



## High capacity Heat Pumps & Energy centres SmartHeat Titan & SmartHeat Titan Z

### Project request

#### Customer data

Company \_\_\_\_\_

Contact person \_\_\_\_\_

#### Project data

Name \_\_\_\_\_

Address \_\_\_\_\_

### 1. Type of application

- Heating  Cooling
- Reversible (Heating or cooling)  Dual operation (Heating and cooling)
- Hot domestic water preparation

### 2. Requirements Heating Operation

#### Capacity demand:

Building \_\_\_\_\_ kW

Hot domestic water \_\_\_\_\_ kW

#### Required temperatures:

Heating  $T_{out}$  \_\_\_\_ °C  $T_{back}$  \_\_\_\_ °C

Hot domestic water  $T_{out}$  \_\_\_\_ °C  $T_{back}$  \_\_\_\_ °C

#### Type of operation

- monovalent  bivalent-parallel  bivalent-alternative

If bivalent, Fraction of heating capacity covered by the heat pump \_\_\_\_\_% / \_\_\_\_\_ kW

### 3. Requirements Cooling operation

Cooling demand:

(Building) Cooling capacity \_\_\_\_\_ kW

Fraction of cooling capacity covered by the heat pump \_\_\_\_\_% / \_\_\_\_\_ kW

Type of cooling

Passive / Natural Cooling       Active Cooling

Required temperatures:

Cooling circuit       $T_{out}$  \_\_\_\_\_ °C       $T_{back}$  \_\_\_\_\_ °C

### 4. Heat pump type

Brine/water heat pump

with vertical probes    with horizontal collector    \_\_\_\_\_

Brine temperature \_\_\_\_\_ °C

Water/Water heat pumps

groundwater       surface water  
 sewage water       \_\_\_\_\_

Heat source temperature \_\_\_\_\_ °C

Feasible flow rate \_\_\_\_\_ m<sup>3</sup>/h

Water quality checked?       Yes       No

Separating heat exchanger required?    Yes       No

Air/Water Heat Pump

Ambient air       Exhaust air from \_\_\_\_\_

Mean temperature \_\_\_\_\_ °C      Feasible flow rate \_\_\_\_\_ m<sup>3</sup>/h

### 5. Technical requirements

max. outgoing temperature heating operation \_\_\_\_\_ °C (feasible: 55°C / 68°C / 75°C)

min. outgoing temperature cooling operation \_\_\_\_\_ °C (feasible: 6°C / 10°C)

No. of capacity levels \_\_\_\_\_

No. of compressors \_\_\_\_\_       No. of refrigerant circuits \_\_\_\_\_

Medium primary / secondary circuit \_\_\_\_\_ / \_\_\_\_\_

- Additional sound protection (reduction of sound pressure level ~ 10dB)?  yes  no
- Max. dimensions of heat pump  
width: \_\_\_\_\_m    depth: \_\_\_\_\_m    height: \_\_\_\_\_m
- Possibility of controlling by BMS (Building Management System)?  yes  no  
Used protocol     LonBus     ModBus     Bacnet
- Remote sensing by integrated WebCard?  yes  no

## 6. Integrated Components (only Titan Z)

- Integrated separating heat exchanger
- Integrated passive cooling unit (plate heat exchanger, 3-way-valves)
- Integrated hot gas heat exchanger
- Integrated circulation pumps
- Buffer loading pump    pressure loss pipes and buffer    \_\_\_\_\_kPa
  - DHW loading pump    pressure loss pipes and buffer    \_\_\_\_\_kPa
  - primary circuit    pressure loss primary circuit    \_\_\_\_\_kPa
- Dual operation (Internal Hydraulic device for Heating & Cooling at the same time)

## 6. Additional information

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Please send your request by email or Telefax.

We are pleased to support you with optimized, high-efficient heat pump technology and the experience of over 25 years own development and production.

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