Product Documentation

Date: 23.09.2004

Customer: ebm-papst Inc.

Model No: G1G170AB 3120

Enclosures:

- x Design Specification
- x Dimensional Drawing
- x Wiring Diagram
- x Performance Data
- x Construction Data
- x Marking Data

ebm-papst Mulfingen GmbH & Co

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Design Specification **Part No:** G1G170AB 3120

General –

Allowable temperature:	-15°C (5°F) to +55°C (131°F) [Motor ambient – operation]
Max. backpressure:	2850 Pa
Allowable premix gases:	Natural and propane (Responsibility at customer side)
Relative humidity:	0% to 93% (non-condensing)
Mounting position:	any desired
Weight:	4,19 kg (9,2 lbs)
Packaging:	Bulk packed, palletized, 108 pc/skid (sea freight), 72 pc/skid (air cargo)

Electrical Rating –

Voltage:	230 V
Frequency:	50/60 Hz
Power:	315 W

Mechanical –

Dimensional data:	see appendix

Motor –

Design:	EC Motor, external rotor
Type:	M1G074CF
Rotor diameter:	92 mm
Stack height:	25 mm
Insulation class:	B
Protection:	Locked-rotor and polarity (polarizing key, plug coding) current over-load
Bearing type:	Ball bearings
Cover:	1 pc. plastic (polyflam RPP 374-ND CS1) cover for motor and drive electronics
Speed controllable:	via PWM signal (see interface)
AC Main Switching:	possible, preferred method of ON/OFF switching is via PWM signal (see interface). AC Main Switching reduces the specified lifetime.

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Design Specification (continued) **Part No:** G1G170AB 3120

Drive Electronics –

Interface:	60234-5-9770
Connections:	3 pin (AC Main) AMP-Nr. 1-350 766-1 5 pin (DC Control Circuit) Molex Nr. 39-01-4050
Protection class:	IP20

Housing –

Material:	(2 pc) die cast aluminium
Sealed:	Yes, pentane resistant o-ring
Static pressure tap:	Yes, normally closed

Impeller –

Type:	Backward inclined
Size:	170 mm diameter
Material:	AL 99 W8 (cover disc and base disc) ALMG 3 W9 (blade)
Hub connection:	screwed

Safety Approvals –

Type:	UL, CSA, VDE, CE

Marking –

Product label:	Located on drive side of scroll housing, includes company name, part number, model number, rated voltage, frequency, power, rated speed; agency mark (if applicable), date of manufacture,

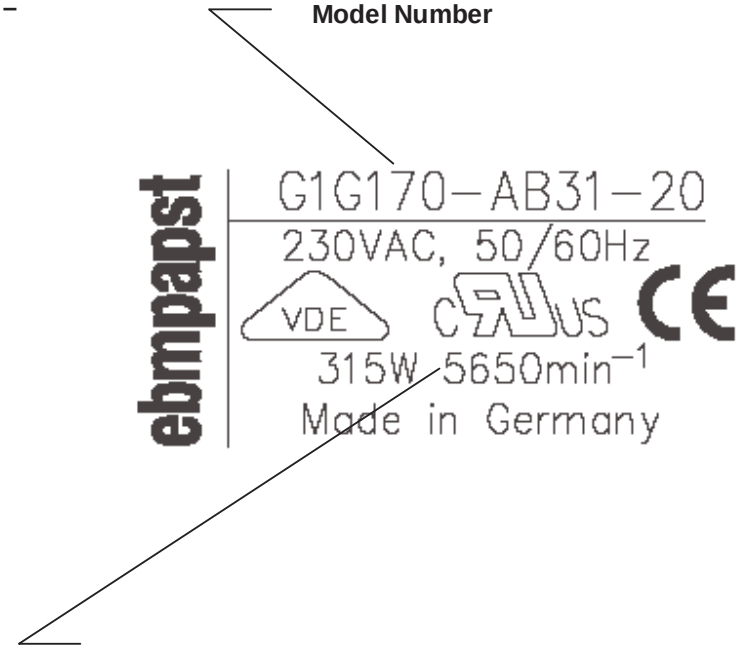
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Design Specification (continued) **Part No:** G1G170AB 3120

Alterations –

ebm-papst reserves the right to make changes and technical improvements without influence on dimensional or performance specifications. Any other modifications can be introduced only after written mutual agreement between both parties.

Marking Data –



Example of Product Label

(General Layout)

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Summary of Construction Details
of M1G074 CF
for radial Blower G1G170 AB3120

1 Manufacturer	ebm-papst Mulfingen GmbH
2 Motortype	M1G074 CF
3 Nominal voltage / frequency	230V ~ 50/60 Hz
4 Rated speed	5650 1/min
5 Insulation material according to insulation class: B / EN 60335-1	
6 Termination disc	optional Ultramid A3X2G5, Latamid 66H2G 25/V0KB, Technyl A20V25, Radiflam ARV 250AF
7 Deck slide	Hostaphan
8 Insulation washer	POLY-PAD K4/AC
9 Cover	Polyflam RPP374-ND/CS1
10 Coil wire	copper varnish wire
11 Printed board	FR4
12 Fuse	T 4 Nominal value 4A/ 250V
13 Yellow Card Number	E54522

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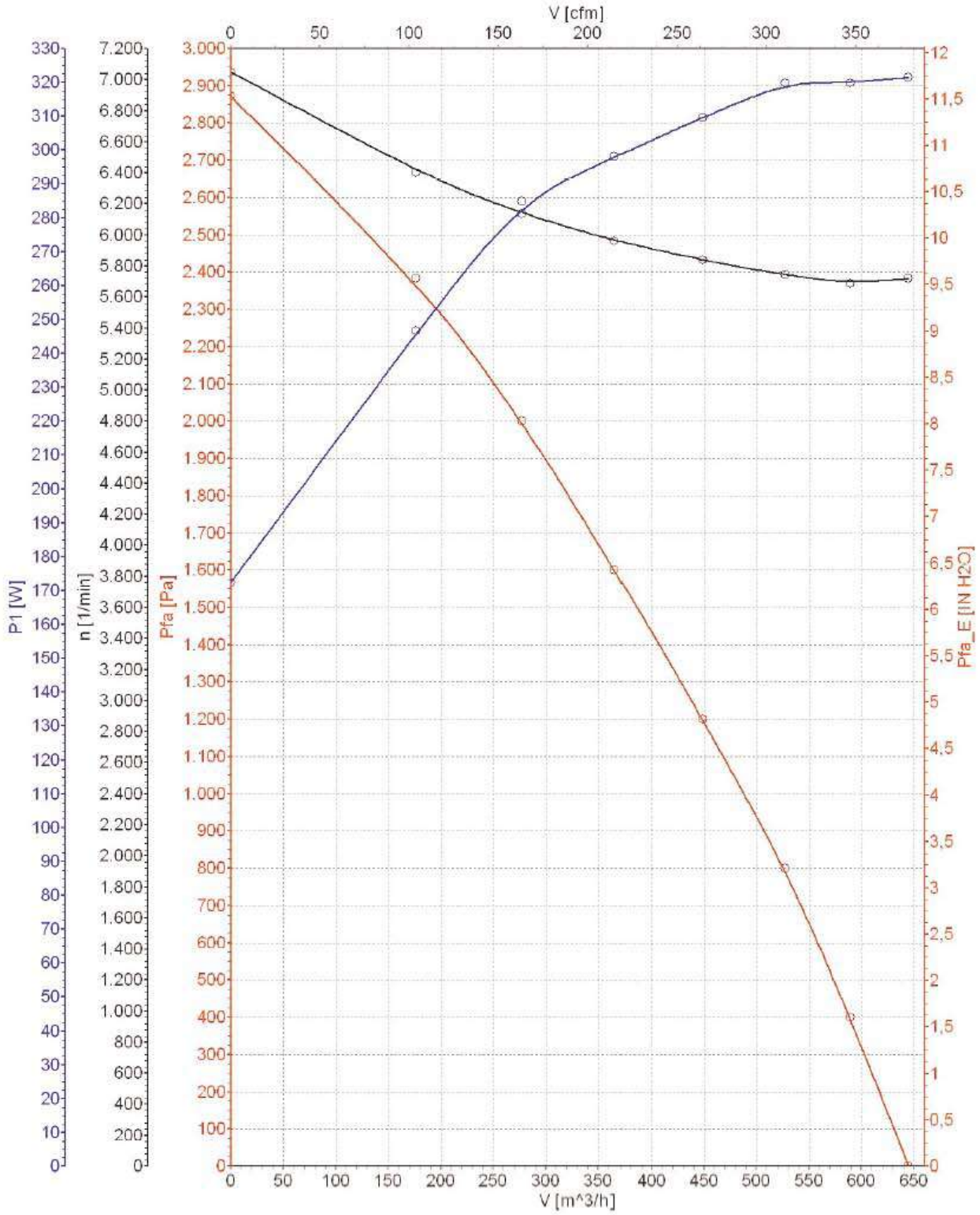
ebm-papst Mulfingen GmbH & Co. KG
Postfach 11 61 · 74671 Mulfingen
Telefon 0 79 38 / 81-0
Telefax 0 79 38 / 81-1 10

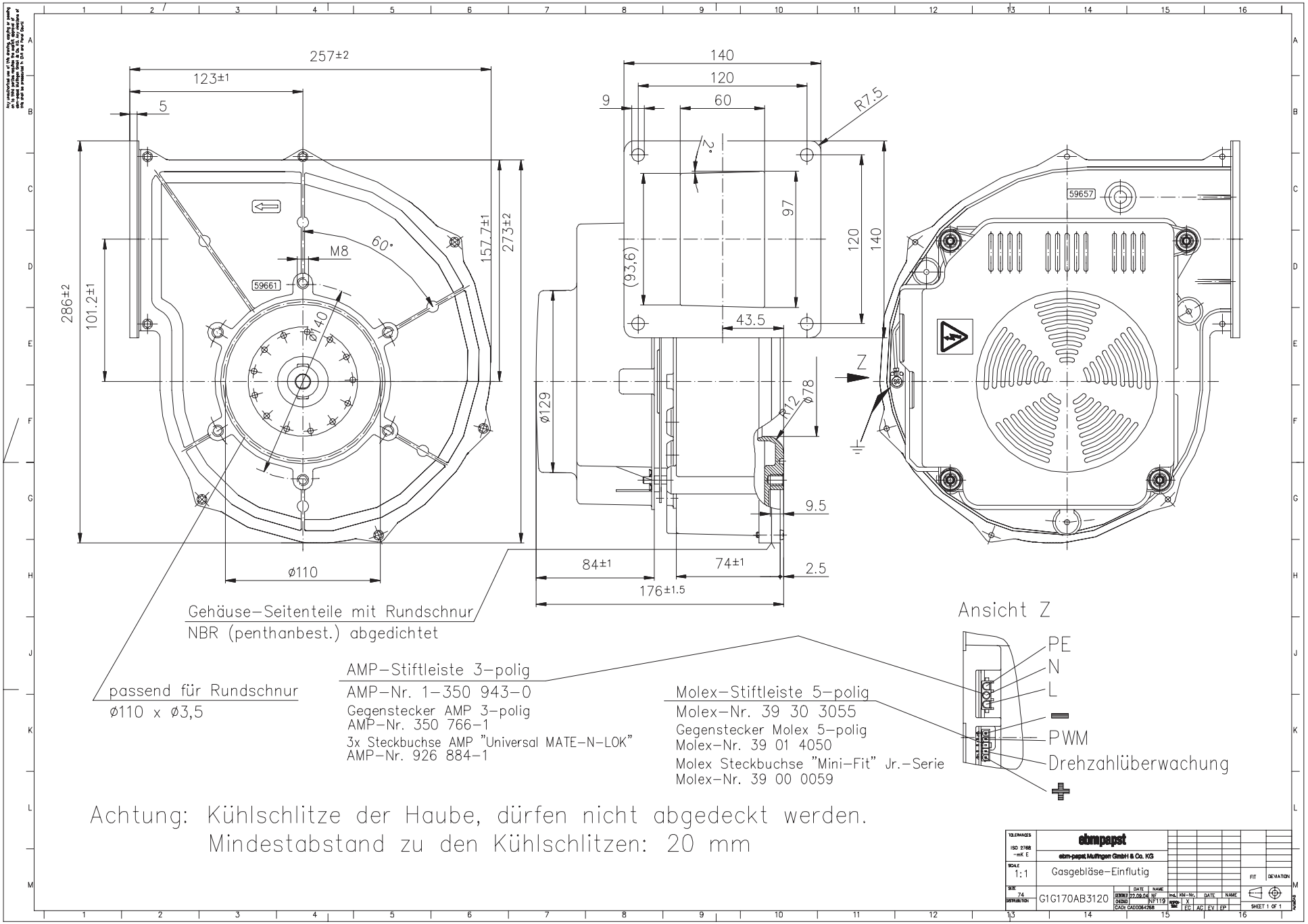
Air Test

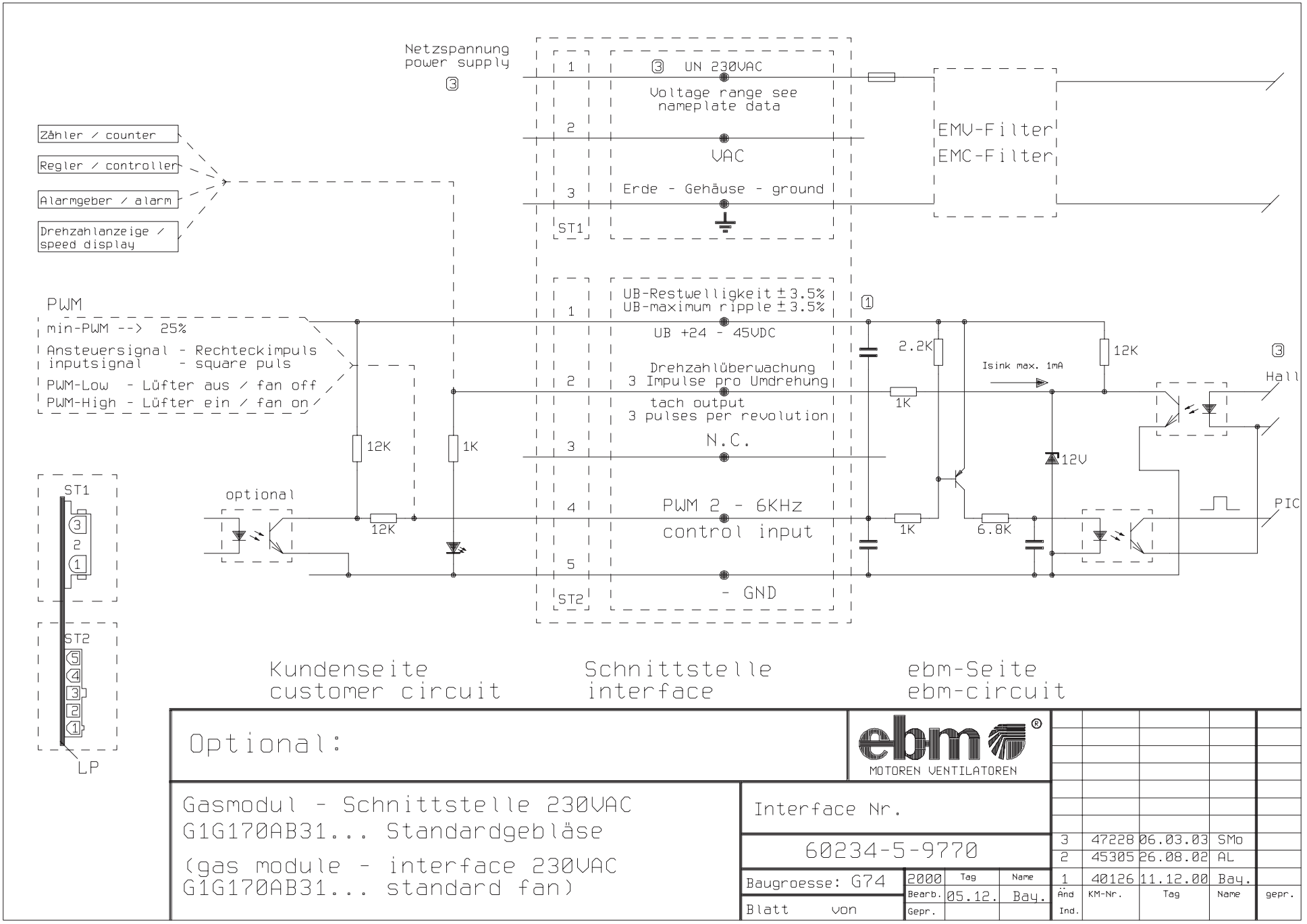
flow controlling regulations DIN 1952 VDI

determined at sucking side according to DIN 24163

Type	M-No.	U[V]	F[Hz]	C[uF]	SampleLevel	Linetype	Remark
G1G170AB3120		230	50				




257±2
123±1
5
286±2
101.2±1
157.7±1
273±2
M8
60°
59661
ø140
ø110
140
120
60
9
R7.5
2°
97
120
140
(93,6)
43.5
ø129
R12
ø78
9.5
2.5
84±1
74±1
176±1.5
Z
59657
Gehäuse-Seitenteile mit Rundschnur
NBR (penthanbest.) abgedichtet
passend für Rundschnur
ø110 x ø3,5
AMP-Stiftleiste 3-polig
AMP-Nr. 1-350 943-0
Gegenstecker AMP 3-polig
AMP-Nr. 350 766-1
3x Steckbuchse AMP "Universal MATE-N-LOK"
AMP-Nr. 926 884-1
Molex-Stiftleiste 5-polig
Molex-Nr. 39 30 3055
Gegenstecker Molex 5-polig
Molex-Nr. 39 01 4050
Molex Steckbuchse "Mini-Fit" Jr.-Serie
Molex-Nr. 39 00 0059
Ansicht Z
PE
N
L
PWM
Drehzahlüberwachung
Achtung: Kühlschlitze der Haube, dürfen nicht abgedeckt werden.
Mindestabstand zu den Kühlschlitzen: 20 mm
ebmpapst
ebm-papst Mulfingen GmbH & Co. KG
Gasgebläse-Einflutig
G1G170AB3120
SHEET 1 OF 1



Optional:

ebm MOTOREN VENTILATOREN

Gasmodul - Schnittstelle 230VAC
G1G170AB31... Standardgebläse

(gas module - interface 230VAC
G1G170AB31... standard fan)

Interface Nr.

60234-5-9770

Baugroesse: G74	2000	Tag	Name	
	Bearb.	05.12.	Bay.	
Blatt von	Gepr.			

Änd Ind.	KM-Nr.	Tag	Name	gepr.
3	47228	06.03.03	SMo	
2	45305	26.08.02	AL	
1	40126	11.12.00	Bay.	