

## POD

i405



Internal insulation



Simple user interface



First Fix Kit  
(available separately)



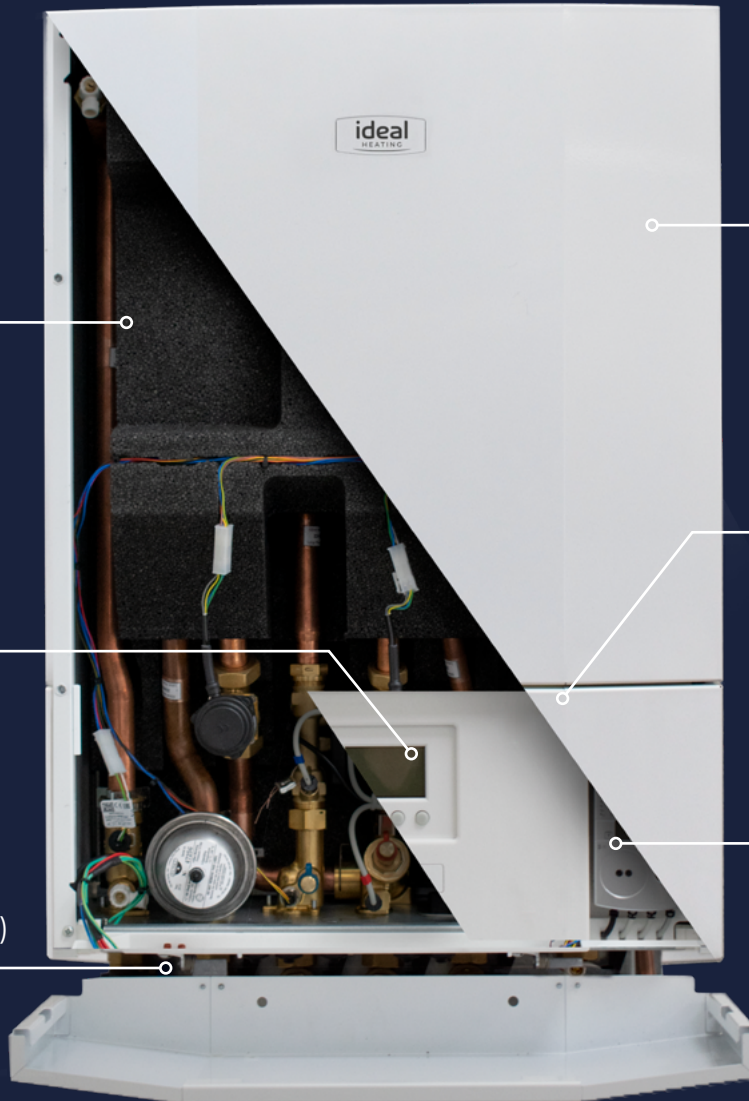
Removable Front Cover



Drop-down front panel



Heat Metering  
(optional)



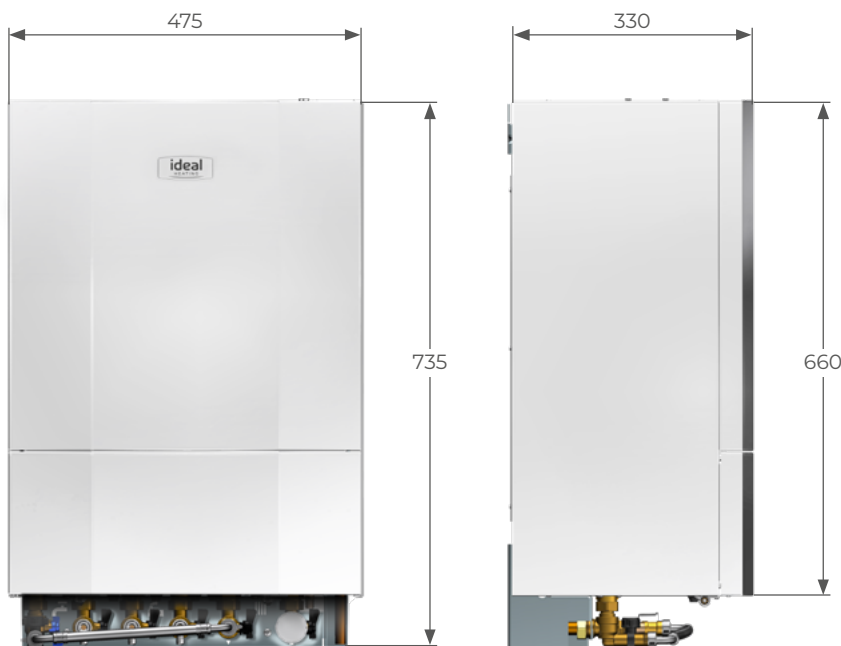
### INDIRECT HEAT INTERFACE UNIT

Available in outputs of 30, 40, 50, 60 and 70kW, the indirect Pod HIU is designed to meet all the requirements of the heat network installer, operator and end user. Also available as direct appliances.

# Features & specification

- 2 year warranty\*
- Robust steel chassis
- Internal insulation
- Copper pipework
- DZR Brass components
- Stainless steel brazed plate heat exchanger
- Advanced control features, simple to use interface
- Compact unit with minimal installation clearances
- Appliance fully serviceable from the front
- WRAS Approved Product

## DIMENSIONS & CLEARANCES



All dimensions in mm

The following minimum clearances must be maintained for operation and servicing:

- ↑ **TOP: 100mm, for front cover removal and ventilation**
- ↔ **SIDES: 20mm**
- **FRONT: 25mm min, 450mm min recommended for servicing**
- ↓ **BOTTOM: 80mm min**

\*2 year warranty subject to Terms and Conditions. 2 years parts and labour warranty available subject to being commissioned by Ideal Heating or an authorised representative. Terms & conditions available on request.

## HIU ASSEMBLY



POD HEAT INTERFACE UNIT

### KEY

1. Steel chassis
2. DHW plate heat exchanger
3. Copper pipework
4. Quick release connections
5. Heat meter (optional)
6. DHW PICV
7. DHW water hammer arrestor
8. DHW flow limiter
9. Drain / vent points
10. First fix kit with temporary filling loop
11. Reversible service connections
12. Primary inlet strainer
13. CH PICV
14. Internal clamshell insulation
15. CH circulation pump
16. CH expansion vessel
17. CH plate heat exchanger

## POD i405 HIU

# TECHNICAL SPECIFICATIONS

### GENERAL

Dry Weight	kg	29.4
HIU Dimensions (excluding first fix)	mm	660 (H) x 475 (W) x 330 (D)
Boiler Clearances	mm	Front: 25 (min) Side: 20 (min) Top: 100 (min) Below: 80 (min)
Service pipework connection size	mm	22
Pressure relief discharge pipe size	mm	15

### PRIMARY

Maximum working pressure	bar	16
Maximum temperature	°C	85
Max. flow rate - DHW operation	l/h	1330
	l/sec	0.37
Max. flow rate - CH operation	l/h	1330
	l/sec	0.37
Minimum differential pressure	kPa	50
Maximum differential pressure	kPa	600
Nominal temperatures - DHW operation	°C	70 / 25
Nominal flow rate - DHW	l/sec	0.21
Nominal temperatures - CH operation	°C	70 / 40
Nominal flow rate - CH Radiator	l/sec	0.04
Nominal flow rate - CH Underfloor	l/sec	0.04

### SECONDARY DHW

Maximum working pressure	bar	10
Maximum temperature	°C	60
Nominal heat input	kW	40
Nominal temperatures - DHW	°C	10 / 55
Nominal flow rate - DHW	l/sec	0.21
	l/min	12.6

### SECONDARY CH

Maximum working pressure	bar	2.5
Maximum temperature	°C	80
Nominal heat input	kW	5
Available pump head	kPA	35
Nominal temperatures - Radiator	°C	55/35
Nominal flow rate - Radiator	l/sec	0.06
Nominal temperatures - Underfloor	°C	45 / 35
Nominal flow rate - Underfloor	l/sec	0.12

### ELECTRICAL

Electrical Supply		230V - 50Hz
Power Consumption	watt	53.1
Modulating Input		OpenTherm
Credit control input	V	230
Fuse rating	amp	3

### STANDARD FEATURES

Primary PICV's with flow limitation	Yes
Primary strainer	Yes
Primary pressure test points	Yes
DHW flow limitation	Yes
DHW water hammer arrestor	Yes
CH high efficiency circulator	Yes
Temporary filling loop	Yes

### APPROVALS

WRAS Approved Product	Yes
UKCA / CE marked	Yes

### OPTIONAL EXTRAS

Hardwired Mbus heat meter	Yes
Wireless OMS Mbus heat meter	Yes
Wireless Lorawan heat meter	Yes
Temporary flushing loop	Yes
Permanent flushing bypass valve	Yes
Ideal system filter (CH)	Yes
Outside stat kit	Yes
Programmable room stat	Yes
Credit control valve kit	Yes

All figures are based on nominal operating conditions. Please refer to installation manual for charts of expected/tested operational parameters for other conditions. Please note that the above information is correct at time of publication. Ideal Heating has a policy of continuous development and therefore reserves the right to alter product specifications or any other details without prior notification.

# POD i405 HIU

## SUGGESTED ENGINEERING SPECIFICATION

The Suggested Engineering Specification is wording designed for specifiers to copy and paste into their specifications to ensure inclusion of Ideal Heating heat interface units.

### OVERVIEW

The heat interface units must be fully automatically controlled, wall mounted, efficient appliances suitable for connection to a fully pumped pressurised heat network.

### CONTROLS

The heat interface units should have connectivity for common residential controls providing switched live or OpenTherm signals to control heating demands.

Additional controls provided by the heat interface unit shall include:

Weather compensated heating flow temperature (using optional outside sensor), switchable DHW pre-heat, modulated CH pump, valve and pump anti-seize protection, anti-legionella (for connected cylinders), primary return temperature limitation, credit control function, slab warm-up function, frost protection, commissioning function (PICV valves open).

### HYDRAULIC

The heat interface unit primary circuit connecting directly to a fully pumped pressurised heat network must have a pressure capability of PN16.

The heat interface unit circuit connecting to a potable cold-water supply shall provide instantaneous domestic hot water and must have a pressure capability of PN10.

The heat interface unit circuit connecting to a wet space heating system must be capable of a maximum working pressure of 2.5 bar.

All hydraulic connections shall be located on the bottom of the appliance. The hydraulic connections on the appliance shall have the flexibility to allow service connections to be made on to pipe running from above or below the appliance, or a mixture of both.

The heat interface unit shall include pressure independent control valves on the primary circuits to regulate flow with a maximum primary differential of 600kPa. It shall be possible to mechanically adjust the valves to limit the maximum primary flow rate.

### FIRST FIX KIT

A first fix kit shall be available for the heat interface unit to allow connection and isolation of all the hydraulic services before the appliance is installed. There should be the option to install a temporary loop on the first fix kit to allow primary flushing activity to be concluded without the need for a permanently installed flushing bypass valve.

### DIMENSIONS

The heat interface unit should have a universal compact width, height and depth across the range requiring a low volume area for installation and a maximum wall area of 0.364m<sup>2</sup> including top, bottom and side clearances.

### SPECIFICATION

The Indirect heat interface unit shall provide a nominal output of 30 - 70kW for domestic hot water based on primary system temperatures of 70/25°C providing instantaneous domestic hot water 10/55°C.

The heat interface unit shall provide a nominal output of 5kW for wet space heating systems based on primary system temperatures of 70/40°C and secondary temperatures of 55/35°C for radiators or 45/35°C for UFH.

The heat interface unit shall operate when provided with a primary differential of at least 50kPa between the primary flow and return.

The heat interface unit shall operate with a minimum mains cold water pressure of 0.5 bar.

The heat interface shall provide a minimum available pump head of 35kPa external to the appliance to circulate secondary space heating systems.

All internal pipework shall be copper and main components shall be DZR brass or stainless steel.

### APPROVALS

The heat interface unit must be a WRAS Approved Product or compliant with Regulation 4 of the Water Supply (Water Fittings) Regulations 1999.

### SOURCING

The heat interface unit must be manufactured or finally assembled in the United Kingdom.

### WARRANTY

The heat interface unit must be available with a minimum 2 year warranty.

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