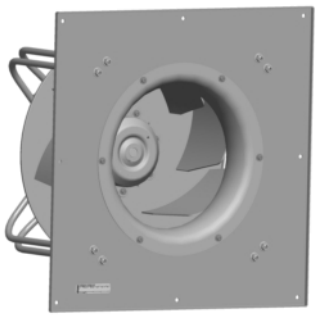
K3G450-AU14-13

EC centrifugal module - Plug Fan

backward curved

with support bracket



K3G450-AU14-13 ebmpapst Datasheet
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Nominal data

Type	**K3G450-AU14-13**
Motor	**M3G150-FF**

Phase		3~
Nominal voltage	[VAC]	200
Nominal voltage range	[VAC]	200 .. 240
Frequency	[Hz]	50/60
Type of data definition		ml
State		prelim.
Speed	[min^{-1}]	2250
Power input	[W]	2700
Current draw	[A]	8,2
Min. ambient temperature	[°C]	-25
Max. ambient temperature	[°C]	+50

ml = max. load · me = max. efficiency · rfa = running at free air · cs = customer specs · cu = customer unit
Subject to alterations

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Technical features

Size	450 mm
Operation mode	S1
Direction of rotation	Clockwise, seen on rotor
Mounting position	Shaft horizontal or rotor on top; rotor on bottom on request
Electrical leads	Via terminal box
Humidity class	F4-1
Insulation class	"F"
Condensate discharge holes	Rotor-side
Bearing motor	Ball bearing
Mass	38.5 kg
Material of electronics housing	Die-cast aluminium
Material of impeller	Aluminium sheet
Material of mounting plate	Sheet steel, hot-galvanised
Material of support bracket	Steel, coated in black
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	6
Type of protection	IP 54
Protection class	I
Technical features	- 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
Approval	CSA C22.2 Nr.77; GOST; UL 2111

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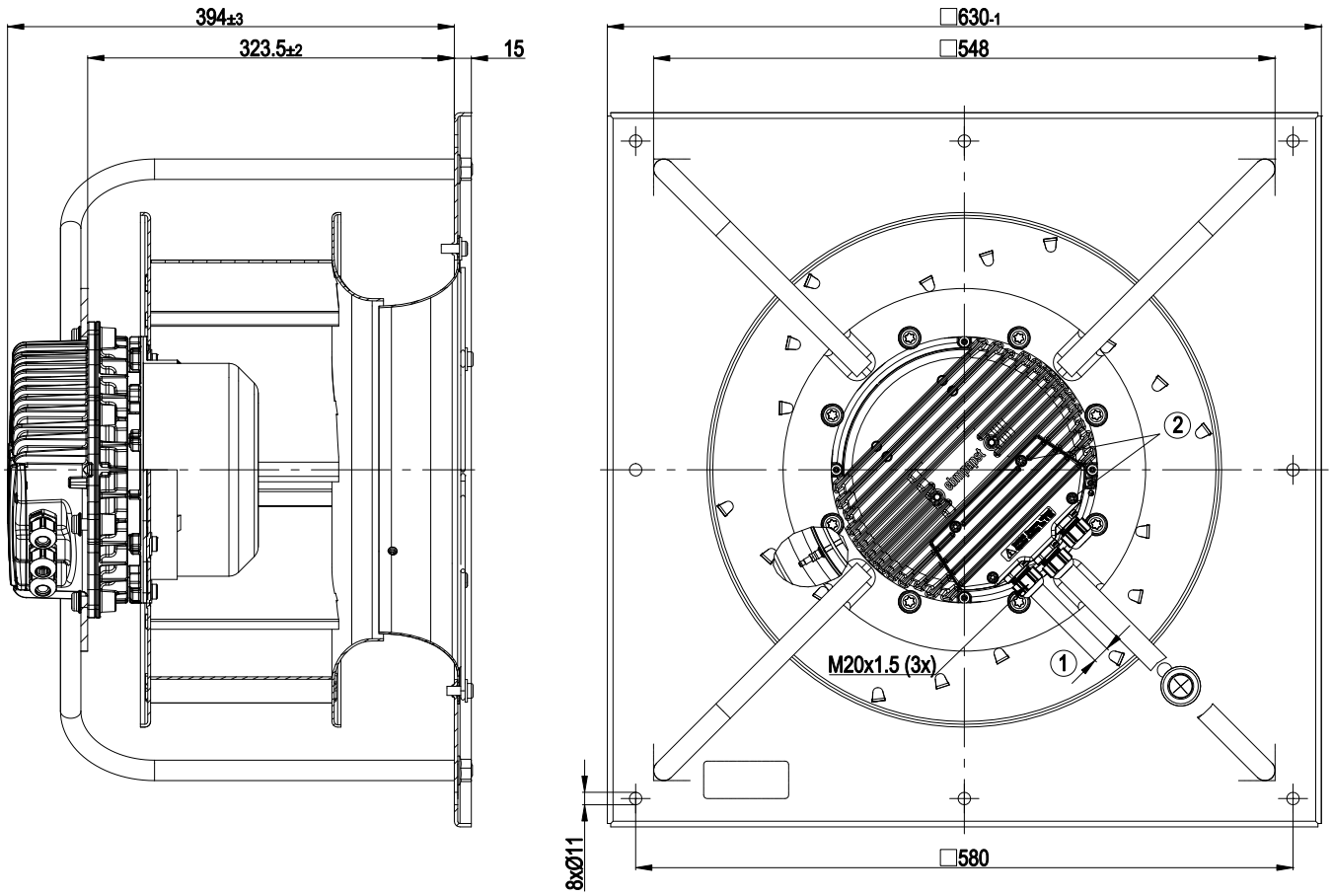
Product drawing



1	Cable diameter: min. 4 mm, max. 10 mm, tightening torque: 4±0.6 Nm
2	Tightening torque 3.5±0.5 Nm

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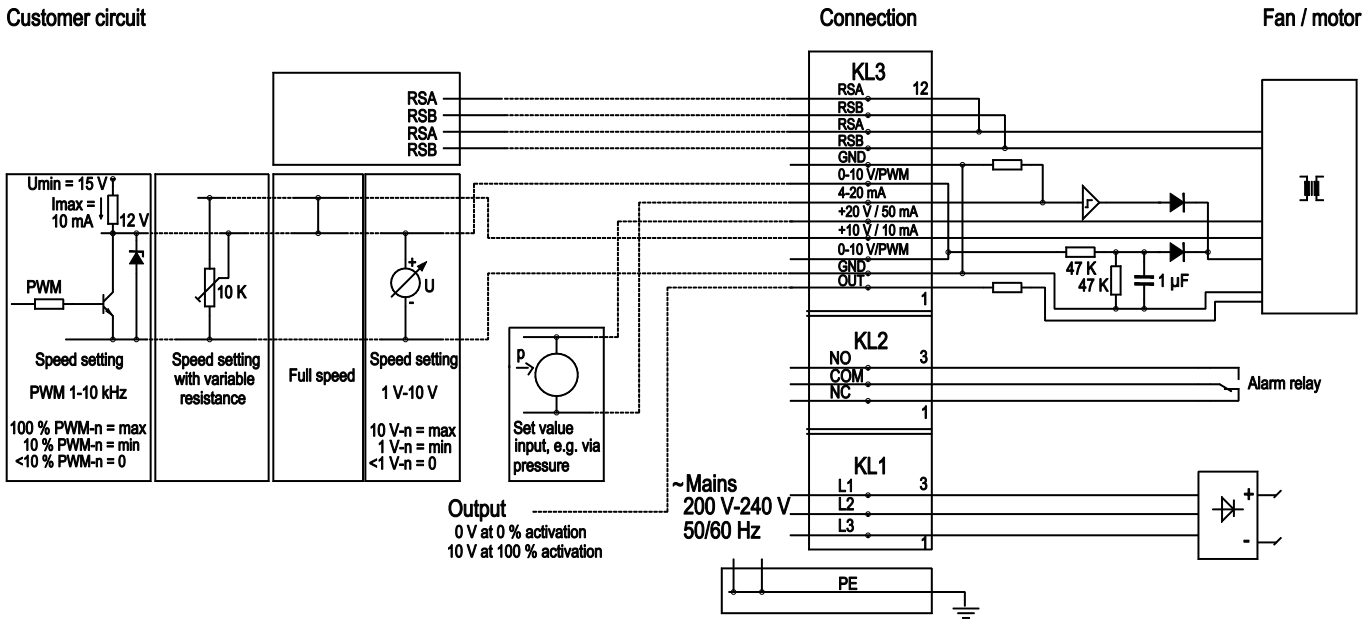
Connection screen



No.	Pin	Signal	Function / assignment
PE		PE	Protective ground connection
KL1	1, 2, 3	L1, L2, L3	Power line, L1, L2, L3
KL2	1	NC	Alarm relay, normally closed connection
KL2	2	COM	Alarm relay, common
KL2	3	NO	Alarm relay, normally open connection
KL3	1	OUT	Master output for controlling fans
KL3	2, 8	GND	GND
KL3	3, 7	0-10 V/PWM	Reference / Actual value
KL3	4	+10 V	Supply to external potentiometers
KL3	5	+20 V	Supply to external sensor
KL3	6	4-20 mA	Reference / Actual value input
KL3	9, 11	RSB	RS485 interface for ebmBus, RSB
KL3	10, 12	RSA	RS485 interface for ebmBus, RSA

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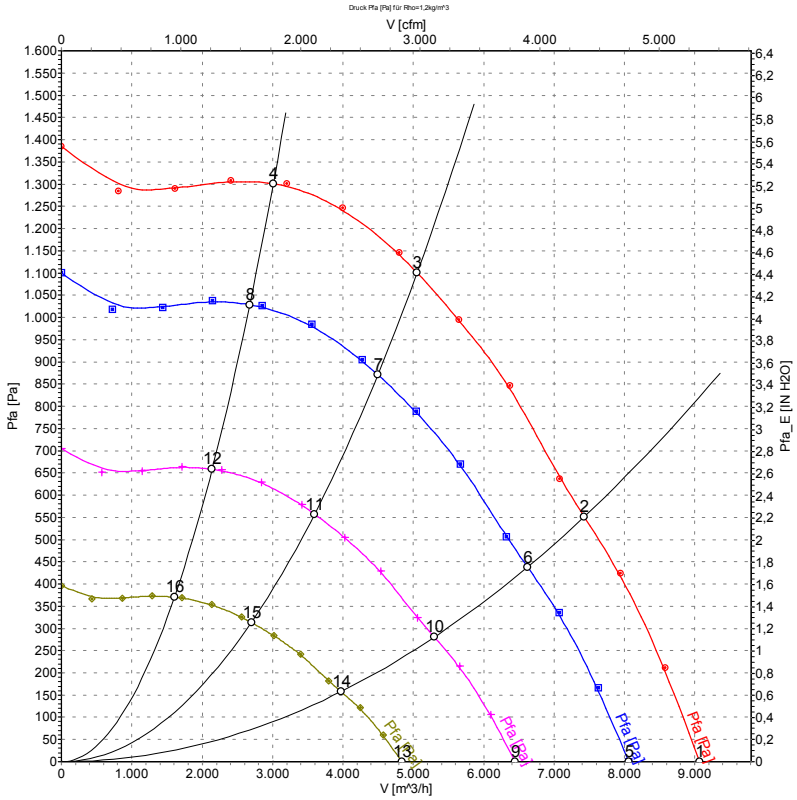
Charts: Air flow 50 Hz



Measurement: LU-74204

Measured values

	U	f	n	P_1	I	$\dot{V}$	p_{fa}
	[V]	[Hz]	[min^{-1}]	[W]	[A]	[m^3/h]	[Pa]
1	200	50	2250	1752	5.29	9070	0
2	200	50	2250	2297	6.97	7430	550
3	200	50	2250	2700	8.20	5055	1100
4	200	50	2250	2421	7.20	3010	1300
5	200	50	2000	1230	3.71	8060	0
6	200	50	2000	1628	4.94	6625	438
7	200	50	2000	1892	5.68	4495	871
8	200	50	2000	1702	5.06	2675	1030
9	200	50	1600	630	1.90	6450	0
10	200	50	1600	834	2.53	5300	280
11	200	50	1600	969	2.91	3595	558
12	200	50	1600	871	2.59	2140	659
13	200	50	1200	266	0.80	4835	0
14	200	50	1200	352	1.07	3975	158
15	200	50	1200	409	1.23	2695	314
16	200	50	1200	368	1.09	1605	371