

## Mikrofill 3 PRO

### Technical submittal

72846

Permanent filling device for primary heating and chilled water closed circuits in domestic and non-domestic premises. The mains and closed-circuit system pressures are continuously checked by two pressure sensors, and microprocessors monitor their differential. If mains pressure is adequate and system pressure drops, the two solenoid valves operate to allow water into the system via the transfer chamber. At all other times, the normally open solenoid valve drains the transfer chamber to waste via tundish (meeting the requirements of an air gap to drain), and allows air to be admitted via an automatic air vent to create an atmospheric disconnection across the transfer chamber. Stainless steel strainer on the inlet supply.

Mikrofill 3 PRO is the most advanced 'direct-type' pressurisation unit available, suitable for sealed system LTHW/CHW applications of any size. Unlike 'pump-type' pressurisation units, the Mikrofill 3 PRO is designed to be connected directly to a building's incoming mains/boosted water supply and fill a heating or chilled water system without the use of a pump. The Mikrofill 3 PRO is the most energy-efficient unit of its kind, consuming as little as 3 watts/hr in standby and 16 watts/hr in full operation.

#### Unit features

- WRAS-approved product - Fluid Risk Category 4 backflow prevention - WRAS approval number: 2307805
- The ability to fill directly from a mains/boosted water supply any LTHW or CHW system from empty
- Comprehensive electronic pressure management
- Full colour display with 3.95" TFT LCD screen
- Large memory capacity to record up to 100 parameter changes and fault conditions combined (all entries are time and date stamped)
- Flexible hoses on both inlet and system connections with integrated isolation valves
- Electrical protection class: IP55
- Smart fault logic (included in the Ai100 controller)
- Measured flow rate
- Manual solenoid operation
- MODBUS RTU
- User password protection
- Blown fuse protection
- Customisable service reminders (can be disabled)



- 4x customisable volt-free changeover contacts
- Dry weight (excluding hoses): 5.3 kg
- Colour: Sky blue (RAL 5015)

#### Operating (environmental) conditions

Max inlet pressure	9.0 bar
Min inlet pressure	1.1 bar
Max delivery pressure	8.7 bar
Max design pressure	9.0 bar
Max flow rate	12 l/min

#### Electrical

Supply voltage	230 V/1 ph/50 Hz
Electrical current	Full load: 1 A Start: 1 A Fuse rating: 3 A
Max load BMS contacts	5 A

#### Temperatures

Ambient temperature range	5 - 45°C
Inlet water temperature range	5 - 23°C
System water temperature range	5 - 85°C

## Dimensions

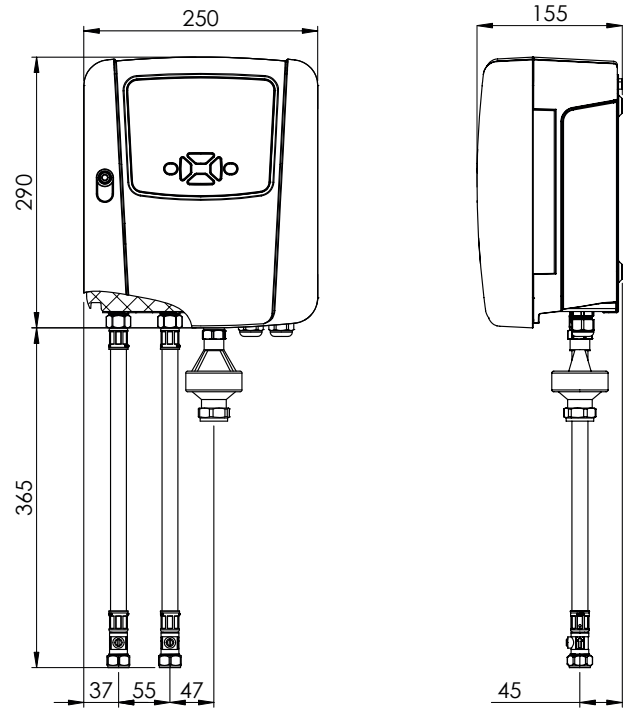
Height (to bottom of connections)	290 mm
Height (to bottom of hoses)	655 mm
Height (to bottom of tundish)	386 mm
Width	250 mm
Depth	155 mm

## Installation and connections

Inlet	15 mm
Outlet	15 mm
Drain	22 mm compression
Installation clearance (left)	100 mm
Installation clearance (right)	170 mm
Installation clearance (top)	100 mm
Installation clearance (from front face with door closed)	750 mm

## Mikrofill 3 PRO dimensions

All dimensions in mm.



## Mikrofill 3 PRO typical schematic

