

D1G133-AB39-52

# EC centrifugal fan

forward-curved, dual-intake  
with housing (without 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

Amtsgericht (court of registration) Stuttgart · HRA 590344

General partner Elektrobau Mulfingen GmbH · Headquarters Mulfingen

Amtsgericht (court of registration) Stuttgart · HRB 590142

## Nominal data

Type	D1G133-AB39-52	
Motor	M1G074-BF	
Nominal voltage	VDC	48
Nominal voltage range	VDC	36 .. 57
Frequency	Hz	-
Method of obtaining data		fa
Speed (rpm)	min <sup>-1</sup>	1780
Power consumption	W	105
Current draw	A	2.8
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	60

ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment  
Subject to change



# EC centrifugal fan

forward-curved, dual-intake  
with housing (without flange)

## Technical description

<b>Weight</b>	2.8 kg
<b>Fan size</b>	133 mm
<b>Rotor surface</b>	Painted black
<b>Impeller material</b>	Sheet steel, galvanized
<b>Housing material</b>	Sheet steel, galvanized
<b>Motor suspension</b>	Motor vibration-damped on both sides
<b>Direction of rotation</b>	Clockwise, viewed toward rotor
<b>Degree of protection</b>	IP42
<b>Insulation class</b>	"B"
<b>Moisture (F) / Environmental (H) protection class</b>	F0
<b>Max. permitted ambient temp. for motor (transport/storage)</b>	+80 °C
<b>Min. permitted ambient temp. for motor (transport/storage)</b>	-40 °C
<b>Installation position</b>	Any
<b>Condensation drainage holes</b>	None
<b>Mode</b>	S1
<b>Motor bearing</b>	Ball bearing
<b>Technical features</b>	<ul style="list-style-type: none"> <li>- Tach output</li> <li>- Motor current limitation</li> <li>- Soft start</li> <li>- Control input 0-10 VDC / PWM</li> </ul>
<b>EMC immunity to interference</b>	According to EN 61000-6-2 (industrial environment)
<b>EMC interference emission</b>	According to EN 55022 (Class B, household environment)
<b>Motor protection</b>	Reverse polarity and locked-rotor protection
<b>With cable</b>	Variable
<b>Conformity with standards</b>	EN 60950-1
<b>Approval</b>	CCC; EAC; UL 1004-1; CSA C22.2 No. 77

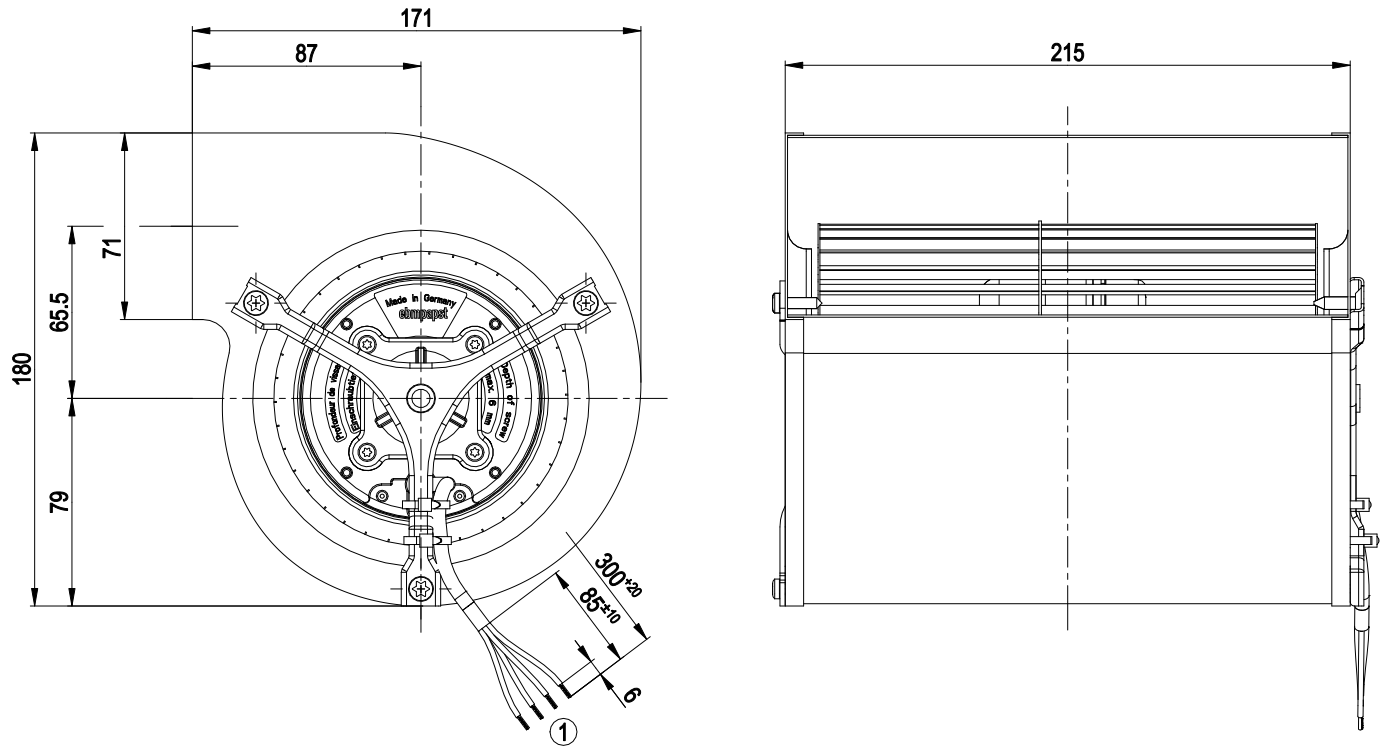


D1G133-AB39-52

# EC centrifugal fan

forward-curved, dual-intake  
with housing (without flange)

## Product drawing



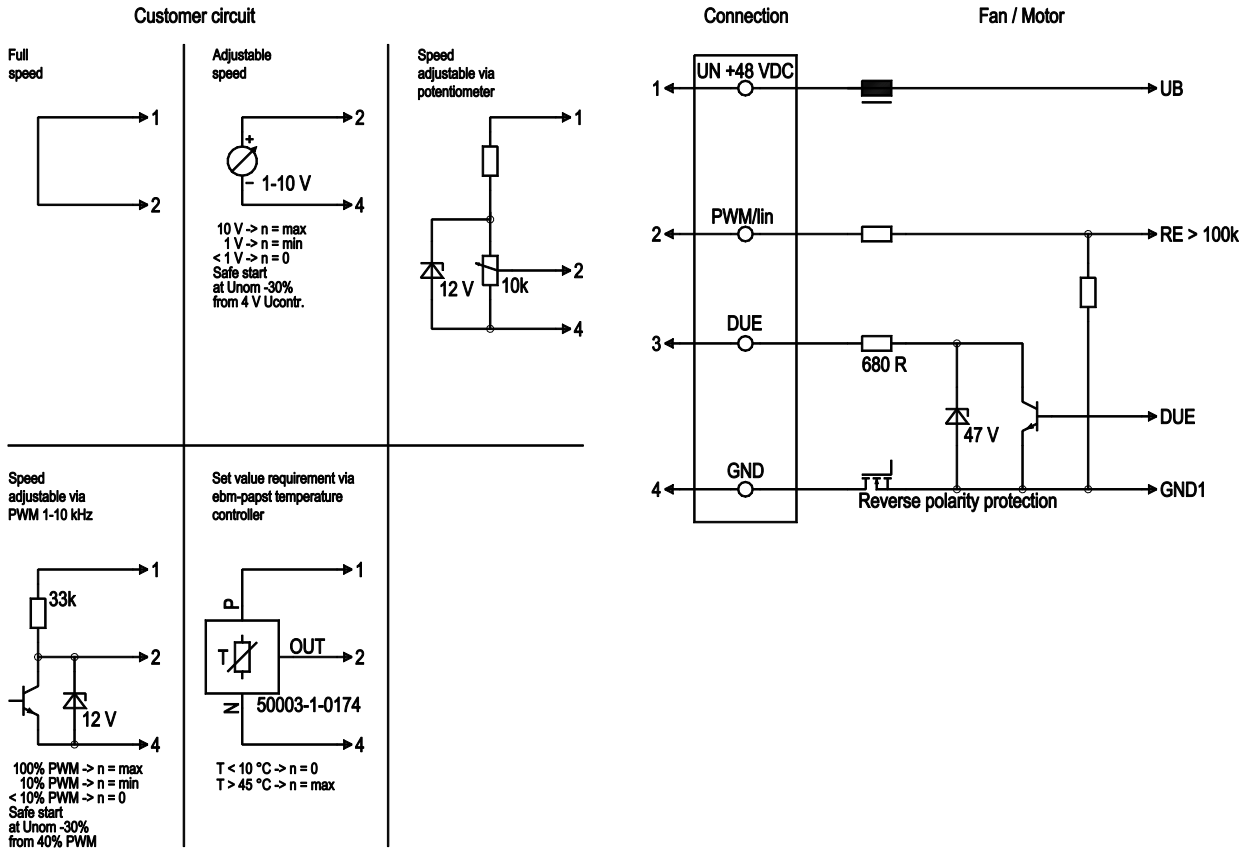
1 Cable PVC AWG20, 4x crimped splices



# EC centrifugal fan

forward-curved, dual-intake  
with housing (without flange)

## Connection diagram



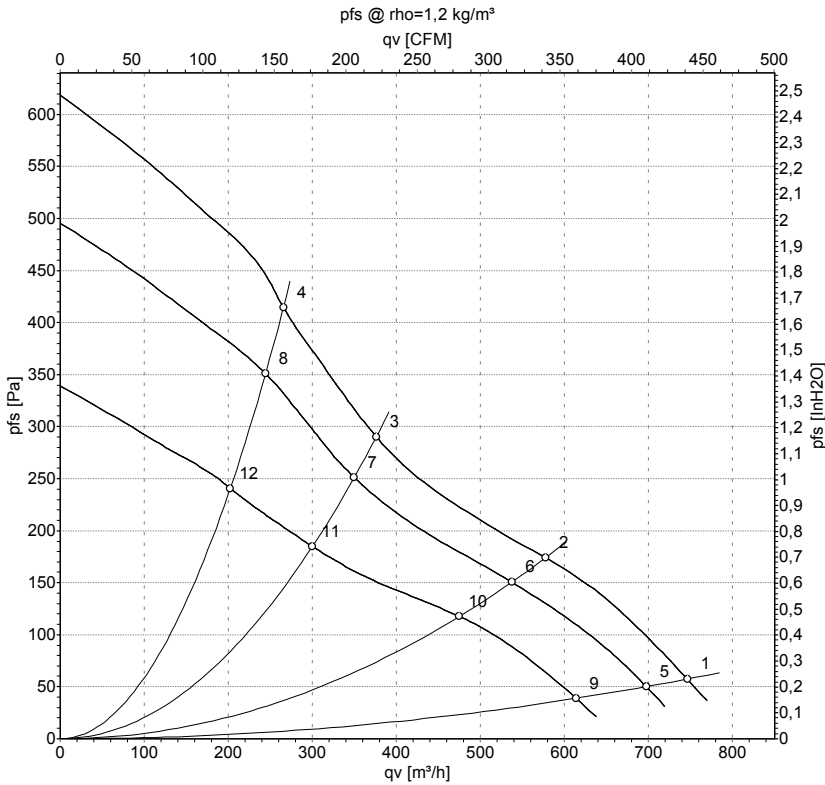
No.	Conn.	Designation	Color	Function/assignment
1	1	Un +48 VDC	red	Power supply 48 VDC, maximum ripple 3.5%
1	2	0-10 VDC	yellow	Control input Re > 100k
1	3	Tach	white	Tach output, 3 pulses per revolution, Isink max = 10 mA
1	4	GND	blue	Reference ground



# EC centrifugal fan

forward-curved, dual-intake  
with housing (without flange)

## Curves: Air performance



Measurement: LU-51633-1  
Measurement: LU-51632-1  
Measurement: LU-51634-1

Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebm-papst. Intake sound level: Sound power level according to ISO 13347 / sound pressure level measured at 1 m distance from fan axis. The values given are valid under the specified measuring conditions and may vary due to conditions of installation. For deviations from the standard configuration, the parameters have to be checked on the installed unit.

## Measured values

	U	n	P <sub>ed</sub>	I	qv	p <sub>fs</sub>	qv	p <sub>fs</sub>
	V	min <sup>-1</sup>	W	A	m <sup>3</sup> /h	Pa	CFM	inH <sub>2</sub> O
1	57	1890	130	3.24	745	58	440	0.23
2	57	2230	114	2.64	575	174	340	0.70
3	57	2640	104	2.21	375	290	220	1.16
4	57	3005	98	1.98	265	412	155	1.65
5	48	1780	105	2.80	695	50	410	0.20
6	48	2065	92	2.37	535	150	315	0.60
7	48	2455	85	2.03	350	250	205	1.00
8	48	2775	76	1.77	245	350	145	1.41
9	36	1590	70	2.31	615	40	360	0.16
10	36	1855	64	2.02	475	118	280	0.47
11	36	2120	54	1.67	300	185	175	0.74
12	36	2325	45	1.40	200	241	120	0.97

U = Power supply · n = Speed (rpm) · P<sub>ed</sub> = Power consumption · I = Current draw · qv = Air flow · p<sub>fs</sub> = Pressure increase

