G1G144-AE13-01

EC centrifugal fan

backward-curved, single-intake

with housing (flange), Gas blower for condensing boilers



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	**G1G144-AE13-01**	
Motor	**M1G055-AI**	
Nominal voltage	VDC	24
Nominal voltage range	VDC	16 .. 28
Method of obtaining data		fa
Speed (rpm)	min-1	4350
Power consumption	W	54
Current draw	A	2.5
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	70
Min. temp. of flow medium	°C	-25
Max. temp. of flow medium	°C	+80

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 (flange), Gas blower for condensing boilers

Technical description

Weight	1.47 kg
Fan size	144 mm
Rotor surface	Thick-film passivated
Cover material	PP plastic
Impeller material	PA plastic
Housing material	Die-cast aluminum
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP00
Insulation class	"B"
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	On rotor side
Mode	S1
Premixing	Not suitable for premixing.
Motor bearing	Ball bearing
Technical features	- Tach output - Motor current limitation - PWM control input
Electrical hookup	With plug
Motor protection	Reverse polarity and locked-rotor protection
Comment	Complete unit must be tested for required approvals.

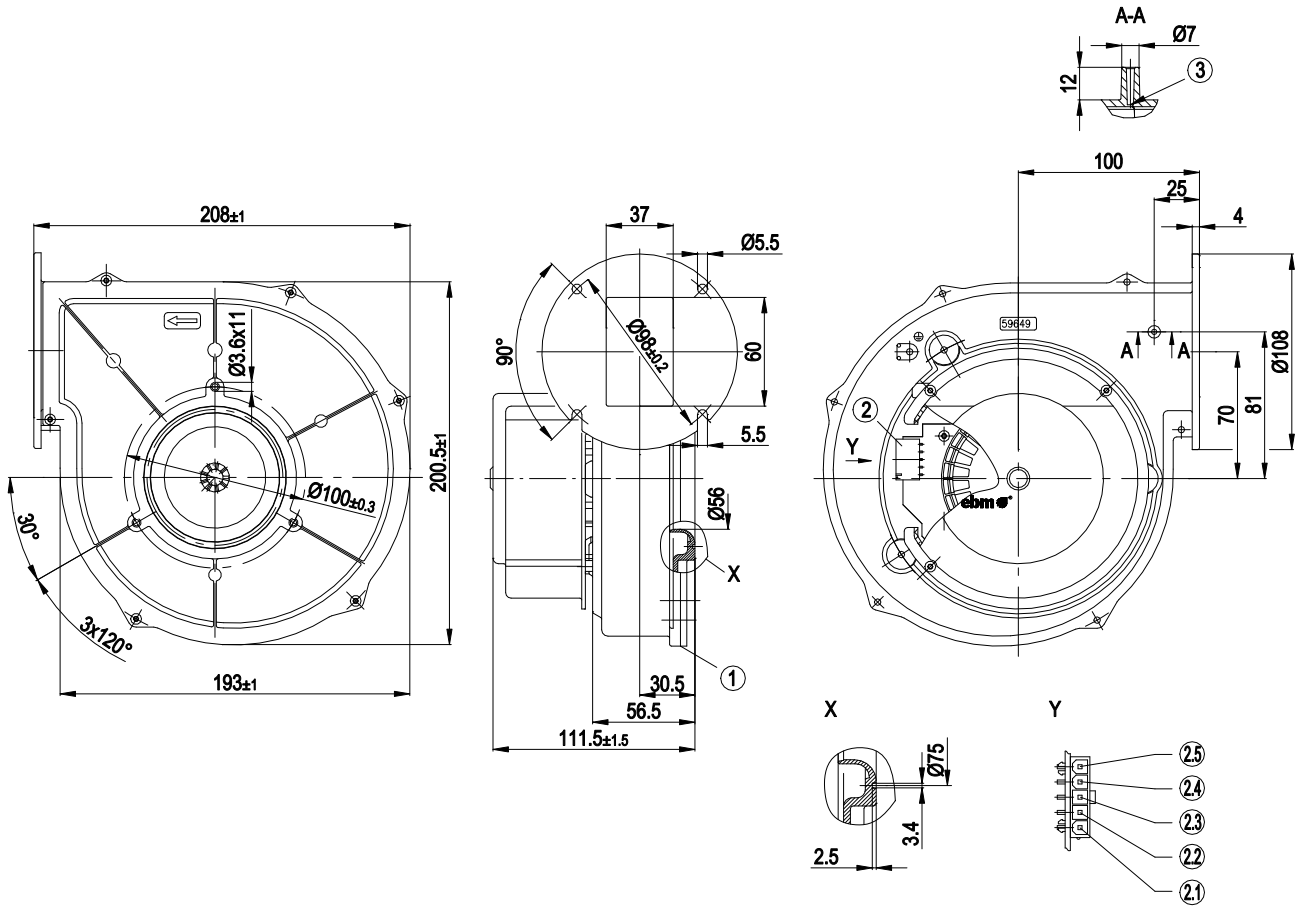
ebm-papst Mulfingen GmbH & Co. KG · Bachmühle 2 · D-74673 Mulfingen · Phone +49 (0) 7938 81-0 · Fax +49 (0) 7938 81-110 · info1@de.ebmpapst.com · www.ebmpapst.com

EC centrifugal fan

backward-curved, single-intake

with housing (flange), Gas blower for condensing boilers

Product drawing



A-A	Section A-A
X	Detail X
Y	View Y
1	Housing side parts sealed with NBR round cord (pentane-resistant)
2	5-pole header, mating connector (not included in scope of delivery): Molex no. 39-01-4050; socket: Molex no. 39-00-0059
2.1	(+)
2.2	Speed monitoring
2.3	N.C.
2.4	PWM
2.5	(-)
3	Pressure tap sealed (drilled open if required)

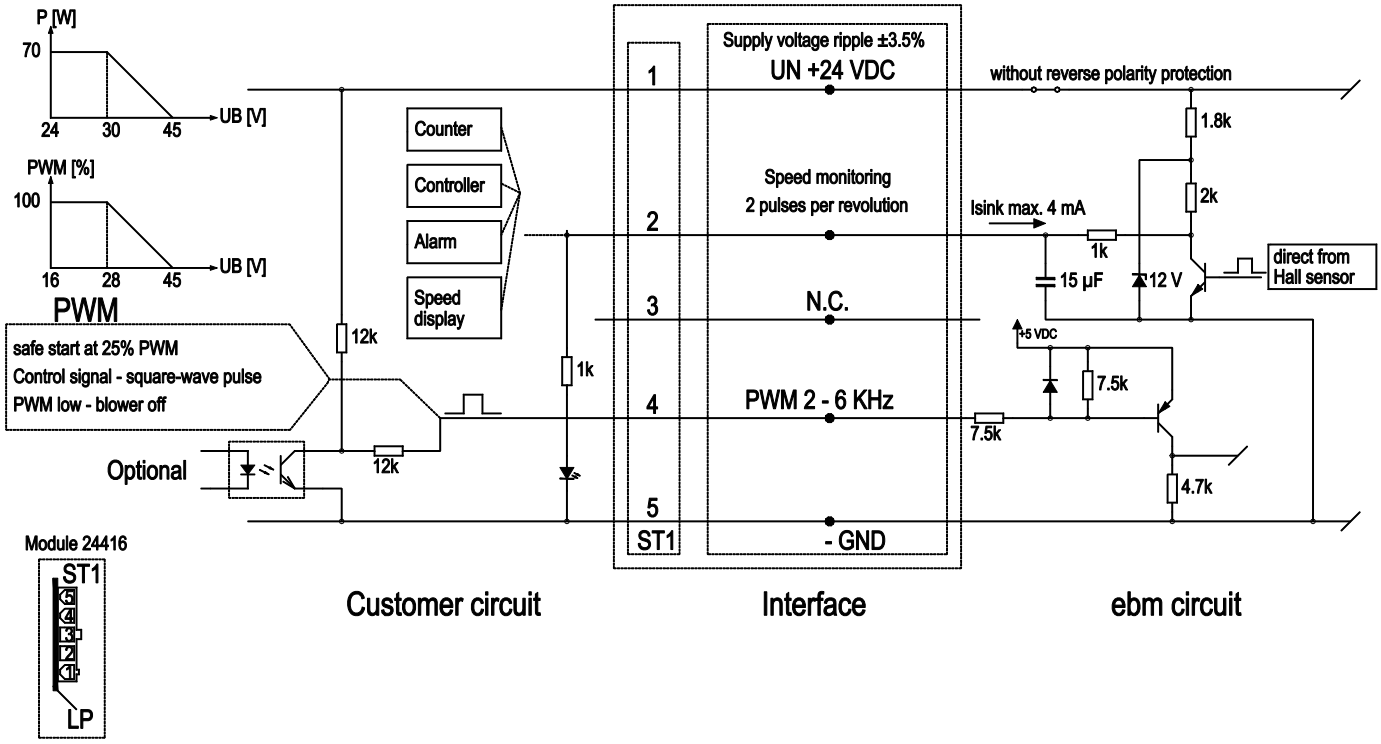
ebm-papst Mulfingen GmbH & Co. KG · Bachmühle 2 · D-74673 Mulfingen · Phone +49 (0) 7938 81-0 · Fax +49 (0) 7938 81-110 · info1@de.ebmpapst.com · www.ebmpapst.com

EC centrifugal fan

backward-curved, single-intake

with housing (flange), Gas blower for condensing boilers

Connection diagram



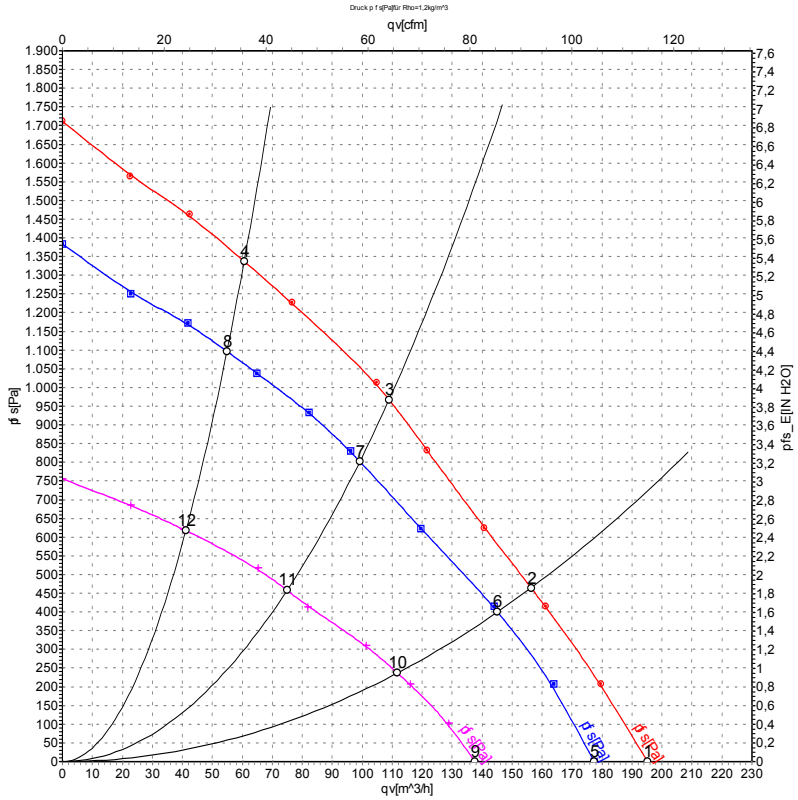
ebm-papst Mulfingen GmbH & Co. KG · Bachmühle 2 · D-74673 Mulfingen · Phone +49 (0) 7938 81-0 · Fax +49 (0) 7938 81-110 · info1@de.ebmpapst.com · www.ebmpapst.com

EC centrifugal fan

backward-curved, single-intake

with housing (flange), Gas blower for condensing boilers

Curves: Air performance



Measurement: LU-38724-1
Measurement: LU-38723-1
Measurement: LU-38725-1

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	qv	p_{fs}	qv	p_{fs}
	V	min^{-1}	W	A	m^3/h	Pa	CFM	inH2O
1	28	4655	68	2.83	195	0	115	0.00
2	28	4775	66	2.70	155	465	90	1.87
3	28	5155	61	2.45	110	970	65	3.89
4	28	5655	52	2.04	60	1337	35	5.37
5	24	4350	54	2.50	175	0	105	0.00
6	24	4435	53	2.43	145	404	85	1.62
7	24	4700	47	2.16	100	804	60	3.23
8	24	5105	39	1.77	55	1096	30	4.40
9	16	3380	25	1.70	140	0	80	0.00
10	16	3435	24	1.64	110	237	65	0.95
11	16	3595	21	1.47	75	458	45	1.84
12	16	3855	18	1.23	40	618	25	2.48

U = Power supply · n = Speed (rpm) · P_{ed} = Power consumption · I = Current draw · qv = 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