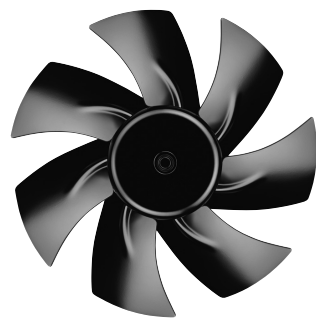


EC axial fan - ESM

sickled blades (S series)
with full round nozzle



W1G250-CH37-52 ebmpapst Datasheet
sales@fansco.com
www.fansco.com

Nominal data

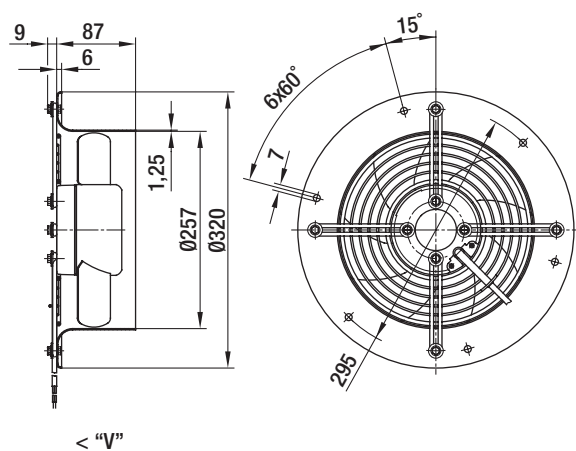
Type	W1G250-CH37-52	
Motor	M1G074-BF	
Nominal voltage	[VDC]	24
Nominal voltage range	[VDC]	16 .. 28
Type of data definition		rfa
Speed	[min ⁻¹]	2750
Power input	[W]	105
Current draw	[A]	5.0
Max. back pressure	[Pa]	140
Min. ambient temperature	[°C]	- 25
Max. ambient temperature	[°C]	+60

ml = max. load · me = max. efficiency · rfa = running at free air · cs = customer specs · cu = customer unit
Subject to alterations

Technical features

Size	250 mm
Operation mode	S1
Direction of rotation	Counter-clockwise, seen on rotor
Mounting position	Any
EMC interference emission	Acc. to EN 55022 (Class B)
EMC interference immunity	Acc. to EN 61000-6-2 (industrial environment)
Direction of air flow	"V"
Insulation class	"B"
Cable exit	Lateral
Condensate discharge holes	None
Bearing motor	Ball bearing
Mass	2.85 kg
Material of electronics housing	Die-cast aluminium, coated in black
Material of blades	Sheet steel, coated in black
Material of guard grille	Steel, phosphated and coated in black plastic
Material of wall ring	Sheet steel, pre-galvanised and coated in black plastic
Motor protection	Reverse polarity and locked-rotor protection
Product conforming to standard	EN 60950-1
Surface of rotor	Coated in black
Number of blades	7
Type of protection	IP 42
Technical features	- Control input 0-10 VDC / PWM - Tach output - Motor current limit - Soft start
Max. permissible ambient motor temp. (transp./ storage)	+80 °C
Min. permissible ambient motor temp. (transp./storage)	-40 °C
Approval	CSA C22.2 Nr.77; UL 1004-1

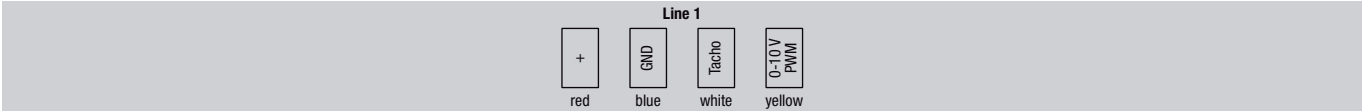
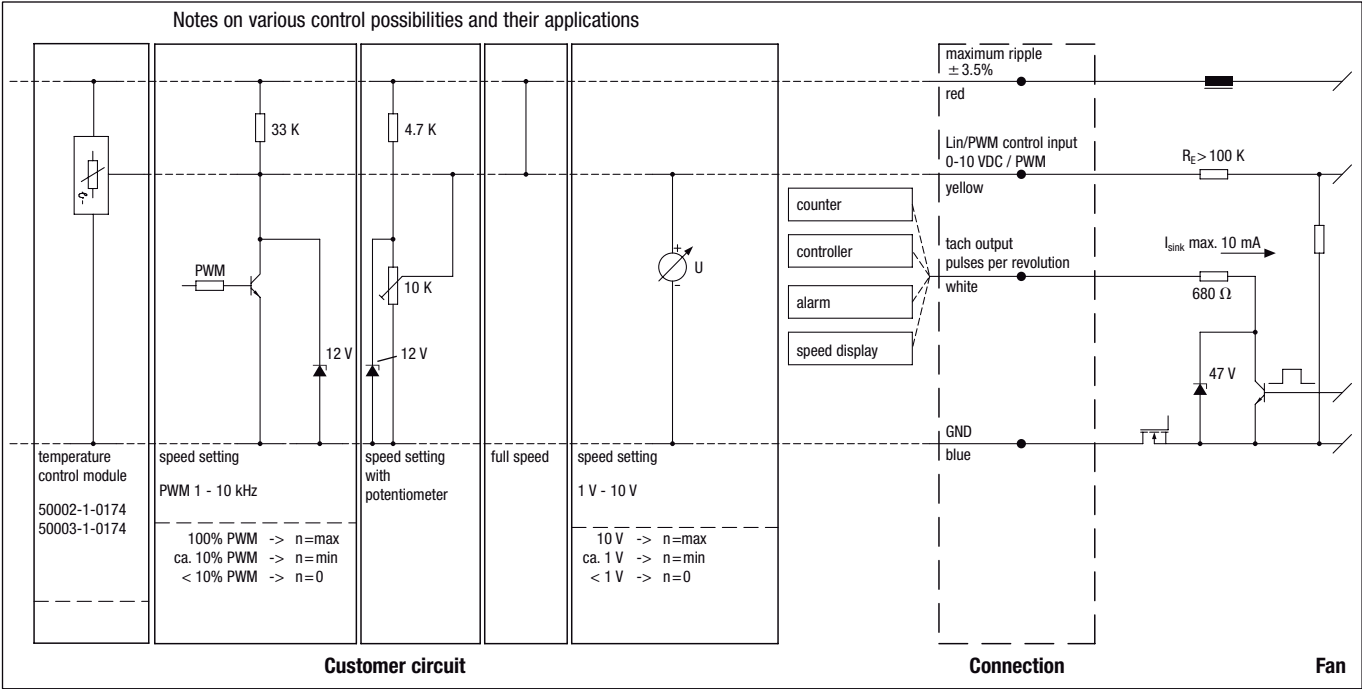
Product drawing



EC axial fan - ESM

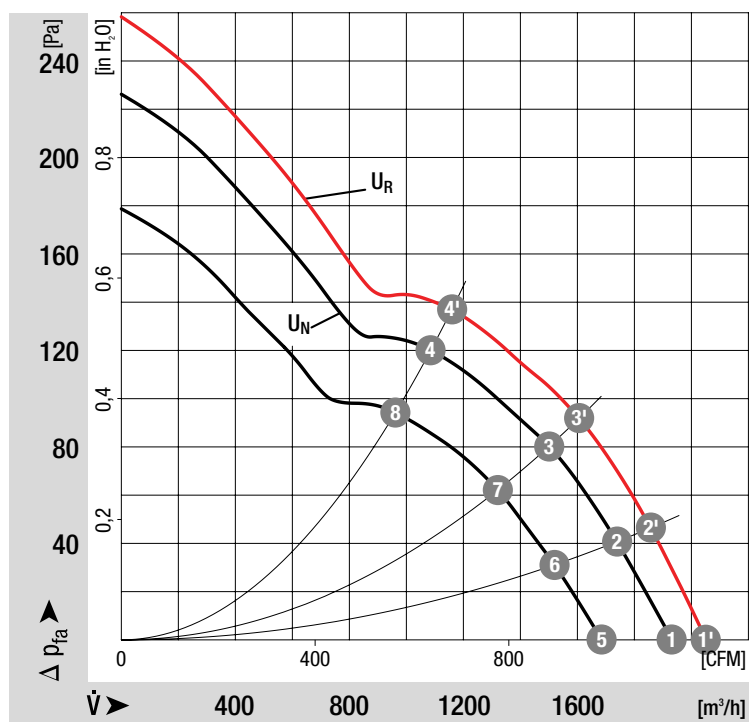
sickled blades (S series)
with full round nozzle

Connection screen



Line	Signal	Colour	Assignment / function	Line	Signal	Colour	Assignment / function
1	+	red	maximum ripple $\pm 3.5\%$	1	Tacho	white	Tach output: pulses per revolution
	GND	blue	GND		0-10 V / PWM	yellow	Control input

Charts: Air flow



Measured values

	n	P ₁	η _{TL}
	[min ⁻¹]	[W]	[%]
1'	2920	129	
2'	2800	132	63
3'	2680	135	60
4'	2600	139	45
1	2750	105	
2	2630	110	63
3	2520	111	60
4	2440	114	45
5	2610	73	
6	2320	75	63
7	2230	78	60
8	2170	80	45