

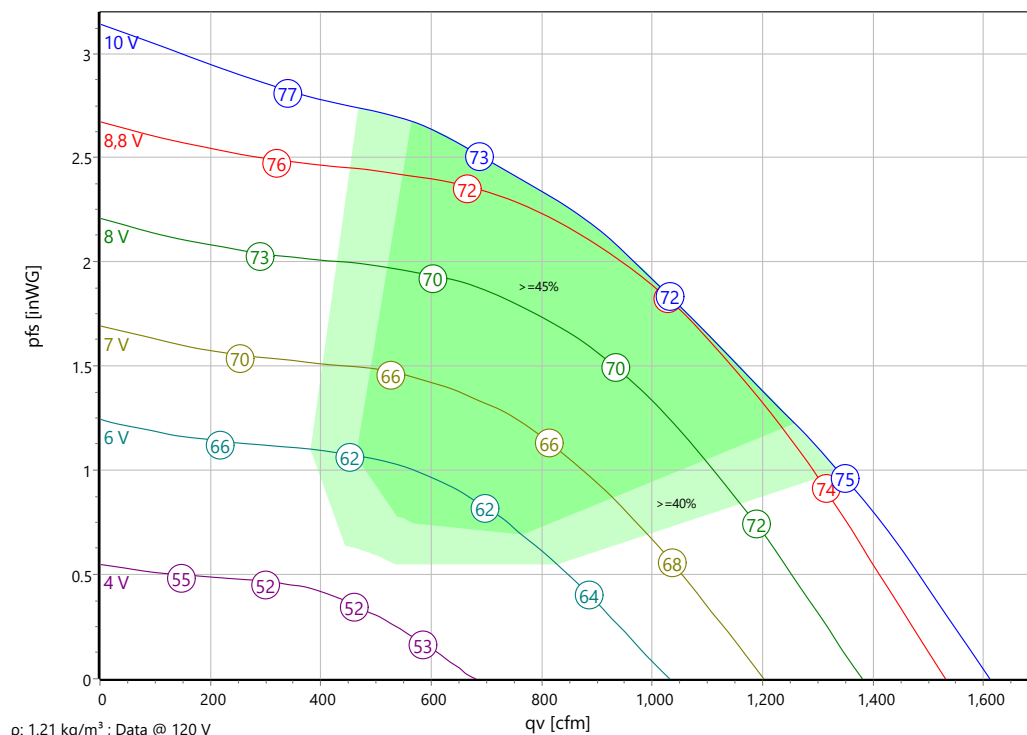


Type: **GKHR 280-CIE.065.4EA IE HP**

Motorized Impeller

Part no.: N42-28002

Curve:



Nominal Data:

U [V]	f [Hz]	Data @ [V]	P _{ed} [kW]	I _N [A]	n _N [r/min]	t _R [°C]	k ₁₀ [m²/s/h]	Eff.-Rating	IP	m [kg]
1~100-130	50/60	120	0.4	3.5	2900	-25 .. +40	67	IE4	IP 54	4.7
		110	0.38	3.66	2820					

Sound Data:

Frequency	Σ	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	Distances	1 m	4 m
LwA(A,in) [dB(A)]		-27	-25	-13	-5	-4	-8	-13	-17	LpA(A,in) [dB(A)]	-7	-17
LwA(A,out) [dB(A)]	4	-27	-20	-7	-1	-2	-2	-7	-13	LpA(A,out) [dB(A)]	-3	-13

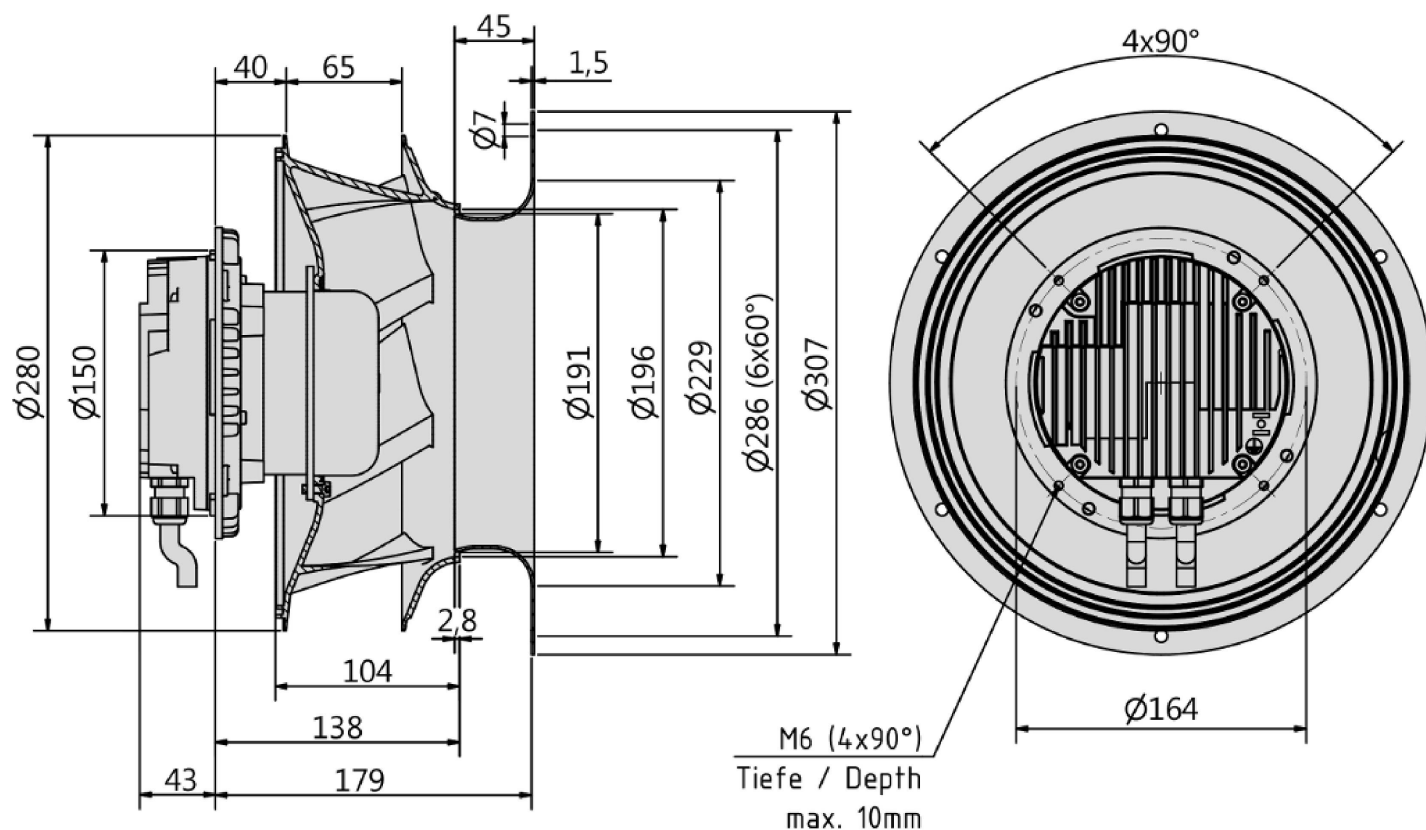
Attention: Start-up times up to ~ 20 - 60 sec. depending on motor-impeller combination, motor load and number of operation.
 Please note during project planning (e.g. for condenser units in refrigeration circuits)!



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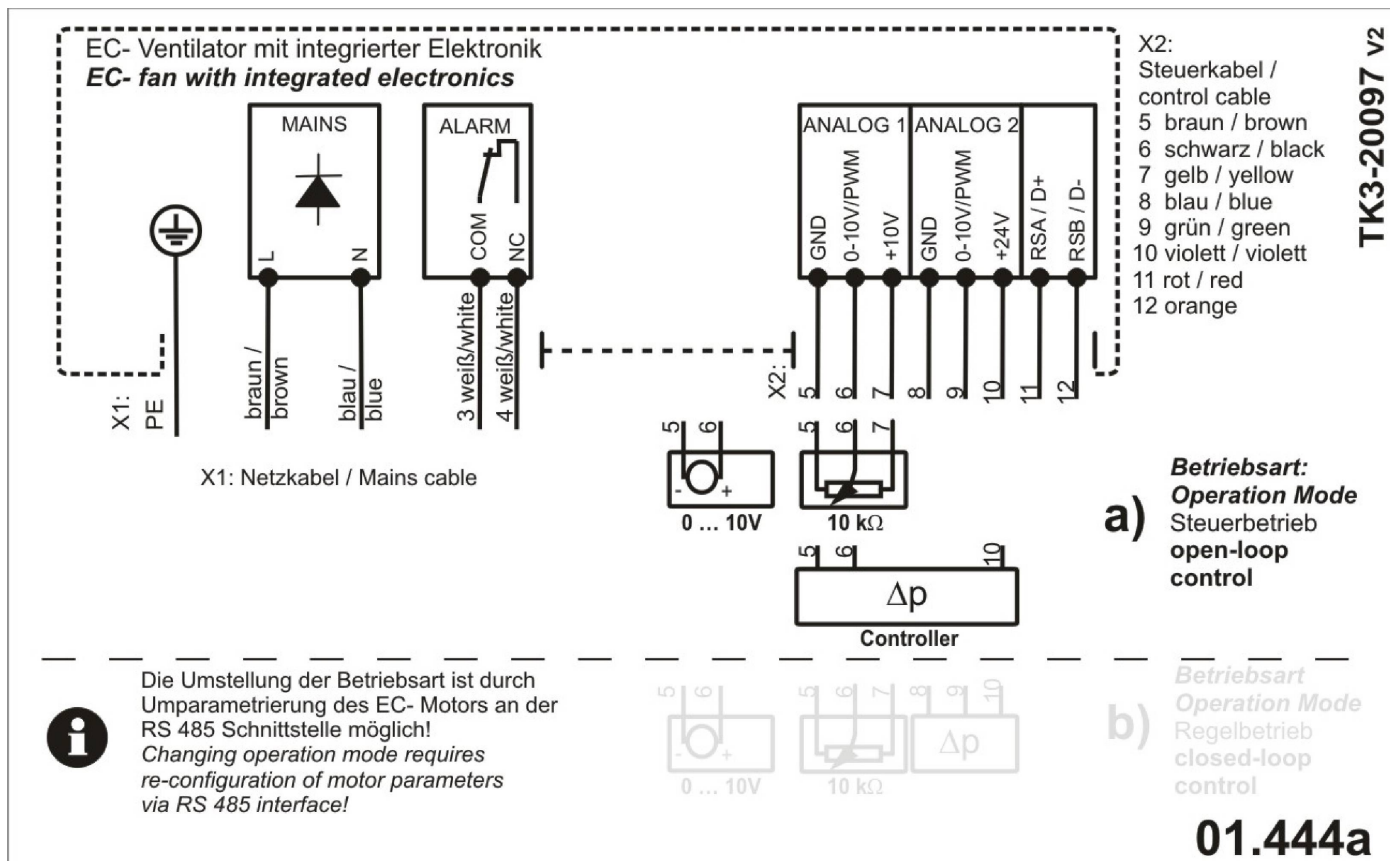




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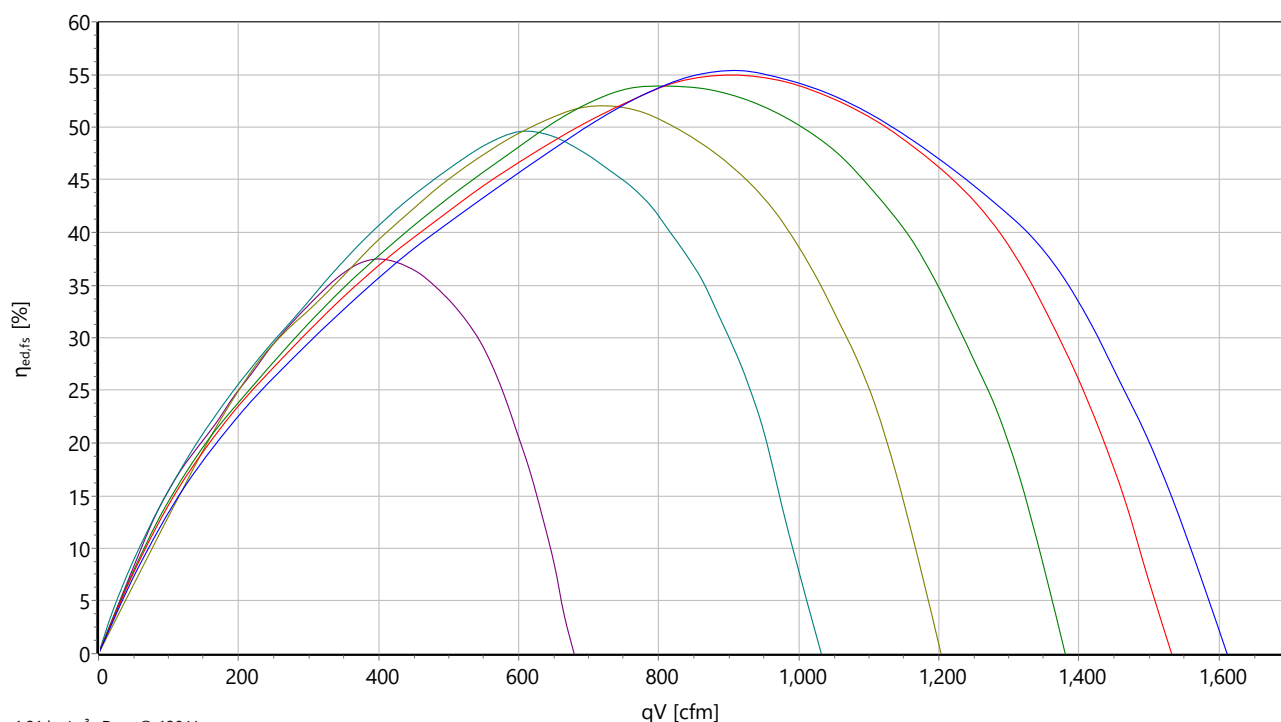


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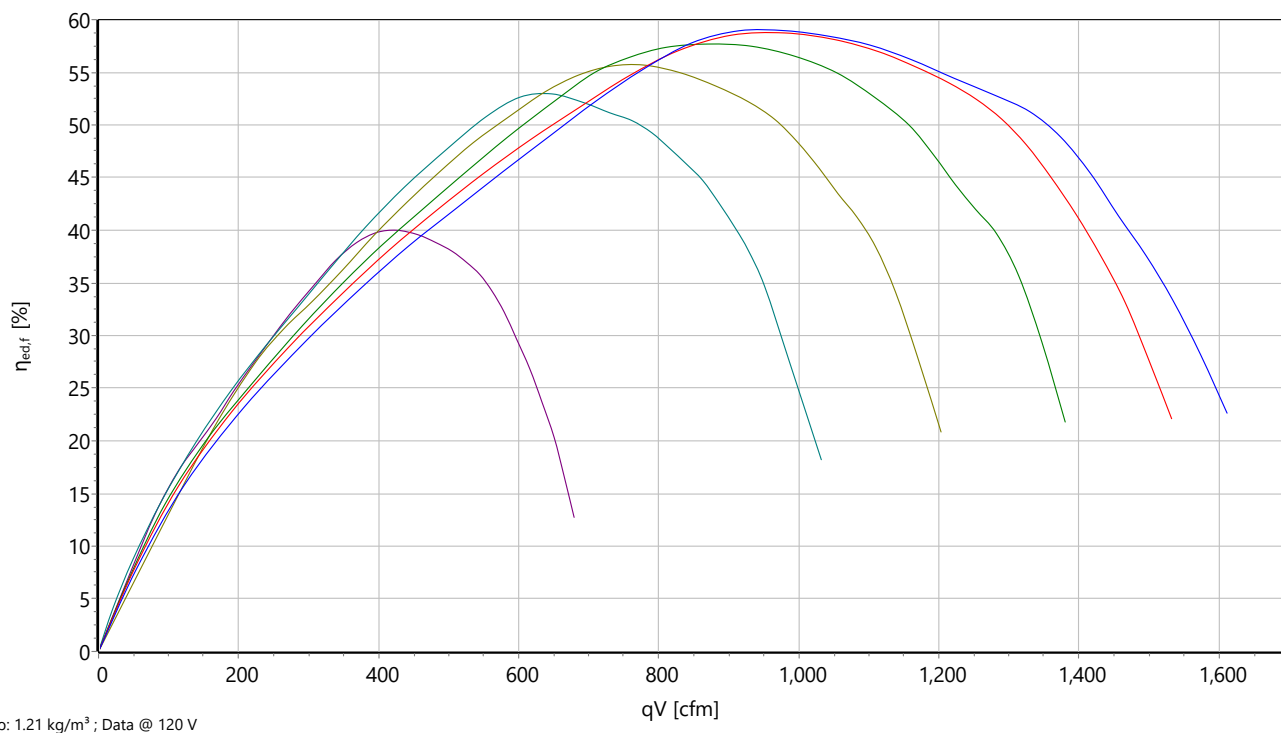
Motorized Impeller

Part no.: N42-28002

stat. Efficiency



tot. Efficiency



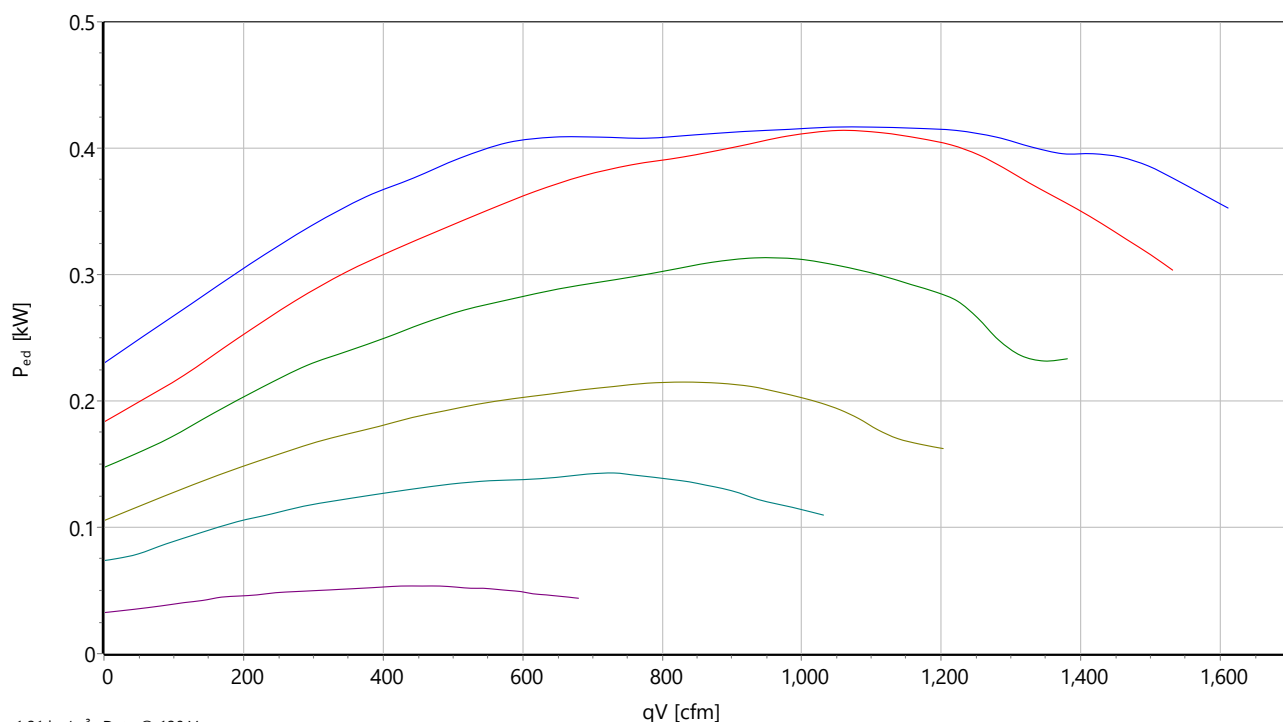


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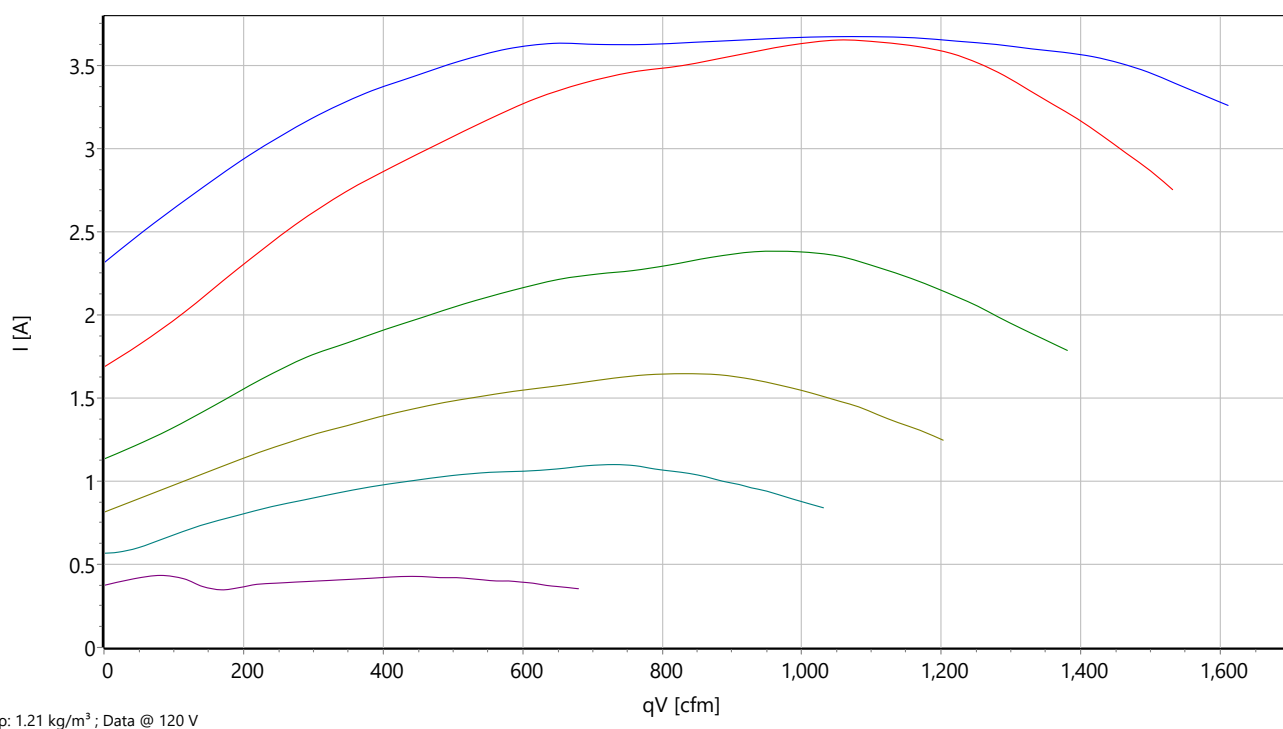
Motorized Impeller

Part no.: N42-28002

Input power



Current



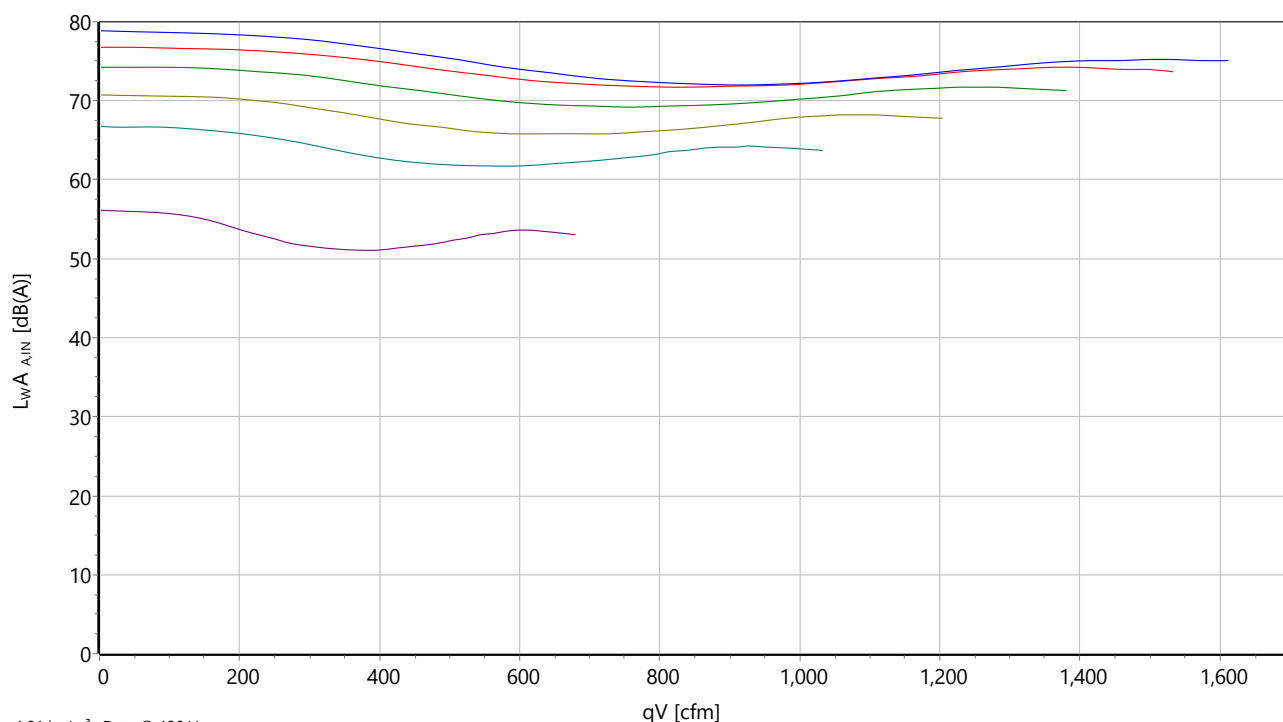


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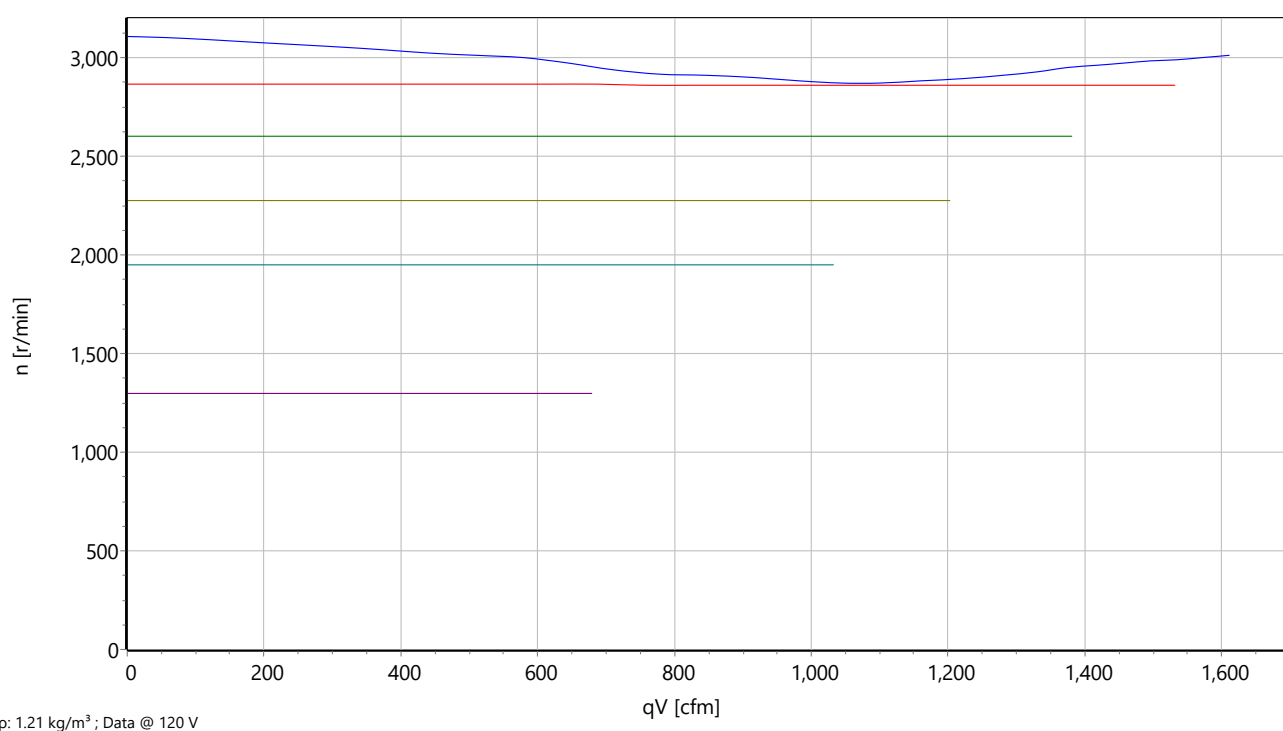
Motorized Impeller

Part no.: N42-28002

Sound power



Speed



EC-Plug Fan

with backward curved impeller

Impeller made of Polyamide (PA66) UL94 V-0 with backward curved blades. Motorized Impeller, includes motor and impeller. Fitting fluidic optimized cone available. 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 possible 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]
1~100-130 V
Frequency [f]
50/60 Hz
Input power [P]
0.4 / 0.38 kW
Current [I]
3.5 / 3.66 A
Speed [n]
2900 / 2820 r/min
Medium temperature [tR]
40 °C
Protection Mode
IP 54
Efficiency Class
IE4
K-Factor
67
Weight [m]
4.7 kg
Dimensions [L / W / H]
307 mm / 307 mm / 222 mm

Contact:

Rosenberg Ventilatoren GmbH
Maybachstraße 1
D - 74653 Künzelsau - Gaisbach
www.rosenberg-gmbh.com

Type:

GKHR 280-CIE.065.4EA IE HP

Article-No.:
N42-28002

GKH... - Plug Fan

with EC-Motor and E-Impeller

- air flow 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:

Box Fans / Roof Fans / Duct Fans / Compact Air Handling Units

Mechanical Configuration:

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

_KHR, RRE	= Motorized Impeller (Inlet Cone Accessory)
_KHM, RRM	= Fan Module type "Classic" cone and supporting frame included
_KHC	= Fan Module type "Slim" cone and supporting frame included
_KHQ	= Fan Module type "Qube" cone and supporting frame included
_KHD	= Module with forwarding device "High Performance"

Impeller:

E-series impeller (Revolution series) made of up to size 280 made of polyamide (PA66), black, glass fiber reinforced and from size 315 made of polypropylene (PP), UV -stabilized, black, glass fiber reinforced with 7 profiled blades curved backwards and a narrow circumferential diffuser to optimize efficiency. From size 630 made of aluminium (AlMg3). Noise-optimised, weight-reduced and corrosion-resistant design, volume-flow-oriented behaviour.

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

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.