G1G097-AA05-15

EC centrifugal fan

backward-curved, single-intake

with housing (without 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	**G1G097-AA05-15**	
Motor	**M1G045-BE**	
Nominal voltage	VDC	24
Nominal voltage range	VDC	16 .. 28
Method of obtaining data		fa
Speed (rpm)	min^{-1}	2650
Power consumption	W	16
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

backward-curved, single-intake

with housing (without flange)

Technical description

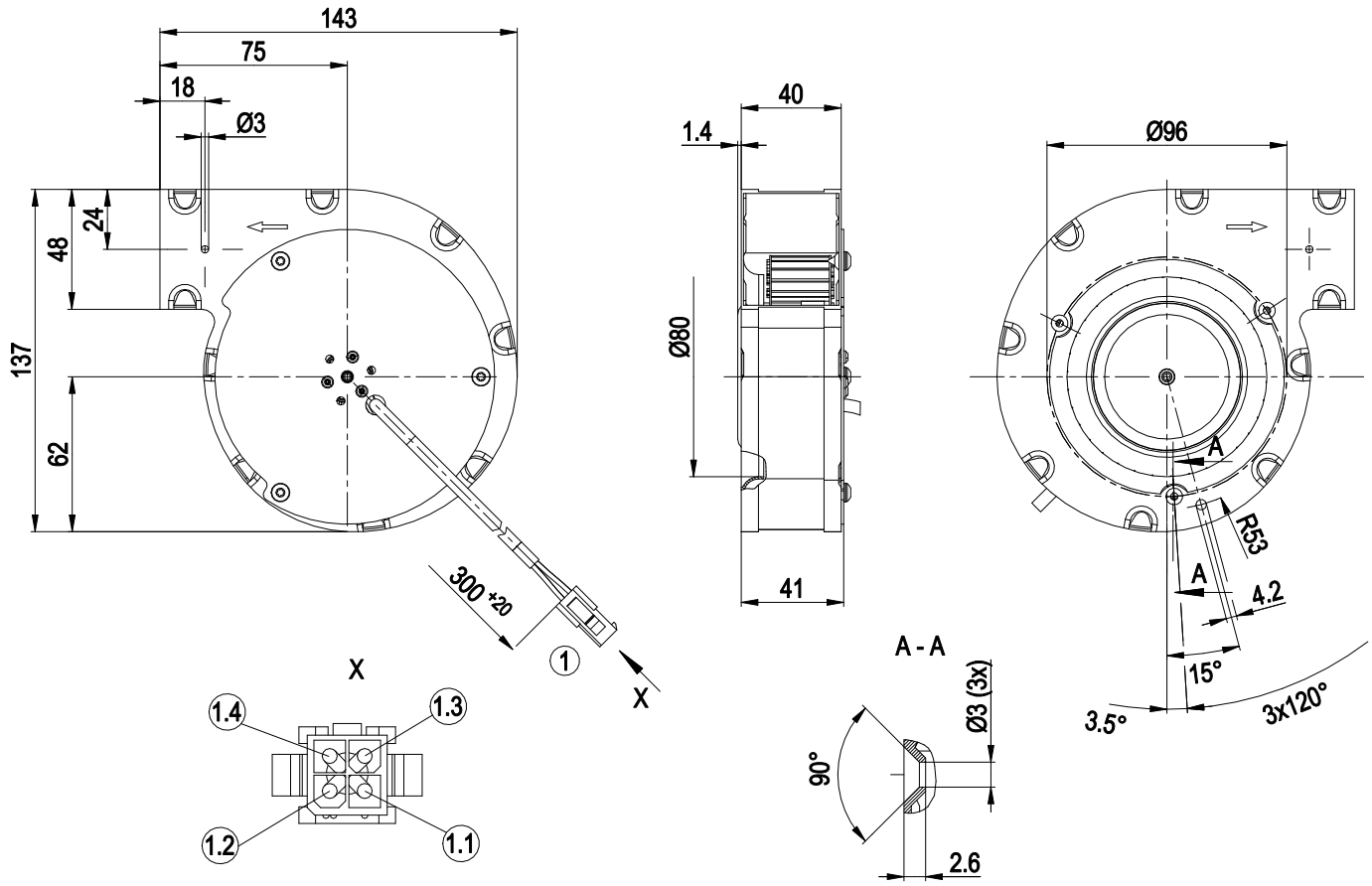
Weight	0.79 kg
Size	97 mm
Motor size	45
Rotor surface	Thick-film passivated
Impeller material	Sheet steel, galvanized
Housing material	Sheet steel, galvanized
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP22
Insulation class	"B"
Moisture (F) / Environmental (H) protection 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	- Tach output - Soft start - Control input 0-10 VDC / PWM
Electrical hookup	Connector with cable
Motor protection	Reverse polarity and locked-rotor protection
With cable	Axial
Protection class	I (if protective earth is connected by customer to the housing's connection point)
Conformity with standards	EN 60950-1
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

backward-curved, single-intake
with housing (without flange)

Product drawing



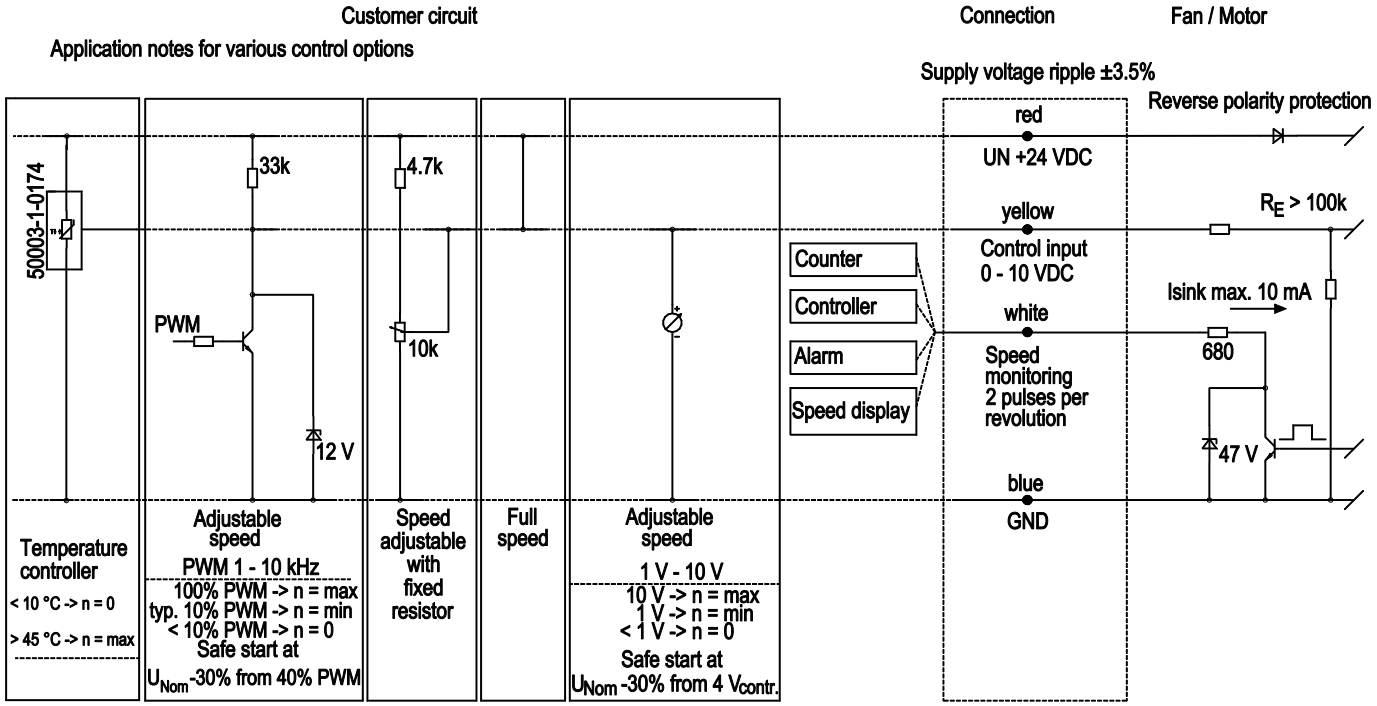
1	Cable PVC AWG22, 4-pole connector housing Molex 39-01-2046, 4x socket Molex 39-00-0040
1.1	UN +24 VDC (red)
1.2	GND (blue)
1.3	Tach (white)
1.4	0-10 VDC (yellow)

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

backward-curved, single-intake
with housing (without flange)

Connection diagram



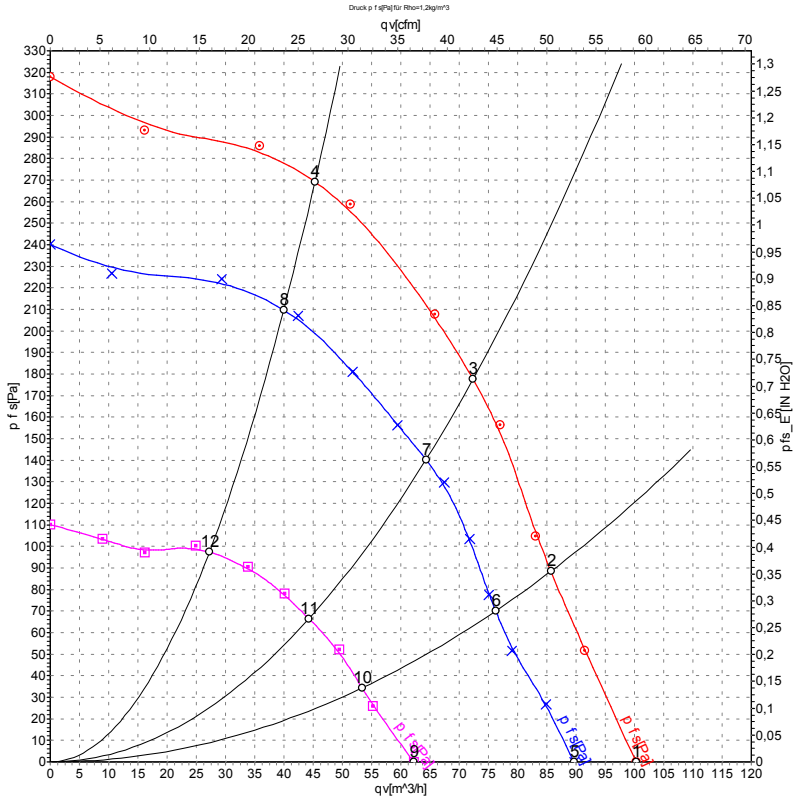
ebm-papst Mulfingen GmbH & Co. KG · Bachmühle 2 · D-74673 Mulfingen · Phone +49 (0) 7938 81-0 · Fax +49 (0) 7938 81-110 · info1@de.ebmpapst.com · www.ebmpapst.com

EC centrifugal fan

backward-curved, single-intake

with housing (without flange)

Curves: Air performance



Measurement: LU-53694-1
Measurement: LU-53693-1
Measurement: LU-53695-1

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	in. wg
1	28	2825	20	0.78	100	0	60	0.00
2	28	2960	18	0.71	85	88	50	0.35
3	28	3115	16	0.64	70	178	40	0.71
4	28	3410	13	0.52	45	269	25	1.08
5	24	2550	15	0.70	90	0	55	0.00
6	24	2640	13	0.61	75	70	45	0.28
7	24	2755	12	0.55	65	140	40	0.56
8	24	3005	9.4	0.45	40	210	25	0.84
9	16	1820	6.0	0.44	60	0	35	0.00
10	16	1885	5.5	0.41	55	34	30	0.14
11	16	1950	5.0	0.38	45	66	25	0.26
12	16	2085	4.0	0.33	25	98	15	0.39

U = Voltage · 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