

## **Comfortline Design**

Design Air Curtain



### Your wish is our Standard



# Many shapes — a single technology

GELU-Frico Design air curtain systems have been fulfilling this demanding task for more than 30 years and create a perfectly shaped and efficient symbiosis of form and function.

Every time doors and gates are left open in buildings, continuous air exchange due to the temperature difference occurs by means of pressure compensation. Wind pressure and the thermal properties of the building itself additionally amplify this effect, leading to the expansion of cold pools at ground level and drafts in the vicinity of the entrance area. Air curtain systems create comfort zones here, with focused warm air streams even in the immediate vicinity of the entrance. Air stream speed and volume, stream direction and air jet temperature are the parameters that determine the efficiency of an air curtain system. Their layout must be carefully designed, taking all construction and climate conditions into consideration.

The entrance area of commercial and service buildings is, additionally, also the welcoming area for guests and employees. Therefore, in addition to flawless technical function, architecture and design are also important aspects.

Due to their function, air curtain systems are situated at the seam between building engineering and entrance architecture.



HR (Half Round)

R (Round)

## Tailor made design



GELU-Design air curtain systems in the R series (Round), O (Oval), HR (Half Round) and Papillon can be utilized at all comfort entrances up to a venting height of 4.0 m and in a variety of entrance widths.

Very stylishly designed equipment, finished according to the customer's request in a variety of materials (aluminium, stainless steel, brass, etc.) and colour design, with no visible screws or rivets. A customer specific design of suspension, suspension covering and base is possible.

**Individual design and unit styles** are available on request.

Connections for water and electricity can be optionally integrated in upright units either on the top or bottom on the inside of the unit. Both the supply lines on suspended units and the mounting fixtures can be finished in a variety of coverings according to the client's wishes. **Regulating and control elements** can be factory-installed in a user friendly manner within the units.

Thanks to its compact construction the highest degree of efficiency is ensured with the smallest size. High-quality interior soundproofing ensures low acoustic emissions.





#### **Application area**

• Design air curtain systems can be fitted in accordance with the technical requirements and the layout wishes of the customer, suspended above the entrance as well with upright units on either one side or both sides.

• Suspended systems capture the warmer air layer located in the vicinity of the ceiling and use this to create an effective air curtain against the outside air.

• Systems that vent from the side, offer the possibility of an air jet speed, which can be graded in height. This achieves a high degree of efficiency in the critical ground area and ensures comfort in the sensitive head area by means of reduced speed. In the case of installations between two doors, units that vent to both sides can be designed, which

have a common middle suction area. Additionally, there is the possibility of working with the highly effective air lock principle when utilising the tangential outlet vent layout.
For critical entrance situations, such as multi-storey buildings, technically complex solutions such as the series DUO-ES double vent system should be used. These units can also be adapted to the building architecture in regard to form and material.



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