

# Cooling System

## TMV7510WW



Fachbetrieb für Kälteanlagen und Flüssigkühlung

### Cooling principle Water - Water

In the TMV7510WW, the cooling medium in the primary circuit circulates between the cooling system and the heat source to be cooled. The heated cooling medium, which re-enters via the return, is cooled by a plate heat exchanger connected to the cold water circuit and exits at the outlet line.

Drinking water or a mixture of drinking water and antifreeze protection (f.e. G48® Glysantin®) can be used as cooling medium.

The cooling system has a digital temperature controller in the primary circuit for precise descent control of the cold water circuit, temperature monitoring of the water flow temperature, a tank level switch (pump dry run protection) and an adjustable flow monitor. The monitoring circuits are already connected onto connecting terminals

A manual volume control valve installed in the cold water circuit (in addition to the solenoid valve) can, if required, adapt the volume flow in the secondary circuit to the cooling power requirement of the application.

*Optional extras:*  
e.g. customer specific electrical interfaces, IEC appliance inlet C 14 (switched), process sensors

- ◆ Compact design
- ◆ Variable cooling capacity in a smallest possible constructed size
- ◆ Digital temperature controller, RS485
- ◆ Monitoring of temperature, flow and fluid level
- ◆ Customized version possible

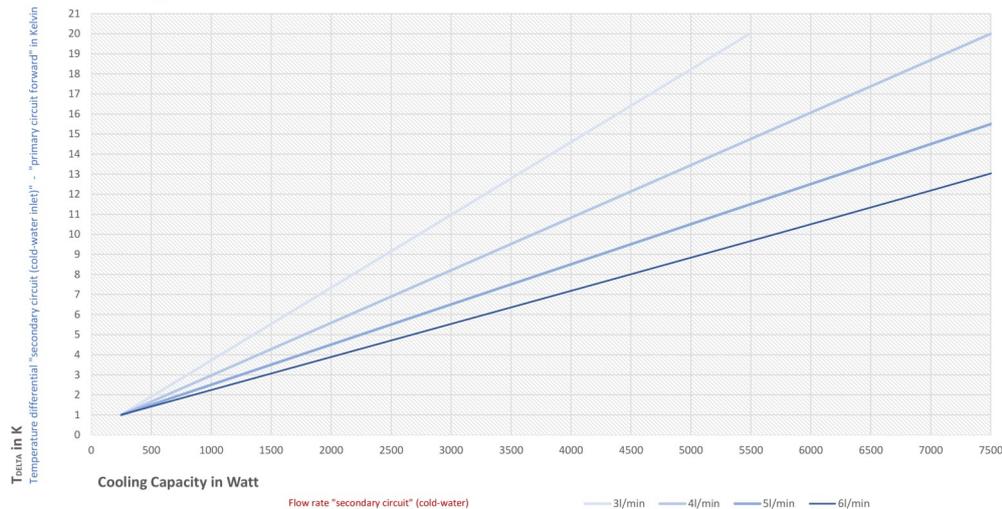
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### Performance diagramm

TMV7510WW  
Cooling capacity



Version 1.03  
System 10/2019

### Product picture



## Technical data

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### Dimensions, weight and color

Length (depth):	465 mm
Width (front):	355 mm
Height (front):	400 mm
Weight (empty):	34,00 kg
Weight (filled):	50,00 kg
Colour:	RAL 7035 (light grey)

### Coolant circuit

Coolant:	drinking water or drinking water-glycol mixture (drinking water / glycol max. 75% / 25%)
Media temperature:	+5°C to 55°C
Capacity (min / max):	12,0 litres / 16,0 litres
Hydraulic connections	
- Primary circuit (coolant)	G3/8", female thread
- Secondary circuit (water)	G3/8", female thread
Coolant hose:	Inner diameter ≥ 10 mm total length (VL+RL) < 30 meters

### Performance data

Cooling capacity:	1.000 - 7.500 watts
Volume flow: (primary circuit)	> 6,0 l/min at 3,5 bar
Mains voltage:	230 V AC ± 5%, 50Hz / 60Hz
Power consumption:	1,85 A / 1,75 A
Operating noise:	49 - 57 dB(A) measured at 1 m distance
Protection:	IP21

### Environmental conditions

Operation above sea level:	Up to 4000 m above sea level
Operating temperature:	+5°C to +40°C ambient temperature
Storage temperature:	-10°C to +70°C
Rel. humidity:	20% to 90% (non-condensing)
Installation conditions:	Indoor installation, horizontal floor

### Factory settings (changeable by customer)

Maximum pressure:	6,0 (+0,0/-0,2) bar
Flow switch contact OPEN:	≤ 4,00 l/min
Flow switch contact CLOSED:	≥ 4,8 l/min
Temperature controller contact OPEN:	< 5°C and > 35°C
Temperature controller contact CLOSED:	> 7°C and < 33°C

### Contact rating

Flow switch:	max. 230V/AC, 3A, 60VA
Fluid level:	max. 250V/AC, 200V/DC, 1,5A, 50VA
Temperature controller (standard)	max. 230V/AC, 8A, resistive load

All dimensions are approximate and may differ slightly in series production

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