D3G160-BF60-12

EC centrifugal fan

forward curved, dual inlet

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
County court Stuttgart · HRA 590344

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

Nominal data

Type	**D3G160-BF60-12**
Motor	**M3G074-CF**

Phase		1~
Nominal voltage	VAC	230
Nominal voltage range	VAC	200 .. 277
Frequency	Hz	50/60
Type of data definition		fa
Speed (rpm)	min^{-1}	1370
Power input	W	150
Current draw	A	1.1
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

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Technical features

Mass	5.5 kg
Size	160 mm
Surface of rotor	Thick layer passivated
Material of electronics housing	Die-cast aluminium
Material of impeller	Sheet steel, sendzimir galvanised
Housing material	Sheet steel, sendzimir galvanised
Motor suspension	Motor mounted with anti-vibration on both sides
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 44; Depending on installation and position
Insulation class	"B"
Humidity (F)/environmental protection class (H)	F3-1
Max. permissible ambient motor temp. (transp./ storage)	+80 °C
Min. permissible ambient motor temp. (transp./storage)	-40 °C
Mounting position	Shaft horizontal
Condensate discharge holes	None
Operation mode	S1
Motor bearing	Ball bearing
Technical features	- Control input 0-10 VDC / PWM - Output 10 VDC, max. 1.1 mA - Tach output - Motor current limit - Soft start - Over-temperature protected electronics / motor
EMC interference immunity	Acc. to EN 61000-6-2
EMC harmonics	Acc. to EN 61000-3-2/3
EMC interference emission	Acc. to EN 61000-6-3
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	<= 3.5 mA
Electrical leads	With plug
Motor protection	Thermal overload protector (TOP) wired internally
Cable exit	Variable
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60950-1; EN 60335-1; EN 61800-5-1; CE
Approval	UL 2111; CSA C22.2 No.77

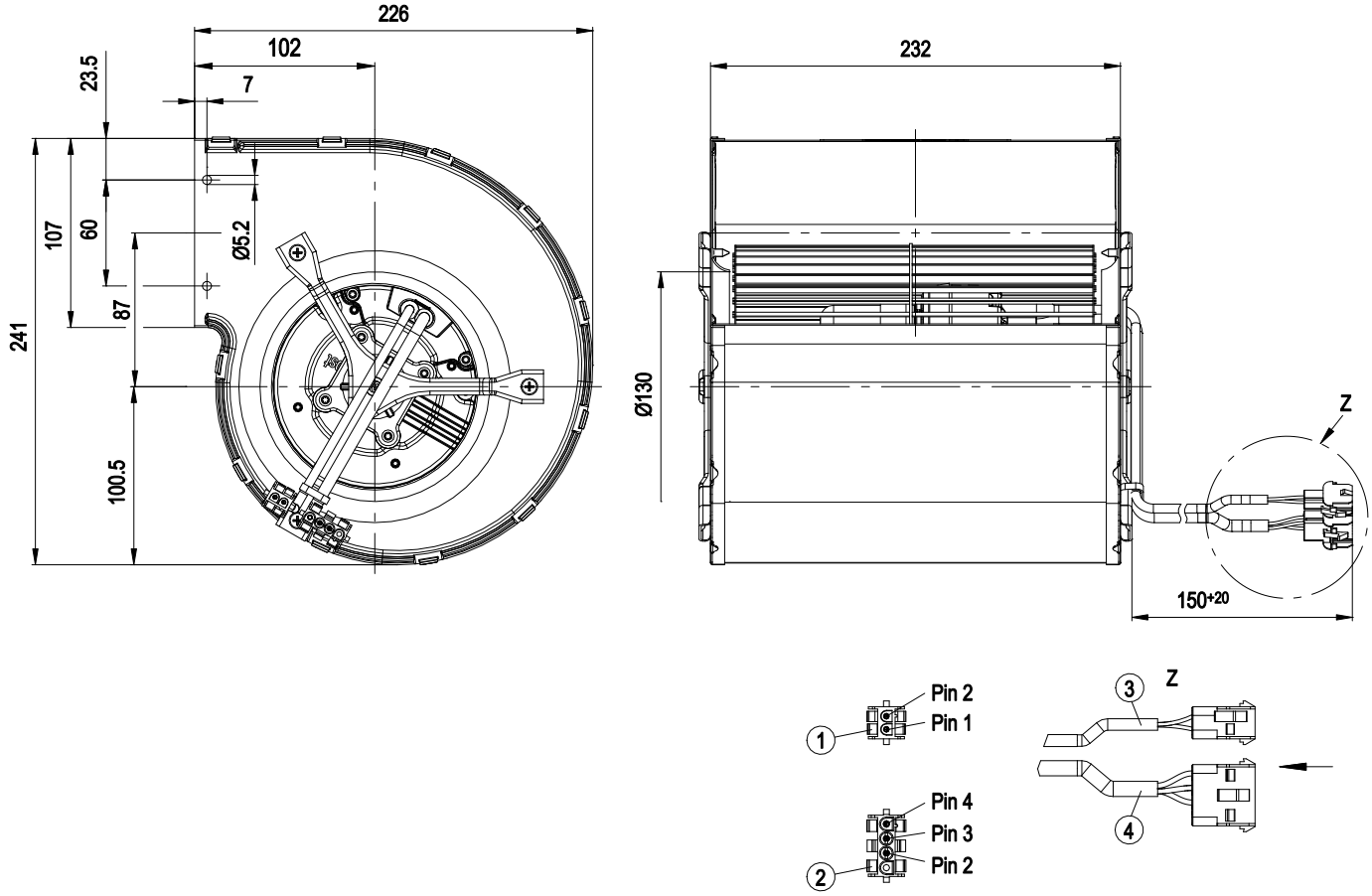
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Product drawing



No.	Conn.	Designation	Function / assignment
Z			View Z / plug assignment
1			Connector housing AMP350 778-1, plug pin AMP926 886-1 (2 x)
1	Pin 1	0-10 V/PWM	yellow
1	Pin 2	GND	Blue
2			Connector housing AMP350 780-1
2	Pin 2	PE	Green / yellow, plug pin AMP926 887-1
2	Pin 3	L	Black, plug pin AMP926 887-1
2	Pin 4	N	Blue, plug pin AMP350 654-1
3			Connection line 2 x AWG22
4			Connection line 3 x AWG18

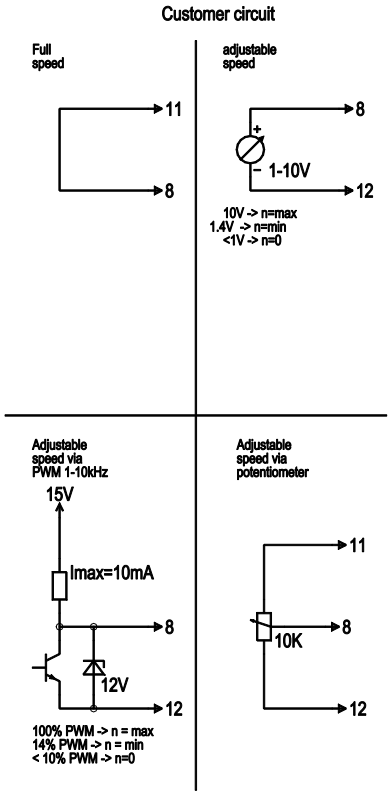
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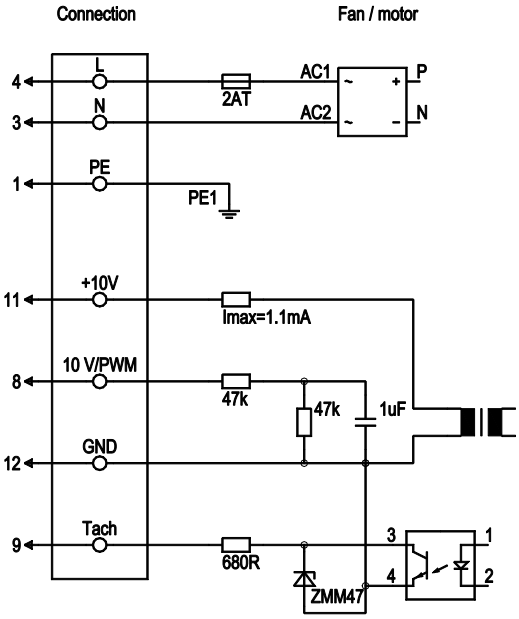
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Connection screen





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

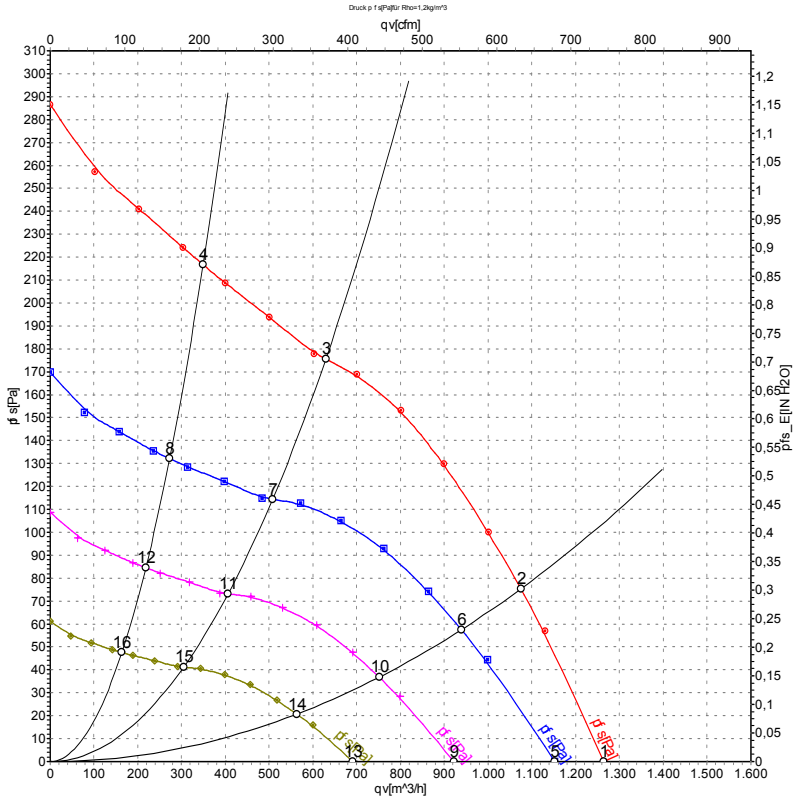
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Charts: Air flow 50 Hz



Measurement: LU-109581-1

Air performance measured as per ISO 5801 Installation category A. For detailed information on the measuring set-up, please contact ebm-papst. Suction-side noise levels: LwA measured as per ISO 13347 / LpA 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_{ed}	I	q_V	p_{fs}	q_V	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa	cfm	inH2O
1	230	50	1370	150	1.10	1255	0	740	0.00
2	230	50	1430	131	0.96	1075	75	635	0.30
3	230	50	1550	85	0.63	630	175	370	0.70
4	230	50	1600	62	0.47	350	215	205	0.86
5	230	50	1250	115	0.84	1150	0	680	0.00
6	230	50	1250	88	0.64	940	58	555	0.23
7	230	50	1250	45	0.33	510	114	300	0.46
8	230	50	1250	30	0.22	275	132	160	0.53
9	230	50	1000	59	0.43	920	0	545	0.00
10	230	50	1000	45	0.33	750	37	440	0.15
11	230	50	1000	23	0.17	405	73	240	0.29
12	230	50	1000	15	0.11	220	84	130	0.34
13	230	50	750	25	0.18	690	0	405	0.00
14	230	50	750	19	0.14	565	21	330	0.08
15	230	50	750	9.7	0.07	305	41	180	0.16
16	230	50	750	6.4	0.05	165	48	95	0.19

U = Supply voltage · f = Frequency · n = Speed (rpm) · P_{ed} = Power input · I = Current draw · q_V = Air flow · p_{fs} = Pressure increase

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