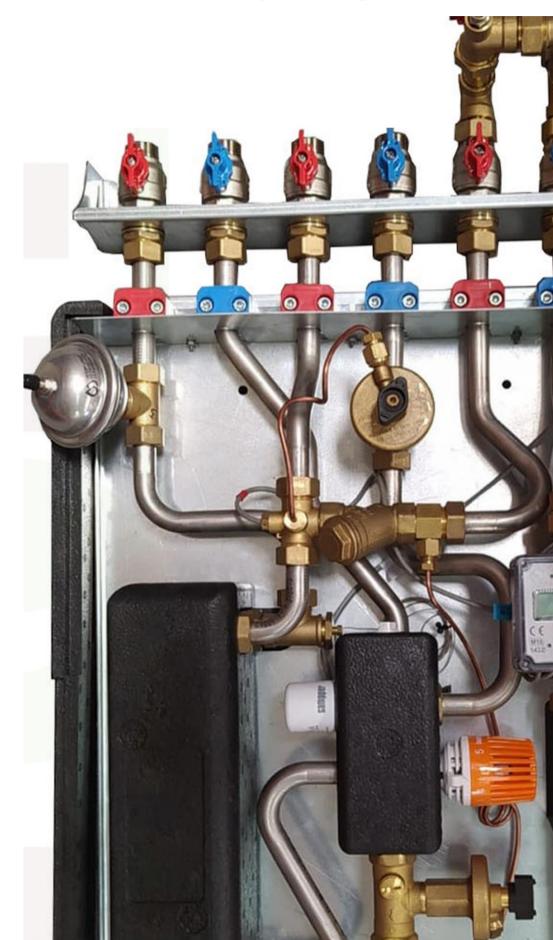


METRO

DIRECT HEAT INTERFACE UNIT





Direct Heat interface unit

Introduction

The YGHP METRO range of direct heat interface units can deliver both instantaneous domestic hot water and heating demand in centralised plant installations. In a direct heat interface, there is no hydraulic separation between the secondary heating circuit and the primary circuit meaning space heating is delivered directly from the primary.

Design

Using a single SWEP plate heat exchanger, the YGHP METRO direct HIU delivers both instantaneous domestic hot water and space heating to individual dwellings.

The space heating is connected directly to the primary heat source circuit, negating the need for an additional plate heat exchanger, normally used in an indirect HIU.

Space heating flow temperatures are set using a mechanical thermostat to suit the particulars of any given installation. Two thermostats, with different control ranges, are available, ensuring the unit is suitable for both radiators and UFH.

An AFRISO electronically controlled actuator dictates flow to the space heating. In combination with a room thermostat, the YGHP METRO ensures comfort and stability of temperature for end users.

Installing engineers can set the flow temperature of the DHW to desired levels. This is controlled by a mechanical thermostat sitting within the plate heat exchanger, enabling the YGHP METRO to deliver DHW demand in industry leading times.

In addition to this, the DHW thermostat also boasts an anti-tamper function to help minimise the risk of scalding to end users.

There are also a variety of optional accessories offered including a flushing by-pass valve and a pre-payment valve for use with a number of different billing systems.

First fix kits are also available, giving the benefit of being able to flush and commission the primary circuit before the unit arrives on site.

Every YGHP METRO HIU is supplied with an EPP cover, maximising heat retention and helping maintain system performance.



Features & Benefits

- · Robust, durable, mechanical design
- · Front facing components for ease of maintenance
- · First fix kits available for ease of install
- · DHW demands up to 120kW
- · DHW response time of three seconds
- · Space heating demands up to 30kW
- · Bespoke product development service
- · Ideal for use with pre-fabricated utility cupboards
- · Indemnified specification design support
- · Pre-payment valve and heat meter options available
- · WRAS approved & CE marked component parts
- SWEP plate heat exchanger
- · CIMM water hammer expansion vessel
- · AFRISO electronic actuator
- · AISI 316L stainless steel pipework



Technical Specification:

Heating

Radiators 40-90°C
UFH 20-50°C
Secondary circuit max. pressure 10 Bar
Secondary circuit max. operating pressure 2.5 Bar
Max. pressure loss in primary 40 kPa
Max. pressure loss in secondary 40 kPa
Pump Wilo Para 15/7

Safety relief valve setting 3 Bar
Expansion vessel 8 Litres
Heating control circuit (room stat) 240 V

Domestic Hot Water - DHW

Set point 20-70°C

Max. pressure 16 Bar

Max. operating pressure 4 Bar

DHW flow rate 12/ 18 / 23 l/ min DHW PHE capacity 33 - 120 kW

Primary Side

Max. working pressure16 BarMax. working temperature90°CFluid mediumWaterDPCV factory setting40 kPaMaximum differential pressure150 kPa

External Connections

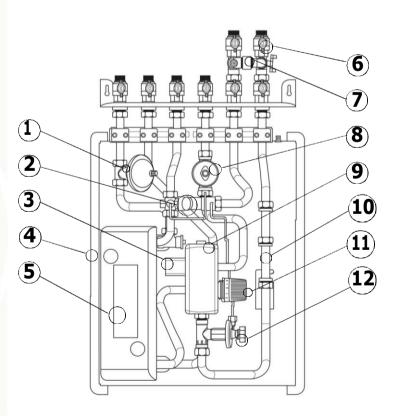
Primary flow G 3/4" BSP
Primary return G 3/4" BSP
Secondary flow G 3/4" BSP
Secondary return G 3/4" BSP
Cold water inlet G 3/4" BSP
DHW outlet G 3/4" BSP

Electrical Connections

 $\begin{array}{lll} \mbox{Main voltage} & 230\mbox{V AC} \pm 10\% \\ \mbox{Power frequency} & 50\mbox{-}60\mbox{ Hz} \\ \mbox{Operating voltage} & 5\mbox{V AC} \pm 10\% \\ \mbox{Input} & 0.15\mbox{ } 3\mbox{W} \\ \mbox{Protection} & \mbox{IP44} \end{array}$

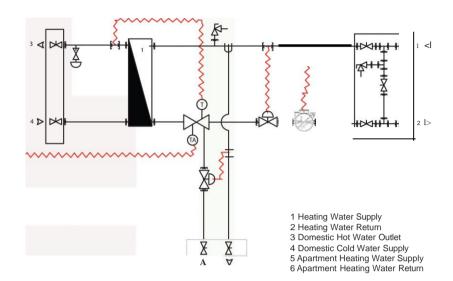
Component Parts

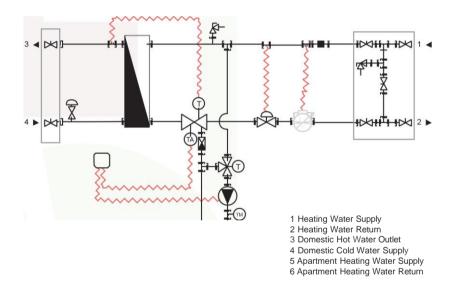
- 1. CIMM Water Hammer Shock Arrestor Vessel
- 2. Y-Pattern Strainer
- 3. AFRISO Electronic Actuator Head
- 4. Plate Heat Exchanger Cover (EPP)
- 5. SWEP Plate Heat Exchanger
- 6. Ball Valves
- 7. Flushing By-Pass Valve
- 8. BALLOREX Differential Pressure Control Valve
- 9. Manual Air Vent
- 10. Heat Meter Stool Piece
- 11. DHW Thermostatic Control Valve
- 12. BALLOREX Differential Pressure Control Valve

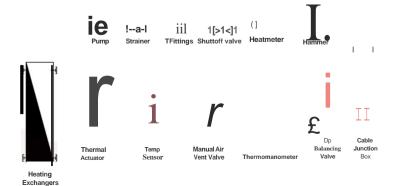














HYDRAULIC CONNECTIONS

Capacity One - DHW output up to 40kW

Capacity Two - DHW output up to 60kW

Capacity Three - DHW output up to 120kW

