G1G085-AB07-01

EC centrifugal fan

forward-curved, single-intake

with housing (flange)



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

Limited partnership · Headquarters Mulfingen
Amtsgericht (court of registration) Stuttgart · HRA 590344

General partner Elektrobau Mulfingen GmbH · Headquarters Mulfingen
Amtsgericht (court of registration) Stuttgart · HRB 590142

Nominal data

Type	**G1G085-AB07-01**	
Motor	**M1G045-BE**	
Nominal voltage	VDC	48
Nominal voltage range	VDC	36 .. 57
Method of obtaining data		fa
Speed (rpm)	min^{-1}	2850
Power consumption	W	14
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	60

ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment
Subject to change

EC centrifugal fan

forward-curved, single-intake

with housing (flange)

Technical description

Weight	0.8 kg
Fan size	85 mm
Rotor surface	Galvanized
Impeller material	Sheet steel, hot-dip galvanized
Housing material	Die-cast aluminum
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP22; installation- and position-dependent
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	H0 - dry environment
Max. permitted ambient temp. for motor (transport/storage)	+ 80 °C
Min. permitted ambient temp. for motor (transport/storage)	- 40 °C
Installation position	Any
Condensation drainage holes	None
Mode	S1
Motor bearing	Ball bearing
Technical features	Control input 0-10 VDC/PWM, tach output, reverse-polarity and locked-rotor protection
Motor protection	Reverse polarity and locked-rotor protection
With cable	Axial
Approval	EAC

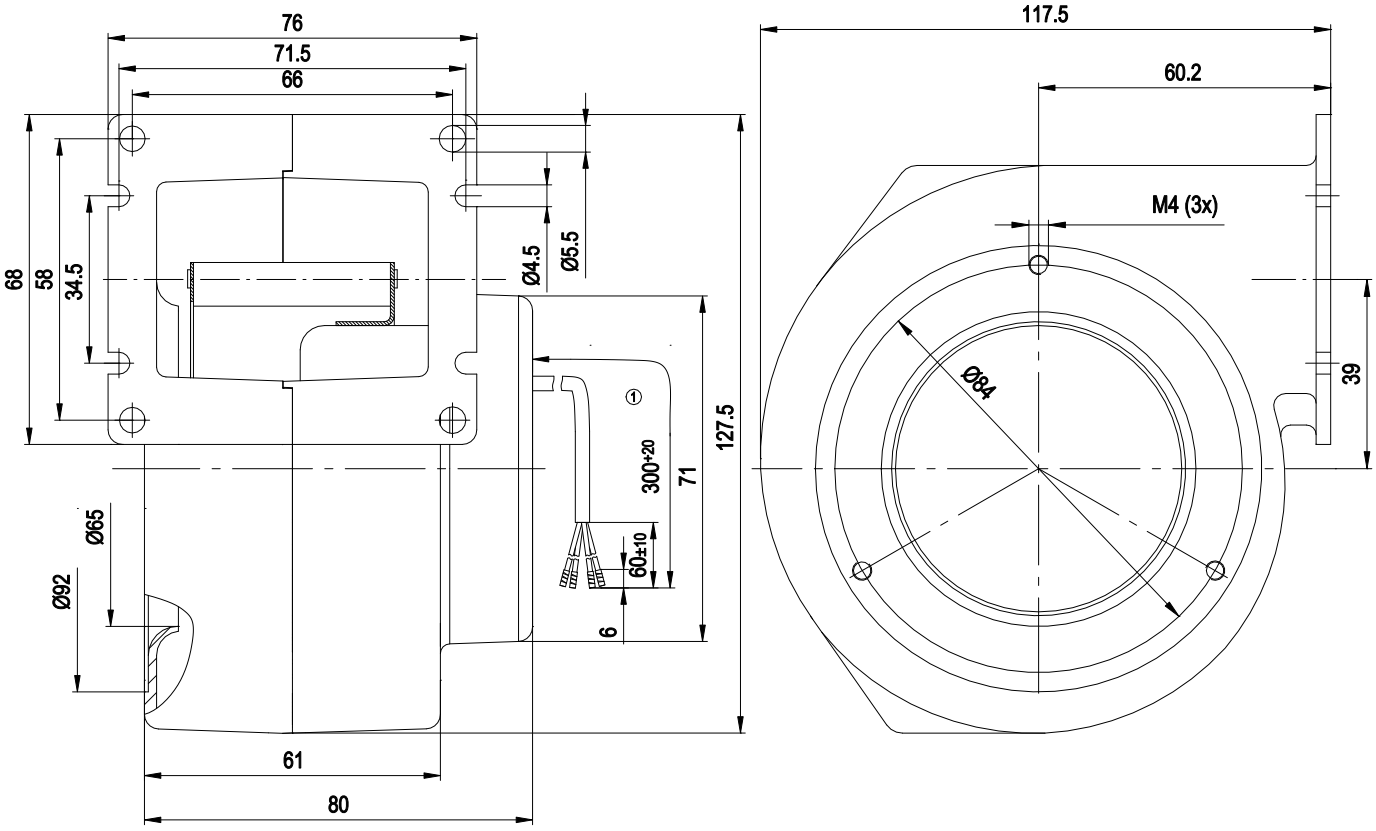
ebm-papst Mulfingen GmbH & Co. KG · Bachmühle 2 · D-74673 Mulfingen · Phone +49 (0) 7938 81-0 · Fax +49 (0) 7938 81-110 · info1@de.ebmpapst.com · www.ebmpapst.com

EC centrifugal fan

forward-curved, single-intake

with housing (flange)

Product drawing



1	Cable PVC AWG22, 4 x crimped splices

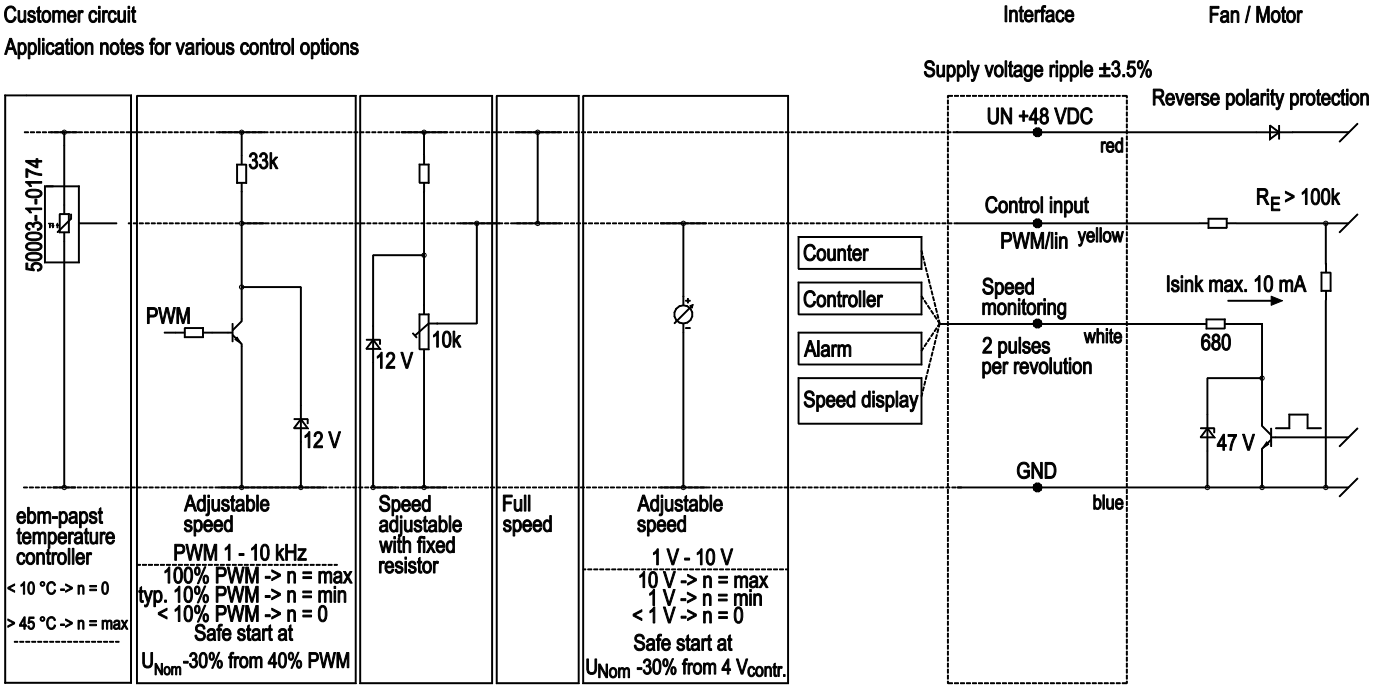
ebm-papst Mulfingen GmbH & Co. KG · Bachmühle 2 · D-74673 Mulfingen · Phone +49 (0) 7938 81-0 · Fax +49 (0) 7938 81-110 · info1@de.ebmpapst.com · www.ebmpapst.com

EC centrifugal fan

forward-curved, single-intake

with housing (flange)

Connection diagram



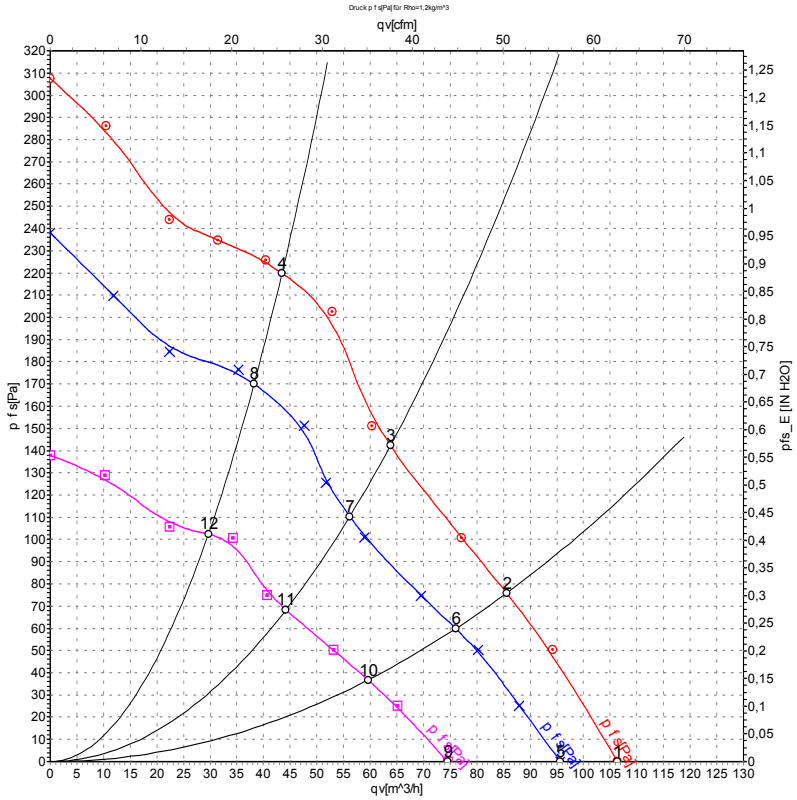
ebm-papst Mulfingen GmbH & Co. KG · Bachmühle 2 · D-74673 Mulfingen · Phone +49 (0) 7938 81-0 · Fax +49 (0) 7938 81-110 · info1@de.ebmpapst.com · www.ebmpapst.com

EC centrifugal fan

forward-curved, single-intake

with housing (flange)

Curves: Air performance



Measurement: LU-42731-1
Measurement: LU-42730-1
Measurement: LU-42732-1

Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebm-papst. Intake sound level: Sound power level according to ISO 13347 / sound pressure level measured at 1 m distance from fan axis. The values given are valid under the specified measuring conditions and may vary due to conditions of installation. For deviations from the standard configuration, the parameters have to be checked on the installed unit.

Measured values

	U	n	P_{ed}	I	q_V	p_{fs}	q_V	p_{fs}
	V	min^{-1}	W	A	m^3/h	Pa	cfm	inH2O
1	56	3245	20	0.39	105	0	60	0.00
2	56	3470	17	0.34	85	76	50	0.31
3	56	3680	15	0.30	65	141	40	0.57
4	56	3915	13	0.26	45	220	25	0.88
5	48	2850	14	0.32	95	0	55	0.00
6	48	3090	13	0.30	75	60	45	0.24
7	48	3270	11	0.27	55	110	35	0.44
8	48	3460	9.6	0.24	40	170	20	0.68
9	36	2340	8.2	0.26	75	0	45	0.00
10	36	2465	7.2	0.24	60	37	35	0.15
11	36	2580	6.3	0.22	45	68	25	0.27
12	36	2700	5.4	0.20	30	103	20	0.41

U = Power supply · n = Speed (rpm) · P_{ed} = Power consumption · I = Current draw · q_V = Air flow · p_{fs} = Pressure increase

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