EC axial fans mains-powered

S series, Ø 990



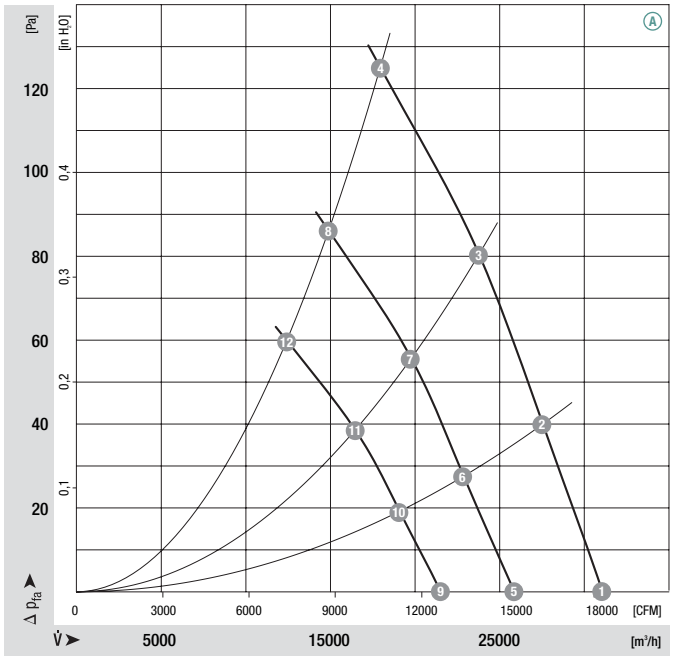
- **Material:** Guard grille: Steel, phosphated and coated in black plastic
  Wall ring: Sheet steel, pre-galvanised and coated in black plastic
  Blades: Die-cast aluminium
  Rotor: Cast-in with PA plastic
  Electronics enclosure: Die-cast aluminium, coated in black
- **Number of blades:** 7
- **Direction of rotation:** Dir. of air flow "V" clockwise, "A" counter-clockwise, seen on rotor
- **Type of protection:** IP 54 (acc. to EN 60529)
- **Insulation class:** "F"
- **Mounting position:** Shaft horizontal or rotor on bottom; rotor on top on request
- **Condensate discharges:** Rotor-side
- **Mode of operation:** Continuous operation (S1)
- **Bearings:** Maintenance-free ball bearings

Nominal data			Curve	Nominal voltage range	Frequency	Speed/rpm	Max. power input (1)	Max. current draw (1)	Max. operative range	Perm. amb. temp.	Electr. connection
Type	**Motor**			**VAC**	**Hz**	**rpm**	**kW**	**A**	**Pa**	**°C**	p. 428
***3G 990**	M3G 150-IF		Ⓐ	3~ 200-240	50/60	650	1.50	4.80	120	-25 to +60	M)
***3G 990**	M3G 150-IF		Ⓑ	3~ 380-480	50/60	650	1.50	2.60	120	-25 to +60	M)

subject to alterations

(1) Nominal data in operating point with maximum load and 200 or 400 VAC

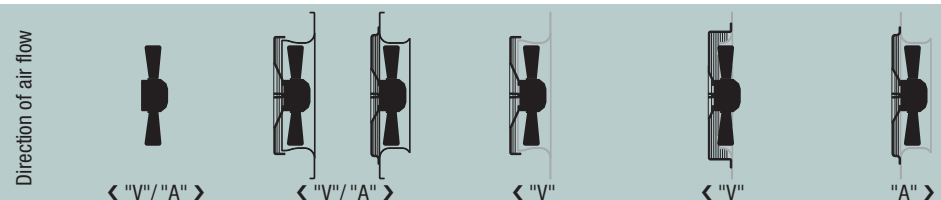
Curves



	n [rpm]	P_1 [kW]	I [A]	Lp_A [dB(A)]	η_{tL} [%]
Ⓐ 1	650	1.02	3.60	75	—
Ⓐ 2	650	1.21	4.00	76	72
Ⓐ 3	650	1.32	4.40	76	70
Ⓐ 4	650	1.44	4.60	75	57
Ⓐ 5	540	0.60	2.20	70	—
Ⓐ 6	540	0.71	2.60	71	72
Ⓐ 7	540	0.78	2.80	71	70
Ⓐ 8	540	0.84	3.00	70	57
Ⓐ 9	450	0.36	1.40	65	—
Ⓐ 10	450	0.42	1.60	66	72
Ⓐ 11	450	0.46	1.80	66	70
Ⓐ 12	450	0.50	1.80	65	57

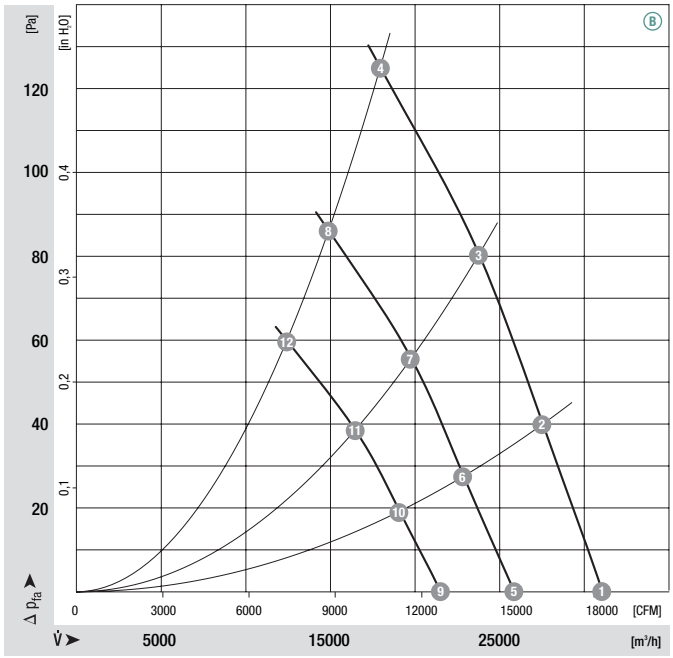
ebmpapst

- **Technical features:**
  - PFC (passive)
  - Integrated PID controller
  - Control input 0-10 VDC / PWM
  - Input for sensor 0-10 V or 4-20 mA
  - Slave output 0-10 V max. 3 mA
  - Output 20 VDC (±20 %) max. 50 mA
  - Output 10 VDC (+10 %) max. 10 mA
  - RS485 ebmBUS
  - Alarm relay
  - Line undervoltage / phase failure detection
  - Motor current limitation
  - Over-temperature protected electronics / motor
  - Locked rotor protection
  - Soft start
- **EMC:** Interference emission acc. to EN 61000-6-3
  Interference immunity acc. to EN 61000-6-2
  Harmonics acc. to EN 61000-3-2/3
- **Leakage current:** < 3.5 mA acc. to EN 61800-5-1
- **Connection leads:** Via terminal strip
- **Protection class:** I (acc. to EN 61800-5-1)
- **Product conforming to standard:** CE
- **Approvals:** UL, CSA, GOST; Ⓑ also VDE



	Without attachments	With full square nozzle	With guard grille for full nozzle	With guard grille for short nozzle	With guard grille for full nozzle
"V"	A3G 990-AD11 -13	W3G 990-CD11 -13	S3G 990-BD11 -13	—	—
"A"	A3G 990-AD11 -14	W3G 990-CD11 -14	—	—	S3G 990-CD11 -14
"V"	A3G 990-AD05 -03	W3G 990-CD05 -03	S3G 990-BD05 -03	—	—
"A"	A3G 990-AD05 -04	W3G 990-CD05 -04	—	—	S3G 990-CD05 -04

Curves



	n [rpm]	P_1 [kW]	I [A]	Lp_A [dB(A)]	η_{tL} [%]
Ⓑ 1	650	1.02	1.80	75	—
Ⓑ 2	650	1.21	2.00	76	72
Ⓑ 3	650	1.32	2.20	76	70
Ⓑ 4	650	1.44	2.30	75	57
Ⓑ 5	540	0.60	1.10	70	—
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