W3G385-CT65-21

EC axial panel fan

with brushless DC motor

Automotive

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Nominal data

Type	**W3G385-CT65-21**
Motor	**M3G084-CF**

Nominal voltage	VDC	26
Nominal voltage range	VDC	16 .. 32
Method of obtaining data		fa
Speed (rpm)	min^{-1}	3300
Power consumption	W	525
Current draw	A	20
Min. ambient temperature	°C	-40
Max. ambient temperature	°C	85
-with power derating to	°C	110

ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment
Subject to change

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Technical description

Weight	3.2 kg
Size	385 mm
Motor size	84
Blade material	PA plastic
Fan housing material	PA plastic
Number of blades	7
Airflow direction	V
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	Motor IP24 KM, electronics IP6K9K (mating connector installed)
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	H4
Ambient temperature note	An occasional start-up between -40°C and -25°C is permitted. For continuous operation at ambient temperatures below -25°C (such as refrigeration applications), a fan design with special low-temperature bearings must be used.; Above +85°C with power derating
Max. permitted ambient temp. for motor (transport/storage)	+110 °C
Min. permitted ambient temp. for motor (transport/storage)	-40 °C
Installation position	Any
Condensation drainage holes	None, open rotor
Mode	S1
Motor bearing	Ball bearing; (sealed)
Life expectancy	40,000 h (depending on load profile and ambient conditions)
Technical features	- Fault output (high-side switch max. 30 mA) - Power limiter - Load dump (58 V) - Motor current limitation - Soft start - Control input 0-10 VDC / PWM - Temperature derating - Overvoltage detection - Thermal overload protection for electronics - Line undervoltage detection
EMC regulations	According to ECE R10 Rev. 5
Electrical hookup	Connector with cable; Standby current less than 500 µA
Motor protection	Reverse polarity and locked-rotor protection
With cable	Lateral
Protection class assignment	III; Supply with safety extra-low voltage SELV. The built-in component has several local protection class assignments. The final protection class is determined by the intended installation.
Comment on CE	Ecodesign Directive 2009/125/EC + Fan Regulation (EC) No. 327/2011 does not apply, as use only in means of transport for transporting persons or goods.
Approval	EAC

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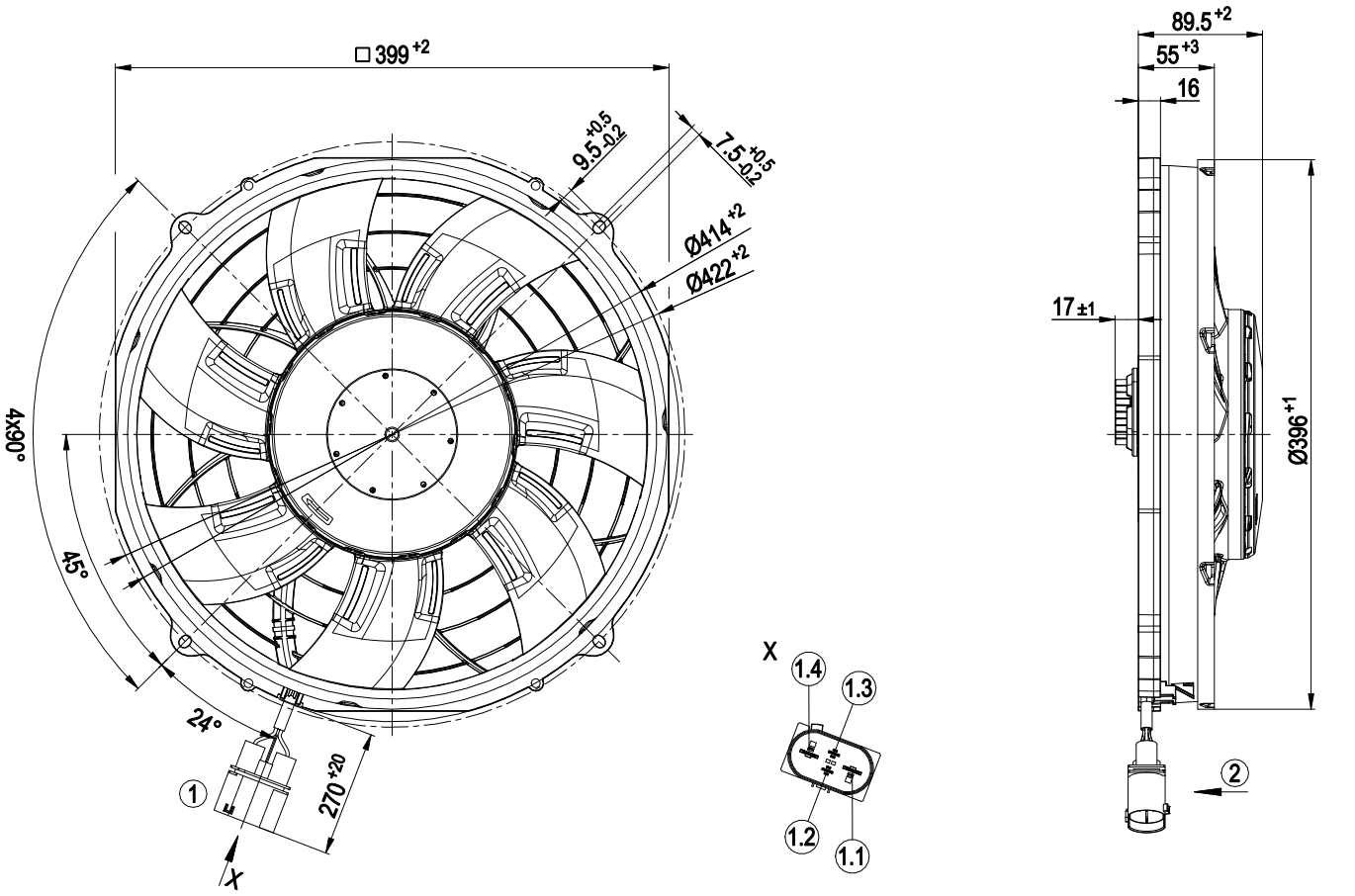
Product drawing



1	Cable FLRYW 2x 6.0 mm², 2x 1.0 mm²
	4-pole connector housing Amphenol F353200, 2x flat plug FCI 60170261, 2x flat plug TE 964310-1, 2x seal FCI 60993308, 2x seal TE 1394511-1
1.1	+ UB
1.2	Diagnostic output
1.3	PWM/LIN
1.4	GND
	4-pole mating connector Amphenol F004200, 2x flat plug FCI 60170261, 2x flat plug TE 927831-1, 2x seal FCI 60993308, 2x seal TE 1394511-1
2	Airflow direction "V"

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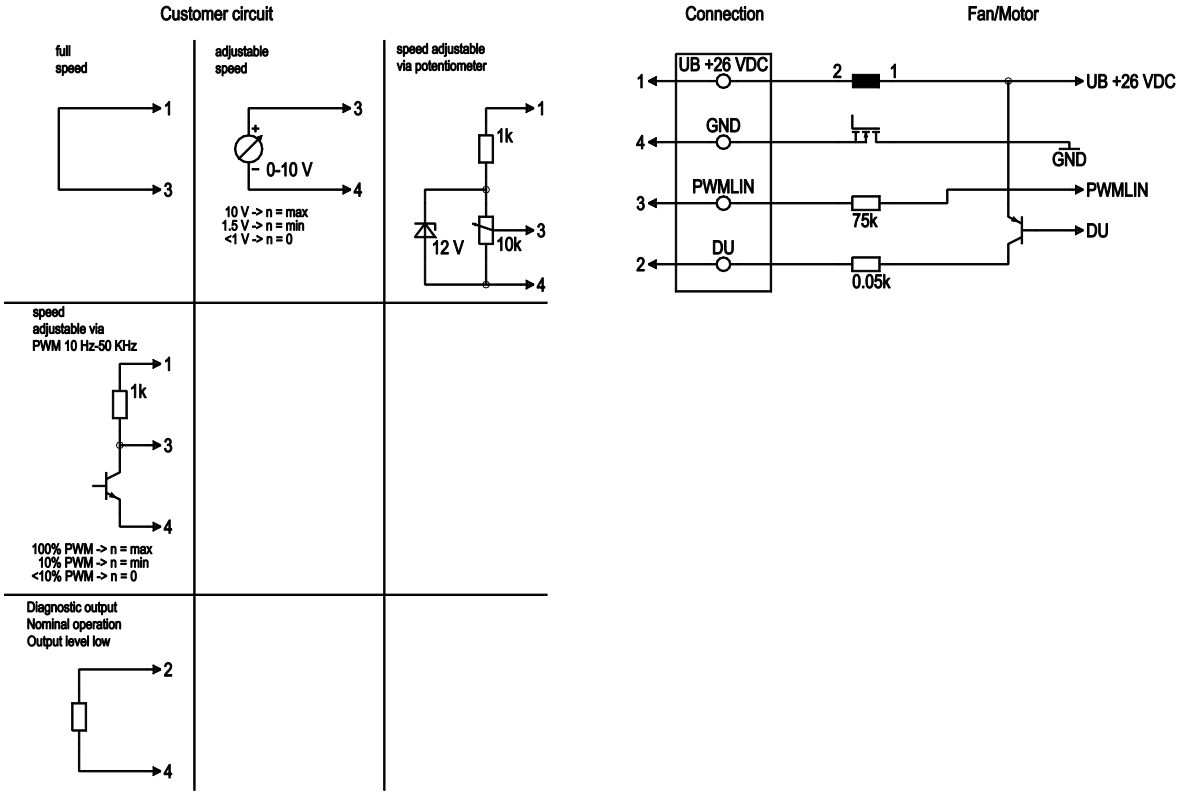
Connection diagram



No.	Conn.	Designation	Function/assignment
	1	UB +26 VDC	Power supply 26 VDC
	2	DU	Diagnostic output
	3	PWMLIN	Analog voltage control input 0-10 V or PWM
	4	GND	Power supply GND, reference ground

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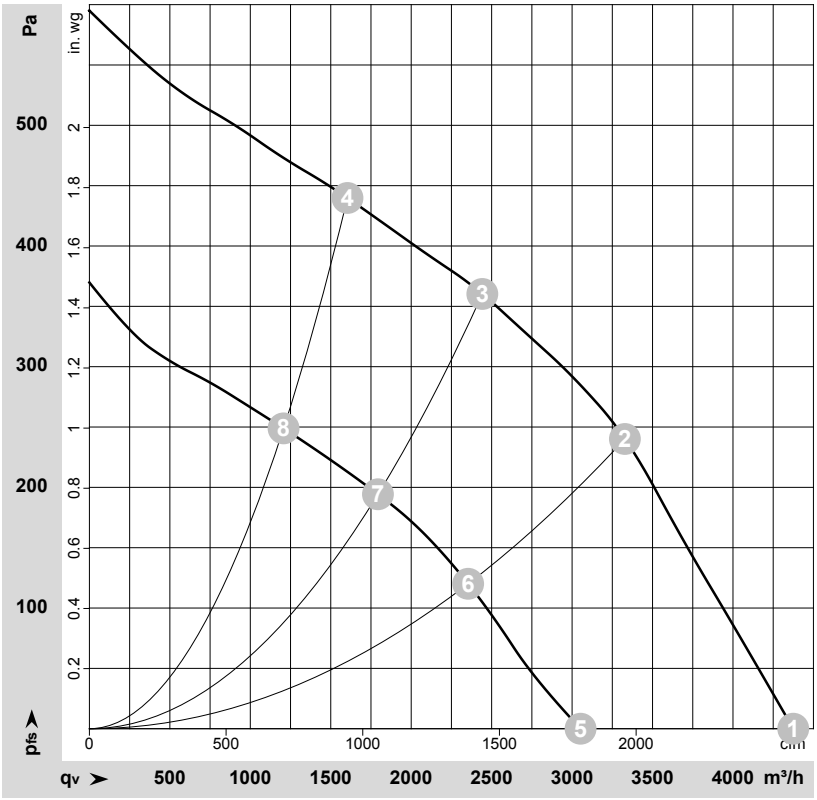
Curves: Air performance



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-141959-1
Date: 2012-04-13
Housing: 80700-1-2910

Measurement: LU-141916-1
Date: 2012-04-12
Housing: 80700-1-2910

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	LpA_{in}	LwA_{in}	q_V	p_{fs}	q_V	p_{fs}
	V	min^{-1}	W	A	dB(A)	dB(A)	m^3/h	Pa	cfm	in. wg
1	26-32	3300	525	20.00*	83	90	4375	0	2575	0.00
2	26-32	3170	618	23.80*	81	88	3330	240	1960	0.96
3	26-32	3030	610	23.40*	80	88	2440	360	1435	1.45
4	26-32	2900	613	23.60*	82	89	1605	440	945	1.77
5	16	2325	183	11.42			3055	0	1795	0.00
6	16	2255	215	13.44			2355	120	1385	0.48
7	16	2220	237	14.88			1795	194	1055	0.78
8	16	2200	258	16.15			1205	249	710	1.00

U = Voltage · n = Speed (rpm) · P_{ed} = Power consumption · I = Current draw · * = Current measured at nominal voltage · LpA_{in} = Sound pressure level intake side · LwA_{in} = Sound power level intake side
q_V = Air flow · p_{fs} = Pressure increase

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