G3G146-HK13-13

EC centrifugal fan

forward-curved, single-intake

with housing (flange)

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Nominal data

Type	**G3G146-HK13-13**	
Motor	**M3G055-DF**	
Nominal voltage	VDC	380
Nominal voltage range	VDC	370 .. 390
Method of obtaining data		fa
Speed (rpm)	min^{-1}	2330
Power consumption	W	175
Current draw	A	0.8
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	2.9 kg
Fan size	146 mm
Rotor surface	Thick-film passivated
Terminal box material	Die-cast aluminum
Impeller material	Sheet steel, galvanized
Housing material	Sheet steel, galvanized
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP54
Insulation class	"B"
Max. permitted ambient temp. for motor (transport/storage)	+ 80 °C
Min. permitted ambient temp. for motor (transport/storage)	- 40 °C
Installation position	Any
Condensation drainage holes	None, open rotor
Mode	S1
Motor bearing	Ball bearing
Technical features	- Output 10 VDC, max. 10 mA - Fault output (open collector) - 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
Motor protection	Locked-rotor protection
With cable	Variable
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1; CE

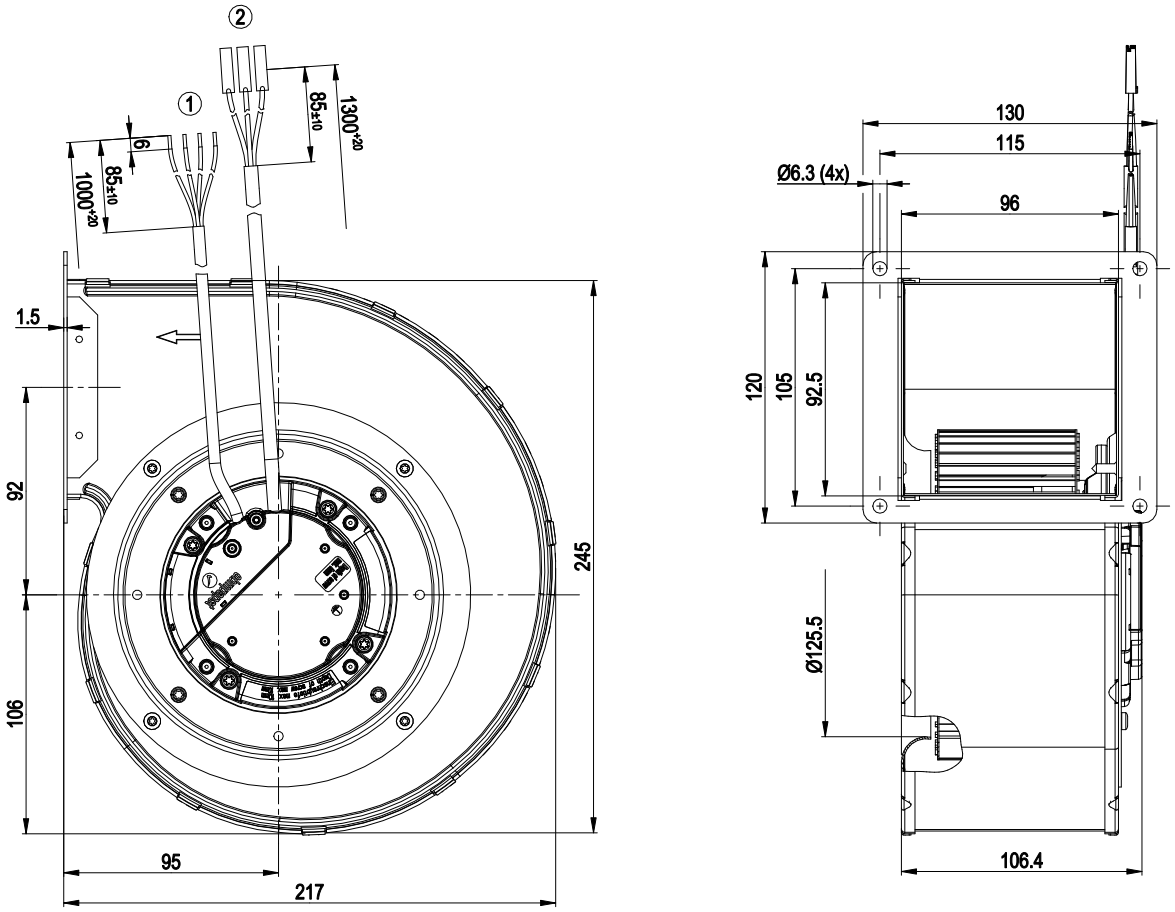
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Product drawing



1	Cable halogen-silicone-free 4x 0.25 mm², 4x crimped splices
2	Cable halogen-silicone-free 3x 0.5 mm², 3x flat push-on receptacle Stocko RSB 8100.001 F2.8-1, 3x insulator Stocko EH 657.100-G

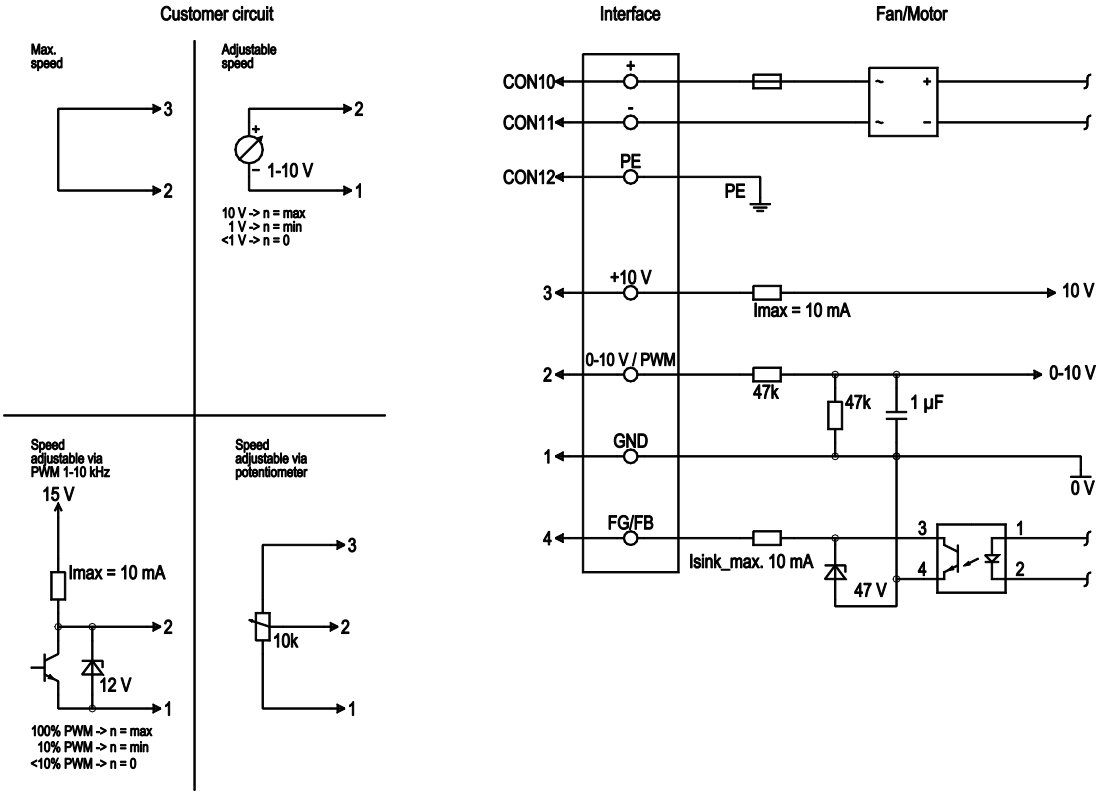
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Connection diagram



No.	Conn.	Designation	Color	Function/assignment
	CON10	+	brown	Supply connection, power supply +, voltage range see nameplate
	CON11	-	blue	Supply connection, power supply -, voltage range see nameplate
	CON12	PE	green/yellow	Ground connection
	3	+10 V	red	Fixed voltage output 10 VDC +/-3 %, Imax. 10 mA, short-circuit-proof, power supply for ext. devices (e.g. pot), SELV
	2	0- 10V PWM	yellow	0-10 V / PWM control input, Ri=100 kΩ, SELV
	1	GND	blue	Reference ground for control interface, SELV
	4	FG/FB	white	Fan good / fan bad: open collector, fan good = low, electrically isolated, Isink max = 10 mA
				Attention! Device may only be operated with control unit 61423-1-0173. This is not included in scope of delivery.

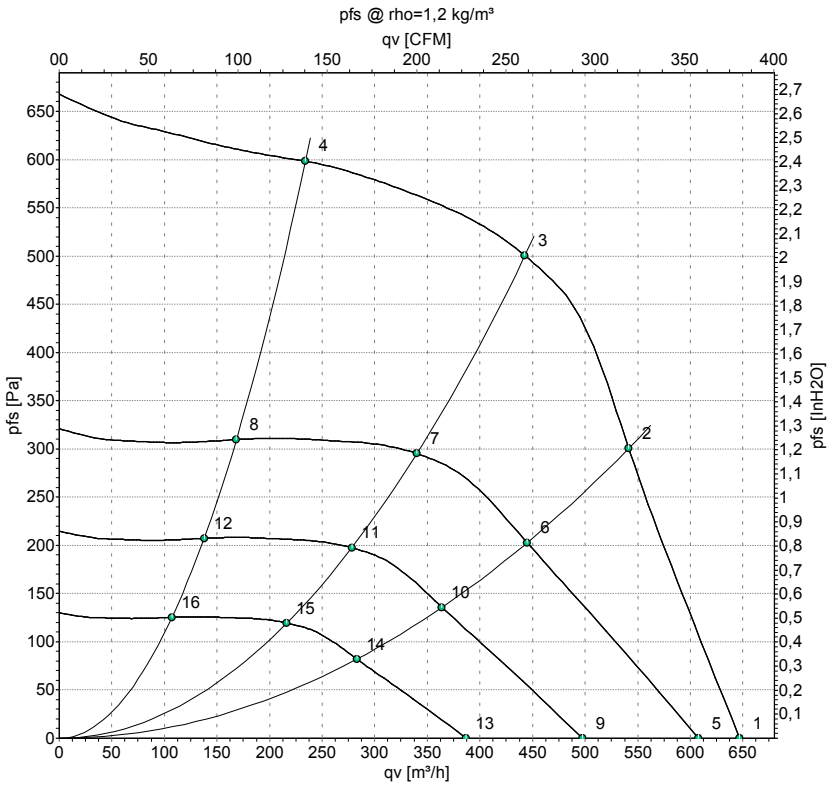
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Curves: Air performance 50 Hz



Measurement: LU-157063-1

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	n	P_{ed}	I	qv	p_{fs}	qv	p_{fs}
	V	min^{-1}	W	A	m^3/h	Pa	CFM	inH2O
1	380	2340	170	0.76	645	0	380	0.00
2	380	2675	170	0.76	540	300	320	1.20
3	380	2865	158	0.69	445	500	260	2.01
4	380	3060	102	0.45	235	600	140	2.41
5	380	2200	144	0.63	610	0	360	0.00
6	380	2200	96	0.42	445	202	260	0.81
7	380	2200	71	0.31	340	296	200	1.19
8	380	2200	38	0.17	170	310	100	1.24
9	380	1800	79	0.35	495	0	295	0.00
10	380	1800	53	0.23	365	136	215	0.55
11	380	1800	39	0.17	280	198	165	0.79
12	380	1800	21	0.09	140	207	80	0.83
13	380	1400	37	0.16	385	0	230	0.00
14	380	1400	25	0.11	285	82	165	0.33
15	380	1400	18	0.08	215	120	125	0.48
16	380	1400	10.0	0.04	105	125	65	0.50

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

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