

R3G310-AL26-10

EC centrifugal fan

backward-curved, single-intake



R3G310-AL26-10 ebmpapst Datasheet

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Nominal data

Type	R3G310-AL26-10	
Motor	M3G084-FA	
Nominal voltage	VDC	24
Nominal voltage range	VDC	16 .. 28
Method of obtaining data		fa
Speed (rpm)	min ⁻¹	1920
Power consumption	W	230
Current draw	A	9.6
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 Commission Regulation (EU) 327/2011

		Actual	Req. 2015			
01 Overall efficiency η_{es}	%	57.3	45.5	09 Power consumption P_e	kW	0.27
02 Measurement category		A		09 Air flow q_v	m ³ /h	1455
03 Efficiency category		Static		09 Pressure increase p_{fs}	Pa	350
04 Efficiency grade N		73.8	62	10 Speed (rpm) n	min ⁻¹	1840
05 Variable speed drive		Yes		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 = $1 + p_{fs} / 100\,000\text{ Pa}$

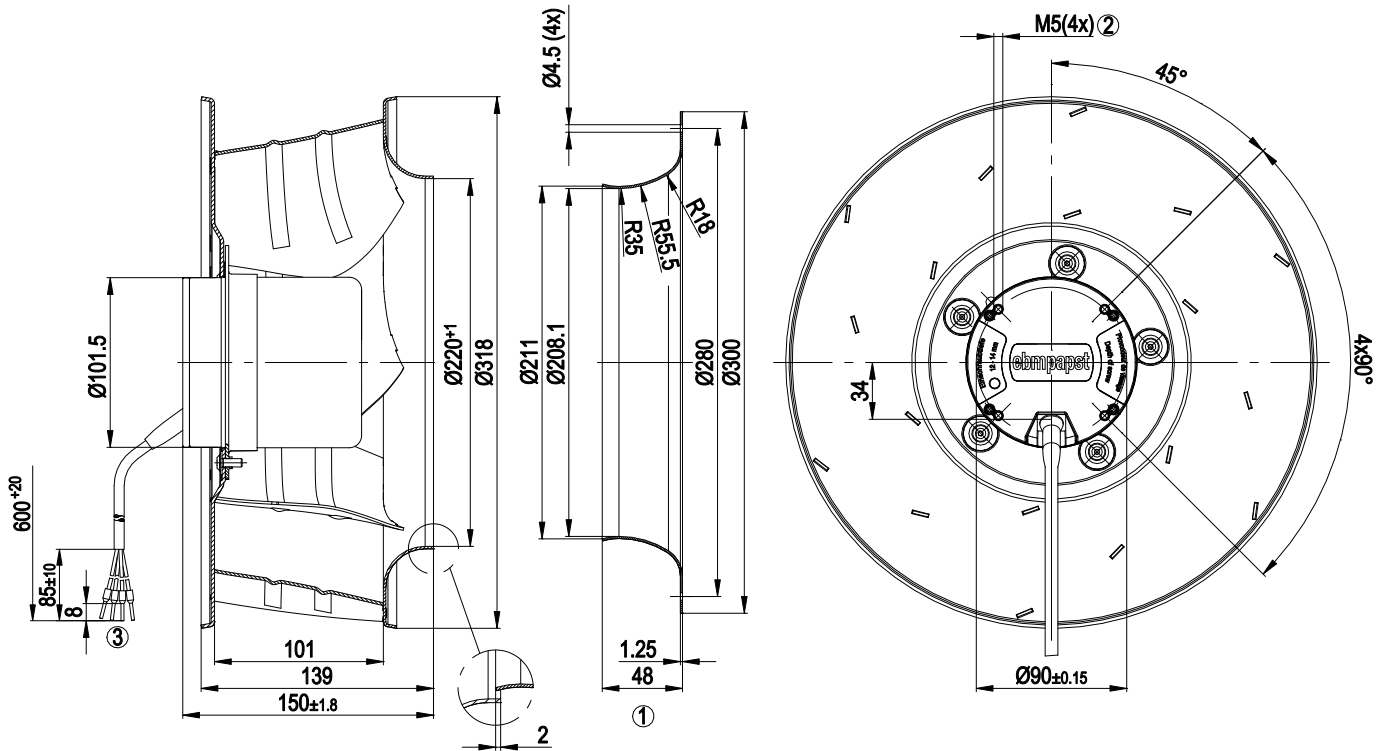
LU-64028



Technical description

Weight	4.4 kg
Fan size	310 mm
Rotor surface	Painted black
Electronics housing material	Die-cast aluminum
Impeller material	Sheet aluminum
Number of blades	6
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP42
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	H1
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	<ul style="list-style-type: none"> - Tach output - Motor current limitation - Soft start - Control input 0-10 VDC / PWM - Control interface with SELV potential safely disconnected from the mains - Thermal overload protection for motor
EMC immunity to interference	According to EN 61000-6-2 (industrial environment)
EMC interference emission	According to EN 55022 (Class B)
Motor protection	Thermal overload protector (TOP) internally connected
With cable	Variable
Conformity with standards	EN 60950-1; CE
Approval	CSA C22.2 No. 100; UL 1004-1

Product drawing



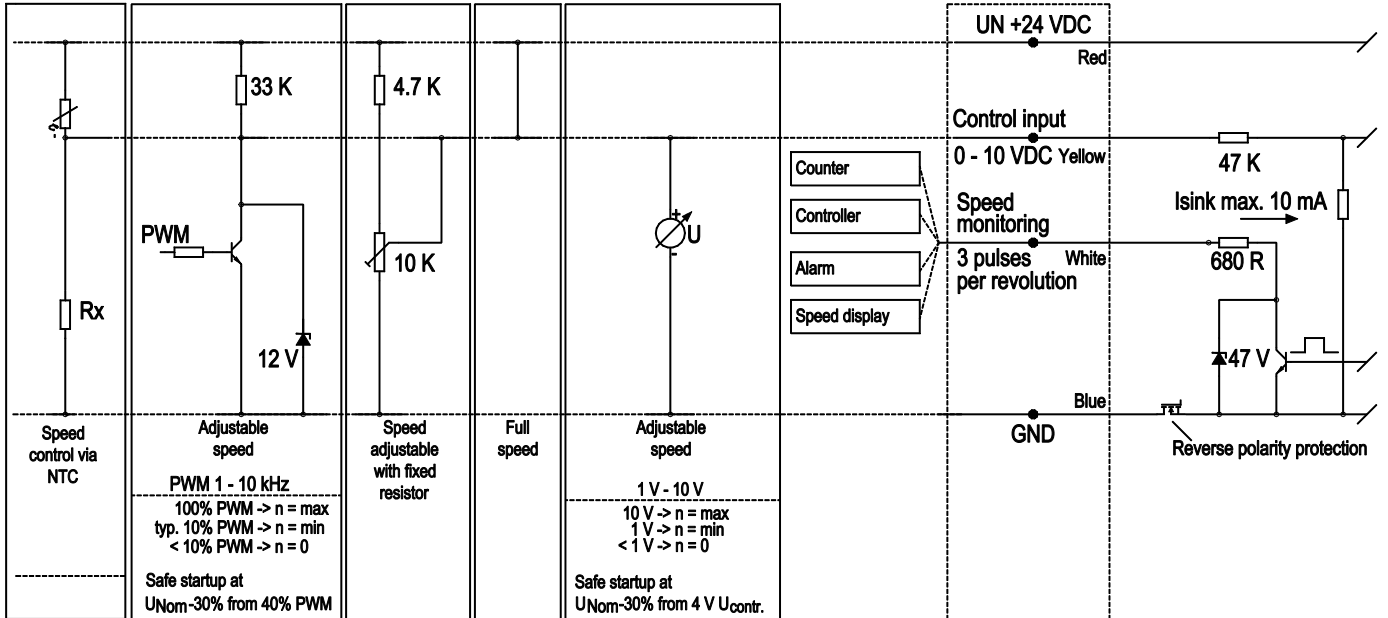
- | | |
|---|---|
| 1 | Accessory part: inlet ring 31050-2-4013 not included in scope of delivery |
| 2 | Clearance for screw 12 - 14 mm |
| 3 | Cable PVC AWG16, 4x crimped ferrules |



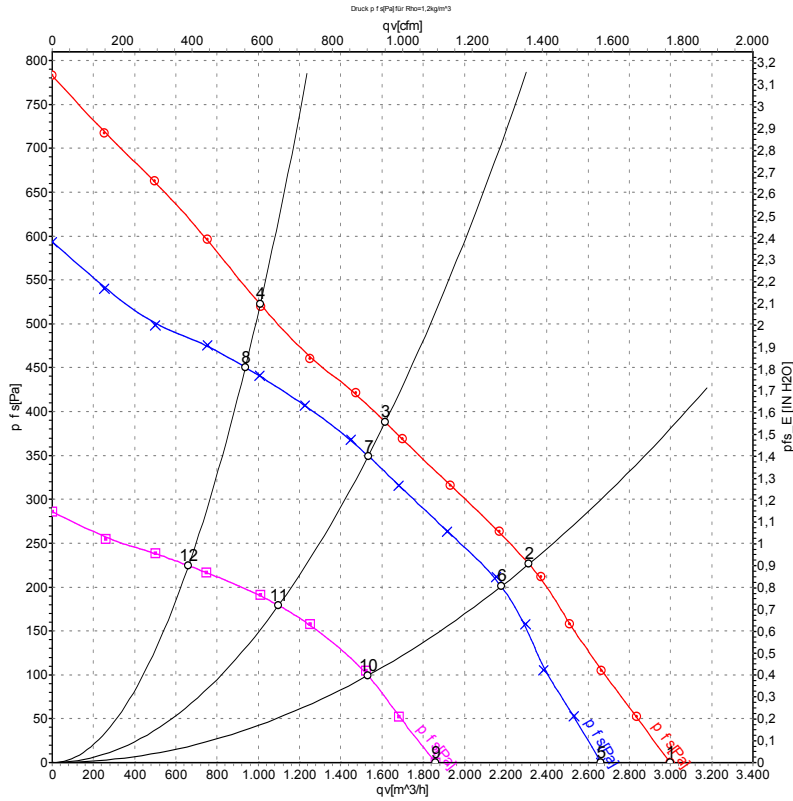
Connection diagram

Customer circuit

Application instructions for various control options



Curves: Air performance



Measurement: LU-64029-1
Measurement: LU-64028-1
Measurement: LU-64030-1

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	n	P _{ed}	I	q _v	p _{fs}	q _v	p _{fs}
	V	min ⁻¹	W	A	m ³ /h	Pa	cfm	inH ₂ O
1	28	2165	326	11.72	3000	0	1765	0.00
2	28	1990	324	11.67	2315	227	1360	0.91
3	28	1935	326	11.72	1615	388	950	1.56
4	28	2045	326	11.71	1010	521	595	2.09
5	24	1920	230	9.60	2660	0	1565	0.00
6	24	1875	274	11.52	2180	200	1280	0.80
7	24	1835	277	11.63	1535	350	905	1.41
8	24	1900	260	10.88	935	450	550	1.81
9	16	1355	83	5.25	1860	0	1095	0.00
10	16	1335	100	6.28	1530	102	900	0.41
11	16	1320	105	6.60	1100	179	645	0.72
12	16	1345	94	5.88	660	224	390	0.90

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

