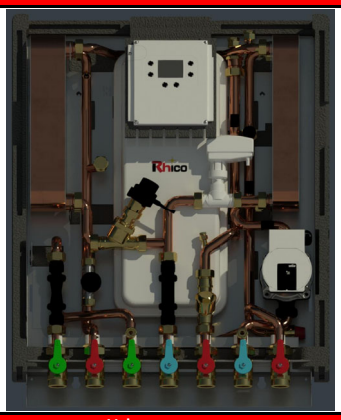
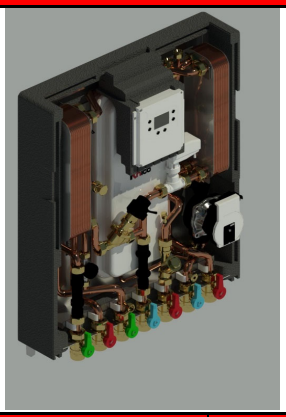
# TI45UL - BIM Properties





| Parameter | Value | Formula | Lock |
|---|---|---|---|
| **Constraints** | | | |
| Default Elevation | 1200 | | |
| Insulation Jacket Visibility | Off/On | | |
| Screen Cover Visibility | Off/On | | |
| Internal Components Visibility | Off/On | | |
| Flow Meter Visibility | Off/On | | |
| Pump Visibility | Off/On | | |
| First Fix Bracket Visibility | Off/On | | |
| **Materials and Finishes** | | | |
| Main Component Material | UNI EN 12165 CW617N | | |
| Insulation Cover Material | EPP 0.037 W/m*K | | |
| Plate Heat Exchanger Material | Brazed Stainless Steel | | |
| **Mechanical** | | | |
| Loss Method | | | |
| K Coeffcient Table | | | |
| K Coeffcient | | | |
| **IFC Parameters** | | | |
| IfcExportAs | N/A | | |
| IfcExportType | N/A | | |
| NominalDepth | 160 | | |
| NominalHeight | 800 | | |
| NominalLength | 570 | | |
| NominalWidth | 570 | | |
| **Model Properties** | | | |
| _Author | CH | | |
| _AuthorizedBy | Rhico District Heating Systems | | |
| _BSBibleVersion | 16 | | |
| _BimSpecGuid | 0 | | |
| _CreatedBy | Rhico District Heating Systems | | |
| _CurrentRevision | 1 | | |
| _DistributedBy | Rhico | | |
| **General** | | | |
| BIMObjectName | Rhico_MechanicalEquiptment_TI45UL | | |
| NBSDescription | Heat Interface Unit | | |
| NBSNote | | | |
| NBSObjectName | Rhico Products - Heat Interface Unit | | |
| NBSOfficeMasterTag | N/A | | |
| NBSReference | N/A | | |
| **Data** | | | |
| Application | Heat Interface Unit | | |
| Approval | | | |
| EANCode | | | |
| GPIDCode | | | |
| SpareParts | | | |
| General Description | The TI45 Ultra Lean is an electronic Heat Interface Unit for heating and hot water applications. Two plate heat exchangers within the module allow for complete separation from the primary circuit or central plant system making the TI45 Ultra Lean ideally suited to apartments, terraced houses, semi detached houses etc. where centralised plant or district heating systems are employed. | | |
| Weight (Including Interception Jig) | 25kg | | |
| Hydraulic Connections (With Interception Jig) | M-F 1" - 3/4" | | |
| Mounting | Wall Hung or Built In | | |
| Compliance | EMC 2004/1108/CE LVD 2006/95/CE | | |

| | | | |
|---|---|---|---|
| Domestic Hot Water | The production of instantaneous DHW is via a stainless steel plate heat exchanger. The regulation of DHW temperature is electronic via a pressure independent control valve that also allows balancing of the HIUs within the system. | | |
| Heating | The heating is supplied via stainless steel plate heat exchanger. The regulation is made by a two-way valve (primary circuit) and the modulation of the secondary pump. The operation of the two-way valve maintains the secondary flow temperature at the set value. The speed of the secondary heating pump controls the desired thermal operation (between inlet and outlet of the space heating circuit). | | |
| Equipped | The module is equipped with all the necessary safety components to ensure a correct functionality: 7 litre expansion tank for the secondary circuit, Secondary circuit safety valve, Primary / secondary air-vent valves, Check valves, Input for safety thermostat (low temperature systems), Filling system from DCW, Strainer (primary side). The module can be equipped with anti-water hammer kit if required. | | |
| Sensors | The variables monitored are as follows: Primary circuit flow temperature (°C), DHW production temperature (°C), SPACE HEATING flow temperature, SPACE HEATING return temperature, Portata RISC, Domestic water flow switch, Heating circuit pressure transducer, Primary circuit flow rate ( energy meter), PWM modulating status feedback (heating circuit pump), Stepper motor position feedback | | |
| Primary Circuit Maximum Pressure | 16Bar | | |
| Domestic Water Circuit Maximum Pressure | 10Bar | | |
| Heating Circuit Maximum Pressure | 3Bar | | |
| Primary Circuit Maximum Flow Rate | 1500 l/h | | |
| Necessary Primary Circuit Head | 12m H2O / Max 16m | | |
| Max Working Temperature | 85oC | | |
| Module Supply | 230V | | |
| Power Consumption | 70W | | |
| Stepper Motor Power Supply | 12V | | |
| Stepper Motor Running Time | 5 Seconds | | |
| Rotary Electric Actuator Power Supply | 230V | | |
| Rotary Electric Actuator Running Time | 24 Seconds | | |
| Rotary Electric Actuator Force | 120 Newtons | | |
| **Other** | | | |
| AccessibilityPerformance | N/A | | |
| AssetIdentifier (default) | Please record on commissioning | | |
| AssetType | Fixed | | |
| BarCode (default) | Please record on commissioning | | |
| ClassificationName | Uniclass2015 | | |
| ClassificationValue | Pr_75_51_17_78 | | |
| CodePerformance | N/A | | |
| Color | Red, White & Black | | |
| Constituents | N/A | | |
| CreatedBy | CH | | |
| CreatedOn | 08/02/2021 T10:00:00 | | |
| DocumentationCertificates | | | |
| DocumentationInstallationGuide | https://rhico.co.uk/rhico-brochures/TI45UL-Example-of-use.pdf | | |
| DocumentationLiterature | | | |
| DocumentationMaintenance | | | |
| DocumentationTechnical | https://rhico.co.uk/rhico-brochures/Rhico-TI45-UL-Brochure.pdf | | |
| DurationUnit | | | |
| ExpectedLife | | | |
| Features | | | |
| Finish | EPP Foam | | |
| Grade | | | |
| InstallationDate (default) | | | |
| ManufacturerName | Rhico District Heating Systems | | |
| Material | EPP Foam | | |
| ModelNumber | | | |
| ModelReference | | | |
| ProductionYear | As per serial information | | |
| ReferencedStandard | | | |
| SerialNumber (default) | Please record on commissioning | | |
| Shape | Cylindrical | | |
| Size | N/A | | |
| TypeName | | | |
| WarrantyDescription | | | |
| WarrantyDurationLabor | | | |
| WarrantyDurationParts | | | |
| WarrantyDurationUnit | | | |
| WarrantyGuarantorParts | | | |
| WarrantyStartDate (default) | Please record on commissioning | | |
| | | | |
| **Identity Data** | | | |
| Assembly Code | D20 | | |
| Cost | | | |
| Description | Rhico Products - TI45UL | | |
| Keynote | S | | |
| Manufacturer | Rhico District Heating Systems | | |
| Model | Rhico Products - TI45UL | | |
| Type Comments | Rhico Products - TI45UL | | |
| Type Image | | | |
| URL | https://www.rhico.co.uk/ | | |