K3G250-AP07-73

EC centrifugal module - AHU

backward curved, single inlet

with support plate

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ErP2015 EXCEEDS THE NORM

Nominal data

Type	**K3G250-AP07-73**
Motor	**M3G084-DF**

Phase		1~
Nominal voltage	VAC	230
Nominal voltage range	VAC	200 .. 277
Frequency	Hz	50/60
Type of data definition		ml
Speed	min^{-1}	3100
Power input	W	410
Current draw	A	2.6
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	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

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}		58.1	43.3	47.3
Efficiency grade N		72.8	58	62
Power input P_{ed}	kW	0.4		
Air flow q_v	m^3/h	1280		
Pressure increase p_{fs}	Pa	601		
Speed n	min^{-1}	3085		

Data established at point of optimum efficiency

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Technical features

Mass	8.2 kg
Size	250 mm
Surface of rotor	Coated in black
Material of electronics housing	Die-cast aluminium
Material of impeller	Aluminium sheet
Material of mounting plate	Sheet steel, hot-galvanised
Material of distancing profiles	Aluminium
Material of inlet nozzle	Sheet steel, hot-galvanised
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	Rotor-side
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 - Over-temperature protected electronics / motor - Line undervoltage detection
EMC interference immunity	Acc. to EN 61000-6-2
EMC harmonics	Acc. to EN 61000-3-2/3
EMC interference emission	Acc. to EN 61000-6-3
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; EN 60335-1; CE
Approval	UL 2111; CSA C22.2 Nr.77

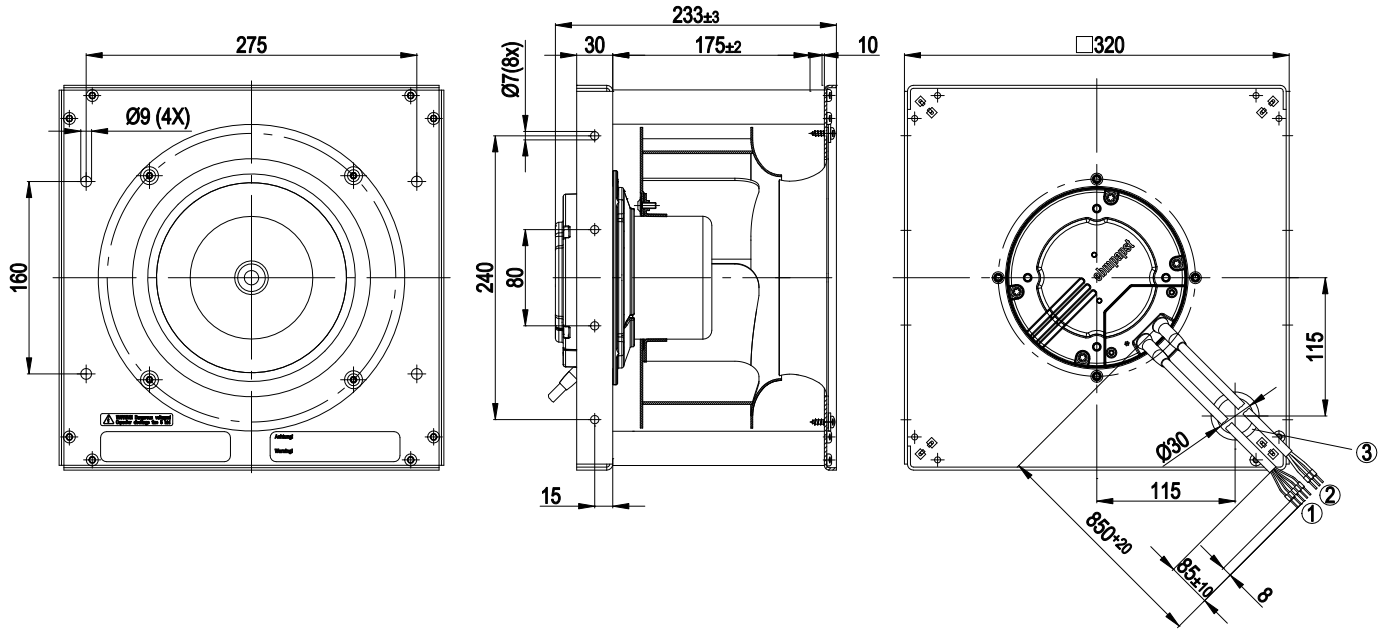
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Product drawing



1	Connection line AWG18, 5 x crimped core-end sleeves
2	Connection line AWG22, 3 x crimped core-end sleeves
3	Wire protecting sleeve

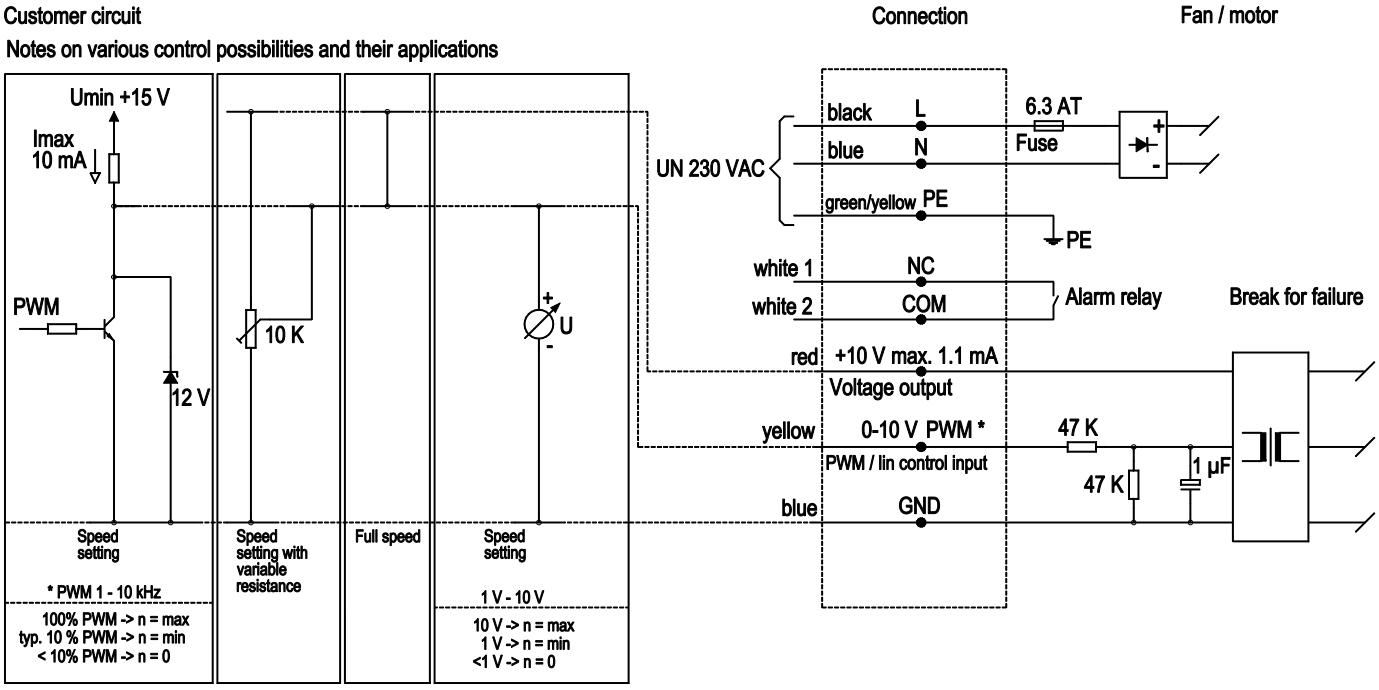
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Connection screen



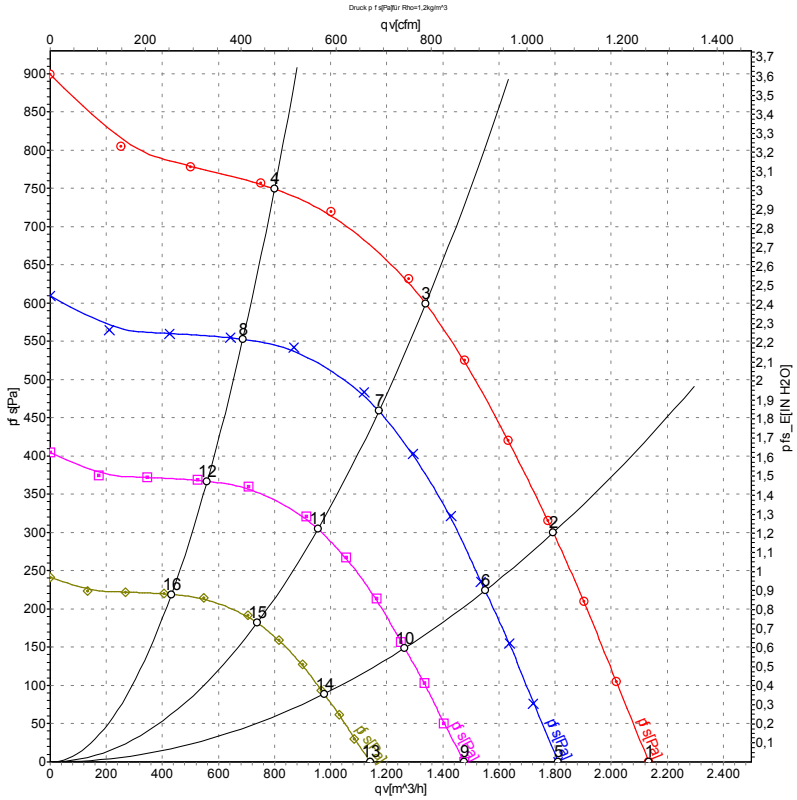
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Charts: Air flow 50 Hz



Measurement: LU-72921

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	3180	318	2.01	2135	0
2	230	50	3125	372	2.35	1795	300
3	230	50	3100	410	2.60	1340	600
4	230	50	3145	362	2.29	800	750
5	230	50	2700	194	1.23	1810	0
6	230	50	2700	240	1.52	1550	224
7	230	50	2700	274	1.73	1170	460
8	230	50	2700	229	1.45	685	553
9	230	50	2200	105	0.67	1475	0
10	230	50	2200	130	0.82	1265	149
11	230	50	2200	148	0.94	955	306
12	230	50	2200	124	0.78	560	367
13	230	50	1700	49	0.31	1140	0
14	230	50	1700	60	0.38	975	89
15	230	50	1700	68	0.43	740	182
16	230	50	1700	57	0.36	430	219

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

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