

DATA SHEET

DUO 1000/200 N P Thermal Store with immersed DHW tank



Main Features

| | |
|--------------------|--|
| Application | Storage of thermal energy for DHW and space heating. |
| Description | Combination Thermal Store with immersed stainless steel DHW tank; a tight separating plate increases seasonal performance factor of a heat pump. |
| Working fluid | Water, water/glycol mixture (max. 1:1) or water/glycerine mixture (max. 2:1) (thermal store), water (immersed DHW tank). |
| Thermal store Code | 19143 |
| Insulation Code | 19334 |

Energy Efficiency Data (as per EC Regulation No. 812/2013)

with insulation

| | |
|-------------------------|-------|
| Energy efficiency class | N/A |
| Standing loss | 130 W |
| Storage volume | 903 l |

Technical Data

| | |
|--|-------|
| Total volume | 903 l |
| Fluid volume in thermal store | 729 l |
| Immersed DHW tank volume | 174 l |
| Max. working temp. in thermal store | 95 °C |
| Max. working temp. in DHW tank | 95 °C |
| Max. working pressure in thermal store | 3 bar |
| Max. working pressure in DHW tank | 6 bar |

Materials

| | |
|--------------------------------------|------------|
| Thermal store material | S235JR |
| DHW tank material | AISI 304 |
| Tank perimeter insulation | fleece |
| Perimeter insulation's outer surface | PU leather |
| Top and bottom tank insulation | fleece |

Dimensions, tipping height, insulation thickness, weight

| | |
|-------------------------------------|---------|
| Tank diameter | 800 mm |
| Tank diameter with insulation | 1000 mm |
| Tank overall height | 2080 mm |
| Tipping height without insulation | 2120 mm |
| Tank perimeter insulation thickness | 100 mm |
| Bottom insulation thickness | 50 mm |
| Top insulations thickness | 120 mm |
| Empty weight without insulation | 167 kg |

Accessories

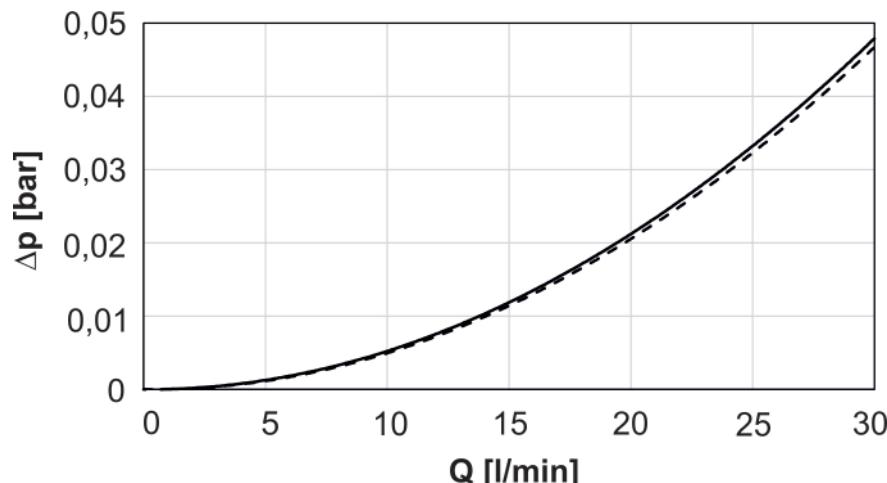
| | |
|-----------------------------------|--|
| El. heating elements | types ETT-C, F, M, P |
| Heating elements max. lenght | 3 x 700 mm into E1–E3 connections, 755 mm into E4 connection |
| Electronic anode rod | code 13793 |
| Expansion vessel (drinking water) | type HW 8 l and larger |

Spare Parts

| | |
|---------------------|------------|
| Magnesium anode rod | code 19152 |
|---------------------|------------|

DATA SHEET**DUO 1000/200 N P Thermal Store with immersed DHW tank****Volume of supplied DHW (heated from 10 °C to 40 °C)**

| Heated volume | entire | | | entire | | | above separating plate | | | entire | | |
|-----------------------------|------------|------------|------------|------------|------------|------------|------------------------|------------|------------|-------------|------------|------------|
| Temperature in tank | 60 °C | | | 60 °C | | | 60 °C | | | 80 °C | | |
| Backup heater | 10 kW | | | none | | | 10 kW | | | none | | |
| Flow rate [l/min] | 8 | 12 | 20 | 8 | 12 | 20 | 8 | 12 | 20 | 8 | 12 | 20 |
| Hot water volume [l] | 730 | 434 | 315 | 538 | 451 | 323 | 254 | 240 | 222 | 1002 | 859 | 665 |

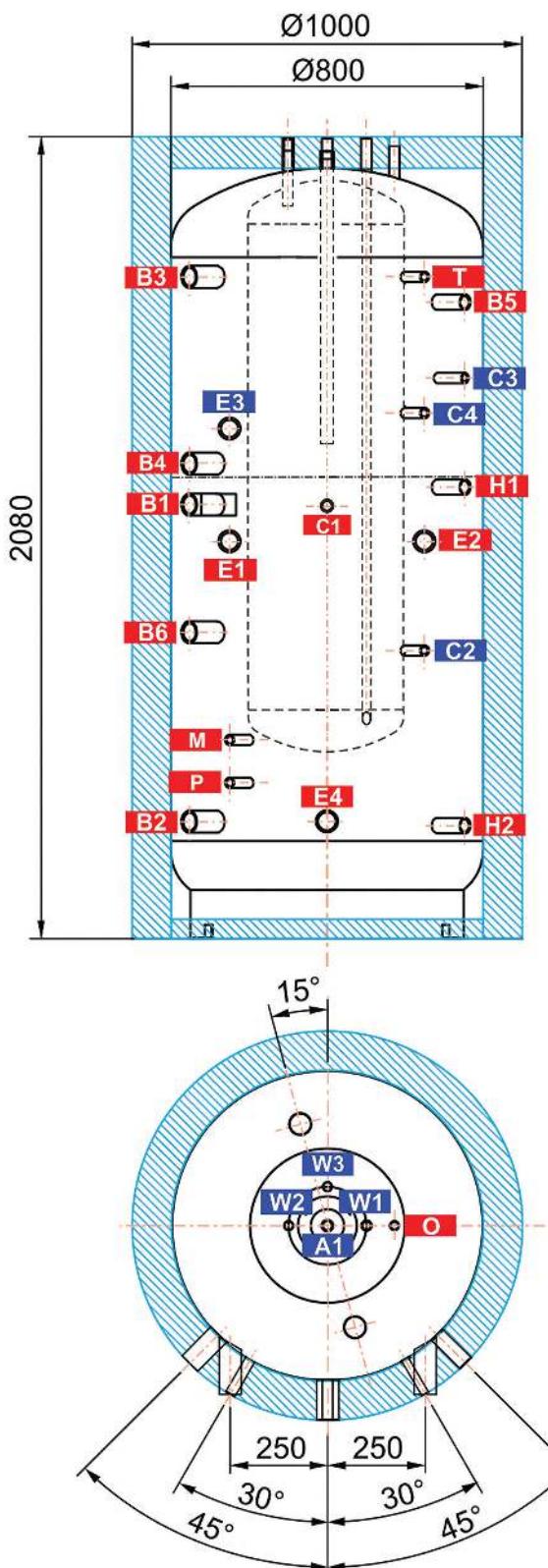
Graph of pressure drop versus flow in the DHW tank

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Dimensions

Tipping height without insulation 2120 mm



CONNECTIONS

| pos. | descriptions | connection | height [mm] |
|----------------------------------|--|------------|-------------|
| Heat sources | | | |
| B1 | Incoming from heat source | G 6/4" F | 1115 |
| B2 | Return to heat source | G 6/4" F | 300 |
| B3 | Incoming from heat source | G 6/4" F | 1700 |
| B4 | Return to heat source | G 6/4" F | 1220 |
| B5 | Incoming from heat source | G 1" F | 1635 |
| B6 | Incoming from heat source | G 6/4" F | 785 |
| Heating system | | | |
| H1 | Outlet to the heating circuit | G 1" F | 1160 |
| H2 | Returnable from the heating circuit | G 1" F | 290 |
| Electric heating elements | | | |
| E1 | Electric heating element for space heating | G 6/4" F | 1020 |
| E2 | Electric heating element for space heating | G 6/4" F | 1020 |
| E3 | Electric heating element for DHW heating | G 6/4" F | 1310 |
| E4 | Electric heating element for PV system | G 6/4" F | 300 |
| DHW heating | | | |
| W1 | Cold water | G 3/4" M | 2080 |
| W2 | Hot water | G 3/4" M | 2080 |
| W3 | Circulation | G 3/4" M | 2080 |
| A1 | Anode | G 3/4" F | 2025 |
| Control and safety | | | |
| C1 | Temperature sensor – space heating | G 1/2" F | 1130 |
| C2 | Temperature sensor – DHW heating | G 1/2" F | 740 |
| C3 | Temperature sensor – DHW heating | G 1/2" F | 1440 |
| C4 | Temperature sensor – DHW heating | G 1/2" F | 1350 |
| T | Thermometer | G 1/2" F | 1700 |
| M | Pressure gauge | G 1/2" F | 510 |
| P | Safety valve | G 1/2" F | 400 |
| Air release | | | |
| O | Air vent valve | G 1/2" F | 2055 |