R3G310-AN12-30/F01

EC centrifugal fan

backward curved, single inlet

ebm-papst Ventilator (Shanghai) Co.,Ltd.
No.418, Hua Jing Road, Wai Gao Qiao Free Trade Zone, Pudong
R3G310-AN12-30/F01 ebmpapst Datasheet
sales@fansco.com
www.fansco.com

Nominal data

Type	**R3G310-AN12-30/F01**	
Motor	**M3G084-FA**	
Nominal voltage	VDC	48
Nominal voltage range	VDC	36 .. 57
Type of data definition		fa
Speed	min^{-1}	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 · fa = running at free air · cs = customer specs · cu = customer unit
Subject to alterations

EC centrifugal fan

backward curved, single inlet

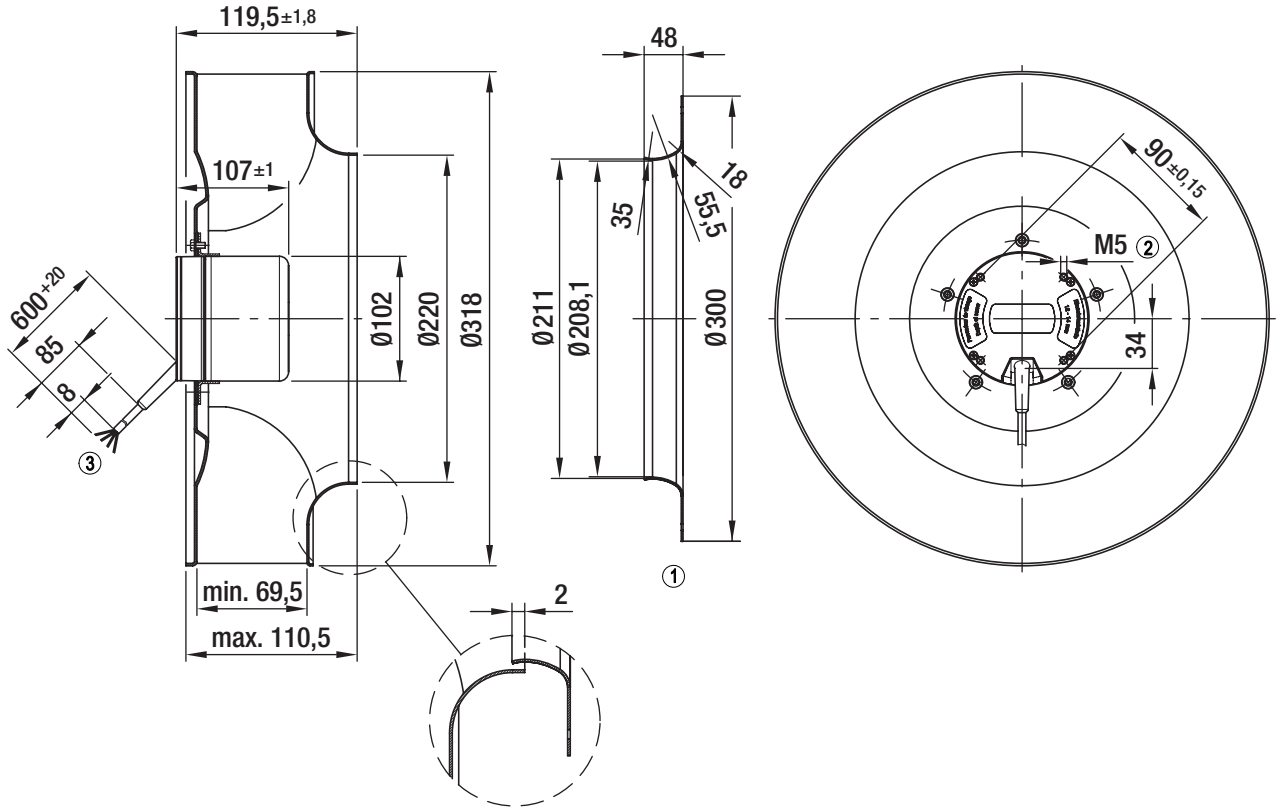
Technical features

Mass	4.4kg
Size	310 mm
Surface of rotor	Coated in black
Material of electronics housing	Die-cast aluminium
Material of impeller	Aluminium sheet, rivet
Number of blades	6
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 42
Insulation class	"B"
Max. permissible ambient motor temp. (transp./ storage)	+80 °C
Min. permissible ambient motor temp. (transp./storage)	-40 °C
Mounting position	Any
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 motor
EMC interference immunity	Acc. to EN 61000-6-2 (industrial environment)
EMC interference emission	Acc. to EN 55022 (Class B)
Motor protection	Thermal overload protector (TOP) wired internally
Cable exit	Variable
Product conforming to standard	EN 60950-1
Approval	UL; CCC

EC centrifugal fan

backward curved, single inlet

Product drawing

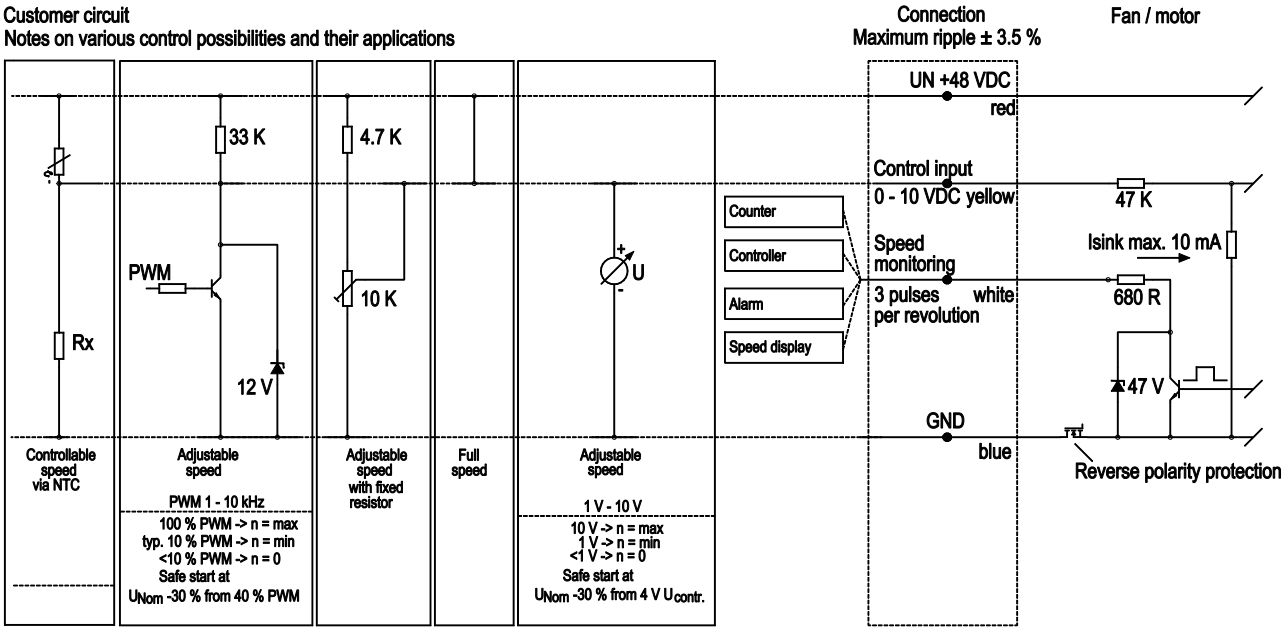


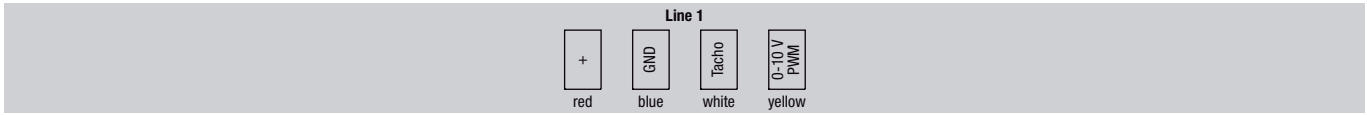
1	Accessory part: Inlet nozzle 31050-2-4013, not included in the standard scope of delivery
2	Depth of screw 12 - 14 mm
3	Connection line PVC AWG16, 4x crimped core-end sleeves

EC centrifugal fan

backward curved, single inlet

Connection screen



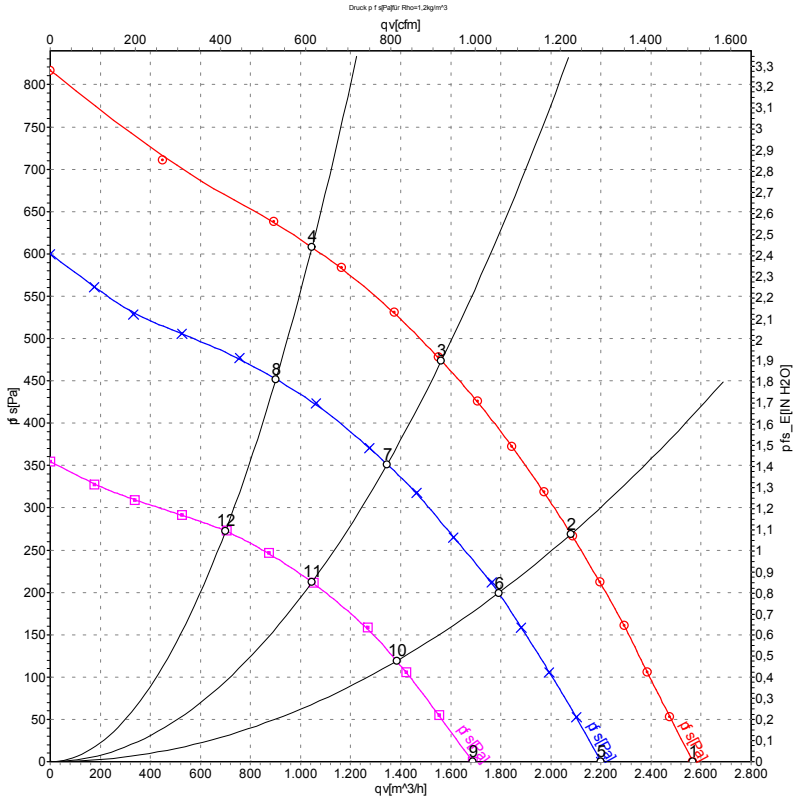


Signal	Colour	Assignment / function
+	red	maximum ripple ± 3.5 %
GND	blue	GND
Tacho	white	Tach output: 3 pulses per revolution
0-10 V / PWM	yellow	Control input

EC centrifugal fan

backward curved, single inlet

Charts: Air flow



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	n	P_{ed}	I	qv	p_{fs}
	V	min^{-1}	W	A	m^3/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

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