W3G330-CA76-02

EC axial fan

sickle-shaped blades (S series)

with round full nozzle

Nominal data

Type	**W3G330-CA76-02**
Motor	**M3G074-CF**

Phase		1~
Nominal voltage	VAC	115
Nominal voltage range	VAC	100 .. 130
Frequency	Hz	50/60
Method of obtaining data		ml
Status		prelim.
Speed (rpm)	min^{-1}	1550
Power consumption	W	168
Current draw	A	2.1
Max. back pressure	Pa	110
Max. back pressure	in. wg	0.44
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	60

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	5.6 kg
Size	330 mm
Motor size	74
Rotor surface	Painted black
Electronics housing material	Die-cast aluminum
Impeller material	Sheet steel, painted black
Fan housing material	Steel, phosphated and coated with black plastic (RAL 9005)
Guard grille material	Steel, phosphated and coated with black plastic (RAL 9005)
Number of blades	5
Airflow direction	A
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP44
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	H1; F3-1
Max. permitted ambient temp. for motor (transport/storage)	+ 80 °C
Min. permitted ambient temp. for motor (transport/storage)	- 40 °C
Installation position	Shaft horizontal or rotor on bottom; rotor on top on request
Condensation drainage holes	On rotor side
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 - Thermal overload protection for motor
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	<= 3.5 mA
Motor protection	Thermal overload protector (TOP) internally connected
With cable	Variable
Protection class	I (with customer connection of protective earth)
Approval	CSA C22.2 No. 77 + CAN/CSA-E60730-1; UL 1004-3 + 60730-1

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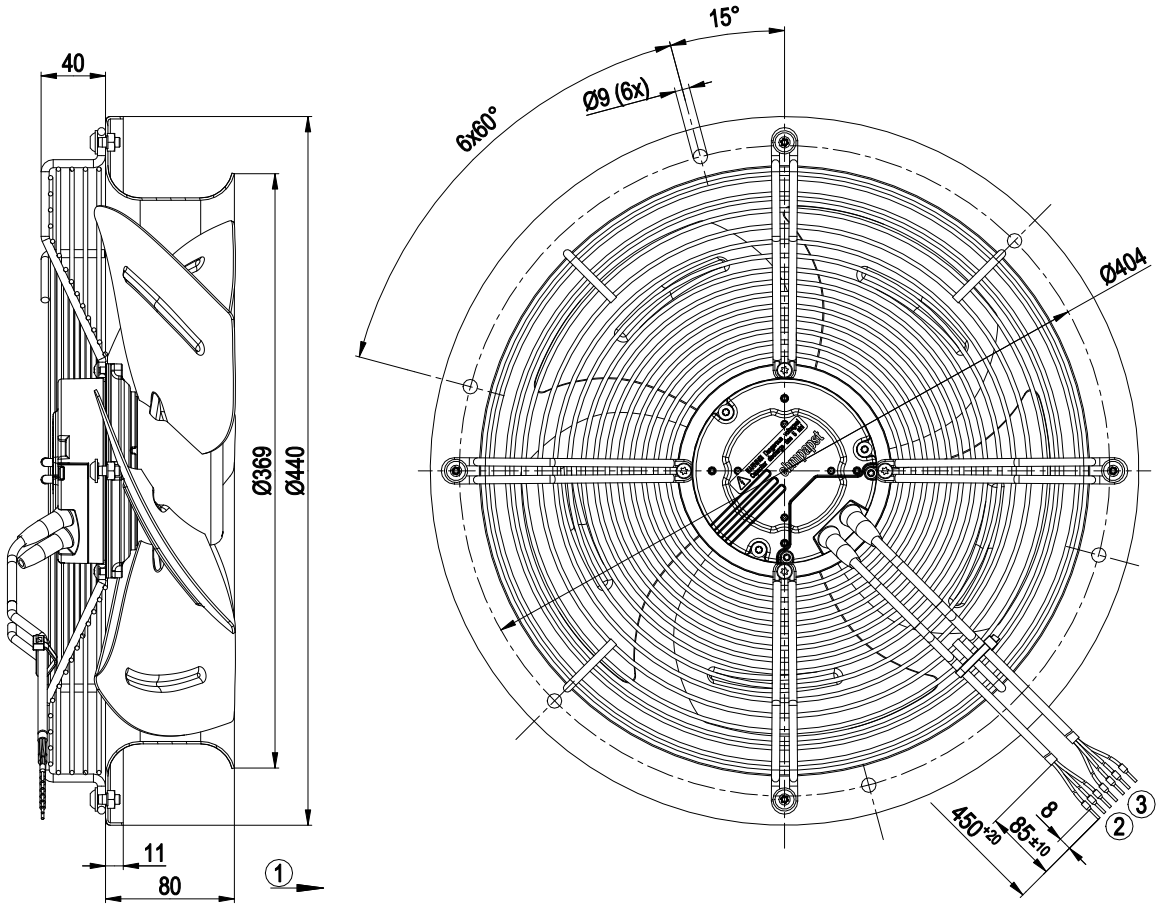
Product drawing



1	Direction of air flow "A"
2	Cable PVC AWG18
	3x wire-end ferrule
3	Cable PVC AWG22
	4x wire-end ferrule

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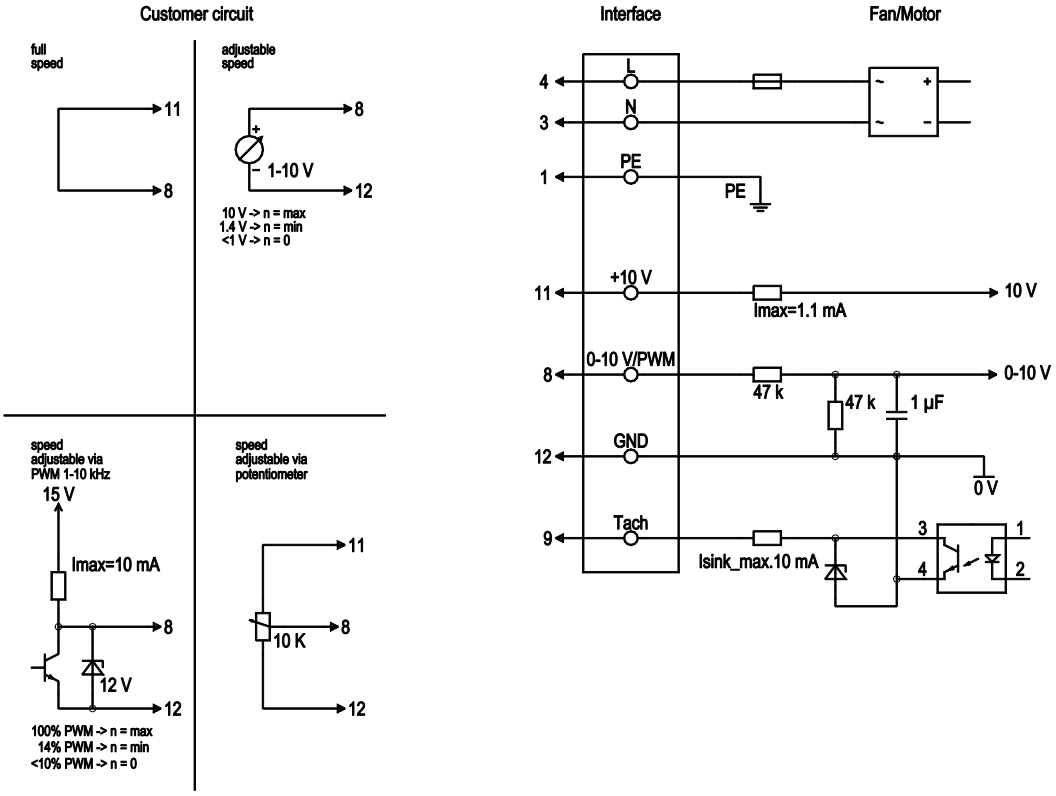
Connection diagram



Not switchable via power supply. Restart via input voltage only after 5 minute delay.

No.	Conn.	Designation	Color	Function/assignment
	4	L	black	Supply connection, power supply, phase, voltage range see nameplate, 50/60 Hz
	3	N	blue	Supply connection, power supply, neutral conductor, voltage range see nameplate, 50/60 Hz
	1	PE	green/yellow	Ground connection
	8	0-10 V / PWM	yellow	0-10 V / PWM control input, Ri=100 kΩ, SELV
	9	Tacho	white	Tach output, open collector, 1 pulse per revolution, Isink max = 10 mA, SELV
	11	+10 V	red	Fixed voltage output 10 VDC +/-3 %, Imax.= 1.1 mA, short-circuit-proof, power supply for ext. devices (e.g. potentiometers), SELV
	12	GND	blue	Reference ground for control interface, SELV

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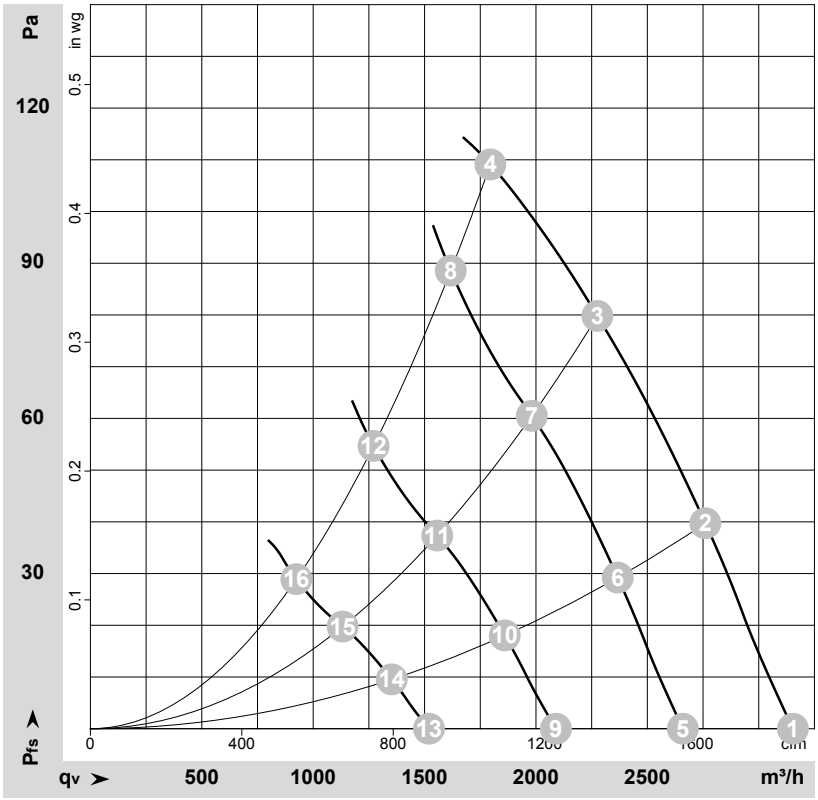
Curves: Air performance 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-75331-1

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	115	50	1660	130	1.68	3155	0	1855	0.00
2	115	50	1635	143	1.82	2760	40	1625	0.16
3	115	50	1610	150	1.89	2275	80	1340	0.32
4	115	50	1550	168	2.10	1795	110	1055	0.44
5	115	50	1400	79	1.01	2660	0	1565	0.00
6	115	50	1400	90	1.15	2365	29	1395	0.12
7	115	50	1400	99	1.25	1980	61	1165	0.24
8	115	50	1400	120	1.50	1620	88	950	0.35
9	115	50	1100	38	0.49	2090	0	1230	0.00
10	115	50	1100	44	0.56	1860	18	1095	0.07
11	115	50	1100	48	0.61	1555	37	915	0.15
12	115	50	1100	58	0.73	1270	54	750	0.22
13	115	50	800	15	0.19	1520	0	895	0.00
14	115	50	800	17	0.21	1355	10	795	0.04
15	115	50	800	18	0.23	1130	20	665	0.08
16	115	50	800	22	0.28	925	29	545	0.12

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