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**Nominal data**

Type	R3G280-AF42-62	
Motor	M3G084-DF	
Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50/60
Type of data definition		ml
Speed	min <sup>-1</sup>	2550
Power input	W	415
Current draw	A	1.8
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	45

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 2013	Request 2015
Installation category	A			
Efficiency category	Static			
Variable speed drive integrated	Integrated			
Specific ratio*	1,00			
Overall efficiency $\eta_{es}$		48,2	43,9	47,9
Efficiency grade N		62,3	58	62
Power input $P_{ed}$	kW	0,45		
Air flow $q_v$	m <sup>3</sup> /h	1510		
Pressure increase $p_{fs}$	Pa	472		
Speed n	min <sup>-1</sup>	2610		

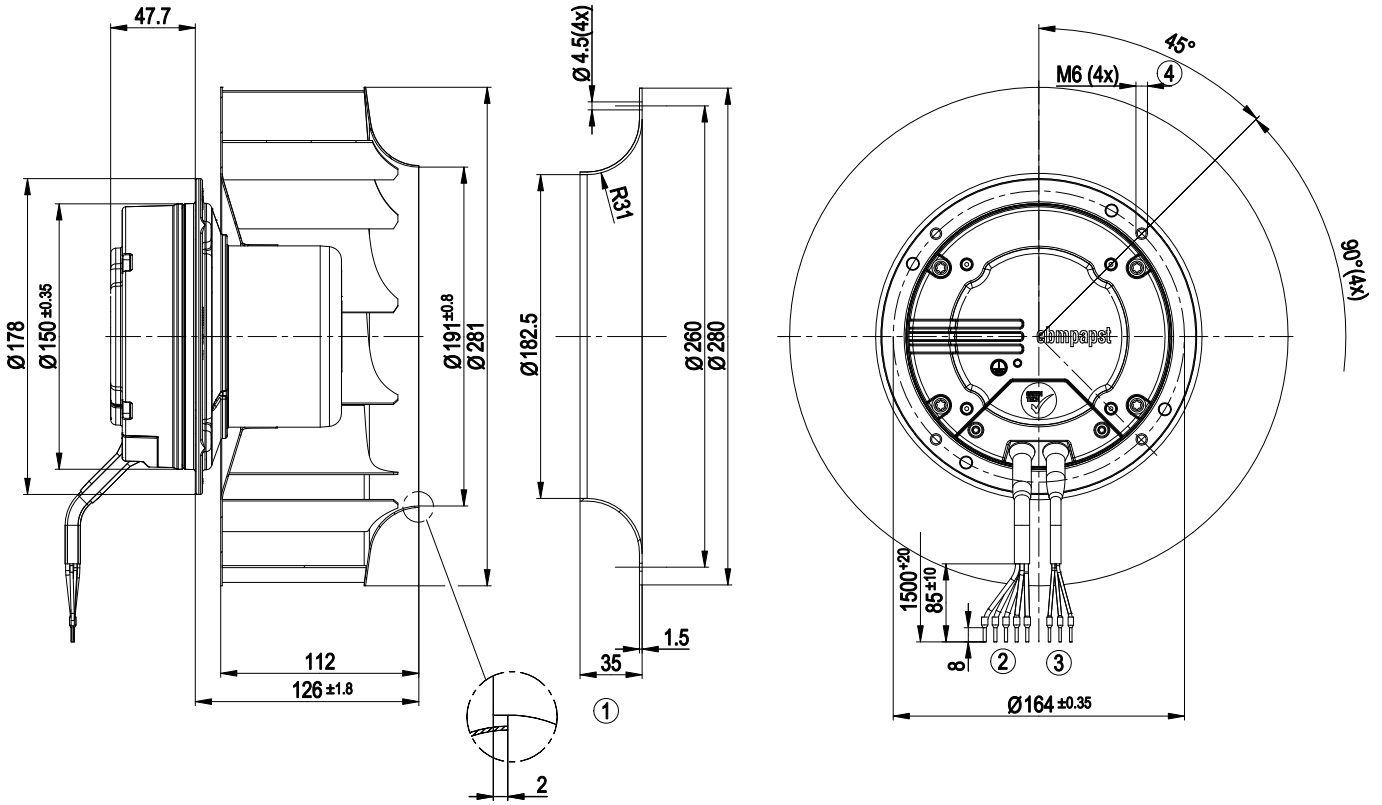
Data established at point of optimum efficiency

\* Specific ratio =  $1 + p_{fs} / 100\,000\text{ Pa}$ 

## Technical features

<b>Mass</b>	5.1 kg
<b>Size</b>	280 mm
<b>Surface of rotor</b>	Coated in black
<b>Material of electronics housing</b>	Die-cast aluminium
<b>Material of impeller</b>	Sheet steel, galvanised
<b>Number of blades</b>	11
<b>Direction of rotation</b>	Clockwise, seen on rotor
<b>Type of protection</b>	IP 54
<b>Insulation class</b>	"B"
<b>Max. permissible ambient motor temp. (transp./ storage)</b>	+80 °C
<b>Min. permissible ambient motor temp. (transp./storage)</b>	-40 °C
<b>Mounting position</b>	Shaft horizontal or rotor on top; rotor on bottom on request
<b>Condensate discharge holes</b>	None
<b>Operation mode</b>	S1
<b>Motor bearing</b>	Ball bearing
<b>Technical features</b>	<ul style="list-style-type: none"> <li>- Output 10 VDC, max. 10 mA</li> <li>- Alarm relay</li> <li>- Motor current limit</li> <li>- PFC, active</li> <li>- Soft start</li> <li>- Control input 0-10 VDC / PWM</li> <li>- Control interface with SELV potential safely disconnected from the mains</li> <li>- Over-temperature protected electronics / motor</li> <li>- Line undervoltage / phase failure detection</li> </ul>
<b>EMC interference immunity</b>	Acc. to EN 61000-6-2 (industrial environment)
<b>EMC interference emission</b>	Acc. to EN 61000-6-4 (industrial environment)
<b>EMC harmonics</b>	Acc. to EN 61000-3-2/3
<b>Leakage current</b>	<= 3.5 mA
<b>Motor protection</b>	Thermal overload protector (TOP) wired internally
<b>Cable exit</b>	Variable
<b>Protection class</b>	I (if protective earth is connected by customer)
<b>Product conforming to standard</b>	EN 61800-5-1

Product drawing



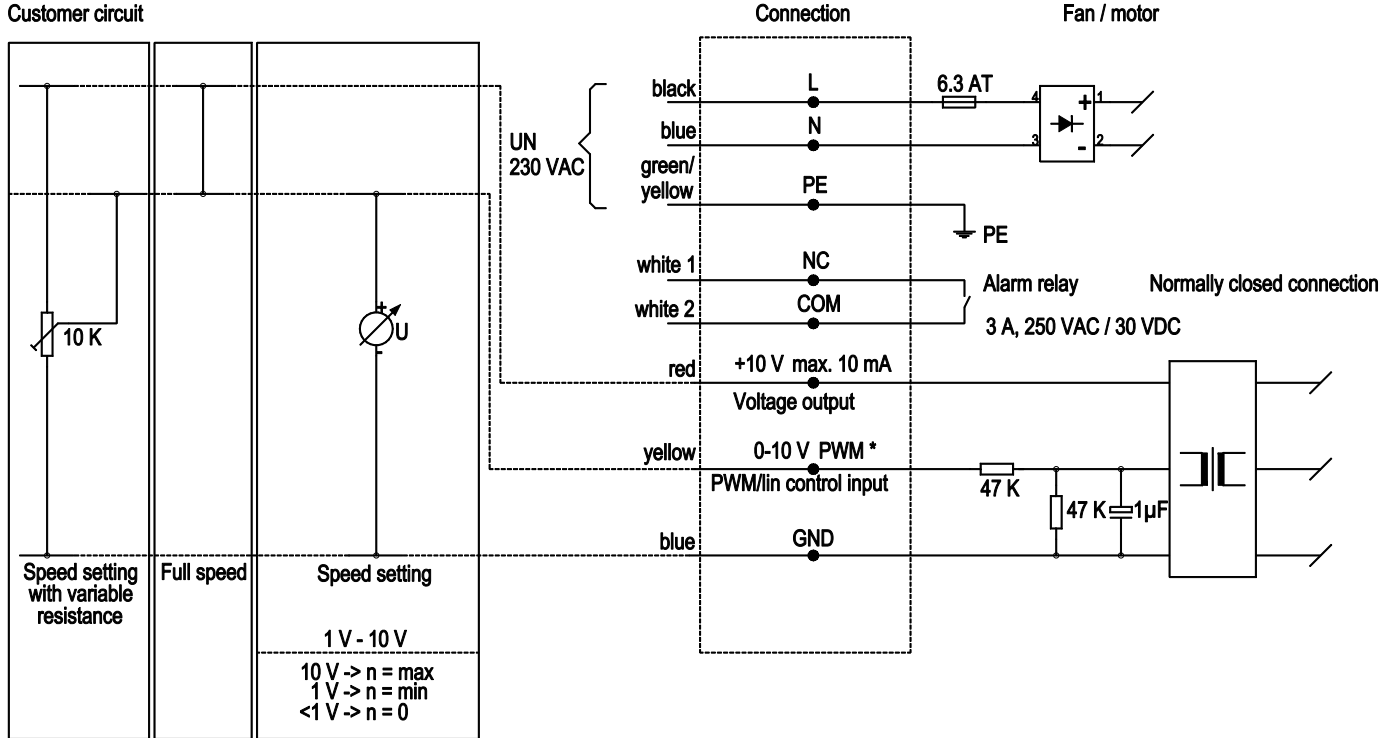
1	Accessory part: Inlet nozzle 96360-2-4013, not included in the standard scope of delivery
2	Connection line PVC AWG18, 5x crimped core-end sleeves
3	Connection line PVC AWG22, 3x crimped core-end sleeves
4	Depth of screw 8-10 mm

# EC centrifugal fan

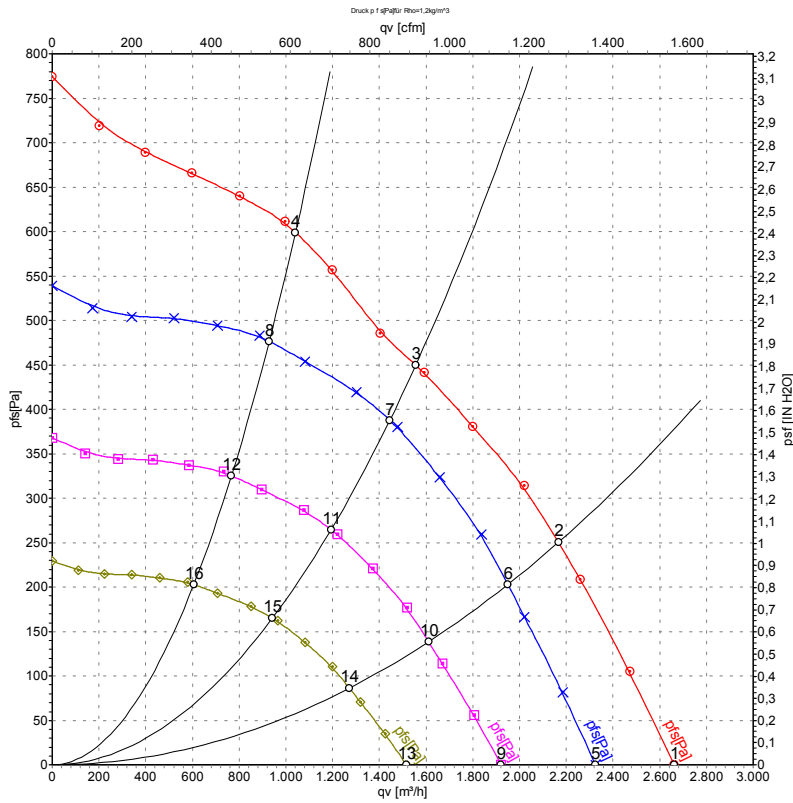
backward curved, single inlet

## Connection screen

Notes on various control possibilities and their applications  
Customer circuit



## Charts: Air flow 50 Hz



Measurement: LU-111192

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: L<sub>wA</sub> measured as per ISO 13347 / L<sub>pA</sub> 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	f	n	P <sub>ed</sub>	I	q <sub>v</sub>	P <sub>fs</sub>
	V	Hz	min <sup>-1</sup>	W	A	m <sup>3</sup> /h	Pa
1	230	50	2635	342	1.49	2665	0
2	230	50	2555	404	1.78	2165	250
3	230	50	2550	415	1.80	1555	450
4	230	50	2580	395	1.74	1040	600
5	230	50	2300	227	0.99	2325	0
6	230	50	2300	294	1.30	1950	203
7	230	50	2300	332	1.46	1445	388
8	230	50	2300	280	1.23	930	477
9	230	50	1900	128	0.56	1920	0
10	230	50	1900	166	0.73	1610	138
11	230	50	1900	187	0.82	1195	265
12	230	50	1900	158	0.70	765	326
13	230	50	1500	63	0.28	1515	0
14	230	50	1500	82	0.36	1270	86
15	230	50	1500	92	0.40	940	165
16	230	50	1500	78	0.34	605	203

