

D1G160-DA19-52

# EC centrifugal fan

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



D1G160-DA19-52 ebmpapst Datasheet  
sales@fansco.com  
www.fansco.com

Limited partnership · Headquarters Muldingen  
Amtsgericht (court of registration) Stuttgart · HRA 590344

General partner Elektrobau Muldingen GmbH · Headquarters Muldingen  
Amtsgericht (court of registration) Stuttgart · HRB 590142

## Nominal data

Type	D1G160-DA19-52	
Motor	M1G074-CF	
Nominal voltage	VDC	24
Nominal voltage range	VDC	16 .. 28
Frequency	Hz	-
Method of obtaining data		fa
Speed	min <sup>-1</sup>	1250
Power consumption	W	112
Current draw	A	5.6
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



D1G160-DA19-52

# EC centrifugal fan

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

## Technical description

<b>Weight</b>	4 kg
<b>Fan size</b>	160 mm
<b>Rotor surface</b>	Painted black
<b>Impeller material</b>	Sheet steel, galvanized
<b>Housing material</b>	Sheet steel, galvanized
<b>Direction of rotation</b>	Counterclockwise, 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 storage</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>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>	CSA C22.2 No. 77; EAC; UL 1004-1

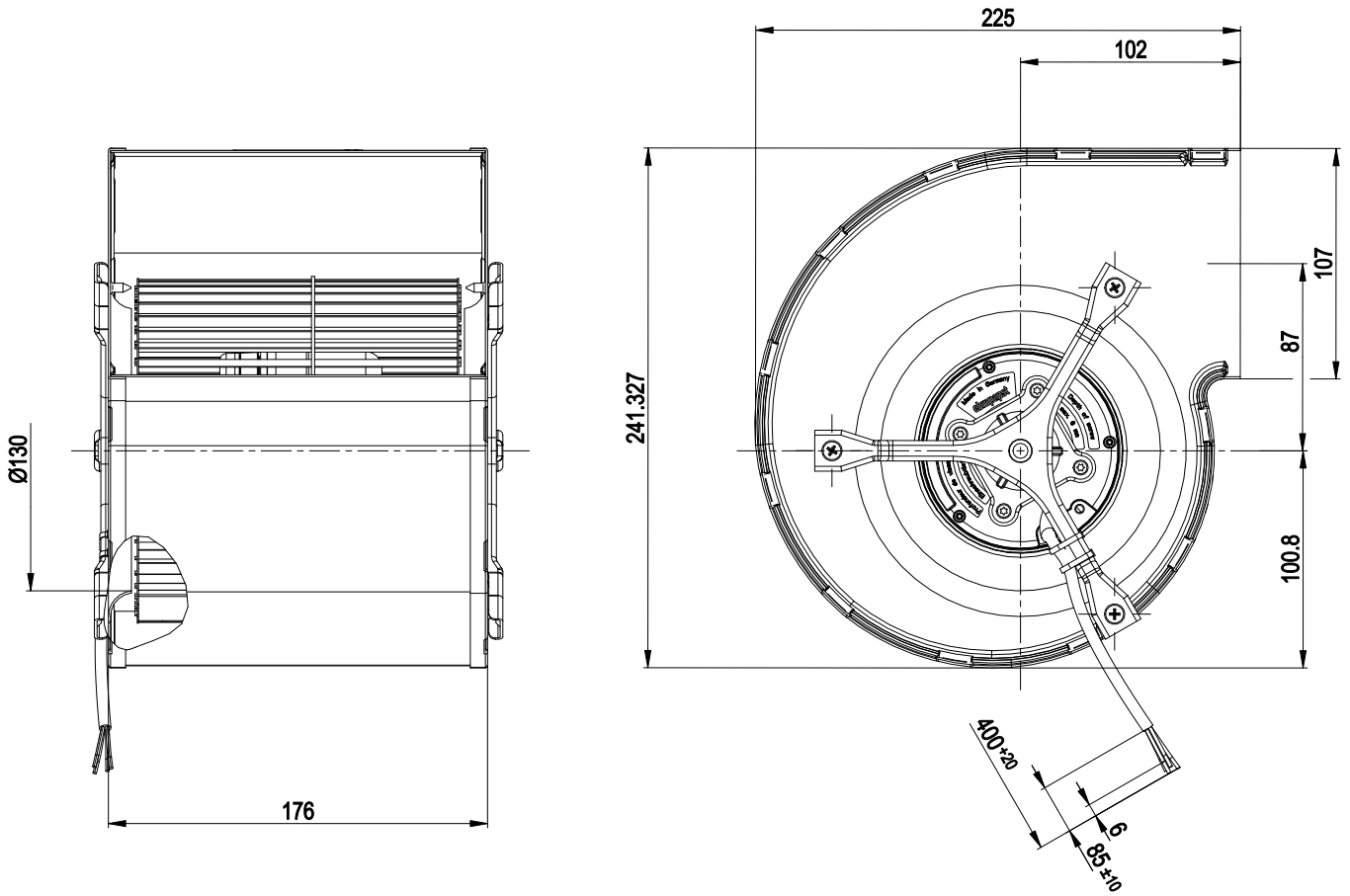


D1G160-DA19-52

# EC centrifugal fan

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

## Product drawing



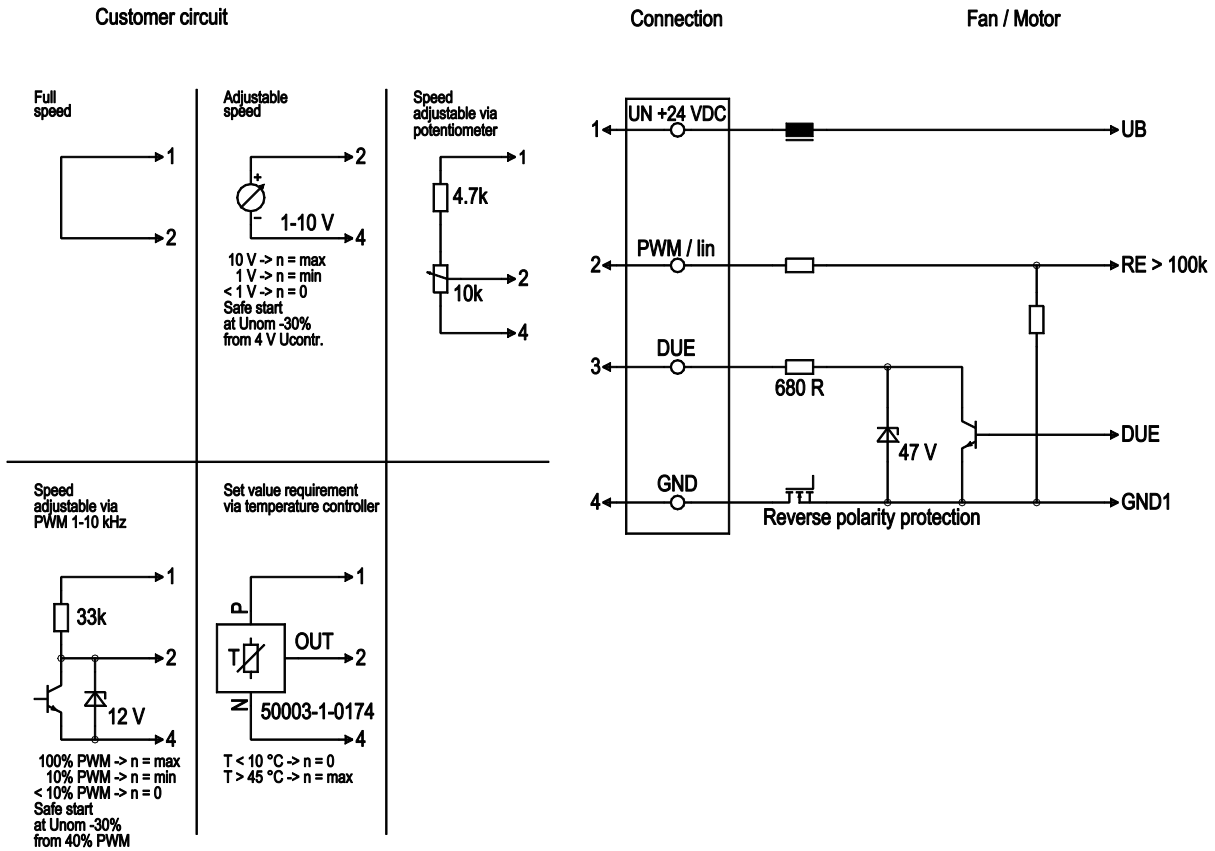
1 Cable PVC AWG20, 4x crimped splices



# EC centrifugal fan

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

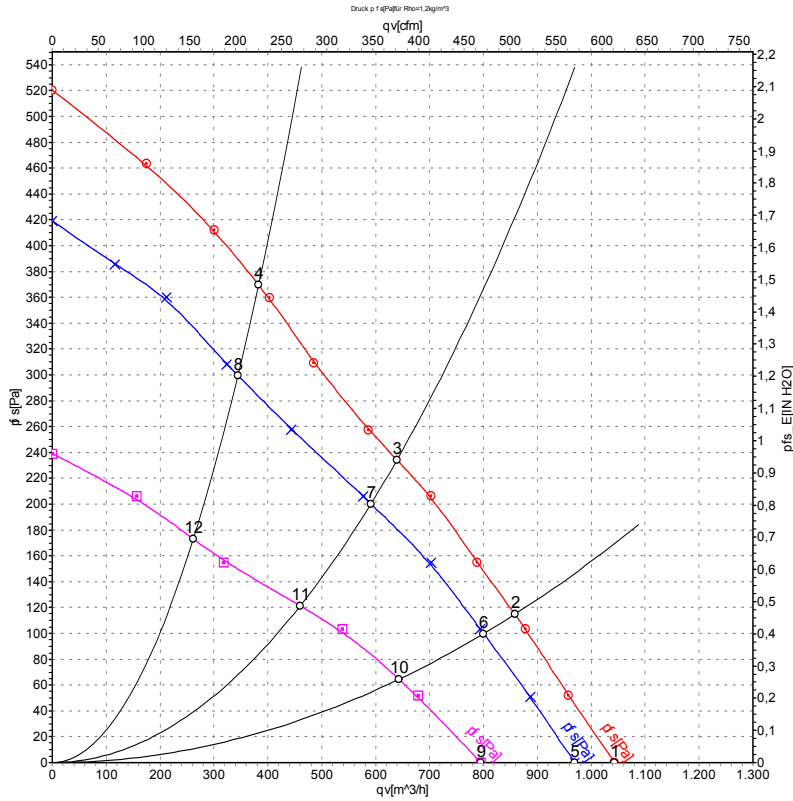
## Connection diagram



No.	Conn.	Designation	Color	Function/assignment
1	1	Un +24V	red	Power supply 24 VDC, maximum ripple 3.5%
1	2	PWM / lin	yellow	PWM / lin., control input, 0-10 V
1	3	Tach	white	Tach output, 3 pulses per revolution, Isink max = 10 mA
1	4	GND	blue	Reference ground



## Curves: Air performance



Measurement: LU-51361  
Measurement: LU-51360  
Measurement: LU-51362

Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebmpapst. 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>
	V	min <sup>-1</sup>	W	A	m <sup>3</sup> /h	Pa
1	28	1315	139	6.21	1045	0
2	28	1515	124	5.31	860	115
3	28	1780	112	4.55	640	234
4	28	2095	99	3.92	385	370
5	24	1250	112	5.60	970	0
6	24	1410	101	4.86	800	100
7	24	1660	91	4.23	590	200
8	24	1895	75	3.48	345	300
9	16	1020	62	4.30	795	0
10	16	1145	53	3.69	645	65
11	16	1290	43	3.03	460	122
12	16	1445	35	2.51	260	173

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

