

R3G160-AW01-12

# EC centrifugal fan

forward-curved



R3G160-AW01-12 ebmpapst Datasheet FansCo

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## Nominal data

Type	R3G160-AW01-12	
Motor	M3G055-CF	
Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50/60
Method of obtaining data		ml
Speed (rpm)	min <sup>-1</sup>	2640
Power consumption	W	120
Current draw	A	0.95
Min. back pressure	Pa	0
Min. back pressure	in. wg	0
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	50

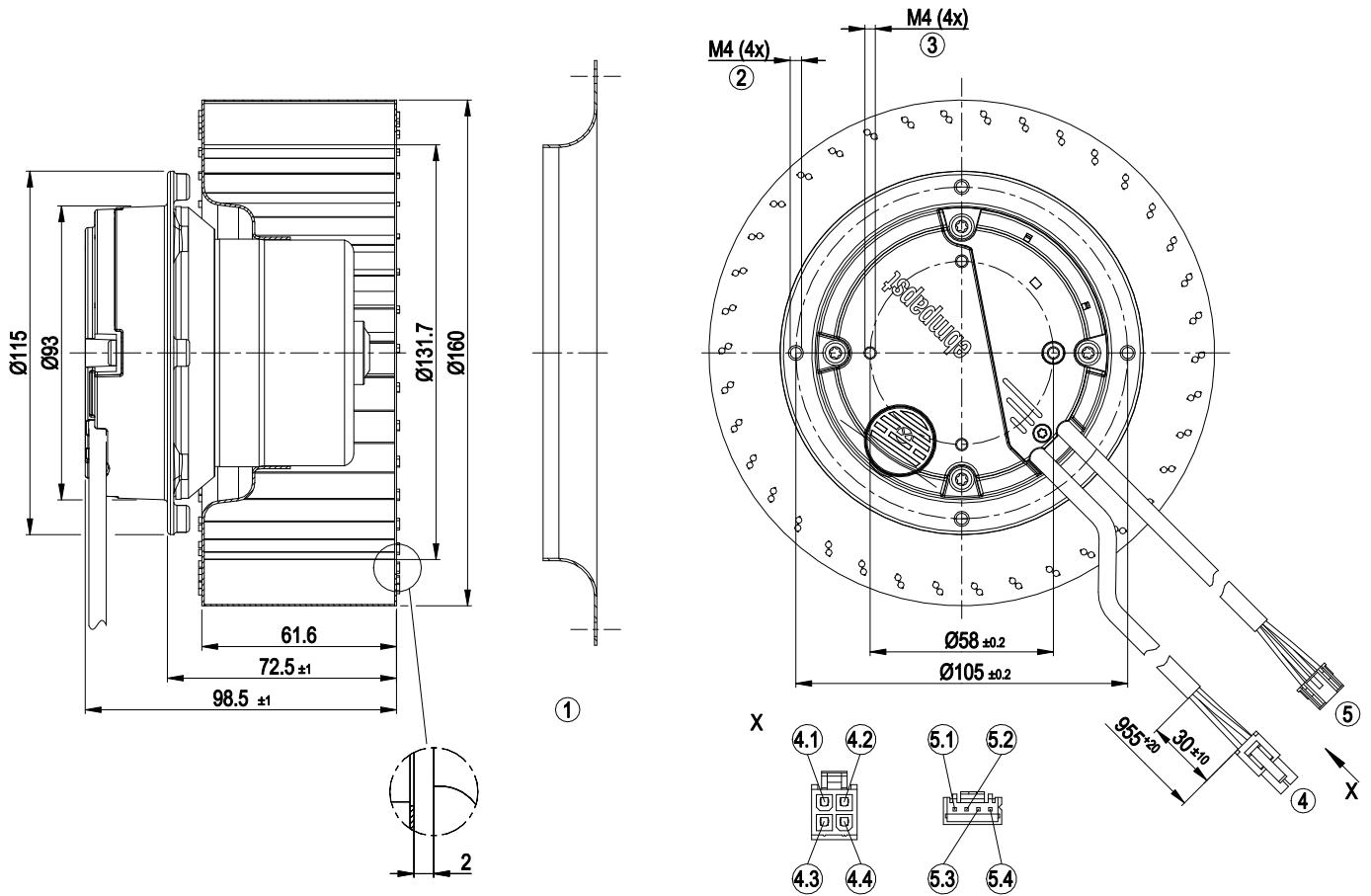
ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment  
Subject to change



## Technical description

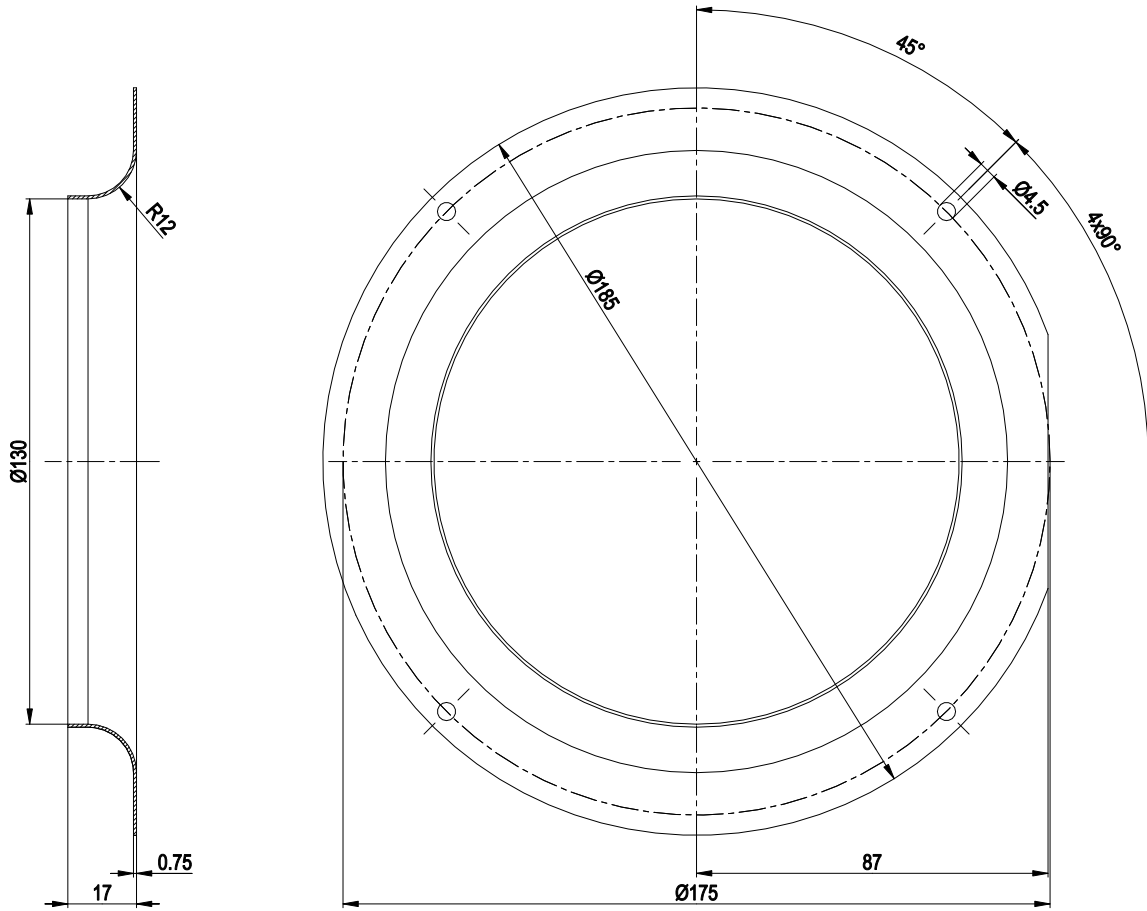
<b>Weight</b>	1.5 kg
<b>Size</b>	160 mm
<b>Motor size</b>	55
<b>Rotor surface</b>	Thick-film passivated
<b>Impeller material</b>	Sheet steel, galvanized
<b>Direction of rotation</b>	Clockwise, viewed toward rotor
<b>Degree of protection</b>	IP44
<b>Insulation class</b>	"B"
<b>Moisture (F) / Environmental (H) protection class</b>	H1
<b>Max. permitted ambient temp. for motor (transport/storage)</b>	+ 80 °C
<b>Min. permitted ambient temp. for motor (transport/storage)</b>	- 40 °C
<b>Installation position</b>	Any
<b>Condensation drainage holes</b>	On rotor side
<b>Motor bearing</b>	Ball bearing
<b>Technical features</b>	<ul style="list-style-type: none"> <li>- Output 10 VDC, max. 10 mA</li> <li>- Tach output</li> <li>- Power limiter</li> <li>- Motor current limitation</li> <li>- Soft start</li> <li>- Set value input Lin 0-10 VDC / PWM (1.7 V corresponds to V=min, 10 V corresponds to V=max)</li> <li>- Control interface with SELV potential safely disconnected from the mains</li> <li>- Overvoltage detection</li> <li>- Thermal overload protection for motor</li> </ul>
<b>Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)</b>	<= 3.5 mA
<b>Electrical hookup</b>	Connector with cable
<b>Motor protection</b>	Temperature limiter manual reset
<b>With cable</b>	Variable
<b>Protection class</b>	I (with customer connection of protective earth)
<b>Conformity with standards</b>	EN 60335-1; CE

## Product drawing



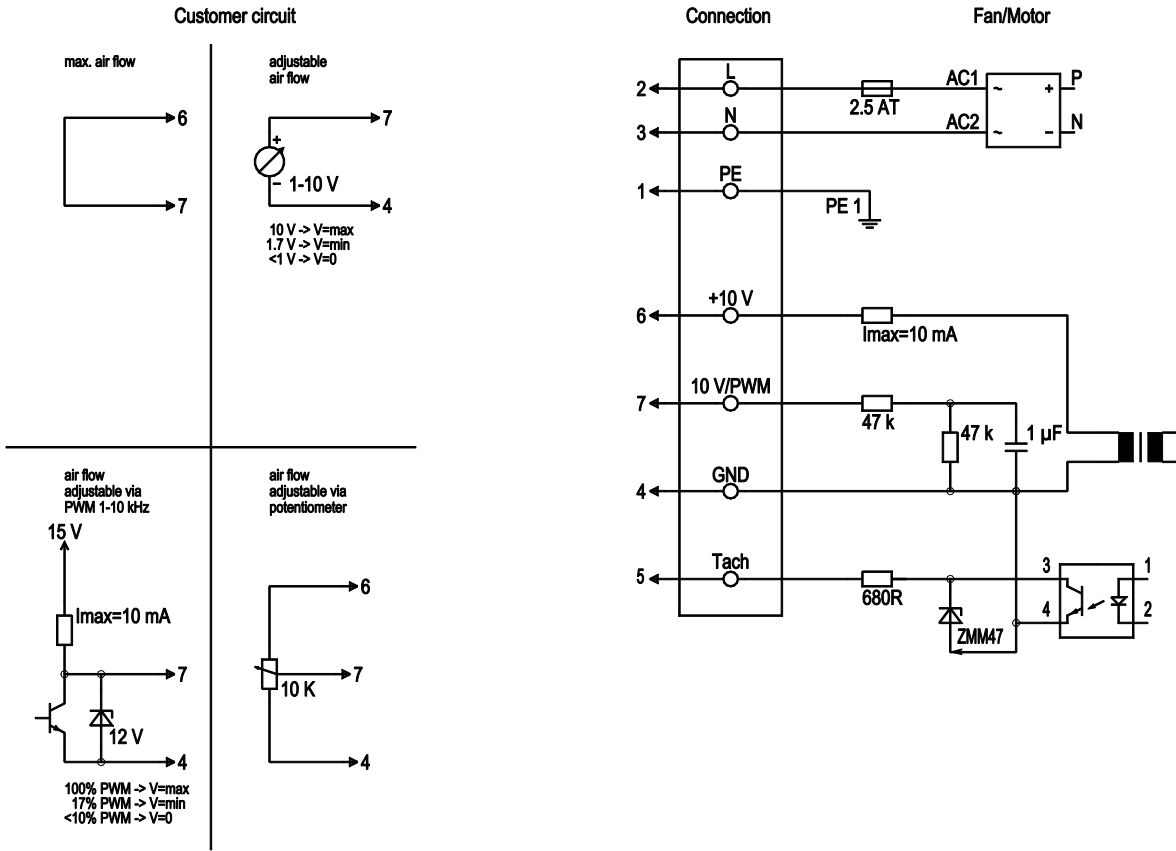
1	Accessory part: Inlet ring 09588-2-4013, not included in scope of delivery
2	Max. clearance for screw 6 mm
3	Max. clearance for screw 6 mm
4	Cable PVC 3G 0.5 mm <sup>2</sup> , connector housing 4-pole Molex 46992-0410, 3x socket Molex 39-00-0038
4.1	PE (green/yellow)
4.2	not used
4.3	L (brown)
4.4	N (blue)
5	Cable PVC 4x 0.25 mm <sup>2</sup> , connector housing JST XAP-04V-1 with 4x plug pin JST SXA-001T-P0.6
5.1	Tach (white)
5.2	GND (blue)
5.3	0-10 V PWM (yellow)
5.4	+10 V (red)

## Accessory part



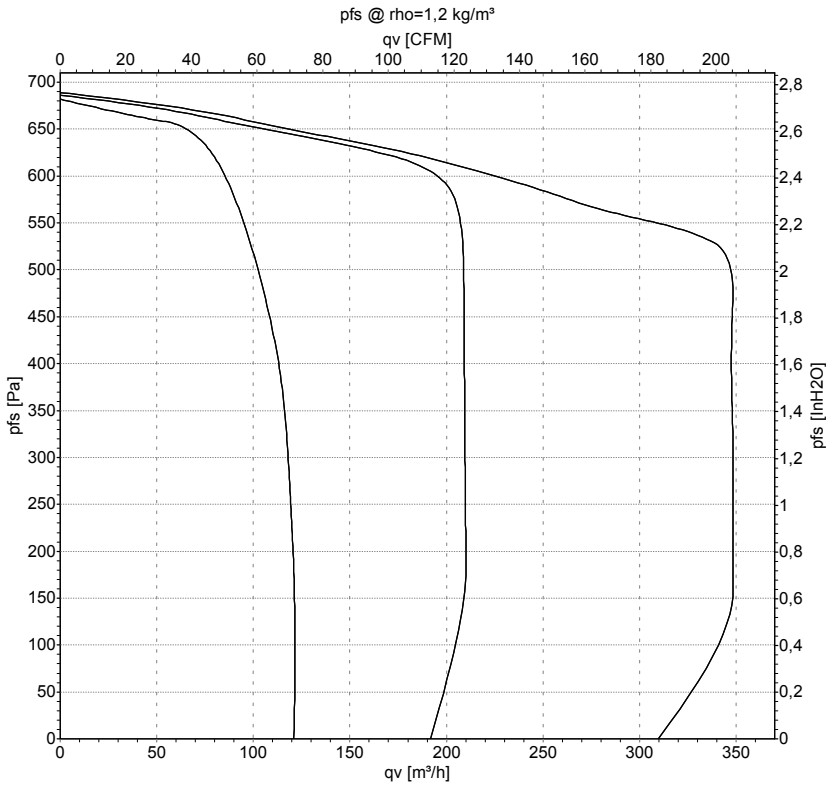
Accessory part: inlet ring 09588-2-4013 not included in scope of delivery

## Connection diagram



No.	Conn.	Designation	Color	Function/assignment
	2	L	brown	Power supply 230 VAC, 50-60 Hz, see nameplate for voltage range
	3	N	blue	Neutral conductor
	1	PE	green/yellow	Protective earth
	7	0-10 V PWM	yellow	Control input 0-10 V or PWM, electrically isolated
	5	Tach	white	Tach output: Open collector, 1 pulse per revolution, electrically isolated
	6	10V	red	Voltage output 10 V, 10 mA, electrically isolated, not short-circuit-proof
	4	GND	blue	Control interface GND connection

## Curves: Air performance 50 Hz



Measurement: LU-144067-1  
Measurement: LU-144087-1  
Measurement: LU-144099-1

Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebm-papst. Intake sound level: Sound power level according to ISO 13347 / sound pressure level measured at 1 m distance from fan axis. The values given are valid under the specified measuring conditions and may vary due to conditions of installation. For deviations from the standard configuration, the parameters have to be checked on the installed unit.

