

EC centrifugal fan

backward curved, single inlet

**ebm-papst Mulfingen GmbH & Co. KG**

Bachmühle 2

D-74673 Mulfingen

Phone: +49(0)7938/81-0

Fax: +49(0)7938/81-110

sales@fansco.com

www.fansco.com

Nominal data

Type	R3G310-AI39-71	
Motor	M3G084-DF	
Phase		1~
Nominal voltage	VAC	230
Nominal voltage range	VAC	200 .. 277
Frequency	Hz	50/60
Type of data definition		ml
Speed	min ⁻¹	2170
Power input	W	480
Current draw	A	3.1
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	30

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

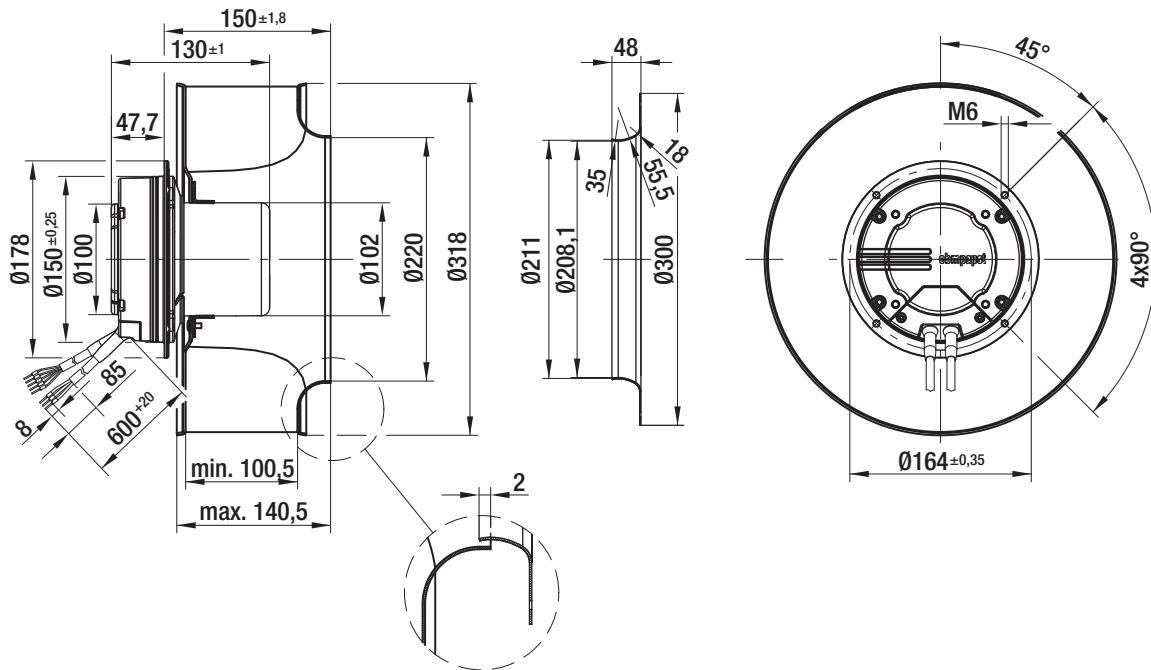
Technical features

Leakage current	<= 3.5 mA
Size	310 mm
Operation mode	S1
Direction of rotation	Clockwise, seen on rotor
Mounting position	Shaft horizontal or rotor on bottom; rotor on top on request
EMC harmonics	Acc. to EN 61000-3-2/3
EMC interference emission	Acc. to EN 61000-6-3 (household environment)
EMC interference immunity	Acc. to EN 61000-6-2 (industrial environment)
Insulation class	"B"
Cable exit	Variable
Condensate discharge holes	None, open rotor
Motor bearing	Ball bearing
Mass	4.71 kg
Material of electronics housing	Die-cast aluminium
Material of impeller	Aluminium sheet
Motor protection	Thermal overload protector (TOP) wired internally
Product conforming to standard	EN 61800-5-1
Surface of rotor	Coated in black
Number of blades	6
Type of protection	IP 44
Protection class	I
Technical features	- Output 10 VDC, max. 1.1 mA - Alarm relay - Motor current limit - Soft start - Control input 0-10 VDC / PWM - Over-temperature protected electronics / motor - Line undervoltage detection
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 2111

EC centrifugal fan

backward curved, single inlet

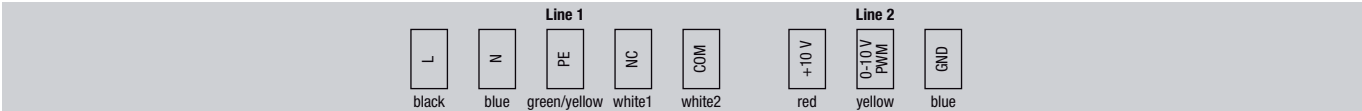
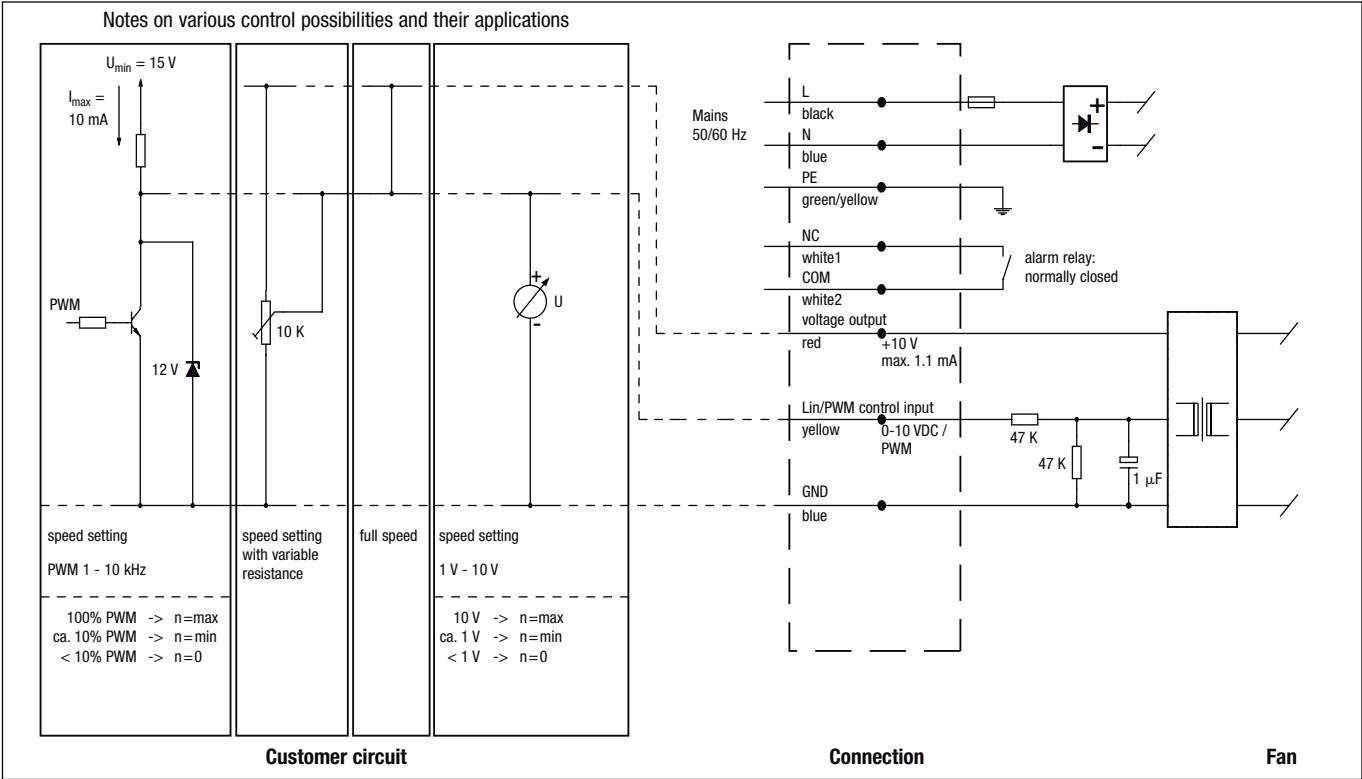
Product drawing



EC centrifugal fan

backward curved, single inlet

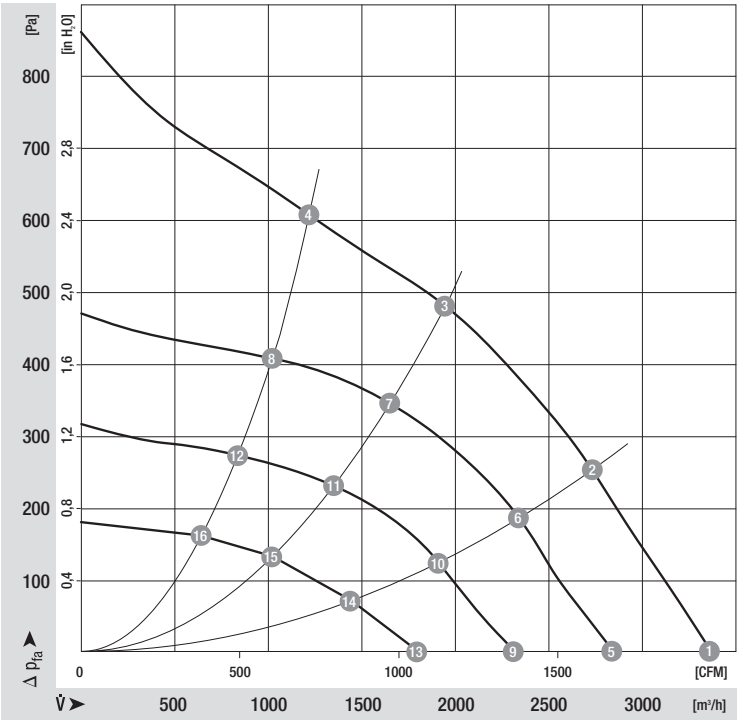
Connection screen



Line	Signal	Colour	Assignment / function
1	L	black	Mains 50/60 Hz, phase
	N	blue	Mains 50/60 Hz, neutral
	PE	green/yellow	Protective earth
	NC	white1	Alarm relay, normally closed
	COM	white2	Alarm relay, COMMON

Line	Signal	Colour	Assignment / function
2	+10 V	red	Voltage output +10 V max. 1.1 mA
	0-10 V / PWM	yellow	Control input
	GND	blue	GND

Charts: Air flow



Measured values

	n	P ₁	I	η _{TL}
	min ⁻¹	W	A	%
1	2300	370	2.35	
2	2215	445	2.85	62
3	2170	480	3.10	67
4	2220	448	2.85	56
5	1900	210	1.30	
6	1900	284	1.70	62
7	1900	312	1.80	67
8	1900	278	1.70	56
9	1560	124	0.80	
10	1560	158	1.10	62
11	1560	175	1.00	67
12	1560	158	1.10	56
13	1200	57	0.40	
14	1200	73	0.50	62
15	1200	80	0.50	67
16	1200	70	0.50	56