

EC centrifugal module

backward-curved, single-intake
with support plate

K3G400-AC30-64 ebmpapst Datasheet
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Nominal data

Type	K3G400-AC30-64	
Motor	M3G084-FA	
Phase		1~
Nominal voltage	VAC	230
Nominal voltage range	VAC	200 .. 277
Frequency	Hz	50/60
Method of obtaining data		ml
Speed (rpm)	min ⁻¹	1304
Power consumption	W	370
Current draw	A	1.8 (200V)
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	30

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

Data according to ErP Directive

		Actual	Req. 2015
01 Overall efficiency η_{es}	%	58.2	46.4
02 Measurement category		A	
03 Efficiency category		Static	
04 Efficiency grade N		73.8	62
05 Variable speed drive		Yes	

Data obtained at optimum efficiency level.
The ErP data is determined using a motor-impeller combination in a standardized measurement setup.

09 Power consumption P_{ed}	kW	0.33
09 Air flow q_v	m³/h	2080
09 Pressure increase p_{fs}	Pa	300
10 Speed (rpm) n	min ⁻¹	1310
11 Specific ratio*		1.00

* Specific ratio = $1 + p_{fs} / 100\,000\text{ Pa}$

LU-70774



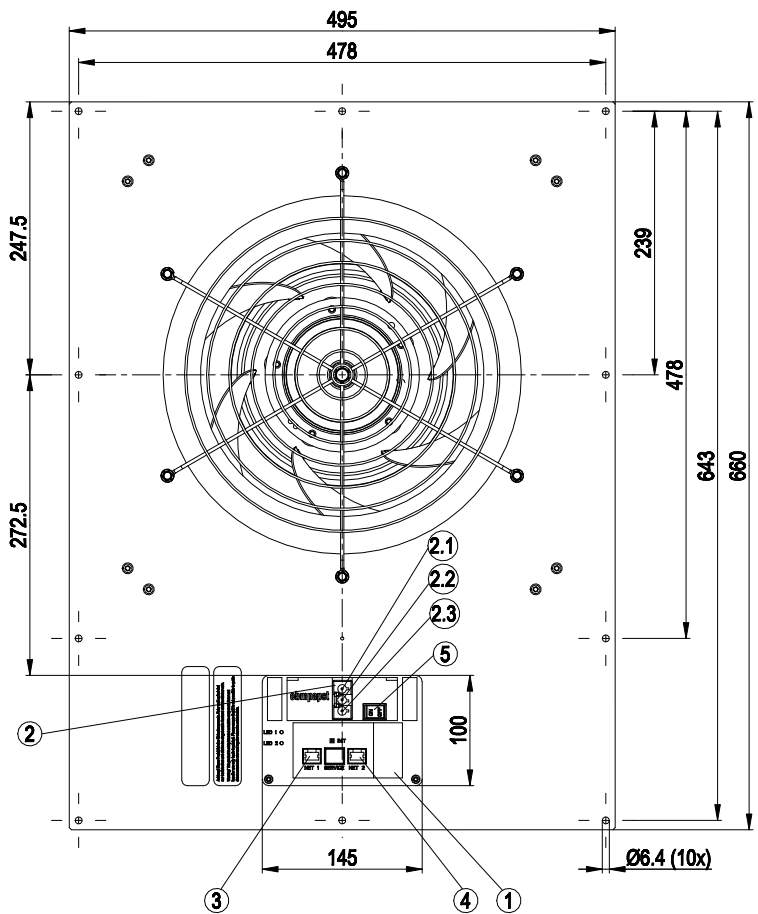
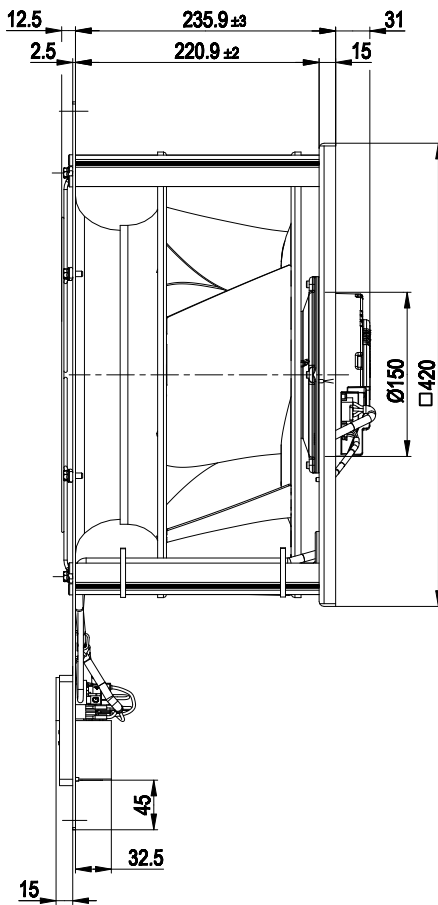
Technical description

Weight	10.1 kg
Fan size	400 mm
Rotor surface	Painted black
Electronics housing material	Die-cast aluminum
Impeller material	Sheet aluminum
Support plate material	Sheet aluminum
Spacer material	Aluminum
Inlet nozzle material	Sheet aluminum
Number of blades	6
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP20
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	F0
Max. permitted ambient temp. for motor (transport/storage)	+80 °C
Min. permitted ambient temp. for motor (transport/storage)	-40 °C
Installation position	Rotor on top
Condensation drainage holes	None
Mode	S1
Motor bearing	Ball bearing
Technical features	- Operation and alarm display with LED - Integrated PID controller - LON / RS485 with DCI function - Motor current limitation - PFC, active - Soft start - Control interface with SELV potential safely disconnected from the mains - Thermal overload protection for electronics/motor - Line undervoltage / phase failure detection
EMC immunity to interference	According to EN 61000-6-2 (industrial environment)
EMC circuit feedback	According to EN 61000-3-2/3
EMC interference emission	According to EN 61000-6-4 (industrial environment)
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	<= 3.5 mA
Electrical hookup	With plug
Motor protection	Thermal overload protector (TOP) internally connected
With cable	Variable
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 61800-5-1; CE
Approval	UL 507

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Product drawing

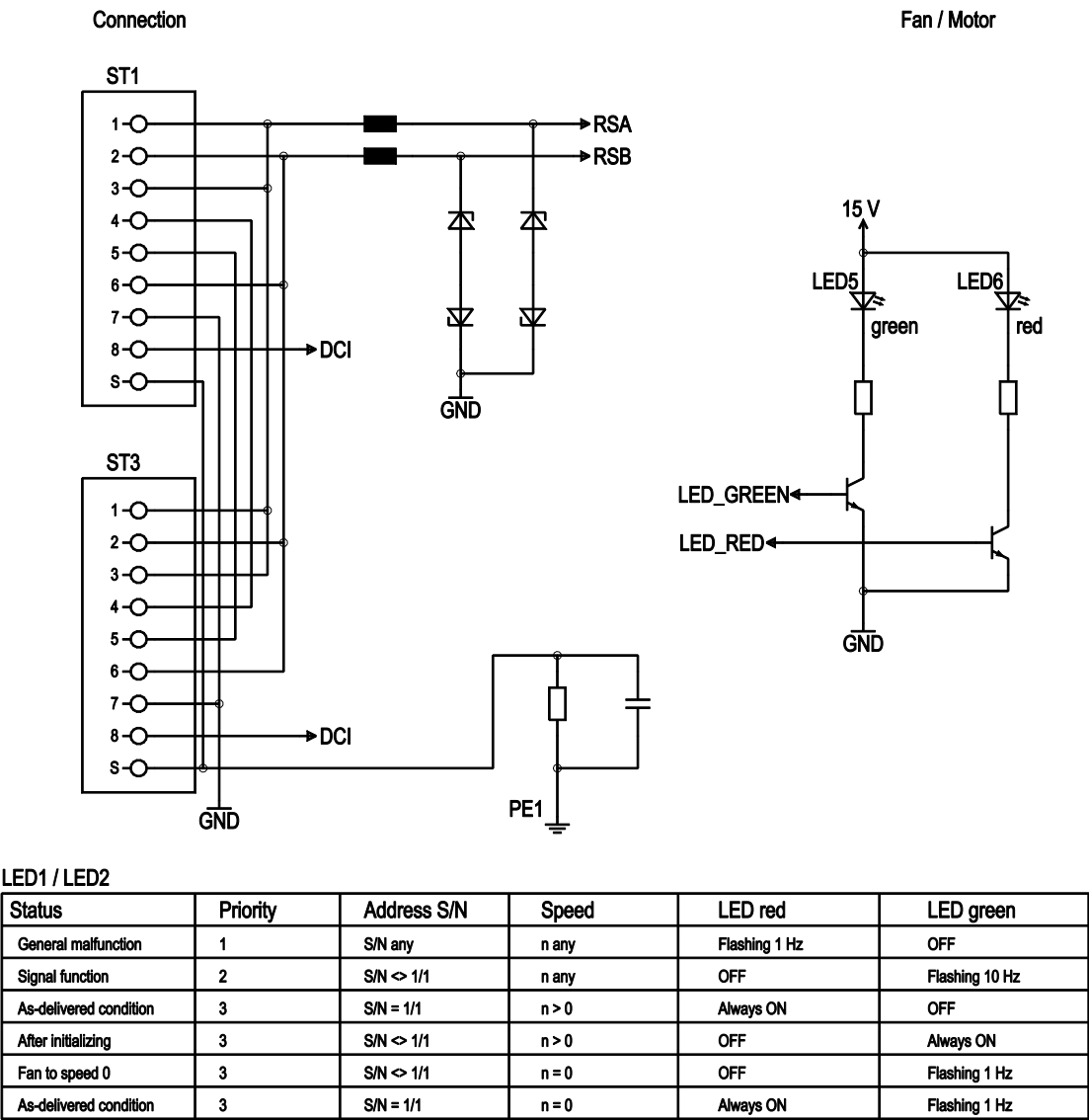


1	Terminal box
2	Connector housing 3-pole GST18/3 Wieland 92.032.9058.1
2.1	N
2.2	PE
2.3	L
3	8-pole socket housing tyco 100616-2
4	8-pole socket housing tyco 100616-2
5	Switch, ARCOLECTRIC SWITCHES P L C (no. H8550VBACF) As-delivered condition end customer switch set to "OFF"

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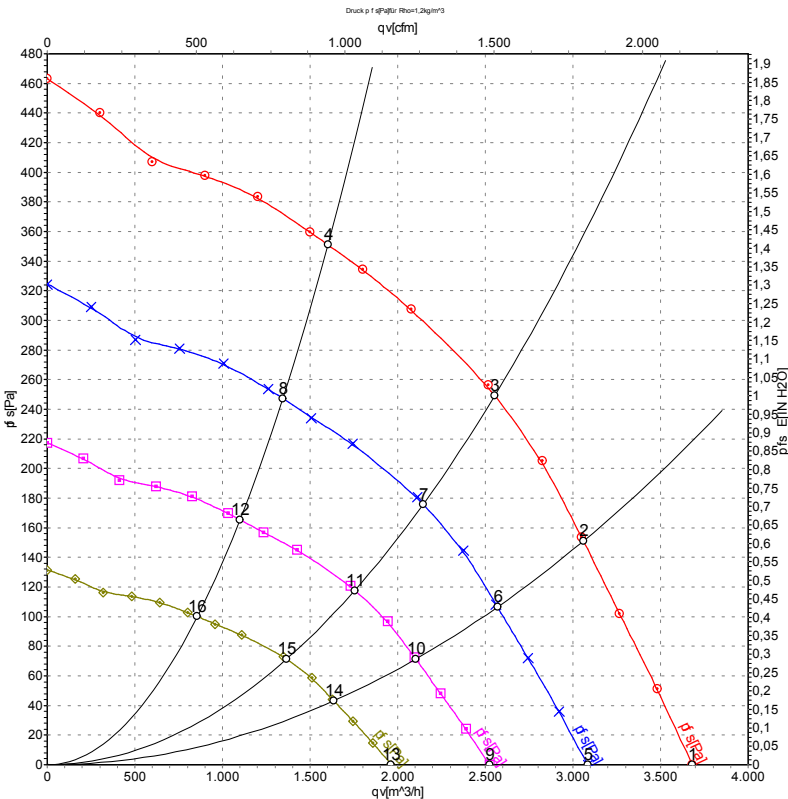
Connection diagram



No.	Conn.	Designation	Function/assignment
ST1/ST3	1	LON_A	Bus connection RS485, LON_A
ST1/ST3	2	LON_B	Bus connection RS485, LON_B
ST1/ST3	3	LON_A	Bus connection RS485, LON_A
ST1/ST3	4	-	Bridge ST1 – ST3
ST1/ST3	5	-	Bridge ST1 – ST3
ST1/ST3	6	LON_B	Bus connection RS485, LON_B
ST1/ST3	7	GND	Reference ground
ST1/ST3	8	DCI	Daisy chain signal
ST1/ST3	S	Schirm	Shield for RJ45 CAT5 wire



Curves: Air performance 50 Hz



Measured values

	U	f	n	P _{ed}	I	q _v	p _{ts}	q _v	p _{ts}
	V	Hz	min ⁻¹	W	A	m ³ /h	Pa	CFM	inH ₂ O
1	200	50	1305	284	1.44	3680	0	2165	0.00
2	200	50	1305	330	1.67	3060	150	1800	0.60
3	200	50	1305	350	1.80	2555	250	1505	1.00
4	200	50	1305	314	1.59	1600	350	945	1.41
5	200	50	1100	167	0.85	3085	0	1815	0.00
6	200	50	1100	196	0.99	2570	107	1515	0.43
7	200	50	1100	207	1.05	2145	177	1260	0.71
8	200	50	1100	186	0.94	1345	247	790	0.99
9	200	50	900	91	0.46	2525	0	1485	0.00
10	200	50	900	107	0.54	2105	71	1240	0.29
11	200	50	900	114	0.57	1755	118	1035	0.47
12	200	50	900	102	0.51	1100	166	645	0.67
13	200	50	700	43	0.22	1965	0	1155	0.00
14	200	50	700	50	0.26	1635	43	960	0.17
15	200	50	700	53	0.27	1365	72	805	0.29
16	200	50	700	48	0.24	855	100	505	0.40

U = Power supply · f = Frequency · n = Speed (rpm) · P_{ed} = Power consumption · I = Current draw · q_v = Air flow · p_{ts} = Pressure increase

