

AC axial fan - HyBlade

sickled blades (S series), single inlet
with full square nozzle

ASIA PACIFIC SHENGRUI LIMITED

Phone +86 10-62547612

zhangyu@bjhengrui.cn

www.apacfan.com



Nominal data

Type	W4D630-GR01-01		
Motor	M4D110-IA		
Phase		3~	3~
Nominal voltage	VAC	400	400
Connection		Δ	Y
Frequency	Hz	50	50
Type of data definition		ml	ml
Valid for approval / standard		CE	CE
Speed	min ⁻¹	1330	1070
Power input	W	1250	840
Current draw	A	2.48	1.42
Max. back pressure	Pa	150	100
Min. ambient temperature	°C	-40	-40
Max. ambient temperature	°C	55	55
Starting current	A	10	

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}	%	37.9	34.5
02 Measurement category		A	
03 Efficiency category		Static	
04 Efficiency grade N		43.4	40
05 Variable speed drive		No	

Data definition with optimum efficiency.
The ErP data is determined using a motor-impeller combination in a standardised measurement configuration.

09 Power input P_e	kW	1.35
09 Air flow q_v	m ³ /h	8830
09 Pressure increase p_{fs}	Pa	210
10 Speed n	min ⁻¹	1310
11 Specific ratio*		1.00

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

LU-107579



AC axial fan - HyBlade

sickled blades (S series), single inlet
with full square nozzle

Technical features

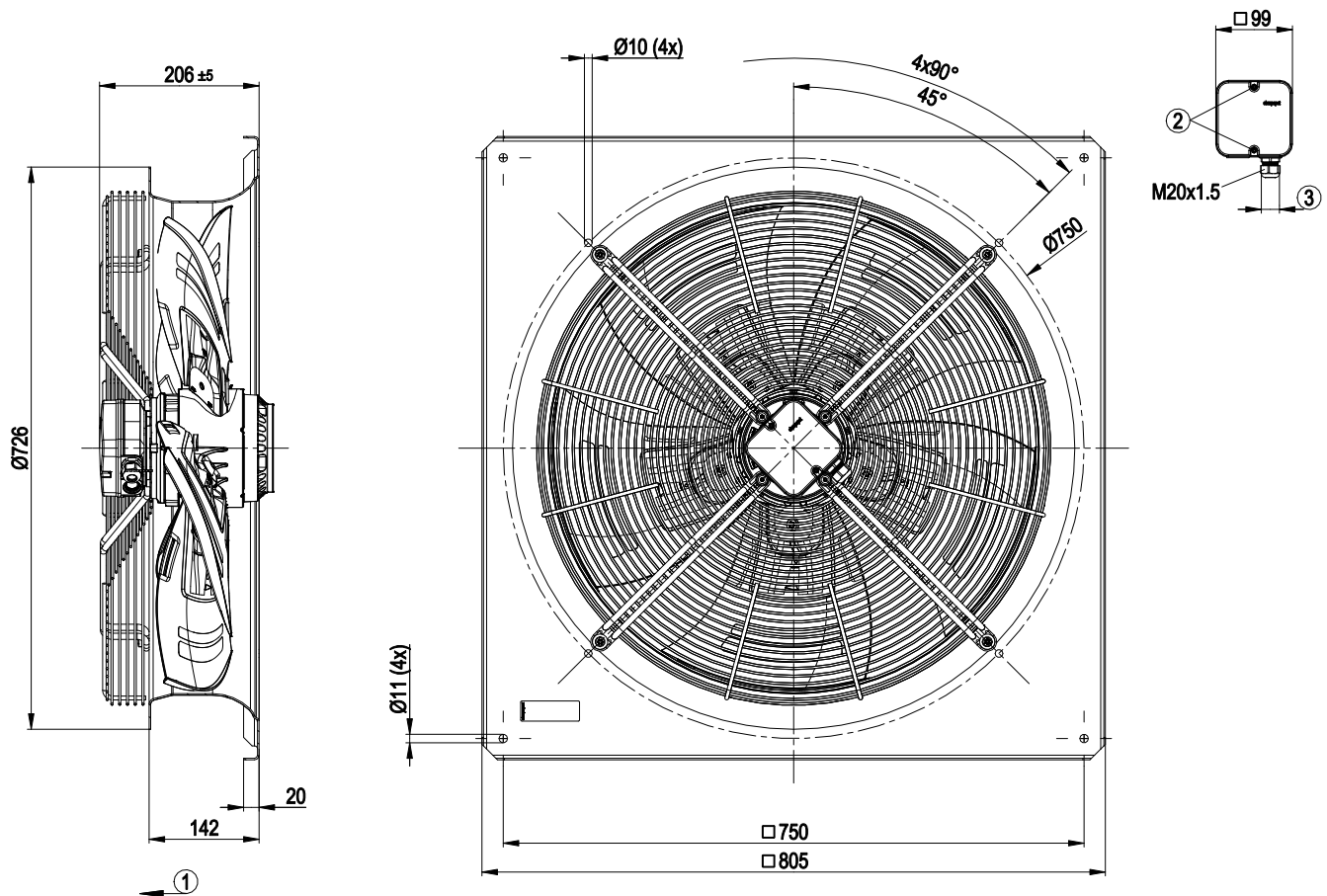
Mass	26.1 kg
Size	630 mm
Surface of rotor	Cast in aluminium
Material of terminal box	PP plastic
Material of blades	Aluminium sheet insert, sprayed with PP plastic
Material of wall ring	Sheet steel, galvanised and coated in black plastic (RAL 9005)
Material of guard grille	Steel, coated in black plastic (RAL9005)
Number of blades	5
Blade angle	-10°
Direction of air flow	"V"
Direction of rotation	Counter-clockwise, seen on rotor
Type of protection	IP 54
Insulation class	"F"
Humidity class	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 bottom; rotor on top on request
Condensate discharge holes	Rotor-side
Operation mode	S1
Motor bearing	Ball bearing
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	<= 3.5 mA
Electrical leads	Via terminal box
Motor protection	Thermal overload protector (TOP) brought out
Cable exit	Axial
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 61800-5-1; CE
Approval	VDE; EAC



AC axial fan - HyBlade

sickled blades (S series), single inlet
with full square nozzle

Product drawing

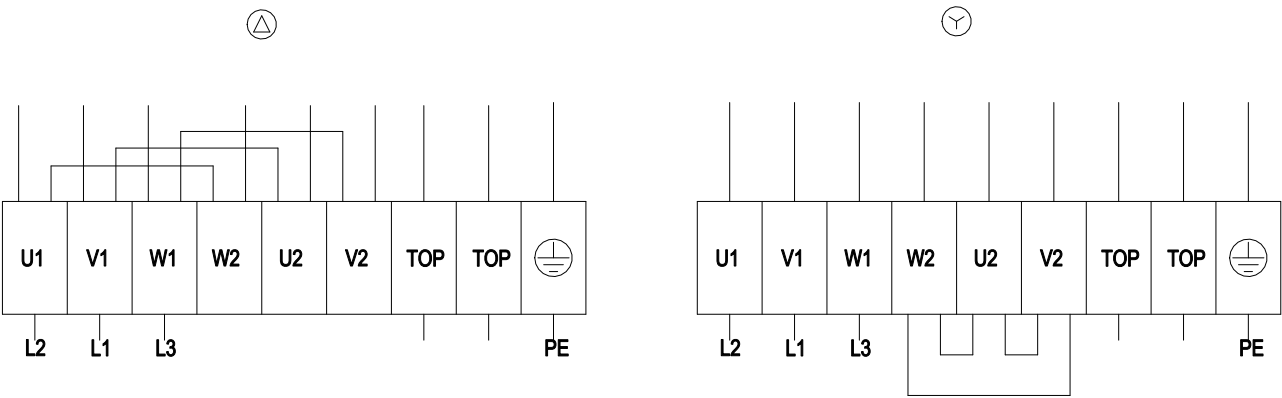


1	Direction of air flow "V"
2	Tightening torque 1.5 ± 0.2 Nm
3	Cable diameter: min. 6 mm, max. 12 mm, tightening torque: 2 ± 0.3 Nm

AC axial fan - HyBlade

sickled blades (S series), single inlet
with full square nozzle

Connection screen



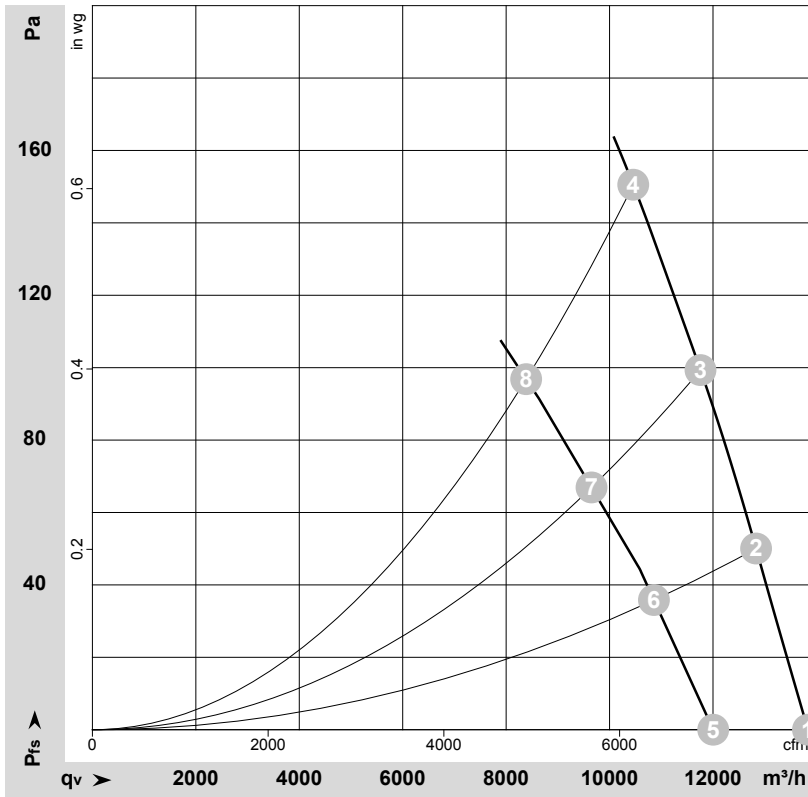
Δ	Delta connection	Y	Star connection	L1	= V1 = blue
L2	= U1 = black	L3	= W1 = brown	W2	yellow
U2	green	V2	white	TOP	2 x grey
PE	green/yellow				



AC axial fan - HyBlade

sickled blades (S series), single inlet
with full square nozzle

Charts: Air flow 50 Hz



$$\rho = 1,15 \text{ kg/m}^3 \pm 2\%$$

Measurement: LU-107579
Measurement: LU-107929

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

	Conn.	U	f	n	P _e	I	LpA _{in}	LwA _{in}	LwA _{out}	qv	p _{fs}
		V	Hz	min ⁻¹	W	A	dB(A)	dB(A)	dB(A)	m ³ /h	Pa
1	Δ	400	50	1395	882	2.06	73	79	79	13835	0
2	Δ	400	50	1375	1006	2.18	70	77	77	12835	50
3	Δ	400	50	1355	1127	2.31	68	75	75	11760	100
4	Δ	400	50	1330	1250	2.48	69	75	75	10460	150
5	Y	400	50	1205	659	1.12	69	76	75	12005	0
6	Y	400	50	1150	722	1.21	66	73	72	10860	36
7	Y	400	50	1105	776	1.30	64	71	70	9650	67
8	Y	400	50	1070	840	1.42	63	70	69	8385	97

Conn. = Connection · U = Supply voltage · f = Frequency · n = Speed · 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 · qv = Air flow · p_{fs} = Pressure increase

