K3G250-AP26-92

EC centrifugal module - AHU

backward curved, single inlet

with support bracket

K3G250-AP26-92 ebmpapst Datasheet
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ErP2015 EXCEEDS THE NORM

Nominal data

Type	**K3G250-AP26-92**	
Motor	**M3G084-DF**	
Nominal voltage	VDC	110
Nominal voltage range	VDC	77 .. 145
Type of data definition		ml
Speed	min^{-1}	3185
Power input	W	445
Current draw	A	4
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	60
Starting current	A	3.7

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}	%	58.4	43.7	47.7
Efficiency grade N		72.7	58	62
Power input P_e	kW	0.43		
Air flow q_v	m^3/h	1205		
Pressure increase p_{fs}	Pa	688		
Speed n	min^{-1}	3190		

Data definition with optimum efficiency. LU-133689
The ErP data is determined using a motor-impeller combination in a standardised measurement configuration.

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Technical features

Mass	7.4 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 support bracket	Steel, coated in black plastic (RAL 9005)
Material of inlet nozzle	Sheet steel, hot-galvanised
Number of blades	6
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 20
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 bottom; rotor on top on request
Condensate discharge holes	None
Cooling bore / aperture	Rotor-side
Operation mode	S1
Motor bearing	Ball bearing
Technical features	- Output 10 VDC, max. 1.1 mA - Tach output - 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
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	EAC

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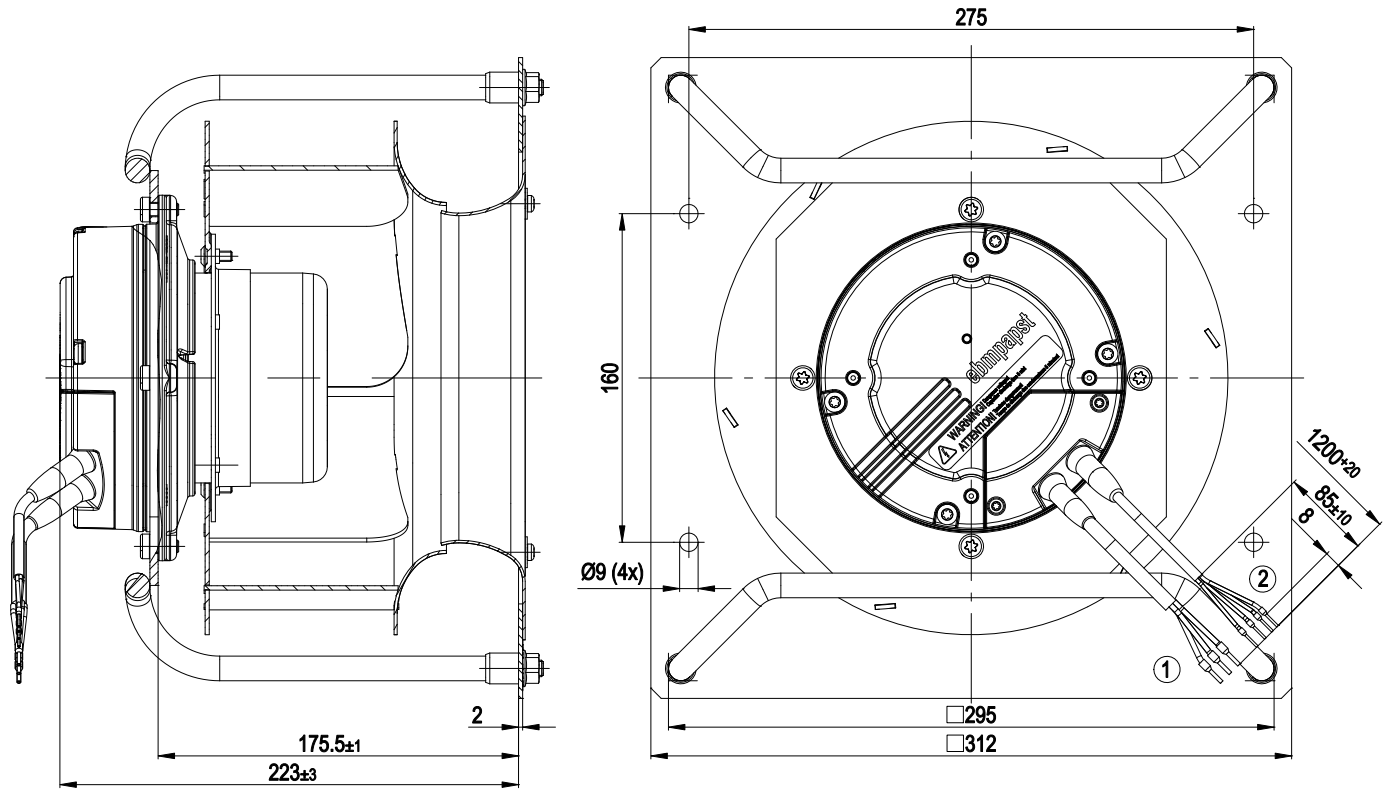
Product drawing



1	Connection line PVC AWG18, 3x crimped core-end sleeves
2	Connection line PVC AWG22, 4x crimped core-end sleeves

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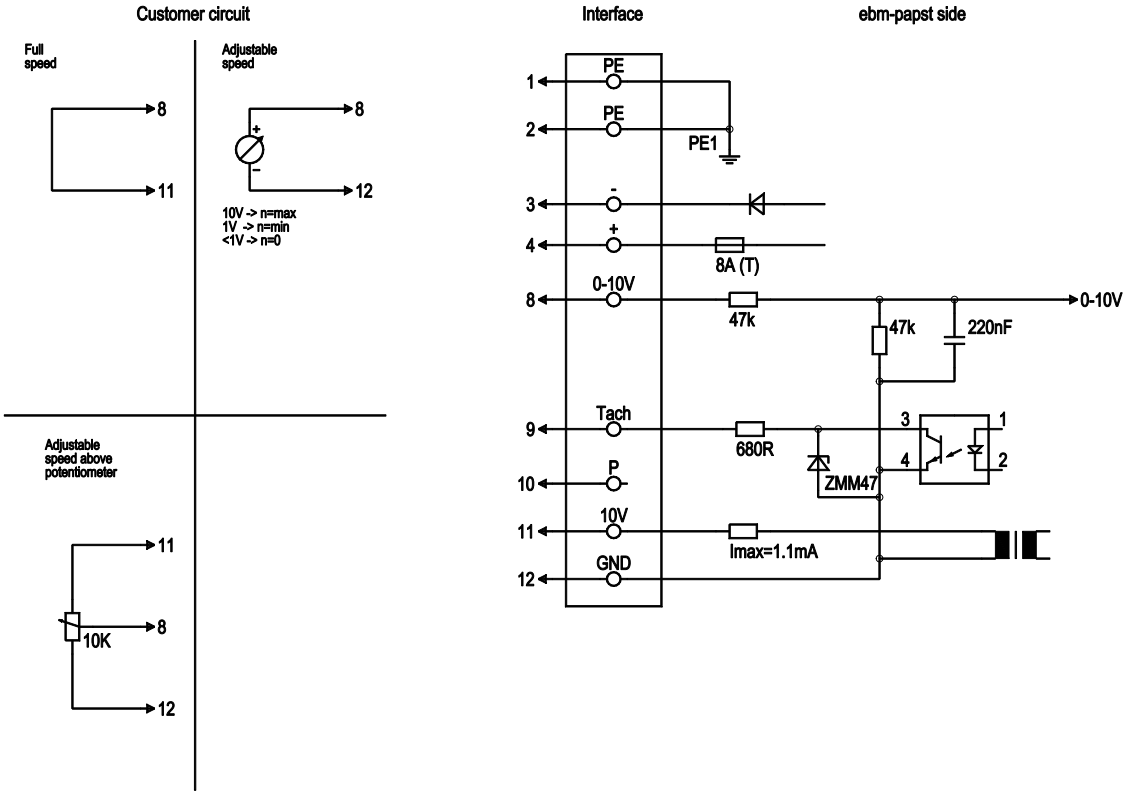
Connection screen



No.	Conn.	Designation	Colour	Function / assignment
1	1, 2	PE	green/yellow	Protective earth
1	3	-	blue	Supply voltage, GND (110 VDC), for voltage range refer to rating plate
1	4	+	black	Supply voltage, 110 VDC, for voltage range refer to rating plate
2	8	0-10V	yellow	Control input, set value 0-10 VDC, impedance 100 kOhm, SELV
2	9	Tach	white	Tach output: open collector, 1 pulse per revolution, electrically isolated
2	10	P	orange	Not assigned
2	11	10 VDC	red	Voltage output 10 VDC (+/3%), max. 1.1 mA, power supply for ext. devices (e.g. potentiometer), SELV
2	12	GND	blue	Signal ground for control interface, SELV

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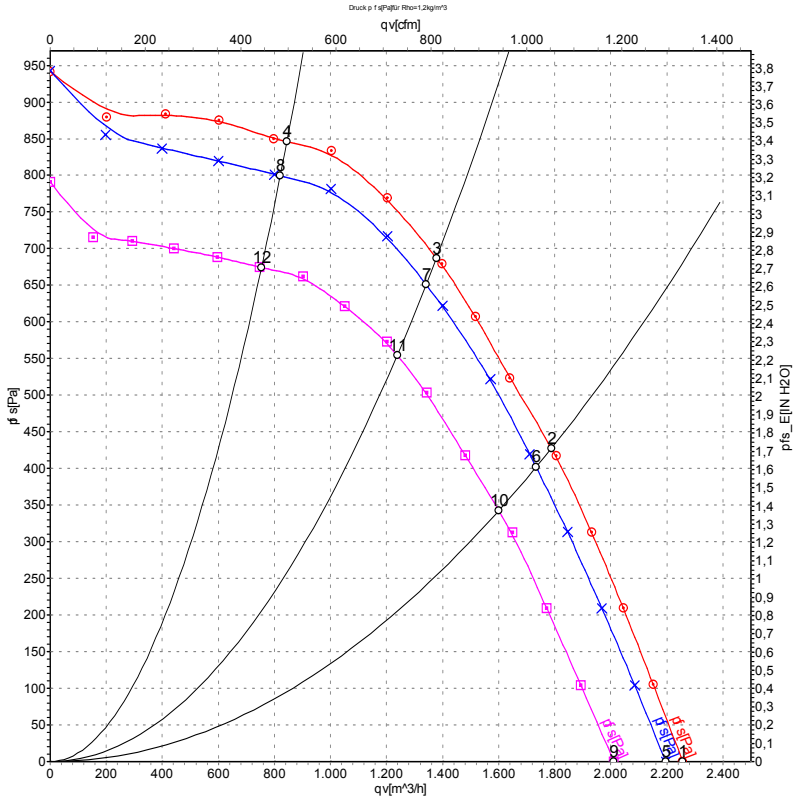
Charts: Air flow



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	qv	p_{fs}
	V	min^{-1}	W	A	m^3/h	Pa
1	130	3395	388	2.97	2255	0
2	130	3295	474	3.64	1790	429
3	130	3275	482	3.71	1380	689
4	130	3340	440	3.38	845	846
5	110	3295	357	3.23	2195	0
6	110	3205	430	3.90	1735	400
7	110	3185	444	4.03	1340	650
8	110	3235	402	3.65	820	800
9	100	3030	277	2.76	2010	0
10	100	2955	339	3.38	1600	343
11	100	2940	351	3.50	1240	555
12	100	2985	313	3.12	755	674

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