R3G310-AN12-30

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
info1@de.ebmpapst.com
www.ebmpapst.com

Nominal data

Type	**R3G310-AN12-30**	
Motor	**M3G084-FA**	
Nominal voltage	[VDC]	48
Nominal voltage range	[VDC]	36 .. 57
Type of data definition		rfa
Speed	[min^{-1}]	2000
Power input	[W]	190
Current draw	[A]	4.0
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

Downloaded from Arrow.com.

EC centrifugal fan

backward curved, single inlet

Technical features

Size	310 mm
Operation mode	S1
Direction of rotation	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)
Insulation class	"B"
Cable exit	Variable
Condensate discharge holes	None
Bearing motor	Ball bearing
Mass	4.35 kg
Material of impeller	Aluminium sheet
Motor protection	Thermal overload protector (TOP) wired internally
Product conforming to standard	EN 60950-1
Surface of rotor	Coated in black
Number of blades	6
Type of protection	IP 42
Technical features	- Control input 0-10 VDC / PWM - Tach output - Over-temperature protected motor - Motor current limit - Soft start
Max. permissible ambient motor temp. (transp./ storage)	+80 °C
Min. permissible ambient motor temp. (transp./storage)	-40 °C
Approval	CCC; CSA C22.2 Nr.77; UL 2111

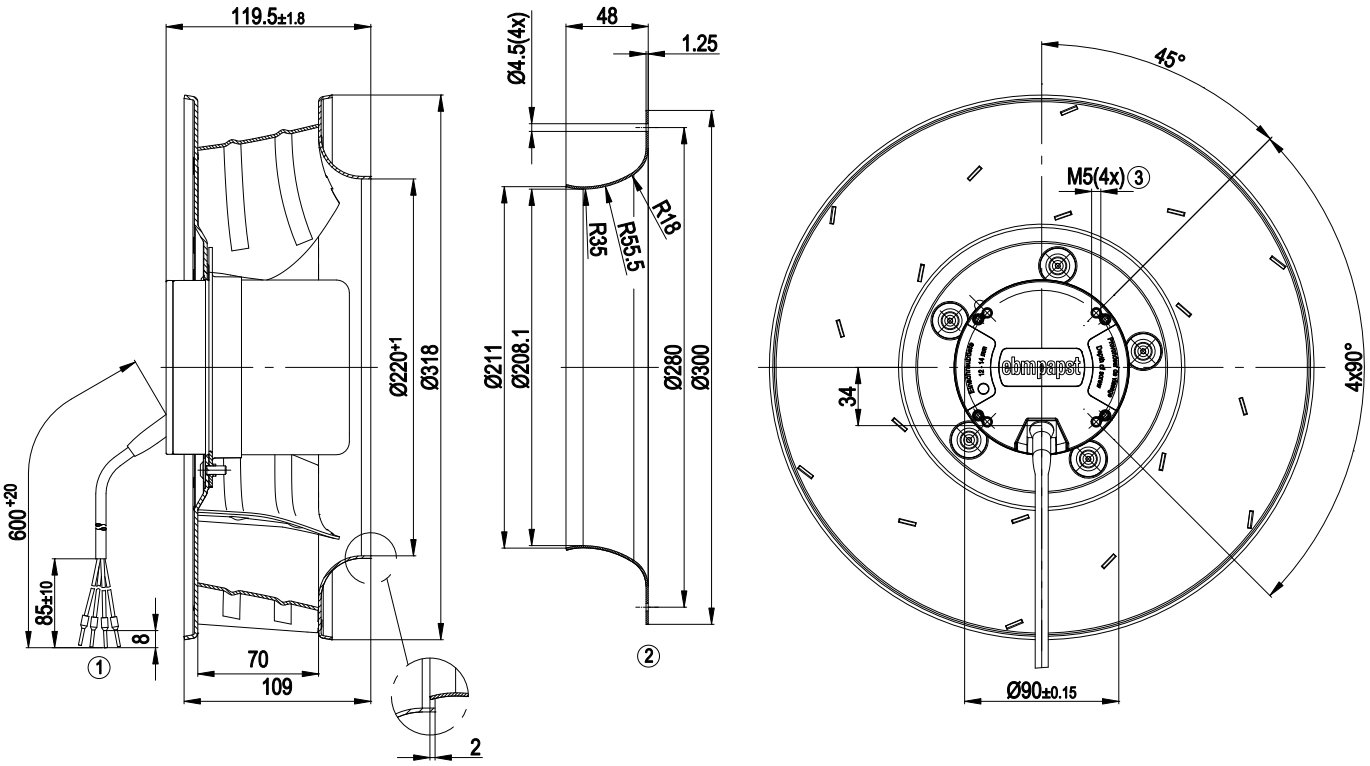
ebm-papst Mulfingen GmbH & Co. KG · Bachmühle 2 · D-74673 Mulfingen · Phone: +49(0)7938/81-0 · Fax: +49(0)7938/81-110 · info1@de.ebmpapst.com · www.ebmpapst.com

Downloaded from Arrow.com.

EC centrifugal fan

backward curved, single inlet

Product drawing



1	Connection line AWG16 , 4x crimped core-end sleeves
2	Accessory part: Inlet nozzle 31050-2-4013 not included in the standard scope of delivery, other inlet nozzles on request
3	Depth of screw 12 - 14 mm

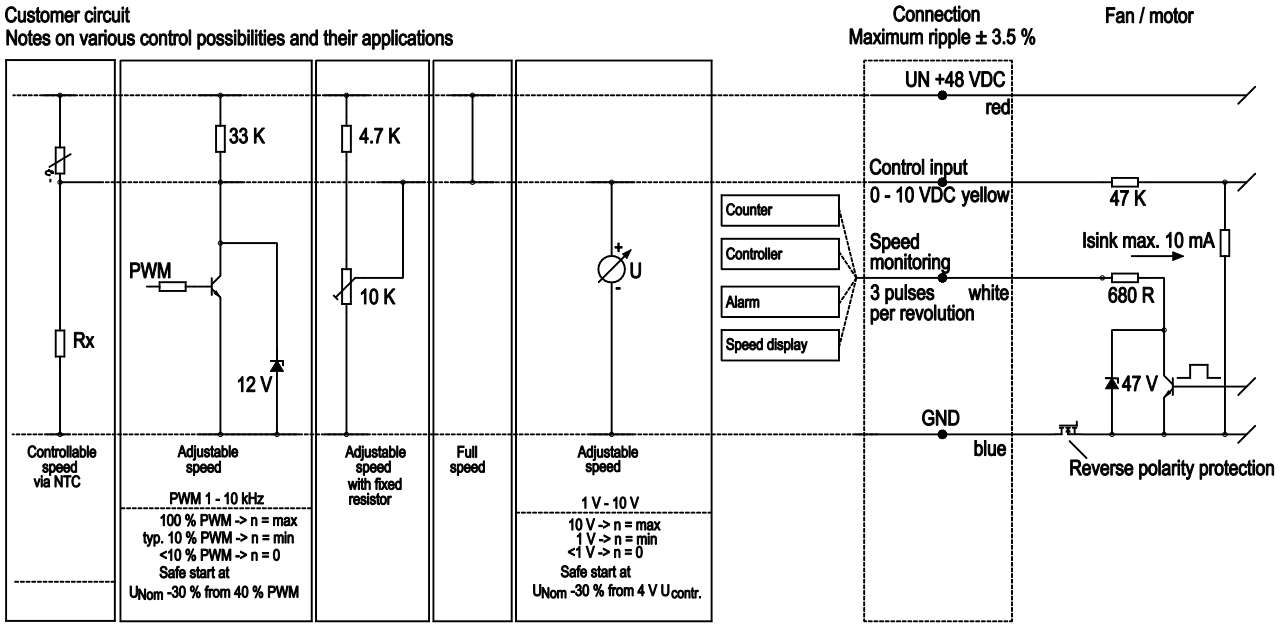
ebm-papst Mulfingen GmbH & Co. KG · Bachmühle 2 · D-74673 Mulfingen · Phone: +49(0)7938/81-0 · Fax: +49(0)7938/81-110 · info1@de.ebmpapst.com · www.ebmpapst.com

Downloaded from Arrow.com.

EC centrifugal fan

backward curved, single inlet

Connection screen



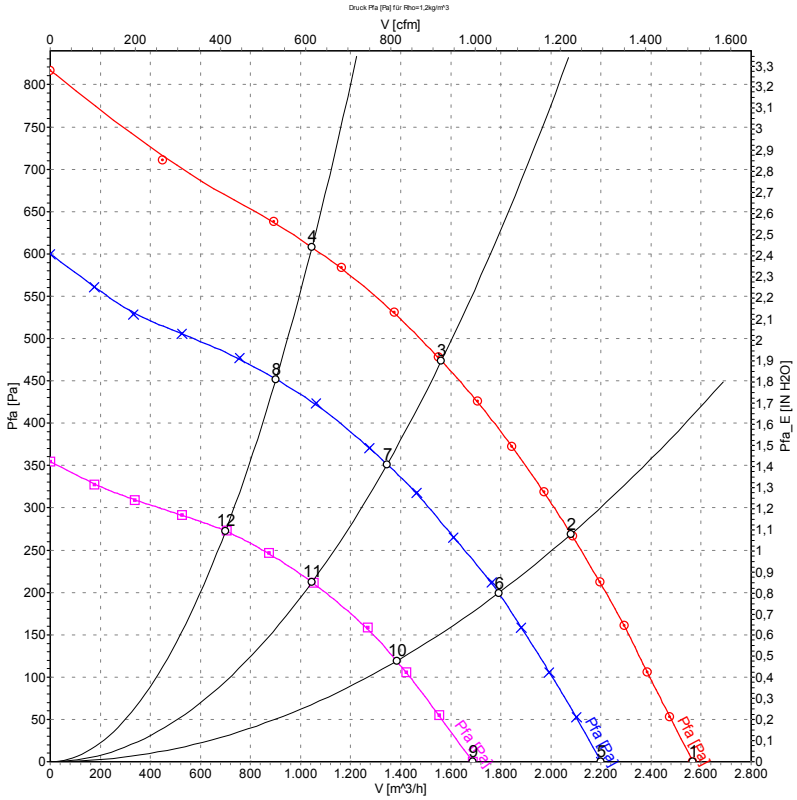
ebm-papst Mulfingen GmbH & Co. KG · Bachmühle 2 · D-74673 Mulfingen · Phone: +49(0)7938/81-0 · Fax: +49(0)7938/81-110 · info1@de.ebmpapst.com · www.ebmpapst.com

Downloaded from Arrow.com.

EC centrifugal fan

backward curved, single inlet

Charts: Air flow



Measurement: LU-57147
Measurement: LU-57146
Measurement: LU-57148

Measured values

	U	n	P_1	I	$\dot{V}$	p_{fa}
	[V]	[min^{-1}]	[W]	[A]	[m^3/h]	[Pa]
1	57	2370	263	4.65	2570	0
2	57	2325	317	5.61	2080	269
3	57	2295	347	6.15	1560	474
4	57	2310	335	5.93	1045	608
5	48	2030	171	3.59	2200	0
6	48	2000	204	4.29	1790	200
7	48	1980	225	4.72	1345	350
8	48	1990	217	4.55	900	450
9	36	1570	84	2.35	1690	0
10	36	1555	101	2.83	1385	119
11	36	1545	110	3.07	1045	213
12	36	1550	106	2.96	700	274

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

Downloaded from Arrow.com.