



# Simple – Made in Germany



Heat Recovery without Ducts

# For New Buildings and Redevelopment Projects

PushPull is the new decentralised ventilation unit featuring heat recovery and sound-insulation characteristics for new buildings and redevelopment projects.

The ventilation unit was designed specifically to meet the **needs** of building contractors and the housing industry both for new buildings as well as redevelopment projects. To combat structural issues such as mould, controlled room ventilation is used here as a solution that also offers comfort features.

To balance the volumes of fresh and exhaust air, at least two or an even number of PushPull units should be used. **Up to four units can be operated using a single control unit.** 

Ventilation operates according to the principle whereby two PushPull units draw in and extract air in turn. In exhaust air operation, the PushPull ventilation unit conveys the used and moist air, e.g. from the living room, out of the building. **The thermal energy of the exhaust air is stored in the heat exchanger.**  The corresponding ventilation unit operates in supply air mode and brings fresh, filtered and preheated air into the room at the same time. After 70 seconds, the ventilation units swap function, i.e. the **air flow is now reversed**. The corresponding ventilation unit can also be located in the neighbouring room. A door ventilation grille MLK then permits the necessary circulation of air in both rooms. **Installation is extremely straightforward and does not involve routing any pipes.** All that's needed is a 220 mm core hole in the wall.

Thanks to its air flow rate of up to 55 m<sup>3</sup>/h, the ventilation system can also be used in larger rooms.

# For significantly more fresh and clean air

**Two G3 filters provide extremely fresh air.** The M6 fine-particulate filter can be used as an option. Double-filtering keeps the heat exchanger and fan clean for significantly longer. The upward air outlet provides improved air circulation and reduces the occurrence of draughts. The **electric shutter** prevents cold air from entering, even when the unit is switched off. The optimally shaped stainless steel external cover keeps condensation safely away from the wall.

## Eco-friendly and quiet

MAICO products deliver convincing performance time and again thanks to their exceptional efficiency and extremely low noise emissions. This makes them ideal for living rooms and bedrooms. PushPull is energy efficient, contributes actively to environmental protection and is easy on the pocket. The innovative ceramic heat exchanger can recover up to 90% of the energy in the room.

### Excellent preventative health care

In addition to its high energy efficiency, the unit offers optimum preventative health care by countering the formation of mould, reducing indoor air pollutants as well as pollen, dust, insect and noise pollution. PushPull is equipped with two coarse particulate filters. An optional fine-particulate filter (M6) can also be used. The filters are generally replaced once annually. The control panel indicates when filter replacement is due. To replace the filters, simply open the front cover and pull out the slide-in unit.

The filters can then easily be removed.

### Comprehensive functionality guarantees convenient ventilation

PushPull can be operated from the external controller. Three operating modes and five ventilation levels are specified. *The individual operating modes are:* 

- The ventilation levels are set manually. The units are in heat recovery mode.
- Cross-ventilation with pre-set ventilation levels. Associated units (always two) operate in one direction only, without heat recovery.
- The dehumidification program removes moisture from the room as efficiently as possible.





# At a Glance

# PushPull MAICOI

- ✓ Effective ceramic thermal store up to 90 % efficiency
- ✓ Volumetric flow up to 55 m³/h
- Filter G3 on the outside and inside
- Circular cross-section, wall core hole 220 mm
- EC motor technology
- Installed in outside walls or in window soffits
- Elegant, simple design
- ✓ For living rooms, offices, etc.
- New buildings and redevelopment projects
- 100 % requirements-based control



PushPull is available in two variants



**PP 60 KA-SR installation in outside walls** Exterior cover (polished stainless steel)



*PP 60 KL-SR for installation in soffits* Soffit duct (aluminium panel, polished stainless steel grille)

# PushPull Technical data MAICO

# Unit design

| Final assembly kit         | PP 60 K-SE  | Article number   | 0095.0204   |   |
|----------------------------|-------------|--|---|---|
|                            |             | Power consumption<br>Filter class<br>Housing material<br>Colour<br>Sound pressure level<br>Thermal<br>recovery level | 2/2.4/2.9/3.7/4.8 W<br>2 x G3 (M6 optional)<br>Plastic EPP<br>traffic white, similar to RAL 9016<br>15/37 dB(A)<br>90 % |   |
| Shell kit                  | PP 60 KA-SR | Article number   | 0095.0205   | 35  |
| Outside wall               |             | Air conduction   | Direct via<br>outside wall  |   |
|                            |             | Flow rate<br>Nominal size<br>Core hole   | 17/22/30/45/55 m³/h<br>200 mm<br>220 mm   | ×   |
| Shell kit<br>Window soffit | PP 60 KL-SR | Article number   | 0095.0206   |   |
|                            |             | Air conduction   | Deflection via<br>window soffit   |   |
|                            |             | Flow rate  | 17/20/28/43/50 m <sup>3</sup> /h  |   |
|                            |             | Core hole  | 220 mm  | ( <u>670</u> ( <u>10</u> ) (270 - 490)    |
| Room air                   | RLS PP-K    | Article number   | 0157.0199   |   |
|                            |             | Short description  | <ul> <li>3 operating modes</li> <li>5 ventilation levels</li> <li>Maximum of 4 PushPull units addressable</li> </ul>    |   |
| Humidity sensor            | РРН-К       | Article number   | 0157.0200   |   |
|                            |             | Short description  | <ul> <li>Required for the "dehumidifying</li> <li>One humidity sensor is required</li> </ul>                            | " operating mode<br>for each control unit |

# Common characteristics

- ✓ Complete fan unit with ceramic heat exchanger
- Internal cover and two integrated G3 filters (M6 optional)
- External cover made of stainless steel (PushPull 60 KA-SR)
- Soffit element made of stainless steel/aluminium (PushPull 60 KL-SR)
- ✓ Slide-in unit made completely of soundproofing EPP
- PVC wall installation sleeve with two plaster protective covers and eight wedges for aligning the sleeve in the wall core hole
   Accessories required:
  - Room air control RLS PP-K
  - Optional: Humidity sensor PPH-K (one PPH-K for each unit)



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