EC centrifugal fan

forward curved, single inlet

with housing (large 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	**G3G200-EL29-72**
Motor	**M3G084-FA**

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}	1800
Power input	W	500
Current draw	A	3.2
Min. back pressure	Pa	60
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	50

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}	%	49.3	34.1
02 Measurement category		A	
03 Efficiency category		Static	
04 Efficiency grade N		59.2	44
05 Variable speed drive		Yes	

09 Power input P_{ed}	kW	0.27
09 Air flow q_v	m^3/h	845
09 Pressure increase p_{fs}	Pa	504
10 Speed (rpm) n	min^{-1}	2010
11 Specific ratio*		1.01

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	9 kg
Size	200 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
Direction of rotation	Counter-clockwise, seen on rotor
Type of protection	IP 54
Insulation class	"B"
Humidity (F)/environmental protection class (H)	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
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	5C; C22.2 Nr.77 + CAN/CSA-E60730-1

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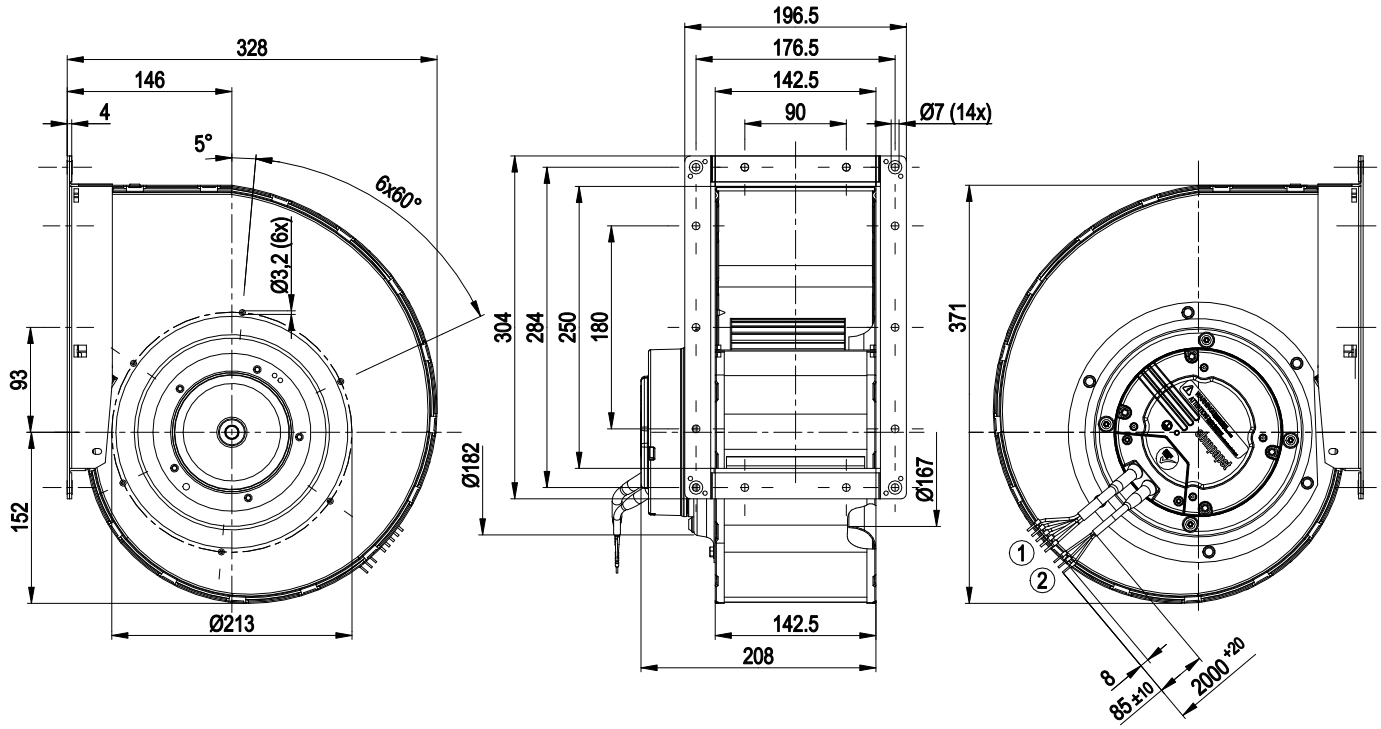
Product drawing



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

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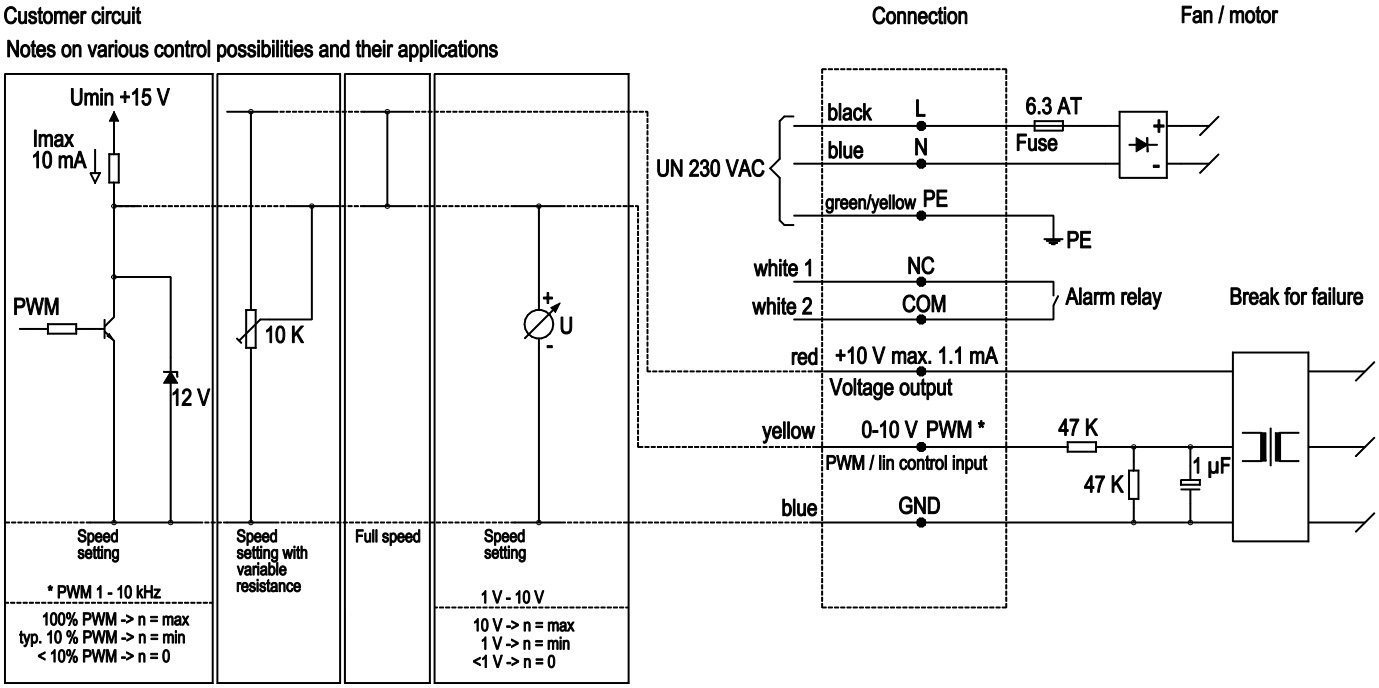
Connection screen



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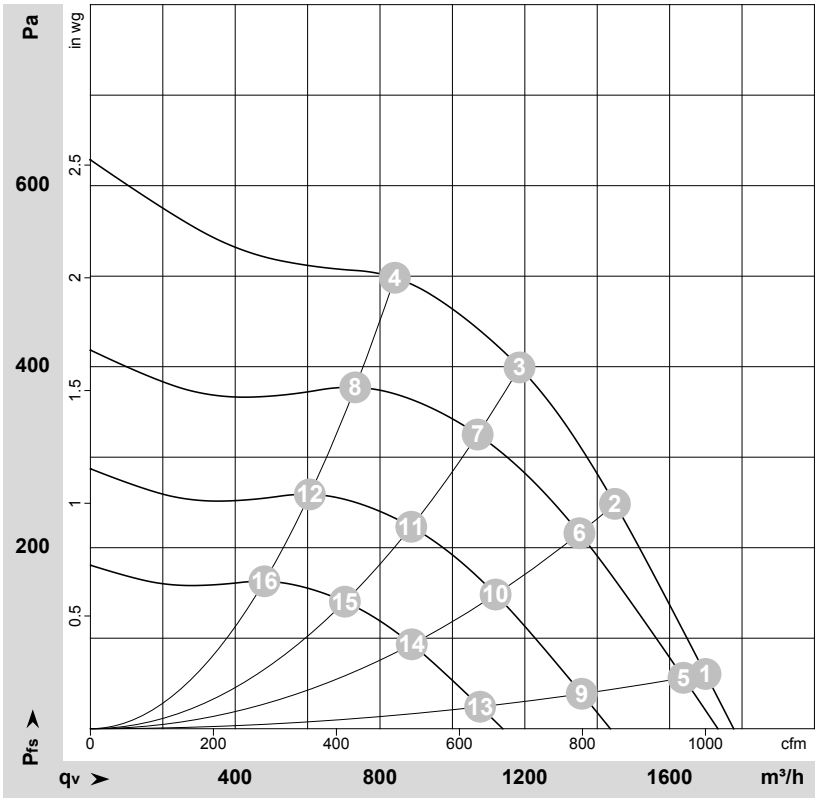
Charts: Air flow 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-169041-1

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	q_V	p_{fs}	q_V	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa	cfm	inH2O
1	230	50	1800	500	3.20	1700	60	1000	0.24
2	230	50	1875	433	2.81	1450	250	855	1.00
3	230	50	1940	361	2.35	1185	400	695	1.61
4	230	50	2010	270	1.78	840	500	495	2.01
5	230	50	1750	449	2.91	1640	57	965	0.23
6	230	50	1750	352	2.28	1350	218	795	0.88
7	230	50	1750	266	1.73	1070	326	630	1.31
8	230	50	1750	178	1.17	730	381	430	1.53
9	230	50	1450	255	1.65	1355	39	800	0.16
10	230	50	1450	200	1.30	1120	150	660	0.60
11	230	50	1450	151	0.98	885	224	520	0.90
12	230	50	1450	101	0.67	605	262	355	1.05
13	230	50	1150	127	0.83	1075	24	635	0.10
14	230	50	1150	100	0.65	890	94	525	0.38
15	230	50	1150	75	0.49	705	141	415	0.57
16	230	50	1150	50	0.33	480	165	285	0.66

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