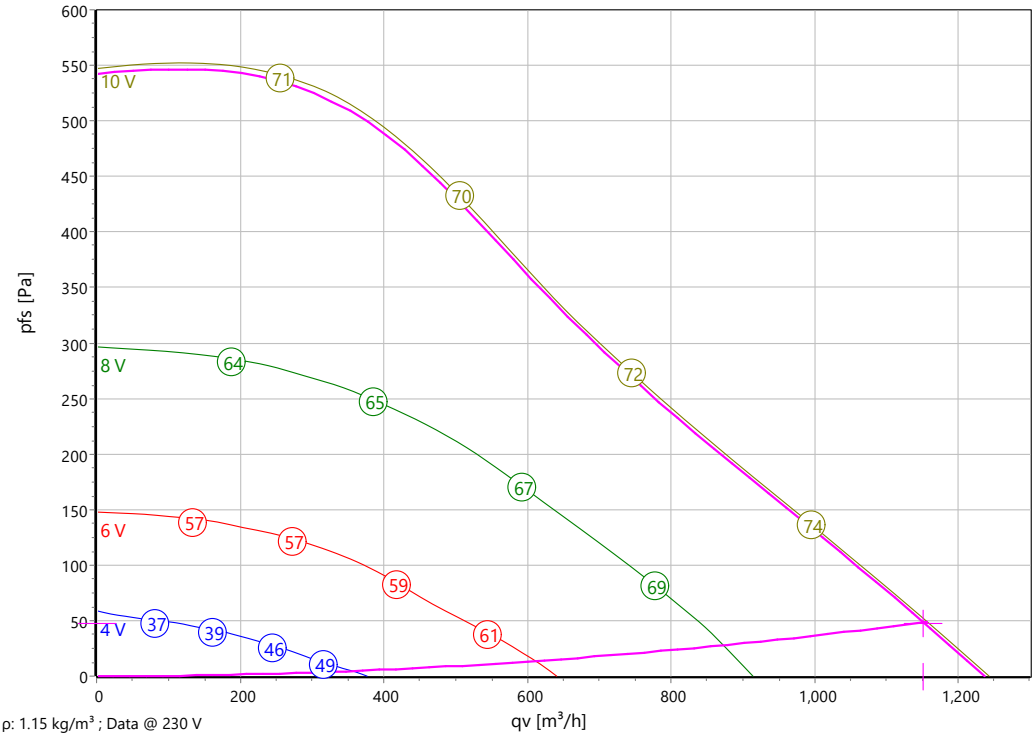
Data Sheet

RoVent® 10

Type: **R 250 G.3BK**

Part no.: F02-25000

Curve:



ρ: 1.15 kg/m³ ; Data @ 230 V

ErP-Data:

(EU) Nr. 1253/2014		(Lot6)
q_v	592	m³/h
p_{fs}	388	Pa
η_{fs}	39.6	%
P_{ed}	0.161	kW
n	2760	r/min
N	51	
v	3.35	m/s
η_{fs} Lot11	52.4	%

Operating Point:

q_v	1151	m³/h
p_{fs}	49	Pa
p_{fd}	25	Pa
$\eta_{ed,fs}$	11	%
$\eta_{ed,tot}$	16	%
P_{ed}	0.151	kW
I	1	A
n	2883	r/min
$L_{WA\ D,OUT}$	74	dB(A)
U_C	10	V
v	6.51	m/s
SFP	474	Ws/m³
FEI	1.3	
$t_{R,OP}$	51	°C

Intersections:

Curve	q_v [m³/h]	p_{fs} [Pa]	P_{ed} [kW]	I [A]	n_N [r/min]	$L_{WA\ D,OUT}$ [dB(A)]
10 V	1156	49	0.153	1.1	2896	74
8 V	872.1	28	0.067	0.48	2182	68
6 V	610.7	14	0.026	0.2	1544	61
4 V	355.1	5	0.007	0.07	916	49

Nominal Data:

U [V]	f [Hz]	Data @ [V]	P_{ed} [kW]	I_N [A]	n_N [r/min]	t_R [°C]	k_{10} [m²s/h]	I_A / I_N	IP	m [kg]
1~200-240	50/60	230	0.16	1.1	2760	-20 .. +50	-	-	IP 44	3.9

Sound Data:

Frequency	Σ		125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	Distances	1 m	3 m
LwA(D,in) [dB(A)]	73		55	66	67	68	64	61	54	LpA(D,in) [dB(A)]	66	58
LwA(D,out) [dB(A)]	74		53	66	67	69	67	64	55	LpA(D,out) [dB(A)]	67	59
LwA(D,cas) [dB(A)]	57		42	43	52	52	50	45	33	LpA(D,cas) [dB(A)]	50	42

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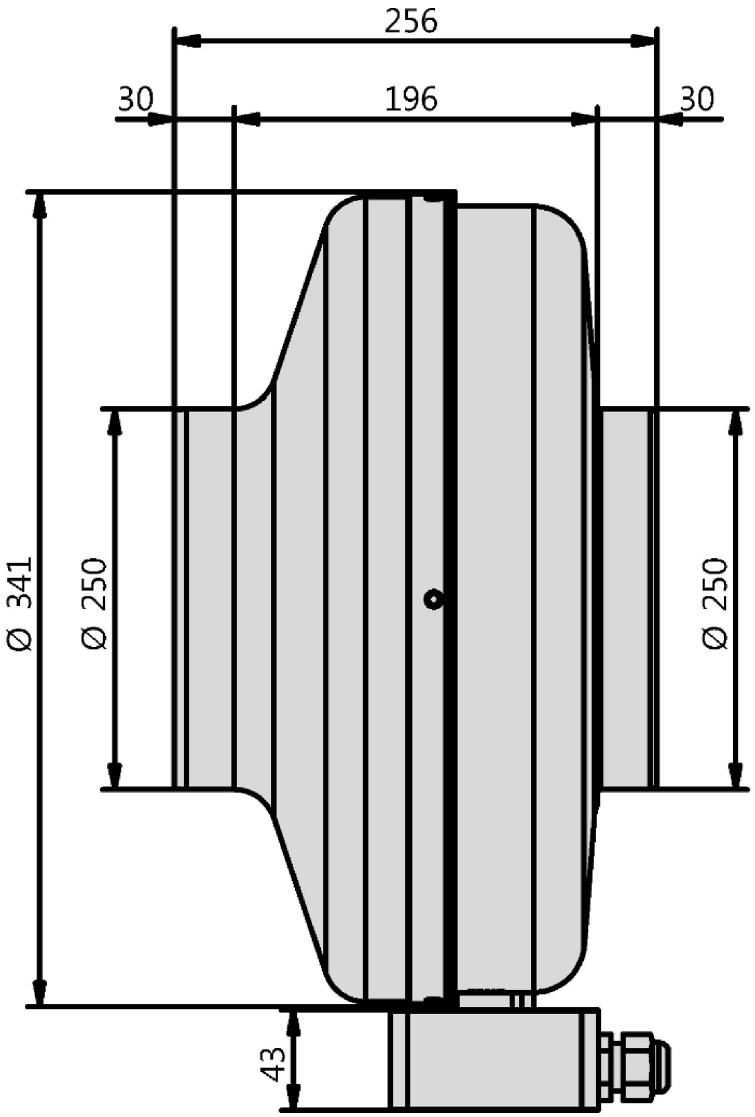

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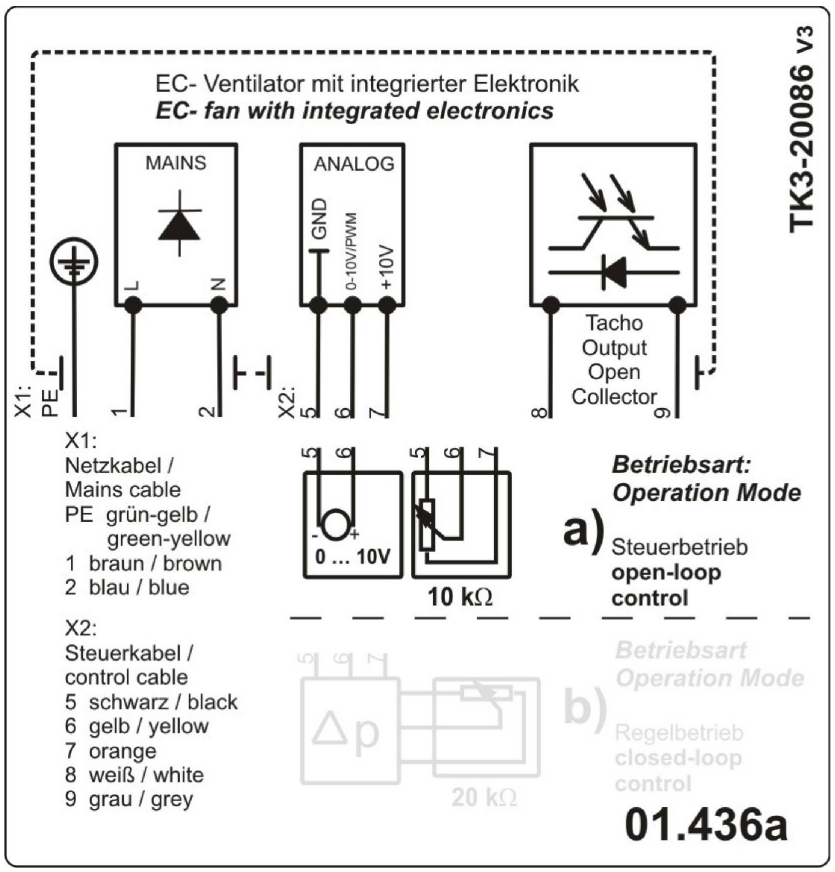

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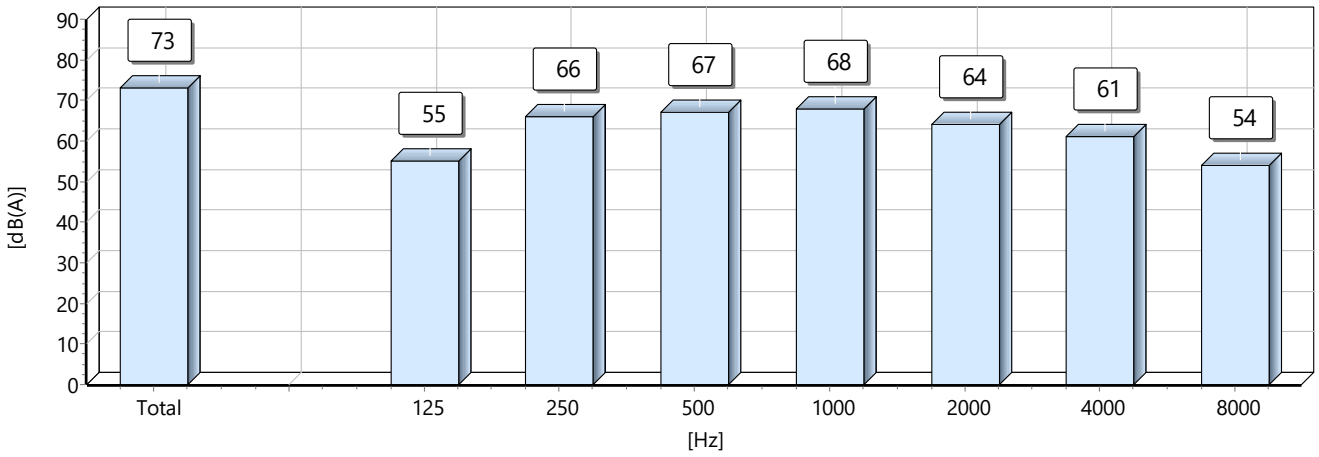
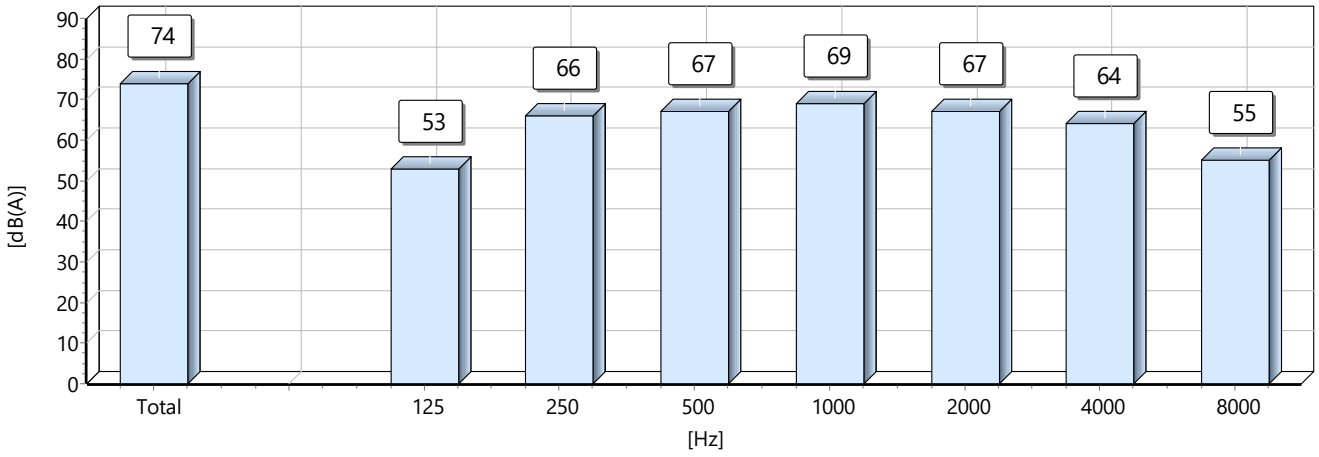
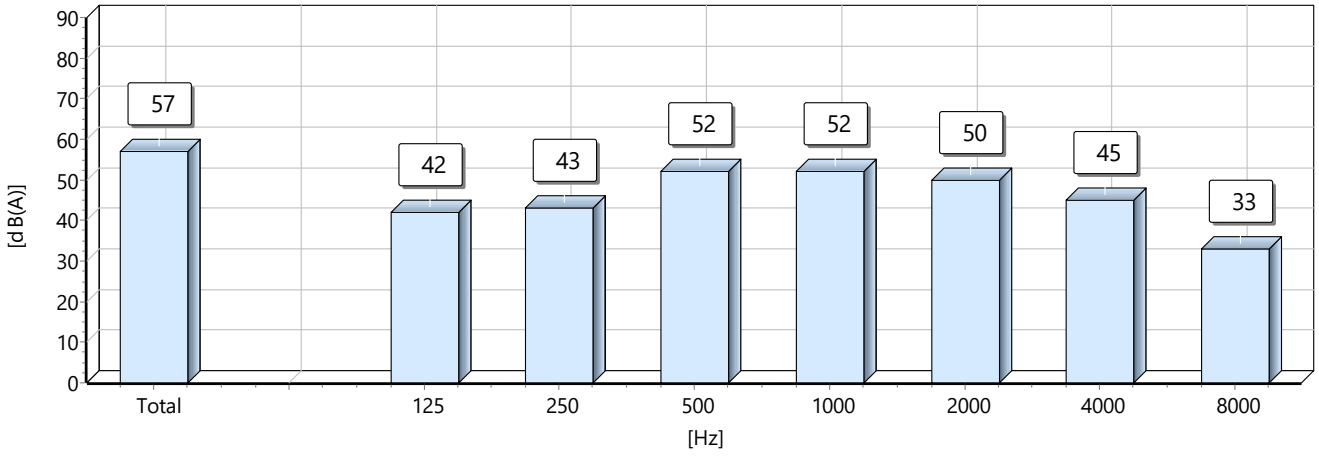
LwA(in)



LwA(out)



LwA(cas)



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Tube fan
with casing made of galvanized sheet steel

The Casing is made from galvanized sheet steel. Inlet and outlet side with duct connection for standard round ducts. Mounting either with horizontal or vertical motor shaft. Impeller made of Polypropylene (PP) UL94 V -0 with backward curved blades. Energy saving EC external -rotor motor. Maintenance free ball bearings, closed on both sides with long-term lubrication. Motor coated black and/or electrogalvanized. Cable for supply and controlling connection. 100% speed controllable with integrated Motor Protection. Soft Start. Applicable in all common energy grids. Motorized Impeller statically and dynamically balanced according to DIN ISO 21940 -11 with quality level G2.5. The electrical connection is mounted on the housing by a IP44 terminal box. Air volume control is possible over an 0 -10V Signal (accessory).

Fan complies with the guidelines required (Machinery -, EMC- and Low Voltage Directive) to comply with installation and conformity declaration as well as CE marking.

Operating Point Data:
Airflow
1151 m^3/h
ext. Pressure
48.3 Pa
Input power
0.151 kW
Current
1 A
Speed
2883 r/min
Sound power level
74 Lw(A)
Medium temperature
51 °C

Nominal Data:
Voltage
1~200-240 V
Frequency
50/60 Hz
Input power
0.16 kW
Current
1.1 A
Speed
2760 r/min
Medium temperature
50 °C
Protection Mode
IP 44
Weight
3.9 kg
Dimensions
256 mm / 341 mm / 341 mm

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Type:
R 250 G.3BK
Article-No.:
F02-25000

R...G - EC Tube Fans

Construction of steel

- easy installation in any position
- for round duct connection
- casing made of galvanized sheet steel
- easy electrical connection via terminal box
- energy saving with ec motors
- speed continously controllable (0-10V)

Description:

The Rosenberg EC-Tube fans represent a technically perfect solution, uniting the advantages of axial fans, straight airflow and easy installation, with high pressure stability, low noise level and high efficiency of the radial fans.

Application fields:

Car workshops / offices / bars / tower blocks / factories / basement rooms / nursery schools / cinemas / storages / nursing homes / schools / sports facilities / supermarkets / parking garages / workshops / greenhouses / apartments and many more

The R...G series is characterized by high airflows at medium pressures. An extensive accessory program for tube mounting completes the product portfolio ideally.

Classification of the fan series:

NRVU = **N**on **R**esidential **V**entilation **U**nits
UVU = **U**nidirectional **V**entilation **U**nits

Casing:

Type R...G:

The casings are manufactured of galvanized sheet steel

Impellers:

The impellers are balanced together with the external rotor motors at two levels according to quality level G2.5/G 6.3 DIN ISO 21940-11.

Type R...G:

The backward curved centrifugal impeller are made of plastic

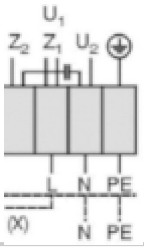
Motors:

The EC motors used are characterized by a very high degree of efficiency, even in partial load ranges, as well as good controlling and regulation behavior. They are easy to connect, individually preconfigured, compact in design and show a high power density. The implementation of additional functions (e.g. air flow and pressure control) is possible. All motors are speed controllable in the range 0 -100%.

Integrated Motor Protection:

The motor protection is integrated with Rosenberg EC motors. All necessary parameters, such as temperature, blocked rotor, over and undervoltage and power are continuously checked and monitored via an intelligent failure management.

Electrical connection:



The electrical connection is mounted on the housing by a terminal box.

Installation:

Rigid folded spiral-seam ducts (Spiro), flexible aluminium or plastic ducts with standardized diameter can be

Air volume control:

For more information see accessories!

Open-loop control:

For example with a Potentiometer 0-10V signal

Closed-loop control:

For example with a Temperature senor 0-10V

Scope of delivery:

- Tube fan (R...G)
- Documentation

Important notes:

Air performance curves:
The air performance curves have been established using the intake test method in the test chamber according to DIN EN ISO 5801. They show pressure increase as a function of the volume flow. Performance curves were recorded in installation type D.

Noise levels:
The bordered values printed in the performance curve diagrams show the "A" weighted **$L_{WA(out)}$** sound power level at the **free outlet side** in duct systems corresponding to ISO 13347 -3 and DIN EN ISO 3744/3745. The relative octave sound power level L_{WArel} at octave medium frequency can be read in the directly attributed table sheet of the respective fan type.

R 160 G.3BK:	**$L_{WA(in)}$ = $L_{WA(out)}$ + 1 dB**
	$L_{WA(cas)}$ = $L_{WA(out)}$ - 15 dB
R 200 G.3BK:	**$L_{WA(in)}$ = $L_{WA(out)}$ + 2 dB**
	$L_{WA(cas)}$ = $L_{WA(out)}$ - 17 dB
R 250 G.3BK:	**$L_{WA(in)}$ = $L_{WA(out)}$ - 1 dB**
	$L_{WA(cas)}$ = $L_{WA(out)}$ - 17 dB
R 315 G.3DE:	**$L_{WA(in)}$ = $L_{WA(out)}$ - 1 dB**
	$L_{WA(cas)}$ = $L_{WA(out)}$ - 12 dB
R 355 G.3DE:	**$L_{WA(in)}$ = $L_{WA(out)}$ - 1 dB**
	$L_{WA(cas)}$ = $L_{WA(out)}$ - 12 dB

Erp-Information:
Rosenberg fans have a specific (pressure-) ratio < 1,05 (pressure < 5000 Pa).

Service life:
For maximum service life of Rosenberg products please beware of the maintenance hints on the manual for each product type.

Recycling and disposal:
For recycling and disposal of Rosenberg products comply with applicable locally requirements and regulations.

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