EC centrifugal fan - RadiCal

backward curved, single inlet

ebm-papst Mulfingen GmbH & Co. KG
Bachmühle 2
74673 Mulfingen
Phone: +49 7938 81-0
Fax: +49 7938 81-110
www.ebmpapst.com
info1@de.ebmpapst.com

Nominal data

Type	**R3G500-AL04-71**
Motor	**M3G084-GF**

Phase		1~	1~
Nominal voltage	[VAC]	230	230
Nominal voltage range	[VAC]		200 .. 277
Frequency	[Hz]	50/60	50/60
Type of data definition		ml	ml
Speed	[min^{-1}]	800	800
Power input	[W]	327	327
Current draw	[A]	2.1	2.1
Min. ambient temperature	[°C]	-25	-25
Max. ambient temperature	[°C]	40	40

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

EC centrifugal fan - RadiCal

backward curved, single inlet

Technical features

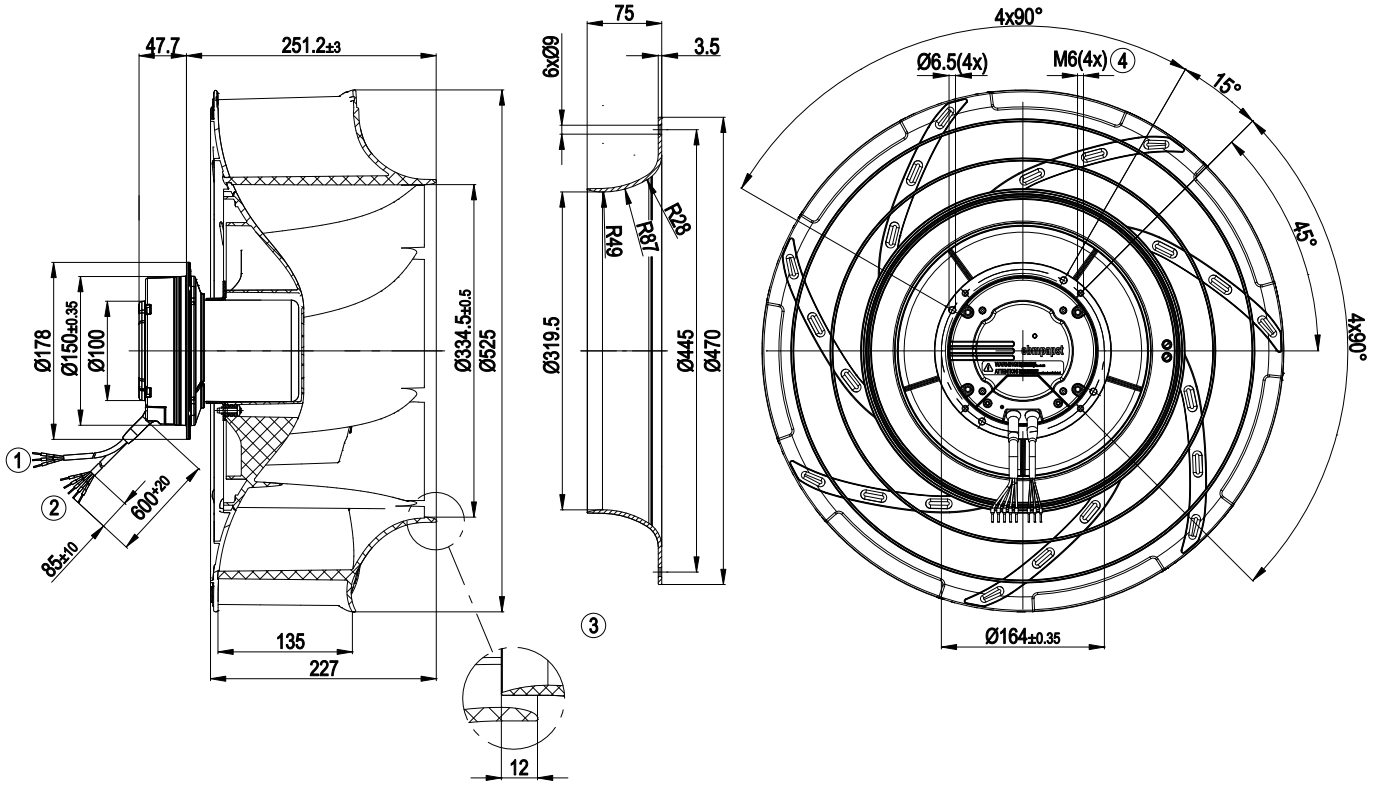
Leackage current	<= 3,5 mA
Size	500 mm
Operation mode	S1
Direction of rotation	Clockwise, seen on rotor
Mounting position	Shaft horizontal or rotor on bottom; rotor on top on request
EMC harmonics	Acc. to EN 61000-3-2/3
EMC interference emission	Acc. to EN 61000-6-3 (household environment)
EMC interference immunity	Acc. to EN 61000-6-2 (industrial environment)
Humidity class	F3-1
Insulation class	"B"
Cable exit	Variable
Condensate discharge holes	Rotor-side
Bearing motor	Ball bearing
Mass	9.72 kg
Material of electronics housing	Die-cast aluminium
Material of impeller	PP-GF40 plastic
Motor protection	Thermal overload protector (TOP) wired internally
Product conforming to standard	EN 60335-1: 2002 + AL11: 2004 + A1: 2004 + A12: 2006 + A2: 2006 + A13: 2008
Surface of rotor	Coated in black
Number of blades	7
Type of protection	IP 44 - depending on position
Protection class	I
Technical features	- Control input 0-10 VDC / PWM - Output 10 VDC, max. 1.1 mA electronics / motor - Alarm relay - Line undervoltage detection - Motor current limit - Soft start
Max. permissible ambient motor temp. (transp./ storage)	+80 °C
Min. permissible ambient motor temp. (transp./storage)	-40 °C

ebm-papst Mulfingen GmbH & Co. KG · Bachmühle 2 · 74673 Mulfingen · Phone: +49 7938 81-0 · Fax: +49 7938 81-110 · www.ebmpapst.com · info1@de.ebmpapst.com

EC centrifugal fan - RadiCal

backward curved, single inlet

Product drawing



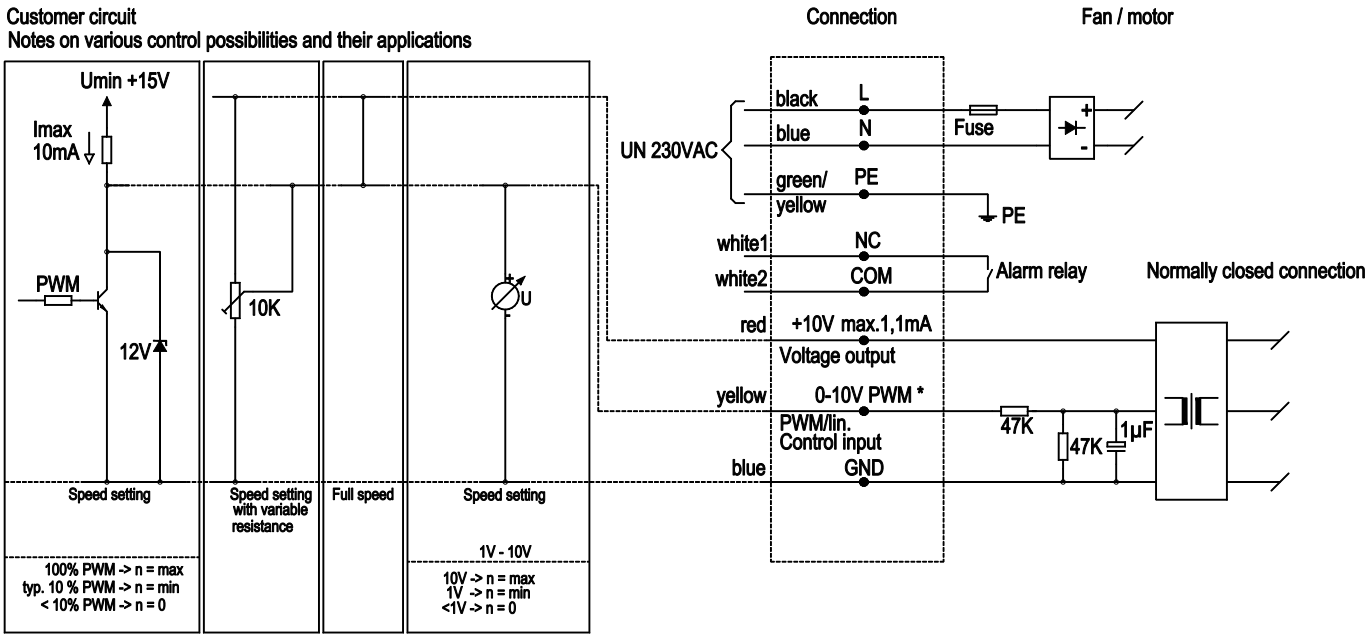
1	Connection line AWG22, 3 x crimped core-end sleeves
2	Connection line AWG18, 5 x crimped core-end sleeves
3	Accessory part: Inlet nozzle 50901-5-2943, not included in the standard scope of delivery
4	Depth of screw min. 8 mm, max. 10 mm

ebm-papst Mulfingen GmbH & Co. KG · Bachmühle 2 · 74673 Mulfingen · Phone: +49 7938 81-0 · Fax: +49 7938 81-110 · www.ebmpapst.com · info1@de.ebmpapst.com

EC centrifugal fan - RadiCal

backward curved, single inlet

Connection screen

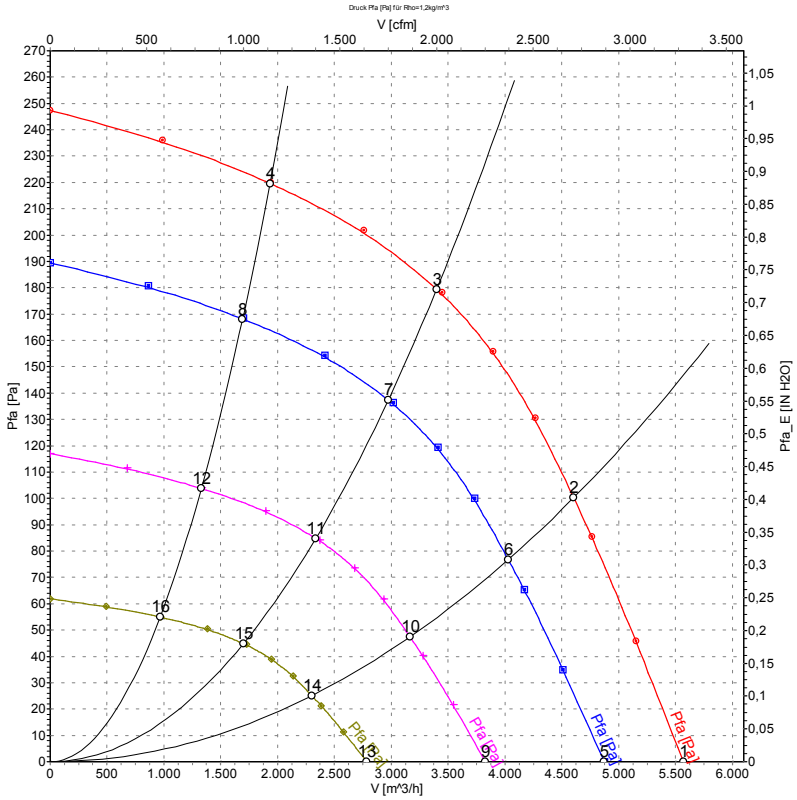


ebm-papst Mulfingen GmbH & Co. KG · Bachmühle 2 · 74673 Mulfingen · Phone: +49 7938 81-0 · Fax: +49 7938 81-110 · www.ebmpapst.com · info1@de.ebmpapst.com

EC centrifugal fan - RadiCal

backward curved, single inlet

Charts: Air flow 50 Hz



Measured values

	U	f	n	P_1	I	LpA_{ss}	LpA_{ds}	LwA_{ss}	LwA_{ds}	$\dot{V}$	p_{fa}
	[V]	[Hz]	[min^{-1}]	[W]	[A]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[m^3/h]	[Pa]
1	230	50	800	201	1.23	59	57	66	72	5570	0
2	230	50	800	288	1.73	55	53	61	68	4605	100
3	230	50	800	327	2.10	52	49	58	64	3395	180
4	230	50	800	261	1.58	51	49	58	63	1935	220
5	230	50	700	135	0.83	56	54	63	69	4875	0
6	230	50	700	193	1.16	52	50	58	65	4030	77
7	230	50	700	216	1.29	49	46	55	61	2975	138
8	230	50	700	175	1.06	49	47	55	61	1690	169
9	230	50	550	65	0.40	51	49	58	64	3830	0
10	230	50	550	93	0.56	46	45	53	59	3165	47
11	230	50	550	105	0.63	44	41	50	56	2335	85
12	230	50	550	85	0.51	43	41	50	55	1330	104
13	230	50	400	25	0.15	44	42	51	57	2785	0
14	230	50	400	36	0.22	39	38	46	53	2300	25
15	230	50	400	40	0.24	37	34	43	49	1700	45
16	230	50	400	33	0.20	36	34	43	48	965	55

ebm-papst Mulfingen GmbH & Co. KG · Bachmühle 2 · 74673 Mulfingen · Phone: +49 7938 81-0 · Fax: +49 7938 81-110 · www.ebmpapst.com · info1@de.ebmpapst.com