

All the facts of ebm-papst axial fans at a glance:

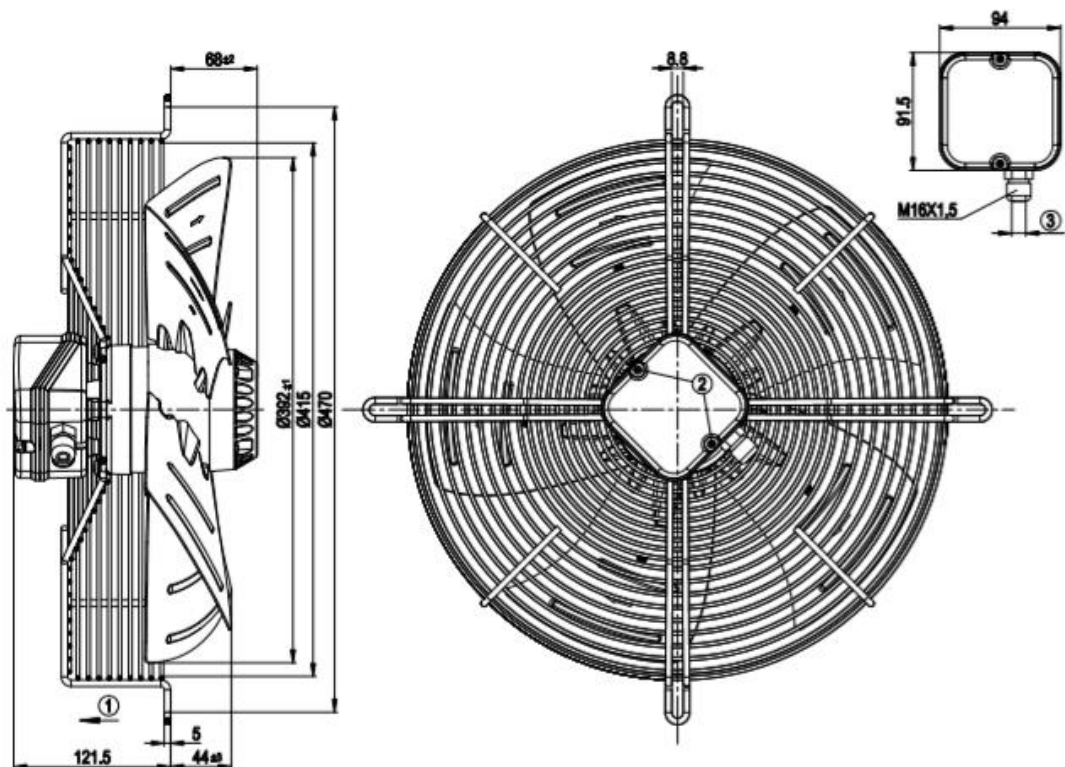
- 1) Compact dimensions
- 2) Available in GreenTech EC technology or AC technology
- 3) Wide selection of models, dimensions and air performance levels
- 4) Optimum efficiency and noise level due to well-engineered aerodynamic design of the fan blades
- 5) High-efficiency, energy saving designs in GreenTech EC technology with standardised integration of control functions and sensor signals
- 6) Wide range of accessories, including guard grilles, basket guard grilles and wall rings
- 7) The axial fan is dynamically balanced in two planes to DIN ISO 1940
- 8) Numerous approvals, including VDE, UL, CSA, CE and GOST

ebmpapst—S4D400-AP12-37—**Technical description:****Technical features**

Mass	5.7 kg
Size	400 mm
Surface of rotor	Coated in black
Material of terminal box	ABS plastic, black
Material of blades	Sheet steel, coated in black
Material of guard grille	Steel, phosphated and coated in black plastic
Number of blades	5
Direction of air flow	"V"
Direction of rotation	Counter-clockwise, seen on rotor
Type of protection	IP 44; Depending on installation and position as per EN 60034-5
Insulation class	"B"
Humidity class	F1-2
Max. permissible ambient motor temp. (transp./ storage)	+ 70 °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 with anti-freezing grease
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	< 0.75 mA
Electrical leads	Via terminal box
Cable exit	Variable
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60335-1, motor does not have factory-installed overheating protection

[ebmpapst](#)——S4D400-AP12-37——Structural drawing:

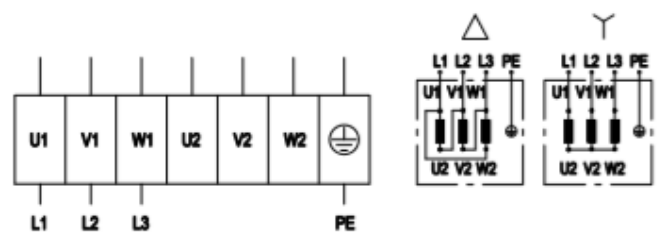
Product drawing



1	Direction of air flow "V"
2	Tightening torque 0.5 ± 0.1 Nm
3	Cable diameter max. 7.5 mm, tightening torque 1.3 ± 0.2 Nm

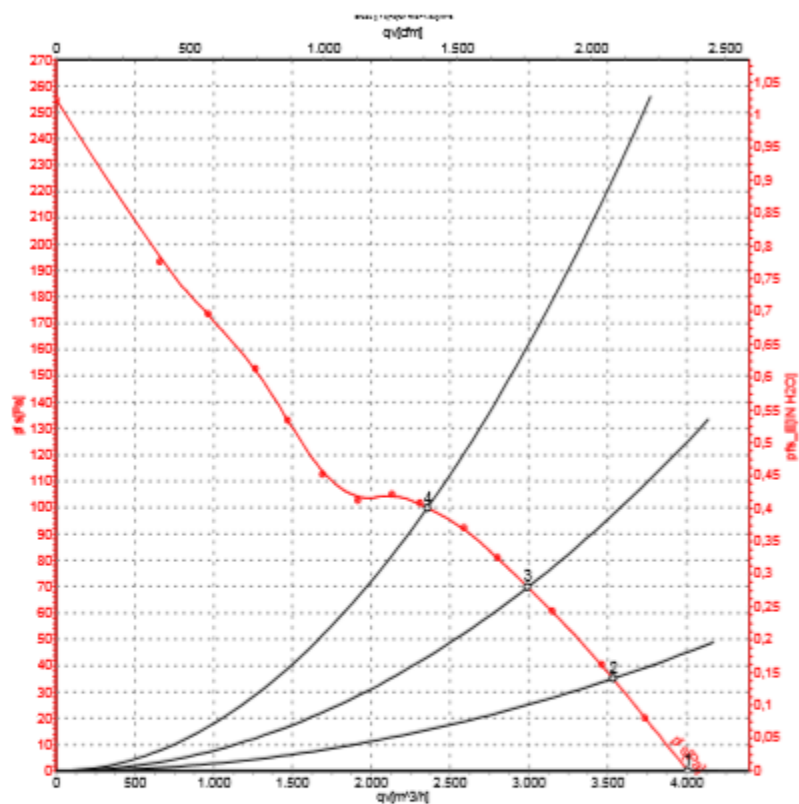
[ebmpapst](#)——S4D400-AP12-37——Connection screen:

Connection screen



	Three-phase motor	Y	Star connection	Δ	Delta connection
L1	= U1 = blue	L2	= V1 = black	L3	= W1 = brown
U2	= white	V2	= green	W2	= yellow
PE	PE (green/yellow)				

Charts: Air flow 50 Hz

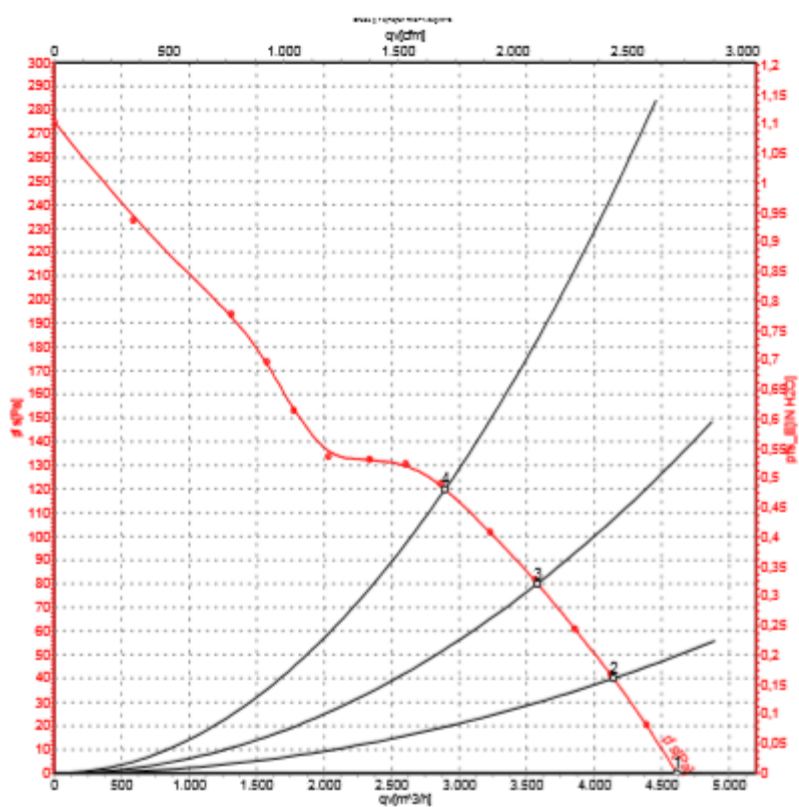


Measured values

	Conn.	U	f	n	P_e	I	$L_p A_{in}$	$L_w A_{in}$	q_v	p_{02}
		V	Hz	min^{-1}	W	A	dB(A)	dB(A)	m^3/h	Pa
1	Y	400	50	1450	135	0.44	65	74	4000	0
2	Y	400	50	1435	161	0.47	65	73	3535	35
3	Y	400	50	1420	182	0.49	65	72	2995	70
4	Y	400	50	1410	203	0.50	67	74	2355	100

Conn. = Connection · U = Supply voltage · f = Frequency · n = Speed · P_e = Power input · I = Current draw · $L_p A_{in}$ = Sound pressure level inlet side · $L_w A_{in}$ = Sound power level inlet side
 q_v = Air flow · p_{02} = Pressure increase

Charts: Air flow 60 Hz



Measured values

	Conn.	U	f	n	P_e	I	$L_{pA_{in}}$	$L_{wA_{in}}$	qv	p_{ts}
		V	Hz	min ⁻¹	W	A	dB(A)	dB(A)	m³/h	Pa
1	Y	400	60	1690	185	0.39	69	76	4615	0
2	Y	400	60	1660	223	0.45	70	76	4145	40
3	Y	400	60	1635	256	0.49	69	76	3580	80
4	Y	400	60	1605	290	0.54	70	76	2895	120

Conn. = Connection · U = Supply voltage · f = Frequency · n = Speed · P_e = Power input · I = Current draw · $L_{pA_{in}}$ = Sound pressure level inlet side · $L_{wA_{in}}$ = Sound power level inlet side
 qv = Air flow · p_{ts} = Pressure increase