D3G146-HQ01-03

EC centrifugal fan

forward curved, dual inlet

with housing (large flange)

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Nominal data

Type	**D3G146-HQ01-03**
Motor	**M3G055-DF**

Phase		1~
Nominal voltage	[VAC]	230
Frequency	[Hz]	50/60
Type of data definition		ml
State		prelim.
Speed	[min^{-1}]	1850
Power input	[W]	170
Current draw	[A]	1.2
Min. back pressure	[Pa]	100
Min. ambient temperature	[°C]	-30
Max. ambient temperature	[°C]	+50

ml = max. load · me = max. efficiency · rfa = running at free air · cs = customer specs · cu = customer unit
Subject to alterations

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Technical features

Leackage current	<= 3.5 mA
Size	146 mm
Operation mode	S1
Direction of rotation	Counter-clockwise, seen on rotor
Mounting position	Any
Electrical leads	Via terminal box, integrated capacitor connected via terminal box; With plug
Insulation class	"F"
Cable exit	Variable
Condensate discharge holes	None, open rotor
Bearing motor	Ball bearing
Mass	2.4 kg
Material of electronics housing	PP plastic, black
Housing material	PP plastic, black
Material of impeller	PP plastic, white
Motor suspension	Motor anti-vibration mounted on both sides
Motor protection	Thermal overload protector (TOP) wired internally
Product conforming to standard	CE; EN 60335-1
Surface of rotor	Galvanised
Type of protection	IP 54; Motor IP54
Protection class	I
Technical features	- Output 10 VDC, max. 1.1 mA - Tach output - Motor current limit - Soft start - Control input 0-10 VDC / PWM - Over-temperature protected motor
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C

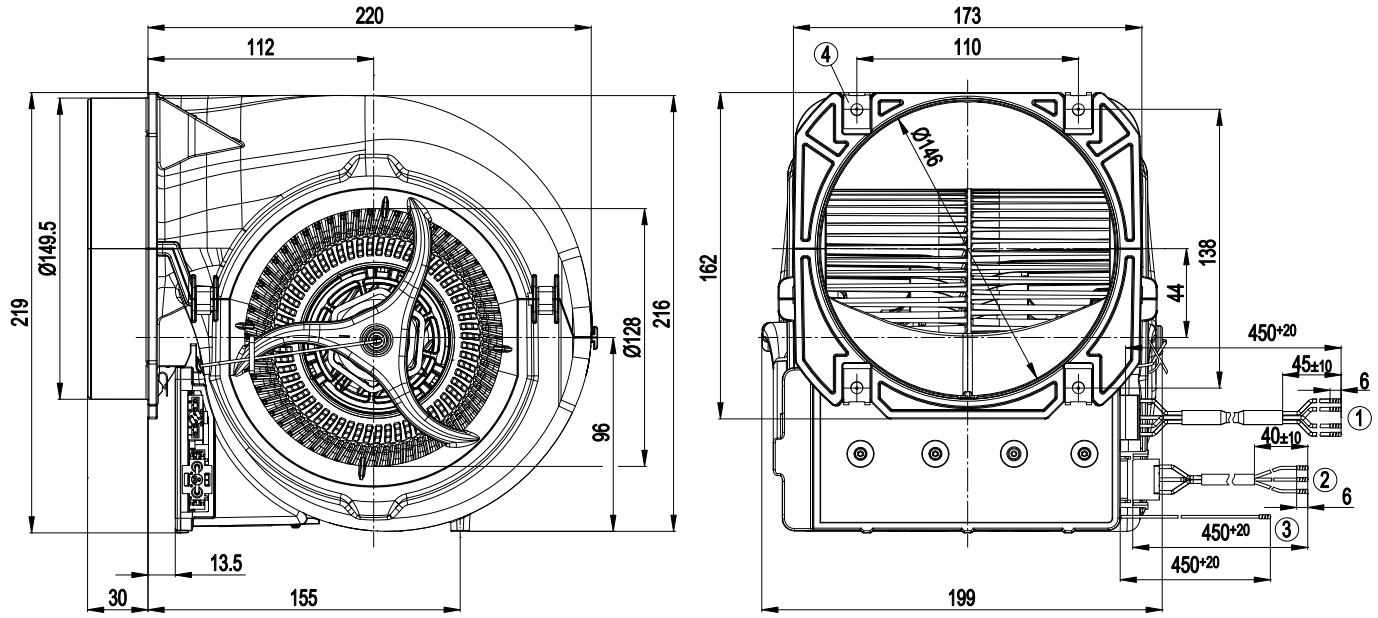
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Product drawing



Line	No.	Signal	Colour	Function / assignment
	1			Control line AWG20, 4 x brass lead tips crimped
			red	Voltage output 10V/ 1mA
			white	Tach output
			yellow	Control input 0 - 10V or PWM
			blue	GND - Connection for control interface
	2			Connection line PVC 3 x 0.5 mm²; 3 x brass lead tips crimped
			green/yellow	Protective earth
			brown	Power supply 230 VAC, 50 60 Hz, see type plate for voltage range
			blue	Neutral conductor
	3		green/yellow	Protective earth AWG20, 1 x brass lead tip crimped
	4			4 x sheet metal nut for thread EN ISO 1478-ST4.8 (min. screw length 14.5 mm plus thickness of mounting material)

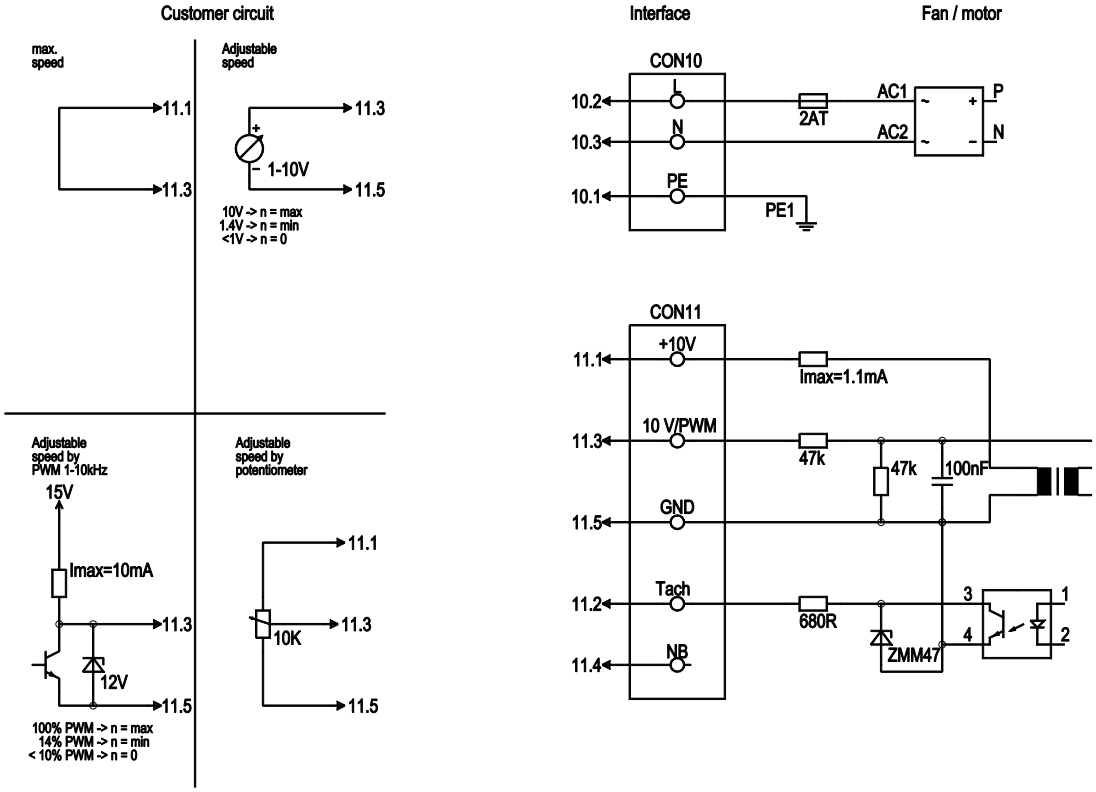
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Connection screen



Line	No.	Signal	Colour	Function / assignment
CON10	10.1	PE	green/yellow	Protective earth
CON10	10.2	L	brown	Power supply 230 VAC, 50-60 Hz, see type plate for voltage range
CON10	10.3	N	blue	Neutral conductor
CON11	11.1	10 V/max. 1.1 mA	red	Voltage output 10 V/ 1 mA, electrically isolated
CON11	11.2	Tacho	white	Tach output: open collector, 2 pulses per revolution, electrically isolated
CON11	11.3	0-10 V PWM	yellow	Control input 0 - 10 V or PWM, electrically isolated
CON11	11.4	NB		Not assigned
CON11	11.5	GND	blue	GND - Connection for control interface

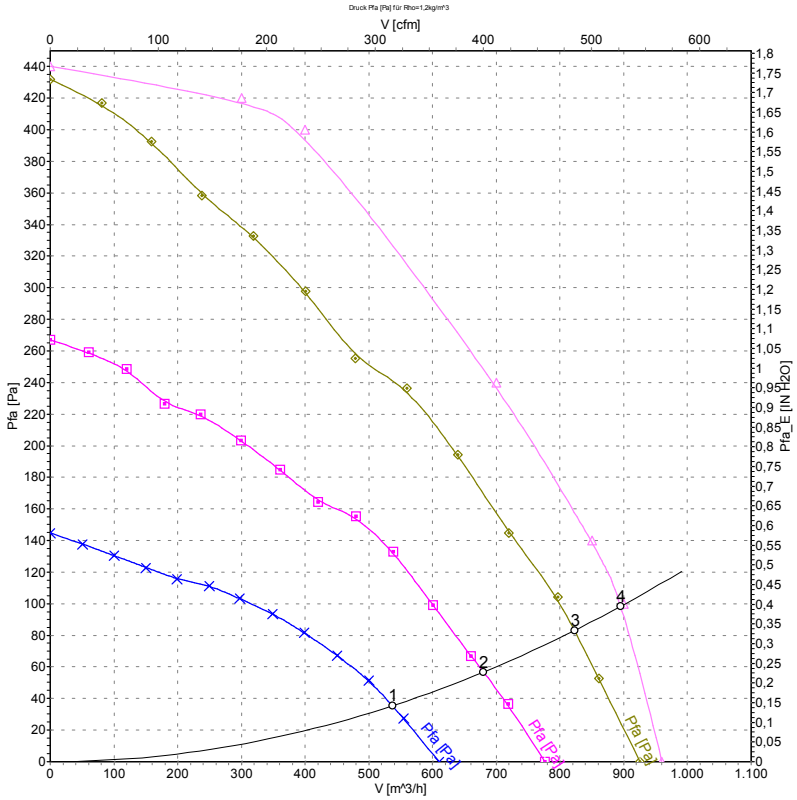
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Charts: Air flow 50 Hz



Measurement: LU-126588
Measurement: LU-126587
Measurement: LU-126586

Measured values

	U	f	n	P_1	I	$\dot{V}$	p_{fa}
	[V]	[Hz]	[min^{-1}]	[W]	[A]	[m^3/h]	[Pa]
1	230	50	1130	35	0.27	535	36
2	230	50	1420	74	0.57	680	57
3	230	50	1690	126	0.93	825	83
4	230	50	1850	170	1.20	900	100

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