

# Water Chiller

# TT-54'500

Air cooled water chiller with integrated heating capability for the water circuit  
Mobile unit for individual machines or multi-machine applications

For water temperatures from +10°C up to +40°C,  
at ambient temperatures up to +45°C

Suitable for high ambient air and tropical installations

No unnecessary water  
consumption due to a  
closed water circuit

Electronic flow control  
with digital display

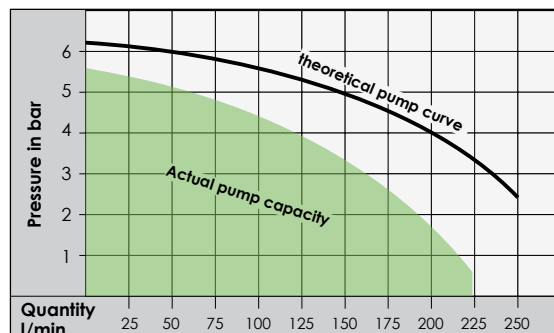
## Operating principle

The unit is equipped with a corrosion free water tank with a content of approx. 250 litres. The cooling compressor cools the water content to the required temperature. The resultant heat will be blown out on the top of the unit. Should the water temperature be too low, the heating element will be activated automatically.

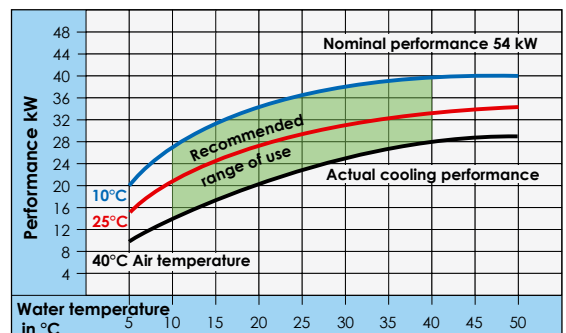
- Self-optimizing microprocessor controller with digital display of the set and actual temperature. With high precision regulation in  $1/10^{\circ}$  range; can be adjusted to read °C or °F.
- Digital flow indication with control of the minimum flow.
- All components in contact with water are made of corrosion resistant stainless steel.
- Long life expectancy due to the electronic control of the compressors operating time.
- If the water in the system does not reach the required temperature, the built-in heating will be activated automatically.
- Automatic or manual water refill.
- Automatic level control with prewarning at low water level.
- All failures are visually indicated.
- Unit on castors.



## Pump capacity



## Cooling capacity



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## Technical data

<b>Temperature control</b>	self-optimizing, electronic microprocessor controller MP-888 with digital display of the set and actual value. Automatic temperature monitoring.
<b>Flow control</b>	electronically, with digital display and automatic control of the minimum flow.
<b>Cooling capacity</b> <i>Nominal</i>	<b>54 kW - see diagram</b>
<b>Temperature range</b> <i>Circulating water</i>	+10°C up to +40°C
<i>Air temperature</i>	+2°C up to +45°C
<b>Heating</b>	12 kW, manual switchable
<b>Content water tank</b>	approx. 250 l
<b>Refrigerating agent</b>	R-134a
<b>Pump capacity</b>	max. 6,2 bar / max. 250 l/min - see pump diagram
<b>Compressor</b>	hermetically sealed
<b>Condenser</b>	air cooled, air inlet located on the side, blow out located on the top
<b>Air volume</b>	8'000 m <sup>3</sup> /h (not relevant to WK)
<b>Power consumption</b>	<b>approx. 18 kW</b> (heating mode approx. 18 kW, cooling mode approx. 14 kW)
<b>Connections</b>	
<i>To mould</i>	1¼" BSP female thread
<i>From mould</i>	1½" BSP female thread
<i>Automatic water refill</i>	¾" BSP female thread
<i>Drain</i>	1" BSP female thread
<i>Cooling water in/out</i>	1" BSP female thread (only at WK)
<b>Dimensions (L×W×H)</b>	1'350 × 1'050 × 1'950 mm, incl. castors
<b>Noise level</b> (in 3 m distance)	65 dBA
<b>Weight</b>	585 kg empty
<b>Colour</b>	silver grey RAL 7001

### TT-54'500 WK:

The same model is also available as water cooled version.

Required cooling water: minimum 1,5 bar water pressure.

With cooling tower water (approx. 30°C)      approx. 65 l/min cooling water consumption

With tap water (approx. 10 - 15°C)      approx. 25 - 40 l/min cooling water consumption

## Electronic temperature controller MP-888

The electronic controller can be adjusted to indicate °C or °F. The upper turning on point and lower turning off point (hysteresis) of the temperature band can be adapted. Due to this, the time range between the start and stop point of the compressor is wider and the compressor has a longer life expectancy.



Set temperature / required temperature  
Adjustable in 1/10° range

Actual temperature (effective temperature) displayed in 1/10° range

Indication of flow with 1/10 display. Switchable from liter to English or American gallons. As soon as the flow falls below a minimum, the alarm is activated.

#### Flow control with automatic or manual pre-adjusted mode:

**Automatic:** The electronic flow control measures the actual flow, generates automatically a minimum flow and as soon as the flow falls below this value, the alarm will be activated.

**Manual:** The minimum flow can be adjusted manually. As soon as the flow falls below this value, the alarm will be activated.



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