R3G180-AU60-01

EC centrifugal fan

forward curved, single inlet

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Nominal data

Type	**R3G180-AU60-01**
Motor	**M3G074-CF**

Phase		1~
Nominal voltage	VAC	230
Nominal voltage range	VAC	200 .. 277
Frequency	Hz	50
Type of data definition		fa
Speed (rpm)	min^{-1}	1300
Power input	W	165
Current draw	A	1.25
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

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Technical features

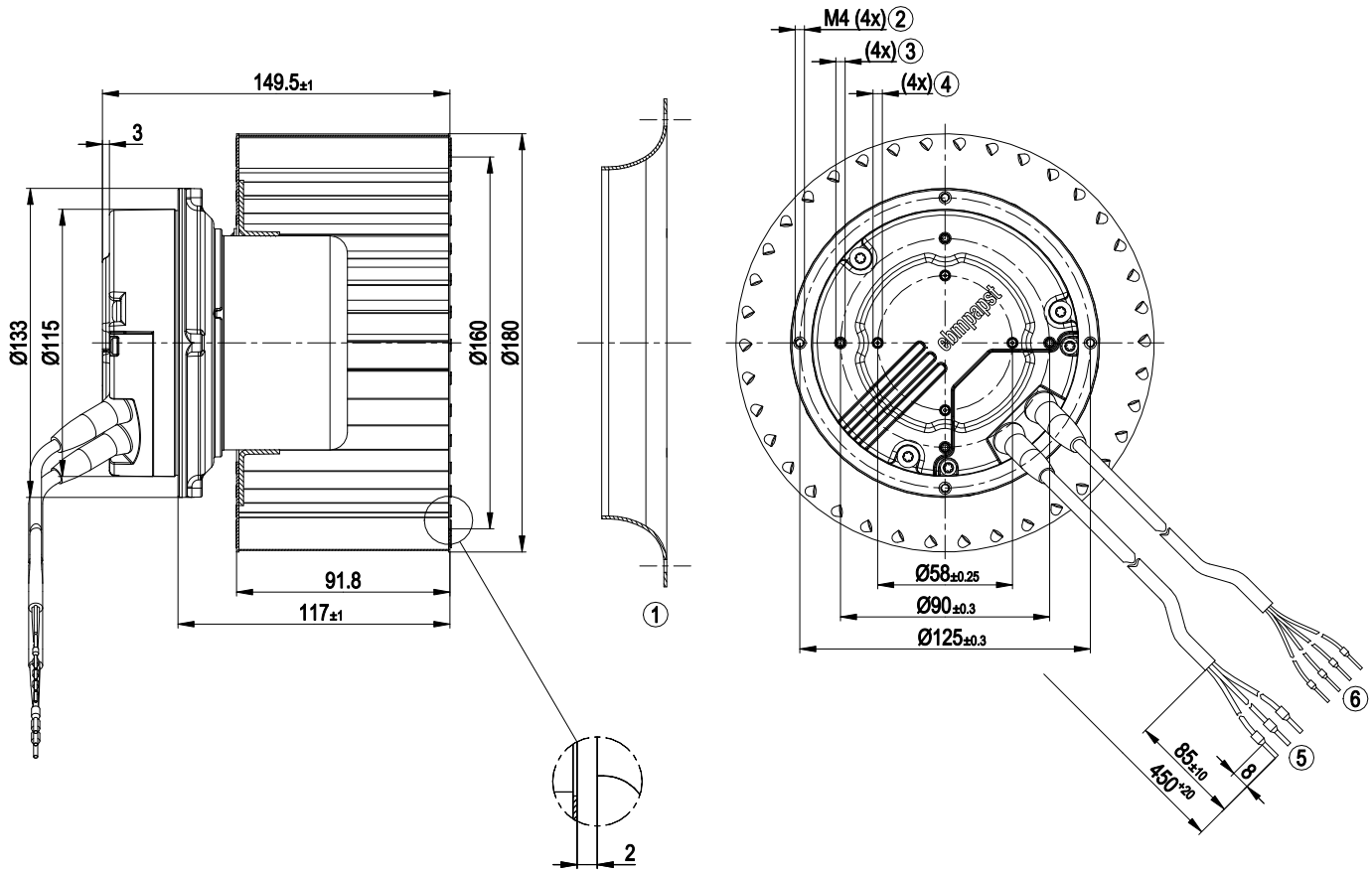
Mass	2.6 kg
Size	180 mm
Surface of rotor	Coated in black
Material of impeller	Sheet steel, galvanised
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 44
Insulation class	"B"
Humidity (F)/environmental protection class (H)	F3-1
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Mounting position	Shaft horizontal or rotor on top
Condensate discharge holes	None
Operation mode	S1
Motor bearing	Ball bearing
Technical features	- Output 10 VDC, max. 1.1 mA - Tach output - Output limit - Motor current limit - Soft start - Control input 0-10 VDC / PWM - Control interface with SELV potential safely disconnected from the mains - Over-temperature protected motor
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	<= 3.5 mA
Motor protection	Thermal overload protector (TOP) wired internally
Cable exit	Variable
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60335-1; CE
Approval	CCC; CSA C22.2 No.77; UL 2111

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Product drawing



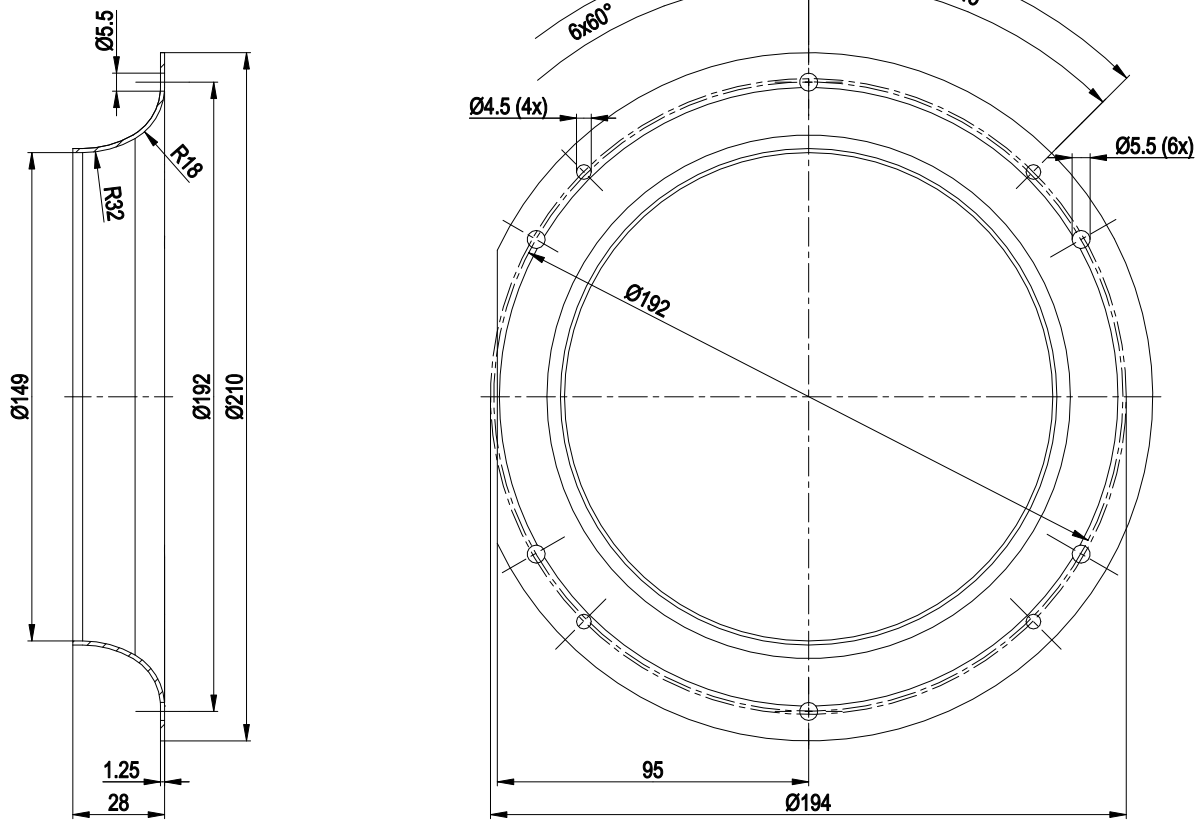
1	Accessory part: Inlet nozzle 09597-2-4013 not included in scope of delivery
2	Thread reach max. 10 mm
3	Pilot hole prepared for M4 self-tapping screw, thread reach max. 6 mm
4	Pilot hole prepared for M4 self-tapping screw, thread reach max. 8 mm
5	Connection line PVC AWG18, 3x crimped core-end sleeves
6	Connection line PVC AWG22, 4x crimped core-end sleeves

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Accessory part

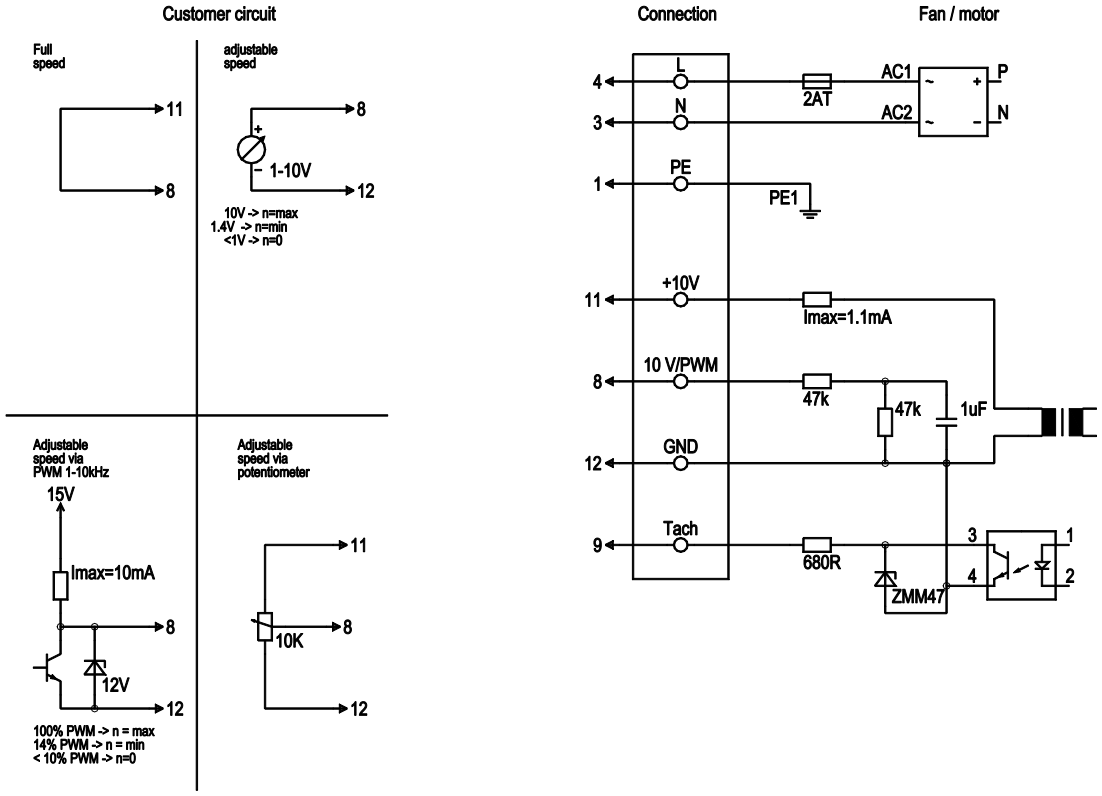


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Connection screen



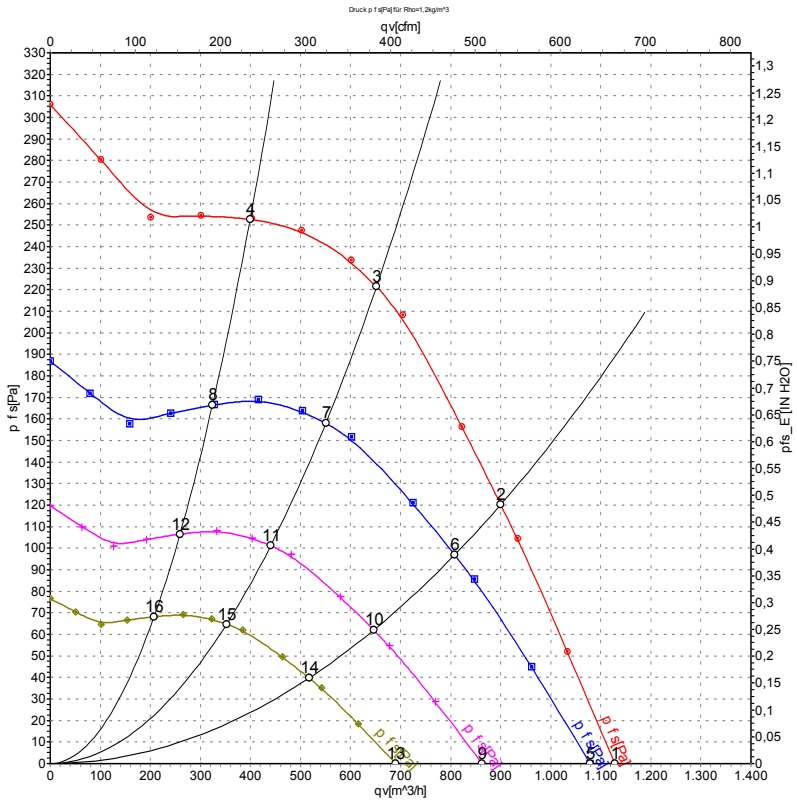
No.	Conn.	Designation	Colour	Function / assignment
	4	L	black	Power supply 230 VAC, 50-60 Hz, see type plate for voltage range
	3	N	blue	Neutral conductor
	1	PE	green/yellow	Protective earth
	8	0-10 V PWM	yellow	Control input 0 - 10 V or PWM, electrically isolated
	9	Tach	white	Tach output: open collector, 1 pulse per revolution, electrically isolated
	11	10V / max 1.1 mA	red	Voltage output 10 V / max. 1.1 mA, electrically isolated
	12	GND	blue	GND - Connection for control interface

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Charts: Air flow 50 Hz



Measurement: LU-117663-1

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}	q_V	p_{fs}	q_V	p_{fs}
	V	Hz	min^{-1}	W	A	dB(A)	dB(A)	m^3/h	Pa	cfm	inH2O
1	230	50	1300	165	1.25	68	73	1130	0	665	0.00
2	230	50	1390	133	0.99	65	71	900	120	530	0.48
3	230	50	1480	98	0.73	62	69	650	220	385	0.88
4	230	50	1540	68	0.51	61	68	400	250	235	1.00
5	230	50	1250	146	1.07	67	72	1080	0	635	0.00
6	230	50	1250	97	0.72	62	69	810	97	475	0.39
7	230	50	1250	59	0.44	59	66	550	158	325	0.63
8	230	50	1250	36	0.27	56	64	325	167	190	0.67
9	230	50	1000	75	0.55	62	67	865	0	510	0.00
10	230	50	1000	50	0.37	57	64	645	62	380	0.25
11	230	50	1000	30	0.23	54	61	440	101	260	0.41
12	230	50	1000	18	0.14	52	59	260	107	150	0.43
13	230	50	800	38	0.28	57	63	690	0	405	0.00
14	230	50	800	25	0.19	53	59	515	40	305	0.16
15	230	50	800	16	0.12	49	56	350	65	205	0.26
16	230	50	800	9.5	0.07	47	54	205	68	120	0.27

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

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