W3G250-HK19-14

EC axial compact fan

sickled blades (S series), single inlet

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Nominal data

Type	**W3G250-HK19-14**
Motor	**M3G055-CF**

Phase		1~
Nominal voltage	VAC	230
Nominal voltage range	VAC	200 .. 240
Frequency	Hz	50/60
Type of data definition		ml
Speed (rpm)	min^{-1}	3000
Power input	W	166
Current draw	A	1.4
Max. back pressure	Pa	150
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	45

ml = Max. load · me = Max. efficiency · fa = Running at free air · cs = Customer specs · cu = Customer unit
Subject to alterations

Data in accordance with ecodesign regulation EU 327/2011 (EN 17166)

		Actual	Request 2015
01 Overall efficiency η_{es}	%	42.2	28.8
02 Measurement category		A	
03 Efficiency category		Static	
04 Efficiency grade N		53.4	40
05 Variable speed drive		Yes	

09 Power input P_{ed}	kW	0.16
09 Air flow q_v	m^3/h	1505
09 Pressure increase p_{fs}	Pa	150
10 Speed (rpm) n	min^{-1}	2980
11 Specific ratio*		1.00

Data definition with optimum efficiency.
The ErP data is determined using a motor-impeller combination in a standardised measurement configuration.

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

LU-152884

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Technical features

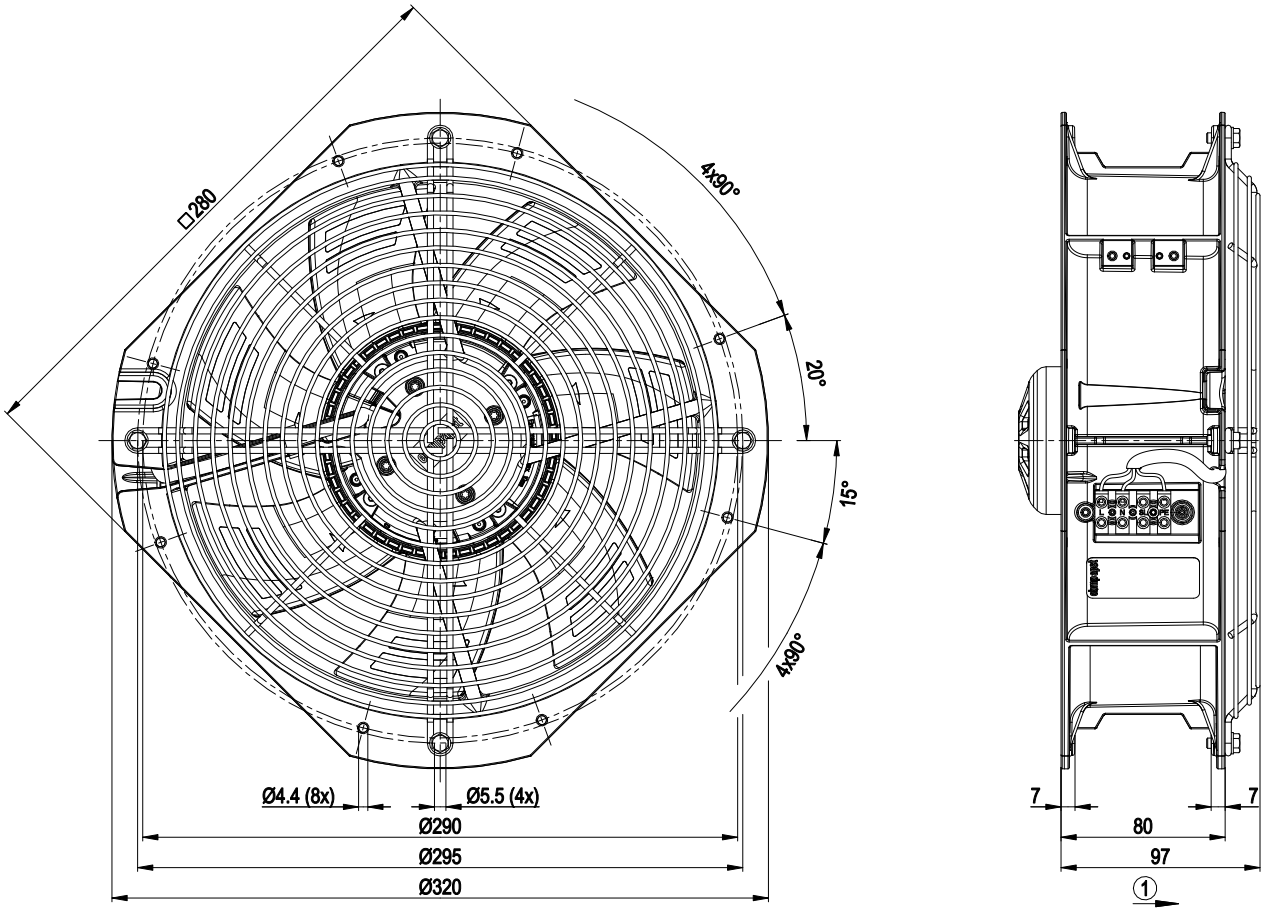
Mass	2.55 kg
Size	250 mm
Motor size	55
Surface of rotor	Thick layer passivated
Material of blades	Press-fitted, coated sheet steel blank, sprayed with PP plastic
Material of wall ring	Die-cast aluminium
Material of guard grille	Steel, coated in white aluminium plastic (RAL 9006)
Number of blades	7
Direction of air flow	V
Direction of rotation	Counter-clockwise, seen on rotor
Type of protection	IP54
Insulation class	"B"
Humidity (F) / environmental protection class (H)	H1
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Mounting position	Any
Condensation drainage holes	None, open rotor
Operation mode	S1
Motor bearing	Ball bearing
Technical features	- Speed adjustment input (230 V) - Output limit - Motor current limit - Soft start - Overvoltage detection - Over-temperature protected electronics / motor - Line undervoltage detection
Speed steps	2
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	<= 3.5 mA
Electrical connection	Terminal strip
Motor protection	Electronic motor protection
Cable exit	Variable
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60335-1; CE
Approval	CSA C22.2 no. 77; UL 1004-7

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Product drawing



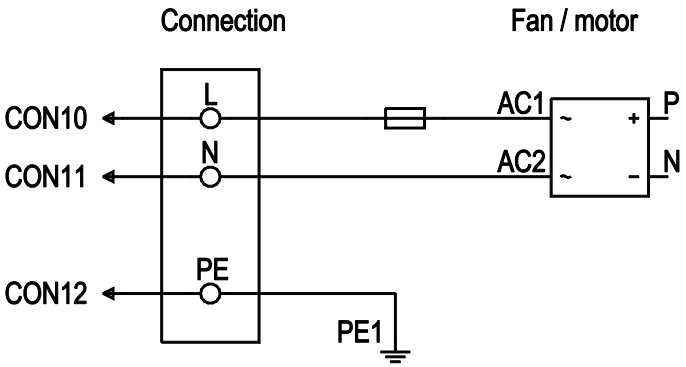
1	Direction of air flow "V"

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Connection screen



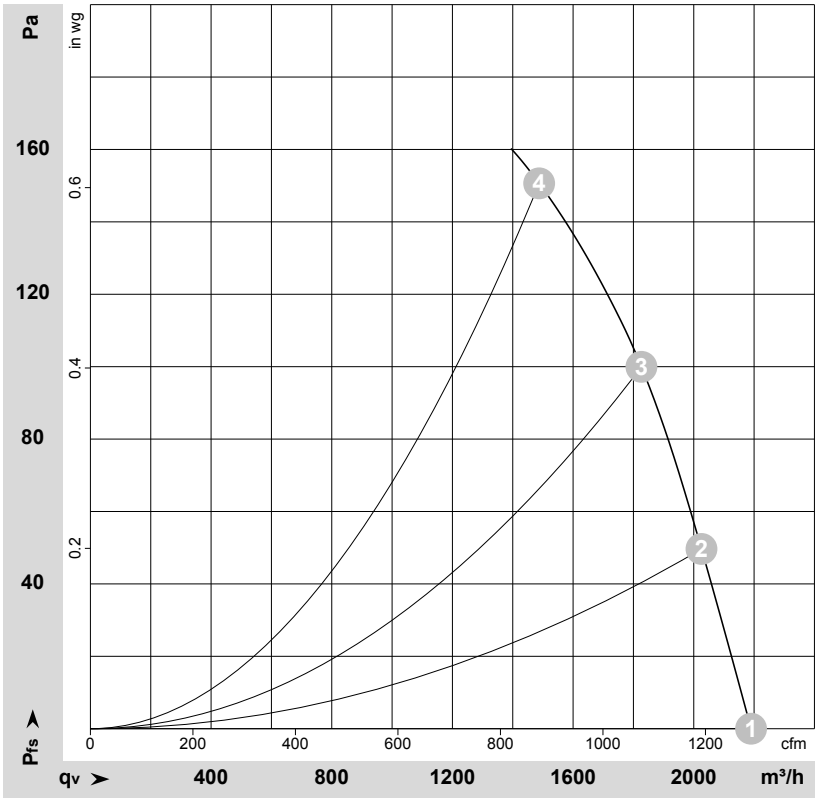
No.	Conn.	Designation	Colour	Function / assignment
	CON 10	L	black	Power supply 230 VAC, 50 - 60 Hz, for voltage range refer to rating plate
	CON 11	N	blue	Neutral conductor
	CON 12	PE	green/yellow	Protective earth

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Charts: Air flow 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-152884-1

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	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	230	50	3240	143	1.19	67	74	2190	0	1290	0.00
2	230	50	3175	156	1.30	67	74	2025	50	1190	0.20
3	230	50	3110	166	1.39	68	75	1825	100	1075	0.40
4	230	50	3000	166	1.40	66	73	1490	150	875	0.60

U = Supply voltage · f = Frequency · n = Speed (rpm) · P_{ed} = Power input · I = Current draw · LpA_{in} = Sound pressure level inlet side · LwA_{in} = Sound power level inlet side · q_V = Air flow
p_{fs} = Pressure increase

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