W6E710-GR03-01

AC axial fan - HyBlade

sickle-shaped blades (S series)

with square full nozzle

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Nominal data

Type	**W6E710-GR03-01**
Motor	**M6E110-IA**

Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50
Method of obtaining data		ml
Valid for approval/standard		CE
Speed (rpm)	min^{-1}	900
Power consumption	W	630
Current draw	A	2.79
Capacitor	µF	14
Capacitor voltage	VDB	450
Max. back pressure	Pa	105
Max. back pressure	in. wg	0.42
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	65
Starting current	A	6.9

ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment
Subject to change

Data according to Commission Regulation (EU) 327/2011

		Actual	Req. 2015
01 Overall efficiency η_{es}	%	37.4	32.1
02 Measurement category		A	
03 Efficiency category		Static	
04 Efficiency grade N		45.3	40
05 Variable speed drive		No	

09 Power consumption P_e	kW	0.57
09 Air flow q_v	m^3/h	8400
09 Pressure increase p_{fs}	Pa	93
10 Speed (rpm) n	min^{-1}	915
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_{fs} / 100 000 Pa

LU-186660

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Technical description

Weight	27.3 kg
Fan size	710 mm
Rotor surface	Cast in aluminum
Terminal box material	PP plastic
Blade material	Sheet aluminum insert, sprayed with PP plastic
Fan housing material	Sheet steel, galvanized and coated with black plastic (RAL 9005)
Guard grille material	Steel, coated with black plastic (RAL 9005)
Number of blades	5
Blade pitch	-10°
Airflow direction	"V"
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP54
Insulation class	"F"
Moisture (F) / Environmental (H) protection class	F3-1
Ambient temperature note	Occasional start-up between -40°C and -25°C is permissible. For continuous operation at temperatures below -25°C (e.g. refrigeration applications) we recommend our fan design with special low-temperature bearings.
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
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	<= 3.5 mA
Electrical hookup	Via terminal box, capacitor integrated and connected
Motor protection	Thermal overload protector (TOP) with basic insulation
With cable	Axial
Protection class	I (with customer connection of protective earth)
Motor capacitor according to EN 60252-1 in safety protection class	S0
Conformity with standards	EN 61800-5-1; CE
Approval	CCC; VDE; EAC

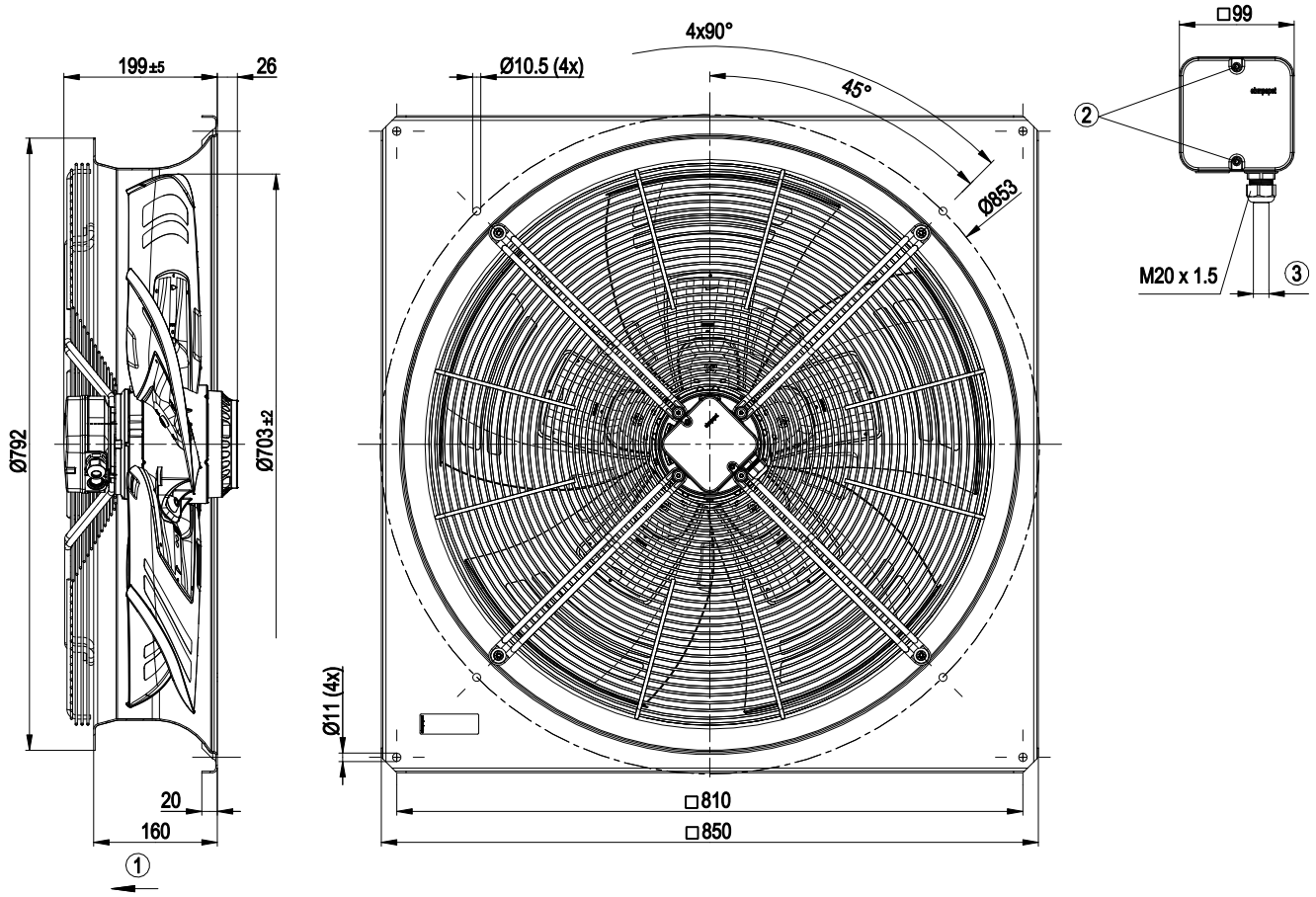
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Product drawing



1	Direction of air flow "V"
2	Tightening torque 1.5 ± 0.2 Nm
4	Cable diameter min. 6 mm, max. 12 mm; tightening torque 2 ± 0.3 Nm

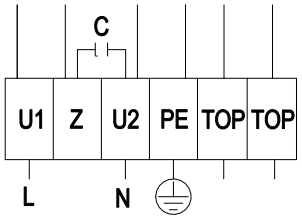
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Connection diagram



L	= U1 = blue	Z	brown	N	= U2 = black
PE	green/yellow	TOP	gray		

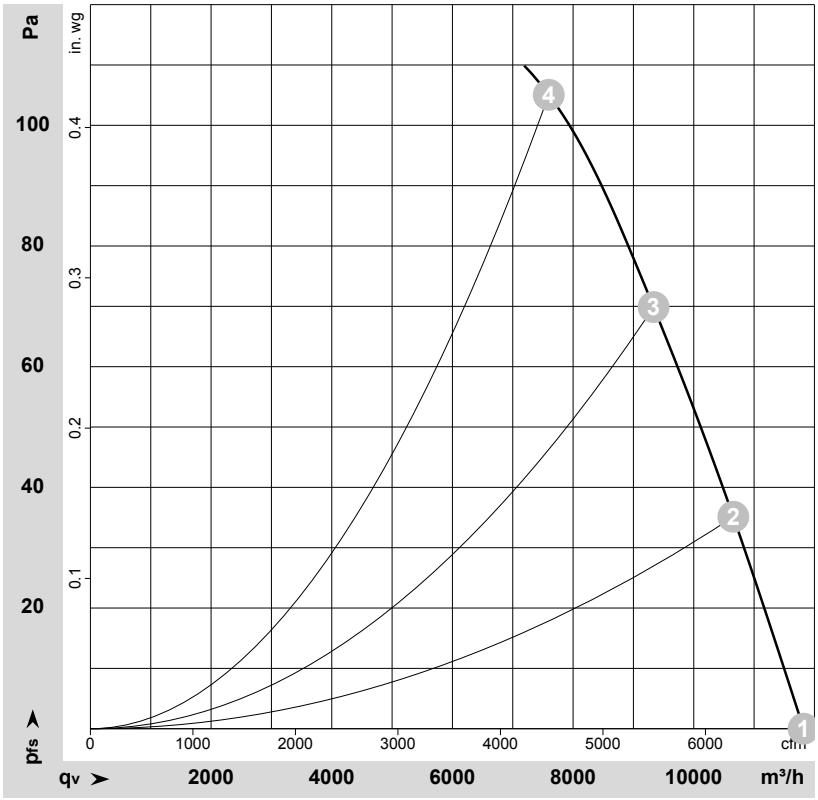
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Curves: Air performance 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-186660-1

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_e	I	LpA_{in}	LwA_{in}	LwA_{out}	q_V	p_{fs}	q_V	p_{fs}
	V	Hz	min^{-1}	W	A	dB(A)	dB(A)	dB(A)	m^3/h	Pa	cfm	in. wg
1	230	50	955	411	1.89	66	73	72	11820	0	6960	0.00
2	230	50	940	474	2.15	65	72	71	10655	35	6270	0.14
3	230	50	925	540	2.42	65	72	71	9335	70	5495	0.28
4	230	50	900	630	2.79	66	73	72	7595	105	4470	0.42

U = Power supply · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · LpA_{in} = Sound pressure level intake side · LwA_{in} = Sound power level intake side
LwA_{out} = Sound power level outlet side · q_V = Air flow · p_{fs} = Pressure increase

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