W3G300-HC05-01

EC axial fan

sickle-shaped blades (S series)

Fan housing with guard grille

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Nominal data

Type	**W3G300-HC05-01**
Motor	**M3G055-CF**

Phase		1~
Nominal voltage	VAC	230
Nominal voltage range	VAC	200 .. 240
Frequency	Hz	50/60
Method of obtaining data		ml
Speed (rpm)	min^{-1}	1700
Power consumption	W	80
Current draw	A	0.7
Max. back pressure	Pa	65
Max. back pressure	in. wg	0.26
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	45

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	2.2 kg
Size	300 mm
Motor size	55
Rotor surface	Cast in PA plastic
Blade material	PA plastic
Fan housing material	PP plastic
Number of blades	5
Airflow direction	V
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
Mode	S1
Motor bearing	Ball bearing
Technical features	- Output 10 VDC, max. 1.1 mA - Tach output - 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
EMC immunity to interference	According to EN 61000-6-2 (industrial environment)
EMC circuit feedback	According to EN 61000-3-2/3
EMC interference emission	According to EN 61000-6-3 (household environment)
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	CE; UKCA

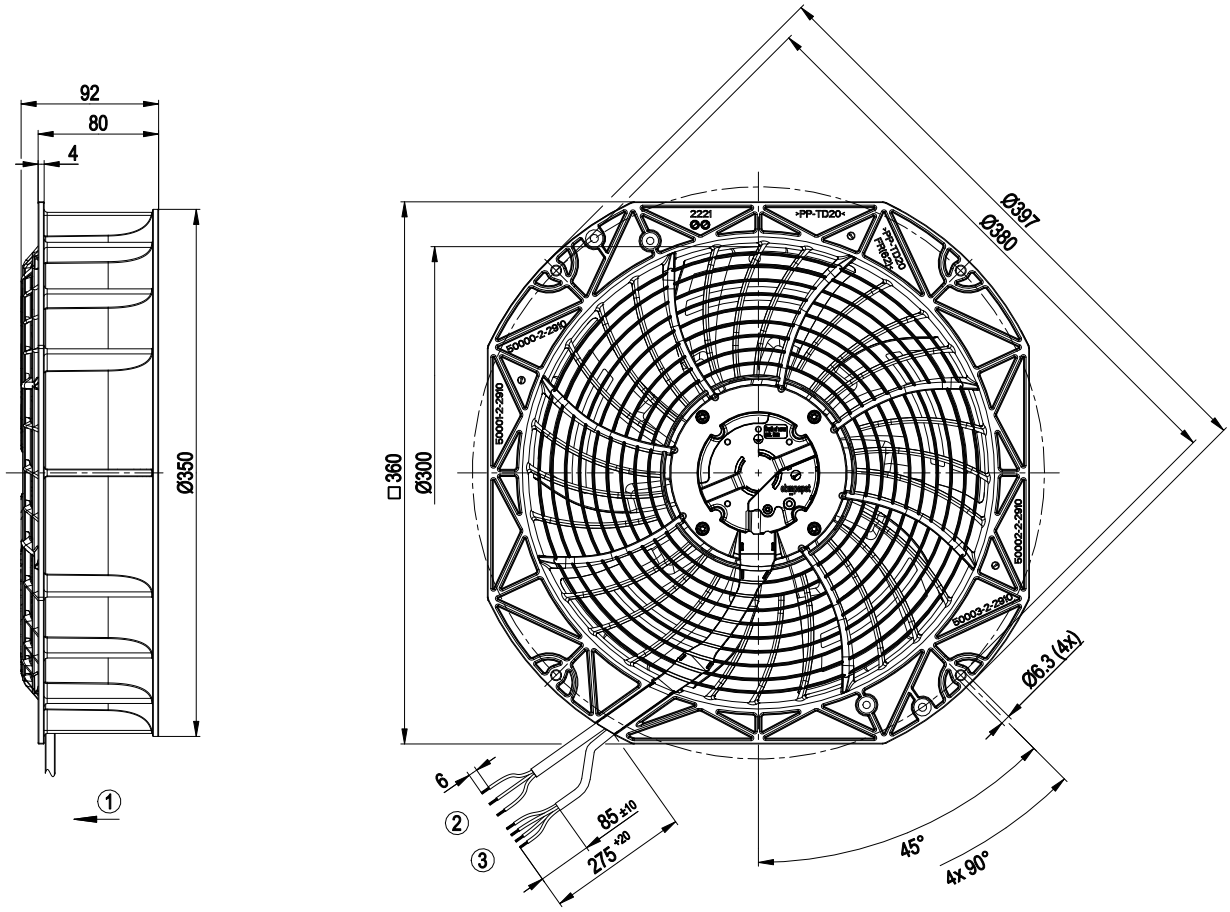
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Product drawing



1	Airflow direction "V"
2	Cable PVC AWG20, 3x crimped splices
3	Cable PVC AWG22, 4x crimped splices

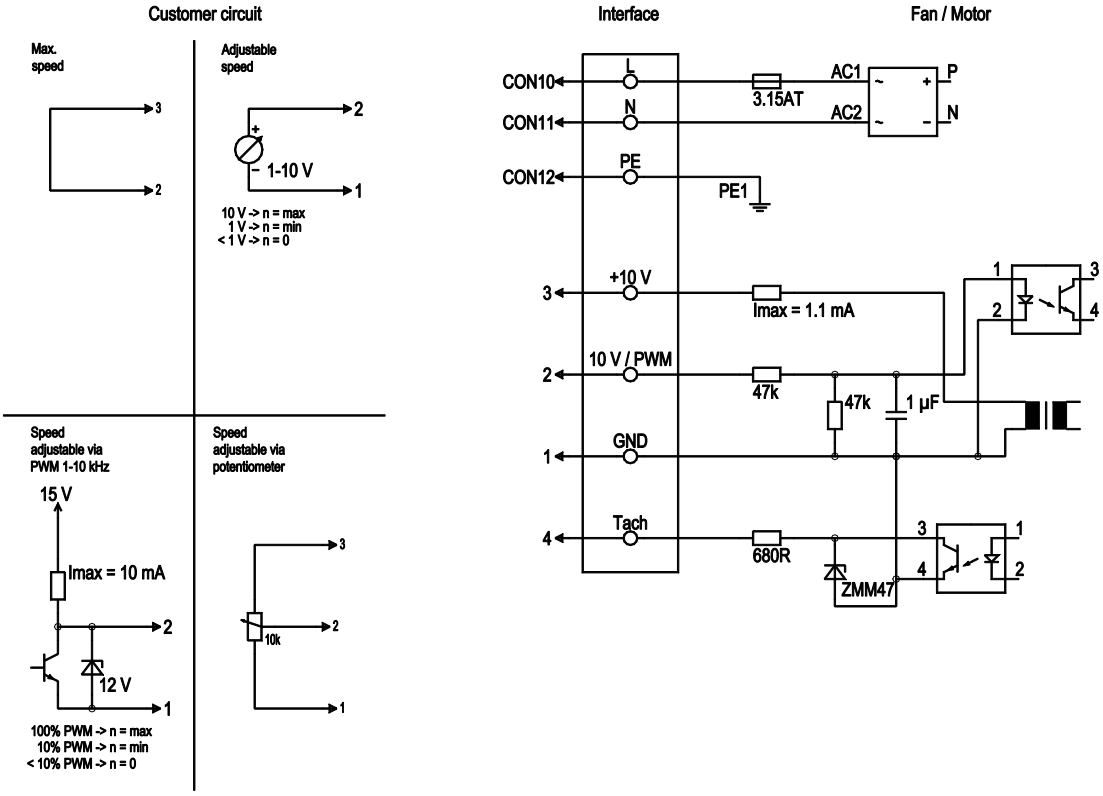
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Connection diagram



No.	Conn.	Designation	Color	Function/assignment
	CON10	L	black	Power supply 230 VAC, 50-60 Hz, see nameplate for voltage range
	CON11	N	blue	Neutral conductor
	CON12	PE	green/yellow	Protective earth
	1	GND	blue	GND connection for control interface
	2	0-10V PWM	yellow	Control input 0-10 V or PWM, electrically isolated
	3	10 V / max. 1,1 mA	red	Voltage output 10 VDC 1.1 mA, electrically isolated, short-circuit-proof
	4	Tacho	white	Tach output: open collector, 1 pulse per revolution, electrically isolated

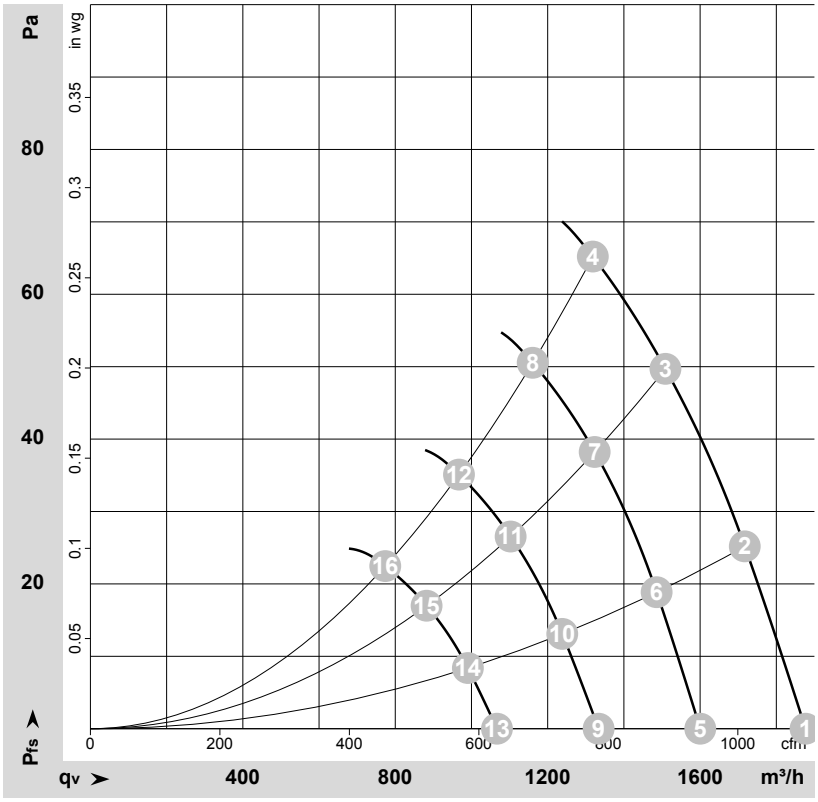
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Curves: Air performance 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-178585-1

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	f	n	P_{ed}	I	q_V	p_{fs}	q_V	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa	cfm	in. wg
1	230	50	1760	71	0.64	1875	0	1105	0.00
2	230	50	1735	75	0.68	1715	25	1010	0.10
3	230	50	1710	80	0.70	1510	50	890	0.20
4	230	50	1700	80	0.70	1320	65	775	0.26
5	230	50	1500	44	0.40	1600	0	940	0.00
6	230	50	1500	49	0.44	1485	19	875	0.08
7	230	50	1500	53	0.47	1325	39	780	0.16
8	230	50	1500	53	0.48	1160	51	685	0.20
9	230	50	1250	25	0.23	1335	0	785	0.00
10	230	50	1250	28	0.25	1240	13	730	0.05
11	230	50	1250	31	0.27	1105	27	650	0.11
12	230	50	1250	31	0.28	965	35	570	0.14
13	230	50	1000	13	0.12	1065	0	630	0.00
14	230	50	1000	14	0.13	990	8	585	0.03
15	230	50	1000	16	0.14	880	17	520	0.07
16	230	50	1000	16	0.14	775	23	455	0.09

U = Voltage · f = Frequency · n = Speed (rpm) · P_{ed} = Power consumption · I = Current draw · q_V = Air flow · p_{fs} = Pressure increase

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