

# Temperature Control Unit

# TT-137 N, B/BP

Universally pressurised water unit with high cooling capacity

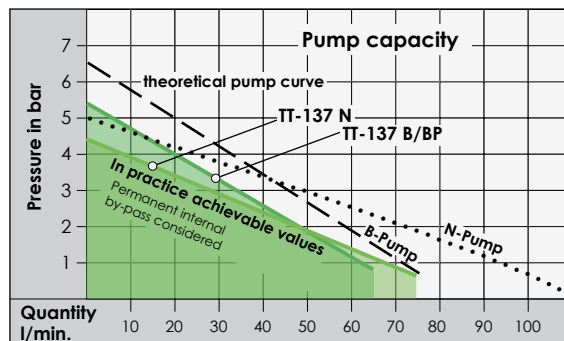
Operational use:

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



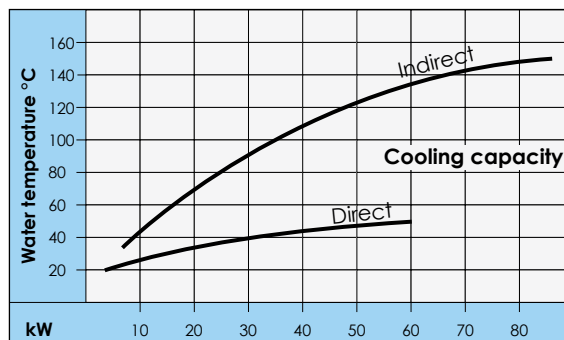
## Features included

- Self-optimizing temperature controller with digital display of the set and actual temperature. With high precision regulation in 1/10° range; can be adjusted to read °C or °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 regulation 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.



# TOOL-TEMP®

## Technical data

## TT-137 N

## TT-137 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

12 kW

6/6

12 kW

6/6

### Cooling capacity

Indirect

approx. 90 kW at 160°C

Direct

approx. 60 kW at 50°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 mH<sub>2</sub>O

vacuum max. 8 mH<sub>2</sub>O

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

¾" BSP male thread, inlet with water filter ¾" BSP female thread

Compressed-air

¼" BSP female thread

### Dimensions (LxWxH)

870 x 360 x 915 mm, incl. castors

### Weight

approx. 120 kg empty

### Colour

silvergry 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

