

AC centrifugal fan - RadiCal

backward-curved, single-intake

Nominal data

Type	R6E400-RN06-01		
Motor	M6E094-FA		
Phase		1~	1~
Nominal voltage	VAC	230	230
Frequency	Hz	50	60
Method of obtaining data		ml	ml
Valid for approval/standard		-	-
Speed (rpm)	min ⁻¹	880	970
Power consumption	W	155	215
Current draw	A	0.68	0.95
Capacitor	µF	5	5
Capacitor voltage	VDB	450	450
Capacitor standard		S0 (CE)	S0 (CE)
Min. back pressure	Pa	0	0
Min. back pressure	inH2O	0	0
Min. ambient temperature	°C	-40	-40
Max. ambient temperature	°C	60	60
Starting current	A	1.3	1.2

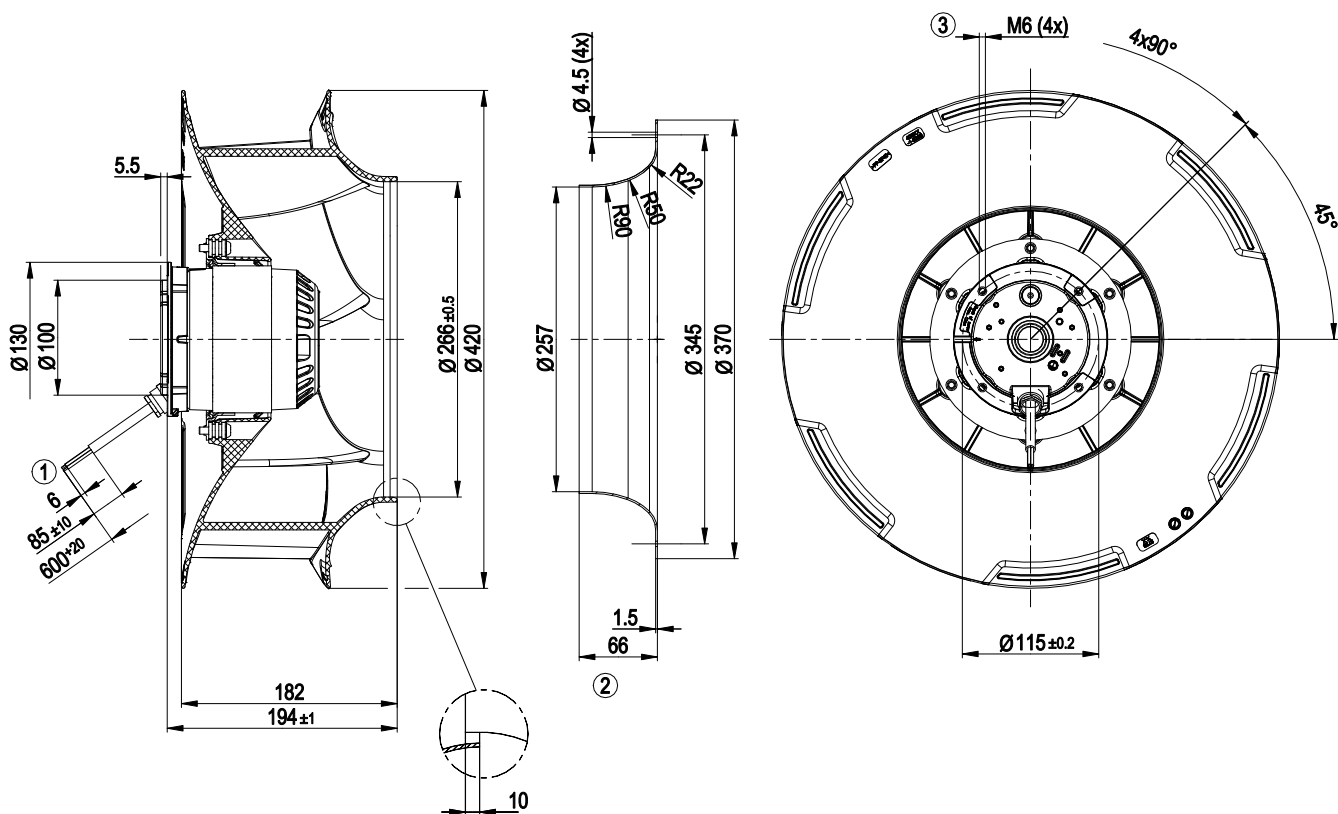
ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment
Subject to change



Technical description

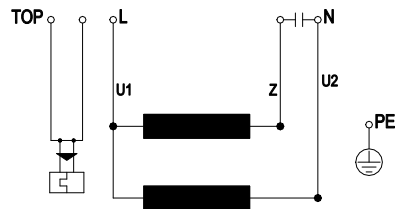
Weight	7.4 kg
Fan size	400 mm
Rotor surface	Painted black
Impeller material	PP plastic
Number of blades	6
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP54
Insulation class	"F"
Moisture (F) / Environmental (H) protection class	F4-1
Max. permitted ambient temp. for motor (transport/storage)	+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
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	<= 3.5 mA
Motor protection	Thermal overload protector (TOP) with basic insulation
With cable	Variable
Protection class	I (with customer connection of protective earth)
Motor capacitor according to EN 60252-1 in safety protection class	S0
Conformity with standards	EN 60034-1 (2010)
Approval	CCC

Product drawing



- | | |
|---|--|
| 1 | Cable silicone 6G 0.5 mm ² , 6 x crimped splices |
| 2 | Accessory part: Inlet ring 54476-2-4013, not included in scope of delivery |
| 3 | Max. clearance for screw 12 mm |

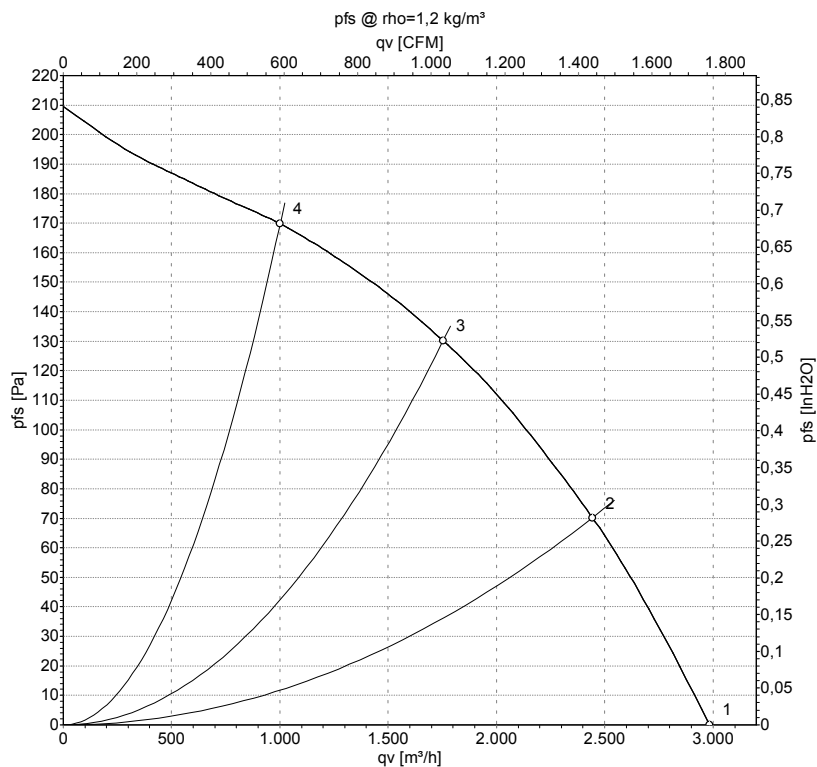
Connection diagram



TOP	2x gray	U1	blue	Z	brown
U2	black	PE	green/yellow		



Curves: Air performance 50 Hz



Measurement: LU-141838-1

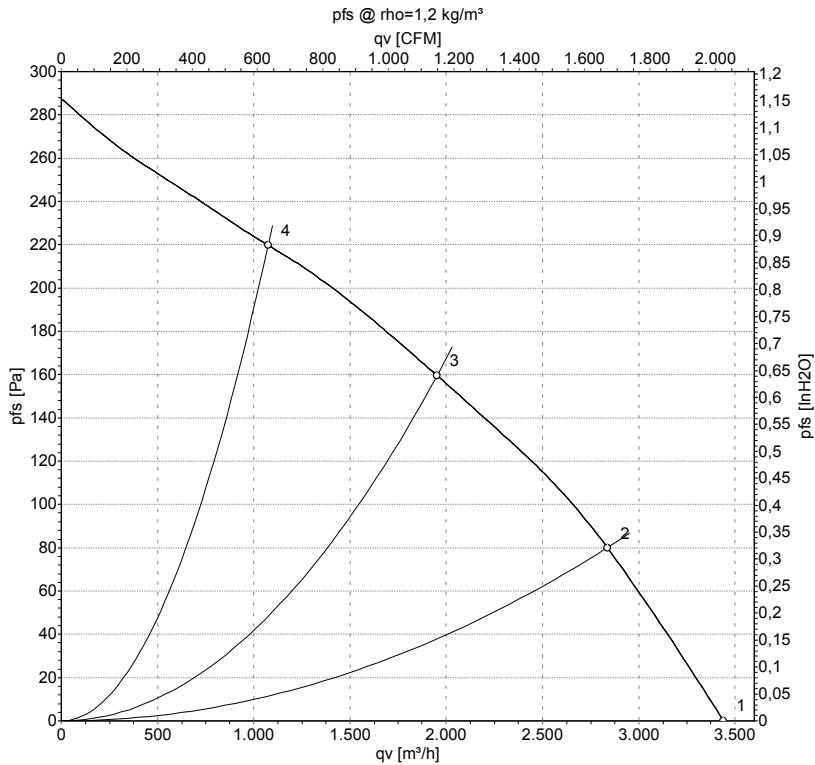
Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebm-papst. Intake sound level: Sound power level according to ISO 13347 / sound pressure level measured at 1 m distance from fan axis. The values given are valid under the 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

	U	f	n	P _e	I	LpA _{in}	LwA _{in}	q _v	p _{fs}	q _v	p _{fs}
	V	Hz	min ⁻¹	W	A	dB(A)	dB(A)	m³/h	Pa	cfm	inH2O
1	230	50	915	131	0.58	61	69	2985	0	1755	0.00
2	230	50	895	145	0.64	55	62	2445	70	1440	0.28
3	230	50	880	155	0.68	48	55	1755	130	1030	0.52
4	230	50	895	144	0.63	46	55	1000	170	590	0.68

U = Power supply · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · LpA_{in} = Sound pressure level intake side · LwA_{in} = Sound power level intake side
q_v = Air flow · p_{fs} = Pressure increase

Curves: Air performance 60 Hz



Measurement: LU-141323-1

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

	U	f	n	P _e	I	LpA _{in}	LwA _{in}	q _v	p _{fs}	q _v	p _{fs}
	V	Hz	min ⁻¹	W	A	dB(A)	dB(A)	m³/h	Pa	cfm	inH2O
1	230	60	1055	193	0.85	64	70	3440	0	2025	0.00
2	230	60	1005	209	0.91	57	64	2835	80	1670	0.32
3	230	60	970	215	0.95	49	57	1950	160	1150	0.64
4	230	60	1020	206	0.90	50	59	1075	220	630	0.88

U = Power supply · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · LpA_{in} = Sound pressure level intake side · LwA_{in} = Sound power level intake side
q_v = Air flow · p_{fs} = Pressure increase