Compact district heating unit for domestic hot water and indirect plants. Perfect for one-family houses, terrace houses and apartments. Hotwater production based on the counter flow principle. The unit is a wall mounted solution with outdoor sensors and a closed expansion tank. The outdoor sensors ensures an accurate weather control.

Sondex DH-HW-E is a complete unit for indirect plants with plate heat exchangers for heat and hot water. The unit is specially developed for two-stringed plants and plants with floor heating. Sondex DH-HW-E is supplied with two automatic thermostats controlling the heat circle and the hot domestic water.

The unit is supplied with Sondex high-efficiency brazed heat exchanger, in which the sensor of the eletrical controller is placed, securing an exact control of the water temperature, a minimal wait for the hot water and calcium control.

Sondex DH-HW-E refrigerates the district heating water effectively and grants a big quantity of fresh hot water which is heated successively while tapping. The temperature of the hot water is controlled by an eletrical controller, factory adjusted to 50-60° C. This adjustment is consumer - as well as environment friendly, as the temperature is kept below the critical limit for limestone deposit in the domestic water.

Properties
The water heater has a big output of tempered, hot water, which is heated while tapping. The output depends on the temperatures of the district heating side as well as the domestic water side. The output also depends on the differential pressure available.

The eletrical controller always keeps the domestic water on the flow control set point of the valve and keeps the service pipe appropriate hot, so that the water is hot immediately when tapping.

Service and Installation-Friendly
A consistant assembly with union and an appropriate piping makes it easy to install and service the unit. Quick and easy installation with the two screw eyes in each corner. Connection of tubes is finished in one of the six unions, which are easy to disassemble and to mount on each one tube, whereafter the union is tightened.

Design
By the construction a clear and convenient placement of the components, as well as a functional and environment-friendly structure has been considered. Sondex DH-HW-E can by extra charge be delivered with a white-painted steel cabinet in a modern design.

Lifetime
Application of stainless steel, AISI 316 - for plate heat exchangers and tubes respectively as well as application of approved quality components secures the unit a long lifetime.
Technical specifications
Sondex DH-HW-E - Compact District Heating Unit

Example: Heatwater Capacity from 10°C / 45°C

<table>
<thead>
<tr>
<th>Heat exchanger</th>
<th>Primary Output KW</th>
<th>Forwards Temp. °C</th>
<th>Backwards Temp. °C</th>
<th>Tap Quantity l/min.</th>
<th>Pressure loss Primary Bar</th>
<th>Primary Flow l/h</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>32,3</td>
<td>60</td>
<td>30</td>
<td>13,2</td>
<td>0,25</td>
<td>936</td>
</tr>
<tr>
<td></td>
<td>32,3</td>
<td>70</td>
<td>40</td>
<td>12</td>
<td>0,12</td>
<td>936</td>
</tr>
<tr>
<td></td>
<td>43</td>
<td>80</td>
<td>40</td>
<td>18</td>
<td>0,25</td>
<td>936</td>
</tr>
</tbody>
</table>

Example: Heat Capacity

<table>
<thead>
<tr>
<th>Heat exchanger</th>
<th>Primary Ydelse Temp. °C</th>
<th>Secondary Temp. °C</th>
<th>Pressure loss Primary Bar</th>
<th>Primary Flow l/h</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>13</td>
<td>60/30</td>
<td>25/45</td>
<td>0,2</td>
</tr>
<tr>
<td></td>
<td>13</td>
<td>70/40</td>
<td>35/60</td>
<td>0,25</td>
</tr>
<tr>
<td></td>
<td>17</td>
<td>80/40</td>
<td>35/65</td>
<td>0,25</td>
</tr>
</tbody>
</table>

Connections:
1. Expansion connection
2. Air screw
3. Eletronic control valve
4. Eletronic control sensor
5. Pump 15-40/130
6. Eletronic control valve
7. Control unit
8. ¾" dirt collector
9. Thermo meter
10. 3 bar safety valve
11. Flow sensor
12. 10 bar safety valve
13. ¾" non-return valve
14. ¾" dirt collector
15. Outlet from the safety valve
16. 6 shutof valves (Auxiliary equipment)
17. Expansion tank
18. Clamp on sensor
19. Outdoor sensor
20. Water flow sensor

Data
Weight and measures incl: Max. 45 kg
Jacket and package: H675 x B550 x D320 mm
Max. temp. (primary/secondary): 120°C / 95°C
Max pressure: PN16
Jacket (Auxiliary equipment): White-painted steel jacket

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