

TT-407 Z

Oil temperature control unit

- high performance unit with wide temperature range: -20°C up to $+240^{\circ}\text{C}$
- for reactors and double-walled vessels



Oil -20°C up to 240°C

Heating capacity **8 kW**

Cooling capacity

67 kW @ 230°C tubular heat exchanger

143 kW @ 80°C plate heat exchanger

Cooling system indirect

Application: reactors up to 50 litres



Functions

- Self-optimizing temperature controller with temperature display $1/10^{\circ}\text{C}$ – steps
- Display in $^{\circ}\text{C}$ or $^{\circ}\text{F}$ and l/min or gal/min
- Digital flow display and monitoring
- Automatic temperature control
- Switchover for temperature control at the consumer
- Heating switchable in stages
- Pressure indication: pump, compressed air unit, compressed air mains
- With pressure regulation

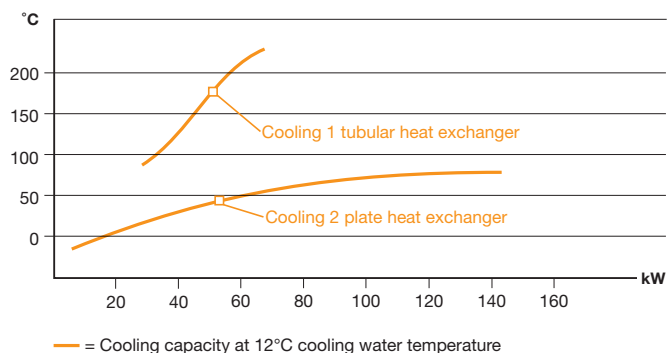
Construction

- High temperature pump with mechanical seal
- Hot oil circuit with bypass, which ensures the internal oil circulation when the valves are closed
- With two cooling circuits:
circuit 1: $+80^{\circ}\text{C}$ to $+240^{\circ}\text{C}$
circuit 2: -20°C to $+80^{\circ}\text{C}$
- Limescale free heat exchanger
- No cracking of the oil thanks to special heating construction
- All parts in contact with water are made of stainless steel or bronze
- Unit on castors

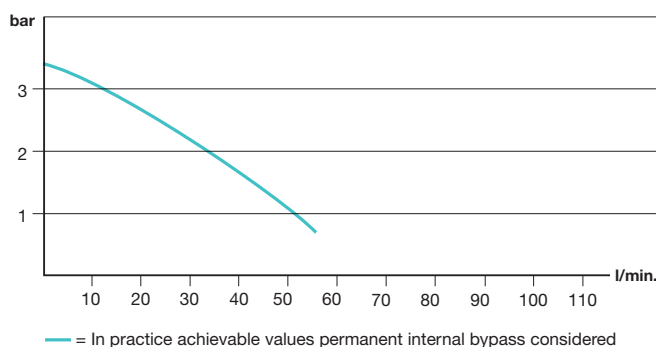
Safety features

- Level control for dry run protection
- Expansion vessel with safety shut-off in case of overflow
- Electronic temperature limitation and monitoring in the controller
- Mechanical safety thermostats
- Visual and acoustic fault indications
- Integrated circuit breakers
- Main switch, transformer and motor protection switch

Cooling capacity



Pump capacity



Technical data

Product attribute	Unit	TT-407 Z
Temperature range	°C	-20°C up to +240°C with heat transfer liquid
Temperature control		Self-optimizing, electronic microprocessor controller MP-988 with digital display of the set and actual value. Automatic temperature monitoring.
Flow control		Electronically, with digital display and automatic control of the minimum flow.
Heating capacity	kW	8 kW
Switchable in stages		3/5
Cooling capacity		
Cooling 1		67 kW at 230°C – see diagram - tubular heat exchanger
Cooling 2		143 kW at 80°C – see diagram - plate heat exchanger
Pump capacity		
Motor	kW	1.8 kW
Pressure mode		Max. 3,5 bar / max. 55 l/min. – see diagram
Expansion tank capacity		21 litres
Filling amount		11 litres
Expansion volume		16 litres
Connections		
Oil circuit		¾" BSP female thread
Cooling water		¾" BSP female thread
Water-glycole		¾" BSP female thread
Compressed air		¼" BSP female thread, min. 5 bar
Dimensions (L×W×H)		1'140x480x1'400 mm, incl. castors
Weight		Approx. 220 kg, empty
Colour		Silvergrey RAL 7001