Product Data Sheet **9392715013**
VTS0030XUFCS
QG030-198/14

ebmpapst
The engineer's choice



GREEN TECH

QG030-198/14
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1 General

Fan type	Cross-flow fan	
Rotational direction looking at motor	Clockwise	
Airflow direction	Cross-flow	
Bearing system motor	Ball bearing	
Bearing system rotor	Sleeve bearing	
Mounting position - shaft	Any	

2 Mechanics

2.1 General

Width	260,5 mm	
Height	47,5 mm	
Depth	50,0 mm	
Mass	0,290 kg	
Material spiral with tongue	Metal	
side part material	Plastic	
Impeller material	Metal	
surface protection rotor housing	Elektrophobic coating	

2.2 Connections

Electrical connection	Wires	
Lead wire length Tolerance	L = 300,0 mm +- 10,0 mm	
Tube length Tolerance	S = 35,0 mm +- 10,0 mm	
Wire size (AWG)	24	
Insulation diameter	1,55 mm	
Plug	See drawing	
Contact	See drawing	





Wire	Color	Operation
1	red	+ UB
2	blue	- GND

3 Operating Data

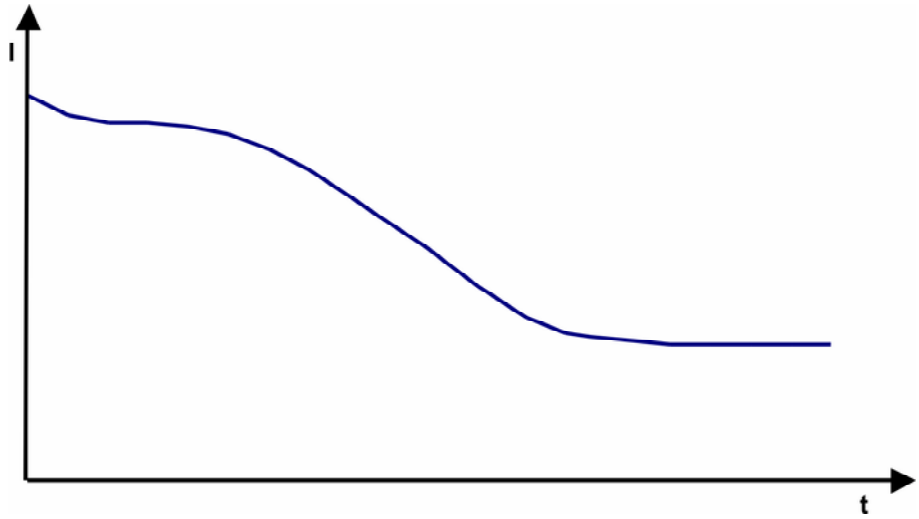
3.1 Electrical Operating Data

Measurement conditions:	Normal air density = 1,2 kg/m3; Temperature 23℃ +/- 3℃; Motor axis horizontal;warm-up time before measuring 5 minutes (unless otherwise specified).In the intake and outlet area should not be any solid obstruction within 0,5 m.
∆p = 0:	corresp. to free air flow (see chapter aerodynamics)
I:	corresp. to arithm. mean current value

Features	**Condition**	**Symbol**	**Values**		
Voltage range	∆p = 0	U	16,0 V		28,0 V
Nominal voltage	∆p = 0	U_N		24,0 V	
Power consumption Tolerance	∆p = 0	P		8,0 W +- 10 %	8,7 W +- 10 %
Current consumption Tolerance	∆p = 0	I		330 mA +- 10 %	310 mA +- 10 %
Speed Tolerance	∆p = 0	n	3.150 1/min +- 7,5 %	4.400 1/min +- 7,5 %	4.900 1/min +- 7,5 %

3.2 Electrical Features

Electronic function	None	
Reversed polarity protection Max. residual current at Umax reaction time reversed polarity protection	PTC IF 2.800 mA < 15,0 s at Tu = 23°C	
Locked rotor protection	PTC	
reaction time locked roter protection	< 120 s at Tu = 23°C	
Locked rotor current at Umax	approx. 110 mA according 120 s	



Blower restart possible after a short power shut down.

3.3 Aerodynamics

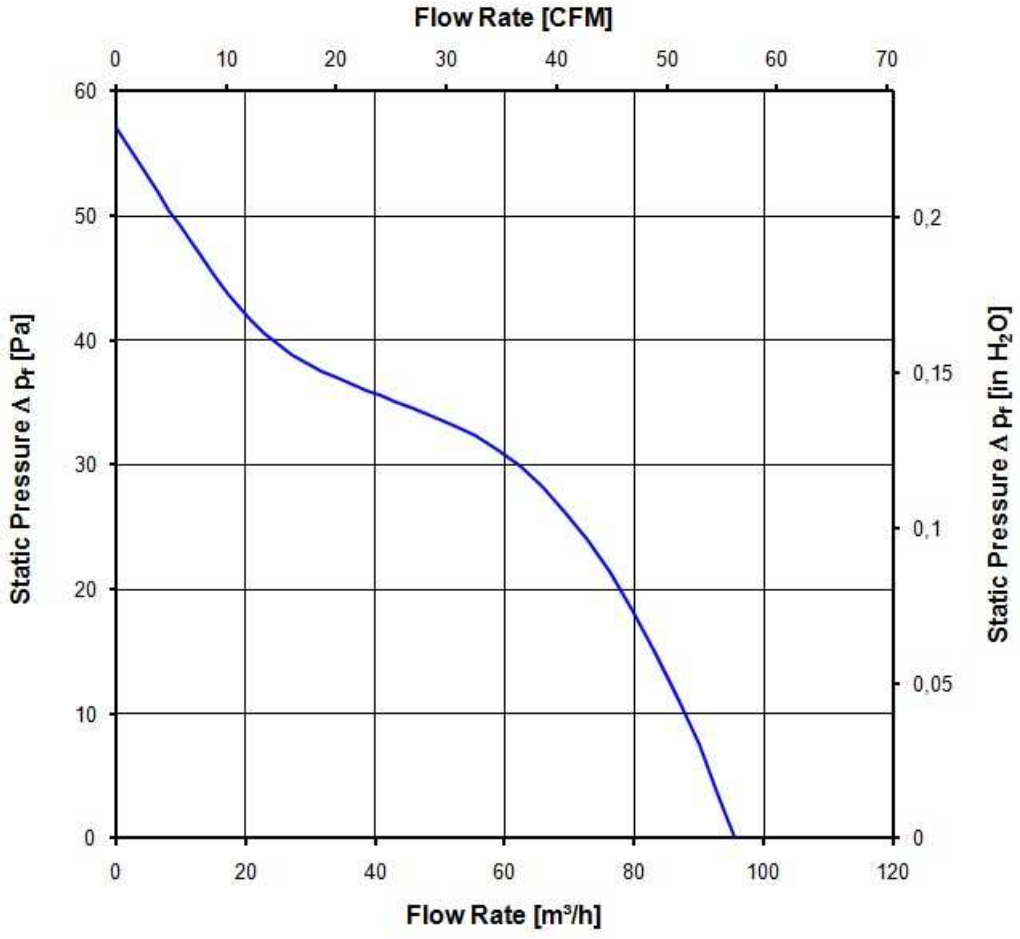
Measurement conditions:	Measured in suction side throttled double-chamber test rig acc. DIN EN ISO 5801 and using a dedicated ebmpapst-setup for cross flow blowers. Normal air density = 1,2 kg/m3; Temperature 23°C +/ - 3°C; In the intake and outlet area should not be any solid obstruction within 0,5 m. Motor shaft horizontal. The information is only valid under the specified test conditions and may be changed by the installation conditions. If there are deviations from the standard test conditions, the characteristic values must be checked under the installed conditions.

Operation condition: 4.400 1/min at free air flow

Max. free-air flow (Δp = 0 / 251658240 V = max.)	95,0 m3/h	

max. allowable operation point on the fan chart

volumetric flow rate	66,0 m3/h	
pressure (Δp)	28 Pa	



3.4 Sound Data

Measurement conditions:	Sound pressure level: 1 meter distance between microphone and the air intake. Sound power level: Acc. to DIN 45635 part 38 (ISO 10302) Measured in a semianchoic chamber with a background noise level of Lp(A) < 5 dB(A) Measured without dedicated ebmpast-setup for cross-flow blowers For further measurement conditions see chapter aerodynamics.

Operation condition: 4.400 1/min at free air flow

Optimal operating point	60,0 m3/h @ 27 Pa	
Sound power level at the optimal operating point	5,4 bel(A)	
Sound pressure level at free air flow, measured in rubber bands	50,0 dB(A)	

4 Environment

4.1 General

Min. permitted ambient temperature TU min.	-20 ℃	
Max. permitted ambient temperature TU max.	60 ℃	
Min. permitted storage temperature TL min.	-40 ℃	
Max. permitted storage temperature TL max.	80 ℃	

4.2 Climatic Requirements

Humidity requirements	humid heat, constant; according to DIN EN 60068-2-78, 14 days	
Water exposure	None	
Dust requirements	None	
Salt fog requirements	None	

Permitted application area:
The product is intended for use in sheltered rooms with controlled temperature and controlled humidity. Directly exposure to water must be avoided.

Pollution degree 1 (according DIN EN 60664-1)
There is either no pollution or it occurs only dry, non-conductive pollution. The pollution has no negative impact.

4.3 Mechanical Requirements

Please require severity levels and specification parameters from the responsible development departments.

5 Safety

5.1 Electrical Safety

Dielectric strength DIN EN 60950 (VDE 0805) and DIN EN 60335 (VDE 0700) A.) Type test Measuring conditions: After 48h of storage at 95% R.H. and 25℃. No arcing or breakdown is allowed! All connections together to ground. B.) Routine test Measuring conditions: At indoor climate. No arcing or breakdown is allowed! All connections together to ground.	500 VAC / 1 Min. 850 VDC / 1 Sec.	
Isolation resistance Measuring conditions: After 48h of storage at 95% R.H. and 25℃ measured with U=500 VDC for 1 min.	RI > 10 MOhm	
Clearance / creepage distance	1,0 mm / 1,2 mm	
Protection class	III	

5.2 Approval Tests

CE	EC Declaration of Conformity	Yes
EAC	Eurasian Conformity	Yes
UL	Underwriters Laboratories	Yes / UL507, Electric Fans E38324
VDE	Association for Electrical, Electronic and Information Technologies	Yes / Approval acc. to EN 60950 (VDE 0805) - Information technology equipment
CSA	Canadian Standards Association	Yes / C22.2 No. 113 Fans and Ventilators
CCC	China Compulsory Certification	Not applicable

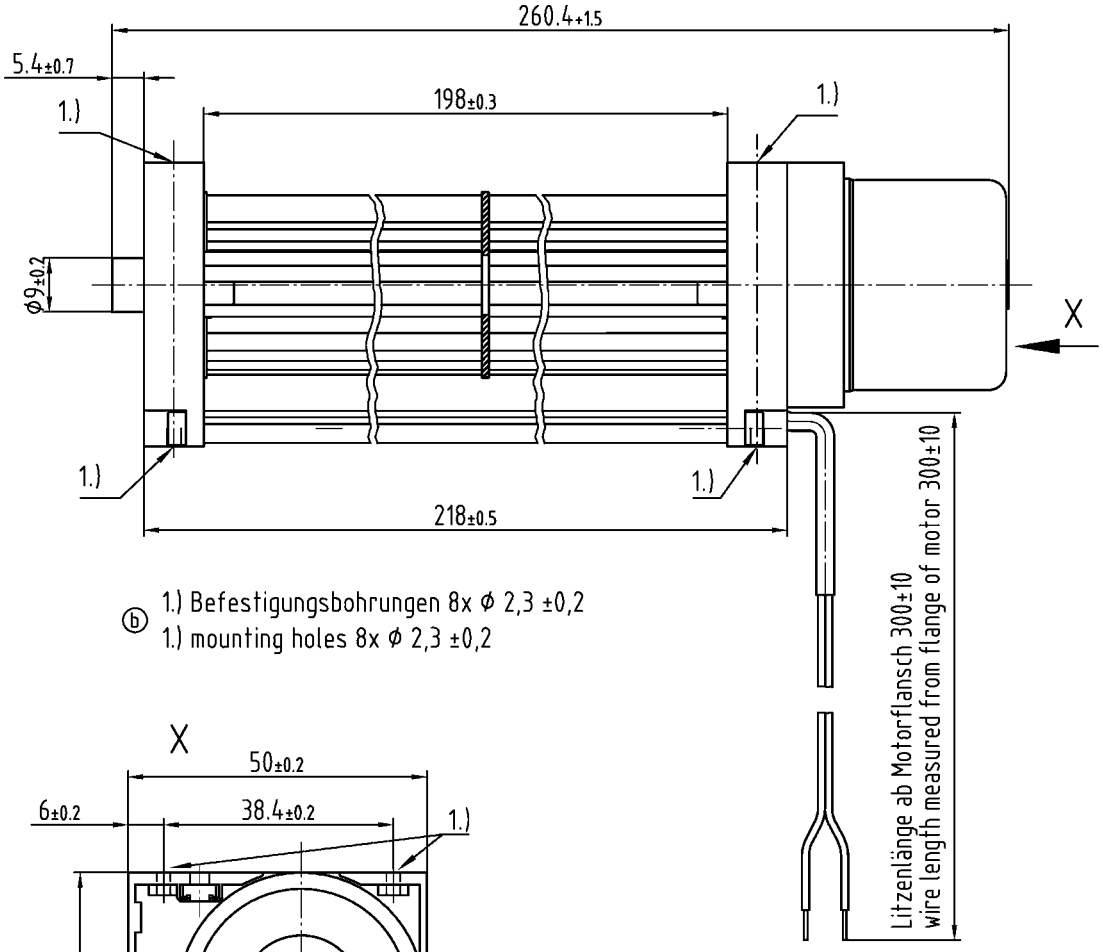
6 Reliability

6.1 General

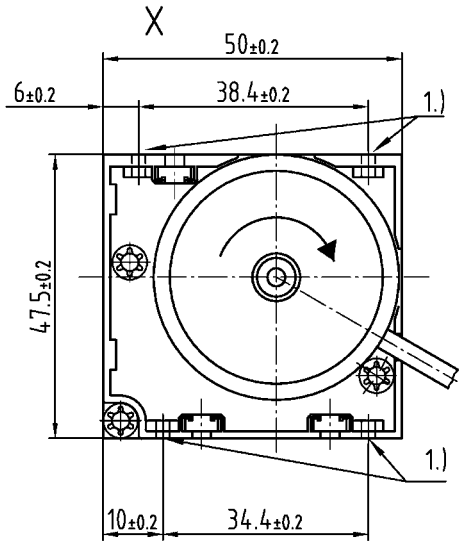
Life expectancy L10 at TU = 40 ℃	30.000 h	
Life expectancy L10 at TU max.	20.000 h	
Life expectancy L10 acc. to IPC 9591 at TU = 40 ℃	50.0 00 h	

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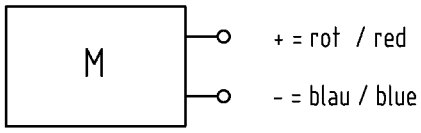
Schutzvermerk nach DIN ISO 16016 beachten/
Refer to protection notice DIN ISO 16016!



ⓑ 1.) Befestigungsbohrungen 8x Ø 2,3 ±0,2
1.) mounting holes 8x Ø 2,3 ±0,2



Schaltbild / circuit diagram



Technische Daten siehe Katalog
for technical data refer to catalogue

			ebmpapst	Werkstoff/Material:	Volumen/Volume (mm³):
SAP-Status/State	Aend.-Nr./Change-No.	AutoCAD-System-Version	CAD-Umgebung/ CAD-Enviroment		Gewicht/Mass (g):
		Datum/Date	Name/Name		
Tolerierung/Tolerances:		Bearb./ Drawn		Artikel/Title	
		Gepr./ Checked			
Allgemeintoleranzen/Gen. tolerances:		Freig./ Releas.			
		ebmpapst		Zchg.-Nr./ Drawing.-No.:	Ers.f.Zchg./ Replaces:
		ebm-papst St. Georgen GmbH & Co. KG		Dokumenttyp/Type of Document / Teildokument (Blatt/Page) / Index/Index / Format/Size: / Massstab/scale	

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