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General partner Elektrobau Mulfingen GmbH · Headquarters Mulfingen

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**Nominal data**

Type	K3G190-RD45-03	
Motor	M3G055-CF	
Phase		1~
Nominal voltage	VAC	230
Nominal voltage range	VAC	200 .. 240
Frequency	Hz	50/60
Type of data definition		ml
Speed	min ⁻¹	4120
Power input	W	169
Current draw	A	1.35
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	60

ml = Max. load · me = Max. efficiency · fa = Running at free air · cs = Customer specs · cu = Customer unit

Subject to alterations

Data according to ErP directive

Installation category	A
Efficiency category	Static
Variable speed drive	Yes
Specific ratio*	1.01

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

		Actual	Request 2013	Request 2015
Overall efficiency η_{es}	%	56	39.1	43.1
Efficiency grade N		74.9	58	62
Power input P_{ed}	kW	0.16		
Air flow q_v	m ³ /h	565		
Pressure increase p_{fs}	Pa	524		
Speed n	min ⁻¹	4055		

Data definition with optimum efficiency.

LU-132500

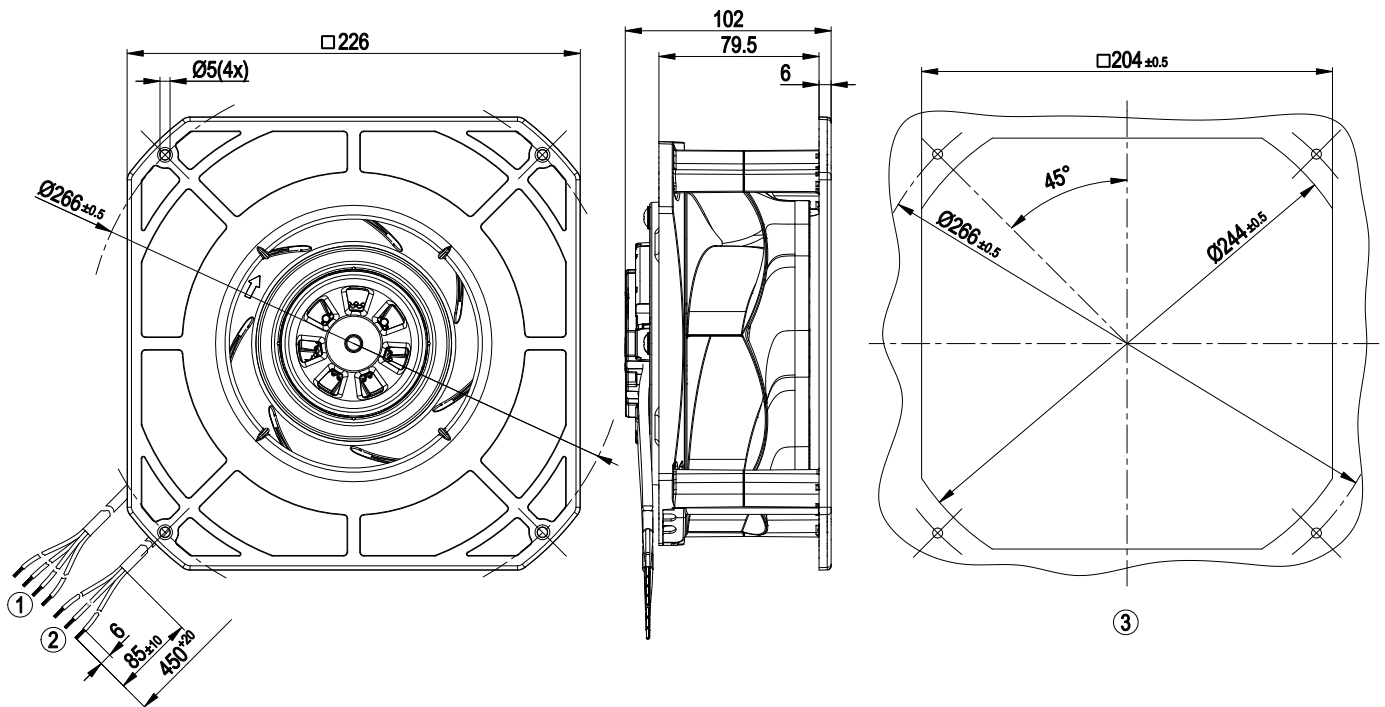
The ErP data is determined using a motor-impeller combination in a standardised measurement configuration.



Technical features

Mass	1.8 kg
Size	190 mm
Surface of rotor	Thick layer passivated
Material of impeller	PA plastic
Housing material	PA plastic
Number of blades	7
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 54
Insulation class	"B"
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Mounting position	Any
Condensate discharge holes	None, open rotor
Operation mode	S1
Motor bearing	Ball bearing
Technical features	- Output 10 VDC, max. 1.1 mA - Tach output - Motor current limit - Soft start - Control input 0-10 VDC / PWM - Over-temperature protected electronics / motor - Line undervoltage detection
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	<= 3.5 mA
Motor protection	Locked-rotor protection
Cable exit	Variable
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60335-1
Approval	CCC; EAC

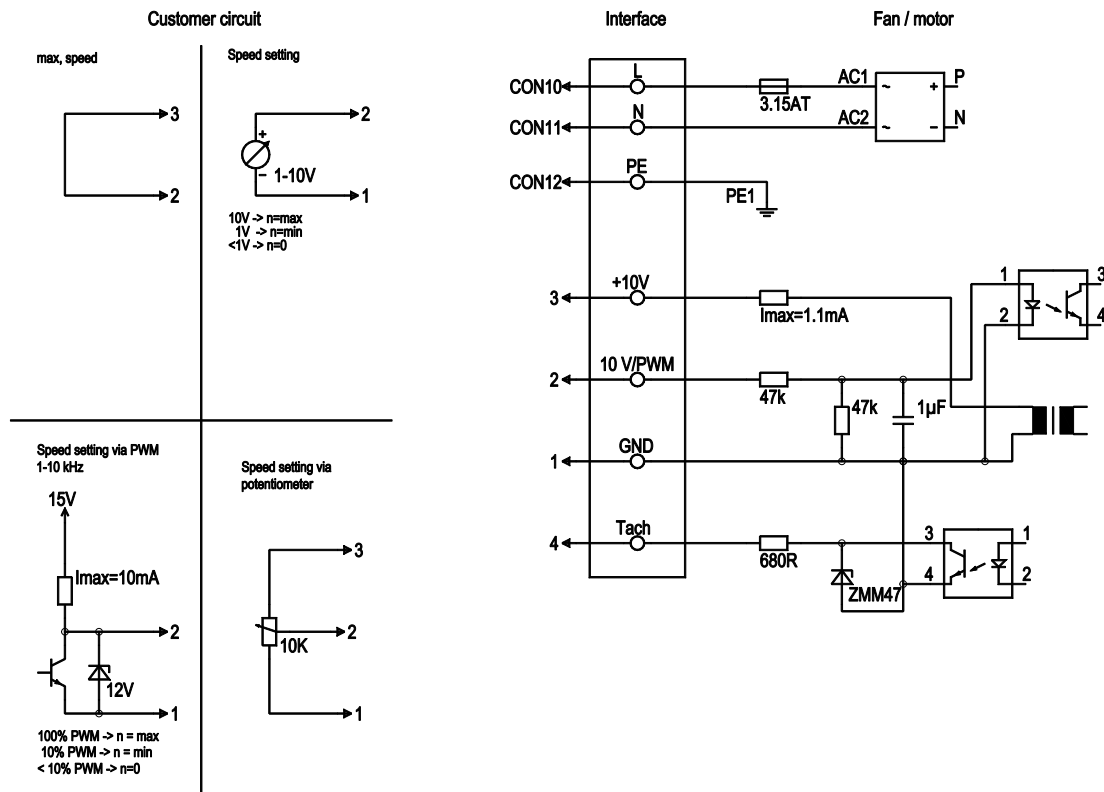
Product drawing



1	Connection line PVC 3G AWG20, 3x lead tips crimped
2	Connection line PVC 4X AWG22, 4x lead tips crimped
3	Mounting dimensions

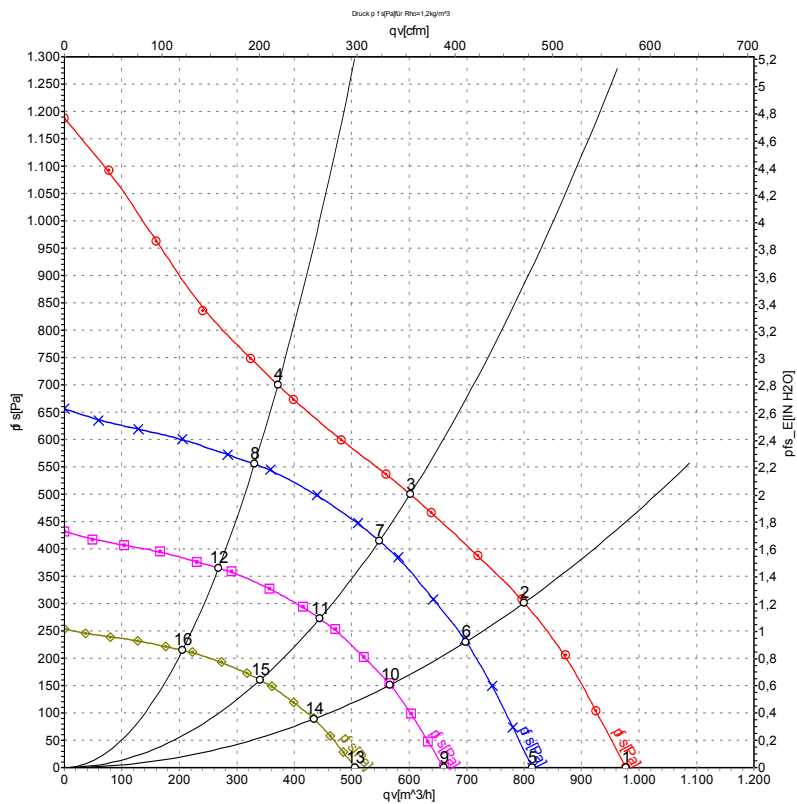
backward curved, single inlet
with housing

Connection screen



No.	Conn.	Designation	Colour	Function / assignment
	CON10	L	black	Power supply 230 VAC, 50-60 Hz, for voltage range refer to rating plate
	CON11	N	blue	Neutral conductor
	CON12	PE	green/yellow	Protective earth
	1	GND	blue	GND - Connection for control interface
	2	0- 10V PWM	yellow	Control input 0 - 10 V or PWM, electrically isolated
	3	10V/ max 1.1mA	red	Voltage output 10V/ 1.1mA, electrically isolated, not short-circuit-proof.
	4	Tach	white	Tach output: open collector, 1 pulse per revolution, electrically isolated

Charts: Air flow 50 Hz



Air performance measured as per ISO 5801 Installation category A. For detailed information on the measuring set-up, please contact ebm-papst. Suction-side noise levels: LwA measured as per ISO 13347 / LpA measured with 1m distance to fan axis. The values given are valid under the measuring conditions mentioned above and may vary according to the actual installation situation. With any deviation from the standard set-up, the specific values have to be checked and reviewed with the unit installed.

Measured values

	U	f	n	P _{ed}	I	LpA _{in}	LwA _{in}	qv	p _{ts}
	V	Hz	min ⁻¹	W	A	dB(A)	dB(A)	m ³ /h	Pa
1	230	50	4440	161	1.35	72	81	975	0
2	230	50	4235	165	1.35	67	75	800	300
3	230	50	4120	169	1.35	63	72	600	500
4	230	50	4150	160	1.35	66	74	370	700
5	230	50	3700	93	0.81	69	77	815	0
6	230	50	3700	110	0.93	64	72	700	233
7	230	50	3700	125	1.06	61	70	550	415
8	230	50	3700	114	0.97	64	72	330	556
9	230	50	3000	50	0.43	64	73	660	0
10	230	50	3000	59	0.50	59	68	565	153
11	230	50	3000	67	0.57	56	65	445	273
12	230	50	3000	61	0.52	59	67	270	365
13	230	50	2300	22	0.19	58	67	505	0
14	230	50	2300	26	0.22	53	62	435	90
15	230	50	2300	30	0.26	51	59	340	160
16	230	50	2300	27	0.23	54	61	205	215

U = Supply voltage · f = Frequency · n = Speed · P_{ed} = Power input · I = Current draw · LpA_{in} = Sound pressure level inlet side · LwA_{in} = Sound power level inlet side · qv = Air flow
p_{ts} = Pressure increase