R4E280-AL93-12

AC centrifugal fan

backward curved

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Nominal data

Type	**R4E280-AL93-12**
Motor	**M4E068-BF**

Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50
Type of data definition		cu
Valid for approval / standard		CE
Speed (rpm)	min^{-1}	670
Power input	W	40
Current draw	A	0.18
Motor capacitor	µF	1
Capacitor voltage	VDB	400
Capacitor standard		S0 (CE)
Min. back pressure	Pa	0
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	60
Starting current	A	0.21

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

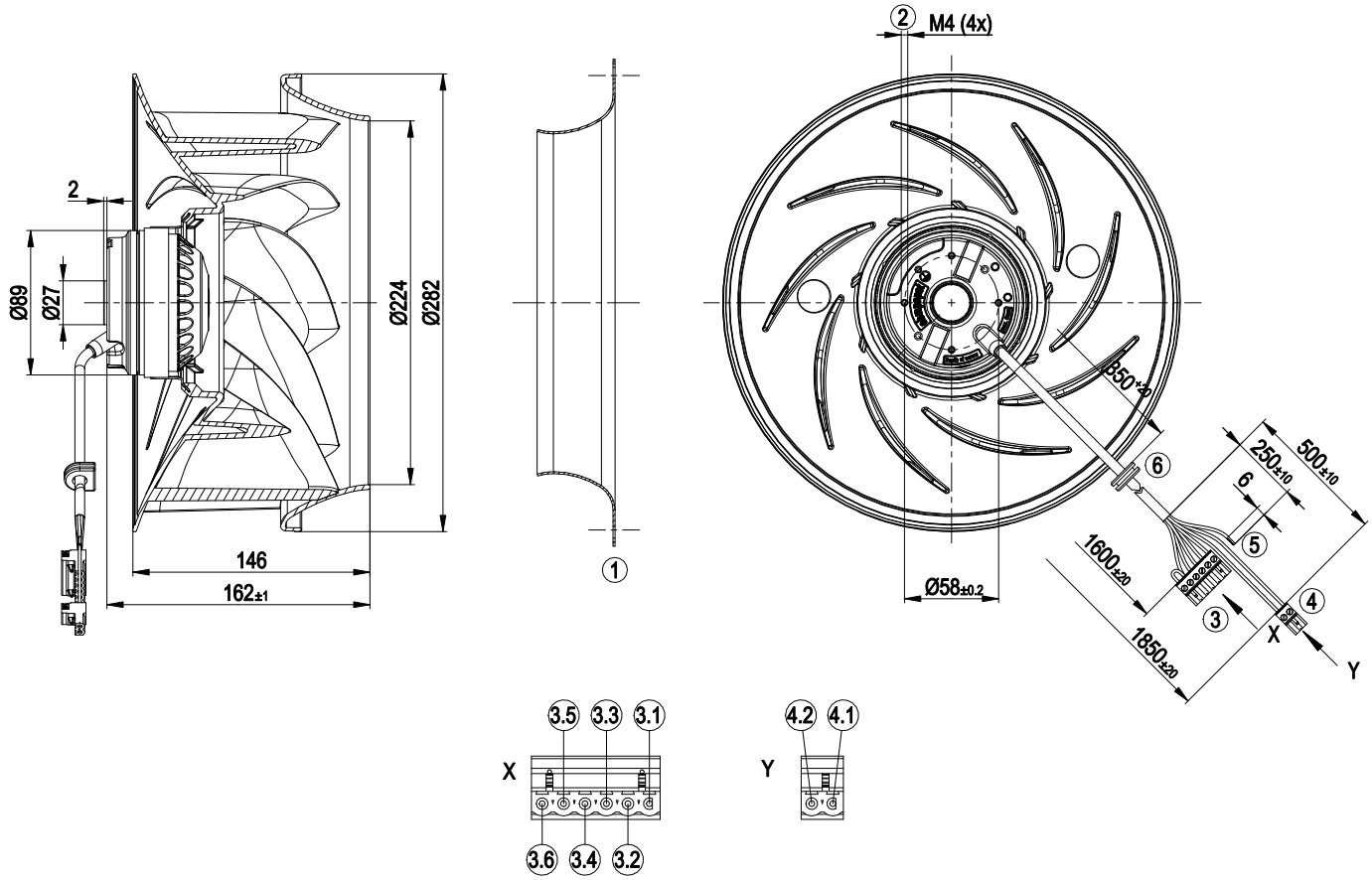
Mass	2.3 kg
Size	280 mm
Surface of rotor	Coated in black
Material of impeller	PA plastic
Number of blades	9
Direction of rotation	Counter-clockwise, seen on rotor
Type of protection	IP 44; Depending on installation and position as per EN 60034-5
Insulation class	"B"
Humidity (F)/environmental protection class (H)	H0+
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) brought out, basic insulation
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



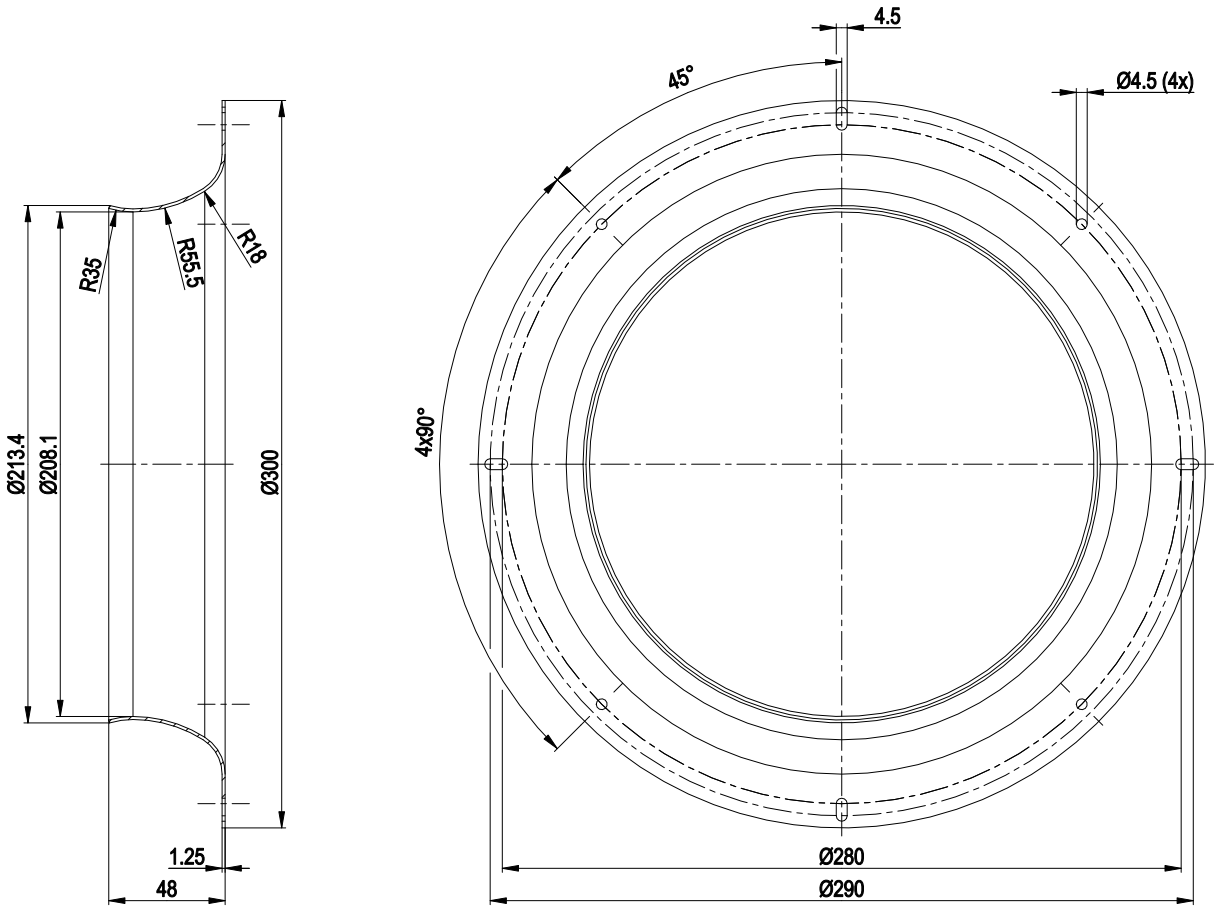
1	Accessory part: Inlet nozzle 31050-2-4013 not included in scope of delivery
2	Thread reach max. 5 mm
3	Connection line PVC 7G 0.5 mm², 1x connector housing Phönix 6-pole 1757051 (MSTB 2.5/6-ST/5.08), 1x lead tip (green/yellow) crimped
3.1	Red (capacitor)
3.2	white (level 1)
3.3	grey (level 2)
3.4	black (level 3)
3.5	blue (N)
3.6	orange (bridge)
4	Connection line ETFE AWG20, 1x connector housing Phönix 2-pin 1757019 (MSTB 2.5/2-ST/5.08)
4.1	yellow (TW)
4.2	yellow (TW)
5	Connection line ETFE AWG20, 1x lead tip (green/yellow) crimped
6	Grommet 64901-4-7011 EPDM black

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Accessory part



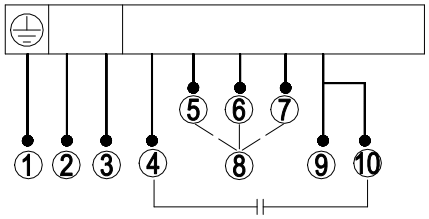
Inlet nozzle 31050-2-4013 not included in scope of delivery

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Connection screen



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

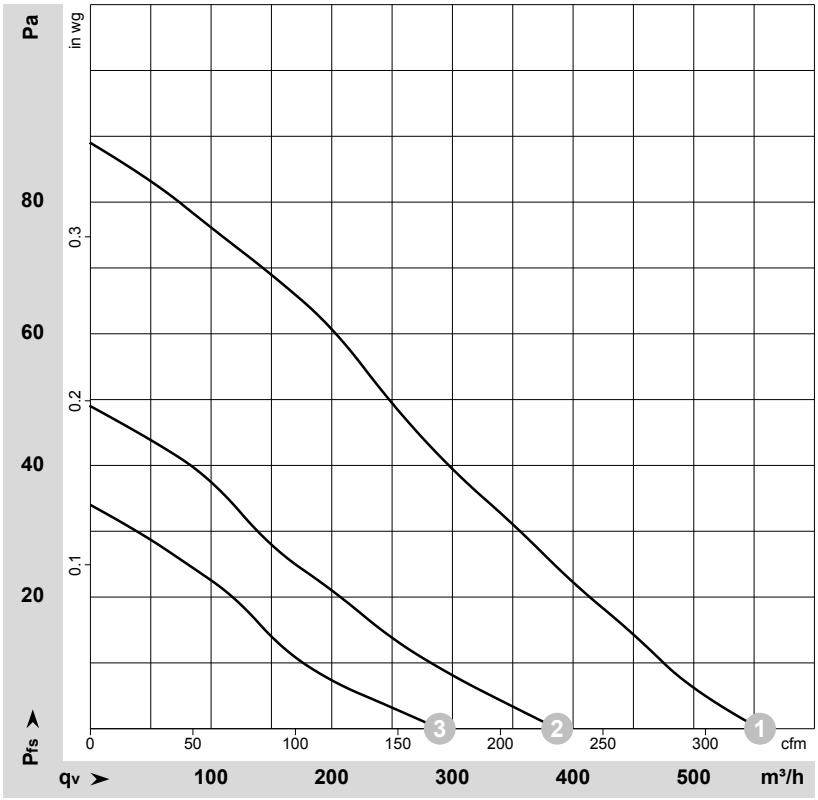
1	PE (green/yellow)	2	TW (yellow)	3	TW (yellow)
4	Capacitor (red)	5	L= Level 1 (white)	6	L= Level 2 (grey)
7	L= Level 3 (black)	8	L1	9	N (blue)
10	Capacitor (orange)				

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Charts: Air flow 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-65723-1
Measurement: LU-65724-1
Measurement: LU-65725-1

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

	Stage	U	f	n	P_e	I	LpA_{in}	q_V	q_V	p_{fs}
		V	Hz	min^{-1}	W	A	dB(A)	m^3/h	cfm	inH2O
1	3	230	50	670	40	0.18	37	555	325	0.00
2	2	230	50	480	30	0.14	28	385	225	0.00
3	1	230	50	400	25	0.12	23	290	170	0.00

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

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