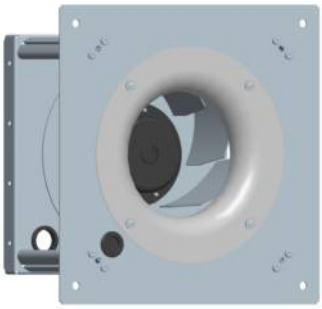
K3G250-AP06-71

EC centrifugal module - AHU

backward curved, single inlet

with support plate



K3G250-AP06-71 ebmpapst Datasheet
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ErP2015 EXCEEDS THE NORM

Nominal data

Type	**K3G250-AP06-71**
Motor	**M3G084-DF**

Phase		1~
Nominal voltage	VAC	230
Nominal voltage range	VAC	200 .. 277
Frequency	Hz	50/60
Type of data definition		ml
Valid for approval / standard		-
Speed	min^{-1}	3350
Power input	W	495
Current draw	A	3.1
Max. ambient temperature	°C	40

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

Installation category	A
Efficiency category	Static
Variable speed drive	Yes
Specific ratio*	1.01

* Specific ratio = 1 + p_{fs} / 100 000 Pa

		Actual	Request 2013	Request 2015
Overall efficiency η_{es}		57.6	44.3	48.3
Efficiency grade N		71.3	58	62
Power input P_{ed}	kW	0.5		
Air flow q_v	m^3/h	1350		
Pressure increase p_{fs}	Pa	702		
Speed n	min^{-1}	3310		

Data established at point of optimum efficiency

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Technical features

Mass	9 kg
Size	250 mm
Surface of rotor	Coated in black
Material of electronics housing	Die-cast aluminum
Material of impeller	Aluminium sheet
Material of mounting plate	Sheet steel, galvanised
Material of distancing profiles	Aluminium
Number of blades	6
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 54
Insulation class	"B"
Humidity class	F3-1
Max. permissible ambient motor temp. (transp./ storage)	+80 °C
Min. permissible ambient motor temp. (transp./storage)	-40 °C
Mounting position	Shaft horizontal or rotor on top; rotor on bottom on request
Condensate discharge holes	None
Operation mode	S1
Motor bearing	Ball bearing
Technical features	- Output 10 VDC, max. 1.1 mA - Alarm relay - Motor current limit - Soft start - Control input 0-10 VDC / PWM - Control interface with SELV potential safely disconnected from the mains - Over-temperature protected electronics / motor - Line undervoltage detection
EMC interference immunity	Acc. to EN 61000-6-2 (industrial environment)
EMC harmonics	Acc. to EN 61000-3-2/3
EMC interference emission	Acc. to EN 61000-6-3 (household environment)
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	<= 3.5 mA
Motor protection	Thermal overload protector (TOP) wired internally
Cable exit	Variable
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 61800-5-1; CE
Approval	UL 2111; CSA C22.2 Nr.77

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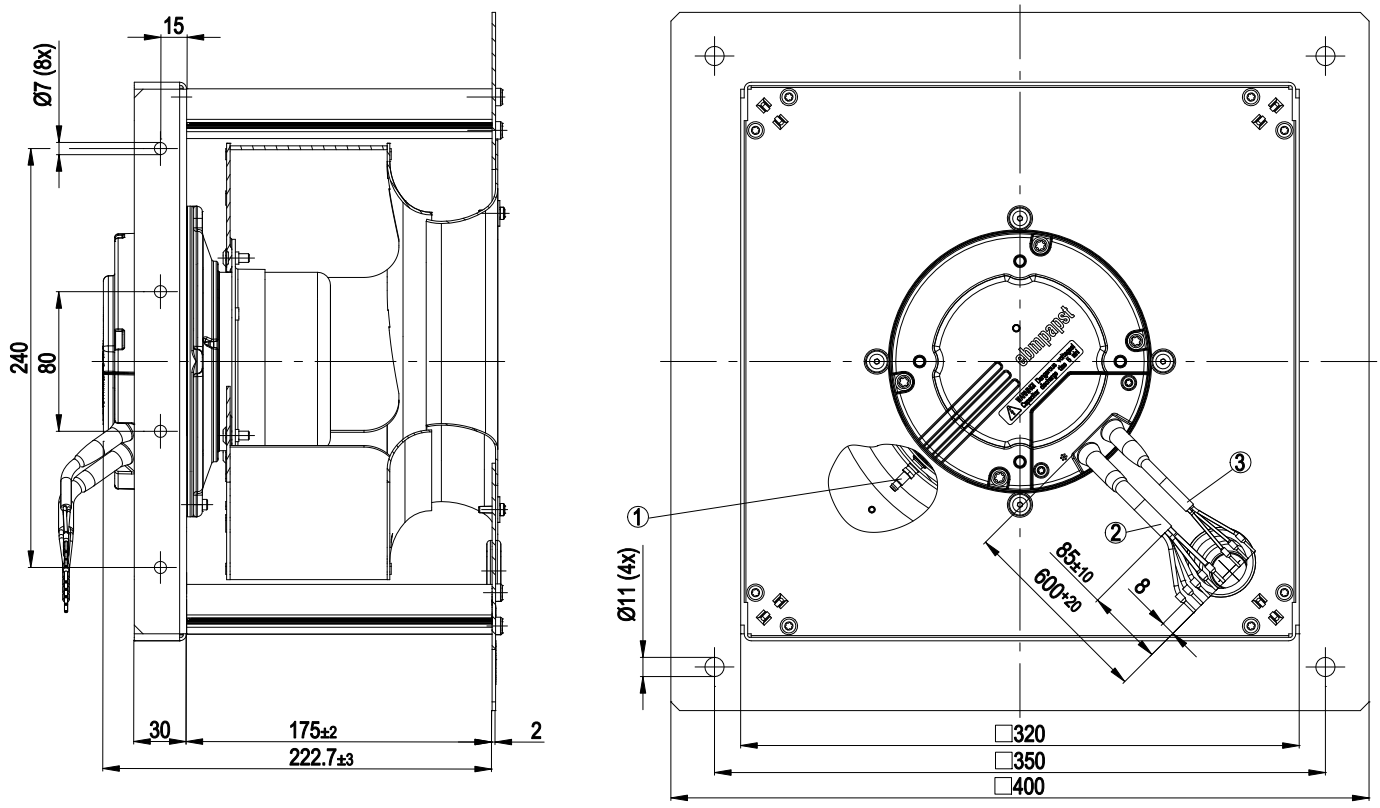
Product drawing



1	Bleeder connection for pressure relief (k-factor 69)
2	Connection line PVC AWG18, 5x crimped core-end sleeves
3	Connection line PVC AWG22, 3x crimped core-end sleeves

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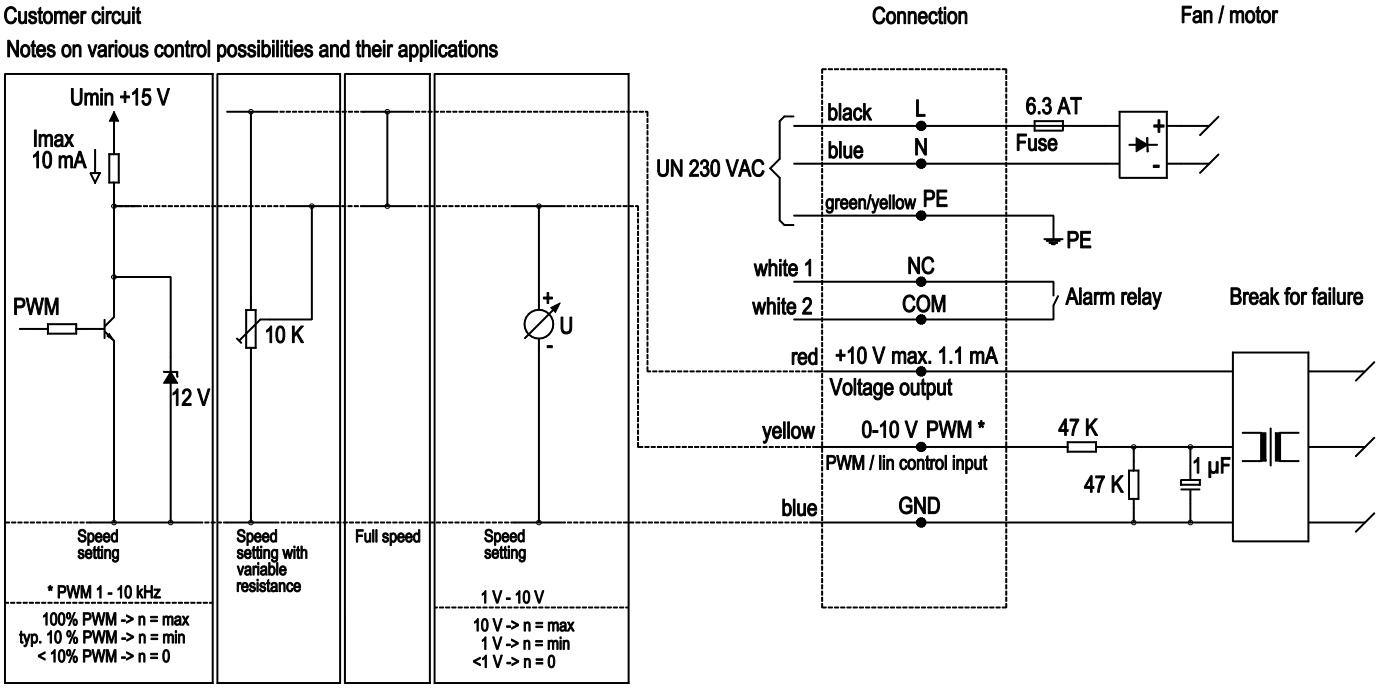
Connection screen



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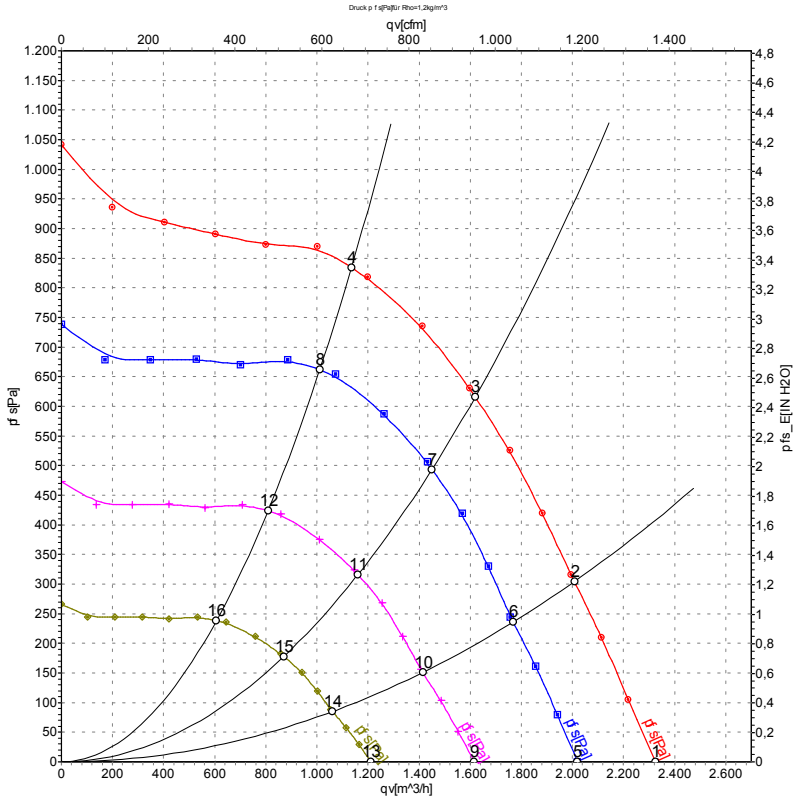
Charts: Air flow 50 Hz



Measurement: LU-72958

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_{ed}	I	qv	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa
1	230	50	3450	378	2.40	2325	0
2	230	50	3410	455	2.88	2010	304
3	230	50	3350	495	3.10	1750	617
4	230	50	3365	477	3.01	1135	835
5	230	50	3000	248	1.58	2020	0
6	230	50	3000	310	1.96	1770	235
7	230	50	3000	355	2.24	1450	495
8	230	50	3000	338	2.13	1010	662
9	230	50	2400	127	0.81	1615	0
10	230	50	2400	159	1.01	1415	150
11	230	50	2400	182	1.15	1160	317
12	230	50	2400	173	1.09	810	424
13	230	50	1800	54	0.34	1210	0
14	230	50	1800	67	0.42	1060	85
15	230	50	1800	77	0.49	870	178
16	230	50	1800	73	0.46	605	238

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