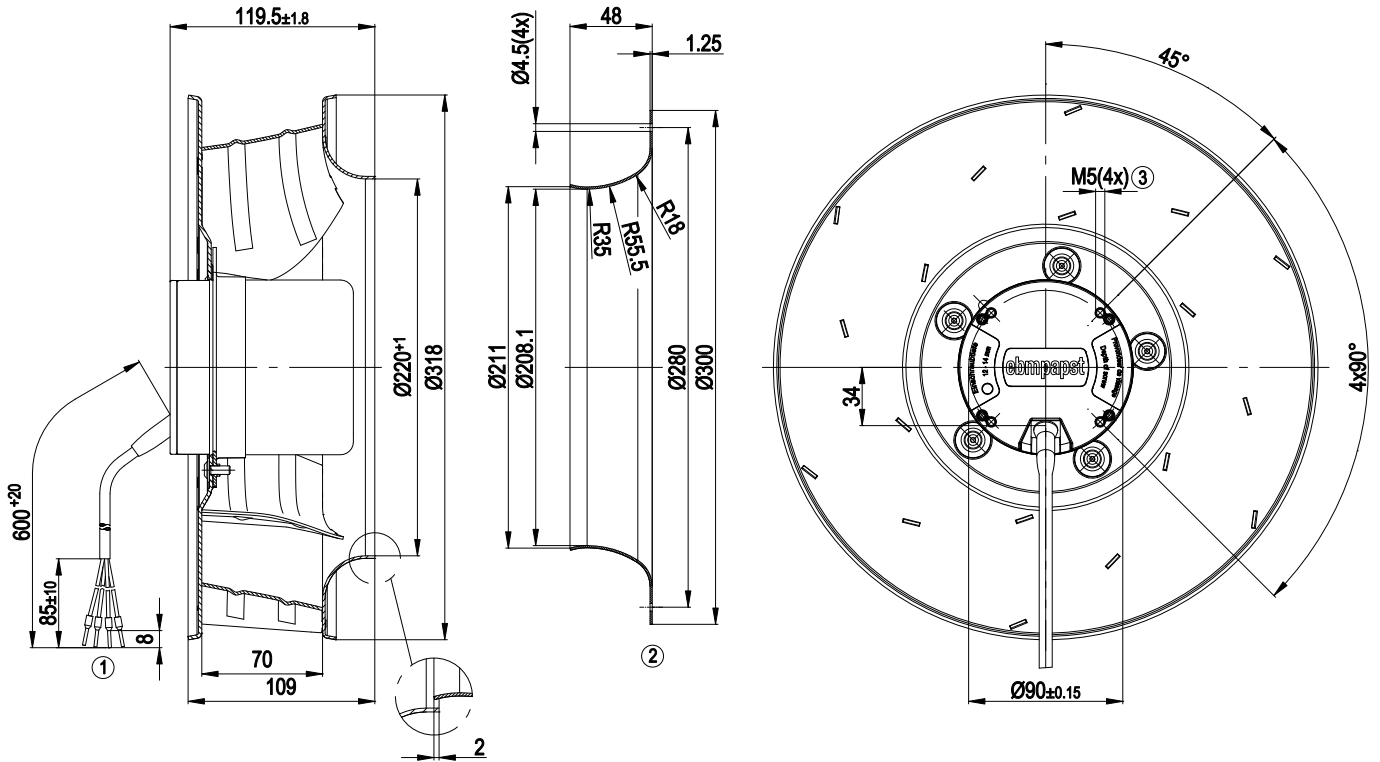
Type	R3G310-AN12-30	
Motor	M3G084-FA	
Nominal voltage	[VDC]	48
Nominal voltage range	[VDC]	36 .. 57
Type of data definition		rfa
Speed	[min <sup>-1</sup> ]	2000
Power input	[W]	190
Current draw	[A]	4.0
Min. ambient temperature	[°C]	- 25
Max. ambient temperature	[°C]	+60

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

### 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	4.35 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	<ul style="list-style-type: none"> <li>- Control input 0-10 VDC / PWM</li> <li>- Tach output</li> <li>- Over-temperature protected motor</li> <li>- Motor current limit</li> <li>- Soft start</li> </ul>
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

Product drawing

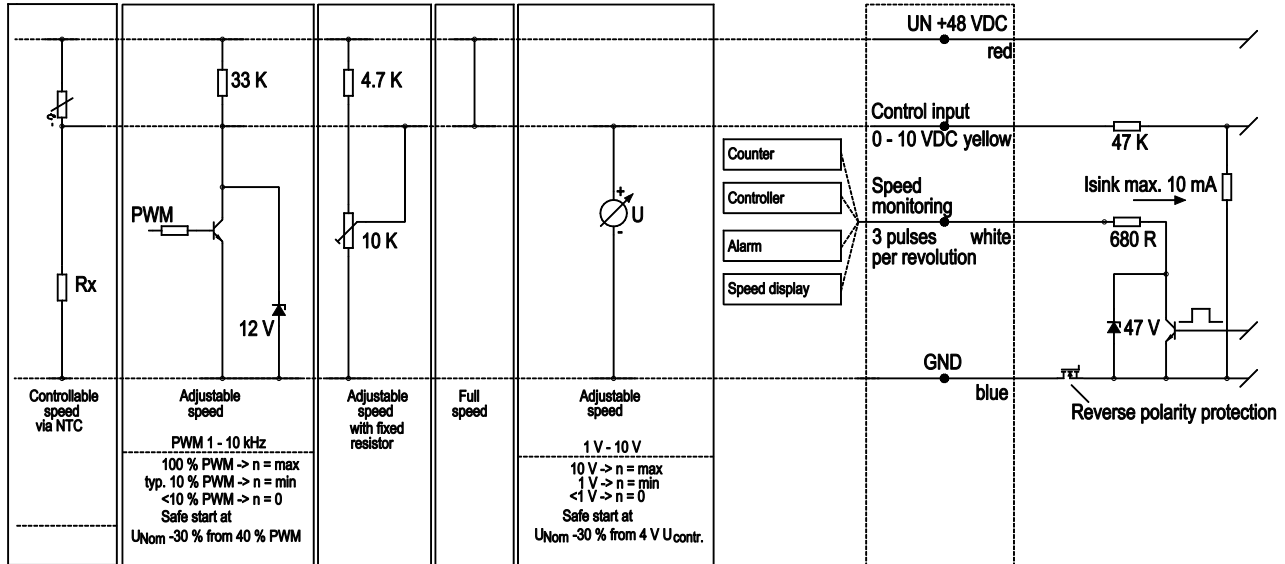


1	Connection line AWG16 , 4x crimped core-end sleeves
2	Accessory part: Inlet nozzle 31050-2-4013 not included in the standard scope of delivery, other inlet nozzles on request
3	Depth of screw 12 - 14 mm

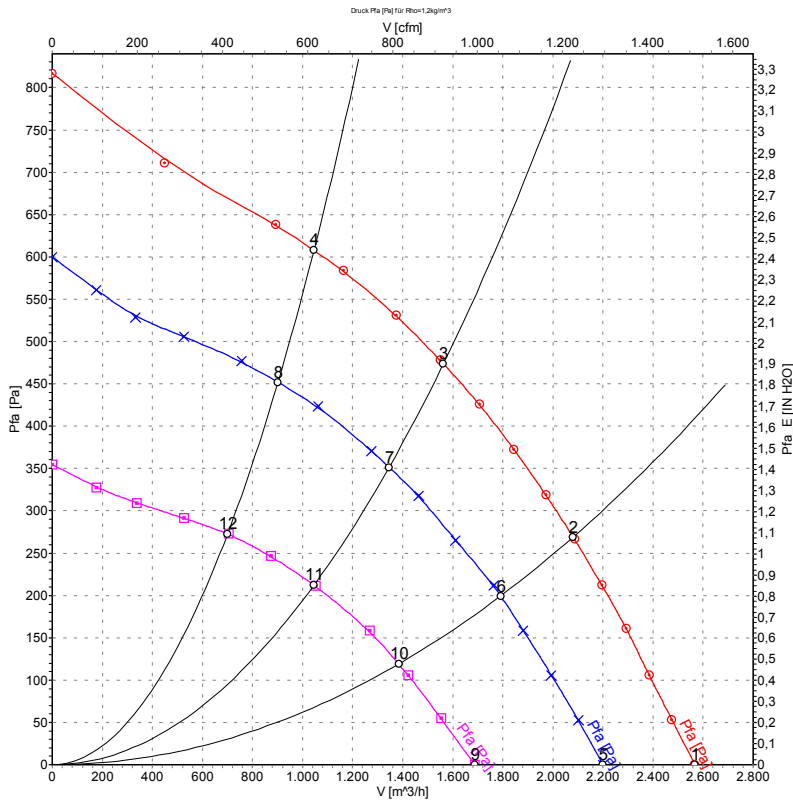
## Connection screen

### Customer circuit

Notes on various control possibilities and their applications



## Charts: Air flow



Measurement: LU-57147  
 Measurement: LU-57146  
 Measurement: LU-57148

## Measured values

	U	n	P <sub>1</sub>	I	$\hat{V}$	p <sub>fa</sub>
	[V]	[min <sup>-1</sup> ]	[W]	[A]	[m <sup>3</sup> /h]	[Pa]
1	57	2370	263	4.65	2570	0
2	57	2325	317	5.61	2080	269
3	57	2295	347	6.15	1560	474
4	57	2310	335	5.93	1045	608
5	48	2030	171	3.59	2200	0
6	48	2000	204	4.29	1790	200
7	48	1980	225	4.72	1345	350
8	48	1990	217	4.55	900	450
9	36	1570	84	2.35	1690	0
10	36	1555	101	2.83	1385	119
11	36	1545	110	3.07	1045	213
12	36	1550	106	2.96	700	274