G3G146-ED19-23

EC centrifugal fan

forward-curved, single-intake

with housing (flange)

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Nominal data

Type	**G3G146-ED19-23**	
Motor	**M3G055-CF**	
Nominal voltage	VDC	380
Nominal voltage range	VDC	370 .. 390
Method of obtaining data		fa
Speed (rpm)	min^{-1}	1930
Power consumption	W	110
Current draw	A	0.5
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	2.6 kg
Size	146 mm
Motor size	55
Rotor surface	Thick-film passivated
Impeller material	Sheet steel, galvanized
Housing material	Sheet steel, painted black
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
Condensation drainage holes	None, open rotor
Mode	S1
Motor bearing	Ball bearing
Technical features	- Output 10 VDC, max. 10 mA - 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
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	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1; CE

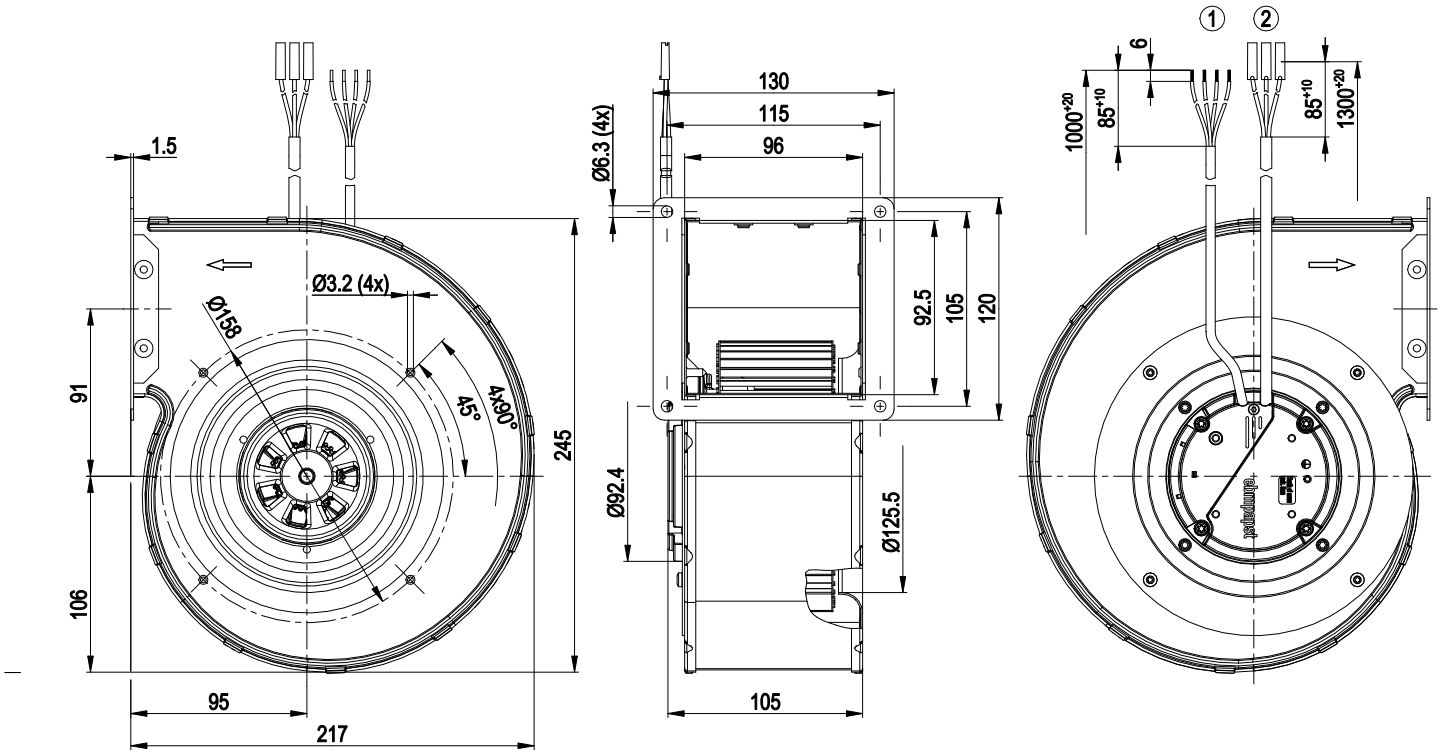
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Product drawing



1	Cable halogen-free, 4x 0.25 mm², 4x crimped splices
2	Cable halogen-free, 3G 0.5 mm², 3x flat push-on receptacle Stocko RSB 8100 F2.8-1, 3x insulator Stocko EH 657.100

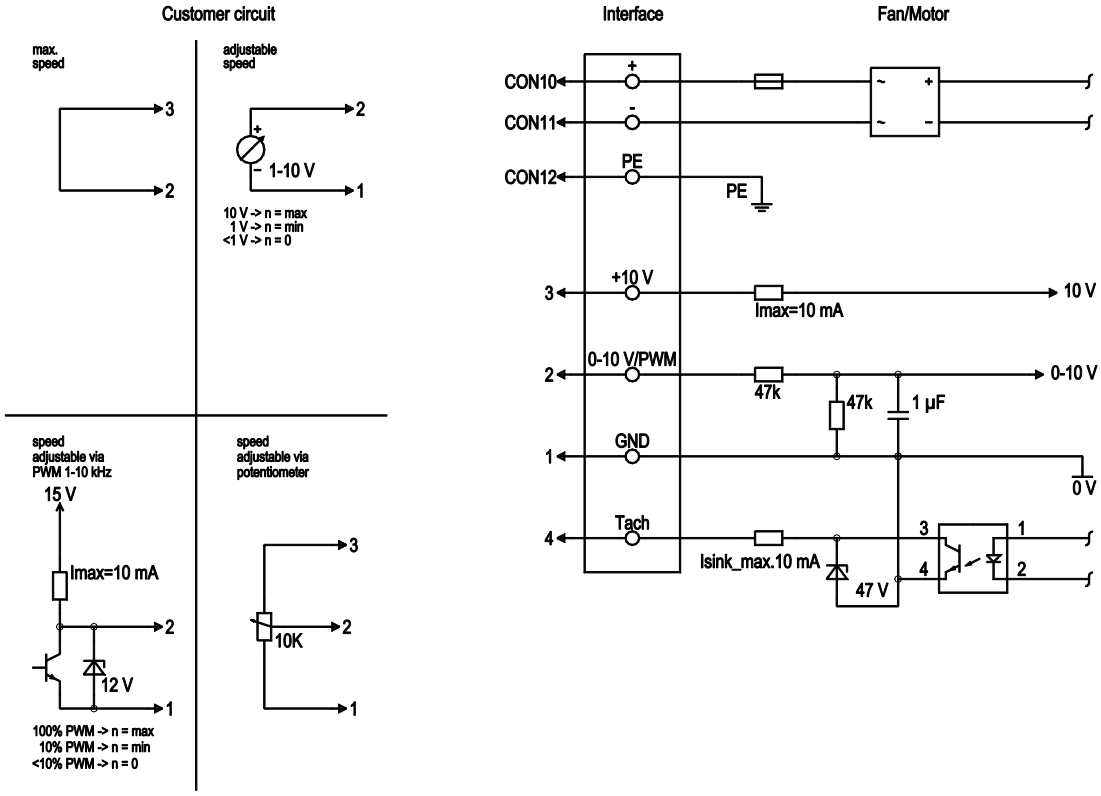
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Connection diagram



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. potentiometers), 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	Tacho	white	Tach output: open collector, 1 pulse per revolution, Isink max = 10 mA, SELV
				Attention: Device is only to be operated with control unit 61423-1-0173. This is not included in the scope of delivery.

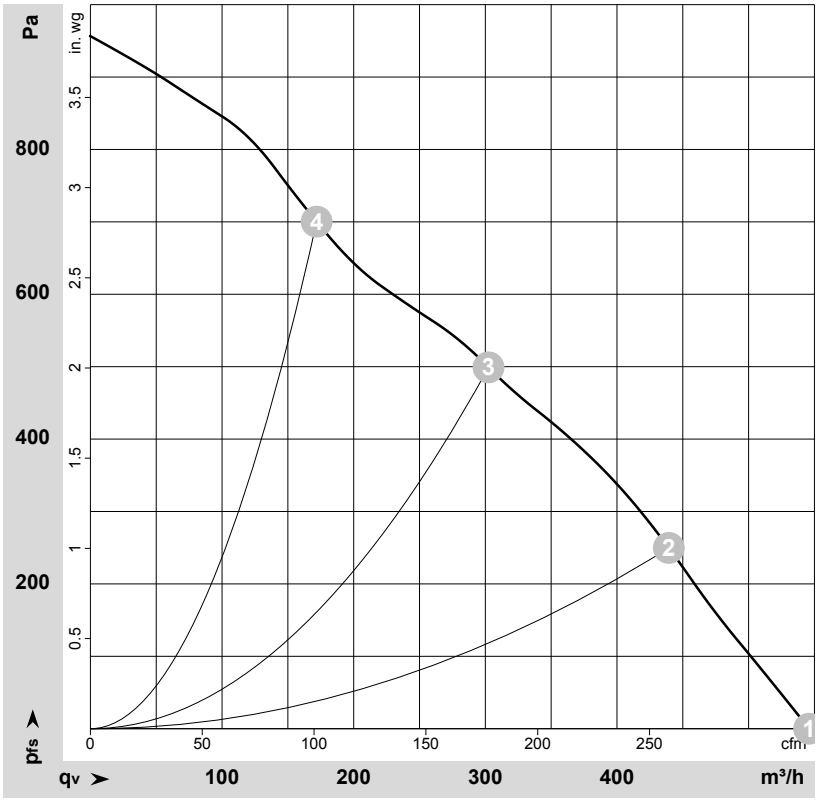
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Curves: Air performance



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-156812-1

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

	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)	m^3/h	Pa	cfm	in. wg
1	1~	230	50	1930	110	0.50	64	71	545	0	320	0.00
2	1~	230	50	2285	110	0.50	64	70	440	250	260	1.00
3	1~	230	50	2795	110	0.50	65	72	300	500	180	2.01
4	1~	230	50	3400	110	0.50	70	76	170	700	100	2.81

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

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