



## Data sheet SIH 90TU

### High-temperature brine-to-water heat pump for indoor installation.

Installation location:

Max. flow temperature: 70 °C

Casing colour: White (similar to RAL 9003)

Heat pump for heating purposes with two performance levels for increased efficiency in partial load operation for indoor installation with integrated heat pump manager WPM Econ5Plus with standard display. Variable connection options for brine and heating connections on the back board of the casing. A sound-optimised metal casing and the integrated solid-borne sound insulation with free-swinging compressor base plate make direct connection with the heating system possible. Access for service work from the front, no minimum clearance required on the sides, accessible from underneath with a lift truck. High coefficient of performance through electronic expansion valve, COP booster and electronic pump control depending on the temperature spread in the brine and generator circuit. Sensor monitoring of the refrigeration circuit for a high degree of operational safety and integrated thermal energy metering (display of the calculated quantity of thermal energy for heating, domestic hot water and swimming pool water preparation). FWO function for more efficient domestic hot water preparation with increased domestic hot water temperatures and volumes of water to be drawn through optimised tank charging.

Universal design with two compressors for output regulation when operating at partial load, optional domestic hot water preparation and flexible expansion options for:

- Bivalent or bivalent-renewable operating mode
- Distribution systems with unmixed and mixed heating circuits
- Use of load-variable tariffs (SG Ready)

Soft starter, flow and return sensors for the brine and heating circuit integrated. Dirt trap for brine circuit and external sensor (standard NTC-2)in



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the scope of supply. Brine circulating pump 12 m delivery height at 11 m<sup>3</sup>/h, flange connection DN 65, installation length 340 mm; heat generator circuit pump 11.5 m delivery height at 6 m<sup>3</sup>/h, flange connection DN 50, installation length 280 mm. Heat pump white textured (similar to RAL 9003). Brine circuit manifold must be ordered separately.



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## Technical data

### Dimplex High-temperature brine-to-water heat pump for indoor installation. (Medium temperature)

|                                                                                                               |                          |
|---------------------------------------------------------------------------------------------------------------|--------------------------|
| Heat pump code                                                                                                | 4015                     |
| Max. flow temperature                                                                                         | 70 Grad                  |
| Lower operating limit heat source (heating operation) / Upper operating limit heat source (heating operation) | -5 Grad / 25 Grad        |
| Sound power level                                                                                             | 70 dB(A)                 |
| Refrigerant / Amount of refrigerant                                                                           | R134a / 24,5 kg          |
| Max. heating water flow rate / Pressure drop                                                                  | 15,4 m3 pro h / 14700 Pa |
| Heat source flow (min.)                                                                                       | 15,5 m3 pro h            |
| Width x Height x Depth **                                                                                     | 1350 x 1890 x 775 mm     |
| Weight                                                                                                        | 807 kg                   |
| Rated voltage                                                                                                 | 3/N/PE ~400 V, 50 Hz     |
| Starting current                                                                                              | 120 A                    |
| Fuse protection HP with separate infeed ***                                                                   | C100A                    |

\*Heat output and coefficient of performance (COP) in accordance with EN 14511 in conjunction with the controlled circulating pumps in the brine and heat generator circuit.

\*\*Please note that additional space is required for pipe connections, operation and maintenance.

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| Description                                                    | Order ref.   | Article number | Sample item | Item |
|----------------------------------------------------------------|--------------|----------------|-------------|------|
| <b>Heat pumps</b>                                              |              |                |             |      |
| Elasticated sound insulation underlay strips                   | SYL 250      | 352260         | 0           |      |
| DN 50 double-sphere rubber expansion joint                     | KOMP 50      | 362080         | 0           |      |
| DN 50 dirt trap                                                | SMF 50       | 362160         | 0           |      |
| Connecting flange for heating and brine circuits               | AF 50        | 351910         | 0           |      |
| <b>Hydraulic accessories</b>                                   |              |                |             |      |
| Universal buffer tank (500 l)                                  | PSW 500      | 339210         | 0           |      |
| Free-standing heating buffer tank 1000 litre                   | BTH 1000     | 382090         | 1           |      |
| Free-standing buffer tank 1000 l                               | PSW 1000     | 361640         | 1           |      |
| Immersion heater 4.5 kW; ~230 V                                | CTHK 630     | 363610         | 0           |      |
| Immersion heater 2.0 kW; ~230 V                                | CTHK 631     | 336180         | 0           |      |
| Immersion heater 2.9 kW; ~400 V                                | CTHK 632     | 335910         | 0           |      |
| Immersion heater 4.5 kW; ~400 V                                | CTHK 633     | 322140         | 0           |      |
| Immersion heater 6.0 kW; ~400 V                                | CTHK 634     | 322150         | 0           |      |
| Immersion heater 7.5 kW                                        | CTHK 635     | 322160         | 0           |      |
| Immersion heater 9.0 kW; ~400 V                                | CTHK 636     | 322170         | 0           |      |
| Domestic hot water module/unmixed heating circuit module       | WWM 50       | 364250         | 0           |      |
| Electronically controlled wet-running pump, self-regulating    | UPE 120-32K  | 374740         | 0           |      |
| High-efficiency wet-running pump PWM with coupling relay       | UPH 120-32PK | 375750         | 0           |      |
| Electronically controlled circulating pump with coupling relay | UPH 80-40F   | 371800         | 0           |      |



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| Electronically controlled circulating pump with coupling relay | UPH 120-50F   | 379020         | 0           |      |
| <b>Heating accessories</b>                                     |               |                |             |      |
| Heat pump heater heating/passive cooling, depth 16.5 cm        | WPHK 165080   | 381210         | 0           |      |
| Heat pump heater heating/passive cooling, depth 16.5 cm        | WPHK 1650100  | 381220         | 0           |      |
| Heat pump heater heating/passive cooling, depth 16.5 cm        | WPHK 1650140  | 381230         | 0           |      |
| Heat pump heater heating/passive cooling, depth 16.5 cm        | WPHK 1650180  | 381240         | 0           |      |
| Heat pump heater heating/passive cooling, depth 21.5 cm        | WPHK 2150100  | 381250         | 0           |      |
| Heat pump heater heating/passive cooling, depth 21.5 cm        | WPHK 2150140  | 381260         | 0           |      |
| Heat pump heater heating/passive cooling, depth 21.5 cm        | WPHK 2150180  | 381270         | 0           |      |
| Heat pump heater vertical                                      | WPHKV 1220053 | 381280         | 0           |      |
| <b>DHW preparation accessories</b>                             |               |                |             |      |
| Domestic hot water cylinder (500l) with temperature sensor     | WWSP 556      | 370080         | 1           |      |
| FLH 25M flange heater                                          | FLH 25M       | 349430         | 0           |      |
| Transport aid for Hydro-Tower / LAW indoor unit                | TH 270        | 370430         | 7           |      |
| Flange heater for domestic hot water                           | FLH 60        | 338060         | 0           |      |
| Flange heater for domestic hot water                           | FLHU 70       | 338070         | 0           |      |
| Safety valve combination                                       | SVK 852       | 326660         | 0           |      |



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| Domestic hot water cylinder, 700 litres                       | WWSP 770     | 376730         | 0           |      |
| 3-way reversing valve DN 50                                   | DWV 50       | 374800         | 1           |      |
| Actuator for 3-way reversing valves DWV 25 - 50               | EMA DWV      | 374760         | 1           |      |
| <b>Control accessories</b>                                    |              |                |             |      |
| Extension for an Ethernet network connection                  | NWPM Touch   | 378800         | 1           |      |
| Expansion module WPM for a KNX/EIB connection                 | KNX WPM      | 376350         | 0           |      |
| Extension for a Modbus RTU connection                         | LWPM 410     | 339410         | 0           |      |
| Outside temperature sensor with casing                        | FG 3115      | 336620         | 0           |      |
| Temperature sensor NTC-10 with metal sleeve                   | NTC-10M      | 363600         | 1           |      |
| <b>Accessories for passive cooling</b>                        |              |                |             |      |
| Passive cooling controller                                    | WPM Econ PK  | 360000         | 0           |      |
| Plate heat exchanger, copper-soldered                         | WTU 75       | 362380         | 0           |      |
| Plate heat exchanger for SI 75                                | WTE 75       | 358450         | 0           |      |
| Plate heat exchanger, copper-soldered                         | WTU 100      | 362390         | 0           |      |
| Plate heat exchanger for SI 100                               | WTE 100      | 358460         | 0           |      |
| <b>Control accessories (cooling)</b>                          |              |                |             |      |
| Room climate station for temperature and humidity measurement | RKS WPM      | 342220         | 0           |      |
| Dew point monitor                                             | TPW WPM      | 350970         | 0           |      |
| <b>Solar thermal systems accessories</b>                      |              |                |             |      |
| 400l solar cylinder for heat pump                             | WWSP 432 SOL | 361080         | 0           |      |



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| 500 l solar cylinder for heat pump | WWSP 540 SOL | 361090         | 0           |      |

\* Other specific accessories available / required

Important information:

The combination of the components and the quantities indicated represent a non-binding sample system, which needs to be tested and individually adapted as required. Pump dimensioning must be reviewed according to the pressure loss of the system and the minimum heating water flow rate of the heat pump.



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