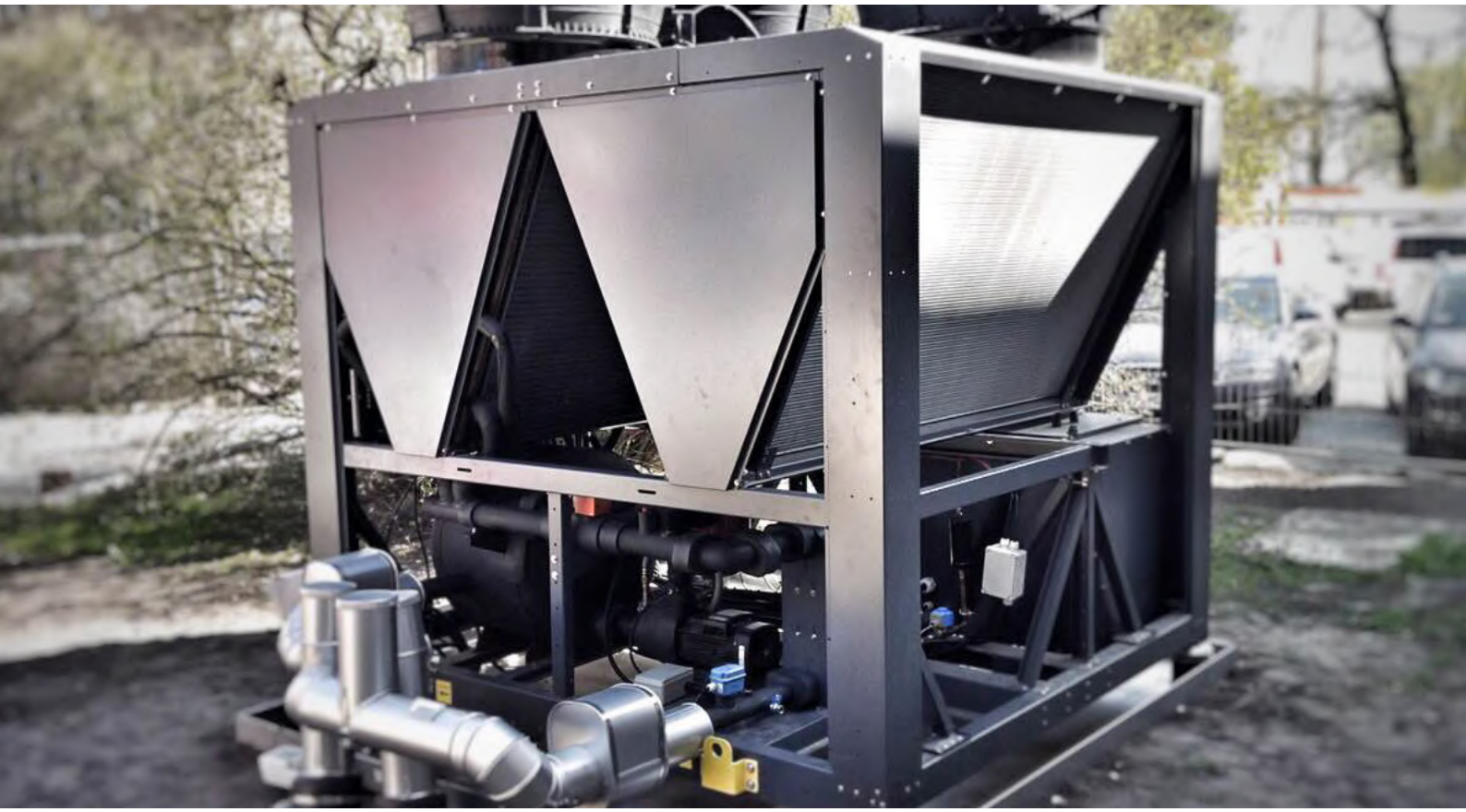
Felzer

Spreading
Baltic
Comfort
Since 1891



# Products

# Foreword

Felzer is one of the Scandinavian & BS leading providers of heating, ventilation, air conditioning and refrigeration solutions for industrial, commercial and residential applications. On our factories we create reliable and efficient climate equipment that improves human comfort, supports industrial processes and protects the environment.

Our wide range of liquid chillers includes innovative options. They allow to decrease installation costs and time as well as the lifecycle costs. Easy control and service, as well as comfort operation are in the focus. Our heat pump range includes the most advanced products for residential application and customized solutions for industrial solutions.  IT product line is simple and reliable. In our new products we focus on inverter compressor and inverter pumps solutions, advanced free cooling solutions and critical climate application.

From current catalogue you can find the product line that suits your particular application. More in-depth technical data are available through our technical literature on the particular product lines. For individual consultancy and quotation please contact your local Felzer sales office.

# Air-cooled Units

## AirPLUS

### Air-cooled scroll chiller


**Cooling capacity A35/W7*:** 115-1265 kW

**Compressors:** Scroll
**Refrigerant:** R32, R454B , R410A
**Fans:** Axial
**Condenser:** Microchannel
**Evaporator:** BPHE

**Basic version:** EEV, RS485 Modbus, etc.

**Key available options:**
Split version \\ Inverter or On-Off pump and tank kits \\ EC Fans \\ AxiTop-type diffusors \\ Coils e-coating \\ Touch screen display \\ LON, BACnet \\ Heat recovery \\ Soft start \\ etc.

#### Free cooling options: fans control

**Dependent** - free cooling coils in parallel to condenser coils and use the same fans. Free cooling capacity depends on condensing pressure regulation.

**Independent** - free cooling coils in separate module and use separate group of fans. Free cooling capacity is independent from condensing pressure regulation.

**Mixed** - free cooling coils are partly dependent and partly independent.

#### Free cooling options: liquid control

**Direct (Glycol)** - glycol mixture from the system directed to the free cooling coils by 3-way valve.

**Glycol Free** - water in evaporator and glycol in the free cooling coils. Heat exchange is in BHPE heat exchanger. Free cooling coils are fed by additional pump.

**Direct Pump** - additional pump for free cooling coils instead of 3-way valve. Allows to reduce pressure drop and electrical consumption in non free cooling mode.

#### Temperature \\ Liquid \\ Controls options

**Up to -35°C without free cooling** - condenser bypass option with EC fans and wind buffles \\ Or TRIAC fan speed control \\ Or EC fans.

**Up to -8°C leaving liquid** - special BRINE option. Ice bank compatible.

**Hydro module control** - Felzer hydro modules can be controlled from the unit.

#### Noise \\ Efficiency options

**Standard** - most efficient solution from Price/Noise/EER ratio point of view.

**X low noise** - plus 1 coil/fan in each circuit and reduced fan speed.

**High Efficiency** - plus 1 coil/fan in each circuit and maximal fan speed.

* - A35/W7 = Ambient air temperature 35°C, User side leaving water temperature 7°C

## AirONE

### Air-cooled scroll chiller

**Cooling capacity A35/W7:** 46-164 kW

**Compressors:** Scroll
**Refrigerant:** R32, R454B, R410A
**Fans:** Axial
**Condenser:** Microchannel
**Evaporator:** BPHE

**Key available options:**
Split version \\ Free cooling \\ Inverter or On-Off pump and tank kits \\ EC Fans \\ AxiTop-type diffusors \\ Coils e-coating \\ Touch screen display \\ EEV \\ Low noise \\ Heat recovery \\ Up to -35°C without free cooling etc.

## AirS

### Air-cooled scroll chiller

**Cooling capacity A35/W7:** 20-39 kW

**Compressors:** Scroll
**Refrigerant:** R32, R454B, R410A
**Fans:** Axial
**Condenser:** Cu-Al
**Evaporator:** BPHE

**Key available options:**
Split version \\ Pump kits \\ EC Fans \\ EEV \\ etc.

# AirDUCT

## Ducted chiller

**Cooling capacity A35/W7:** -57-323 kW

**Compressors:** Scroll
**Refrigerant:** R454B, R32 R410A Fans: Centrifugal
**EC Condenser:** Cu-Al Evaporator: BPHE

**Basic version:** RS485 Modbus, etc.

**Key available options:**
Free cooling \\ Inverter or On-Off pump and tank kits \\ Coils coating \\ Touch screen display \\ EEV \\ Low noise \\ Heat recovery \\ etc.

# AirBLUE

## Air-cooled inverter scroll chiller


**Cooling capacity A35/W7:** 33-425 kW

**Compressors:** Scroll Inverter
**Refrigerant:** R32, R454B, R410A
**Fans:** Axial
**Condenser:** Microchannel / Cu-Al

**Evaporator:** BPHE

**Basic version:** EEV, RS485 Modbus, etc.

**Key available options:**
Split version \\ Inverter or On-Off pump and tank kits \\ EC Fans \\ AxiTop-type diffusors \\ Coils e-coating \\ Touch screen display \\ LON, BACnet \\ Heat recovery \\ etc.

### Free cooling options: fans control

**Dependent** – free cooling coils in parallel to condenser coils and use the same fans. Free cooling capacity depends on condensing pressure regulation.

**Independent** – free cooling coils in separate module and use separate group of fans. Free cooling capacity is independent from condensing pressure regulation.

**Mixed** – free cooling coils are partly dependent and partly independent.

### Free cooling options: liquid control

**Direct (Glycol)** - glycol mixture from the system directed to the free cooling coils by 3-way valve.

**Glycol Free** - water in evaporator and glycol in the free cooling coils. Heat exchange is in BHPE heat exchanger. Free cooling coils are fed by additional pump.

**Direct Pump** - additional pump for free cooling coils instead of 3-way valve. Allows to reduce pressure drop and electrical consumption in non free cooling mode.

### Temperature \\ Liquid \\ Controls options

**Up to -35°C without free cooling** - condenser bypass option with EC fans and wind buffles \\ Or TRIAC fan speed control \\ Or EC fans.

**Up to -8°C leaving liquid** - special BRINE option. Ice bank compatible.

**Hydro module control** - Felzer hydro modules can be controlled from the unit.

### Noise \\ Efficiency options

**Standard** - most efficient solution from Price/Noise/EER ratio point of view.

**X low noise** - plus 1 coil/fan in each circuit and reduced fan speed.

**High Efficiency** - plus 1 coil/fan in each circuit and maximal fan speed.

# ScrewDRIVER

## Air-cooled screw flooded evaporator chiller


**Cooling capacity A35/W7:** 170-1800 kW

**Compressors:** Screw
**Refrigerant:** R1234ze, R134a
**Fans:** Axial
**Condenser:** Microchannel
**Evaporator:** Shell & Tube Flooded

**Basic version:** EEV, RS485 Modbus, etc.

**Key available options:**
Split version \\ Inverter or On-Off pump and tank kits \\ EC Fans \\ AxiTop-type diffusors \\ Coils e-coating \\ Touch screen display \\ LON, BACnet \\ Heat recovery \\ Soft start \\ etc.

### Free cooling options: fans control

**Dependent** – free cooling coils in parallel to condenser coils and use the same fans. Free cooling capacity depends on condensing pressure regulation.

**Independent** – free cooling coils in separate module and use separate group of fans. Free cooling capacity is independent from condensing pressure regulation.

**Mixed –** free cooling coils are partly dependent and partly independent.

### Free cooling options: liquid control

**Direct (Glycol)** – glycol mixture from the system directed to the free cooling coils by 3-way valve.

**Glycol Free** - water in evaporator and glycol in the free cooling coils. Heat exchange is in BHPE heat exchanger. Free cooling coils are fed by additional pump.

**Direct Pump** - additional pump for free cooling coils instead of 3-way valve. Allows to reduce pressure drop and electrical consumption in non free cooling mode.

### Temperature \\ Liquid \\ Controls options

**Up to -35°C without free cooling** - condenser bypass option with EC fans and wind buffles \\ Or TRIAC fan speed control \\ Or EC fans.

**Up to -8°C leaving liquid** - special BRINE option. Ice bank compatible.

**Hydro module control** - Felzer hydro modules can be controlled from the unit.

### Noise \\ Efficiency options

Standard - most efficient solution from Price/Noise/EER ratio point of view.

**X low noise** - plus 1 coil/fan in each circuit and reduced fan speed.

**High Efficiency** - plus 1 coil/fan in each circuit and maximal fan speed.

## ScrewDRIVER iNVi

### Air-cooled inverter screw flooded evaporator chiller


**Cooling capacity A35/W7:** 170-1800 kW

**Compressors:** Screw Inverter
**Refrigerant:** R1234ze, R134a
**Fans:** Axial
**Condenser:** Microchannel
**Evaporator:** Shell & Tube Flooded

**Basic version:** EEV, RS485 Modbus, etc.

**Key available options:**
Split version \\ Scroll inverter \\ Free cooling (all versions) \\ High efficiency and low nose \\ Inverter or On-Off pump and tank kits \\ EC Fans \\ AxiTop-type diffusors \\ Coils e-coating \\ Touch screen display \\ Heat recovery \\ etc.

## BalticSCREW AIR

### Air-cooled screw DX evaporator chiller


**Cooling capacity A35/W7:** 170-1800 kW

**Compressors:** Screw
**Refrigerant:** (R449A/XP40, R404a, R134a)
**Fans:** Axial
**Condenser:** Microchannel
**Evaporator:** DX Shell & Tube
**Already included:** EEV, RS485 Modbus

**Key available options:**
Split version \\ Scroll inverter \\ Free cooling (all versions) \\ Up to -35°C without free cooling \\ High efficiency and low nose \\ Inverter or On-Off pump and tank kits \\ EC Fans \\ AxiTop-type diffusors \\ Coils e-coating \\ Touch screen display \\ Heat recovery \\ Soft start \\ etc.

# BalticSCREW AIR iNVi
# Air-cooled screw DX evaporator chiller
## Air-cooled screw DX evaporator chiller


**Cooling capacity A35/W7:** 170-1800 kW

**Compressors:** Screw
**Refrigerant:** (R449A/XP40, R404a, R1234ze, R134a)

**Fans:** Axial
**Condenser:** Microchannel
**Evaporator:** DX Shell & Tube

**Basic version:** EEV, RS485 Modbus

**Key available options:**
Split version\\ Free cooling (all versions) \\ Up to -35°C without free cooling \\ High efficiency and low nose \\ Inverter or On-Off pump and tank kits \\ EC Fans \\ AxiTop-type diffusors \\ Coils e-coating \\ Touch screen display \\ Heat recovery \\ Soft start \\ etc.

### Free cooling options: fans control

**Dependent** – free cooling coils in parallel to condenser coils and use the same fans. Free cooling capacity depends on condensing pressure regulation.

**Independent** – free cooling coils in separate module and use separate group of fans. Free cooling capacity is independent from condensing pressure regulation.

**Mixed –** free cooling coils are partly dependent and partly independent.

### Free cooling options: liquid control

**Direct (Glycol)** – glycol mixture from the system directed to the free cooling coils by 3-way valve.

**Glycol Free** - water in evaporator and glycol in the free cooling coils. Heat exchange is in BHPE heat exchanger. Free cooling coils are fed by additional pump.

**Direct Pump** - additional pump for free cooling coils instead of 3-way valve. Allows to reduce pressure drop and electrical consumption in non free cooling mode.

### Temperature \\ Liquid \\ Controls options

**Up to -35°C without free cooling** - condenser bypass option with EC fans and wind buffles \\ Or TRIAC fan speed control \\ Or EC fans.

**Up to -8°C leaving liquid** - special BRINE option. Ice bank compatible.

**Hydro module control** - Felzer hydro modules can be controlled from the unit.

### Noise \\ Efficiency options

Standard - most efficient solution from Price/Noise/EER ratio point of view.

**X low noise** - plus 1 coil/fan in each circuit and reduced fan speed.

**High Efficiency** - plus 1 coil/fan in each circuit and maximal fan speed.

## CUSTOM Chillers
to customer requested specification


**Cooling capacity A35/CW7:** 40-323 kW

**Compressors:** Scroll Refrigerants: R32, R454B, R410A
**Fans:** Centrifugal EC
**Condenser:** Cu-Al
**Evaporator:** BPHE

**Basic version:** RS485 Modbus, etc.

**Key applications:**
Free cooling \\ Inverter or On-Off pump and tank kits \\ Coils coating \\ Touch screen display \\ EEV \\ Low noise \\ Heat recovery \\ etc.

## COOLAHU \\ COOLAHU iNVi
AHU condensing unit

**Cooling capacity A35/E5:** 10-200 kW

**COOLAHU**
**Compressors:** Scroll \\ Scroll Inverter
**Refrigerant:** R407C, R410A, R134a
**Fans:** Axial
**Control:** From AHU

**COOLAHU iNVi**
**Compressors:** Inverter Scroll
**Refrigerant:** R407C, R410A, R134a
**Fans:** Axial
**Control:** Integrated controller

# Water-cooled units \\ Remote Condenser Chillers

## WaterBIRD \\ WaterBIRD iNVi

### Chiller water stations: water-cooled and remote condenser


**Cooling capacity CW35/W7*:** 30-750 kW

**Compressors:** Scroll \\ Scroll inverter optionally
**Refrigerant:** R513a, R410A
**Condenser:** BPHE \\ Remote
**Evaporator:** BPHE

**Basic version:** EEV, RS485 Modbus, Low noise panels, hydronic station, etc.

**Key available options:**
Touch screen display \\ LON, BACnet \\ Soft start \\ Heat recovery \\ Energy meter \\ COP control \\ Stainless steel water piping \\ etc.

#### Free cooling options

**Parallel inverter** – free cooling operates simultaneously to compressors. Condensing pressure is controlled by inverter pump. Dry cooler fans are controlled from the unit.

**Parallel valve** – free cooling operates simultaneously to compressors. Condensing pressure is controlled by 3-way valve. Dry cooler fans are controlled from the unit.

**Serial** – free cooling operates then compressors are stopped. Dry cooler fans are controlled from the unit.

#### Tank & Pumps options

**Direct** - tank on the water inlet or outlet. High or low pressure On/Off or inverter system pump. Inverter system pump can be differential pressure regulated from 70 to 100%.

**VWF (variable water flow)** - hydronic separator tank and evaporator very low pressure pump. High or low pressure On/Off or inverter system pump. Inverter system pump can be differential pressure regulated from 0 to 100%.

**Customization** - chilled beam 3-way valve \\ second system pump \\ etc.

#### Ambient temperature options

Dry cooler fans control from the unit.

**Up to -35°C on water-cooled chiller –** 3-way bypass valve and condenser pump.

**Up to -35°C on remote condenser chiller** - condenser bypass and liquid receiver.

* - CW35/W7 = Condenser leaving water temperature 35°C, User side leaving water temperature 7°C

## WaterPLUS / WaterPLUS RC

### Water-cooled or remote condenser scroll chillers


**Cooling capacity CW35/W7:** 160-1200 kW

**Compressors:** Scroll
**Refrigerant:** R513a, R410A
**Condenser:** BPHE or remote
**Evaporator:** BPHE

**Basic version:** EEV, RS485 Modbus, etc.

**Key available options:**
Low noise \\ Touch screen display \\ LON, BACnet \\ Soft start \\ Heat recovery \\ Energy meter \\ COP control \\ Stainless steel water piping \\ etc.

## ScrewNORD \\ ScrewNORD iNVi

### Water-cooled screw flooded evaporator chillers


**Cooling capacity CW35/W7:** 190-1700 kW

**Compressors:** Screw \\ Screw inverter optionally
**Refrigerant:** R1234ze, R513a, R134a
**Condenser:** Shell & Tube
**Evaporator:** Shell & Tube Flooded

**Basic version:** EEV, RS485 Modbus, etc.

**Key available options:**
Low noise \\ Touch screen display \\ LON, BACnet \\ Soft start \\ Heat recovery \\ Energy meter \\ COP control \\ etc.

## BalticSCREW WATER

### Water-cooled or remote condenser screw chillers

**Cooling capacity CW35/W7:** 200-2500 kW

**Compressors:** Screw
**Refrigerant:** R1234ze, R513a, R134a
**Condenser:** Shell & Tube or remote
**Evaporator:** DX Shell & Tube

**Basic version:** EEV, RS485 Modbus, etc.

**Key available options:**
Low noise \\ Touch screen display \\ LON, BACnet \\ Soft start \\ Heat recovery \\ Energy meter \\ COP control \\ etc.

**iNVi - inverter screw available**
**RC - reciprocating compressor available**

## CUSTOM Chillers

### To customer requested specification

**Cooling capacity CW35/W7:** 5-3000 kW

**Cabinet and piping:** Standard, Stainless steel, etc.

**Compressors:** Screw, Scroll, Reciprocating (inverter available)
**Refrigerants: HFC (**R404a, R407C, R410A, R134a etc.), HFO (R1234ze, R449A/XP40, etc.), Propane (R290)
**Condenser:** BPHE, Shell&Tube, Remote
**Evaporator:** BPHE, Shell&Tube, Remote

**Key applications:**
Aggressive areas \\ Industrial \\ Refrigeration \\ High and low ambient \\ Special requirements \\ etc.

# NordGALE DC
## Dry coolers

**Heat rejection capacity A35/CW45:** 40-1000 kW
**Heat exchanger shape:** flat, V-shaped
**Heat exchanger type:** microchannel, Cu-Al

**Key available options:**
Low noise \\ EC fans \\ Axitop - Type diffusers \\ Adiabatic cooling \\ etc.

* - A35/C50 = Ambient air temperature 35°C, Condensing temperature 50°C

# NordGALE RC
## Remote condensers

**Heat rejection capacity A35/C50*:** 50-940 kW
**Heat exchanger shape:** flat, V-shaped
**Heat exchanger type:** microchannel, Cu-A

**Key available options:**
Low noise \\ EC fans \\ AxiTop - type diffusers \\ Flooded condenser low temperature control \\ Adiabatic cooling \\ etc.

# Heat Pumps: Air To Water

## NordicLIGHT \\ NordicLIGHT iNVi \\ NordicLIGHT3 \\ NordicLIGHT EVI

Air to water low temperature heat pump

**Heating capacity A7/W35*:** 23-408 kW

**Compressors:** Scroll \\ Inverter Scroll \\ Scroll EVI
**Refrigerant:** R454B, R32, R407C, R410A

**Fans:** Axial
**Condenser:** BPHE
**Evaporator:** Cu-Al

Up to -20°C in heat pump mode
Up to -40°C in electrical heating mode

## NordicGREEN

### Air to water low temperature heat pump

**Heating capacity A2/W35*:** 22-120 kW

**Compressors:** Scroll/reciprocating
**Refrigerant:** R290
**Fans:** Axial
**Condenser:** Microchannel
**Evaporator:** Cu-Al

Up to -20°C in heat pump mode

## SiltaVIETA CARBO ($CO_2$)

### Water to water heat pump

**Heating capacity G7/3; W55*: 25-107 kW**

**Hot water temperature standard:** up to +55°C
**Hot water temperature HT:** up to +75°C

**Compressors:** Scroll
**Refrigerant:** R744
**Heat exchanger:** BPHE

**Basic version:** RS485 Modbus, etc.

**Key available options:**
Inverter or On-Off pump and tank kits \\
\\ Touch screen display \\ EEV \\ Low noise \\
Heat recovery \\ etc.

* - G7/3; W55 = glycol temperature in/out +7/+3oC, User side leaving water temperature 75°C

# SiltaVIETA \\ SiltaVIETA GREEN(propane)

## Air to water heat pump


SiltaVIETA:
**Heating capacity A7/W35:** 10-40 kW
**Hot water temperature standard:** up to +55°C
**Hot water temperature HT:** up to +65°C

SiltaVIETA GREEN:
**Heating capacity A2/W35:** 2-14.5 kW
**Cooling capacity A35/W18: 3-17 kW**
**Hot water temperature standard:** up to +35°C
**Hot water temperature HT:** up to +55°C

**Compressors:** Scroll
**Refrigerant:** R290, R410A
**Fans:** Axial
**Condenser:** BPHE
**Evaporator:** BPHE

**Basic version:** RS485 Modbus, etc.

**Key available options:**
Connection set\\ Connection set\\ HP pipe\\ Impressed current anode\\ HA group HA 25-2\\ Separation system\\ Set of vibration decouples \\ etc.

## AirONE HP

### Air to water heat pump

**Heating capacity A7/W35:** 25-170 kW

**Hot water temperature standard:** up to +55°C
**Hot water temperature HT:** up to +65°C

**Compressors:** Scroll
**Refrigerant:** R454B, R32, R410A
**Fans:** Axial
**Condenser:** BPHE
**Evaporator:** Cu-Al

**Basic version:** RS485 Modbus, etc.

**Key available options:**
Inverter or On-Off pump and tank kits \\ EC Fans \\ AxiTop-type diffusors \\ Touch screen display \\ EEV \\ Low noise \\ Heat recovery \\ etc.

## AirPLUS HP

### Air to water heat pump


**Heating capacity A7/W35:** 150-1645 kW

**Hot water temperature standard:** up to +55°C
**Hot water temperature HT:** up to +65°C

**Compressors:** Scroll
**Refrigerant:** R454B, R32, R410A
**Fans:** Axial
**Condenser:** BPHE
**Evaporator:** Cu-Al

**Basic version:** EEV, RS485 Modbus, etc.

**Key available options:**
Inverter or On-Off pump and tank kits \\ EC Fans \\ AxiTop-type diffusors \\ Touch screen display \\ Low noise \\ Heat recovery \\ Soft start \\ etc.

* - A7/W35 = Ambient air temperature 7°C, User side leaving water temperature 35°C

## AirS

### Air-cooled scroll chiller


**Cooling capacity:** A35/W7: 20-39 kW

**Compressors:** Scroll
**Refrigerant:** R454B, R32, R410A
**Fans:** Axial
**Condenser:** Cu-Al Evaporator: BPHE

**Key available options:**
Split version \\ Pump kits \\ EC Fans \\ EEV \\ etc.

## BalticSCREW HP

### Air to water heat pump


**Heating capacity A7/W35:** 260-3250 kW

**Hot water temperature standard:** up to +55°C
**Hot water temperature HT:** up to +65°C

**Compressors:** Screw
**Refrigerant:** (R449A/XP40, R404a, R1234ze, R134a)
**Fans:** Axial
**Condenser:** BPHE
**Evaporator:** Cu-Al

**Basic version:** EEV, RS485 Modbus, etc.

**Key available options:**
Inverter or On-Off pump and tank kits \\ EC Fans \\ AxiTop-type diffusors \\ Touch screen display \\ EEV \\ Low noise \\ Heat recovery \\ etc.

# Heat Pumps \\ Liquid to Water

## WaterPLUS HP \\ WaterBIRD HP

Liquid to water heat pumps \\ Hot water stations


**Heating capacity S7/W35*:** 30-1200 kW

**Hot water temperature standard:** up to +55°C
**Hot water temperature HT:** up to +65°C

**Refrigerant:** R454B, R32, R410A
**Condenser:** BPHE
**Evaporator:** BPHE

**Basic version:** EEV, RS485 Modbus, etc.

**Key available options:**
Low noise \\ Touch screen display \\ LON, BACnet \\ Soft start \\ Heat recovery \\ Energy meter \\ COP control \\ Stainless steel water piping \\ etc.

### Heat pump versions

**HPG: Ground source** - nonreversible unit. Source liquid from -5C. Heat water up to +55 - +65°C

**HPR: Reversible on refrigerant side** - the unit can work as a heat pump or as a chiller. The reservation in the refrigerant circuit. Liquid from the source side is separated from the user side water.

**HPRW: Reversible on water side** - the unit can work as a heat pump or as a chiller. The reservation in the water circuit. Liquid from the source side is mixed with the user side.

### Tank & Pumps options

**Tank** - tank on the cold or hot water side.

**Inverter or ON/OFF pumps** - high or low pressure On/Off or inverter system pump.

**Hydronic separator tank** - hydronic separator tank on the cold or hot water side and heat exchanger very low-pressure pump. High or low pressure On/Off or inverter system/user pump. Inverter system pump can be differential pressure regulated from 0 to 100%.

**Customization –** 3-way valves \\ Second pumps \\ etc.

* - S7/W35 = Source side leaving water temperature 7°C, User side leaving water temperature 35°C

## WaterPLUS HPR

### Heat recovery heat pump (source 20-40°C to water up to 78°C)

**Heating capacity S40/W78*:** 70-280 kW

**Hot water temperature:** up to +78°C

**Compressors:** Scroll
**Refrigerant:** R1234ze,R134a
**Condenser:** BPHE
**Evaporator:** BPHE

**Already included:** EEV, RS485 Modbus

**Key available options:**
Low noise \\ Touch screen display \\ LON, BACnet \\ Soft start \\ Heat recovery \\ Energy meter \\ COP control \\ Stainless steel water piping \\ etc.

## BalticSCREW WATER HP

### Water-cooled screw heat pump

**Heating capacity S7/W35:** 190-2700 kW

**Hot water temperature standard:** up to +55°C
**Hot water temperature HT:** up to +65°C
**Hot water temperature SHT:** up to +78°C

**Compressors:** Screw (inverter on request)
**Refrigerant:** R1234ze, R134a,
**Condenser:** DX Shell & Tube
**Evaporator:** Shell & Tube

**Already included:** EEV, RS485 Modbus

**Key available options:**
Low noise \\ Touch screen display \\ LON, BACnet \\ Soft start \\ Heat recovery \\ Energy meter \\ COP control \\ etc.

* - S40/W78 = Source side leaving water temperature 40°C, User side leaving water temperature 78°C

# Efficiency Products

## Ice-bank Units

**Direct expansion stainless steel piping units:**
\\ Air-cooled or Water-cooled or Remote condenser integrated refrigeration circuit
\\ Stainless steel tanks
\\ Stainless steel pipes evaporator

**Direct expansion copper piping units**
\\ Air-cooled or Water-cooled or Remote condenser integrated refrigeration circuit
\\ Stainless steel tanks
\\ Copper pipes evaporator

**Chilled water tanks with ice accumulation**
\\ Stainless steel tanks
\\ PVC or stainless steel pipes liquid cooler
\\ Compatible with Felzer glycol chillers

## Smart Hydronic Modules

**What can be integrated?**

**Controls:** Controller or control from the chiller

**Pumps:** On/Off, Inverter: evaporator \\ system \\ condenser \\ chilled beams \\ etc.

**Tanks:** Direct \\ Hydraulic separator \\ etc.

**Heat exchangers:** BPHE: free cooling \\ glycol/water \\ remote evaporator \\ etc.

**3-way valves:** condensing pressure control \\ free cooling \\ supply water temperature control \\ etc.

**Cabinet:** Frame \\ Panels \\ Low noise \\ Stainless steel \\ Stainless steel piping

**Electric box:** Power supply \\ control terminals \\ etc.

# Direct Expansion Units

## Air Handling Units with Integrated DX Refrigeration Circuit

Rooftops, Air dehumidifiers, Refrigeration AHU, IT adiabatic cooling

**Rooftop DX air conditioners:** 7-150 kW

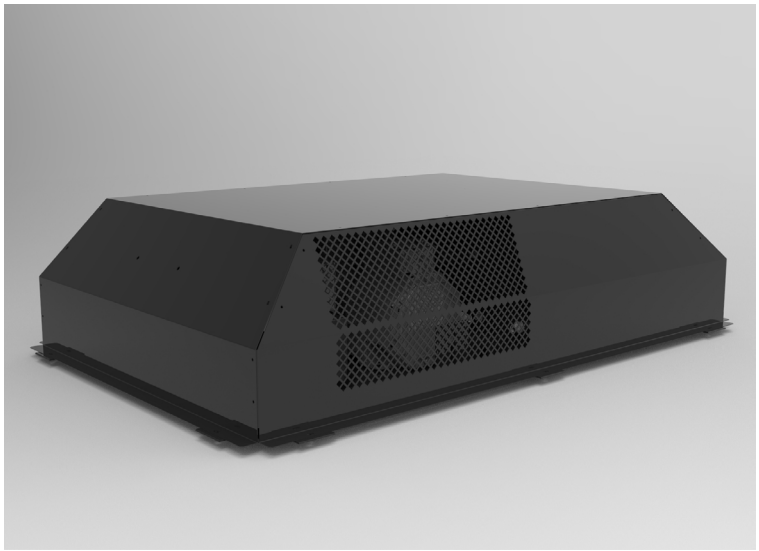
**Swimming pool dehumidifiers:** up to 27000 $m^3/h$

**Heat pump modular air handling units (AHU):** < 70000 $m^3/h$

**Direct cooling modular air handling units (AHU):** < 70000 $m^3/h$

**IT adiabatic cooling AHU:** 70-600 kW

## Railway Air Conditioning



**Driver cabin rooftop air conditioners:** up to 7kW

**Coach rooftop air conditioners:** up to 30kW

**Coach split air conditioners:** up to 20kW

**Compressors:** Scroll, Reciprocating

**Ambient:** Standard \\ High temperature

# PRODUCTS FOR IT & DATA CENTERS

## ByteCOOL DX \\ DX iNVi
### Direct expansion units


**Cooling capacity A35/RA24*:** 5-105 kW

**DXR:** Remote condenser
**DXW:** Water cooled
**DXWFC:** Water-cooled with indirect free cooling
**CWDXR:** Chilled water with DXR reservation
**CWDXR:** Chilled water with DXW reservation

**Air direction:** Up-flow or Downflow
**Compressors:** Scroll (Scroll inverter in iNVi)
**Refrigerant:** R407C, R134a, R410A
**Fans:** Centrifugal EC
**Condenser:** BPHE or Remote
**Evaporator:** Cu-Al

**Key available options:**
Direct free cooling \\ Humidifier \\ Water or electrical heaters \\ etc.

## ByteCOOL CW
### Chilled water units


**Cooling capacity W7/RA24**:** 8-230 kW

**CW:** Chilled water
**CWCW:** Chilled water with CW reservation

**Air direction:** Up-flow or Downflow
**Fans:** Centrifugal EC
**Cooler:** Cu-Al

**Key available options:**
Direct free cooling \\ Humidifier \\ Water or electrical heaters \\ etc.

* - A35/RA24 = Ambient air temperature 35°C, Room air temperature 24°C and relative humidity 50%

** - W7/RA24 = Source side entering water temperature 7°C, Room air temperature 24°C and relative humidity 50%

## ByteCOOL IR iNVi

### In-row units

**Width 300mm:** Remote condenser \\ Chilled water

**Width 400mm:** Remote condenser \\ Water-cooled \\ Chilled water

**Width 600mm:** Remote condenser \\ Water-cooled \\ Chilled water

**Compressors:** Scroll inverter
**Refrigerant:** R32, R454B, R410A
**Fans:** Centrifugal EC

**Key available options:**
Indirect free cooling on water-cooled \\ etc.

## BN

### Remote condensers for ByteCOOL DXR

**Heat rejection capacity A35/C50:** 6-103 kW

**Air direction:** Vertical or Horizontal
**Refrigerant:** R407C, R134a, R410A
**Fans:** Axial
**Condenser:** Cu-Al

**Key available options:**
Up to -35°C condensing pressure control \\ Fan speed regulation \\ EC fans \\ etc.

## MC
Remote condensers for ByteCOOL DXR


**Heat rejection capacity A35/C50:** 23-190 Kw

**Air direction:** Vertical or Horizontal
**Refrigerant:** R407C, R410A
**Fans:** Axial
**Condenser:** microchannel

**Key available options:**
Up to -35°C condensing pressure control \\ Fan speed regulation \\ EC fans \\ etc.

# Heavy Industrial Equipment

## Glycol Chillers
Air-cooled and water-cooled


**MT:** up to -15°C leaving liquid temperature
**LT:** up to -35°C leaving liquid temperature

**Cooling capacity:** up to 2500 kW

**Compressors:** Screw, Reciprocating, Scroll
**Refrigerant:** HFC (R404a, R407C, R410A, R134a, etc.), HFO (R449A/XP40, R1234ze, etc.), Propane (R290)
**Condenser:** Microchannel or Cu-Al
**Evaporator:** DX Shell & Tube or BPHE
**Already included:** EEV, RS485 Modbus

**Key available options:**
Inverter or On-Off pump and tank kits \\ EC Fans \\ AxiTop-type diffusors \\ Coils e-coating \\ Touch screen display \\ LON, BACnet \\ Heat recovery \\ etc.

## Hot Water Chillers

### Air-cooled and water-cooled

**Up to +35°C evaporator water temperature**
**Higher temperatures entering/leaving the unit**
(with water bypass and pumps system)

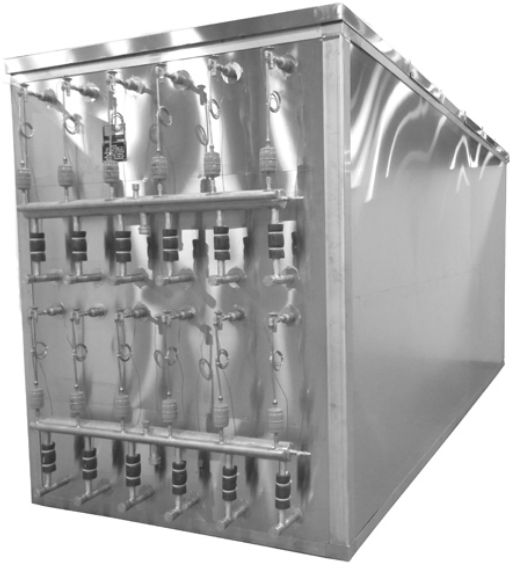
**Cooling capacity:** up to 2500 kW

**Compressors:** Screw, Reciprocating, Scroll
**Refrigerant:** HFC (R407C, R410A, R134a, R407C, etc.), HFO (R1234ze, R449A/XP40, etc.)
**Condenser:** Microchannel or Cu-Al
**Evaporator:** DX Shell & Tube or BPHE

**Key available options:**
Inverter or On-Off pump and tank kits \\ EC Fans \\ AxiTop-type diffusors \\ Coils e-coating \\ Touch screen display \\ LON, BACnet \\ Heat recovery \\ etc.

## Stainless Steel Welded Structures

### Heat exchangers, tanks, etc.



**Steels:** Stainless 304, 316, etc.

**Applications:** tanks, evaporators, frames, freeze dryers, piping sets, etc.

# NordELEMENT Compressor Racks

## Custom made

**Compressors:** Reciprocating, Scroll, Screw

**Refrigerants:** HFC (R407C, R410A, R134a, etc.), HFO (R1234ze, R449A/XP40, etc.), CO2 (R744), Propane (R290)

Evaporation temperatures:
**HT:** +5°C
**MT:** -8°C
**LT:** -35°C
**XLT:** -50°C

# MultiWAT / MultiWAT HP Compressor Racks

## Water-to-water Modular systems

**Compressor:** scroll On/off compressor / Inverter (option)

**Refrigerants:** R454B, R32, R410A
**Cooling capacity**: up to 13 956 kW
**Heating capacity:** up to 11 340 kW

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