Data Sheet

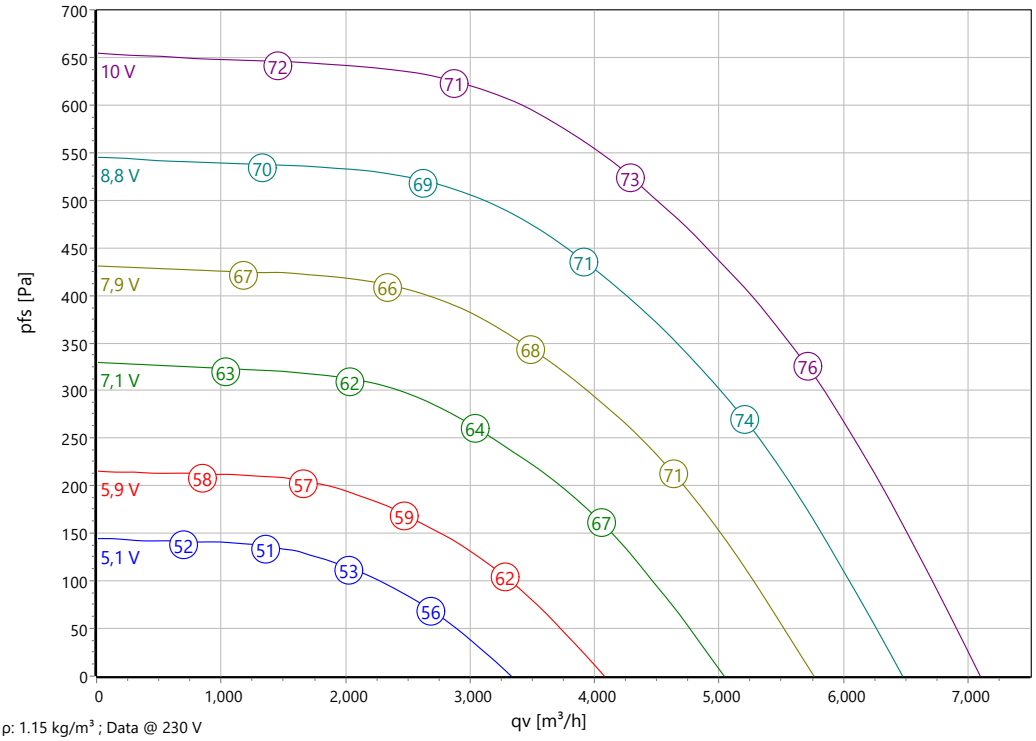
RoVent® 10

Type: **GKHM 450-CIB.125.5FA**

Module Classic

Part no.: N88-45312

Curve:



ρ: 1.15 kg/m³ ; Data @ 230 V

ErP-Data:

ErP 2026 (EU) 2024/1834 (Lot11, BC)		
q_v	4539	m³/h
p_{fs}	496	Pa
η_{fs}	61	%
P_{ed}	1.1	kW
n	1479	r/min
N	71	N
v	6.3	m/s

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]	Eff.-Rating	IP	m [kg]
1~200-277	50/60	230	1.15	5.1	1480	-25 .. +40	171	IE4	IP 54	31.7

Sound Data:

Frequency	Σ		125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	Distances	1 m	4 m
LwA(A,in) [dB(A)]		-	-19	-13	-8	-5	-6	-8	-13	LpA(A,in) [dB(A)]	-7	-17
LwA(A,out) [dB(A)]	7	-	-8	-4	0	3	-1	-5	-11	LpA(A,out) [dB(A)]	0	-10

ErP-Data @ Modul Classuc
Attention: Start-up times up to ~ 20 - 60 sec. depending on motor-impeller combination, motor load and number of operation.
Please note during project planning (e.g. for condenser units in refrigeration circuits)!

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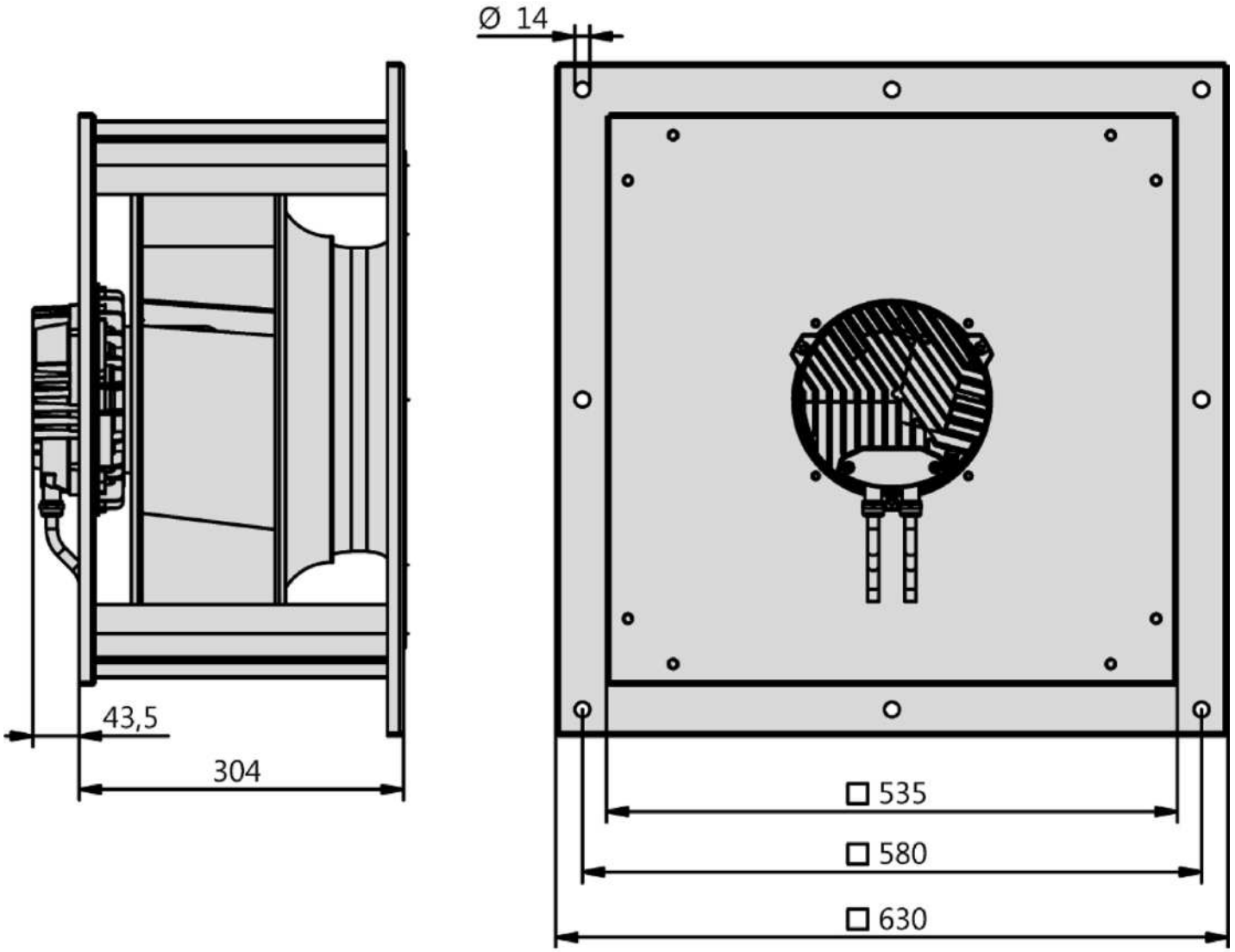

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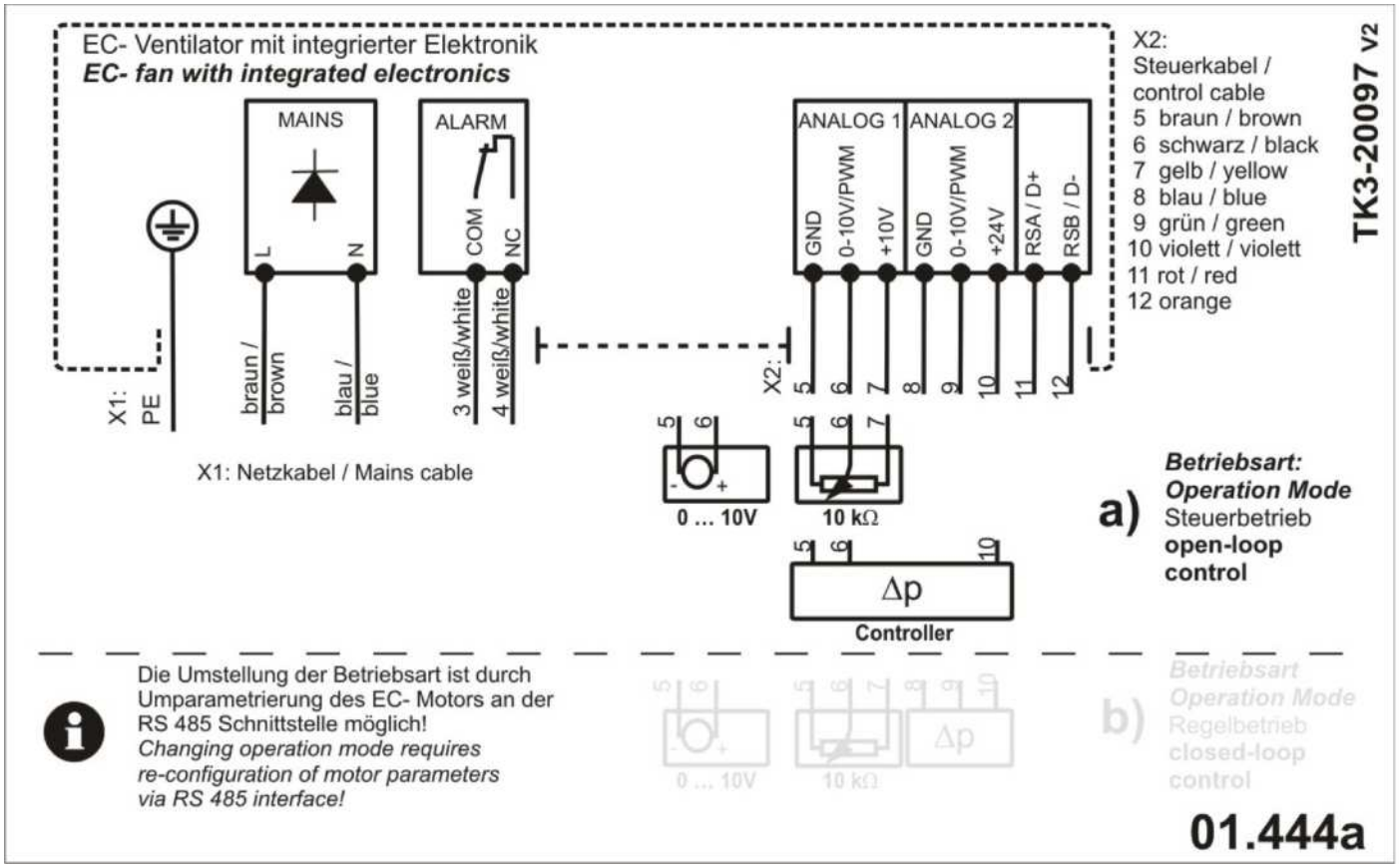

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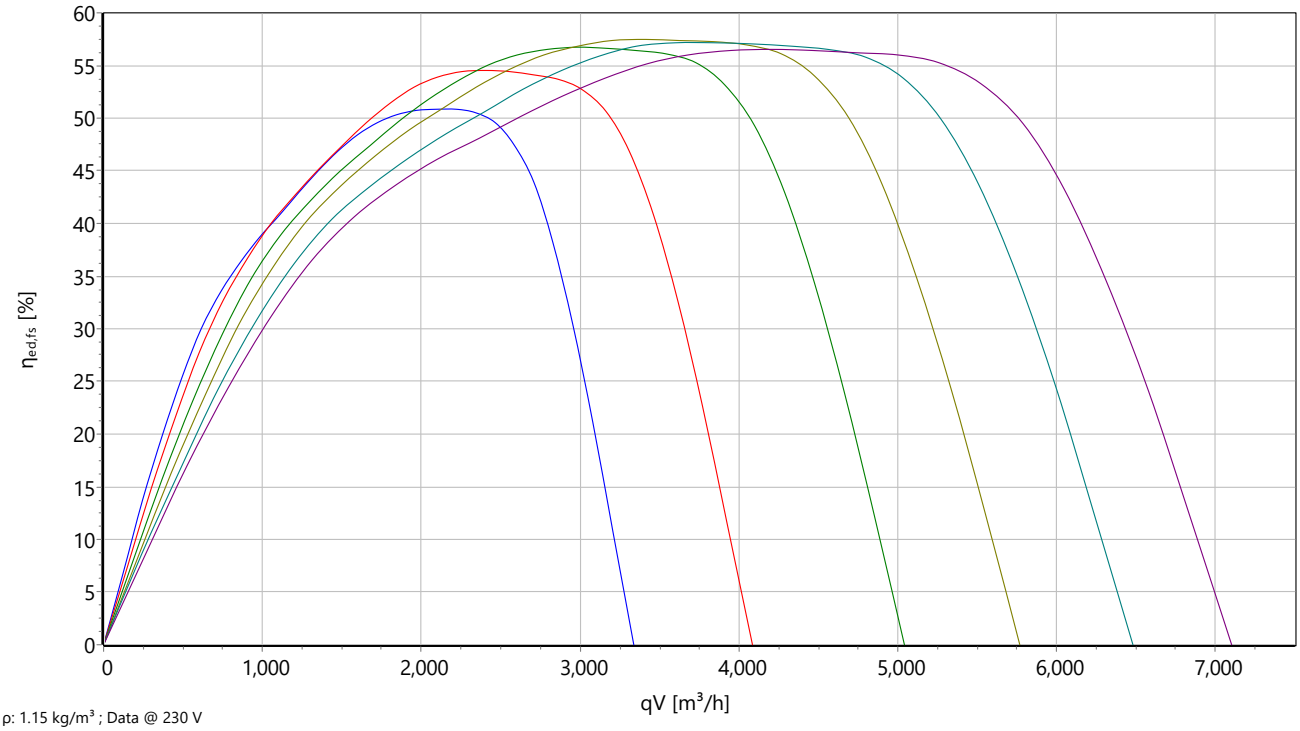
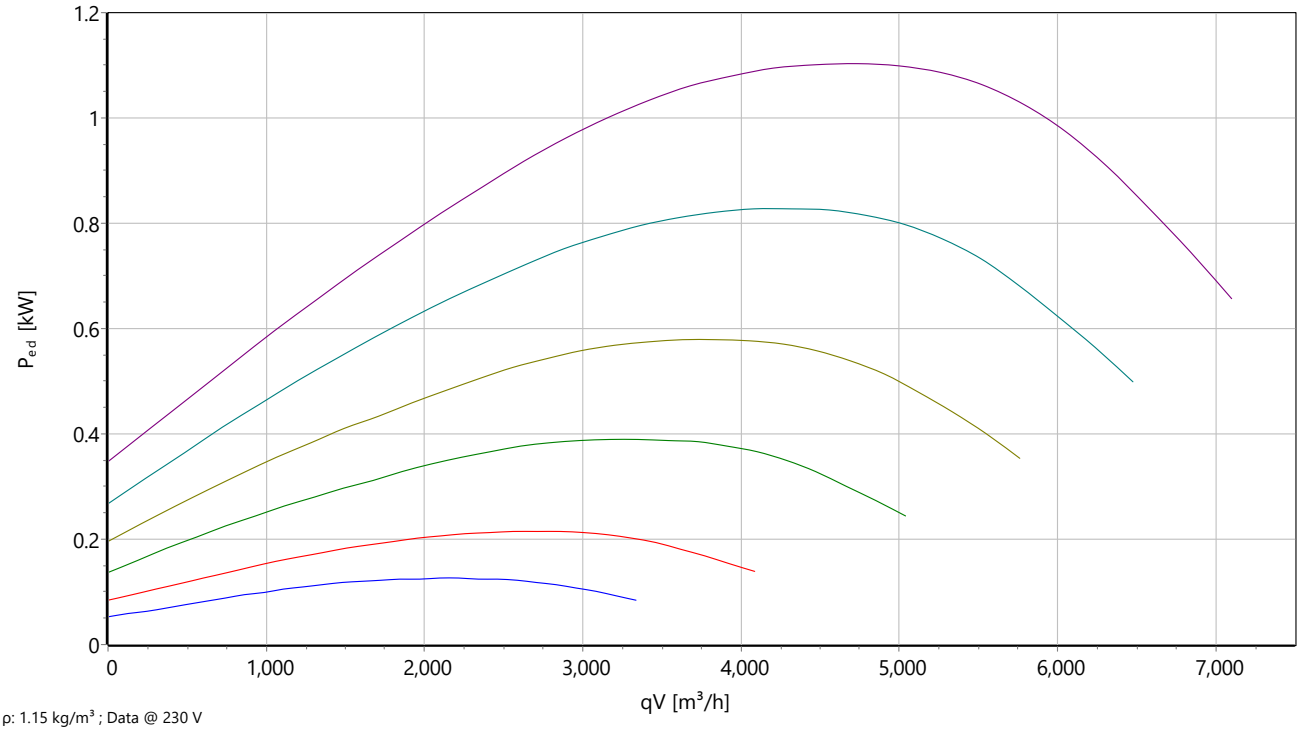
stat. Efficiency



ρ: 1.15 kg/m³ ; Data @ 230 V

Input power



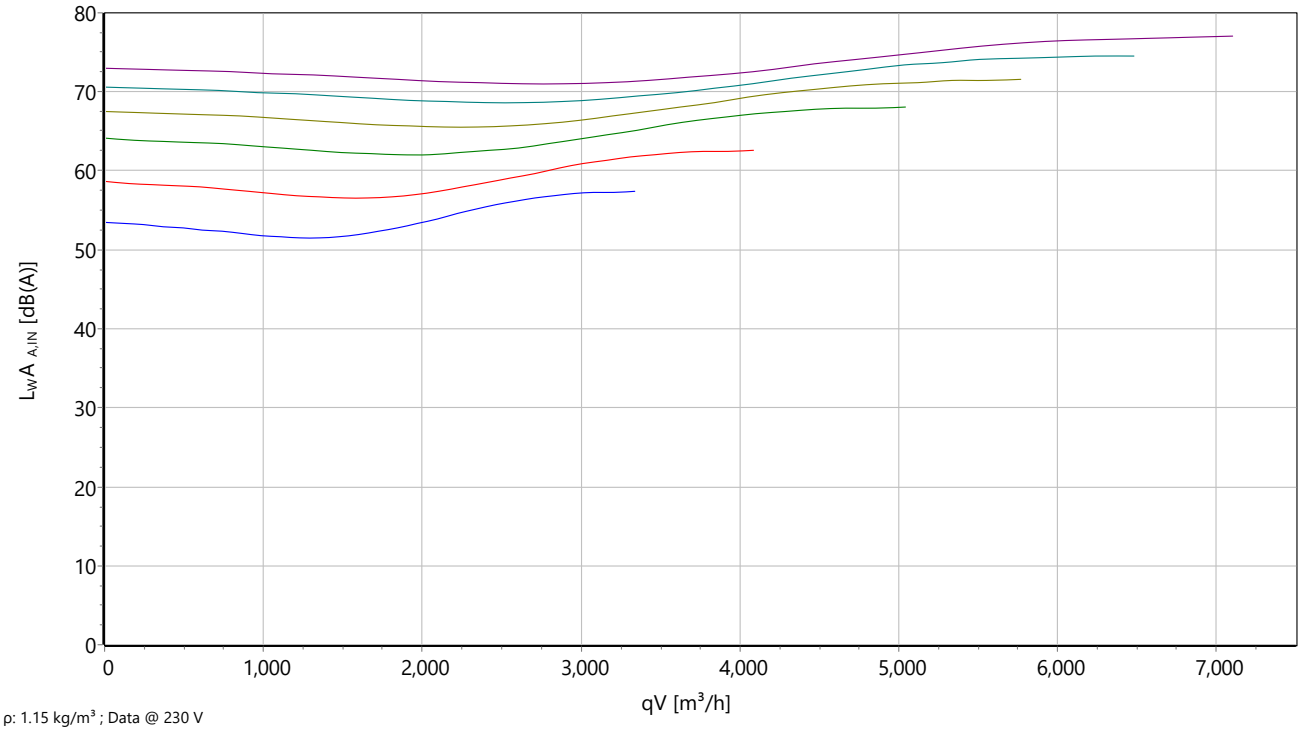
ρ: 1.15 kg/m³ ; Data @ 230 V

Type: **GKHM 450-CIB.125.5FA**

Module Classic

Part no.: N88-45312

Sound power



ρ: 1.15 kg/m³ ; Data @ 230 V

EC-Plug Fan
with backward curved impeller

Impeller made of aluminum (AlMg3) with 7 backward curved blades and efficiency optimized circumferential diffusor. Sound optimized. Pressure orientated behaviour. Fluidic optimized inlet cone made of galvanised sheet steel. Designed as a ring measuring line with a pressure measuring connection.
Compact, weight-reduced fan module "Classic". Consisting of motor, impeller, nozzle and module construction. Motor and nozzle support plate made of galvanized sheet steel with aluminium retaining profiles. Plug & Play. Extra coating on request. Suitable for installation in any position. Motorized Impeller statically and dynamically balanced according to DIN ISO 21940-11 at least with quality level G6.3. Energy saving EC external -rotor motor exceeds IE4 / Super Premium Efficiency. Maintenance free ball bearings, closed on both sides with long-term lubrication. Magnets without rare earth elements. Motor coated black and/or die casted aluminum. Protection Class IP54 and insulation class F. 1 -phase types with cable for supply and controlling and integrated active PFC (Power Factor Correction). 3 -phase types with integrated terminal box and environmental resistant cable glands (3x M20x1,5). 100% speed controllable with integrated Motor Protection. ModBus RTU Interface integrated. Busconfiguration possibile on site by customer. Soft Start. Potential-free Alarm Contact and integrated 24V Supply for Accessories. Applicable in all common energy grids. Low noise commutation.

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

Nominal Data:
Voltage [U]
1~200-277 V
Frequency [f]
50/60 Hz
Input power [P]
1.15 kW
Current [I]
5.1 A
Speed [n]
1480 r/min
Medium temperature [tR]
40 °C
Protection Mode
IP 54
Efficiency Class
IE4
K-Factor
171
Weight [m]
31.7 kg
Dimensions [L / W / H]
630 mm / 630 mm / 304 mm

Contact:
Rosenberg Ventilatoren GmbH
Maybachstraße 1
D - 74653 Künzelsau - Gaisbach

www.rosenberg-gmbh.com

Type:
GKHM 450-CIB.125.5FA
Article-No.:
N88-45312

GKH... - Plug Fan

with EC-Motor and B-Impeller

- pressure orientated high performance impeller
- speed infinitely adjustable
- fast start-up (due to pre-configured system)
- different mechanical configurations available
- maintenance free operation through lifetime lubricated ball bearings
- high operating efficiency due to EC drives
- constant high degree of efficiency (even under partial load)

Description:

Rosenberg EC-Plug fans combined with electronically commutated motors (EC -motors), form a very compact, efficient and optimized fan unit. They impress with low installation depth and a simple installation. Fast start-up is ensured because of well-integrated components.

Applications:

Air Handling Units / Wind Power / Railway* / Compressors / Transformer cooling
*Due to the diverse requirements in rail technology, the usability must be agreed with Rosenberg in advance (railway@rosenberg-gmbh.com).

Mechanical Configuration:

Plug fans, in dependence of the fan type, are available in different mechanical designs. Mounting either with horizontal or vertical motor shaft.

_KH**R**, RR**E**	= Motorized Impeller (Inlet Cone Accessory)
_KH**M**, RR**M**	= Fan Module type "Classic" cone and supporting frame included
_KH**C**	= Fan Module type "Slim" cone and supporting frame included
_KH**Q**	= Fan Module type "Qube" cone and supporting frame included
_KH**D**	= Module with forwarding device "High Performance"

Impeller:

Impeller made of aluminum (AlMg3) with 7 backward curved blades and efficiency optimized circumferential diffusor. Sound optimized. Pressure orientated behaviour.

Product range: 250, 280, 315, 355, 400, 450, 500, 560, 630 and 710 mm.

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 infinitely adjustable via Modbus or 0 –10 V signal.

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:

1~phase Variants:
The electrical connection is made via cables from the motor.
3~phase Variants:
The electrical connection is made via cable glands from the integrated terminal box of the motor.

Air volume control:

For more information see accessories.

Infinitely variable controlling:
via Potentiometer or external set point
Constant-Air Flow-Control:
via pressure controller in combination with air flow measuring points integrated in the inlet cone
Constant-Pressure-Control:
via pressure controller
Constant-Temperature-Control:
via temperature controller

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 A.

Sound levels:
The tests and their performance curves were conducted according to DIN 45635 part 38 or. ISO 133347 -3 and DIN EN ISO 3744/ 3745 in accordance with the envelope surface method.

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

The ErP - Data applies to Rosenberg modules as complete fans within the meaning of Commission Regulation (EU) 2024/1834 and does not apply to the motorized impeller version.

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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