

D3G146-AK05-11

EC centrifugal fan

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

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Amtsgericht (court of registration) Stuttgart · HRB 590142

Nominal data

Type	D3G146-AK05-11	
Motor	M3G055-CF	

Phase		1~
Nominal voltage	VAC	230
Nominal voltage range	VAC	200 .. 240
Frequency	Hz	50/60

Method of obtaining data		ml
Speed (rpm)	min ⁻¹	1500
Power consumption	W	85
Current draw	A	0.75
Min. back pressure	Pa	100
Min. back pressure	in. wg	0.4
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

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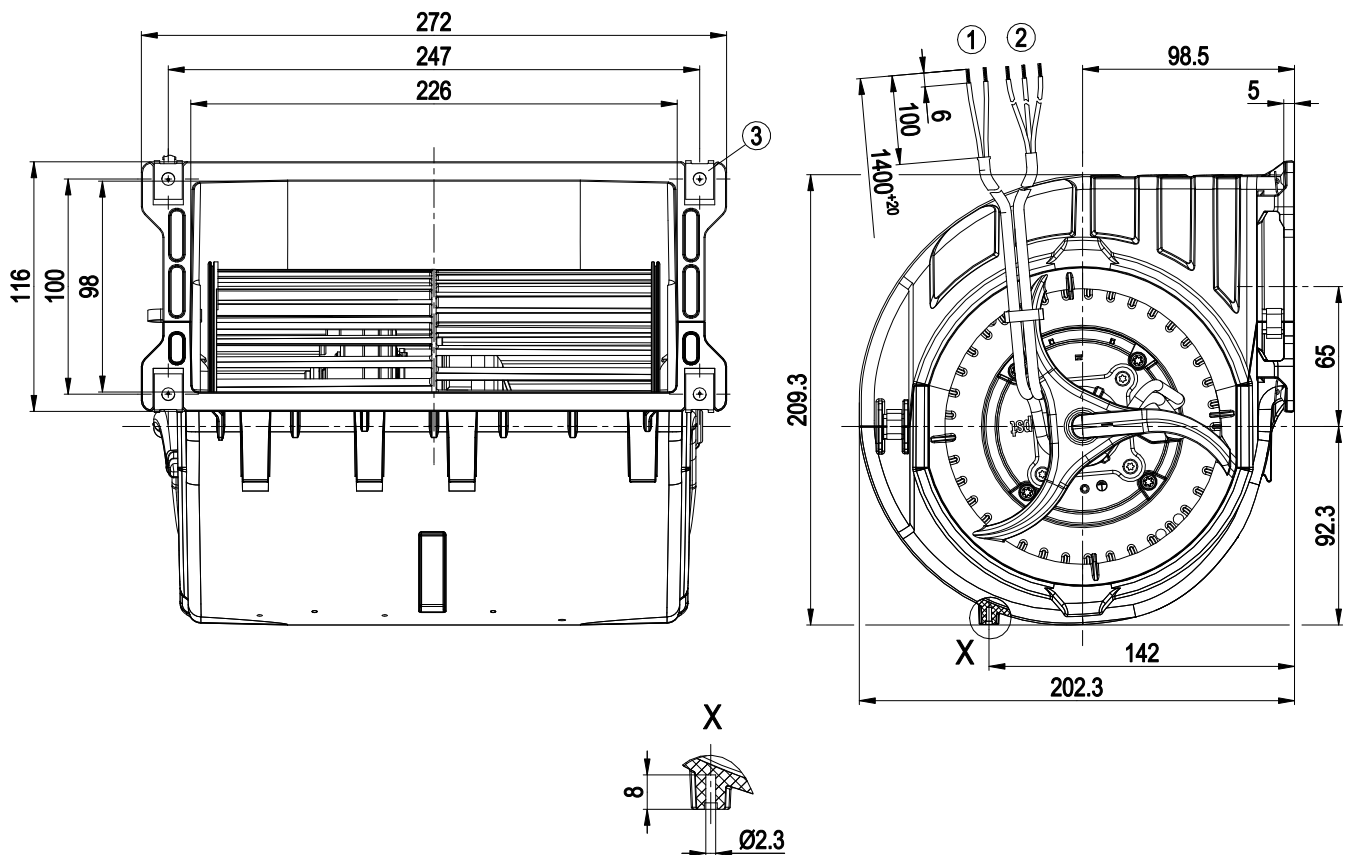
Technical description

Weight	2.15 kg
Size	146 mm
Motor size	55
Rotor surface	Thick-film passivated
Impeller material	PP plastic
Housing material	PP plastic
Motor suspension	Motor vibration-damped on both sides
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP54
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	H1
Max. permitted ambient temp. for motor (transport/storage)	+ 80 °C
Min. permitted ambient temp. for motor (transport/storage)	- 40 °C
Installation position	Any
Mode	S1
Motor bearing	Ball bearing
Technical features	- Power limiter - Motor current limitation - Soft start - Control input 0-10 VDC / PWM - Control interface with SELV potential safely disconnected from the mains - Overvoltage detection - Thermal overload protection for electronics/motor - Line undervoltage detection
EMC immunity to interference	According to EN 61000-6-2 (industrial environment)
EMC circuit feedback	According to EN 61000-3-2/3
EMC interference emission	According to EN 61000-6-3 (household environment)
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	<= 3.5 mA
Motor protection	Electronic motor protection
With cable	Variable
Protection class assignment	I; If a protective earth is connected. The built-in component has several local protection class assignments. The final protection class is determined by the intended installation.
Conformity with standards	EN 60335-1; EN 60034-1; EN 60204-1; CE
Comment on CE	Ecodesign Directive 2009/125/EC + Fan Directive (EC) No. 327/2011 does not apply, as power consumption <125W.
Approval	CCC

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Product drawing

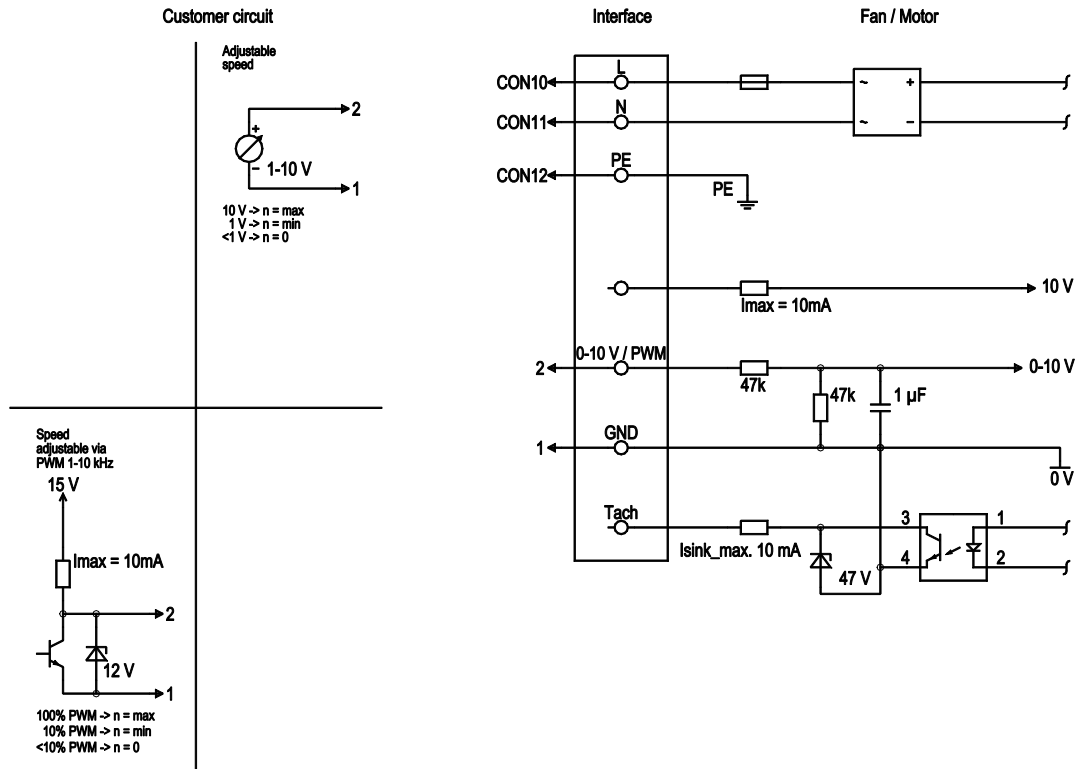


1	Cable PVC 2x 0.25 mm ²
	2x splice
2	Cable PVC 3G 0.5 mm ²
	3x splice
3	4x sheet metal nut for thread EN ISO 1478-ST4.8 (min. screw length 14.5 mm plus material thickness of attachment)

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Connection diagram

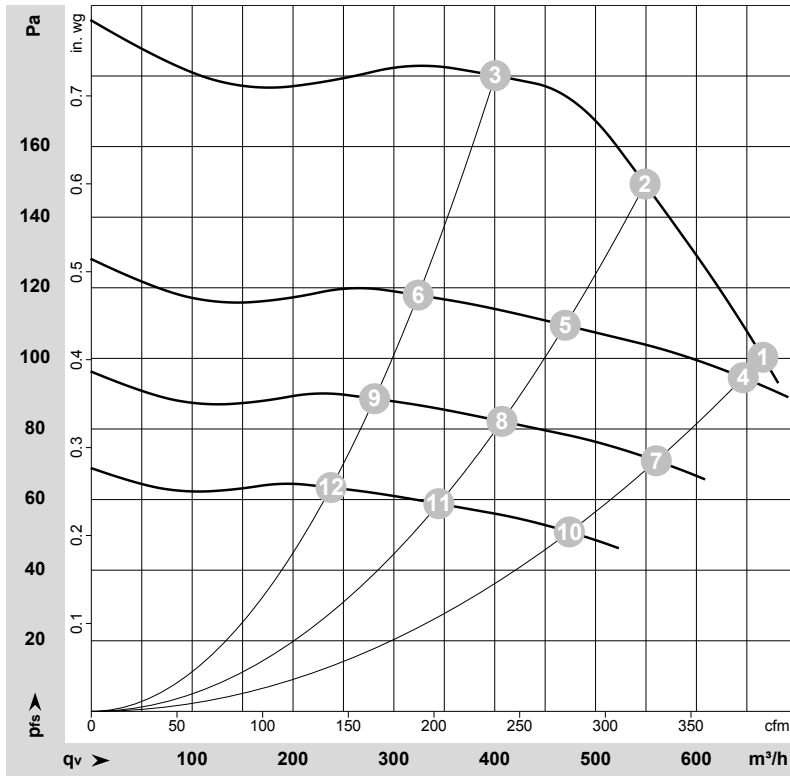


No.	Conn.	Designation	Color	Function/assignment
	CON10	L	brown	Supply connection, power supply, phase, see nameplate for voltage range
	CON11	N	blue	Supply connection, power supply, neutral conductor, see nameplate for voltage range
	CON12	PE	green/yellow	Ground connection
	2	0- 10V PWM	yellow	0-10 V / PWM control input, Ri=100 kΩ, SELV
	1	GND	blue	Reference ground for control interface, SELV

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Curves: Air performance 50 Hz



$$\rho = 1.15 \text{ kg/m}^3 \pm 2 \%$$

Measurement: LU-175298-1
Date: 2016-02-15
Nozzle: 65118-2-2945

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

	Wired	U	f	n	P _{ed}	I	LpA _{in}	LwA _{in}	q _v	P _{fs}	q _v	P _{fs}
		V	Hz	min ⁻¹	W	A	dB(A)	dB(A)	m³/h	Pa	cfm	in. wg
1	1~	230	50	1500	85	0.75	53	63	665	100	390	0.40
2	1~	230	50	1755	85	0.75	54	64	550	150	325	0.60
3	1~	230	50	1855	66	0.58	54	64	400	180	235	0.72
4	1~	230	50	1500	80	0.68	52	62	645	95	380	0.38
5	1~	230	50	1500	54	0.46	50	60	470	109	275	0.44
6	1~	230	50	1500	35	0.31	49	59	325	118	190	0.47
7	1~	230	50	1300	52	0.44	48	58	560	71	330	0.29
8	1~	230	50	1300	35	0.30	46	57	405	82	240	0.33
9	1~	230	50	1300	23	0.20	45	55	280	89	165	0.36
10	1~	230	50	1100	31	0.27	44	54	475	51	280	0.20
11	1~	230	50	1100	21	0.18	42	53	345	59	205	0.24
12	1~	230	50	1100	14	0.12	41	51	240	63	140	0.25

Wired = Wiring · U = Voltage · f = Frequency · n = Speed (rpm) · P_{ed} = Power consumption · I = Current draw · LpA_{in} = Sound pressure level intake side · LwA_{in} = Sound power level intake side
q_v = Air flow · P_{fs} = Pressure increase