A3G350-AK58-12

EC axial fan

sickled blades (S series)

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Nominal data

Type	**A3G350-AK58-12**
Motor	**M3G074-CF**

Phase		1~
Nominal voltage	VAC	230
Nominal voltage range	VAC	200 .. 277
Frequency	Hz	50/60
Type of data definition		me
Speed (rpm)	min^{-1}	1500
Power input	W	170
Current draw	A	1.35
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	60

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

Data according to ErP directive

		Actual	Request 2015
01 Overall efficiency η_{es}	%	40	28.8
02 Measurement category		A	
03 Efficiency category		Static	
04 Efficiency grade N		51.2	40
05 Variable speed drive		Yes	

09 Power input P_{ed}	kW	0.17
09 Air flow q_v	m^3/h	2100
09 Pressure increase p_{fs}	Pa	105
10 Speed (rpm) n	min^{-1}	1500
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-136504

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Technical features

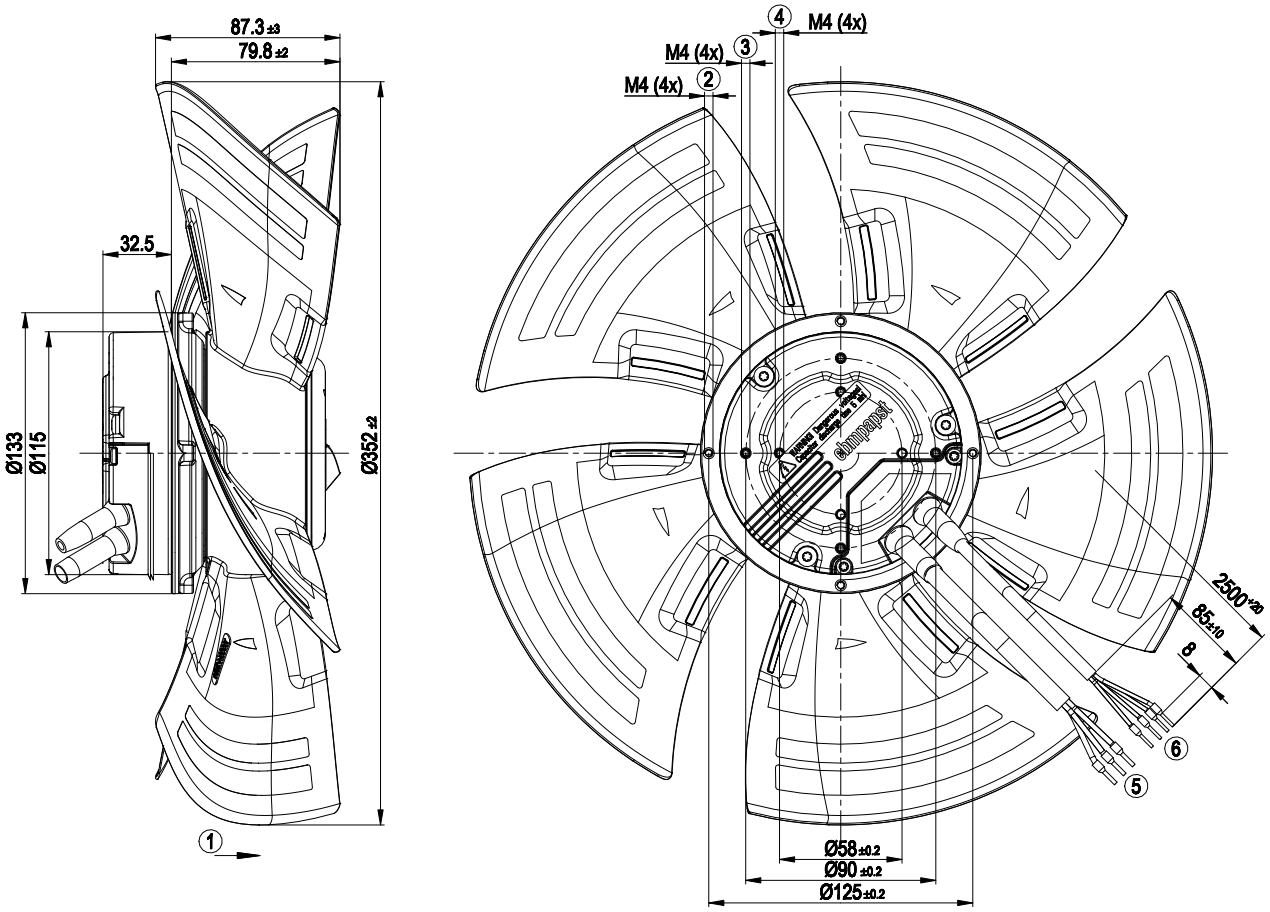
Mass	2.9 kg
Size	350 mm
Surface of rotor	Coated in black
Material of electronics housing	Die-cast aluminium
Material of blades	PP plastic
Number of blades	5
Direction of air flow	"A"
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 44; Depending on installation and position as per EN 60034-5
Insulation class	"B"
Humidity (F)/environmental protection class (H)	F3-1
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Mounting position	Shaft horizontal or rotor on top; rotor on bottom on request
Condensate discharge holes	None
Operation mode	S1
Motor bearing	Ball bearing
Technical features	- Control input 0-10 VDC / PWM - Output 10 VDC, max. 1.1 mA - Tach output - Over-temperature protected motor - Soft start
EMC interference immunity	Acc. to EN 61000-6-2 (industrial environment)
EMC harmonics	Acc. to EN 61000-3-2/3
EMC interference emission	Acc. to EN 61000-6-3 (household environment)
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	<= 3.5 mA
Motor protection	Thermal overload protector (TOP) wired internally
Cable exit	Variable
Protection class	I (if protective earth is connected by customer)

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Product drawing



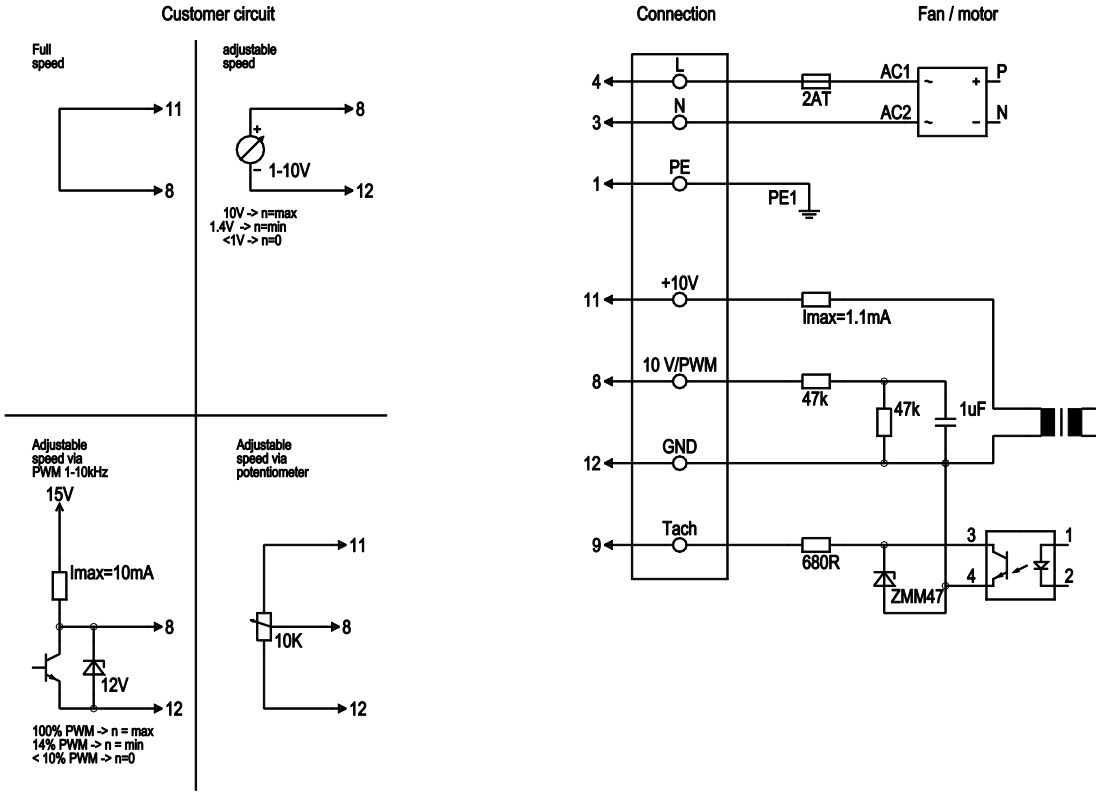
1	Direction of air flow "A"
2	Depth of screw max. 10 mm
3	Pilot hole prepared for self-tapping screw M4, depth of screw max. 6 mm
4	Pilot hole prepared for self-tapping screw M4, depth of screw max. 8 mm
5	Connection line PVC 3G AWG18, 3x brass lead tips crimped
6	Connection line PVC 4X AWG22, 4x brass lead tips crimped

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Connection screen



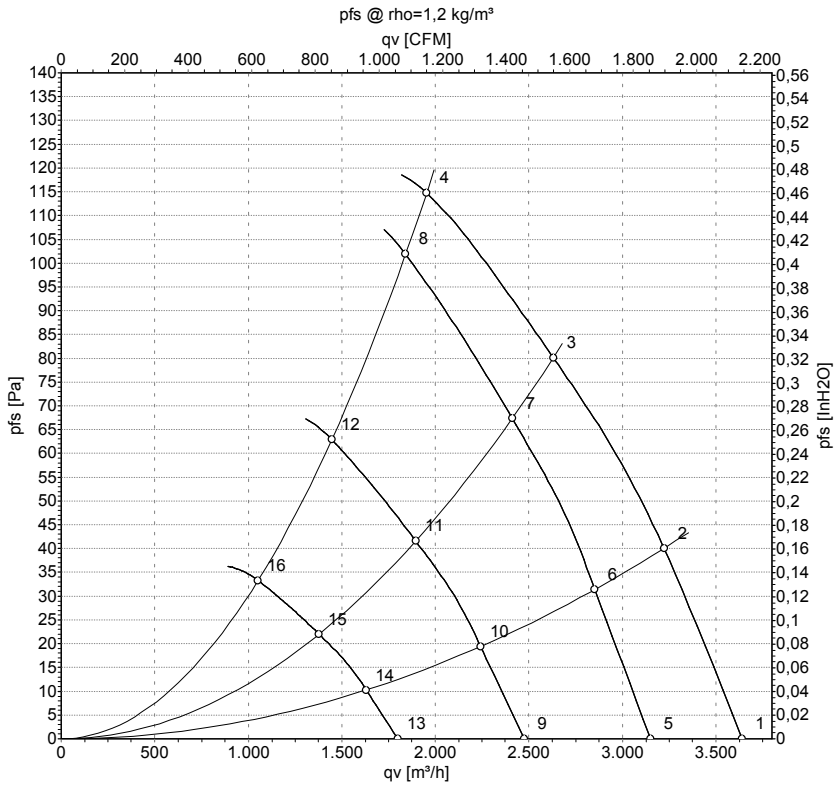
No.	Conn.	Designation	Colour	Function / assignment
	4	L	black	Power supply 230 VAC, 50-60 Hz, see type plate for voltage range
	3	N	blue	Neutral conductor
	1	PE	green/yellow	Protective earth
	8	0-10 V PWM	yellow	Control input 0 - 10 V or PWM, electrically isolated
	9	Tach	white	Tach output: open collector, 1 pulse per revolution, electrically isolated
	11	10V / max 1.1 mA	red	Voltage output 10 V / max. 1.1 mA, electrically isolated
	12	GND	blue	GND - Connection for control interface

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Charts: Air flow 50 Hz



Measurement: LU-136504-1

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	q_V	p_{fs}	q_V	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa	cfm	inH2O
1	230	50	1620	165	1.34	3640	0	2145	0.00
2	230	50	1585	173	1.39	3225	40	1895	0.16
3	230	50	1525	173	1.40	2630	80	1550	0.32
4	230	50	1470	173	1.40	1955	115	1150	0.46
5	230	50	1400	107	0.87	3150	0	1855	0.00
6	230	50	1400	119	0.96	2855	31	1680	0.12
7	230	50	1400	134	1.08	2410	67	1420	0.27
8	230	50	1400	145	1.17	1840	102	1085	0.41
9	230	50	1100	52	0.42	2475	0	1455	0.00
10	230	50	1100	58	0.47	2240	19	1320	0.08
11	230	50	1100	65	0.52	1895	42	1115	0.17
12	230	50	1100	70	0.57	1445	63	850	0.25
13	230	50	800	20	0.16	1800	0	1060	0.00
14	230	50	800	22	0.18	1630	10	960	0.04
15	230	50	800	25	0.20	1380	22	810	0.09
16	230	50	800	27	0.22	1050	33	620	0.13

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

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