

D3G180-AB62-01

# EC centrifugal fan

forward curved, dual inlet  
with housing (flange)



## ebm-papst Mulfingen GmbH & Co. KG

Bachmühle 2 · D-74673 Mulfingen

Phone +49 7938 81-0

Fax +49 7938 81-110

info1@de.ebmpapst.com

www.ebmpapst.com

Limited partnership · Headquarters Mulfingen  
County court Stuttgart · HRA 590344

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

## Nominal data

Type	D3G180-AB62-01	
Motor	M3G074-CF	
Phase		1~
Nominal voltage	VAC	230
Nominal voltage range	VAC	200 .. 277
Frequency	Hz	50/60
Type of data definition		ml
Speed (rpm)	min <sup>-1</sup>	1130
Power input	W	170
Current draw	A	1.25
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



# EC centrifugal fan

forward curved, dual inlet  
with housing (flange)

## Technical features

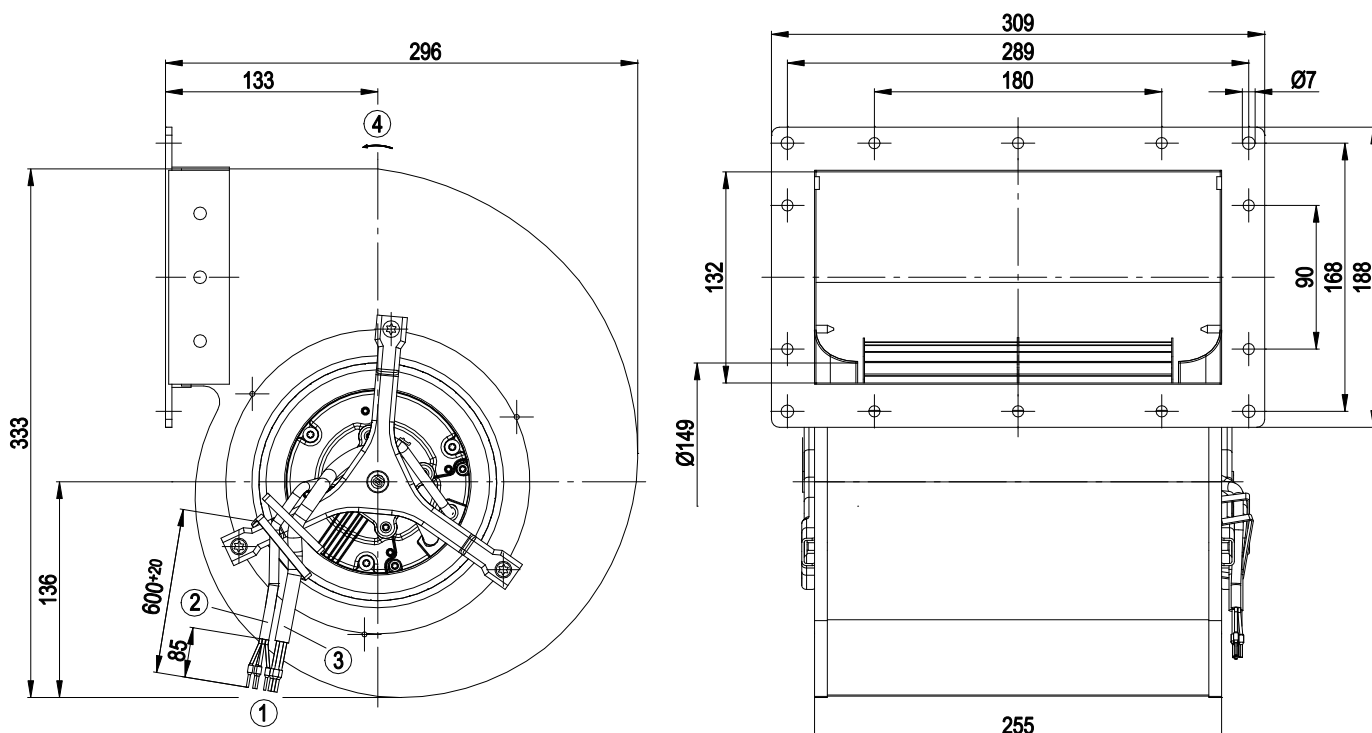
<b>Mass</b>	7.0 kg
<b>Size</b>	180 mm
<b>Surface of rotor</b>	Thick layer passivated
<b>Material of electronics housing</b>	Die-cast aluminum
<b>Material of impeller</b>	Sheet steel, sendzimir galvanized
<b>Housing material</b>	Sheet steel, sendzimir galvanized
<b>Motor suspension</b>	Motor mounted with anti-vibration on both sides
<b>Direction of rotation</b>	Clockwise, seen on rotor
<b>Type of protection</b>	IP 44
<b>Insulation class</b>	"B"
<b>Humidity (F)/environmental protection class (H)</b>	F3-1
<b>Max. permissible ambient motor temp. (transp./ storage)</b>	+80 °C
<b>Min. permissible ambient motor temp. (transp./storage)</b>	-40 °C
<b>Mounting position</b>	Shaft horizontal
<b>Condensate discharge holes</b>	None
<b>Operation mode</b>	S1
<b>Motor bearing</b>	Ball bearing
<b>Technical features</b>	<ul style="list-style-type: none"> <li>- Control input 0-10 VDC / PWM</li> <li>- Output 10 VDC max. 1.1 mA</li> <li>- Speed output</li> <li>- Over-temperature protected electronics / motor</li> </ul>
<b>EMC interference immunity</b>	Acc. to EN 61000-6-1
<b>EMC harmonics</b>	Acc. to EN 61000-3-2/3
<b>EMC interference emission</b>	Acc. to EN 61000-6-3
<b>Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)</b>	< 3.5 mA
<b>Motor protection</b>	Thermal overload protector (TOP) wired internally
<b>Cable exit</b>	Variable
<b>Protection class</b>	I (if protective earth is connected by customer)
<b>Product conforming to standard</b>	EN 60950-1; EN 60335-1; EN 61800-5-1; CE



# EC centrifugal fan

forward curved, dual inlet  
with housing (flange)

## Product drawing

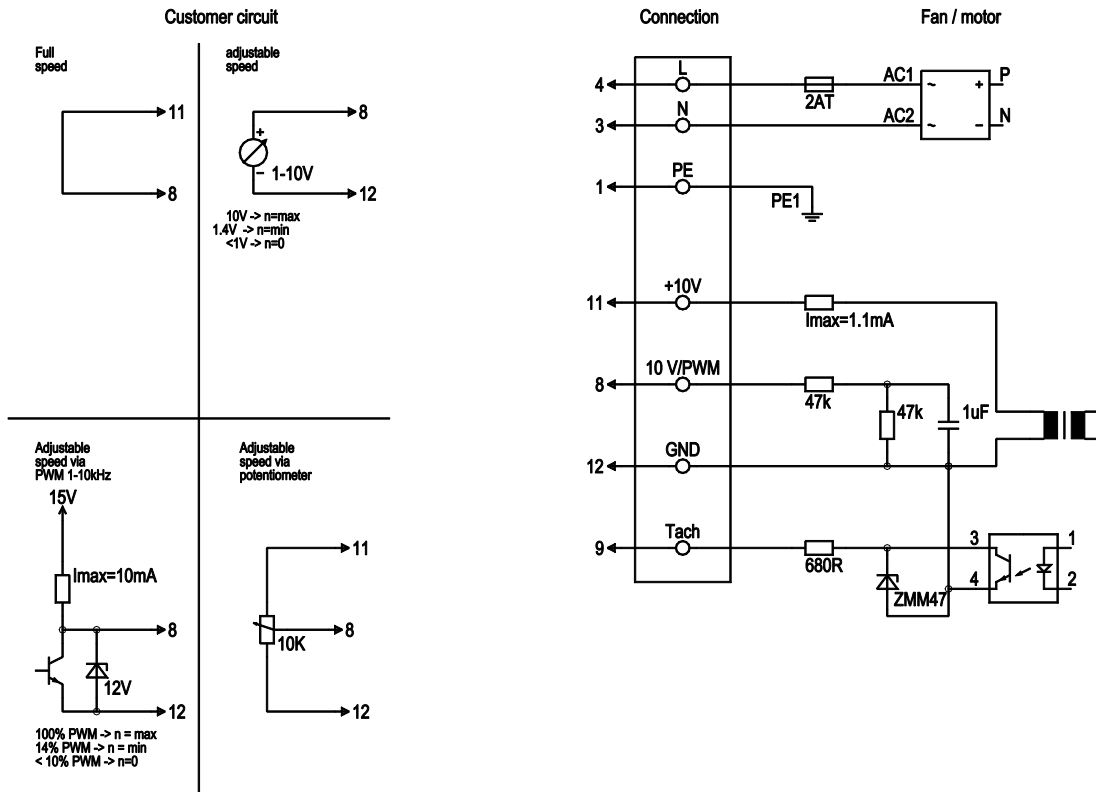


1	Core-end sleeves
2	Connection line 4 x AWG22
3	Connection line 3 x AWG18
4	Direction of rotation clockwise, seen on rotor

# EC centrifugal fan

forward curved, dual inlet  
with housing (flange)

## Connection screen



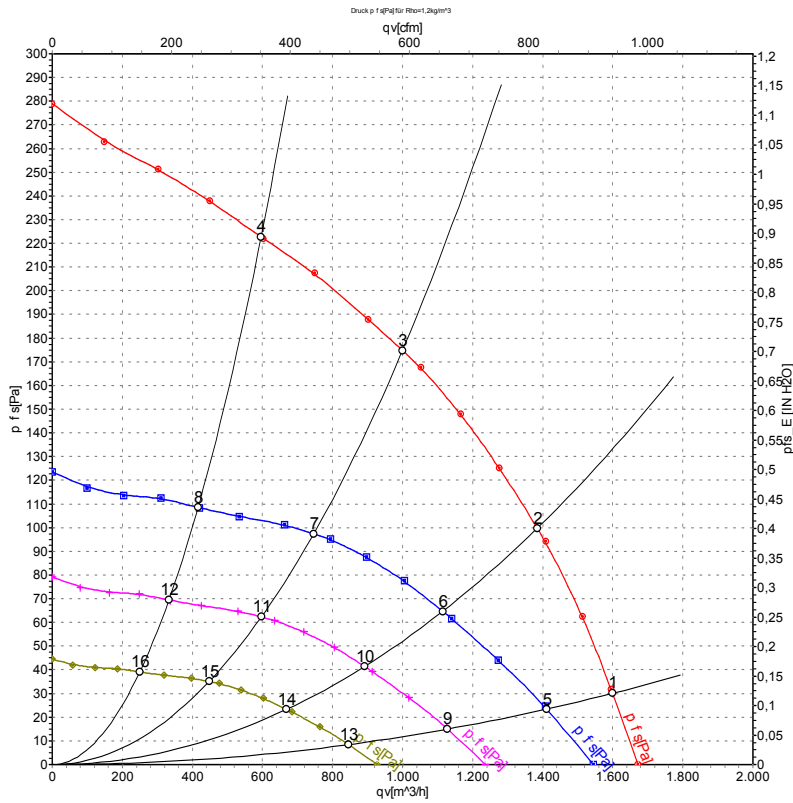
No.	Conn.	Designation	Colour	Function / assignment
	4	L	black	Power supply 230 VAC, 50-60 Hz, see type plate for voltage range
	3	N	blue	Neutral conductor
	1	PE	green/yellow	Protective earth
	8	0-10 V PWM	yellow	Control input 0 - 10 V or PWM, electrically isolated
	9	Tach	white	Tach output: open collector, 1 pulse per revolution, electrically isolated
	11	10V / max 1.1 mA	red	Voltage output 10 V / max. 1.1 mA, electrically isolated
	12	GND	blue	GND - Connection for control interface



# EC centrifugal fan

forward curved, dual inlet  
with housing (flange)

## Charts: Air flow 50 Hz



Measurement: LU-109566-1

Air performance measured as per ISO 5801 Installation category A. For detailed information on the measuring set-up, please contact ebmpapst. Suction-side noise levels: L<sub>wA</sub> measured as per ISO 13347 / L<sub>pA</sub> 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 <sub>ed</sub>	I	q <sub>v</sub>	P <sub>fs</sub>	q <sub>v</sub>	P <sub>fs</sub>
	V	Hz	min <sup>-1</sup>	W	A	m <sup>3</sup> /h	Pa	cfm	inH <sub>2</sub> O
1	230	50	1130	170	1.25	1600	30	940	0.12
2	230	50	1245	160	1.19	1385	100	815	0.40
3	230	50	1340	123	0.92	1000	175	590	0.70
4	230	50	1435	86	0.65	595	225	350	0.90
5	230	50	1000	117	0.87	1410	24	830	0.10
6	230	50	1000	83	0.62	1115	65	655	0.26
7	230	50	1000	51	0.38	745	97	440	0.39
8	230	50	1000	29	0.22	415	108	245	0.43
9	230	50	800	60	0.44	1130	16	665	0.06
10	230	50	800	43	0.32	890	41	525	0.16
11	230	50	800	26	0.20	595	62	350	0.25
12	230	50	800	15	0.11	335	69	195	0.28
13	230	50	600	25	0.19	845	9	500	0.04
14	230	50	600	18	0.13	670	23	395	0.09
15	230	50	600	11	0.08	450	35	265	0.14
16	230	50	600	6.3	0.05	250	39	145	0.16

U = Supply voltage · f = Frequency · n = Speed (rpm) · P<sub>ed</sub> = Power input · I = Current draw · q<sub>v</sub> = Air flow · p<sub>fs</sub> = Pressure increase

