W6E630-KN01-01

AC axial fan - AxiCool

sickled blades (S series)

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Nominal data

Type	**W6E630-KN01-01**
Motor	**M6E110-GF**

Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50
Type of data definition		ml
Valid for approval / standard		CE
Speed (rpm)	min^{-1}	870
Power input	W	550
Current draw	A	2.4
Motor capacitor	µF	14
Capacitor voltage	VDB	400
Capacitor standard		S0 (CE)
Max. back pressure	Pa	100
Min. ambient temperature	°C	-40
Max. ambient temperature	°C	20
Starting current	A	4.8

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

Data in accordance with ecodesign regulation EU 327/2011

		Actual	Request 2015
01 Overall efficiency η_{es}	%	35.9	32
02 Measurement category		A	
03 Efficiency category		Static	
04 Efficiency grade N		43.9	40
05 Variable speed drive		No	

09 Power input P_e	kW	0.55
09 Air flow q_v	m^3/h	6445
09 Pressure increase p_{fs}	Pa	111
10 Speed (rpm) n	min^{-1}	870
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-180323

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Technical features

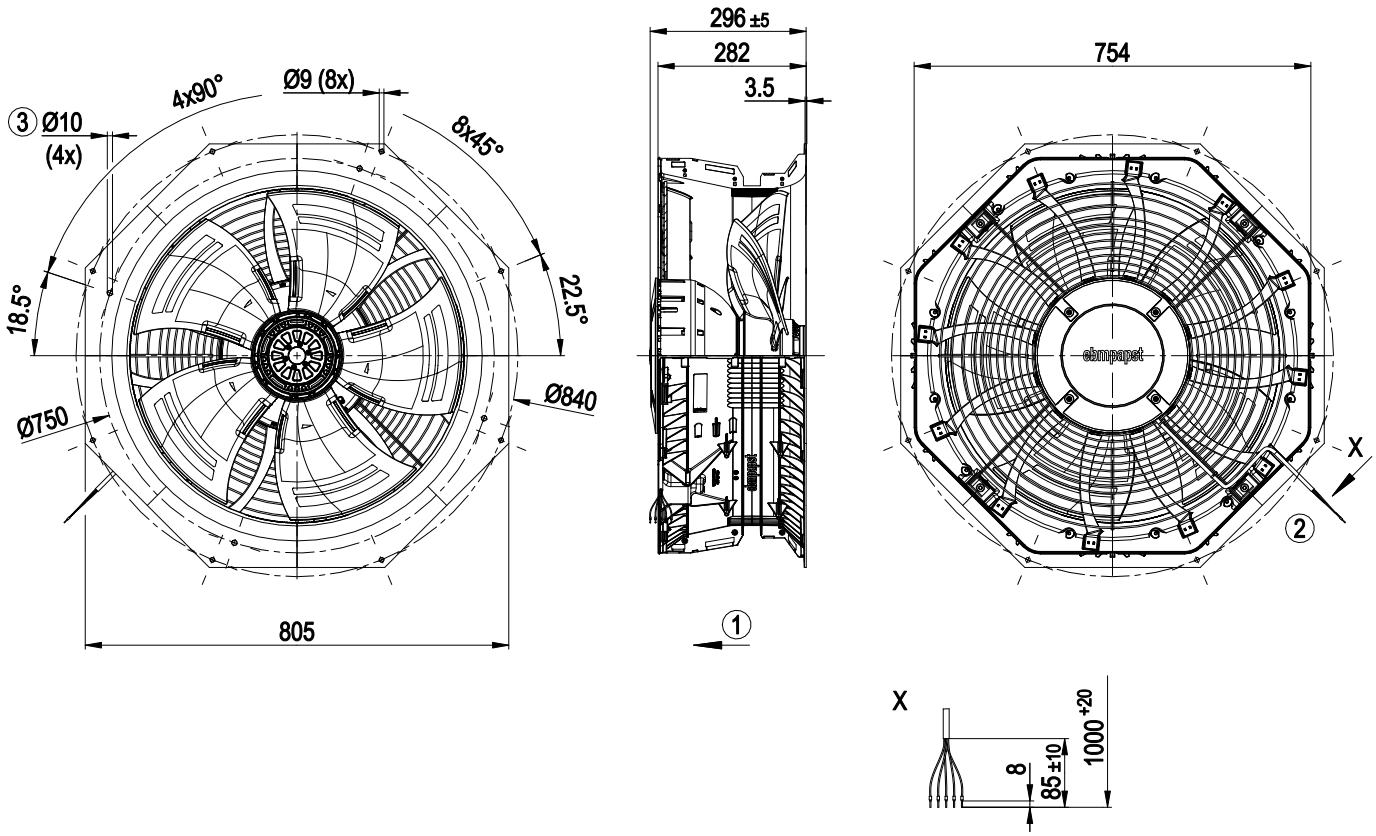
Mass	18.7 kg
Size	630 mm
Motor size	110
Surface of rotor	Coated in black
Material of terminal box	PP plastic
Material of blades	Press-fitted sheet steel blank, sprayed with PP plastic
Material of wall ring	PP plastic
Streamer material	PP plastic
Material of guard grille	Steel, coated in black plastic (RAL9005)
Number of blades	5
Direction of air flow	V
Direction of rotation	Counter-clockwise, seen on rotor
Type of protection	IP54
Insulation class	"F"
Humidity (F) / environmental protection class (H)	H2
Note ambient temperature	If there is a risk of ice formation, the fan is only to be operated with a heating tape in the wall ring. Contact ebm-papst for more details. As a fan for use with industrial evaporators, suitable for ambient temperatures between -40°C and +20°C, occasional start-up at up to +40°C permissible.
Max. permissible ambient motor temp. (transp./ storage)	+70 °C
Min. permissible ambient motor temp. (transp./storage)	-40 °C
Mounting position	See fitting instructions
Condensation drainage holes	Rotor-side
Operation mode	S1
Motor bearing	Ball bearing with anti-freezing grease
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	<= 3.5 mA
Motor protection	Thermal overload protector (TOP) brought out, basic insulation
Protection class	I (if protective earth is connected by customer)
Motor capacitor according to EN 60252-1 in safety protection class	S0
Product conforming to standard	EN 61800-5-1; EN 60034-1 (2010); CE
Approval	VDE; EAC

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Product drawing

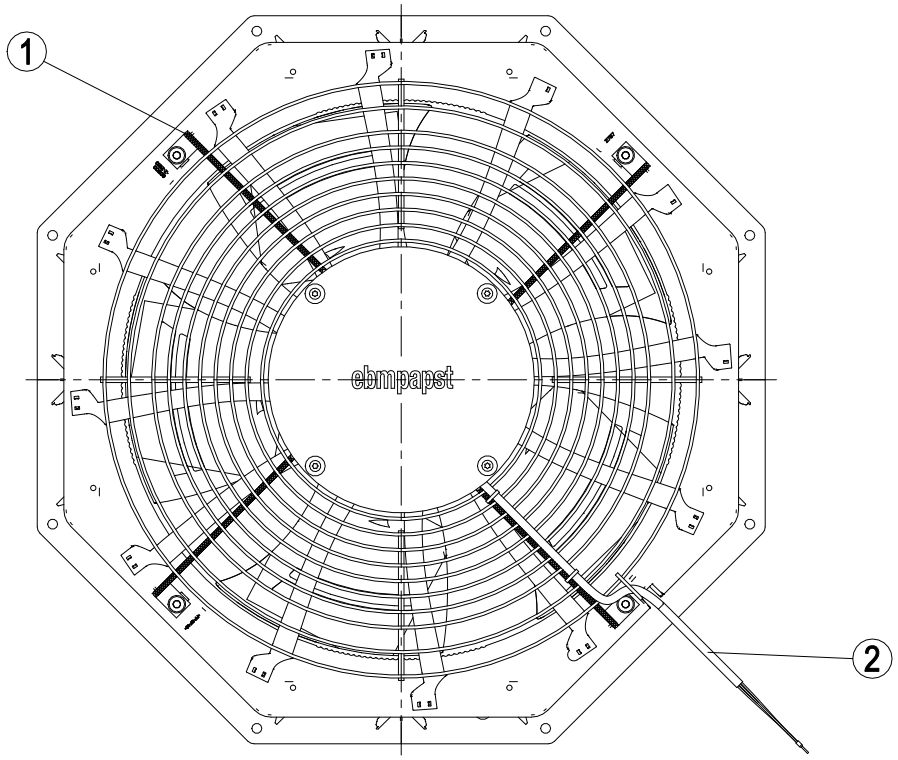


1	Direction of air flow "V"
2	Connection line silicone 5G 0.5 mm², 5x crimped core-end sleeves
3	Mounting holes for FlowGrid

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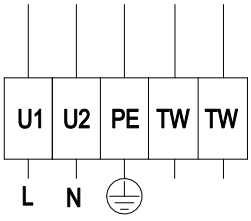
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1	Installation position: shaft horizontal (install the support struts in X-position only as shown in illustration) or rotor on bottom
2	Cable exit must be at bottom right when shaft is installed in horizontal position.

Connection screen



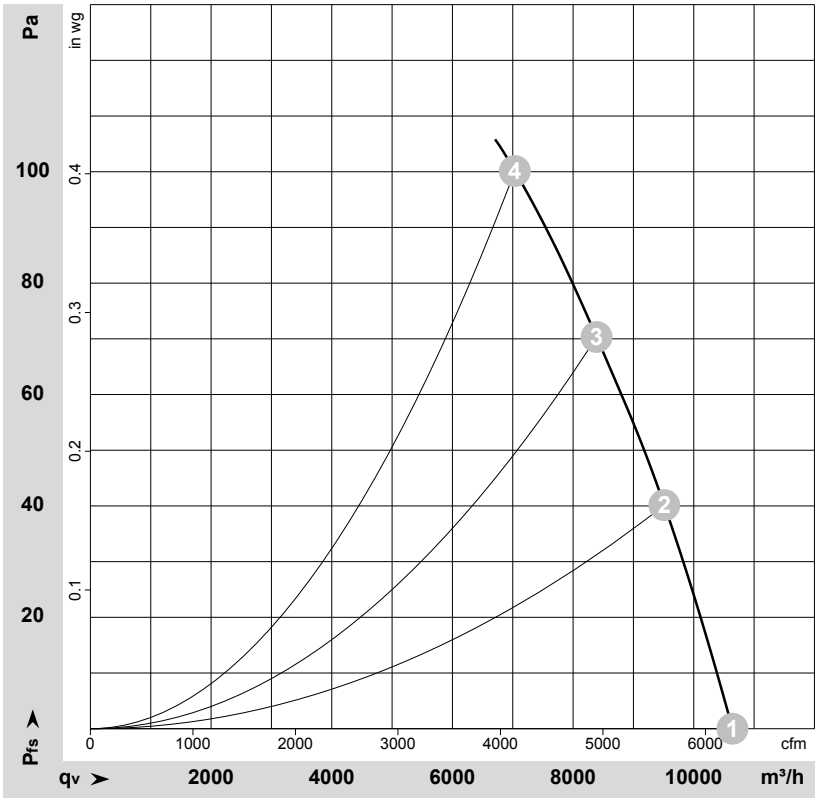
L	= U1 = blue
N	= U2 = black
PE	green/yellow
TW	Thermal overload protector grey (2x)

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Charts: Air flow 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-180323-1

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_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	915	460	2.03	65	73	74	10640	0	6265	0.00
2	230	50	900	500	2.20	63	70	71	9510	40	5600	0.16
3	230	50	880	528	2.32	62	69	70	8390	70	4940	0.28
4	230	50	870	550	2.40	62	70	70	7035	100	4140	0.40

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

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