

A3G350-BK06-G6 ebmpapst Datasheet

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## Nominal data

Type	A3G350-BK06-G6	
Motor	M3G084-DF	
Phase		1~
Nominal voltage	VAC	230
Nominal voltage range	VAC	200 .. 277
Frequency	Hz	50/60
Method of obtaining data		ml
Status		prelim.
Speed	min <sup>-1</sup>	1700
Power consumption	W	220
Current draw	A	1.0
Max. back pressure	Pa	120
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

## Data according to ErP Directive

		Actual	Req. 2015			
01 Overall efficiency $\eta_{es}$	%	43.4	29.4	09 Power consumption $P_{ed}$	kW	0.21
02 Measurement category		A		09 Air flow $q_v$	m <sup>3</sup> /h	2100
03 Efficiency category		Static		09 Pressure increase $p_{fs}$	Pa	144
04 Efficiency grade N		54	40	10 Speed n	min <sup>-1</sup>	1705
05 Variable speed drive		Yes		11 Specific ratio*		1.00

Data obtained at optimum efficiency level.

The ErP data is determined using a motor-impeller combination in a standardized measurement setup.

\* Specific ratio =  $1 + p_s / 100\,000\text{ Pa}$ 

LU-165152



### Technical description

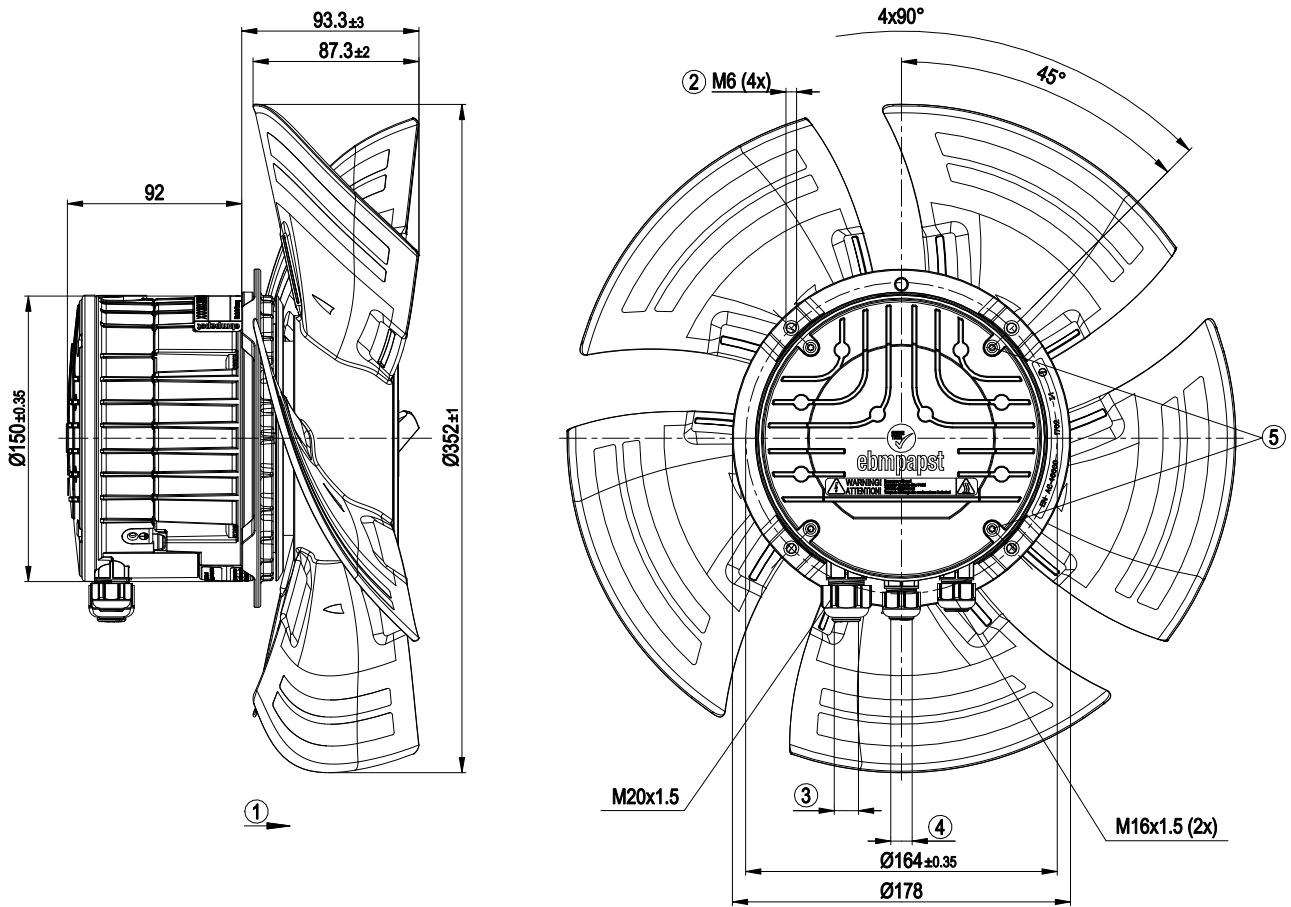
Weight	3.9 kg
Fan size	350 mm
Rotor surface	Painted black
Terminal box material	PP plastic
Electronics housing material	Die-cast aluminum, painted black
Blade material	Press-fitted, painted sheet steel blank, sprayed with PP plastic
Number of blades	5
Airflow direction	"A"
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP55
Insulation class	"F"
Moisture (F) / Environmental (H) protection class	F5
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 top; rotor on bottom on request
Condensation drainage holes	None
Mode	S1
Motor bearing	Ball bearing
Technical features	<ul style="list-style-type: none"> <li>- Output 10 VDC, max. 10 mA</li> <li>- Operation and alarm display</li> <li>- Alarm relay</li> <li>- Integrated PID controller</li> <li>- Power limiter</li> <li>- Motor current limitation</li> <li>- PFC, active</li> <li>- RS-485 MODBUS-RTU</li> <li>- Soft start</li> <li>- Control input 0-10 VDC / PWM</li> <li>- Control interface with SELV potential safely disconnected from the mains</li> <li>- Thermal overload protection for electronics/motor</li> <li>- Line undervoltage / phase failure detection</li> </ul>
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	<= 3.5 mA
Electrical hookup	Via terminal box
Motor protection	Thermal overload protector (TOP) internally connected
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 61800-5-1; CE
Approval	C22.2 No.77 + CAN/CSA-E60730-1; EAC; UL 1004-7 + 60730
Comment	Conformity with EN 60335-1 in preparation

# EC axial fan - HyBlade

sickle-shaped blades (S series)

for barn ventilation

## Product drawing



1	Direction of air flow "A"
2	Max. clearance for screw 16 mm
3	Cable diameter min. 8 mm, max. 12 mm, tightening torque $2.5 \pm 0.4$ Nm
4	Cable diameter min. 6 mm, max. 10 mm, tightening torque $2.5 \pm 0.4$ Nm Cable diameter min. 4 mm, max. 7 mm, tightening torque $2.5 \pm 0.4$ Nm (included seal must be used)
5	Tightening torque $1.5 \pm 0.2$ Nm

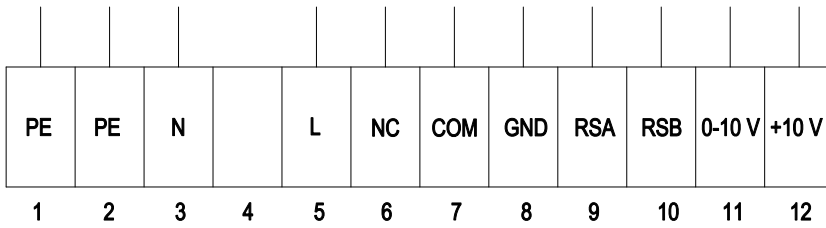


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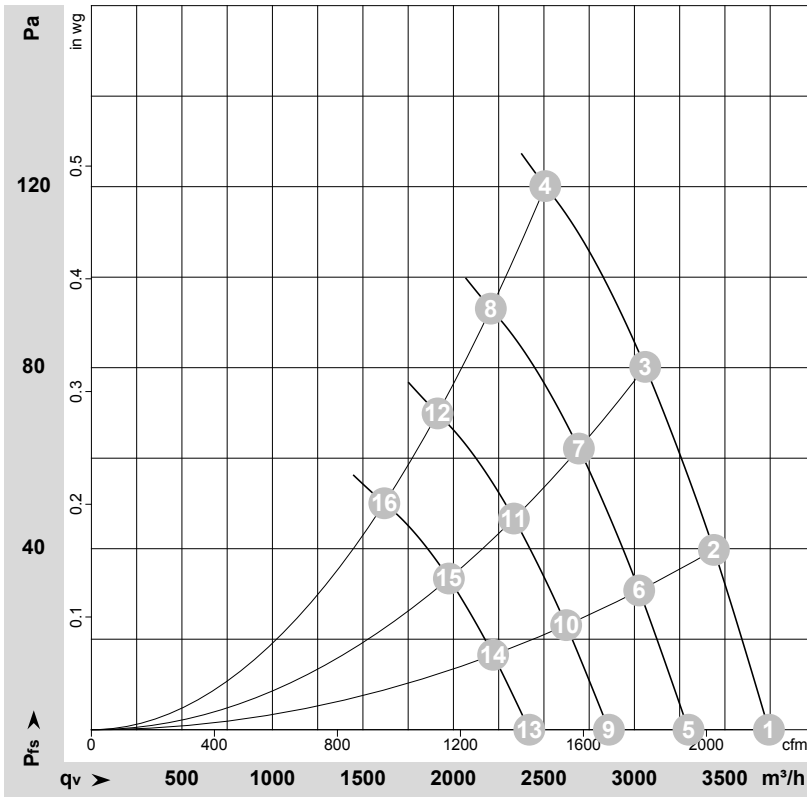
## Connection diagram



No.	Conn.	Designation	Function/assignment
1	PE	PE	Protective earth
2	PE	PE	Protective earth
3	N	N	Power supply, neutral conductor
4	-	-	not used
5	L	L	Power supply, phase
6	NC	NC	Status relay, floating status contact, break for failure, contact rating 250 VAC / 2 A (AC1) / min. 10 mA; basic insulation on supply side and reinforced insulation on control interface side
7	COM	COM	Status relay, floating status contact, common connection, contact rating 250 VAC / 2 A (AC1) / min. 10 mA; basic insulation on supply side and reinforced insulation on control interface side
8	GND	GND	Reference ground for control interface, SELV
9	RSA	RSA	RS485 interface for MODBUS, RSA; SELV
10	RSB	RSB	RS485 interface for MODBUS, RSB; SELV
11	0-10 V	0-10 V	Analog input (set value) SELV, 0-10 V, Ri = 100 kΩ, adjustable curve
12	+10 V	+10 V	Fixed voltage output 10 VDC, SELV, +10 V ±3%, max. 10 mA, short-circuit-proof, power supply for external devices (e.g. pot)



## Curves: Air performance 50 Hz



$\rho = 1.15 \text{ kg/m}^3 \pm 2 \%$

Measurement: LU-165152-1

Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebmpapst. 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 <sub>ed</sub>	I	qv	p <sub>fs</sub>
	V	Hz	min <sup>-1</sup>	W	A	m <sup>3</sup> /h	Pa
1	230	50	1700	176	0.78	3745	0
2	230	50	1700	194	0.85	3440	40
3	230	50	1700	210	0.92	3060	80
4	230	50	1700	220	1.00	2505	120
5	230	50	1500	121	0.53	3300	0
6	230	50	1500	132	0.58	3025	31
7	230	50	1500	143	0.63	2695	62
8	230	50	1500	151	0.66	2205	93
9	230	50	1300	79	0.35	2860	0
10	230	50	1300	86	0.38	2625	23
11	230	50	1300	93	0.41	2335	47
12	230	50	1300	98	0.43	1915	70
13	230	50	1100	48	0.21	2420	0
14	230	50	1100	52	0.23	2220	17
15	230	50	1100	56	0.25	1975	34
16	230	50	1100	60	0.26	1620	50

U = Power supply · f = Frequency · n = Speed · P<sub>ed</sub> = Power consumption · I = Current draw · qv = Air flow · p<sub>fs</sub> = Pressure increase

