EC centrifugal fan

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Nominal data

Type	**R3G470-AA05-24**
Motor	**M3G084-DF**

Nominal voltage	VDC	435
Frequency	Hz	50/60
Type of data definition		ml
State		prelim.
External electronics		CHW035AB0201
Speed	min^{-1}	1210
Power input	W	350
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	40

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

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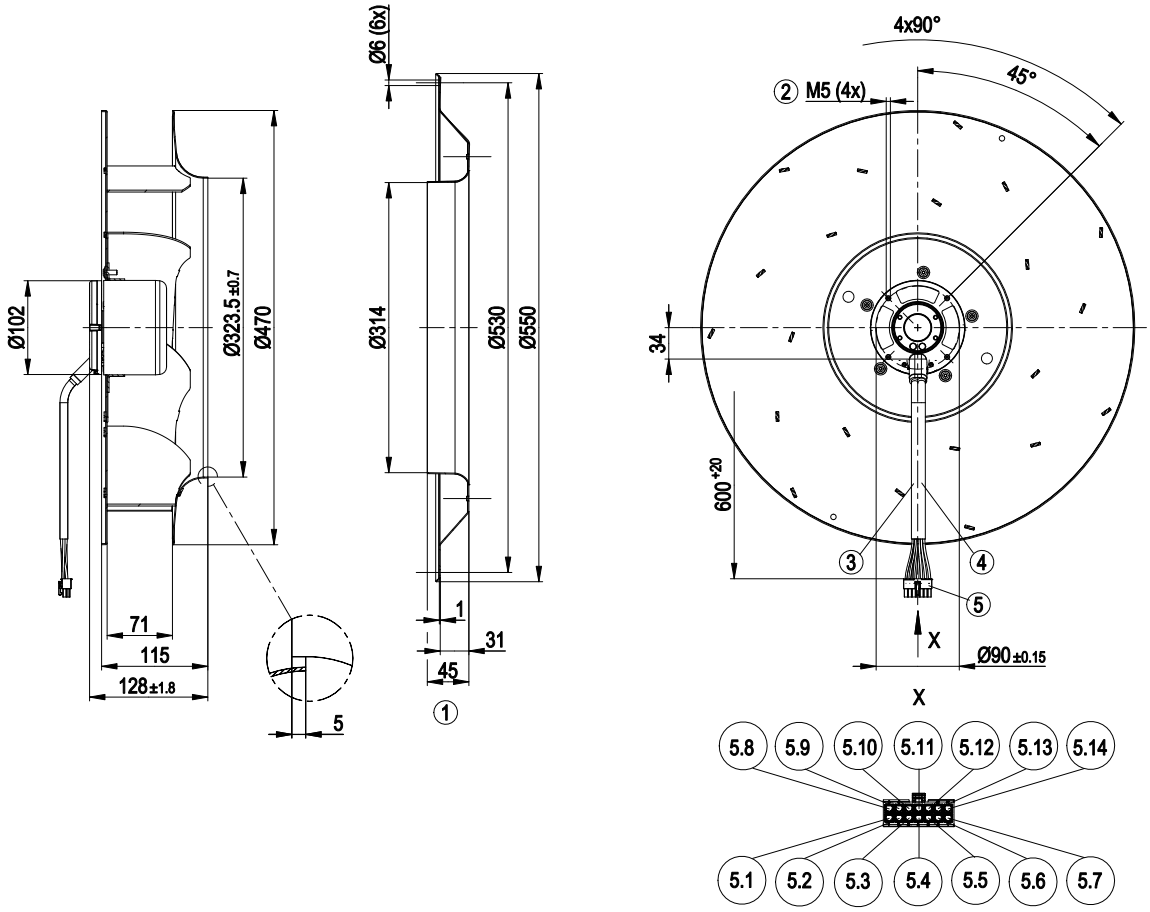
Technical features

Mass	5.45 kg
Size	470 mm
Surface of rotor	Coated in black
Material of impeller	Sheet steel, coated in black
Number of blades	7
Direction of rotation	Counter-clockwise, seen on rotor
Type of protection	IP 20
Insulation class	"B"
Humidity class	F0
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
Cooling bore / aperture	Rotor-side
Operation mode	S1
Motor bearing	Ball bearing
Technical features	- Speed monitoring Hall IC - Over-temperature protected motor
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	<= 3.5 mA
Electrical leads	With plug
Motor protection	PTC resistor
Cable exit	Variable
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 61800-5-1

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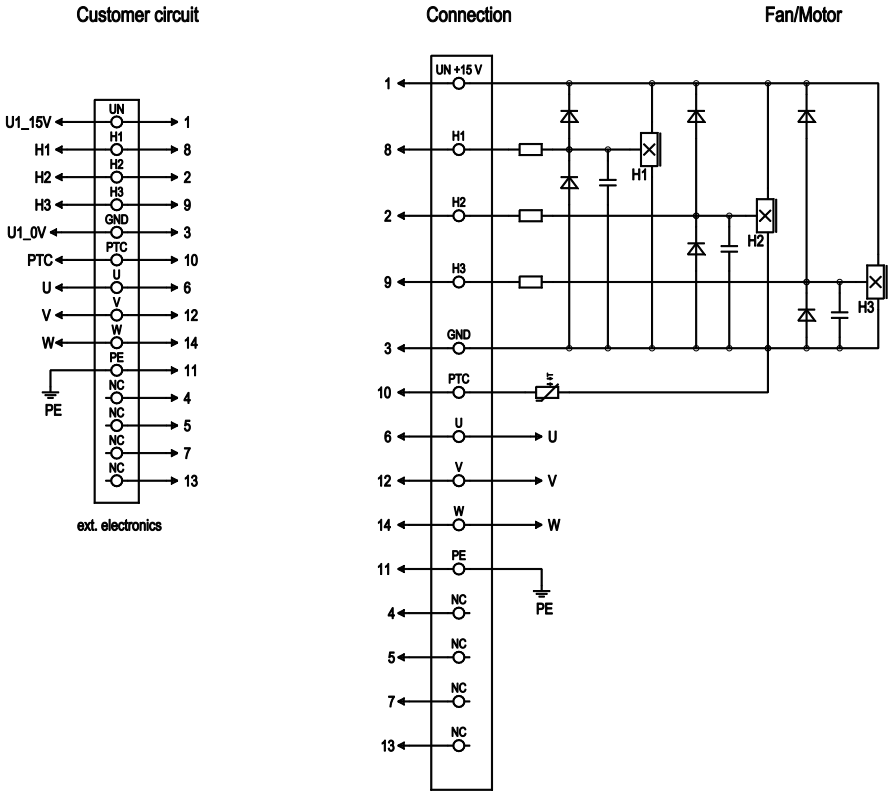
Product drawing



1	Accessory part: Inlet nozzle 47100-2-4013 and guard grille 47000-2-4039, not included in scope of delivery
2	Depth of screw max. 8 mm
3	Connection line AWG22-300V
4	Connection line AWG22-600V
5	Connector housing Molex 39-01-2145 with 10x female connector Molex 39-00-0059
5.1	UN +15 V
5.2	Hall 2, open collector
5.3	GND
5.4	not used
5.5	not used
5.6	Motor connection U
5.7	not used
5.8	Hall 1, open collector
5.9	Hall 3, open collector
5.10	PTC
5.11	PE
5.12	Motor connection V
5.13	not used
5.14	Motor connection W
6	Accessory part: External electronics CHW035-AB02-01 not included in scope of delivery

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Connection screen

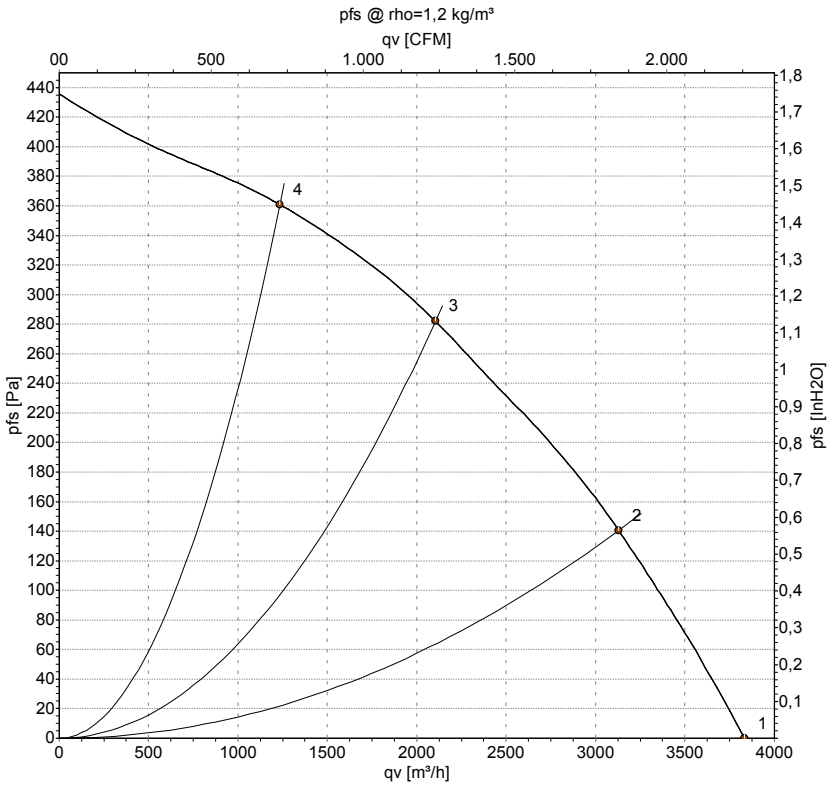


Line	No.	Signal	Colour	Function / assignment
2	1	UN +15 V	red	Power supply
2	2	H2	brown	Hall 2, open collector
2	3	GND	blue	Reference ground
2	4	NC	-	not used
2	5	NC	-	not used
1	6	U	black	Motor connection U
2	7	NC	-	not used
2	8	H1	orange	Hall 1, open collector
2	9	H3	yellow	Hall 3, open collector
2	10	PTC	black	PTC
1	11	PE	green/yellow	Protective earth connection
1	12	V	blue	Motor connection V
2	13	NC	-	not used
1	14	W	brown	Motor connection W

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Charts: Air flow 50 Hz



Measurement: LU-154848

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	qv	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa
1	220	50	1210	223	1.02	3835	0
2	220	50	1210	309	1.41	3130	140
3	220	50	1210	350	1.61	2105	280
4	220	50	1210	314	1.43	1235	360

U = Supply voltage · f = Frequency · n = Speed · P_{ed} = Power input · I = Current draw · qv = Air flow · p_{fs} = Pressure increase

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