

Silent Suite

Hotel Air Conditioning with the New HFF*suite* Induction Unit



Five stars for efficient and silent ventilation, heating and cooling without a fan



- ★ **As quiet as a whisper** even at maximum power: less than 24 dB(A)
- ★ **20 % more cooling power** than standard systems – also in a tight space
- ★ **Maximum thermal comfort:** induction control operated individually by user (optional), adjustable air baffle elements
- ★ **Very low operating costs:** energy-saving, maintenance-free and hard-wearing induction technology
- ★ **The perfect alternative to fan coil solutions:** easy integration, economical for refurbishment work too

Air-water Systems • LTG Induction

Induction unit type HFF *suite* for hotel rooms, ceiling installation

The HFF *suite* hotel induction unit is a ceiling induction unit that ventilates, heats and cools a hotel room in accordance with the induction principle, i.e. without fan, using treated outside air, and ensures individualized temperature control.

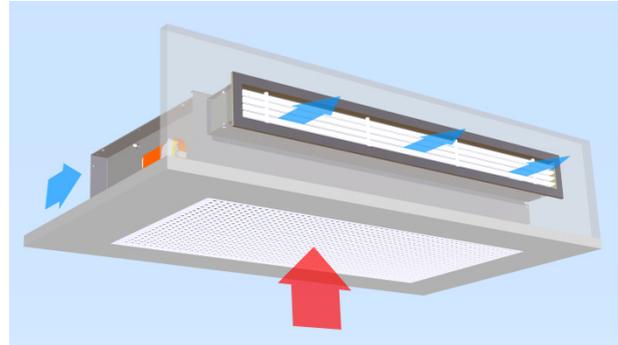
Installation

The unit is installed over the entrance lobby of the hotel room, inside a ceiling panel or integrated casing.

Features

- **Quiet as a whisper**
23.5 or 26.2 dB(A) at 45 or 60 m³/h of primary air
 (sound pressure level L_{PA} with room attenuation of 3.5 dB).
- **Maximum cooling power in a restricted void**
 Up to 1800 W for size 1200, and 1400 W for smallest version 900 mm unit width.
 4- or 2-pipe units for cooling and/or heating.
- Optional: **Induction check** for individualized user control.
- Optional: 2-pipe unit with **electrical heating element** for heating in summer mode
- **Low-draught room air diffusion**
 thanks to optimized air distribution with stable inductive ceiling jet, divergent setting option using air guide vanes.
- **Low-maintenance and hard-wearing induction technology**
 - No rotating parts
 - Secondary air grille easily removable for inspection
 - Heat exchanger readily accessible, cleaning with a vacuum cleaner
 - No air filter needed to protect the heat exchanger
- **Easy integration**
 - Readily accessible installation space by rear-side arrangement of water/air connections
 - Compact design, unit width of 900 mm fits into any corridor
- **Energy-saving induction technology**
 - Low system pressures
 - Minimal air flow rates
 - High CHW temperatures, increase the refrigerating machine efficiency
 - No energy needed for fans in the rooms
- **Economical for refurbishment work too**
 - Considerable reduction in operating costs
 - No servicing/maintenance for fans in each room
 - Condensate-free operation possible, so the condensate lines can be dispensed with

Function



Air conveyance

Primary air:

The required fresh air, e.g. 45 m³/h, to be supplied to the room is supplied into a primary air box at around 100 Pa pressure. The air exits this box through optimized metal nozzles in individual air jets. The primary air flow rate is 100 % pre-treated outside air from a central AHU. It assures basic ventilation with outside air, e.g. in accordance with the recommendations of DIN EN 13779 or DIN EN 15251.

Secondary air:

Four times that quantity of room air is entrained by these air jets and drawn through the heat exchanger. The air is cooled or heated, depending on the room conditions.

Supply air:

The mixed air flows are discharged horizontally, along the ceiling in the hotel room. Special air guide vanes in the outlet minimize the flow velocities.

The active induction check (optional) allows the unit to be "switched off". Only the centrally set primary air flow rate then provides basic ventilation for the necessary air change.

2-pipe unit with electrical heating element:

The electric heating element can also be heated when the control has been set to summer mode and only cold water is flowing through the heat exchanger.