

EC centrifugal fan

forward-curved, dual-intake
with housing (flange)

D3G200-BB36-81 ebmpapst Datasheet
sales@fansco.com
www.fansco.com

Nominal data

Type	D3G200-BB36-81	
Motor	M3G084-FA	
Phase		1~
Nominal voltage	VAC	115
Nominal voltage range	VAC	100 .. 130
Frequency	Hz	50/60
Method of obtaining data		ml
Speed (rpm)	min ⁻¹	1580
Power consumption	W	360
Current draw	A	4.1
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	40

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



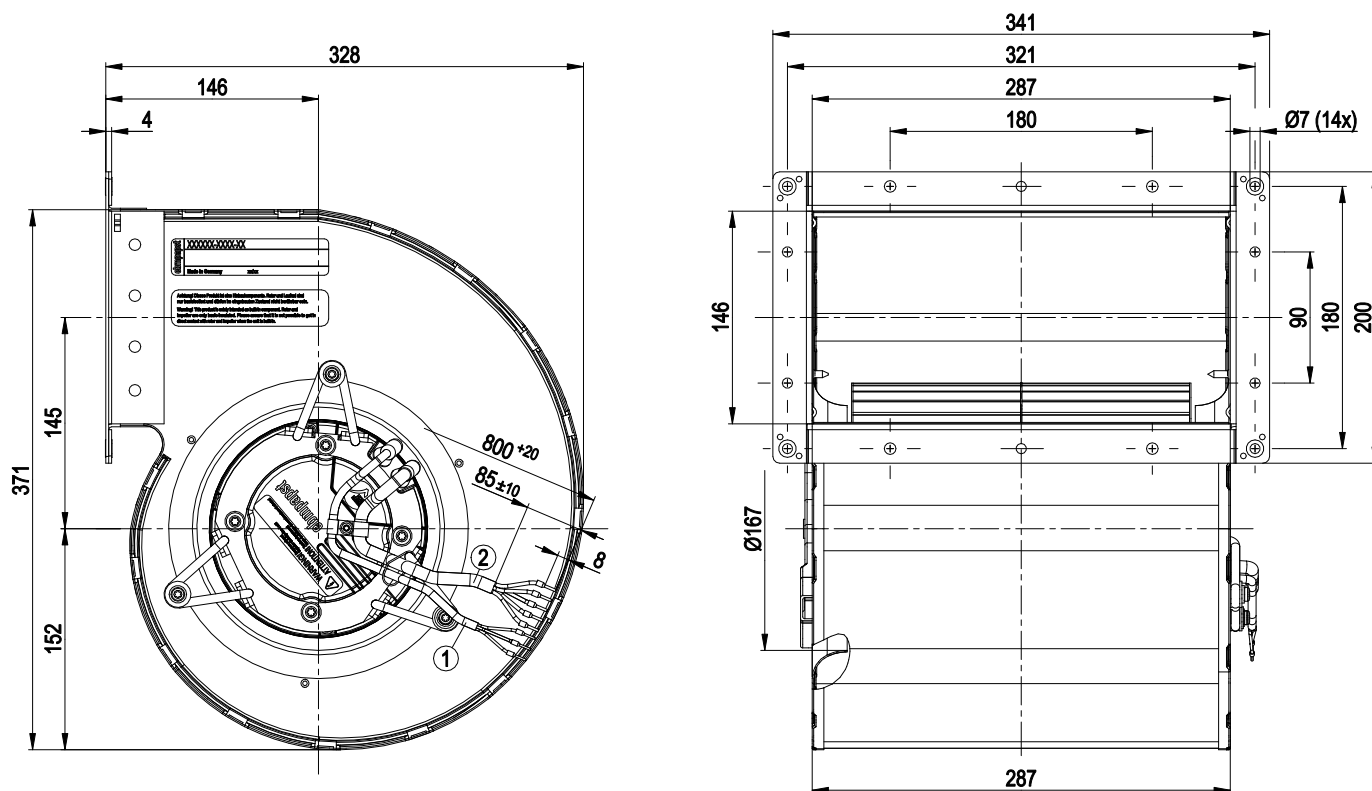
Technical description

Weight	10.4 kg
Fan size	200 mm
Rotor surface	Painted black
Electronics housing material	Die-cast aluminum
Impeller material	Sheet steel, galvanized
Housing material	Sheet steel, galvanized
Motor suspension	Motor mounted on brackets for one-sided vibration damping
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP54
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	F3-1
Max. permitted ambient temp. for motor (transport/storage)	+80 °C
Min. permitted ambient temp. for motor (transport/storage)	-40 °C
Installation position	Shaft horizontal
Condensation drainage holes	None
Mode	S1
Motor bearing	Ball bearing
Technical features	- Output 10 VDC max. 1.1 mA - Alarm relay - Motor current limitation - Soft start - Control input 0-10 VDC/PWM - Control interface with SELV potential safely disconnected from supply - Thermal overload protection for electronics/motor - Undervoltage/phase failure detection
EMC immunity to interference	According to EN 61000-6-2 (industrial environment)
EMC interference emission	According to EN 61000-6-4 (industrial environment)
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	<= 3.5 mA
Motor protection	Thermal overload protector (TOP) internally connected
With cable	Variable
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 61800-5-1
Approval	CSA C22.2 No. 77; UL 2111

EC centrifugal fan

forward-curved, dual-intake
with housing (flange)

Product drawing



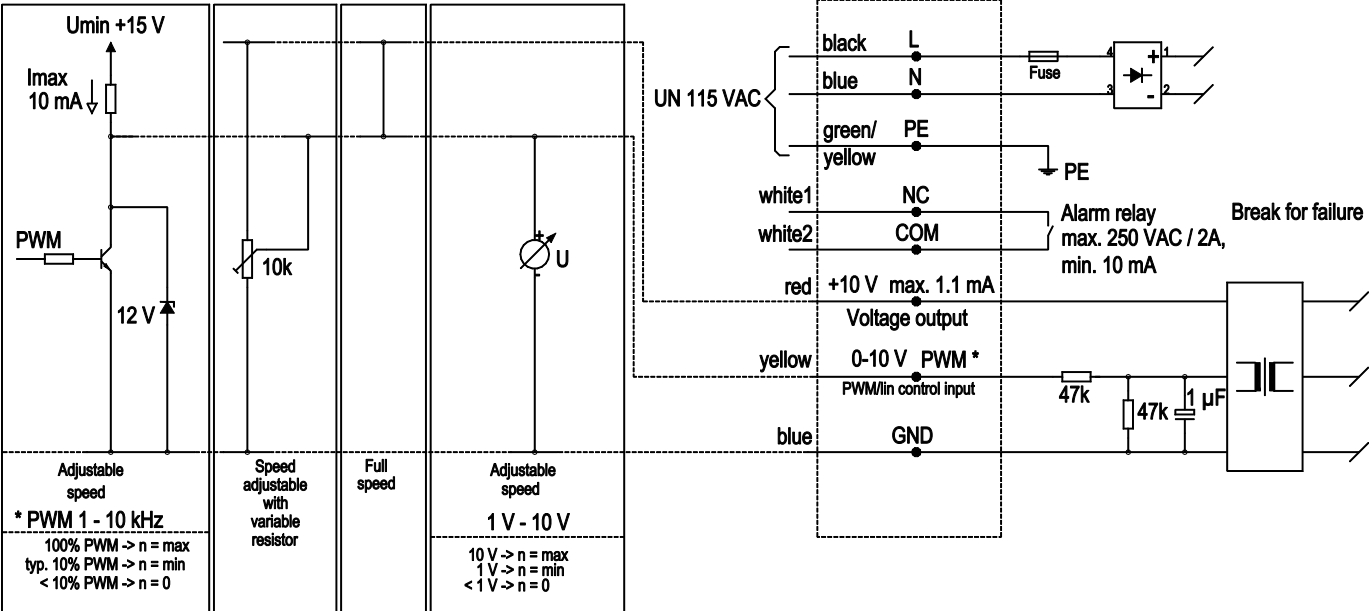
- | | |
|---|--------------------------------------|
| 1 | Cable PVC AWG22, 3x crimped ferrules |
| 2 | Cable PVC AWG18, 5x crimped ferrules |

EC centrifugal fan

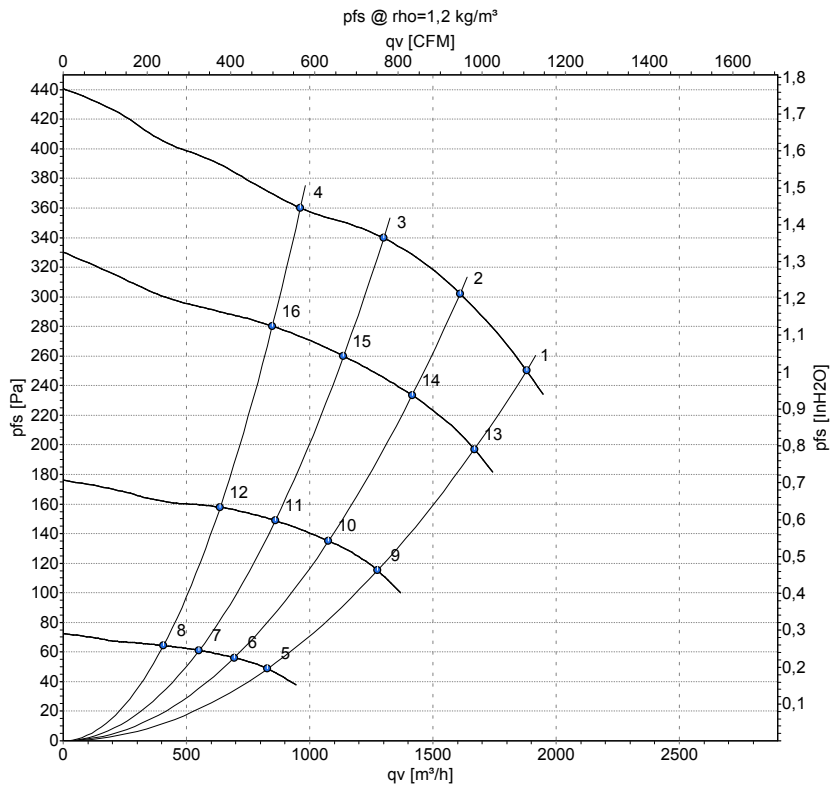
forward-curved, dual-intake
with housing (flange)

Connection diagram

Customer circuit
Application notes for various control options



Curves: Air performance 50 Hz



Measurement: LU-131882-1
 Measurement: LU-107604-1
 Measurement: LU-107603-1
 Measurement: LU-107600-1

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	f	n	P _{ed}	I	qv	p _{fs}	qv	p _{fs}
	V	Hz	min ⁻¹	W	A	m³/h	Pa	CFM	inH2O
1	115	50	1580	360	4.10	1880	250	1105	1.00
2	115	50	1620	326	3.80	1610	300	950	1.20
3	115	50	1670	279	3.30	1300	340	765	1.36
4	115	50	1710	234	2.82	960	360	565	1.45
5	115	50	715	42	0.57	830	49	490	0.20
6	115	50	725	38	0.53	695	56	410	0.22
7	115	50	735	33	0.46	550	61	325	0.24
8	115	50	740	29	0.41	405	64	240	0.26
9	115	50	1095	127	1.59	1275	116	750	0.47
10	115	50	1115	112	1.41	1075	135	635	0.54
11	115	50	1130	95	1.22	860	149	505	0.60
12	115	50	1145	79	1.03	635	158	375	0.63
13	115	50	1425	272	3.19	1670	198	980	0.79
14	115	50	1450	240	2.86	1415	234	835	0.94
15	115	50	1480	204	2.46	1140	260	670	1.04
16	115	50	1515	168	2.06	850	280	500	1.12

U = Power supply · f = Frequency · n = Speed (rpm) · P_{ed} = Power consumption · I = Current draw · qv = Air flow · p_{fs} = Pressure increase