

Now with EC technology:
Jet Fans IVR EC. 



*** Extremely efficient and exceptionally quiet.**



Efficient, compact and extra powerful: The new Helios Jet Fans IVR EC.



It is well known that Helios jet fans are particularly durable and effective. Yet our new generation raises the benchmark even higher.

Equipped with the latest EC technology, they are more economical than ever before and they ensure demand-oriented ventilation in various areas of application, such as parking garages or commercial and industrial plants. They are always the perfect solution when it comes to reliable and quiet operation. Furthermore, the intelligent zone regulation of IVR EC ensures the additional efficiency enhancement of the entire system.

Leading edge technology in every component:

The particularly economical external rotor motor with EC technology impresses with low operating costs and optimal control options. In combination with the advanced high-performance centrifugal plastic impeller, it promises maximum thrust power and an enormous throw distance.

There is also a newly developed aluminium casing in lightweight design for simple installation and peak efficiency with minimal sound emission levels. Versions with single phase and three phase motors are available for practically unlimited application possibilities.

Variably controllable due to latest EC technology.

Highly efficient EC motors in **single phase and three phase versions**.

Flat design for maximum vertical clearance in parking garages.



Enormous thrust power for maximum air pulse.

Low sound emission levels due to optimised fan geometry.

Aluminium casing in **lightweight design**.

Simple electrical connection due to external casing terminal box.



Pretty smart: Demand-based garage ventilation with Helios IVR EC.

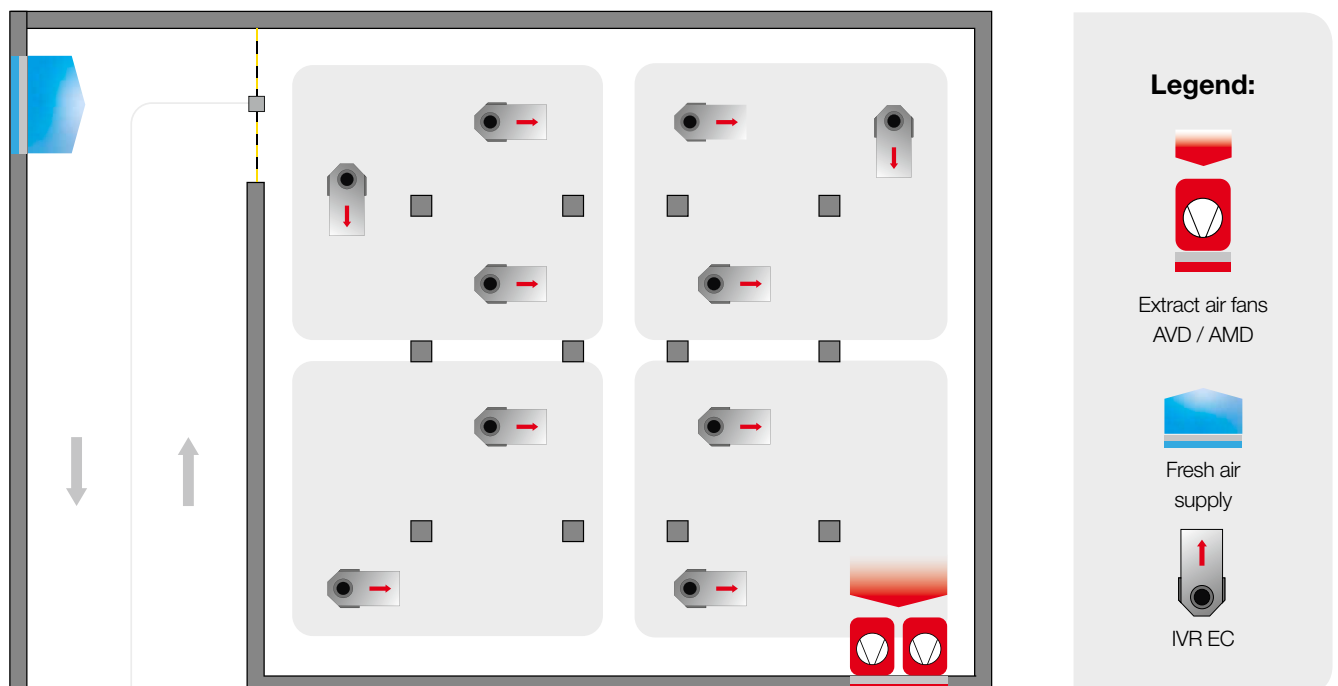
Jet fans are used in parking garages for daily supply and extract ventilation. In this respect, the combination with the Helios gas warning system for the continuous measurement of the concentration of pollutants is particularly ingenious. As soon as this concentration – e.g. CO₂ or NO_x – becomes too high, the ventilation will activate based on demand. The parking garage is flushed out and the pollutants are transpor-

ted to the extract air fans through targeted air movement. In this respect, air flows through the entire garage and there are no areas where toxic gases, which are harmful to people, can collect. Real added value: The legally prescribed vertical clearances for parking garages are effortlessly due to the particularly flat IVR EC design.

Parking garage with zone regulation

The latest and most innovative ventilation solution for parking garages is zone regulation. In this respect, the garage is divided into multiple zones, in which the concentration of pollutants is monitored by at least one sensor. The EC jet fans then work within these zones independently from the other garage fans. All IVR EC are variably operated based on demand within the zone depending on the concentration of pollutants. This enables the mixing with fresh air and the reli-

able reduction of the concentration of pollutants, even with low airflows. This continuously ensures the effective supply and extract ventilation of the individual zones. A high fan ventilation stage is not normally required due to the early mixing – the energy consumption and sound emission levels are significantly reduced. This intelligent form of garage ventilation makes the entire system unbeatably efficient and quiet.





Always there when needed: IVR EC in commerce and industry.

Too humid, too warm, used air – high air quality in commercial and industrial halls is rare.

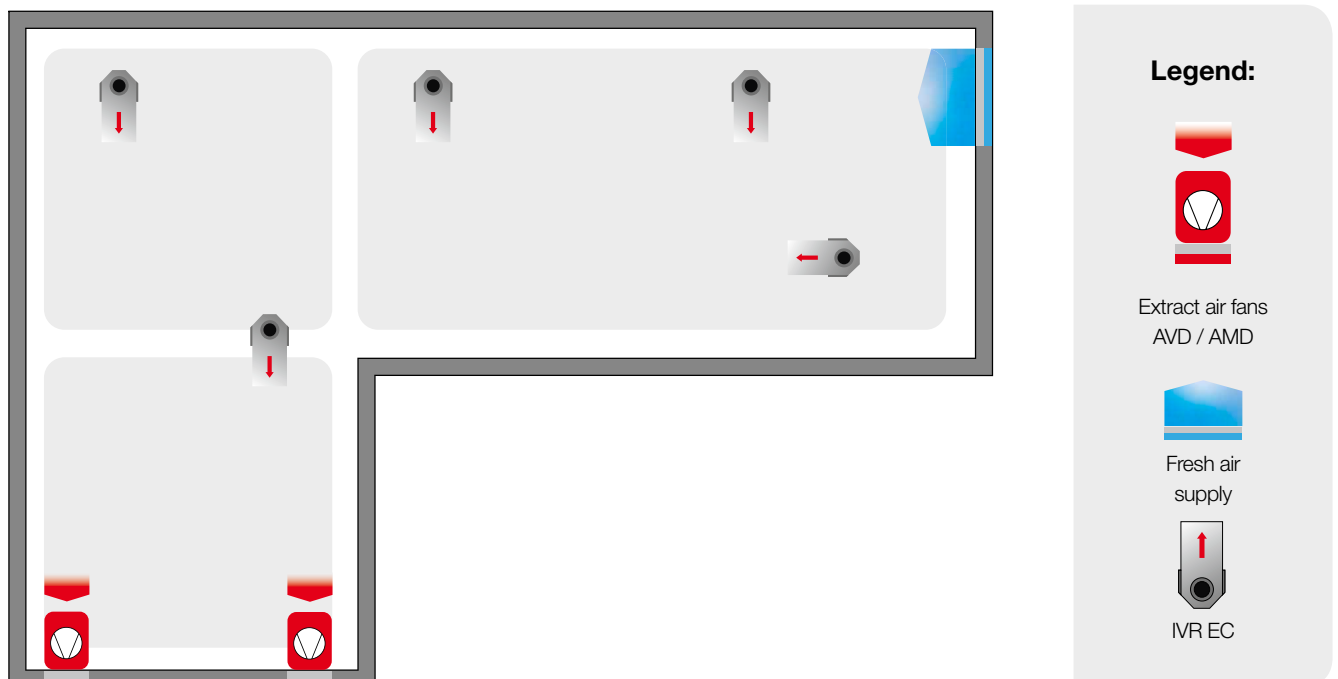
With the new Helios jet fans with EC technology, you now have the opportunity to reliably improve the air quality for all situations and conditions. IVR EC has become a clever, individually configurable system solution due to the variable

speed control and optionally available sensors. The air pulse of the Helios IVR EC can dilute, mix and flush humid or warm air based on demand. In this respect, the system continuously reacts to critical temperature, humidity, CO₂ or VOC values.

Zone regulation in industry and commerce

The zone regulation also demonstrates its advantages in commerce and industry and it provides a contemporary form of ventilation. In this regard, the rooms are divided into multiple zones and the temperature, humidity, VOC and CO₂ values are continuously monitored by sensors. All EC jet fans are variably operated based on demand within the zone depending on the measured values.

This enables the mixing with fresh air and optimisation of air quality, even with low air volumes. A high fan ventilation stage is not normally required due to the early mixing – the energy consumption and sound emission levels are significantly reduced. This form of demand-based ventilation is unbeatably efficient and quiet.



■ IVR EC



IVR EC

High quality, high-performance jet fans with optimal dimensions for the smallest space requirements.

Latest EC technology for economical ventilation solutions in parking garages and commercial applications. Suitable for supply and extract ventilation with air flow temperatures up to 40 °C.

■ Special properties

- Low sound emission levels.
- Highly efficient motor with EC technology.
- Variably controllable via 0 – 10 Volt signal.
- Maximum thrust power.
- Aluminium casing in lightweight design for peak efficiency.
- Simple and easy to install due to low weight.
- Centrifugal impeller driven directly by EC external rotor motor.
- Single phase and three phase versions.

■ Casing

Casing made of corrosion-resistant aluminium in compacter design. Aerodynamic inlet nozzle.

■ Impeller

High-performance centrifugal impeller with backward curved blades. Dynamically balanced, quality class 6.3.

■ Drive

Highly efficient EC motor. In single phase (IVRW) and three phase (IVRD) versions. Protection class IP54.

■ Motor protection

The motor protection device is on the casing terminal box (250 V~/2 A) for evaluation. This allows effective motor protection.

■ Assembly

With integrated mounting holes in the casing seam as standard, for simple mounting directly to the ceiling at four fixing points (fixing material provided by customer). In order to prevent vibration transmission, the use of anti-vibration mounts is recommended (SDZ, accessories).

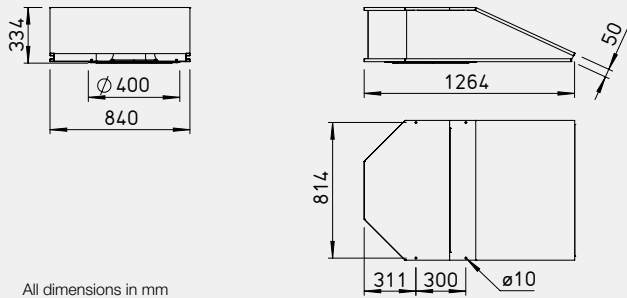
■ Electrical connection

Standard plastic terminal box (protection class IP55), outside on casing.

■ Installation

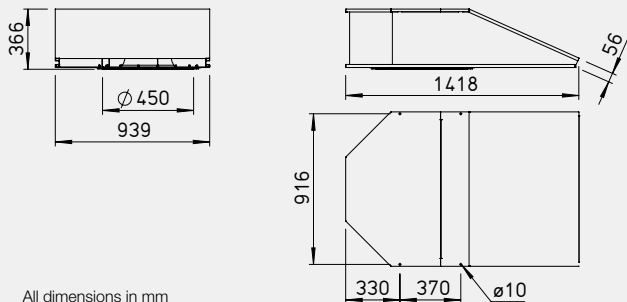
The federal, state and regional rules and regulations must be observed during installation.

■ Dimensions IVRW EC 400



All dimensions in mm

■ Dimensions IVRD EC 450



All dimensions in mm



■ Anti-vibration mounts for suspension

SDZ 2 Ref. no. 01455

For vibration and sound-insulated suspension (ceiling mounting). Temperature-resistant up to 60 °C. Max. fan weight up to 16 kg. Important installation information: An even load distribution (balance centre of gravity for heavy motor) must be ensured during installation. Scope of delivery: 1 set = 4 pcs.

■ Technical data

Type	Ref. no.	Thrust	Discharge speed	Output max.	Rated speed	Sound press. ¹⁾ L _{Pa}	Rat. mot. power (disch)	Rat. mot. current	Wiring diagram	max. air flow temperature	Weight net ca.	Anti-vibrat. mounts (1 set = 4 pcs.)
		N	m/s	\dot{V} m ³ /h	min ⁻¹	dB(A)	kW	A	No.	+°C	kg	Type Ref. no.
Single phase, 230 V, 50/60 Hz, protection class IP54												
IVRW EC 400	09802	50	33,0	4700	1950	64	1.25	6,4	1300	40	28	SDZ 2 01455
Three phase, 400 V, 50/60 Hz, protection class IP54												
IVRD EC 450	09803	75	36,0	6300	1800	68	1.80	2,9	1299	40	33	SDZ 2 01455

¹⁾ measured under free field conditions, at 3 m distance