

## SOLUTIONS FOR HEAT PUMPS



### Innovations for the future

A partnership with Backer gives you a dedicated team of designers, project engineers and technical experts in the fields of intelligent heating and control, ready to provide you with the optimal solutions for your needs.

#### **Crank Case Heaters / Compressor Heater**

Eliminate start-ups with cold oil and increase the life time of the compressor. Backer has a standard range of heaters for compressors and crankcases, e.g. for heat pumps both in a design with heating cable in an aluminum section, as well as silicon heaters.





- Heating cables
- · Self-regulating version
- With or without thermostat

### **Backup Heaters / Booster Heaters**

Welded stainless steel tanks with tightness guarantee. Units up to 42kW.

- For both internal & external assembly
- Thermal insulation
- Cables
- Overheat protection / thermostat
- Air vent





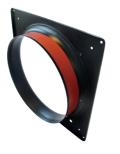
# Copper Brazed Stainless Steel Plate Heat Exchangers

- Especially designed as a condenser or an evaporator for heat pumps
- Optimized plate pattern for maximum heat transfer
- Asymmetric design allows for decreased refrigerant amount in heat pumps
- Compact size combined with high strength
- Easy to install with tailor made connections



# Fan Housing Defroster

- Flexible foil elements
- Heating Cable



### **Condensate Tray Heaters**

- Flexible foil elements
- Heating cables
- PTC solutions
- Tubular stainless steel elements



### Immersion Heaters with electronic control

Electronic version allows precise and intelligent temperature control.

Can be integrated with external control systems.

- For steel and copper tanks
- G1 1/4" to G2"
- Heating elements made of:
  1.4404, 1.4547, 1.4876, 2.4858
- Isolated version for enamelled tanks



### NEW!

#### **Flex Hoses**

- · Corrugated metal flex hoses
- · Expansion joints
- · Heating & cooling fittings
- · Copper/SS connection flex hoses
- · Boiler hoses



### **Electronics**

- Soft starters
- Controls
- Sensors



### Cables, cable harnesses and control panels

Custom made cables and harnesses made from various types of cables, dimensions and materials. Equipped with different terminals, housings and grommets.

Plug-and-play customer specific control panels, with baseplate housings made by either metal and plastic, with allcomponents like cables, sensors, PCBs, chokes, displays, switches, etc.



# **SERVICES**

- Simulations
- Tests
- Validations
- Documentations

### BACKER WORLD WIDE



# BACKER GROUP

We strive to provide optimal technical solutions with the best possible quality at globally competitive prices. With advanced capabilities in laboratory testing, engineering, agency certification and producton, our passion for exceeding our customers' expectations makes us the first choice in heating solutions.

Backer AB is the headquarters for the Backer Group. Together we develop, produce and sell

customized solutions and components for electrical heating, measurement and control. With over 88 production sites and 12,000 employees worldwide, the Backer Group is the leading supplier in the heating element industry and offers the latest technologies and products on the market. All based on the first tubular heating element that our founder Christian Backer patended already back in 1921.

## INDUSTRIES WE SERVE







Energy/ Environment



Advanced technology



Commercial equipment



Home appliance



Transportation



HVAC

