

W3G710-CZ08-06 ebmpapst Datasheet

sales@fansco.com

www.fansco.com

Nominal data

Type	W3G710-CZ08-06	
Motor	M3G150-NA	
Phase		3~
Nominal voltage	[VAC]	400
Nominal voltage range	[VAC]	380 .. 480
Frequency	[Hz]	50/60
Type of data definition		ml
State		prelim.
Speed	[min ⁻¹]	1560
Power input	[W]	4300
Current draw	[A]	6.7
Max. back pressure	[Pa]	380
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

Technical features

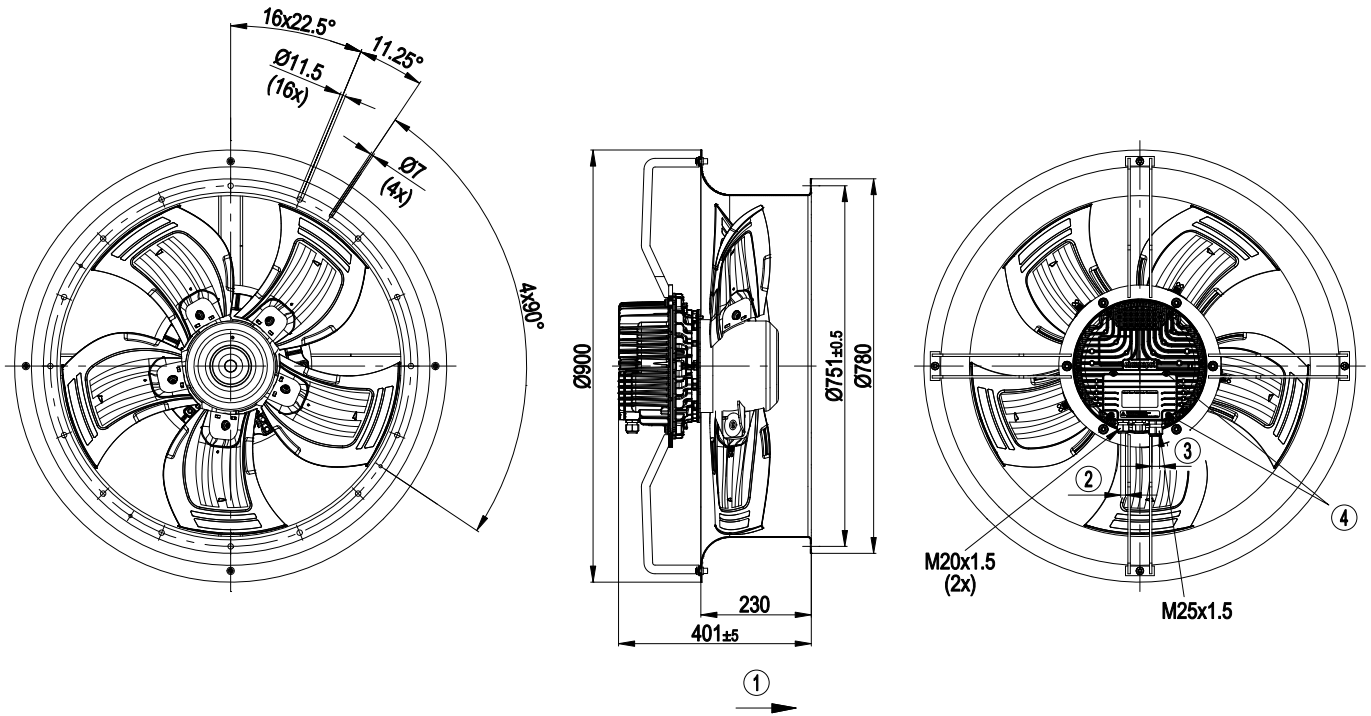
Leakage current	<= 3,5 mA
Size	710 mm
Operation mode	S1
Direction of rotation	Counter-clockwise, seen on rotor
Mounting position	Shaft horizontal or rotor on top
Electrical leads	Via terminal box
EMC interference emission	Acc. to EN 61000-6-3 (household environment)
EMC interference immunity	Acc. to EN 61000-6-2 (industrial environment)
Humidity class	F4-1
Blade angle	-5°
Direction of air flow	"A"
Insulation class	"F"
Condensate discharge holes	On the stator side
Bearing motor	Ball bearing
Mass	55 kg
Material of electronics housing	Die-cast aluminium, coated in black
Material of blades	Aluminium sheet insert, sprayed with PP plastic
Material of mounting ring	Steel, coated in black
Material of wall ring	Sheet steel, pre-galvanised and plastic-coated in white aluminium (RAL 9006)
Motor protection	Reverse polarity and locked-rotor protection
Surface of rotor	Coated in black
Number of blades	5
Type of protection	IP 54
Protection class	I
Technical features	<ul style="list-style-type: none"> - PFC, passive - Control input 0-10 VDC / PWM - Over-temperature protected electronics / motor - Alarm relay - Integrated PID controller - Input for sensor 0-10 V or 4-20 mA - Output for slave 0-10 V - RS485 ebmBUS - Motor current limit - Soft start - Line undervoltage / phase failure detection - Output 10 VDC, max. 10 mA - Output 20 VDC, max. 50 mA
Max. permissible ambient motor temp. (transp./ storage)	+80 °C
Min. permissible ambient motor temp. (transp./storage)	-40 °C

EC axial fan - HyBlade®

sickled blades (S series)

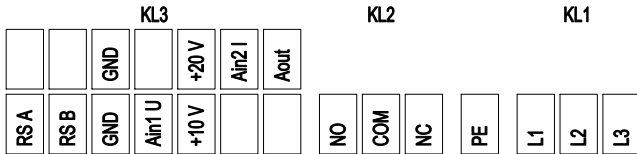
with full round nozzle

Product drawing



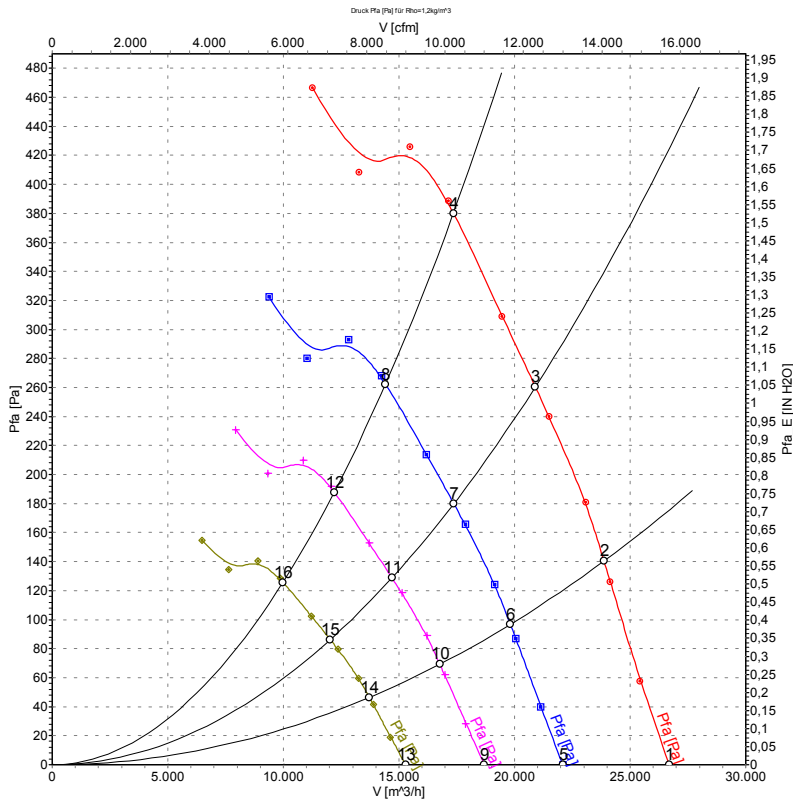
1	Direction of air flow "A"
2	Cable diameter: min. 4 mm, max. 10 mm; tightening torque: 4 ± 0.6 Nm
3	Cable diameter: min. 9 mm, max. 16 mm; tightening torque: 6 ± 0.9 Nm
4	Tightening torque 3.5 ± 0.5 Nm

Connection screen



No.	Pin	Signal	Function / assignment
PE		PE	Ground wire
KL1		L3	Power line, L3
KL1		L2	Power line, L2
KL1		L1	Power line, L1
KL2		NC	Alarm relay, normally closed connection
KL2		COM	Alarm relay, COMMON (2 A, 250 VAC, AC1)
KL2		NO	Alarm relay, normally open connection
KL3		+10 V	Supply for external potentiometer, 10 VDC(+/-3 %) max. 10 mA
KL3		Ain1U	Analogue set value input, 0-10 V (impedance 100 kΩ), can be used as an alternative to connection Ain2 I only
KL3		GND	GND
KL3		RSB	RS485 interface for ebmBus, RS B
KL3		RSA	RS485 interface for ebmBus, RS A
KL3		Aout	Analog output 0-10 V max. 5 mA, output of the current level control coefficient
KL3		Ain2 I	Analogue actual value input, 4-20 mA (impedance 100 Ω), can be used only as an alternative to connection Ain1 U only
KL3		+20 V	Supply for external sensor, 20 VDC (+25 %/-10 %) max. 40 mA
KL3		GND	GND

Charts: Air flow 50 Hz



Measurement: LU-125234

Measured values

	U	f	n	P ₁	I	LpA _{ss}	LpA _{ds}	LwA _{ss}	LwA _{ds}	\dot{V}	p _{fa}
	[V]	[Hz]	[min ⁻¹]	[W]	[A]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[m ³ /h]	[Pa]
1	400	50	1560	3129	4.85	76	82	84	85	26690	0
2	400	50	1560	3640	5.64	76	74	83	84	23870	140
3	400	50	1560	4030	6.21	79	70	86	86	20900	260
4	400	50	1560	4300	6.70	83	71	90	90	17350	380
5	400	50	1300	1773	2.75	72	77	79	81	22090	0
6	400	50	1300	2083	3.23	72	70	79	80	19820	97
7	400	50	1300	2316	3.57	75	66	82	82	17370	180
8	400	50	1300	2453	3.76	79	67	86	86	14420	264
9	400	50	1100	1074	1.66	68	74	76	77	18690	0
10	400	50	1100	1262	1.96	68	67	75	77	16770	69
11	400	50	1100	1403	2.16	71	63	78	78	14700	129
12	400	50	1100	1486	2.28	76	64	83	82	12200	189
13	400	50	900	588	0.91	64	70	71	73	15290	0
14	400	50	900	691	1.07	64	62	71	72	13720	46
15	400	50	900	768	1.18	67	58	74	74	12030	86
16	400	50	900	814	1.25	71	59	78	78	9980	126