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Nominal data

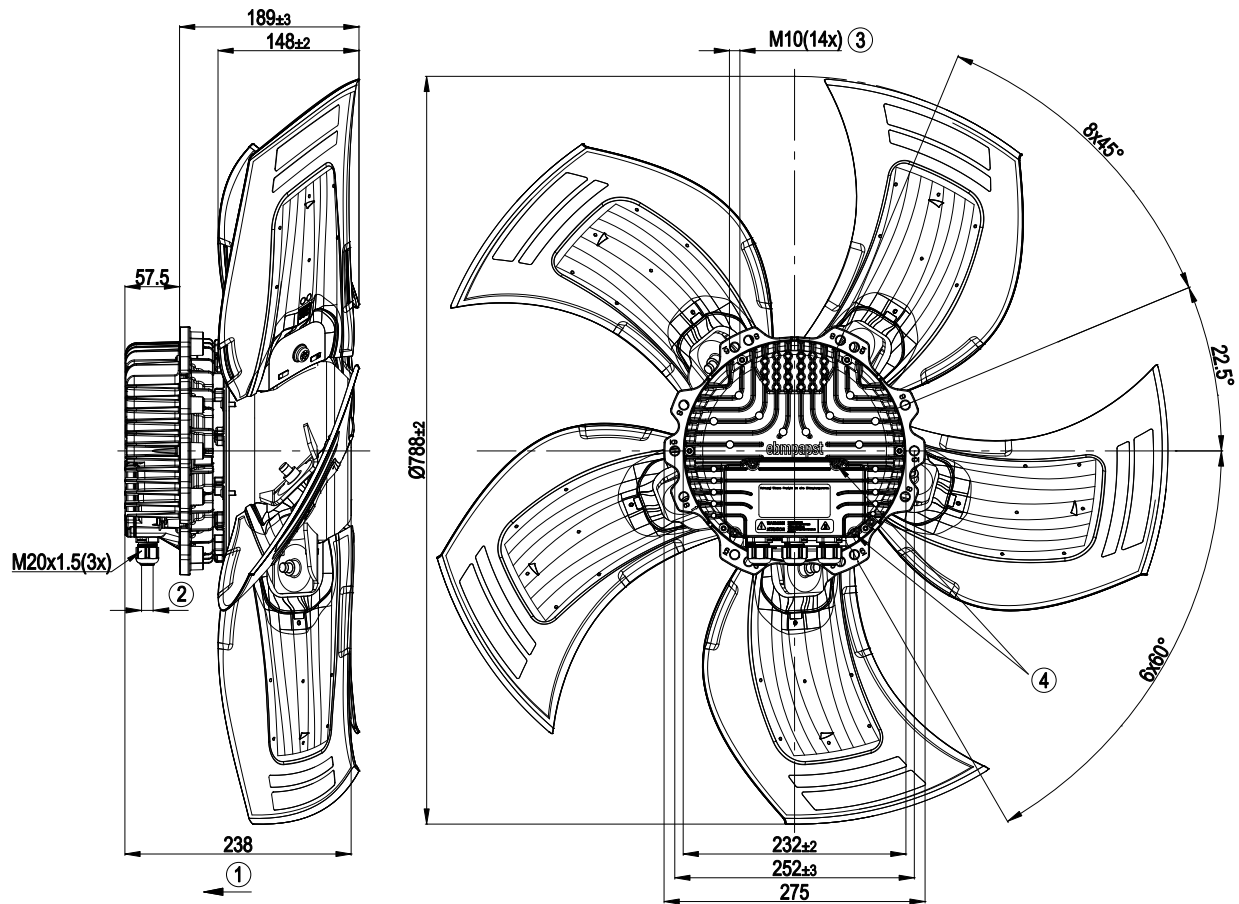
Type	A3G800-AT21-01	
Motor	M3G150-GF	
Phase		3~
Nominal voltage	[VAC]	400
Nominal voltage range	[VAC]	380 .. 480
Frequency	[Hz]	50/60
Type of data definition		ml
Speed	[min ⁻¹]	925
Power input	[W]	1850
Current draw	[A]	2.85
Min. ambient temperature	[°C]	-25
Max. ambient temperature	[°C]	60

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	800 mm
Operation mode	S1
Direction of rotation	Clockwise, seen on rotor
Mounting position	Shaft horizontal or rotor on bottom; rotor on top on request
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	0°
Direction of air flow	"V"
Insulation class	"F"
Condensate discharge holes	Rotor-side
Bearing motor	Ball bearing
Mass	23 kg
Material of electronics housing	Die-cast aluminium, coated in black
Material of blades	Aluminium sheet insert, sprayed with PP plastic
Motor protection	Reverse polarity and locked-rotor protection
Product conforming to standard	CE; EN 61800-5-1
Surface of rotor	Coated in black
Number of blades	5
Type of protection	IP 54
Protection class	I
Technical features	- RS485 MODBUS RTU - 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 - Motor current limit - Soft start - Line undervoltage / phase failure detection - Output 10 VDC, max. 10 mA - Output 20 VDC, max. 50 mA - External 24 V input (programming)
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Approval	C22.2 Nr.77 + CAN/CSA-E60730-1; GOST; UL 1004-7 + 60730

Product drawing



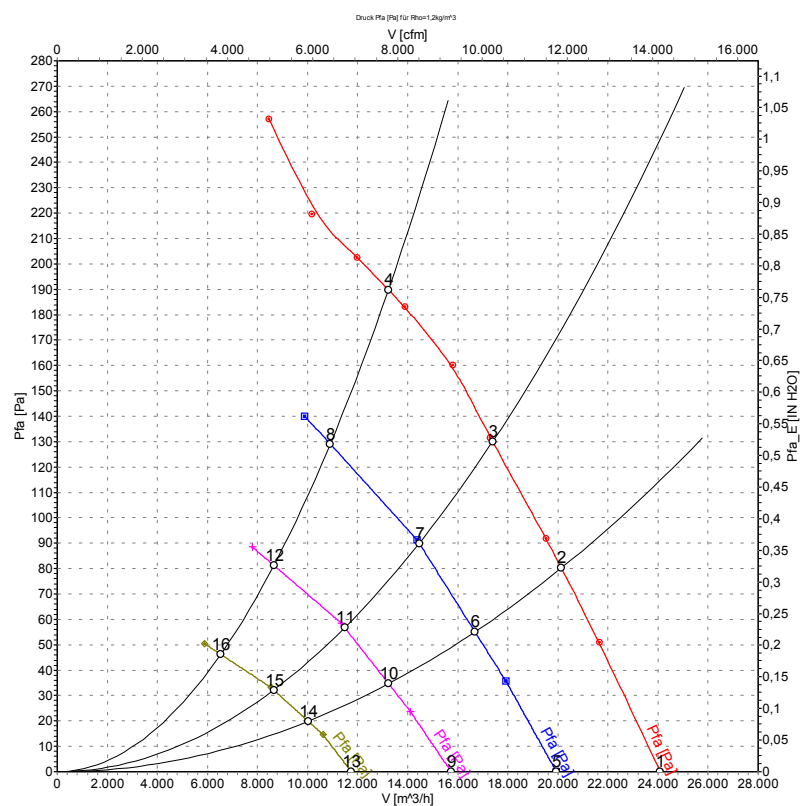
1	Cable diameter: min. 4 mm, max. 10 mm, tightening torque: 4 ± 0.6 Nm
2	Direction of air flow "V"
3	Depth of screw max. 25 mm
4	Tightening torque 3.5 ± 0.5 Nm

Connection screen

	8	Din 2	RSA	1	KL 3
	9	Din 3	RSB	2	KL 3
	10	GND	GND	3	KL 3
	11	Ain 2 U	Ain 1 U	4	KL 3
	12	+ 20 V	+ 10 V	5	KL 3
	13	Ain 2 I	Ain 1 I	6	KL 3
	14	Aout	Din 1	7	KL 3
			NO	1	KL 2
			COM	2	KL 2
			NC	3	KL 2
			PE		PE
			L 1	1	KL 1
			L 2	2	KL 1
			L 3	3	KL 1

No.	Pin	Signal	Function / assignment
KL 1	1	L1	Mains supply connection, supply voltage 3~380-480 VAC; 50/60 Hz
KL 1	2	L2	Mains supply connection, supply voltage 3~380-480 VAC; 50/60 Hz
KL 1	3	L3	Mains supply connection, supply voltage 3~380-480 VAC; 50/60 Hz
PE		PE	Earth connection, PE connection
KL 2	1	NO	Status relay, floating status contact; normally open; close with error
KL2	2	COM	Status relay; floating status contact; changeover contact; common connection; contact rating 250 VAC / 2 A (AC1)
KL2	3	NC	Status relay, floating status contact; break with error
KL 3	1	RSA	Bus connection RS485; RSA; MODBUS RTU
KL 3	2	RSB	Bus connection RS485; RSB; MODBUS RTU
KL 3	3 / 10	GND	Signal ground for control interface KL3
KL 3	4	Ain1 U	Analogue input 1 (set value); 0-10 V; Ri= 100 kΩ; parametrisable curves; only usable as alternative to input Ain1 I
KL 3	5	+ 10 V	Fixed voltage output 10 VDC; + 10 V +/-3%; max. 10 mA; short circuit proof; power supply for ext. devices (e.g. potentiometer)
KL 3	6	Ain1 I	Analogue input 1 (set value); 4-20 mA; Ri= 100 Ω; parametrisable curves; only usable as alternative to input Ain1 U
KL 3	7	Din1	Digital input 1: enabling of electronics; enabling: open pin or applied voltage 5 to 50 VDC; disabling: bridge to GND or applied voltage < 1 VDC; reset function: triggers software reset after a level change to <1 V
KL 3	8	Din2	Digital input 2: parameter set switch 1/2; according to EEPROM setting, the valid/used parameter set is selectable per BUS or per digital input DIN2. Parameter set 1: open pin or applied voltage 5 to 50 VDC; parameter set 2: bridge to GND or applied voltage < 1 VDC
KL 3	9	Din3	Digital input 3: Control characteristic of the integrated controller; according to EEPROM setting, the control characteristic of the integrated controller is normally/inversely selectable per BUS or per digital input; normal: open pin or applied voltage 5 to 50 VDC (control deviation = actual sensor value - set value) inverse: bridge to GND or applied voltage < 1 VDC (control deviation = set value - actual sensor value)
KL 3	11	Ain2 U	Analogue input 2; actual sensor value 0-10 V; Ri= 100 kΩ; parametrisable curve; only usable as alternative to input Ain2 I
KL 3	12	+ 20 V	Fixed voltage output 20 VDC; + 20 V +/-25/-10 %; max. 50 mA; short circuit proof; power supply for ext. devices (e.g. sensors)
KL 3	13	Ain2 I	Analogue input 2; actual sensor value 4-20 mA; Ri= 100 Ω; parametrisable curve; only usable as alternative to input Ain2 U
KL 3	14	Aout	Analogue output 0-10 V; max. 5 mA; output of the actual motor control factor (output voltage of electronics)/ of the actual motor speed; function selectable per bus; parametrisable curve.

Charts: Air flow 50 Hz



Measurement: LU-121612
 Measurement: LU-121639
 Measurement: LU-121640
 Measurement: LU-121641

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)]	[m³/h]	[Pa]
1	400	50	925	1221	1.85	65	69	72	73	24090	0
2	400	50	925	1458	2.22	66	59	73	72	20140	80
3	400	50	925	1612	2.45	67	58	74	73	17400	130
4	400	50	925	1850	2.85	72	64	80	79	13230	190
5	400	50	770	669	1.04	61	62	68	67	19930	0
6	400	50	770	821	1.26	61	54	68	67	16690	55
7	400	50	770	909	1.39	63	54	70	69	14460	90
8	400	50	770	1058	1.61	68	60	75	75	10910	129
9	400	50	610	355	0.60	56	53	62	62	15730	0
10	400	50	610	426	0.70	56	48	63	62	13240	35
11	400	50	610	466	0.76	57	48	64	63	11490	57
12	400	50	610	541	0.86	62	54	69	69	8655	81
13	400	50	460	169	0.37	50	43	56	55	11750	0
14	400	50	460	195	0.41	50	41	56	56	10020	20
15	400	50	460	215	0.44	50	41	57	56	8650	32
16	400	50	460	244	0.48	54	46	62	62	6530	46