R4E280-AM19-09

AC centrifugal fan

backward curved

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Nominal data

Type	**R4E280-AM19-09**
Motor	**M4E068-CF**

Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50
Type of data definition		cu
Valid for approval / standard		CE
Speed	min^{-1}	850
Power input	W	50
Current draw	A	0.22
Motor capacitor	µF	1.5
Capacitor voltage	VDB	400
Capacitor standard		P2 (CE)
Min. back pressure	Pa	0
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	60
Starting current	A	0.25

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

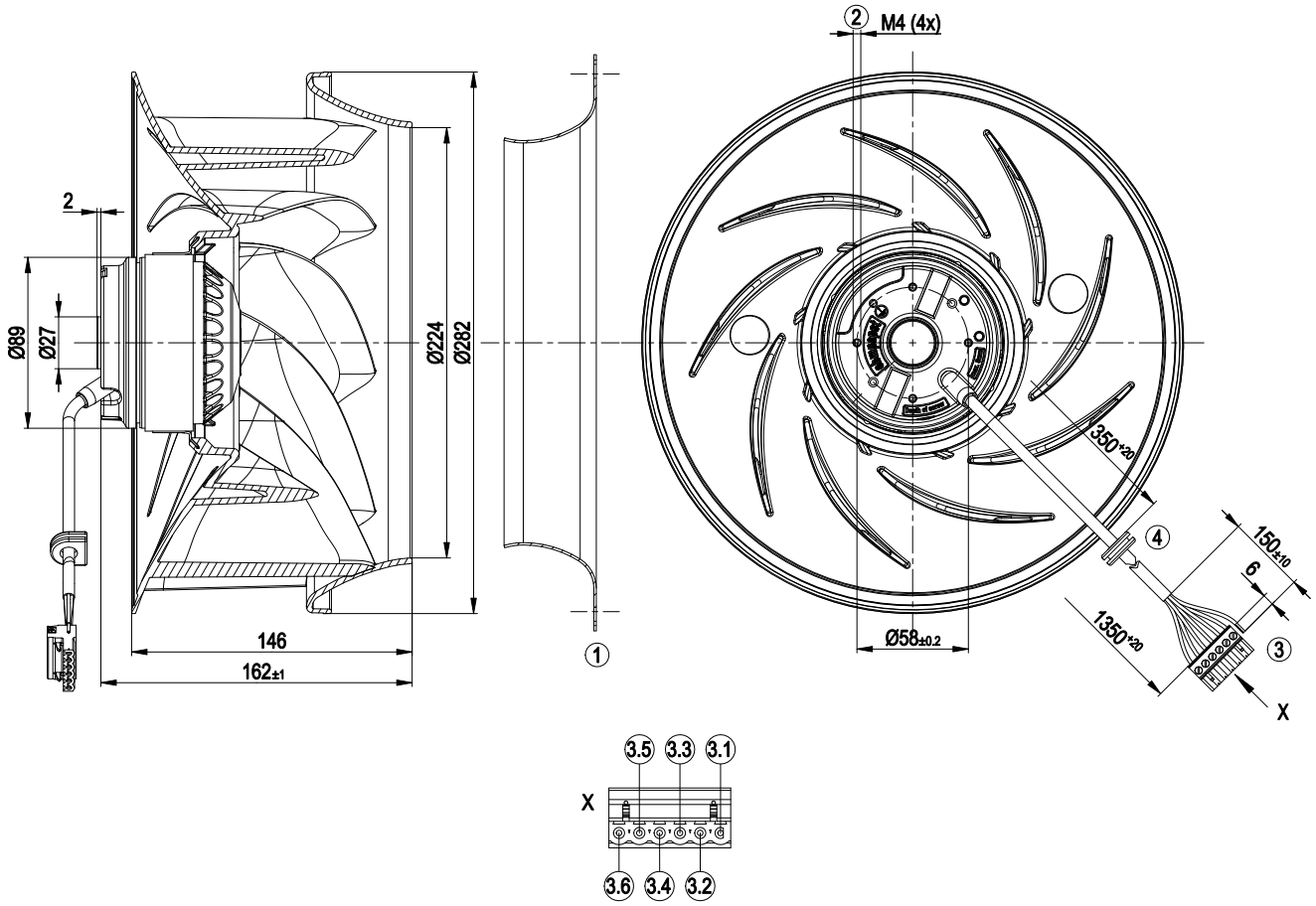
Mass	2.7 kg
Size	280 mm
Surface of rotor	Coated in black
Material of impeller	PA plastic
Number of blades	9
Direction of rotation	Counter-clockwise, seen on rotor
Type of protection	IP 44; Depending on installation and position as per EN 60034-5
Insulation class	"B"
Humidity class	F1-2
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Mounting position	Shaft horizontal or rotor on bottom; rotor on top on request
Condensate discharge holes	Rotor-side
Operation mode	S1
Motor bearing	Ball bearing
Speed steps	3
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	< 0.75 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

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Product drawing



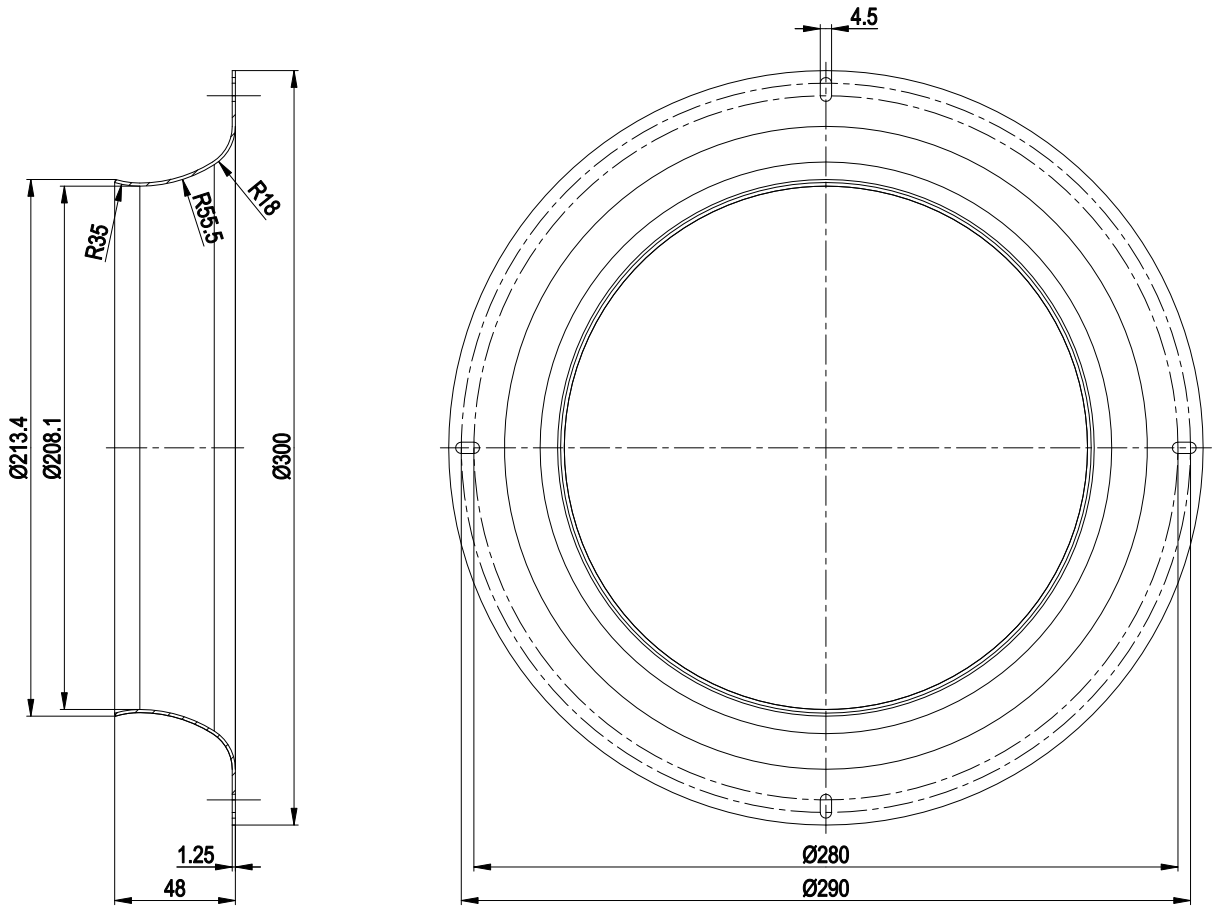
1	Accessory part: Inlet nozzle 31050-2-4013 not included in scope of delivery
2	Depth of screw max. 5 mm
3	Connection line PVC 7G 0.5 mm², 1x connector housing Phönix 6-pole 1757051 (MSTB 2.5/6-ST/5.08), 1x lead tip (green/ yellow) crimped
3.1	Red (capacitor)
3.2	white (level 1)
3.3	grey (level 2)
3.4	black (level 3)
3.5	blue (N)
3.6	Orange (capacitor)
4	Grommet 64901-4-7011 EPDM black

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Accessory part



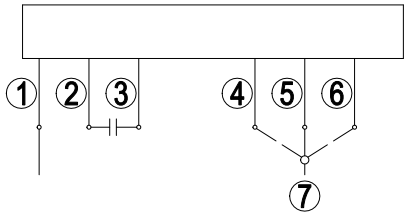
Inlet nozzle 31050-2-4013 not included in scope of delivery

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Connection screen



Note: Fast speed (step III); slow speed (step I)

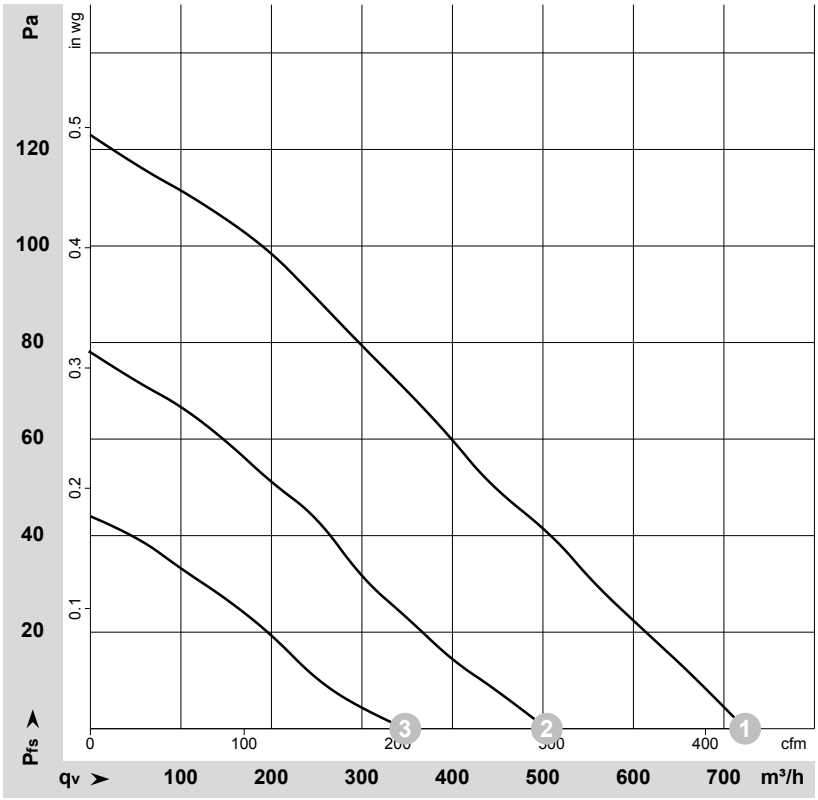
1	N = blue	2	orange	3	red
4	Step I white	5	Step II grey	6	Step III black
7	L1				

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Charts: Air flow 50 Hz



ρ = 1,15 kg/m³ ± 2%

Measurement: LU-65843
Measurement: LU-65844
Measurement: LU-65845

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

	Stage	U	f	n	P_e	I	LpA_{in}	qv
		V	Hz	min^{-1}	W	A	dB(A)	m^3/h
1	3	230	50	850	50	0.22	44	725
2	2	230	50	610	37	0.17	34	505
3	1	230	50	450	29	0.14	28	350

U = Supply voltage · f = Frequency · n = Speed · P_e = Power input · I = Current draw · LpA_{in} = Sound pressure level inlet side · qv = Air flow

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