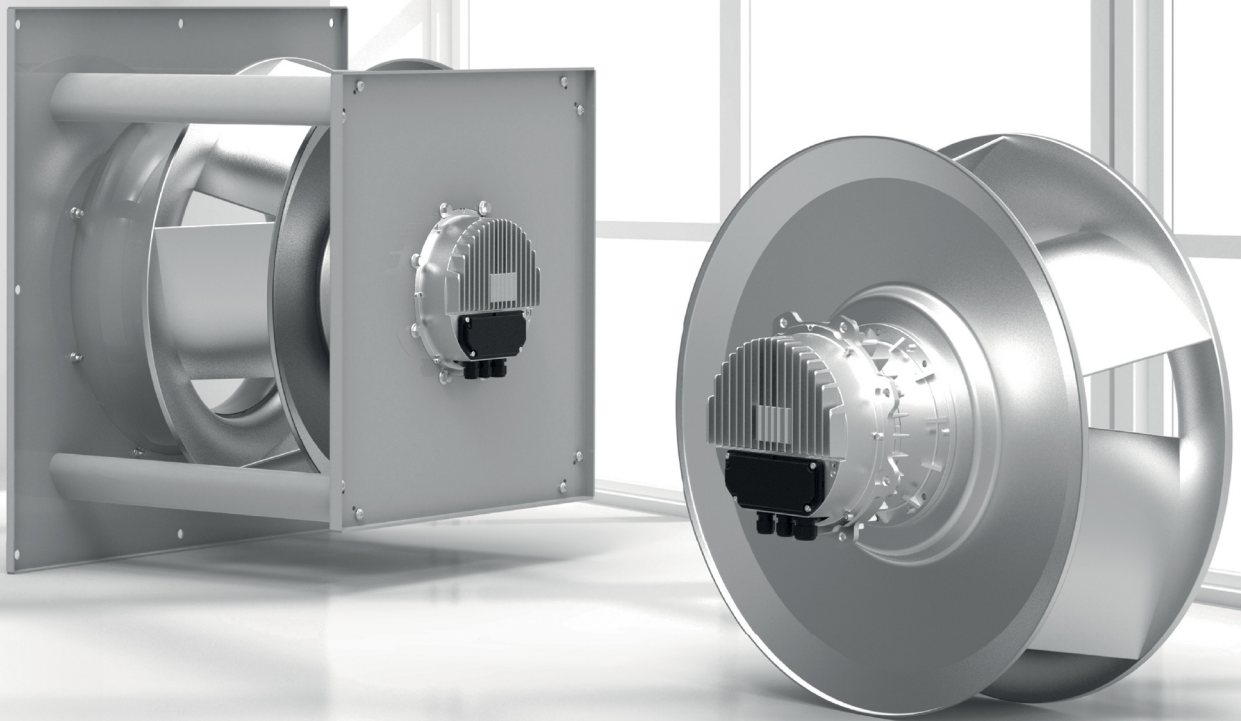




EC PLUG FANS I-SERIES



rosenbergcanada.com

Plug Fans of the I-SERIES

Motorized Impeller: Type GKHR-CII

Module: Type GKHM-CII

The volume flow-orientated I-impeller has 5 backward curved, hollow profiled blades made of aluminium sheet.

The turbulent flow at the trailing edge of the blades is significantly reduced by the characteristic shape. This has a particularly positive effect on noise behaviour. Furthermore, the blades are positioned diagonally and inclined outwards in the impeller so that the airflow is optimised.

In summary, we can offer an innovative diagonal impeller, which in combination with highly efficient Generation 3 (+) EC motors clearly exceeds the requirements of the market.



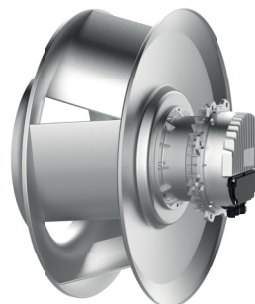
In combination with the highly efficient Generation 3 (+) EC motors, the I-SERIES impeller enables maximum air performance while minimising noise emissions.



EC motors of Generation 3 (+)

The maximum electrical input power is 4.7 kW (7.4 kW). The input voltage range of the motor is 200-480 VAC (50/60 Hz). The EC motors of Generation 3 also offer many other advantages, such as:

- » **An integrated inspection LED** to visualise the motor status. It is visible from the outside through the composite material of the motor cover.
- » **Improved ModBus RTU functionality.** The motor not only measures its current power requirement, but also continuously the total energy consumption. A detailed histogram shows the fan's load profile and the temperature at which the fan has operated over time. This makes it possible to predict any faults and evaluate the operating conditions of the selected EC fan.
- » **Electronic Quick Change Technology**
In the event of a defect in the electronics, e.g. due to incorrect connection, it is possible to replace them within minutes without having to dismantle other parts of the fan.
- » **IT-network support (Earthing system)**
IT-network is a configuration of the power grid often used in hospitals and data centres. It is mainly about increasing the fault tolerance of the system.
- » **280-680 VDC-Supply (on request)**
The use of DC voltage becomes more and more common in data centres, due to failure safety and overall design considerations.



Motorized impeller: Type GKHR

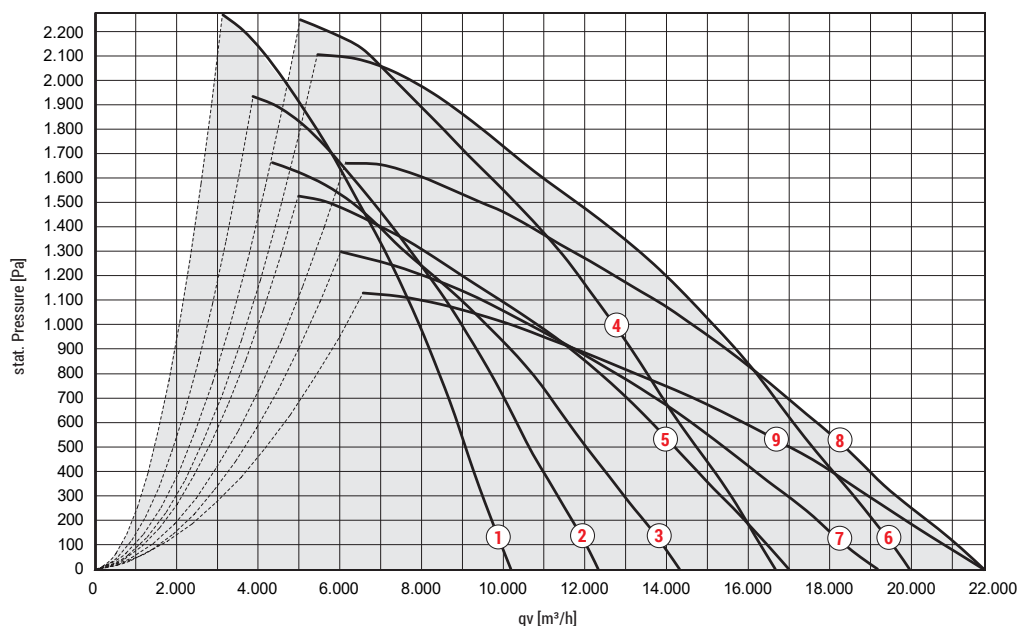


Module: Type GKHM



Rosenberg EC motor of Generation 3+

Technical Data:

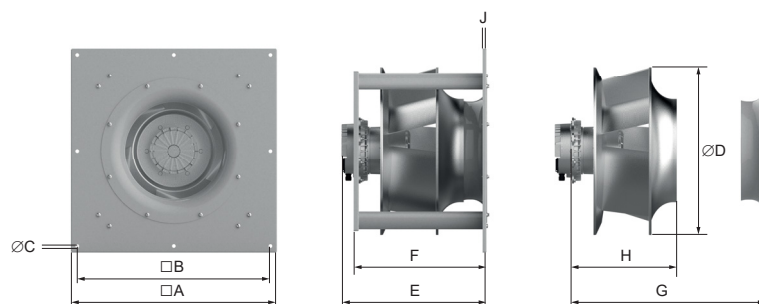


Fan Type	Performance Curve	Art.-No. N86 - (GKHR) N88 - (GKHM)	Voltage [V]	Mains Frequency [Hz]	Input Power [kW]	Rated Current [A]	Speed [min ⁻¹]	Medium Temperature [°C]	Protection Class	Weight (GKHR / GKHM) [kg]	Sound Power Level ¹⁾ dB(A)	Efficiency η_{fs} ²⁾ [%]
GKH_355-CII.118.6FF IE Gen3	1)	Nxx-35702	3~380-480	50/60	4,44	6,8	3650	-25 to 40	IP54	17 / 32	87 / 91	65,3
GKH_400-CII.133.6FF IE Gen3	2)	Nxx-40700	3~380-480	50/60	4,44	6,8	3065	-25 to 40	IP54	18 / 35	87 / 93	67,7
GKH_450-CII.147.6FF IE Gen3	3)	Nxx-45701	3~380-480	50/60	4,22	6,7	2400	-25 to 40	IP54	19 / 38	83 / 89	69,3
GKH_450-CII.147.6IF IE Gen3+	4)	Nxx-45702	3~380-480	50/60	6,7	10,3	2800	-25 to 40	IP54	24 / 43	88 / 94	68,3
GKH_500-CII.164.6IF IE Gen3	5)	Nxx-50700	3~380-480	50/60	4,55	7,0	2065	-25 to 40	IP54	24 / 50	83 / 89	70,2
GKH_500-CII.164.6NA IE Gen3+	6)	Nxx-50701	3~380-480	50/60	7,35	11,3	2425	-25 to 40	IP54	30 / 56	87 / 93	70,7
GKH_560-CII.183.6IF IE Gen3	7)	Nxx-56703	3~380-480	50/60	4,5	6,9	1705	-25 to 40	IP54	26 / 58	81 / 87	69,2
GKH_560-CII.183.6NA IE Gen3+	8)	Nxx-56700	3~380-480	50/60	6,4	9,8	1920	-25 to 40	IP54	32 / 64	84 / 90	70,1
GKH_630-CII.200.6NA IE Gen3	9)	Nxx-63700	3~380-480	50/60	4,4	6,7	1475	-25 to 40	IP54	33 / 73	80 / 86	70,8

1) Total Sound Power Level: Inlet side LwA(in) / Outlet side LwA(out) at $q_v = 0,5 \times q_v(\max)$

2) Real efficiency at optimum efficiency of the fan, which is used for ErP evaluation

Dimensions: (all dimensions in mm)



Fan Size	A	B	C	D	E (Gen3)	E (Gen3+)	F (Gen3)	F (Gen3+)	G (Gen3)	G (Gen3+)	H (Gen3)	H (Gen3+)	J
355	500	450	11	405	427	-	375	-	359	-	306	-	15
400	550	500	11	455	444,5	-	392,5	-	378	-	321	-	15
450	630	580	14	530	491	517	439	439	424	424	353	353	15
500	700	650	14	585	522,5	573	475,5	500	456	479	376	398	15
560	800	750	14	655	509	535	462	608	442	515	354	427	15
630	800	750	14	716	605	-	556	-	537,6	-	447,6	-	15