



R3G280-RNB1-11 ebmpapst Datasheet
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Nominal data

Type	R3G280-RNB1-11		
Motor	M3G074-CF		
Nominal voltage	VDC	48	48
Nominal voltage range	VDC	36 .. 57	36 .. 57
Type of data definition		fa	fa
State		prelim.	
Speed (rpm)	min ⁻¹	1910	1910
Power input	W	140	140
Current draw	A	2.9	2.9
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	60	60

ml = Max. load · me = Max. efficiency · fa = Running at free air · cs = Customer specs · cu = Customer unit
Subject to alterations

Data according to ErP directive

		Actual	Request 2015			
01 Overall efficiency η_{es}	%	67.1	43.1	09 Power input P_e	kW	0.16
02 Measurement category	A			09 Air flow q_v	m ³ /h	1205
03 Efficiency category	Static			09 Pressure increase p_{fs}	Pa	287
04 Efficiency grade N	86		62	10 Speed (rpm) n	min ⁻¹	1830
05 Variable speed drive	Yes			11 Specific ratio*		1.00

Data definition with optimum efficiency.
The ErP data is determined using a motor-impeller combination in a standardised measurement configuration.

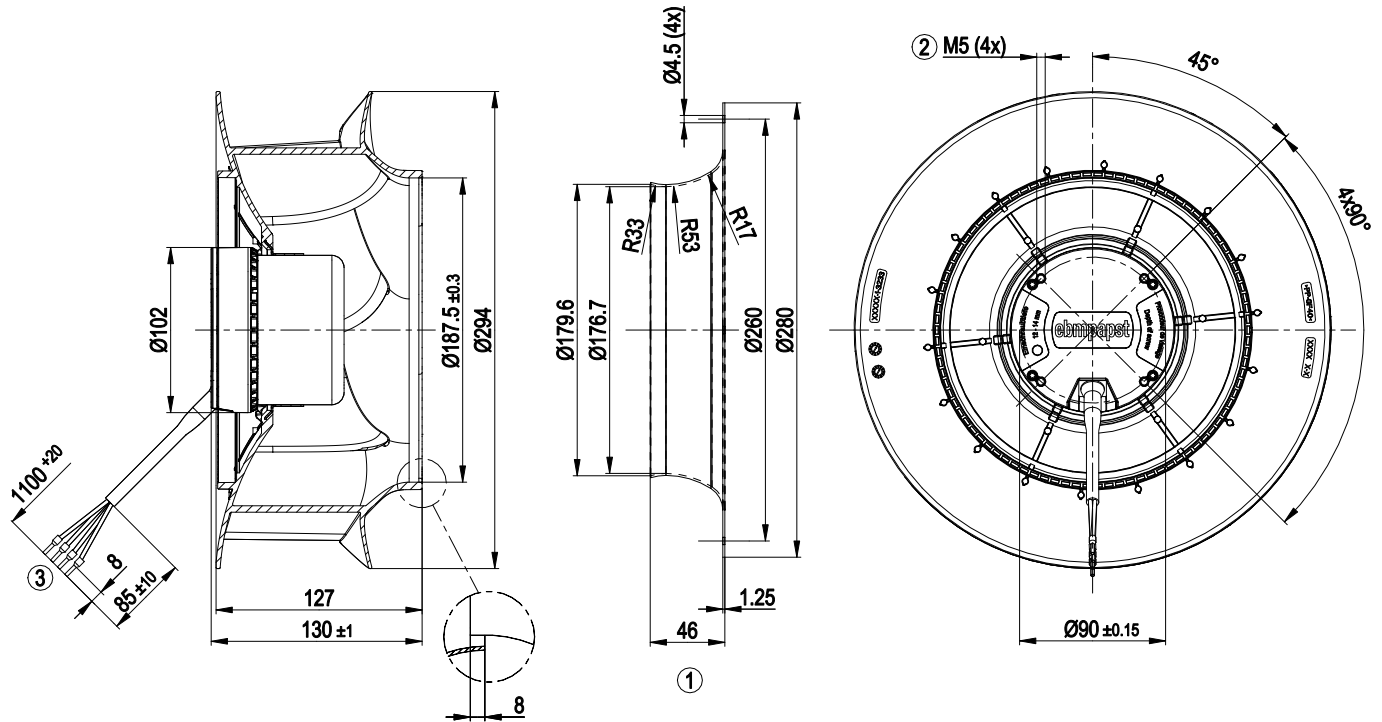
* Specific ratio = $1 + p_g / 100\,000\text{ Pa}$ LU-155541



Technical features

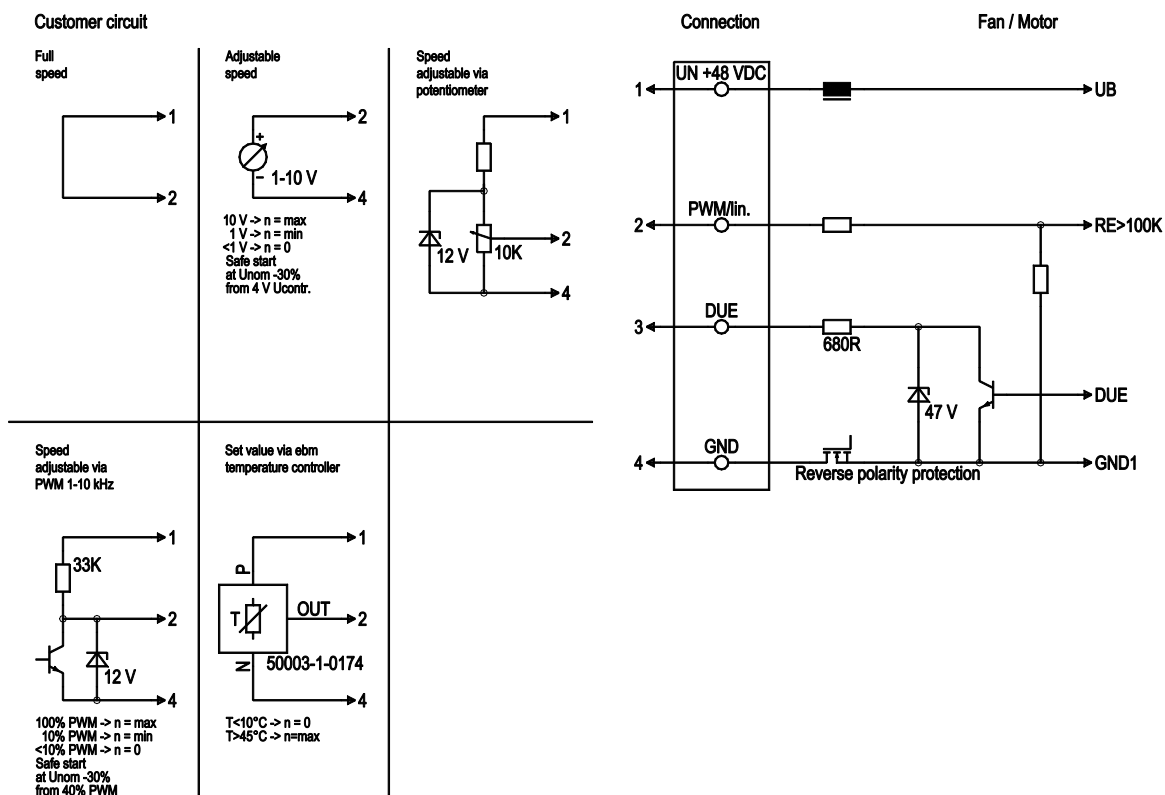
Mass	2.4 kg
Size	280 mm
Surface of rotor	Coated in black
Material of impeller	PP plastic
Number of blades	6
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 44; Depending on installation and position
Insulation class	"B"
Humidity (F)/environmental protection class (H)	F5
Max. permissible 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 - Overvoltage detection
EMC interference immunity	Acc. to EN 61000-6-2 (industrial environment)
EMC interference emission	Acc. to EN 55022 (Class B, household environment)
Motor protection	Reverse polarity and locked-rotor protection
Cable exit	Variable
Product conforming to standard	EN 60950-1
Approval	CCC

Product drawing



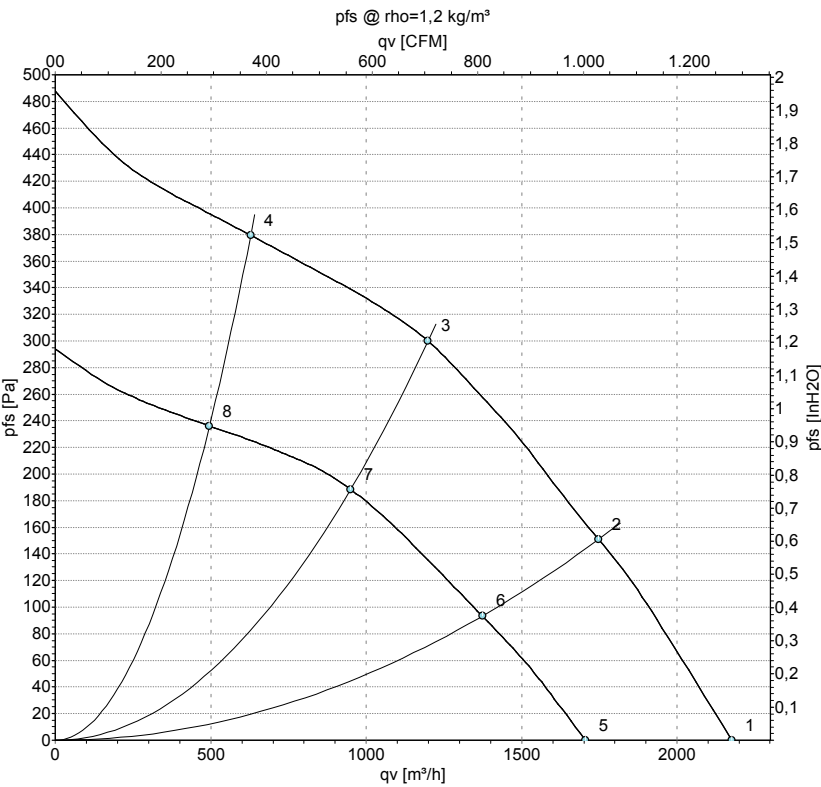
- | | |
|---|---|
| 1 | Accessory part: Inlet nozzle 28000-2-4013 not included in scope of delivery |
| 2 | Depth of screw max. 14 mm |
| 3 | Connection line PVC AWG16, 4x crimped core-end sleeves |

Connection screen



No.	Conn.	Designation	Colour	Function / assignment
	1	Un +48 VDC	red	Power supply 48 VDC, residual ripple 3.5 %
	2	0-10 VDC	yellow	Control input Re>100 K
	3	Tach	white	Speed monitoring output, 3 pulses per revolution, Isink max = 10 mA
	4	GND	blue	Reference mass

Charts: Air flow



Measurement: LU-155541-1
Measurement: LU-155543-1

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	LwA _{in}	q _V	p _{fs}	q _V	p _{fs}
	V	min ⁻¹	W	A	dB(A)	m³/h	Pa	cfm	inH2O
1	48-57	1910	140		74	2175	0	1280	0.00
2	48-57	1845	158		67	1745	150	1030	0.60
3	48-57	1830	163		64	1200	300	705	1.20
4	48-57	1900	141		68	630	380	370	1.53
5	36	1505	69	1.92		1705	0	1005	0.00
6	36	1475	79	2.19		1375	93	810	0.37
7	36	1460	82	2.30		950	189	560	0.76
8	36	1505	70	1.94		495	236	290	0.95

U = Supply voltage · n = Speed (rpm) · P_{ed} = Power input · I = Current draw · LwA_{in} = Sound power level inlet side · q_V = Air flow · p_{fs} = Pressure increase

