

K3G310-AJ23-81

# EC centrifugal module

backward curved, single inlet

with support plate

K3G310-AJ23-81 ebmpapst Datasheet

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County court Stuttgart · HRA 590344

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County court Stuttgart · HRB 590142

## Nominal data

Type	K3G310-AJ23-81	
Motor	M3G084-DF	
Phase		1~
Nominal voltage	VAC	115
Nominal voltage range	VAC	100 .. 130
Frequency	Hz	50/60
Type of data definition		ml
Speed	min <sup>-1</sup>	2170
Power input	W	360
Current draw	A	4.1
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	55

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



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## Technical features

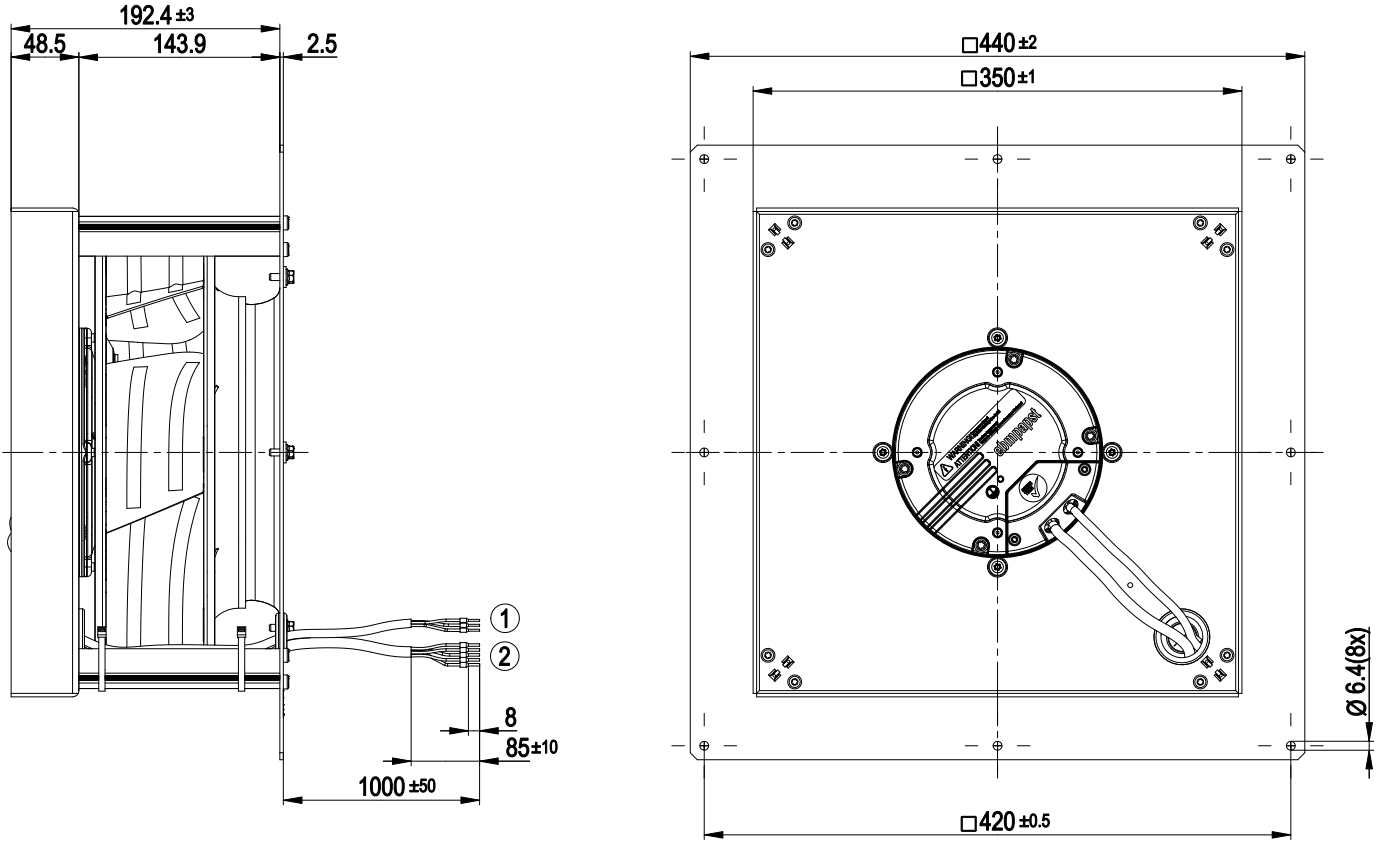
<b>Mass</b>	7.5 kg
<b>Size</b>	310 mm
<b>Surface of rotor</b>	Coated in black
<b>Material of electronics housing</b>	Die-cast aluminium
<b>Material of impeller</b>	Aluminium sheet
<b>Material of mounting plate</b>	Aluminium sheet
<b>Material of distancing profiles</b>	Aluminium
<b>Number of blades</b>	6
<b>Direction of rotation</b>	Clockwise, seen on rotor
<b>Type of protection</b>	IP 54
<b>Insulation class</b>	"B"
<b>Humidity class</b>	F3-1
<b>Mounting position</b>	Shaft horizontal or rotor on top; rotor on bottom on request
<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. 1.1 mA</li> <li>- Alarm relay</li> <li>- Motor current limit</li> <li>- Soft start</li> <li>- Control input 0-10 VDC / PWM</li> <li>- Line undervoltage detection</li> </ul>
<b>EMC interference immunity</b>	Acc. to EN 61000-6-2 (industrial environment)
<b>EMC harmonics</b>	Acc. to EN 61000-3-2/3
<b>EMC interference emission</b>	Acc. to EN 61000-6-4 (industrial environment)
<b>Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)</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
<b>Approval</b>	CCC; UL 2111; CSA C22.2 Nr.77



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## Product drawing



- 1 Connection line PVC, AWG22, 3x crimped core-end sleeves
- 2 Connection line PVC, AWG18, 5x crimped core-end sleeves



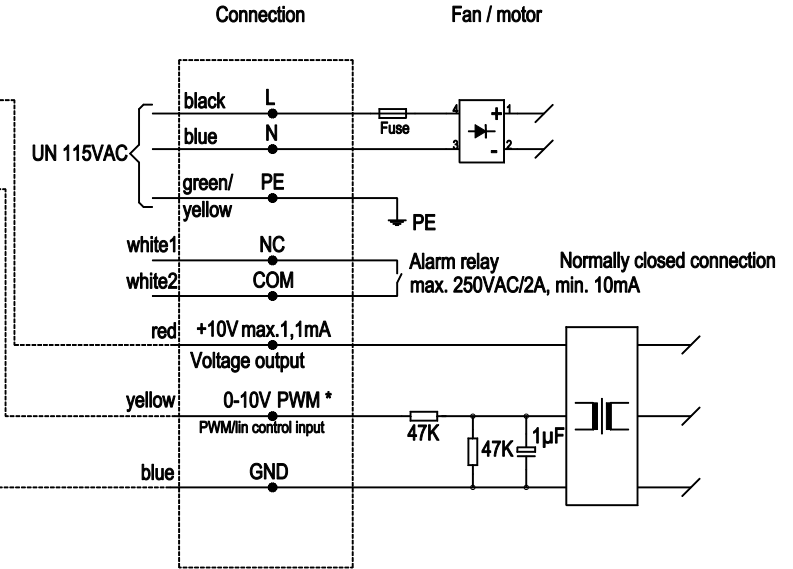
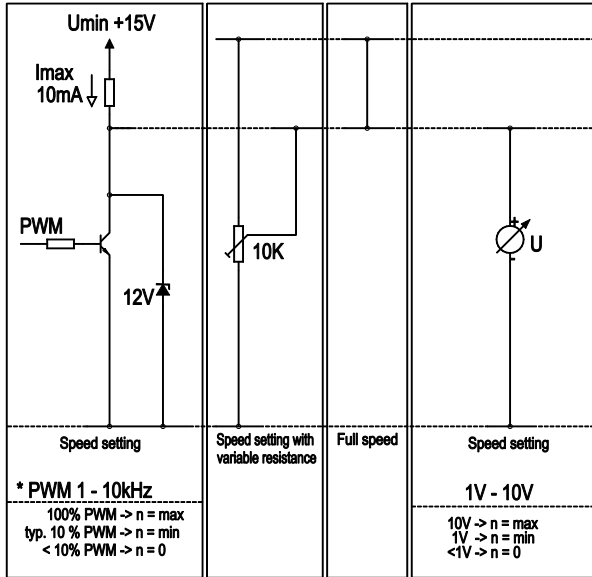
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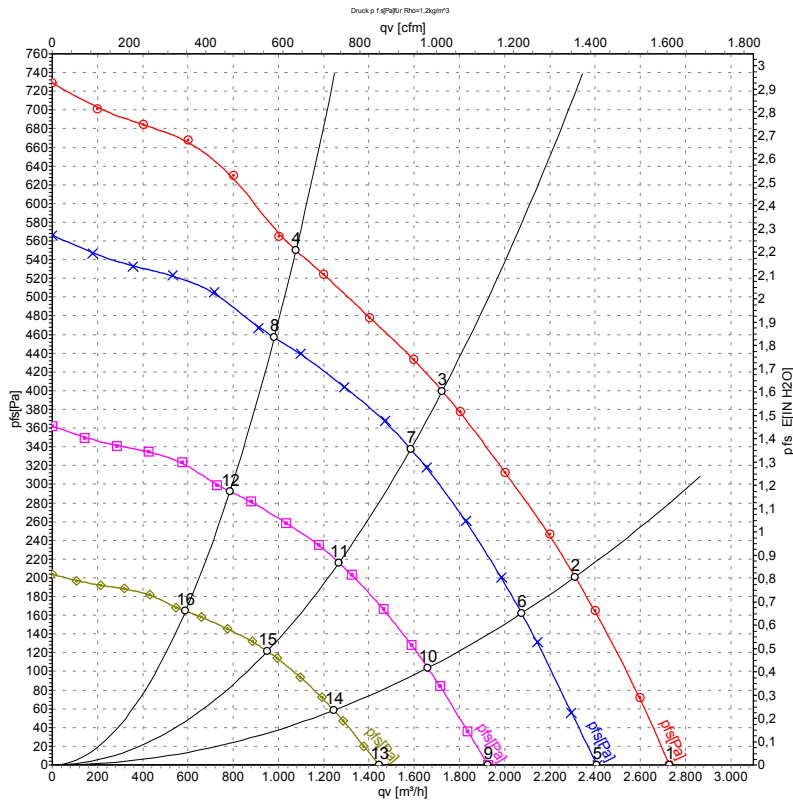
## Connection screen

### Customer circuit

Notes on various control possibilities and their applications



## Charts: Air flow 50 Hz



Measurement: LU-137416

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	f	n	P <sub>ed</sub>	I	qv	P <sub>fs</sub>
	V	Hz	min <sup>-1</sup>	W	A	m <sup>3</sup> /h	Pa
1	115	50	2265	273	3.22	2730	0
2	115	50	2230	331	3.84	2310	200
3	115	50	2170	360	4.10	1725	400
4	115	50	2195	350	4.05	1075	550
5	115	50	2000	187	2.21	2410	0
6	115	50	2000	239	2.78	2075	162
7	115	50	2000	280	3.24	1585	338
8	115	50	2000	265	3.07	980	457
9	115	50	1600	96	1.13	1925	0
10	115	50	1600	122	1.42	1660	104
11	115	50	1600	143	1.66	1270	216
12	115	50	1600	136	1.57	785	292
13	115	50	1200	40	0.48	1445	0
14	115	50	1200	52	0.60	1245	58
15	115	50	1200	60	0.70	950	122
16	115	50	1200	57	0.66	590	164

U = Supply voltage · f = Frequency · n = Speed · P<sub>ed</sub> = Power input · I = Current draw · qv = Air flow · p<sub>fs</sub> = Pressure increase

