

Temperature Control Unit

TT-138 N, B/BP

Powerful pressurised water unit with 18 or 24 kW heating capacity

Operational use:

Model N with water up to 140°C

pump with axial face seal

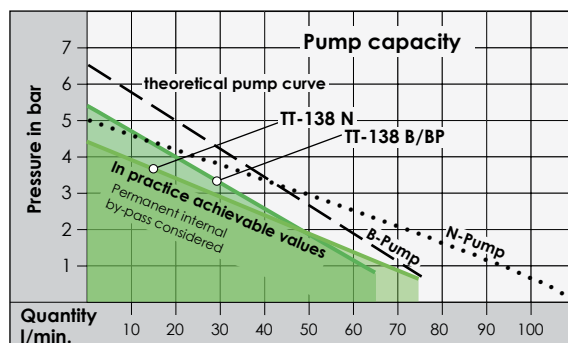
Model B/BP with water up to 160°C

pump with seal less magnetic drive



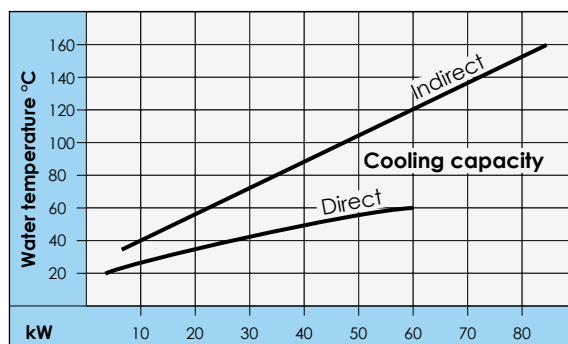
Features included

- Self-optimizing temperature controller with digital display of the set and actual temperature. With high precision regulation in $1/10^{\circ}$ range; can be adjusted to read $^{\circ}\text{C}$ or $^{\circ}\text{F}$.
- Automatic temperature control - difference between set and actual temperature activates an alarm.
- Indication of the pressure to the mould and of the system pressure.
- Automatic mould drain, pressure discharge, aeration and water filling.
- Lime scale free heat exchanger.
- All components in contact with water are made of stainless steel or bronze.
- Heating switchable in stages.
- Safety devices:
 - Automatic level control for dry run protection.
 - Electronic temperature limiter in the controller and separate mechanical safety thermostat.
 - Main switch, transformer and motor protection switch.
 - Horn in case of failure.
- All failures are visually indicated.
- Unit on castors.



Unit equipped with 2 cooling systems:

- Indirect cooling from 30°C up to 160°C
- Direct cooling up to 80°C



Particularities

- Digital flow indication with control of the minimum flow.
- Reversing switch for temperature controlling at the mould.
- Mould drain by compressed air ensures complete emptying of the consumer.
- Leakstopper device – unit can be used in pressure or vacuum mode. No medium is lost on leaking tools, therefore ensuring continued production.
- Optional with digital interface controller MP-988.

HEADQUARTERS & MANUFACTURER

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TOOL-TEMP®

Technical data

TT-138 N

TT-138 B/BP

Temperature range

water

up to 140°C

up to 160°C

Temperature control

self-optimizing, electronic microprocessor controller MP-888 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

Switchable in stages

18 kW **24 kW**
6/12 6/18

18 kW **24 kW**
6/12 6/18

Cooling capacity

Indirect

approx. 85 kW at 160°C

Direct

approx. 60 kW at 60°C

Pump capacity

Pressure mode

motor 1,8 kW
max. 5 bar / max. 110 l/min.

motor 1,8 kW
max. 6,5 bar / max. 75 l/min.

Vacuum mode

vacuum max. 8 mH₂O

vacuum max. 8 mH₂O

Model

axial face seal

seal less magnetic drive

Pressure increasing pump

no

yes

Temperature measurement

at the mould

yes

yes

Pressure discharge

yes

yes

Leakstopper and

mould drain

with compressed-air

with compressed-air

Filling

automatic

automatic

Connections

Medium

¾" BSP female thread

Cooling water

1" BSP male thread, inlet with water filter 1" BSP female thread

Compressed-air

¼" BSP female thread

Dimensions (L×W×H)

1'240 × 480 × 1'400 mm, incl. castors

Weight

approx. 180 kg empty

Colour

silvergery RAL 7001

All possible voltages are available from 3 x 200 V to 3 x 600 V and 50/60 Hz. The units are available conform to UL/CSA specifications. For the USA market the units are equipped with NPT-thread connections and the controller is adjusted to indicate °F.

Electronic temperature controllers

The electronic controllers MP-888 and MP-988 can be operated to read °C or °F. The analog interfaces 0-5 V, 0-10 V and 4-20 mA are standard included in the controllers - **without additional costs**.

The self-optimizing feature on these controllers allows a very high regulating accuracy even at high temperatures and adheres to the set temperatures independently of the consumer size.

Flow control:

The indication of the flow rate is possible in litres or gallons per minute. As soon as the flow falls below a minimum, the alarm is activated.

Standard controller MP-888



Set temperature
(required temperature)

Actual temperature
(effective temperature)

Indication of the flow

Analog interfaces

- 0 - 5 V, 0 - 10 V, 4 - 20 mA

Digital interface controller MP-988 (Optional)



Digital interface

- RS-485, RS-232, Current Loop 20 mA, CAN-bus, Profibus
- Incl. all existing machine protocols

Temperature difference monitoring

Indication of up to three temperatures

Analog interfaces

- 0 - 5 V, 0 - 10 V, 4 - 20 mA

