D3G283-BB32-25

EC centrifugal fan

forward curved, dual inlet

with housing (flange)

Limited partnership · Headquarters Mulfingen
County court Stuttgart · HRA 590344

General partner Elektrobau Mulfingen GmbH · Headquarters Mulfingen
County court Stuttgart · HRB 590142

Nominal data

Type	**D3G283-BB32-25**
Motor	**M3G112-GA**

Phase		1~
Nominal voltage	VAC	230
Nominal voltage range	VAC	200 .. 277
Frequency	Hz	50/60
Type of data definition		ml
Speed (rpm)	min^{-1}	940
Power input	W	750
Current draw	A	3.4
Min. back pressure	Pa	0
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

		Actual	Request 2015
01 Overall efficiency η_{es}	%	50.3	35
02 Measurement category		A	
03 Efficiency category		Static	
04 Efficiency grade N		59.3	44
05 Variable speed drive		Yes	

09 Power input P_{ed}	kW	0.38
09 Air flow q_v	m^3/h	2020
09 Pressure increase p_{fs}	Pa	313
10 Speed (rpm) n	min^{-1}	1140
11 Specific ratio*		1.00

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

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

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Technical features

Mass	18.7 kg
Size	283 mm
Surface of rotor	Coated in black
Material of electronics housing	Die-cast aluminium
Material of impeller	Sheet steel, galvanised
Housing material	Sheet steel, galvanised
Motor suspension	Motor anti-vibration mounted on one side via brackets
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 54
Insulation class	"B"
Humidity (F)/environmental protection class (H)	F4-1
Max. permissible ambient motor temp. (transp./ storage)	+80 °C
Min. permissible ambient motor temp. (transp./storage)	-40 °C
Mounting position	Shaft horizontal
Condensate discharge holes	None
Operation mode	S1
Motor bearing	Ball bearing
Technical features	-Output 10 VDC, max. 10 mA -Alarm relay -Motor current limit -PFC, active -Soft start -Control input 0-10 VDC -Control interface with SELV potential safely disconnected from the mains -Excess temperature protection for electronics/motor -Line undervoltage / phase failure 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 61000-6-4 (industrial 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	CE

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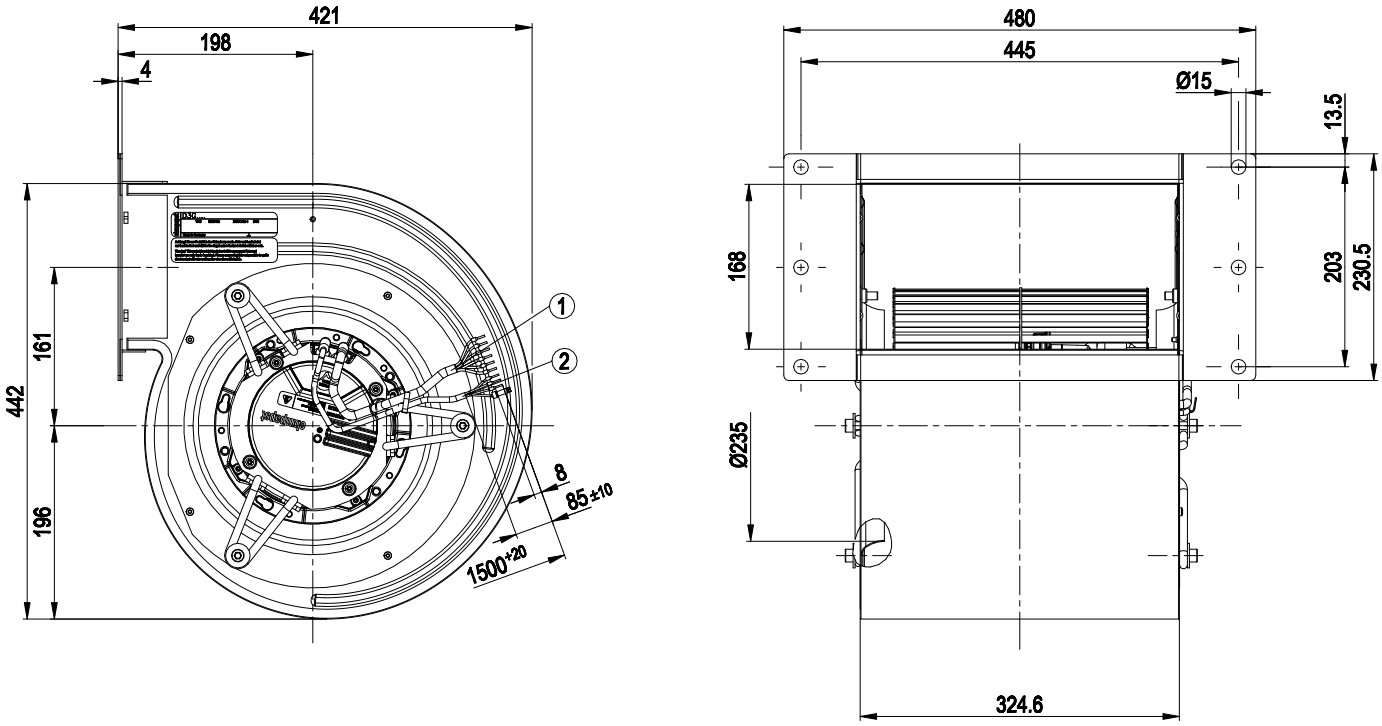
Product drawing



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

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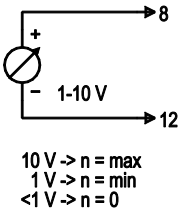
Connection screen

Customer circuit

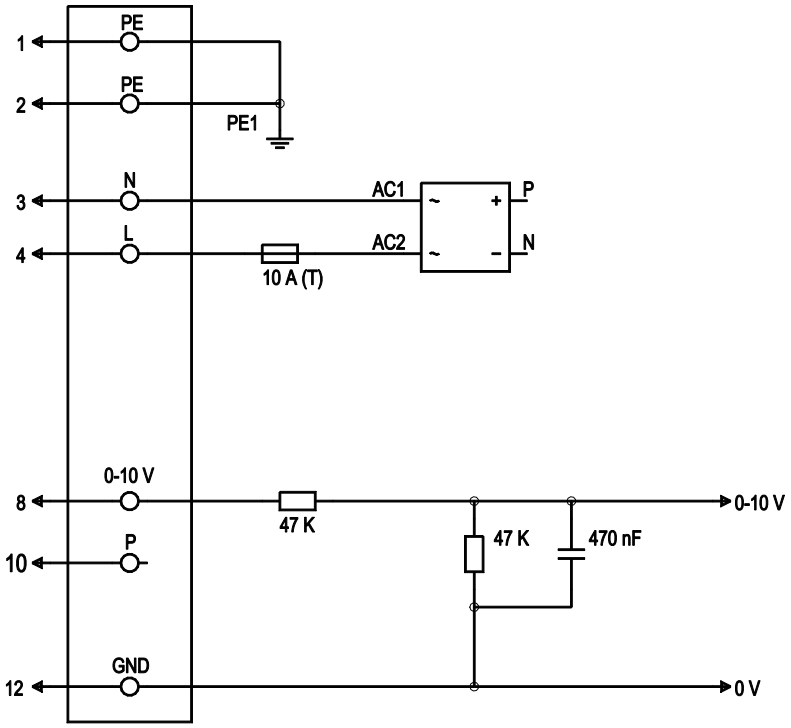
Adjustable speed



10 V -> n = max
1 V -> n = min
<1 V -> n = 0

Connection

Fan/Motor



No.	Conn.	Designation	Colour	Function / assignment
1	1,2	PE	green/yellow	Protective earth
1	3	N	blue	Supply voltage, neutral conductor, 50/60 Hz
1	4	L	black	Supply voltage, phase, 50/60 Hz
2	8	0-10 V	yellow	Control input, set value 0-10 VDC, impedance 100 kΩ, SELV
2	10	P	red	Internal
2	12	GND	blue	Signal ground for control interface, SELV

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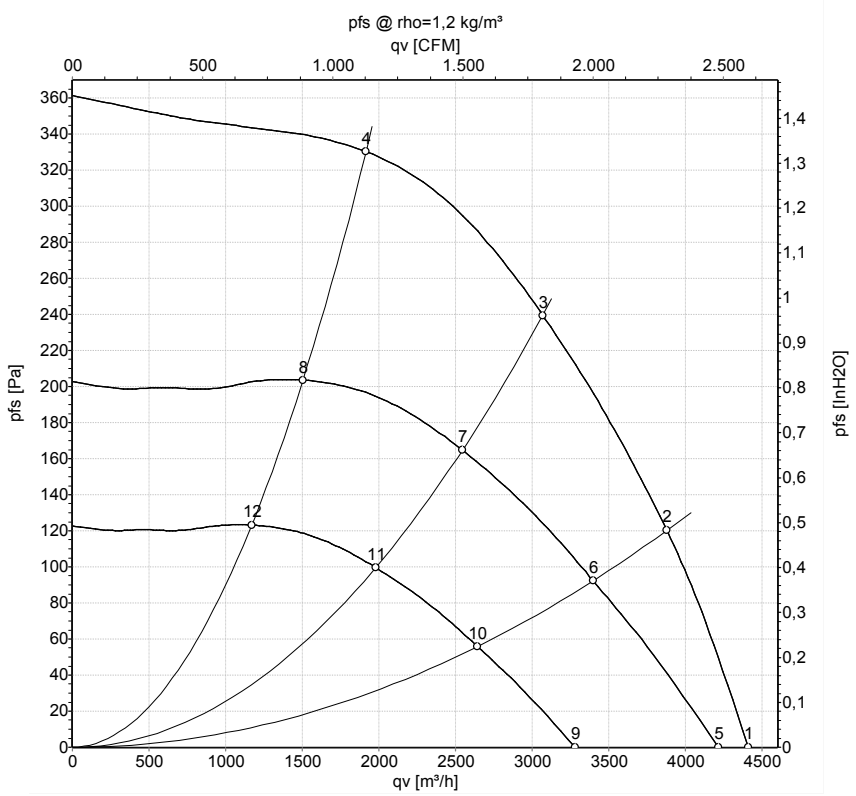
Charts: Air flow 50 Hz



Measurement: LU-161996-1

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	LpA_{in}	LwA_{in}	LwA_{out}	q_V	p_{fs}	q_V	p_{fs}
	V	Hz	min^{-1}	W	A	dB(A)	dB(A)	dB(A)	m^3/h	Pa	cfm	inH2O
1	230	50	940	750	3.40	66	83	84	4410	0	2595	0.00
2	230	50	1030	721	3.22	64	81	82	3880	120	2285	0.48
3	230	50	1085	570	2.58	61	77	78	3070	240	1805	0.96
4	230	50	1145	373	1.72	58	73	74	1915	330	1130	1.32
5	230	50	900	664	2.97	65	81	83	4215	0	2480	0.00
6	230	50	900	484	2.16	61	77	79	3395	92	2000	0.37
7	230	50	900	326	1.47	56	72	74	2545	165	1495	0.66
8	230	50	900	181	0.83	52	67	68	1505	204	885	0.82
9	230	50	700	313	1.40	59	75	76	3280	0	1930	0.00
10	230	50	700	228	1.02	55	71	73	2640	56	1555	0.22
11	230	50	700	153	0.69	50	66	67	1980	100	1165	0.40
12	230	50	700	85	0.39	46	60	62	1170	123	690	0.49

U = Supply voltage · f = Frequency · n = Speed (rpm) · P_{ed} = Power input · I = Current draw · LpA_{in} = Sound pressure level inlet side · LwA_{in} = Sound power level inlet side · LwA_{out} = Sound power level outlet side
q_V = Air flow · p_{fs} = Pressure increase