Gebwell heat pump accessories

Installation set for ground source heat pump

The installation set was designed to facilitate and speed up the installation of Aries ground source heat pump.

Installation set includes

- Collector valve group
- Expansion tank of 12l for collector
- Safety valve for collector 2,5 bar
- · Filling group for heating circuit
- · Expansion tank of 12l for heating circuit
- Safety valve for heating circuit 2,5 bar
- Shut-off valve for heating circuit
- · Filter for heating circuit
- Pressure meters for collector and heating circuit
- Mixing valve for DHW
- · Safety valve for DHW 10 bar
- · Hanging hooks

- Manufactured in Finland
- · Reduces installation time considerably
- A large part of the installation accessory ready
- · Collector pipes ready insulated
- · Ground circuit pre-pressurized
- · Speeds up the deaerating
- · Collector filling valve from DHW
- Smart and neat finishing for installation
- Installable onto the side of ground source heat pump or onto the wall beside the pump



Installation set

Cooling supplies for installation set

Supplies for completing the installation set suitable for cooling:

Delivery contents:

- Cooling pump
- Shut-off valves in/out
- Non-return valve
- · Control centre for cooling



Cooling accessories for installation set

Heating pump extension for installation set

Supplies for completing the installation with an additional pump for heating circuit, especially for radiator heating systems.

Delivery contents:

- · Circulation pump
- Non-return valve
- Connectors



Heating pump extension for installation set

| Product | GTIN | Feasibility, GSHP | Weight, kg | Outer dimensions (d x b x h), mm |
|---|---------------|-------------------|----------------------|--|
| Installation set | 6415853626156 | Aries | 22,0 | 340 x 540 x 870 |
| Cooling supplies for installation set | 6415853626163 | Aries | 5,8 | - |
| Heating pump extension for installation set | 6415853626170 | Aries | 3,6 | - |

Gebwell Cool cooling convector

Wall-mounted cooling convector is elegant by style and silent by operation.

Filters on the convector are washable and reusable and the convector is equipped with wireless remote control. The convector is suitable especially for domestic and office use.



- Elegant and silent
- · Washable and reusable filters
- · Equipped with wireless remote control
- · On/Off timer
- For domestic and office use

| Gebwell Cool | | |
|--|-------------|--------------------|
| Cooling | | |
| Total cooling capacity | kW | 2,49 |
| Sensible cooling capacity | kW | 1,81 |
| Water flow | l/h | 427 |
| Pressure drops | kPa | 28 |
| Heating | | |
| Heating capacity | kW | 3,21 |
| Water flow | l/h | 427 |
| Pressure drops | kPa | 23 |
| Air flow (max / med / min) | m³/h | 500 / 370 / 290 |
| Power supply | V / Ph / Hz | 230V / 1Ph / 50 Hz |
| Pipe connections | G | 1/2" |
| Sound pressure level (max / med / min) | dB(A) | 37 / 30 / 26 |
| Dimensions | | |
| Height | mm | 300 |
| Width | mm | 875 |
| Depth | mm | 220 |
| Weight | kg | 16 |

Collector valve group

Valve group makes the filling and the venting of collector easy. In addition, the dirt filter removes the possible dirt particles in the liquid circulation.

DN25 and DN32 collector valve group models include an expansion vessel through which the annual liquid checks can be done.

Valve group is insulated with a polystyrene box to prevent the formation of condensation water.

Valve group is meant as accessory for all Gebwell heat pumps.







Collector valve group DN65-80

| Collector valve group | GTIN | Feasibility, GSHP | Feasibility, kW | Expansion tank type, vol. | Connections, GSHP | Connections, collector |
|--------------------------|---------------|--------------------------------------|--------------------|------------------------------|----------------------|---------------------------|
| DN25 | 6415853619813 | Aries | 6-13 | open, 5 l | 1" male | Pipe conn . 1" |
| DN32 | 6415853619752 | T3 Inverter | 16-30 | open, 5 l | 1¼" female | PEM 40 |
| DN50 | 6415853619783 | T3 Inverter, Gemini | 30-50 | - | Flange 50 | Flange DN50 |
| DN65 | 6415853619790 | Inverter, Taurus Inverter Pro and | 85 | - | Flange 65 | Flange DN65 |
| DN80 | 6415853619806 | Taurus EVIC | 100 | - | Flange 80 | Flange DN80 |

Change-over valve set

The change-over valve set turns the water flow to heating domestic water or the water circulating in the heating system.

The change-over valve set includes the change-over valve and an actuator. Accessory for the Gebwell T3 Inverter, Gemini Inverter, Taurus Inverter and Taurus EVIC heat pumps.



Change-over valve set

| Change-over valve set | GTIN | Feasibility, heat pump | Flow range I/s | Change-over valve KVS value |
|------------------------------------|---------------|--|----------------|--------------------------------|
| VV4 Change-over valve set 26-32 kW | 6415853623599 | T3 Inverter and Gemini Inverter | 0,7-2,2 | 25 |
| VV5 Change-over valve set 33-85 kW | 6415853623605 | Gemini Inverter, Taurus Inverter Pro, Taurus EVIC | 1,7-7 | 73 |

Circulation pump sets for domestic water

Circulation pump set for domestic hot water circulation

The circulation pump set contains the water circulation pump, pump valve and line adjustment valve.







Hot water circulation GSHP DN20

| Circulation pump set for domestic water | GTIN | Circulation pump |
|---|----------------|-----------------------------|
| Hot water circulation GSHP DN15 | 6415853623148 | Grundfos UPM3 15-50 DHW CIL |
| Hot water circulation GSHP DN20 | 64158 53623155 | Grundfos UPS 25-60N |
| Hot water circulation GSHP DN25 | 64158 53623162 | Grundfos UPS 25-60N |
| Hot water circulation GSHP DN32 | 64158 53623179 | Grundfos UPS 25-80N |
| Hot water circulation GSHP DN40 | 64158 53623186 | Grundfos UPS 25-80N |

DHW shunt

 $\ensuremath{\mathsf{DHW}}$ shunt transfers heat from accumulator tank to heat domestic hot water.

DHW shunt includes a three-way valve and actuator as well as connectors, nuts and a sensor. DHW shunt and HEX includes heat exhanger, circulation pump, connectors and a sensor.



DHW shunt 4-8 apartments

| DHW shunt | GTIN 64158 | Circulation pump | Control valve KVS value | Maximum flow I/s |
|--------------------------------------|-------------------|------------------------|----------------------------|------------------|
| DHW shunt 1 apartment | 53623193 | - | 2,5 | 0,27 |
| DHW shunt 2-3 apartments | 53623209 | - | 4 | 0,43 |
| DHW shunt 4-8 apartments | 53623223 | - | 6,3 | 0,68 |
| DHW shunt 9-20 apartments | 53623230 | - | 10 | 1,08 |
| DHW shunt 21-54 apartments | 53623216 | - | 16 | 1,72 |
| DHW shunt 55-129 apartments | 53626507 | - | 25 | 2,69 |
| DHW shunt 130-175 apartments | 53626514 | - | 40 | 4,30 |
| DHW shunt and HEX 1-4 apartments | 53626187 | Grundfos UPM Geo 25-85 | - | 0,55 |
| DHW shunt and HEX 5-16 apartments | 53626194 | Grundfos Magna3 25-100 | - | 0,99 |
| DHW shunt and HEX 17-32 apartments | 53626200 | Grundfos Magna3 40-120 | - | 1,35 |
| DHW shunt and HEX 33-50 apartments | 53626217 | Grundfos Magna3 40-120 | - | 1,65 |
| DHW shunt and HEX 51-100 apartments | 53626224 | Grundfos Magna3 40-120 | - | 2,27 |
| DHW shunt and HEX 101-150 apartments | 53626231 | Grundfos Magna3 40-150 | - | 2,96 |

Heating control group

With heating control group the adjusting of heating network is easy

Connecting the heating control group to the heating network is easy and effortless. By connecting another control group to heat pump, you can heat damp spaces all-year round regardless of other spaces' heating needs.

Heating control group is meant as accessory for all Gebwell heat pumps.

Control group includes

- Heating pump
- Shut-off valve
- · Control valve with actuator
- · Dirt filter
- Needed sensors, electric cables, hangers
- · Wall mounting rails
 - · Reduces installation time
 - Effortless connecting of the control group to the heating network
 - Easy adjustment of the heating circuit by the heating control group



Heating control group Aries and LSR Si KV4



Heating control group LSR Si KV25

| Heating control group | GTIN | Feasibility, heat pump | Feasibility, radiator heating, kW | Feasibility, floor heating, kW | Valve KVS value | Circulation pump |
|--|---------------|---|---|--------------------------------------|-----------------------|-----------------------------|
| Heating control group Aries | 6415853626125 | Aries | 1.5-7.5 | 1.5-7.5 | 4 | Grundfos UPM3 Auto 15-70 |
| Heating control group KV4 R1-23 F1-6 | 6415853619820 | | 1-23 | 1-6 | 4 | Grundfos UPM3 Auto 15-70 |
| Heating control group KV6,3 R23-45 F6-14 | 6415853619837 | | 23-45 | 6-14 | 6.3 | Grundfos Magna 3 25-100 |
| Heating control group KV10 R45-70 F14-22 | 6415853619844 | T3 Inverter, Gemini Inverter, Taurus Inverter Pro and Taurus EVIC | 45-70 | 14-22 | 10 | Grundfos Magna 3 25-100 |
| Heating control group KV16 R70-110 F22-36 | 6415853619851 | | 70-110 | 22-36 | 16 | Grundfos Magna 3 25-100 |
| Heating control group KV25 R110-180 F36-56 | 6415853619868 | | 110-180 | 36-56 | 25 | Grundfos Magna 3 40-120 |
| Heating control group KV40 R180-240 F56-90 | 6415853619875 | | 180-240 | 56-90 | 40 | Grundfos Magna 3 40-120 |
| Pump heating group 0,6 l/s - 3m | 6415853619882 | | 15-23 | 1-6 | - | Grundfos UPM3 Auto 15-70 |
| Pump heating group 1,7 /s - 5,5m | 6415853619899 | | 23-110 | 6-36 | - | Grundfos Magna 3 25-100 |
| Pump heating group 3,3 l/s - 6m | 6415853619905 | | 110-240 | 36-90 | - | Grundfos Magna 3 40-120 |

Its recommended to install the block thermostat in underfloor heating. The block thermostat are delivered by Gebwell Ltd.



Pump heating group 2m3/h

Pump heating group 6m3/h

Pump heating group 12m3/h

Automation accessories — Gebwell Smart heat pumps

| Code | Name | Description |
|---------------------------------|---|---|
| Expansion m | nodules | |
| G5212254 | TC1.2 expansion module for Gebwell Smart heat pump | Used with heating circuit mixing groups and flow sensors. Includes Climatix POL955 extension module and connectors. Does NOT include the valves, actuators or sensors. |
| G2931891 | TC1.4 expansion module for Gebwell Smart heat pump | Used with cascade systems, to control additional / back-up heat. Includes Climatix POL955 extension module, connectors and two NTC10k water sensors with 4m leads. |
| G1716587 | TC1.5 expansion module for Gebwell Smart heat pump | Used with active cooling feature. Includes Climatix POL955 extension module, connectors and activation of the feature on the controller. Does not include cooling tank, valves, actuators or sensors. |
| G1750700 | TC1.6 expansion module for Gebwell Smart heat pump | Used with cooling circuit mixing groups. Includes Climatix POL955 extension module and connectors. Does not include valves, actuators or sensors. |
| G5790493 | TC1.7 expansion module for Gebwell Smart heat pump | Used with DHW mixing group and heating/source circuits pressure sensors. Includes Climatix POL955 extension module and connectors. Does not include valves, actuators or sensors. |
| G3206076 | TC1.8 expansion module for Gebwell Smart heat pump | Used with Auxilary measurement module. Includes Climatix POL955 extension module, connectors and activation of the feature on the controller. Does not include valves, actuators or sensors. |
| Communicat | tion modules | |
| G4722856 | M-bus communication module | Includes POL907 module and connectors. |
| G7042677 | Modbus RTU communication module | Modbus allows transferring data through the Modbus protocol from the controller of heat pump to the higher-level automation system Includes POL902 module and connectors. |
| Enclousures | for expansion modules | |
| G1699982 | Enclousure for two POL955 extension modules. | Includes plastic enclousure, main switch, 24AC 40VA transformer and 24DC power supply. Does not include extension modules. |
| G6142649 | Enclousure for three POL955 extension modules. | Includes plastic enclousure, main switch, 24AC 60VA transformer and 24DC power supply. Does not include extension modules. |
| Flow meters | | |
| ENEM7000 | Energy meter CLI - Aries, Taurus EVIC (de-superheater) | For measuring the energy produced. Includes connectors, seals and the sensor cable and its connectors. Feasability: 0,2-50 l/min (0,83 l/s) Maksimi: dt 5K = 17kW, dt 6K = 21kW, dt 7K = 24kW |
| ENEM8000 | Energy meter CLI - T3 Inverter, Gemini Inverter | For measuring the energy produced. Includes connectors, seals and the sensor cable and its connectors. Feasability: 0,2-100 l/min (1,67 l/s) Maksimi: dt 5K = 35kW, dt 6K = 42kW, dt 7K = 49kW |
| ENEM9000 | Energy meter - Taurus Inverter Pro, Taurus EVIC | For measuring the energy produced. Includes connectors, seals and the sensor cable and its connectors. Feasability: 5-300 l/min (5,00 l/s) Maksimi: dt 5K = 105kW, dt 6K = 126kW, dt 7K = 147kW |
| | room sensor | , , |
| quickly, accu into walls. Th | room sensor allows you to read the room temperature rately and effortlessly without installing cables or drilling the delivery includes a base station and the sensors. The the state from the wireless room sensor are stored in the Gebwell | |
| such as firep | commended for the buildings with big internal heat loads, laces or in a properties with need to notify the external heat , people, household appliances) | 2.0.5 |
| AMRanturi | Wireless sensor for indoor use | Temperature and humidity sensor for the ACR cloud base station |
| 9005952 | Cloud base station ACR + PS1 | Wireless sensor and base station for the Gebwell Smart controller |