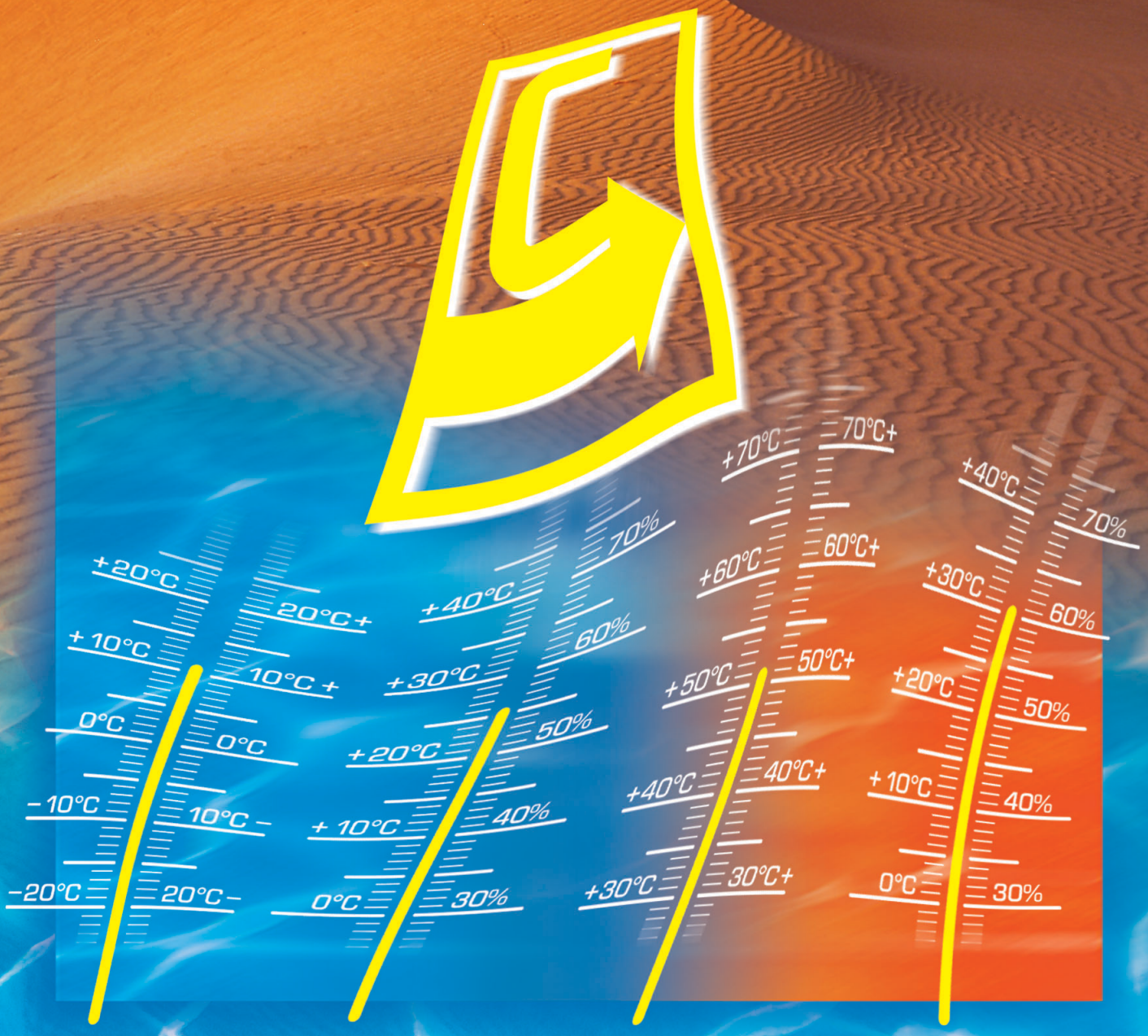
# Combitherm POOL-COOLER

FOR SWIMMING POOLS UP TO 100 m²

**SPECIAL FEATURES**

*Reverse cycle for cooling and heating · No water pressure drop · Perfect for existing water cycles · Low sound level · Pool and sea water resistant components · Designed for high ambient and pool temperatures · Use of high quality components · Many colours available*

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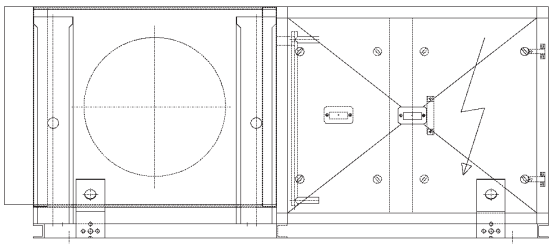
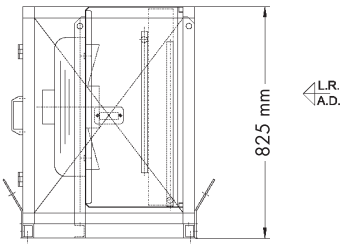
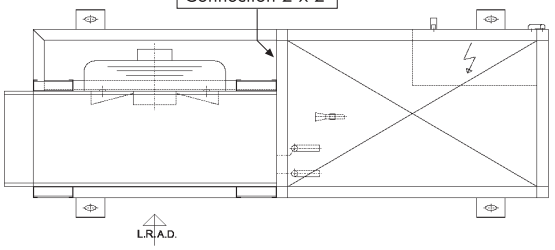
# Dimensions and Typical Water Scheme.

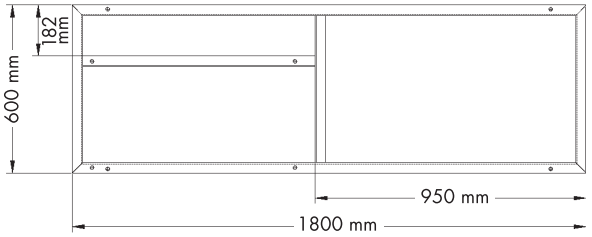


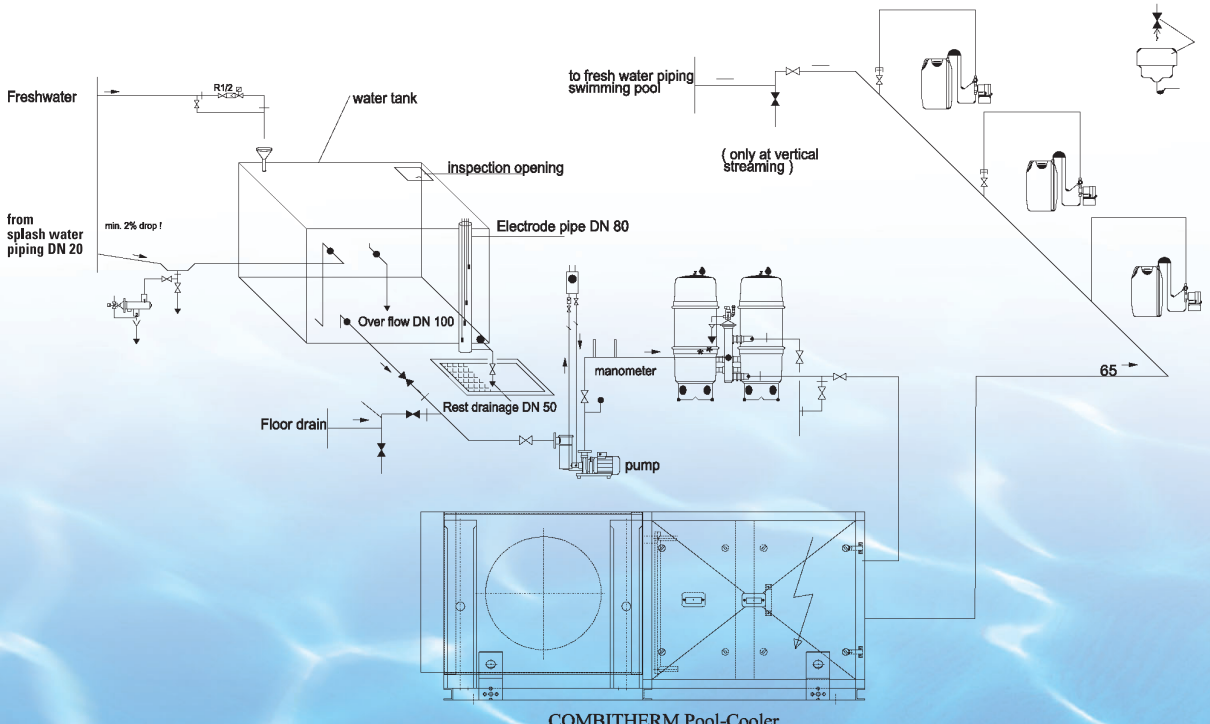



Connection 2 x 2"




Base Frame U50




COMBITHERM Pool-Cooler

Distribution Partner

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# Technical Description.

The refrigeration unit consists of 1 refrigerant cycle for cooling and heating pool water. Condensation heat is removed via a separate air-cooled condenser. The whole installation is built in a weather-resistant, noise insulating housing of coated galvanized steel. The unit is certified in accordance with the EU conformity.

***The unit consists of the following components:***

1 single stage piston compressor, semi-hermetic type, with 2 shut-off valves, oil heater, high and low pressure switches.
1 condenser, air-cooled, with sucking axial fans. Housing with profile frame, casing made of galvanized steel sheet, completely lacquered, different colours available. Heat exchanger (condenser block) consisting of Cu-pipe 12 mm ⌀ and Alu fins 2.2 mm distance, epoxy coated.
1 direct expansion heat exchanger for chilling the pool water, consisting of titanium pipes, suitable for dry evaporation. The heat exchanger casing is manufactured from special PVC for highest anti-corrosion protection. Design operating pressure 3 bar.
Refrigeration accessories as required, installed within the refrigeration cycle as filter dryer, magnetic valve in the liquid line, sight glass, 2 expansion valves, 4-way-valve for reverse heating cycle, refrigerant collector unit to contain the complete refrigerant filling.
Refrigeration piping connecting the above equipment within the cycle, including all attachment and connection materials as well as insulation of the cold sections (suction line). Refrigeration filling with R 134a and special refrigerant oil. Vibration attenuators for the unit under base frame.
Control of unit by means of electronic controllers, digital display for temperatures and demanded stages and all necessary temperature sensors. Control and switching components for the refrigeration system in the unit and in the control panel installed and connected electrically in accordance with their function. 1 electric panel, built according to the international standards, attached to the unit, including all switch and safety components for the unit as well as the complete control system.

***The following components are included within the electric panel:***

1 main switch, current protection for all electric motors (three phase current), relays and current protection for 1 compressor motor and 1 condenser fan motor, current protectors for the control circuit, general fault indication lamp, collective fault alarm signal, all required time relays and auxiliary contactors, terminals and labelling of components on the panel. The electric panel includes all connecting wiring. The components described above are installed within the panel and connected in accordance with their function. All motors, switch and safety components within the unit are connected with the panel.

Documentation in different languages. Unit completely factory tested before delivery.

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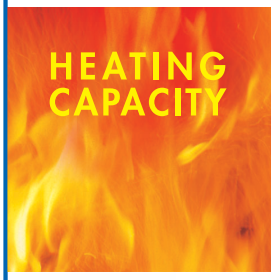
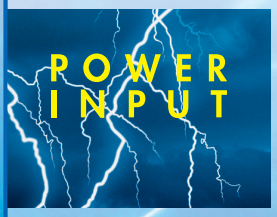
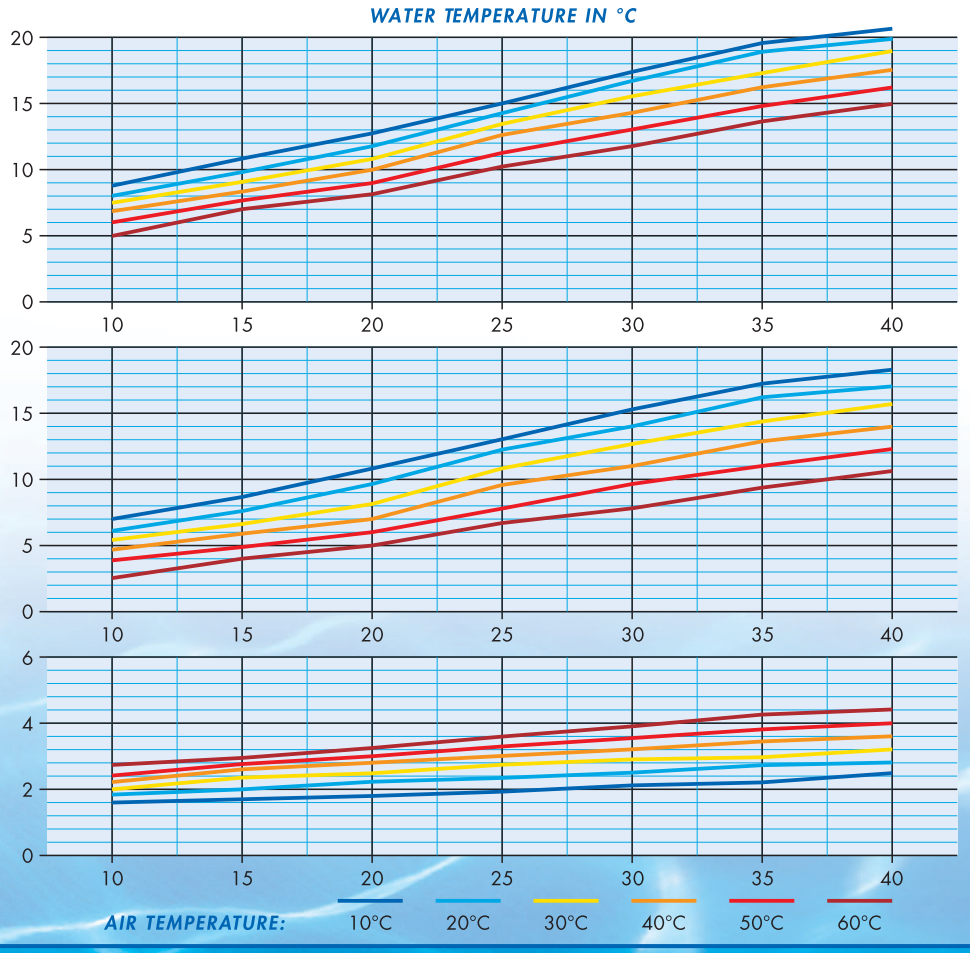
# Technical Data.

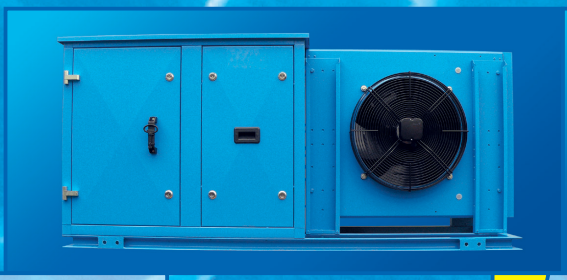
| | | | | | | |
|---|---|---|---|---|---|---|
| Cooling Capacity | kW | 9.5 | | Water Flow | m³/h | 5-40 |
| Heating Capacity | kW | 12.5 | | Water Pressure Drop | kPa | 0-5 |
| Pool Temperature | °C | +25 | | Water Connection | | 2x2" |
| Max. Pool Temperature | °C | +45 | | Refrigerant | | R 134a |
| Ambiant Temperature | °C | +40 | | Sound Level at 3m | dB(A) | 50 |
| Max. Ambiant Temperature | °C | +60 | | Length | mm | 1800 |
| Power Consumption | kW | 3.0 | | Width | mm | 600 |
| Power Supply | V/Ph/Hz | 400/3/50 | | Higth | mm | 825 |
| Fuse | A | 25 | | Weight | kg | 300 |





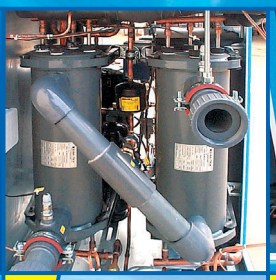


> Standard version ...

> High version



> Detail evaporator

> Detail electrical cabinet