R4E280-AL99-11

AC centrifugal fan

backward-curved

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Nominal data

Type	**R4E280-AL99-11**
Motor	**M4E068-BF**

Phase		1~	1~
Nominal voltage	VAC	230	230
Frequency	Hz	50	60
Method of obtaining data		ce	ce
Valid for approval/standard		CE	CE
Speed	min^{-1}	510	510
Power consumption	W	27	28
Current draw	A	0.12	0.13
Capacitor	µF	0.75	0.75
Capacitor voltage	VDB	400	400
Capacitor standard		P0 (CE)	P0 (CE)
Min. back pressure	Pa	0	0
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	60	60

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

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Technical description

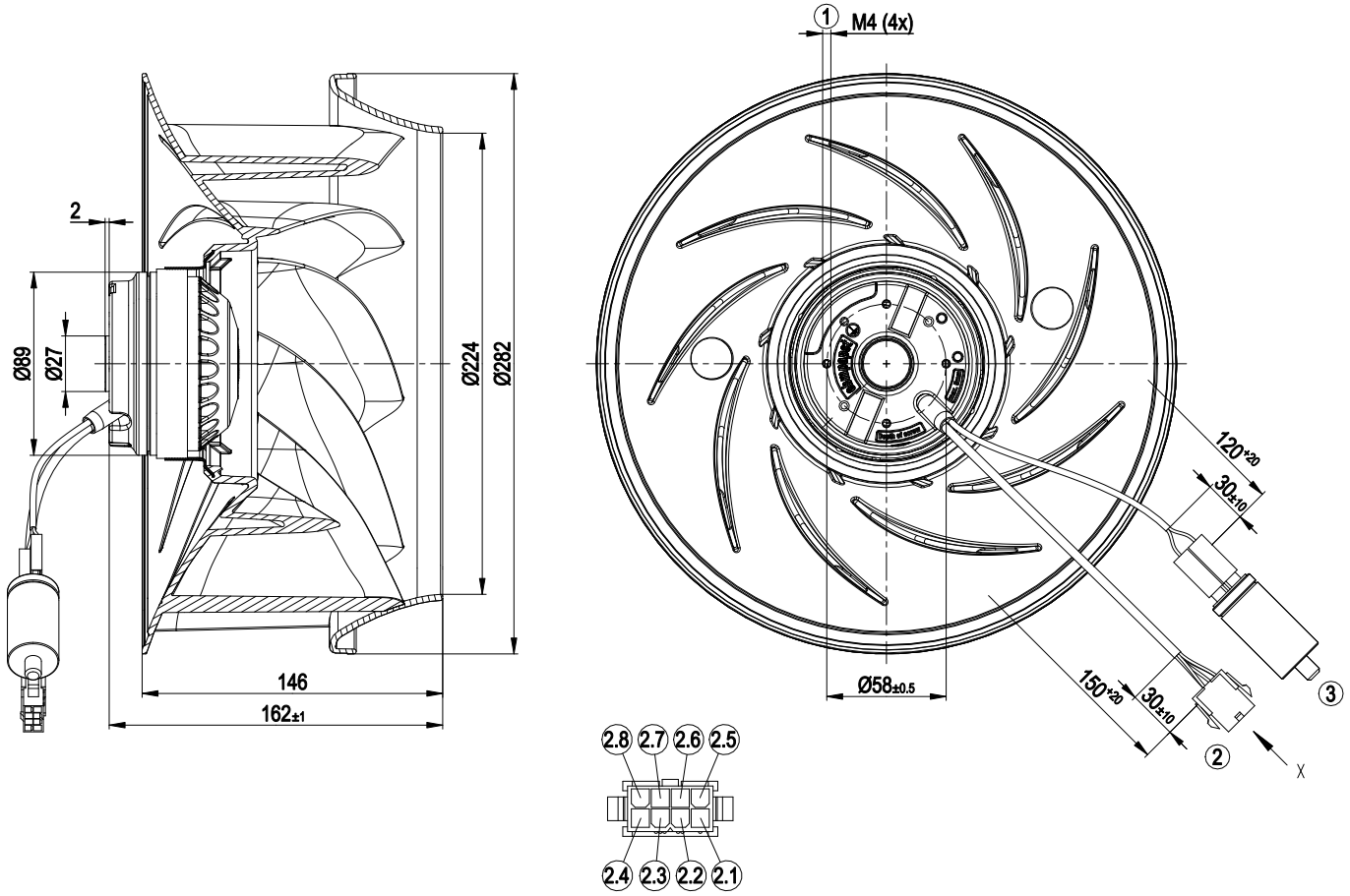
Weight	2.2 kg
Fan size	280 mm
Rotor surface	Unpainted
Impeller material	PA plastic
Number of blades	9
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent
Insulation class	"F"
Moisture (F) / Environmental (H) protection class	F0
Max. permitted ambient temp. for motor (transport/storage)	+ 80 °C
Min. permitted ambient temp. for motor (transport/storage)	- 40 °C
Installation position	Any
Condensation drainage holes	None
Mode	S1
Motor bearing	Ball bearing
Speed levels	3
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	< 0.75 mA
Motor protection	Thermal overload protector (TOP) internally connected
With cable	Variable
Protection class	I (with customer connection of protective earth)
Motor capacitor according to EN 60252-1 in safety protection class	P0/S0
Conformity with standards	EN 60335-1; CE

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Product drawing



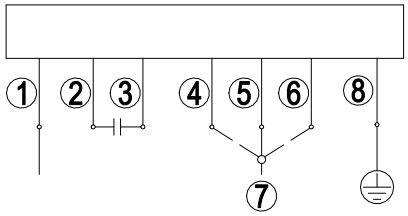
1	Max. clearance for screw 5 mm
2	Cable halogen-silicone-free 5x 0.5 mm², 1x 8-pole connector housing Molex 46993-0800, 5x plug pin Molex 39-00-0040
2.1	black
2.2	gray
2.3	white
2.4	not used
2.5	green/yellow
2.6	not used
2.7	blue
2.8	not used
3	Cable halogen-silicone-free 2x 0.5 mm², 2x crimped flat push-on receptacle 6.3 x 0.8, 2x connector housing tyco 1-735075-0

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Connection diagram



Note: High speed (step III); low speed (step I)

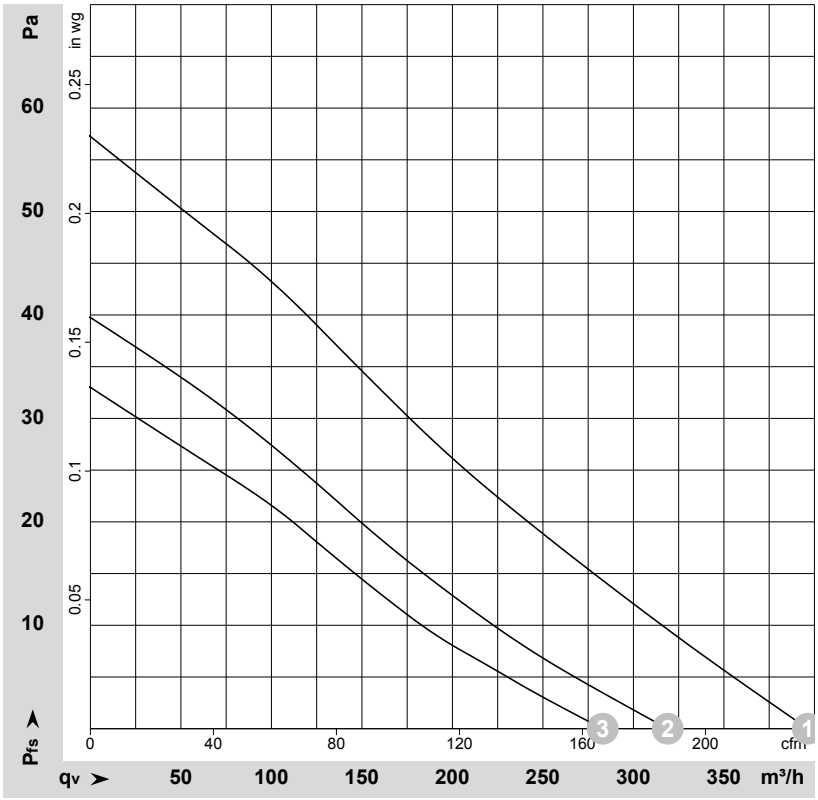
1	blue (N)	2	brown	3	yellow
4	Step 1 (white)	5	Step 2 (gray)	6	Step 3 (black)
7	L1	8	PE (green/yellow)		

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Curves: Air performance 50 Hz



ρ = 1.148 kg/m³ ± 2 %

Measurement: LU-118215-1
Measurement: LU-118222-1
Measurement: LU-118224-1

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.

Measured values

	Stage	U	f	n	P_e	I	qv
		V	Hz	min^{-1}	W	A	m^3/h
1	3	230	50	515	26	0.11	395
2	2	230	50	420	22	0.10	320
3	1	230	50	385	21	0.09	285
4	3	230	60	510	28	0.13	395
5	2	230	60	425	24	0.10	320
6	1	230	60	390	22	0.10	290

U = Power supply · f = Frequency · n = Speed · P_e = Power consumption · I = Current draw · qv = Air flow

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