Wilson Energy Ltd

Today's energy partner for tomorrow's world

WilSon W2

Single Plate HIU



Data Sheet

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ADVANTAGES

- Instantaneous domestic hot water production
- Domestic hot water priority operation
- Low primary return temperature
- Self-acting hydraulic and thermostatic control
- Reduced scaling risk

Compact and connection-ready, this integrated heat interface unit provides direct space heating and instantaneous domestic hot water production from a single compact solution.

DESCRIPTION

The compact Single Plate heat interface unit is designed for supplying domestic hot water and space heating in residential applications. The unit operates with a self-acting hydraulic and thermostatic control system and provides instantaneous domestic hot water production through a stainless steel plate heat exchanger. With various hydraulic components integrated into a single compact assembly, the unit ensures reliable operation, low primary return temperatures and efficient energy distribution.

INSTALLATION POSITION

This heat interface unit is suitable for surface mounting and can be installed in utility cupboards or any other suitable indoor location.

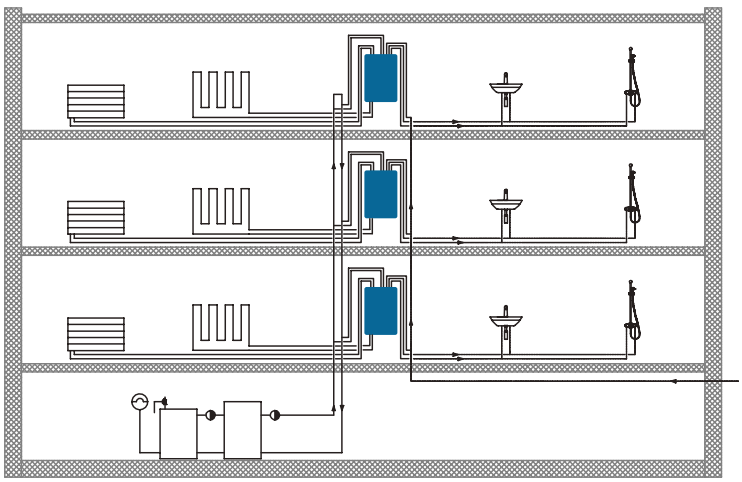
Ideally, the unit should be positioned close to the domestic hot water draw-off points in order to minimise distribution losses. The unit shall be installed vertically on a suitable wall and sufficient space shall be provided around the unit for commissioning, inspection and maintenance.

OPERATING PRINCIPLE

The Single Plate heat interface unit operates according to the instantaneous water heating principle. Primary energy from the heating network is transferred through the stainless steel plate heat exchanger to produce domestic hot water on demand.

During domestic hot water operation, the hydraulic control assembly automatically gives priority to domestic hot water production. The domestic hot water outlet temperature is controlled by a thermostatic controller valve, while space heating is controlled separately by an actuator. The integrated differential pressure control valve maintains stable primary circuit conditions, ensuring reliable and efficient operation under varying demands.

SYSTEM/BASIC DIAGRAM



BUILDING CATEGORIES

- Detached houses
- Apartment buildings
- Student accommodation
- Care Homes
- Extra Care facilities

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SPECIFICATION

General

- Overall dimensions(with cabinet): W 556 mm × H 663 mm × D 210 mm
- Weight without water: appr. 25 kg
- Casing Material Metal case with Insulation

Primary Supply

- Operating temperature $T_{O\,max}$: 85 °C
- Pressure class: PN16
- DPCV:Max 450 kPa ; Max 2000 l/h
- Connection:Female - 3/4''
- Heatmeter M Bus
- Return temperature limit range:35- 65°C

Secondary Heating

- Secondary heating limit range : 80 °C
- Pressure class : PN 10

Domestic hot / cold water

- Operating temperature $T_{O\,max}$: 60°C
- Pressure class : PN 10

Material

- Heat exchanger: copper brazed
- Cover: EPP insulation
- Pipes: DN 15 , stainless steel 1.4404
- Valve body: brass
- Seals: KLINGERSIL C4324

Output data

- See design diagram

Flow media

- Heating water (VDI 2035; SWKI BT 10201; ÖNORM H 5195–1)
- Cold water to DIN 1988200 and DIN EN 8065

APPROVALS / CERTIFICATES

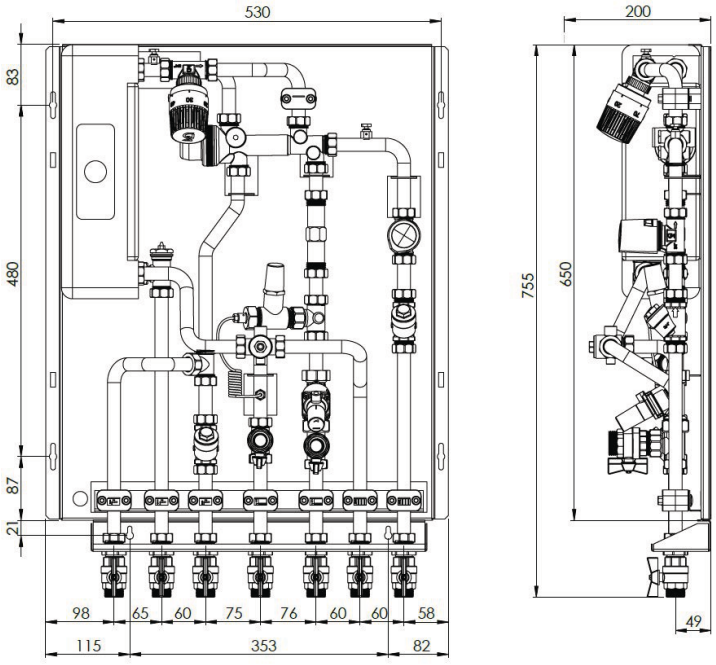
- Components in contact with drinking water comply with UBA Evaluation Criteria 26/03/2018 and Directive (EU) 2015/1535

TYPE OVERVIEW

WilSon W2 Single Plate HIU

Part no.	DN	Rp	Number of plates for DHW
W2-D24	15	¾"	24
W2-D30	15	¾"	30
W2-D40	15	¾"	40
W2-D54	15	¾"	54
W2-D70	15	¾"	70

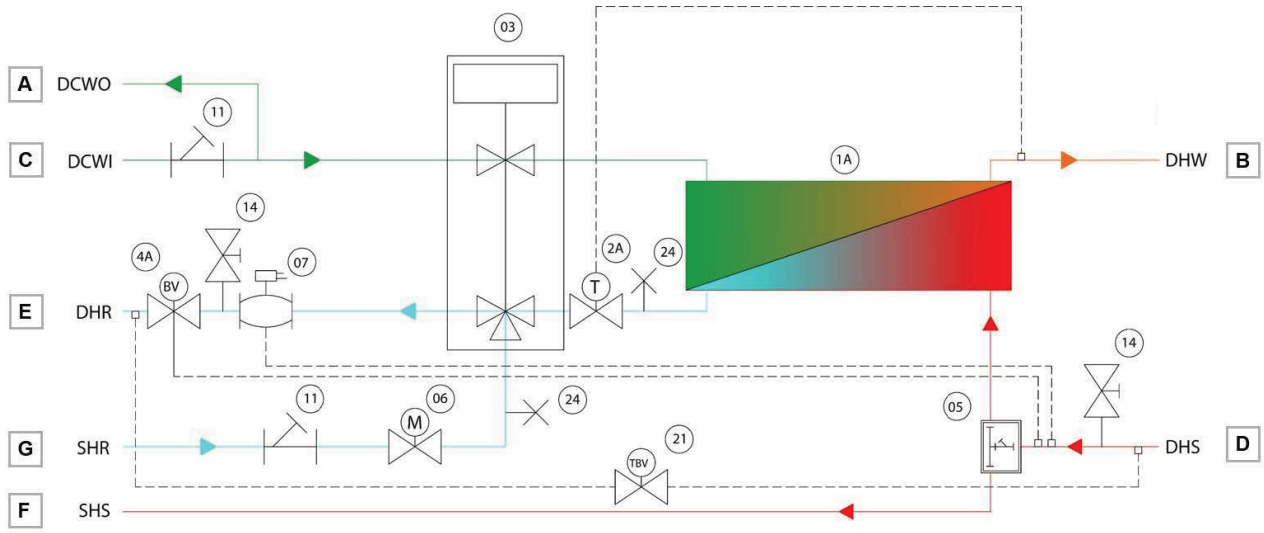
***Optional plate heat exchanger configurations are available for low primary supply temperature applications (40, 54 or 70 plates).**



1 Domestic Cold Water Outlet
2 Domestic Hot Water
3 Domestic Cold Water Inlet
4 District Heating Supply
5 District Heating Return
6 Space Heating Supply
7 Space Heating Return

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FLOW DIAGRAM



Domestic hot / cold water circuit

- **A** Domestic Cold Water Outlet
- **B** Domestic Hot Water
- **C** Domestic Cold Water Inlet

Primary circuit

- **D** District Heating Supply
- **E** District Heating Return

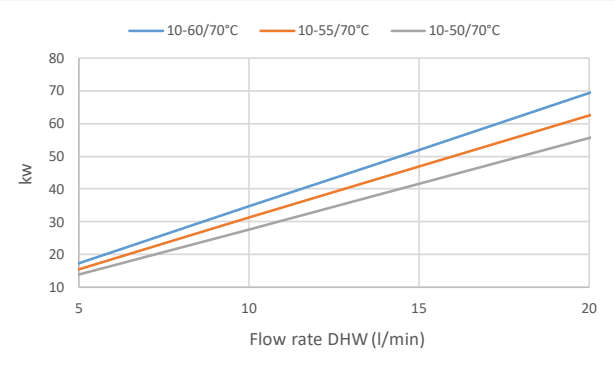
Heating circuit

- **F** Space Heating Supply
- **G** Space Heating Return

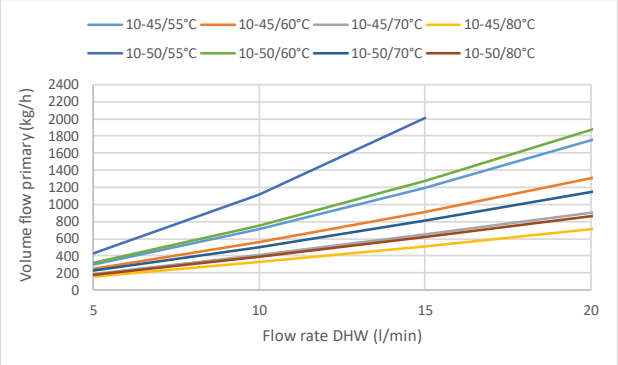
- **1** Heat Exchanger
- **2** Thermostatic controller
- **3** Hydraulic Regulator
- **4** Differential pressure control valve
- **5** 3 Way Strainer
- **6** Actuator
- **7** Heat meter
- **11** Strainer
- **14** Fill and Drain valve
- **21** Thermal by-pass valve
- **24** Manual Air Vent

FLOW AND PRESSURE LOSS DIAGRAMS
PLATE HEAT EXCHANGER WITH 24 PLATES (DOMESTIC HOT WATER)

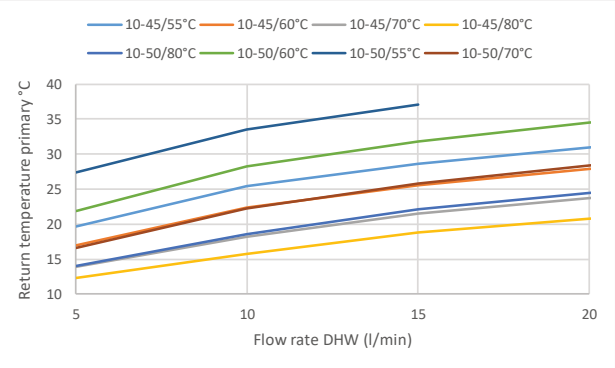
Performance



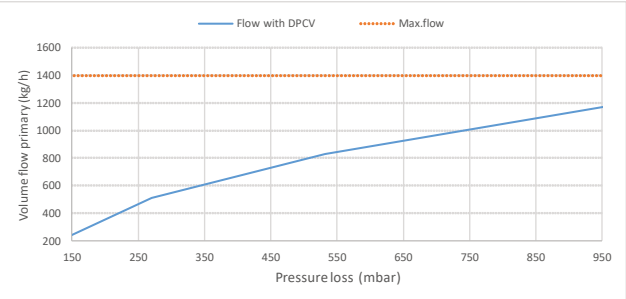
Volume flow DHM primary / performance



Return temperature



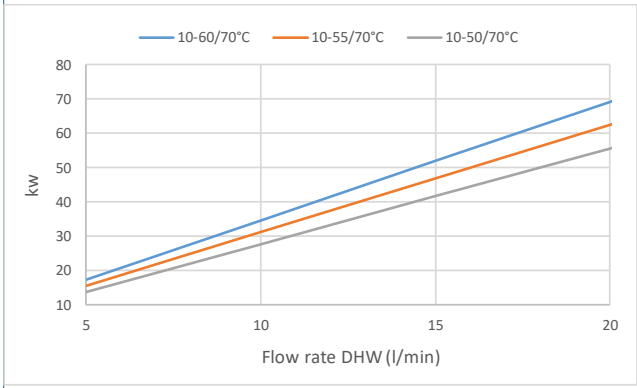
Pressure loss primary with heatmeter



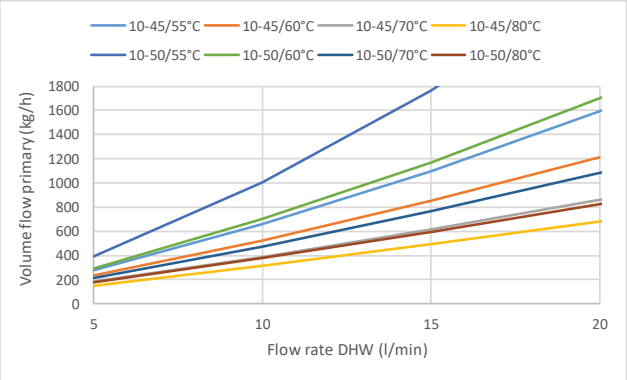
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FLOW AND PRESSURE LOSS DIAGRAMS
PLATE HEAT EXCHANGER WITH 30 PLATES (DOMESTIC HOT WATER)

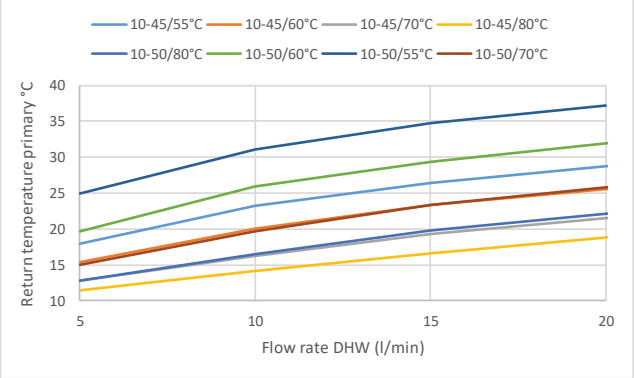
Performance



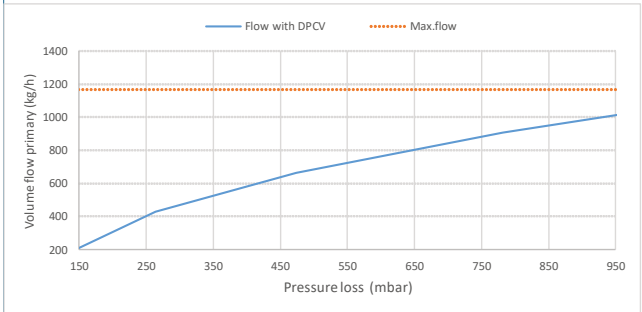
Volume flow DHM primary / performance



Return temperature

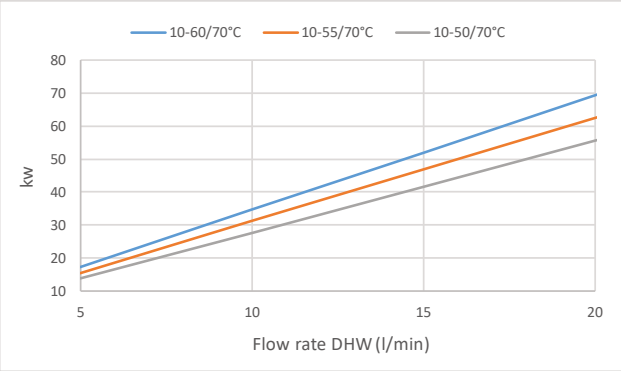


Pressure loss primary with heatmeter

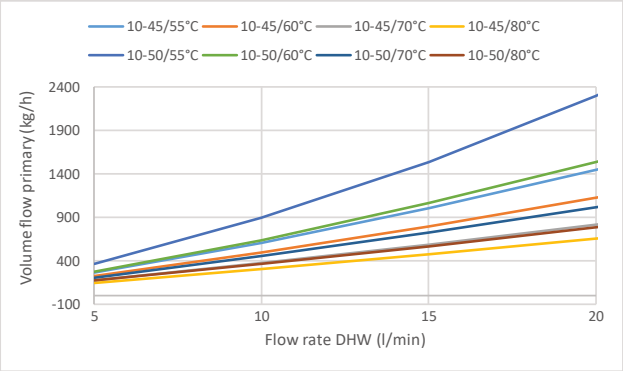


FLOW AND PRESSURE LOSS DIAGRAMS
PLATE HEAT EXCHANGER WITH 40 PLATES (DOMESTIC HOT WATER)

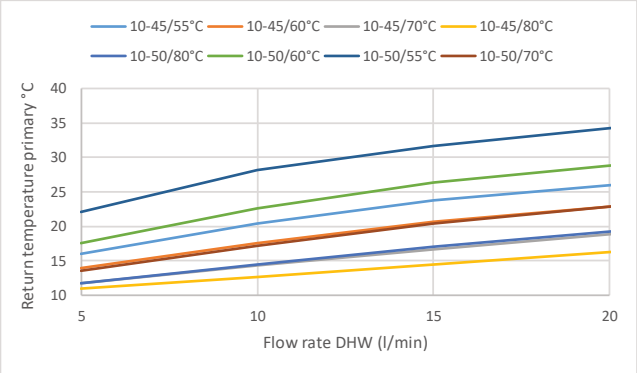
Performance



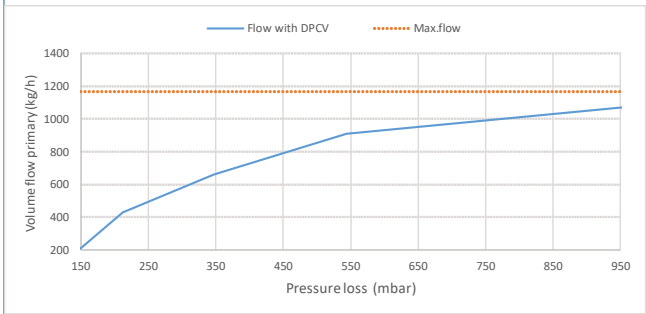
Volume flow DHM primary / performance



Return temperature



Pressure loss primary with heatmeter



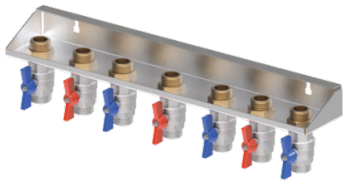
ACCESSORIES

Pipe Fixing Kit



W2-15510855 | Pipe fixing Kit

First Fix Rail



W2-00303 | First fix rail

ACCESSORIES

Part no.	Description
W2-15510855	Pipe fixing Kit
W2-15510856	Pipe connection set

OPTIONS

Part no.	Description
W2-0010007	Heat meter
W2-45335613	Re-circulation Kit
W2-238901	Heat exchanger E8LASH-40 WRAS
W2-238902	Heat exchanger E8LASH-54 WRAS
W2-238906	Heat exchanger E8LASH-70 WRAS

Subject to modification. 07/2026