D3G146-AH77-21

EC centrifugal fan

forward curved, dual inlet

with housing (without flange)

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ErP2015 EXCEEDS THE NORM

Nominal data

Type	**D3G146-AH77-21**	
Motor	**M3G074-CF**	
Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50/60
Type of data definition		ml
Speed	min^{-1}	2600
Power input	W	240
Current draw	A	1.8
Min. ambient temperature	°C	-25
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

Data according to ErP directive

Installation category	A
Efficiency category	Static
Variable speed drive	Yes
Specific ratio*	1.00

* Specific ratio = 1 + p_{fs} / 100 000 Pa

		Actual	Request 2013	Request 2015
Overall efficiency η_{es}		43.4	26.6	33.6
Efficiency grade N		53.8	37	44
Power input P_{ed}	kW	0.23		
Air flow q_v	m^3/h	745		
Pressure increase p_{fs}	Pa	431		
Speed n	min^{-1}	2675		

Data definition with optimum efficiency.

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Technical features

Mass	3.9 kg
Size	146 mm
Surface of rotor	Coated in black
Material of impeller	Sheet steel, galvanised
Housing material	Sheet steel, galvanised
Motor suspension	Motor mounted 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 class	F3-1
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Mounting position	Any
Condensate discharge holes	None
Operation mode	S1
Motor bearing	Ball bearing
Technical features	- Output 10 VDC, max. 1.1 mA - Tach output - Motor current limit - Soft start - Set value input Lin 0-10 VDC / PWM (1.7 V corresponds to V=min, 10 V corresponds to V=max) - Control interface with SELV potential safely disconnected from the mains - Over-temperature protected electronics / motor
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	<= 3.5 mA
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 60335-1; CE

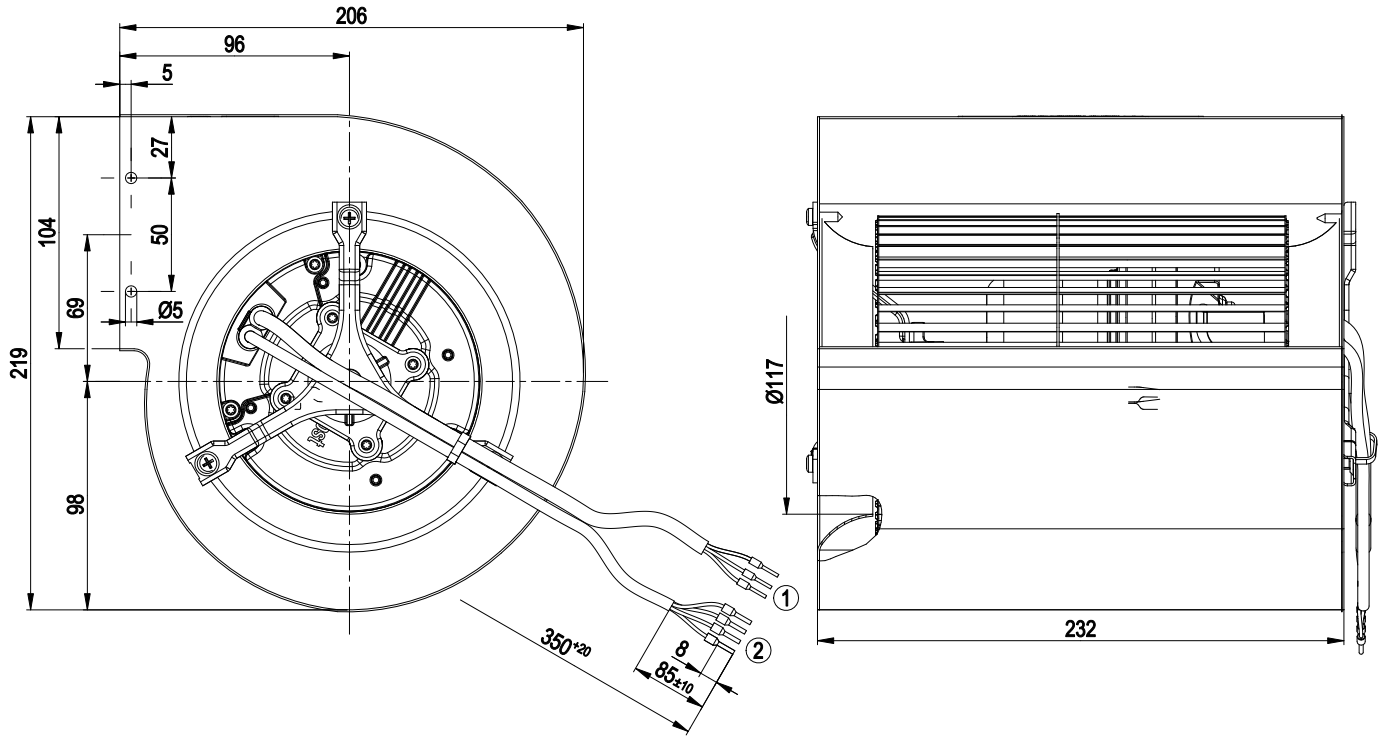
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Product drawing



1	Connection line AWG18, 3x crimped core-end sleeves
2	Connection line AWG22, 4x crimped core-end sleeves

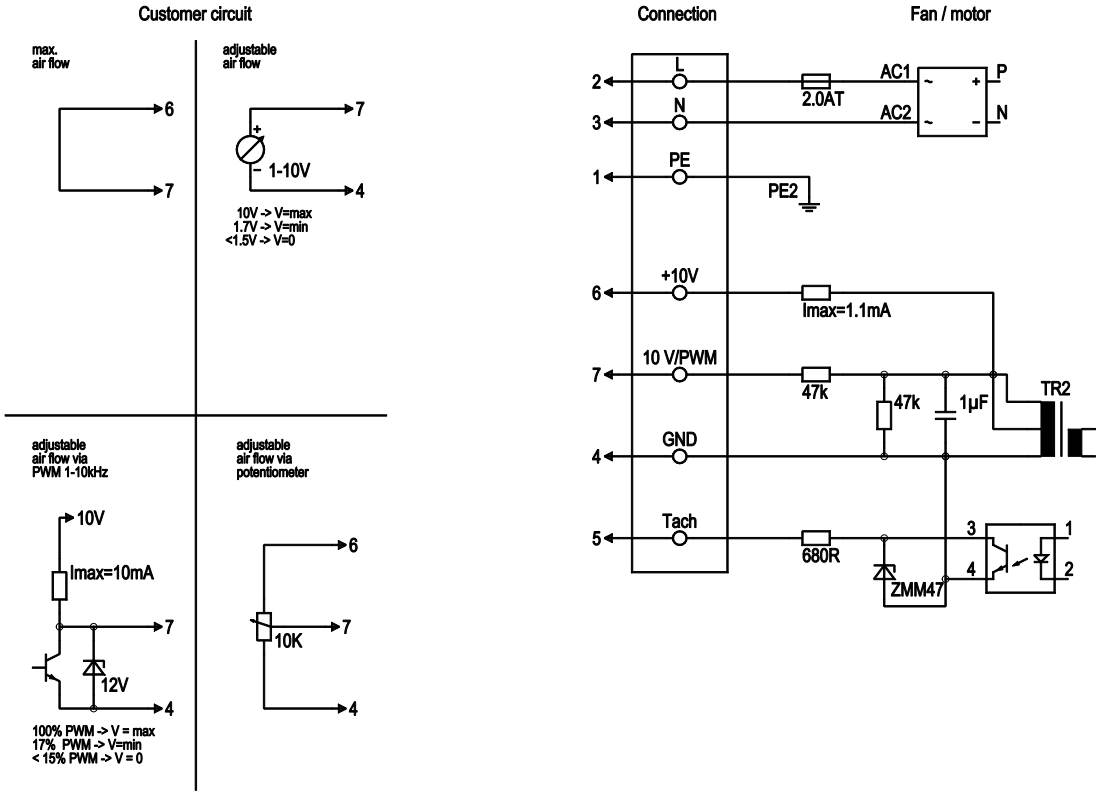
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Connection screen



Line	No.	Signal	Colour	Function / assignment
	2	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
	7	0-10 V PWM	yellow	Control input 0 - 10 V or PWM, electrically isolated
	5	Tach	white	Tach output: open collector, 1 pulse per revolution, electrically isolated
	6	10V / max 1.1 mA	red	Voltage output 10 V / 1 mA, electrically isolated
	4	GND	blue	GND - Connection for control interface

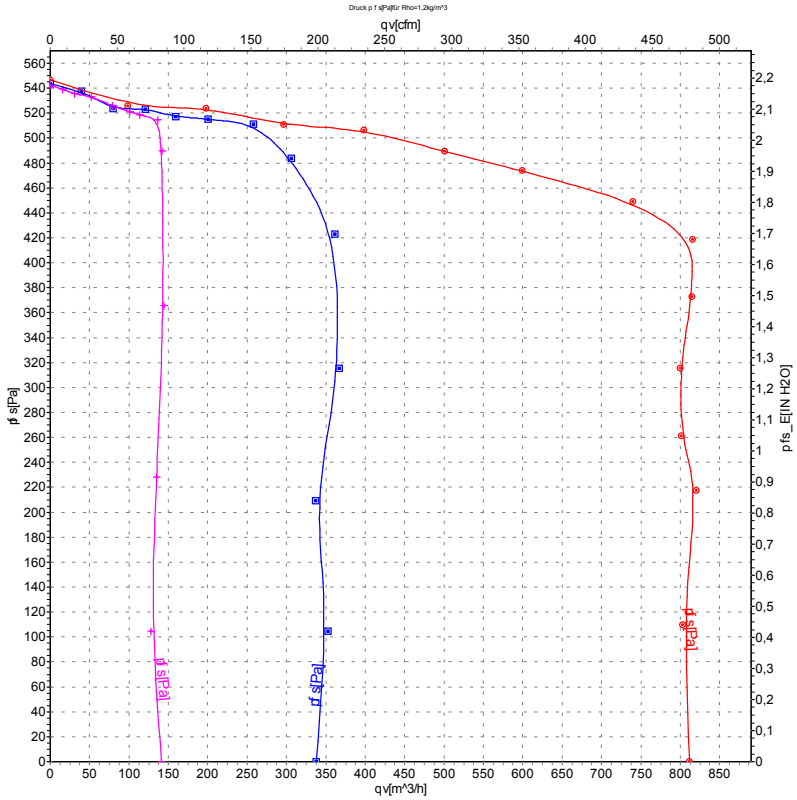
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Charts: Air flow 50 Hz



Measurement: LU-110203
Measurement: LU-110207
Measurement: LU-110211

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.

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