



AIR DIFFUSION

HYPOWER-GEKO

HyPower-Geko®

» FAN COIL UNITS





**OPTIMAL CLIMATE:
HYGIENIC. EFFICIENT. SUSTAINABLE.**

The HyPower-Geko fan coil units generate a whisperquiet and comfortable feel-good climate at maximum energy efficiency and optimal air treatment.

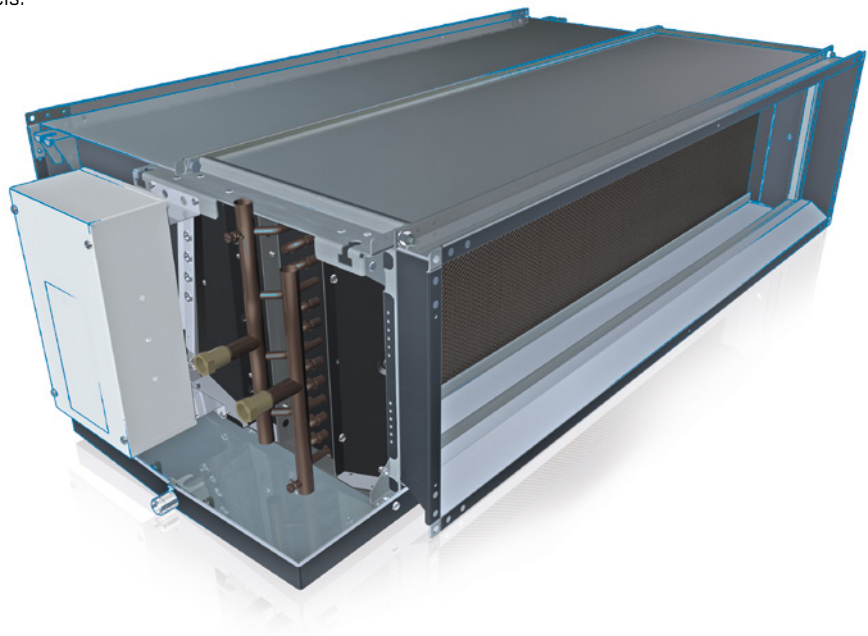
The signs of the times are clear

Investors, plant engineers, planners, and architects no longer ask “whether” but “how” they can enhance the degree of sustainability of their plants and building management systems. Buildings are unique objects. Location, size, construction quality, and – increasingly, building engineering technology – determine values and returns. Energy matters substantially gain in significance since buildings absorb about 40 % of the world energy consumption and produce 21 % of world-wide greenhouse gas emissions. Energy costs will increasingly become a “second rent” for users and residents.

Where air conditioning is required for rooms and buildings, FläktGroup contributes to technological advances. We offer highly efficient air treatment and supply with the greatest possible reduction of energy consumption over the entire service life of the plants: This pays off in cents and euros, comfort and work productivity. In highly sensitive areas, such as clinical and clean room applications, our solutions reliably satisfy all international standards and achieve high rankings in the demanding classification of the “Eurovent Compliance Committee for Air Handling Units”. They furthermore set new standards for sustainability and perfect system integration in modern sport arenas, factory buildings, airport facilities, and swimming pools, as well as in offices, museums and hotels.



We design the most efficient
demand-controlled solution for
your requirements



The new dimensions of innovative air handling

HyPower-Geko – The innovative fan coil unit in recirculating air mode convinces in three ways with an integral concept, that sets new standards: On maximum capacity with maximum energy efficiency and greatest possible demand on hygiene, HyPower-Geko performs individual air-conditioning at its best.

Maximum power with precision

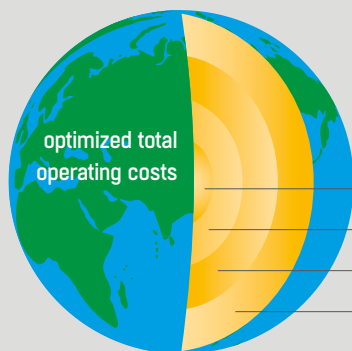
- Maximum cooling capacity at highest speed (25 kW)
- Powerful thanks to external pressure up to 150 Pa
- Modular construction system enables a flexible design, low-noise operation
- Certified hygiene conformity (VDI6022)
- Variable capacity stages: 2-pipe and 4-pipe
- Individual installation, e.g. in a discreet position in the false ceiling

HyPower-Geko®
means:

- High Power
- Hygienic Power
- Hydronic Power



Certified according to VDI 6022



Comprehensive concept – maximum use

We optimize your total operating costs continuously and sustainably: highly-efficient fans are integrated in the unit and precisely tailored to our ISYteq control technology. Besides, our reliable software enables individual configuration and layout of your system.

- EC fan
- Integration in unit
- Compatibility of control system
- Software flexibility (individual operating points)

Power is in the air

Concentrated power, efficiency and comfort for a perfect room climate

EC fans made by quality manufacturer ebm-papst

Maximum cooling and heating capacity with minimum electric power consumption - excellently awarded: EUROVENT energy label FCEER/FCOOP (class A)

Condensate pump MaxiBlue

Harmony all along the line: powerful, energy-efficient, low-noise and reliable owing to a new rotation-membrane principle.

ISYteq controls

Diverse control options in different stages of expansion - including: "Plug and Play" function, power-optimized operation and competent service with service tool.

Compact controller ISYteq CET.ACEC

Equipped with auto and manual mode in 3 speeds: heating and cooling/only heating or cooling. Compatible with open/close valves. The fan is continuously controlled in auto mode.



EC fan



SIMPLY INTELLIGENTLY REGULATED ISYTEQ CONTROLS



Comprehensive control possibilities:

- Control system for EC & AC fans
- Energy-optimized equipment operation
- Equipment ready to operate and highly competent service
- Plug-and-play functionality
- Modbus RTU and TCP/IP always on board
- BACnet MSTP and TCP/IP always on board
- On Board Webserver (PC/Smartphone/Tablet control)
- Several digital and analogue interface function for all customer requirements

INNOVATIVE TECHNOLOGY WITH INTUITIVE USER INTERFACE

Upon request, the proven ISYteq intelligent control system will be integrated into HyPower-Geko at the factory. Thus only completely tested equipment will be supplied to your construction site.

The user can optimally match the HyPower-Geko to the required functions: either by means of the control panel with a touchscreen, or by the USB socket and an external notebook. The system acquires a wide range of measured values and continuously monitors them, to assure safe and reliable operation.

Using the control panel with the new HMI touchdisplay, which resembles a modern smartphone, enables the user to access the most important functions. The functional handling of the new control interface creates a completely new perspective for the unit operation, events and settings. The user can select between 4 functional profiles. As a result, setpoint values and switching times can be very quickly and easily entered, and current actual values and messages can be simply visualized and read off.

ISYteq furthermore ensures energy-optimised operation of HyPower-Gekos. A coordinated switchover function, for example, prevents heating and cooling circulation systems from working against each other. Hardware and software are developed entirely at FläktGroup. As a result of close collaboration in the company, our engineers can systematically adjust the control system to match every component – and in turn optimally exploit the possibilities of fan coil units. Service and support also benefit from this arrangement, and can rapidly and competently react whenever questions arise.

ISYteq system control

There are several open protocols routinely available for the connection to an external building automation system. The two interfaces BACnet and Modbus are always on board as standards and must not be supplemented by add-on modules. This enables the easy and cost-efficient integration in the building automation. The Ethernet interface with an integrated Webserver is suitable for the integration in a local network (LAN) . This enables a very simple and clear access with the PC, tablet or smartphone.

Controls panels

ISYteq system controls



ISYteq Touch 4.0

- 4.3" Touch Panel as a high-end solution
- Graphical and multilingual interface
- Timer is included
- 2 different designs possible:
Hotel and Business layout
- Available with white or black frame
- LED bar for additional user experience
- Horizontal or vertical installation
- Temperature and humidity sensor
- On-wall and in-wall installation
- Non-Browser panel
(Modbus communication)



ISYteq LCD LW

- Modern cost-efficient design
- Control panel with LCD in protection class IP20
- 7 soft touch buttons for the user navigation
- For wall mounting with a black frame
- Display of alarms
- Temperature sensor is always included

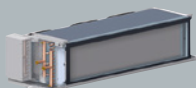


ISYteq CET.ACEC

- White casing in white RAL 9016
- Rotary switch is used for setpoints
- Relative setpoint shift is enabled
- Rotary switch provides 3-stage fan and automatic mode
- Digital inputs for window contact, heating/cooling changeover, economy mode
- Analog inputs for room temperature and inlet temperature
- Modbus RTU is included
- Temperature sensor is always included
- Room frost protection

Max. dimensions and weights

HyPower-Geko®



Basic unit – version A

Without chamber for fans

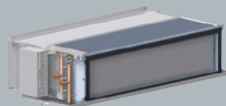
Free intake

On-site filter must be provided

Size	Width* mm	Depth mm	Height mm
1	803	595	340
2	1108	595	340
3	1413	595	340
4	1833	595	340

Weight including water charge

Size	Max. (kg)
1	31
2	42
3	55
4	69



Basic unit – version B

With chamber for fans

Without insulation of the fan chamber

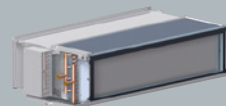
With integrated flat filter

Duct and accessory connection possible

Size	Width* mm	Depth mm	Height mm
1	803	705	340
2	1108	705	340
3	1413	705	340
4	1833	705	340

Weight including water charge

Size	Max. (kg)
1	37
2	50
3	66
4	84



Basic unit – version C

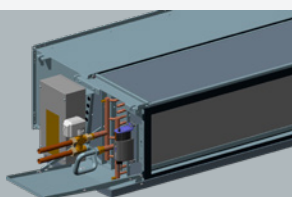
With chamber for fans

Like version B, but with interior acoustic insulation of the fan chamber

Size	Width* mm	Depth mm	Height mm
1	803	705	340
2	1108	705	340
3	1413	705	340
4	1833	705	340

Weight including water charge

Size	Max. (kg)
1	40
2	53
3	69
4	88

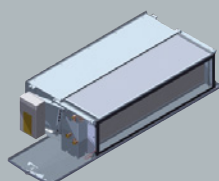


Extended condensate pan

Optional for cooling operation

Additional equipment

Additional extended condensate pan at mounted valves and connection fixtures
An additional 264 mm is then added to the entire width of the unit



Basic unit in hygiene configuration

On request

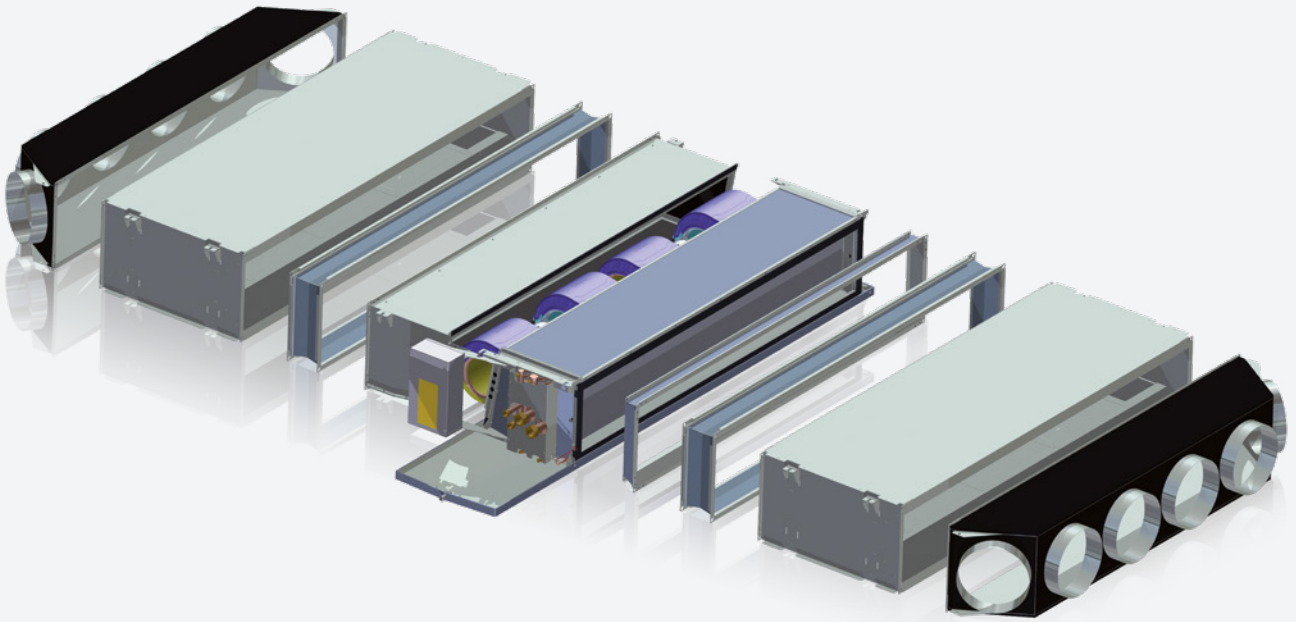
Only available for authorized sales regions

Heat exchanger cover plates on the front and back side to provide optical covering and protect the hydraulics and copper pipes from damage during installation

Condensate pan, extended and powder-coated

Increased distance between hydraulic system and electric terminal box

* plus 264 mm when using the extended condensate pan



Optional selectable accessories

- Spare filters (G2 or G4)
- Flexible connection (intake or discharge)
- Air-intake plenum with round connectors DN 250 (insulated or non-insulated)
Number of round connectors:
Model size 1 = 3 pcs.
Model size 2 = 4 pcs.
Model size 3 = 5 pcs.
Model size 4 = 6 pcs
- Seal cap DN 250 for round connector
- Transition piece for accessories
- Sound attenuator (intake/discharge)
- Suspension rail for ceiling mounting

2-pipe system – chilled water

Cooling | Recirculating air

Air volume flow V at external pressure of 50 Pa in speed 3 and capacity stage 1

		V	Cooling capacity PCW 6 / 12 °C Air intake 27 °C / 46 % Capacity stage			Sound power level at capacity stage 1			Motor data EC motor 1 ~ 230 Volt	
Size	Speed	Max.	CS1	CS2	CS3	Intake	Discharge	Casing	Max.	Max.
1	1	340 m³/h	1.70 kW	2.30 kW	2.60 kW	41 dB(A)	44 dB(A)	36 dB(A)	20 W	0.13 A
	3	620 m³/h	2.70 kW	3.90 kW	4.40 kW	57 dB(A)	60 dB(A)	50 dB(A)	100 W	0.72 A
	5	920 m³/h	3.60 kW	5.50 kW	6.40 kW	67 dB(A)	71 dB(A)	59 dB(A)	213 W	1.54 A
2	1	420 m³/h	2.20 kW	2.90 kW	3.20 kW	37 dB(A)	40 dB(A)	30 dB(A)	19 W	0.18 A
	3	970 m³/h	4.20 kW	6.00 kW	6.70 kW	56 dB(A)	59 dB(A)	46 dB(A)	136 W	0.89 A
	5	1,525 m³/h	5.90 kW	8.80 kW	10.10 kW	66 dB(A)	70 dB(A)	57 dB(A)	296 W	2.09 A
3	1	630 m³/h	3.20 kW	4.30 kW	4.90 kW	45 dB(A)	48 dB(A)	36 dB(A)	36 W	0.30 A
	3	1,410 m³/h	6.00 kW	8.70 kW	10.00 kW	61 dB(A)	64 dB(A)	53 dB(A)	258 W	1.84 A
	5	2,090 m³/h	8.10 kW	12.10 kW	14.20 kW	70 dB(A)	73 dB(A)	61 dB(A)	510 W	3.43 A
4	1	735 m³/h	4.00 kW	5.30 kW	6.10 kW	43 dB(A)	42 dB(A)	35 dB(A)	34 W	0.29 A
	3	1,735 m³/h	7.80 kW	11.10 kW	12.70 kW	61 dB(A)	60 dB(A)	51 dB(A)	259 W	1.75 A
	5	2,800 m³/h	10.70 kW	16.70 kW	19.70 kW	71 dB(A)	72 dB(A)	61 dB(A)	591 W	3.76 A

2-pipe system – warm water

Heating | Recirculating air

Air volume flow V at external pressure of 50 Pa in speed 3 and capacity stage 1

V			Thermal output PWW 70 / 50 °C Air intake 20 °C Capacity stage			Sound power level at capacity stage 1			Motor data EC motor 1 ~ 230 Volt	
Size	Speed	Max.	CS1	CS2	CS3	Intake	Discharge	Casing	Max.	Max.
1	1	340 m³/h	3.50 kW	4.50 kW	4.70 kW	41 dB(A)	44 dB(A)	36 dB(A)	20 W	0.13 A
	3	620 m³/h	5.60 kW	7.70 kW	8.20 kW	57 dB(A)	60 dB(A)	50 dB(A)	100 W	0.72 A
	5	920 m³/h	7.70 kW	10.90 kW	12.00 kW	67 dB(A)	71 dB(A)	59 dB(A)	213 W	1.54 A
2	1	420 m³/h	4.50 kW	5.60 kW	5.70 kW	37 dB(A)	40 dB(A)	30 dB(A)	19 W	0.18 A
	3	970 m³/h	8.80 kW	11.90 kW	12.70 kW	56 dB(A)	59 dB(A)	46 dB(A)	136 W	0.89 A
	5	1,525 m³/h	12.50 kW	17.80 kW	20.00 kW	66 dB(A)	70 dB(A)	57 dB(A)	296 W	2.09 A
3	1	630 m³/h	6.70 kW	8.50 kW	9.00 kW	45 dB(A)	48 dB(A)	36 dB(A)	36 W	0.30 A
	3	1,410 m³/h	12.70 kW	17.40 kW	19.30 kW	61 dB(A)	64 dB(A)	53 dB(A)	258 W	1.84 A
	5	2,090 m³/h	17.20 kW	24.60 kW	27.80 kW	70 dB(A)	73 dB(A)	61 dB(A)	510 W	3.43 A
4	1	735 m³/h	8.10 kW	10.30 kW	10.90 kW	43 dB(A)	42 dB(A)	35 dB(A)	34 W	0.29 A
	3	1,735 m³/h	16.30 kW	22.20 kW	24.30 kW	61 dB(A)	60 dB(A)	51 dB(A)	259 W	1.75 A
	5	2,800 m³/h	23.60 kW	33.80 kW	38.00 kW	71 dB(A)	72 dB(A)	61 dB(A)	591 W	3.76 A

2-pipe system chilled or warm water

Cooling or heating | Change-Over operation | Recirculating air

Air volume flow V at external pressure of 50 Pa in speed 3 and capacity stage 1

		V	Cooling capacity PCW 6 / 12 °C Air intake 27 °C / 46 % Capacity stage			Sound power level at capacity stage 1			Motor data EC motor 1 ~ 230 Volt	
Size	Speed	Max.	CS1	CS2	CS3	Intake	Discharge	Casing	Max.	Max.
1	1	340 m³/h	1.70 kW	2.30 kW	2.60 kW	41 dB(A)	44 dB(A)	36 dB(A)	20 W	0.13 A
	3	620 m³/h	2.70 kW	3.90 kW	4.40 kW	57 dB(A)	60 dB(A)	50 dB(A)	100 W	0.72 A
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2	1	420 m³/h	2.20 kW	2.90 kW	3.20 kW	37 dB(A)	40 dB(A)	30 dB(A)	19 W	0.18 A
	3	970 m³/h	4.20 kW	6.00 kW	6.70 kW	56 dB(A)	59 dB(A)	46 dB(A)	136 W	0.89 A
	5	1,525 m³/h	5.90 kW	8.80 kW	10.10 kW	66 dB(A)	70 dB(A)	57 dB(A)	296 W	2.09 A
3	1	630 m³/h	3.20 kW	4.30 kW	4.90 kW	45 dB(A)	48 dB(A)	36 dB(A)	36 W	0.30 A
	3	1,410 m³/h	6.00 kW	8.70 kW	10.00 kW	61 dB(A)	64 dB(A)	53 dB(A)	258 W	1.84 A
	5	2,090 m³/h	8.10 kW	12.10 kW	14.20 kW	70 dB(A)	73 dB(A)	61 dB(A)	510 W	3.43 A
4	1	735 m³/h	4.00 kW	5.30 kW	6.10 kW	43 dB(A)	42 dB(A)	35 dB(A)	34 W	0.29 A
	3	1,735 m³/h	7.80 kW	11.10 kW	12.70 kW	61 dB(A)	60 dB(A)	51 dB(A)	259 W	1.75 A
	5	2,800 m³/h	10.70 kW	16.70 kW	19.70 kW	71 dB(A)	72 dB(A)	61 dB(A)	591 W	3.76 A

2-pipe system chilled or warm water

Cooling or heating | Change-Over operation | Recirculating air

Air volume flow V at external pressure of 50 Pa in speed 3 and capacity stage 1

V			Thermal output PWW 70 / 50 °C Air intake 20 °C Capacity stage			Sound power level at capacity stage 1			Motor data EC motor 1 ~ 230 Volt	
Size	Speed	Max.	CS1	CS2	CS3	Intake	Discharge	Casing	Max.	Max.
1	1	340 m³/h	3.50 kW	4.50 kW	4.70 kW	41 dB(A)	44 dB(A)	36 dB(A)	20 W	0.13 A
	3	620 m³/h	5.60 kW	7.70 kW	8.20 kW	57 dB(A)	60 dB(A)	50 dB(A)	100 W	0.72 A
	5	920 m³/h	7.70 kW	10.90 kW	12.00 kW	67 dB(A)	71 dB(A)	59 dB(A)	213 W	1.54 A
2	1	420 m³/h	4.50 kW	5.60 kW	5.70 kW	37 dB(A)	40 dB(A)	30 dB(A)	19 W	0.18 A
	3	970 m³/h	8.80 kW	11.90 kW	12.70 kW	56 dB(A)	59 dB(A)	46 dB(A)	136 W	0.89 A
	5	1,525 m³/h	12.50 kW	17.80 kW	20.00 kW	66 dB(A)	70 dB(A)	57 dB(A)	296 W	2.09 A
3	1	630 m³/h	6.70 kW	8.50 kW	9.00 kW	45 dB(A)	48 dB(A)	36 dB(A)	36 W	0.30 A
	3	1,410 m³/h	12.70 kW	17.40 kW	19.30 kW	61 dB(A)	64 dB(A)	53 dB(A)	258 W	1.84 A
	5	2,090 m³/h	17.20 kW	24.60 kW	27.80 kW	70 dB(A)	73 dB(A)	61 dB(A)	510 W	3.43 A
4	1	735 m³/h	8.10 kW	10.30 kW	10.90 kW	43 dB(A)	42 dB(A)	35 dB(A)	34 W	0.29 A
	3	1,735 m³/h	16.30 kW	22.20 kW	24.30 kW	61 dB(A)	60 dB(A)	51 dB(A)	259 W	1.75 A
	5	2,800 m³/h	23.60 kW	33.80 kW	38.00 kW	71 dB(A)	72 dB(A)	61 dB(A)	591 W	3.76 A

4-pipe system – chilled and warm water

Cooling and heating | Recirculating air

Air volume flow V at external pressure of 50 Pa in speed 3 and capacity stage 1

		V	Cooling capacity PCW 6 / 12 °C Air intake 27 °C / 46 % Capacity stage			Sound power level at capacity stage 1			Motor data EC motor 1 ~ 230 Volt	
Size	Speed	Max.	CS1	CS2	-	Intake	Discharge	Casing	Max.	Max.
1	1	335 m³/h	2.10 kW	2.20 kW	-	41 dB(A)	44 dB(A)	36 dB(A)	20 W	0.13 A
	3	610 m³/h	3.40 kW	3.80 kW	-	57 dB(A)	60 dB(A)	50 dB(A)	100 W	0.72 A
	5	910 m³/h	4.70 kW	5.30 kW	-	67 dB(A)	71 dB(A)	59 dB(A)	213 W	1.54 A
2	1	400 m³/h	2.50 kW	2.70 kW	-	37 dB(A)	40 dB(A)	30 dB(A)	19 W	0.18 A
	3	920 m³/h	5.10 kW	5.70 kW	-	56 dB(A)	59 dB(A)	46 dB(A)	136 W	0.89 A
	5	1,460 m³/h	7.40 kW	8.40 kW	-	66 dB(A)	70 dB(A)	57 dB(A)	296 W	2.09 A
3	1	600 m³/h	3.80 kW	4.20 kW	-	45 dB(A)	48 dB(A)	36 dB(A)	36 W	0.30 A
	3	1,340 m³/h	7.50 kW	8.40 kW	-	61 dB(A)	64 dB(A)	53 dB(A)	258 W	1.84 A
	5	1,995 m³/h	10.20 kW	11.70 kW	-	70 dB(A)	73 dB(A)	61 dB(A)	510 W	3.43 A
4	1	710 m³/h	4.70 kW	5.10 kW	-	43 dB(A)	42 dB(A)	35 dB(A)	34 W	0.29 A
	3	1,665 m³/h	9.60 kW	10.70 kW	-	61 dB(A)	60 dB(A)	51 dB(A)	259 W	1.75 A
	5	2,695 m³/h	14.10 kW	16.10 kW	-	71 dB(A)	72 dB(A)	61 dB(A)	591 W	3.76 A

4-pipe system – chilled and warm water

Cooling and heating | Recirculating air

Air volume flow V at external pressure of 50 Pa in speed 3 and capacity stage 1

V			Cooling capacity PKW 70 / 50 °C Air intake 20 % Capacity stage			Sound power level at capacity stage 1			Motor data EC motor 1 ~ 230 Volt	
Size	Speed	Max.	CS1	CS2	-	Intake	Discharge	Casing	Max.	Max.
1	1	335 m³/h	2.30 kW	3.30 kW	-	41 dB(A)	44 dB(A)	36 dB(A)	20 W	0.13 A
	3	610 m³/h	3.50 kW	5.30 kW	-	56 dB(A)	60 dB(A)	50 dB(A)	100 W	0.72 A
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2	1	400 m³/h	2.90 kW	4.10 kW	-	37 dB(A)	39 dB(A)	30 dB(A)	19 W	0.18 A
	3	920 m³/h	5.30 kW	8.00 kW	-	56 dB(A)	59 dB(A)	46 dB(A)	136 W	0.89 A
	5	1,460 m³/h	7.30 kW	11.60 kW	-	66 dB(A)	70 dB(A)	57 dB(A)	296 W	2.09 A
3	1	600 m³/h	4.20 kW	6.20 kW	-	45 dB(A)	47 dB(A)	36 dB(A)	36 W	0.30 A
	3	1,340 m³/h	7.50 kW	11.80 kW	-	61 dB(A)	64 dB(A)	53 dB(A)	258 W	1.84 A
	5	1,995 m³/h	9.90 kW	16.10 kW	-	69 dB(A)	73 dB(A)	61 dB(A)	510 W	3.43 A
4	1	710 m³/h	5.10 kW	7.50 kW	-	43 dB(A)	42 dB(A)	35 dB(A)	34 W	0.29 A
	3	1,665 m³/h	9.50 kW	15.00 kW	-	60 dB(A)	60 dB(A)	51 dB(A)	259 W	1.75 A
	5	2,695 m³/h	13.40 kW	21.80 kW	-	71 dB(A)	72 dB(A)	61 dB(A)	591 W	3.76 A

EXCELLENCE IN SOLUTIONS

WWW.FLAKTGROUP.COM

HYPOWER-GEKO

FläktGroup is the European market leader for smart and energy efficient Indoor Air and Critical Air solutions to support every application area. We offer our customers innovative technologies, high quality and outstanding performance supported by more than a century of accumulated industry experience. The widest product range in the market, and strong market presence in 65 countries worldwide, guarantee that we are always by your side, ready to deliver Excellence in Solutions.

PRODUCT FUNCTIONS BY FLÄKTGROUP

Air Treatment | Air Movement | Air Diffusion | Air Distribution
Air Filtration | Air Management | Air Conditioning & Heating
Controls | Service

» Learn more on www.flaktgroup.com
or contact one of our offices

