TCU • TEMPERATURE CONTROL UNIT

SMART 5W TS

Water temperature control unit for industrial aplications up to 90ºC in the field of plastic injection moulding, extrusion, chemical, pharmaceutical, cosmetics or steel.

Water
FLUID

90ºC
MAX. TEMP.

MAIN FEATURES

- Pump works under pressure and reverse operation feature
- Solid State relays for heating
- Frontal cooler for solid state relays
- PID temperature control in cooling and heating process
- Hose breakage and leakage monitor
- Sensor failure monitor
- Automatic water filling
- Standard pump 200 l/m 5,8 bar
- Indirect cooling system double submersible coil
- Two independent solenoide valves one for cooling one for filling
- Entire cooling sytem, heaters, tank, process pipes and thermocouple in stainless steel
- Water level sensor through elèctrode
- Electronic flow measurement
- Acoustic alarm
- Castors
- Pressure transducer
- Thermocouple in process return
- User friendly touch screen pcb card

OPTIONS

- *Analogic Input/Output temperature 4...20mA / 0-10 volt* OPT.
- *Interface TTY 20mA, OPC UA, Profinet, RS 485* OPT.
- *Multi polar connector for external signals* OPT.
- *Pump frequency converter* OPT.
- *Kit plate exchanger 235 kw (standard coil substitution)* OPT.
- *Kit plate exchanger 450 kw (standard coil substitution)* OPT.
- *By pass* OPT.
- *Automatic moud drain* OPT.

EQUIPMENT TYPE

WATER
WITH TANK

EQUIPMENT IMAGE

KEY DATA

Water
Fluid

90 ºC
Max. temp.

400/3/50hz
Power supply

CERTIFICATION
Industry 4.0 Ready

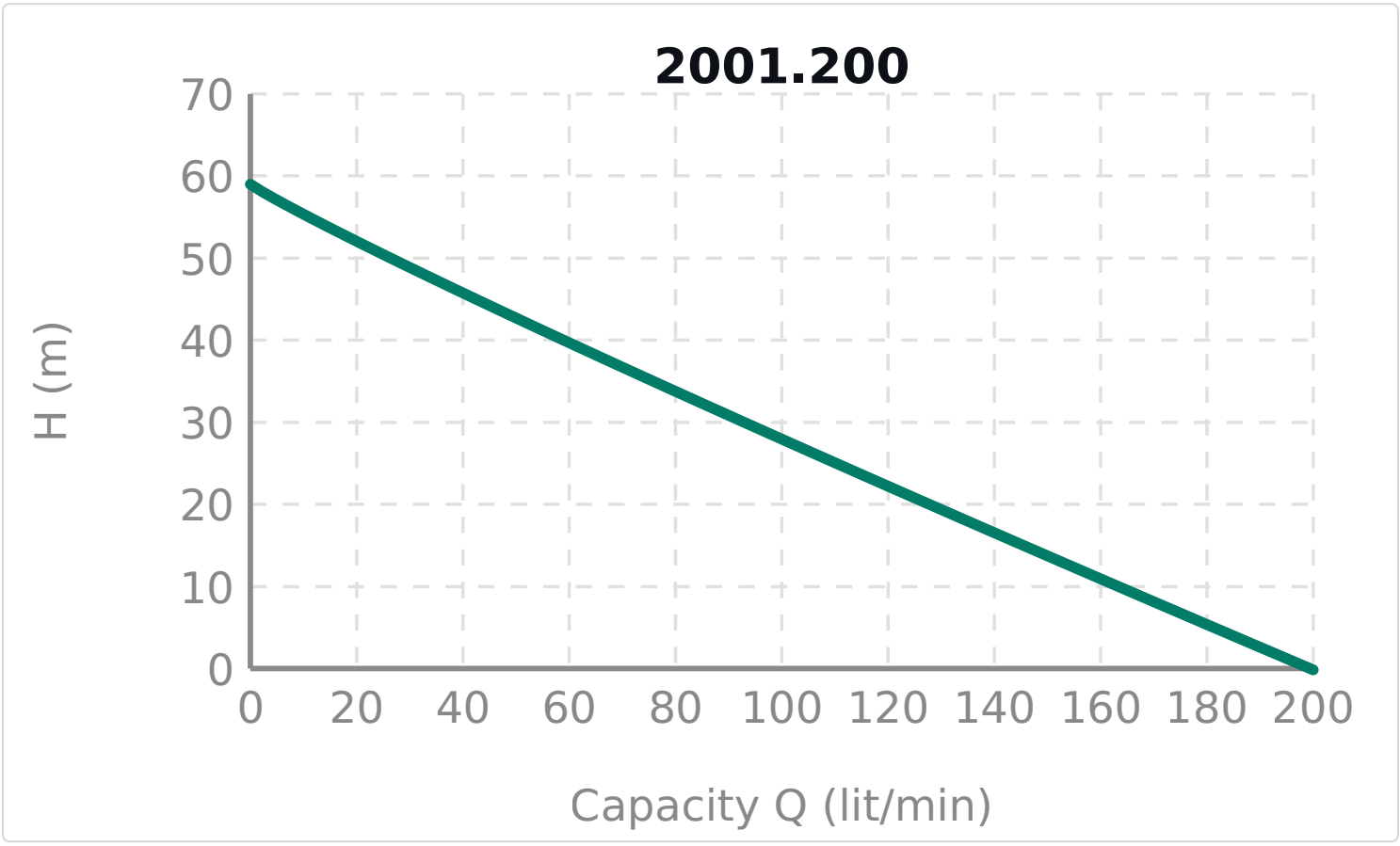
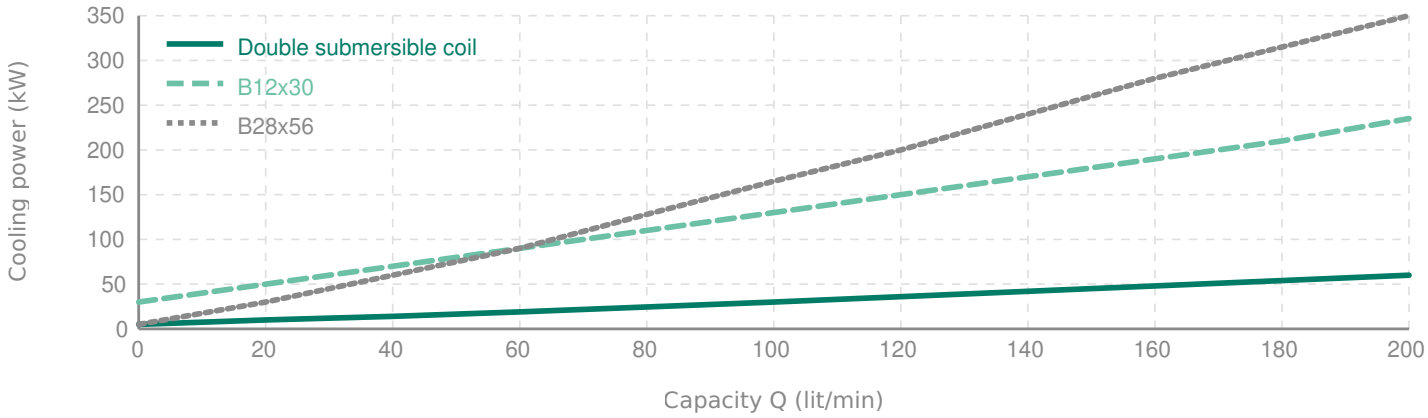
TECHNICAL DATA

PARAMETER	UNIT	SMART 5W TS
SMART 5W TS		
Fluid		**Water**
Maximum temperature	ºC	**90**
PID temperature control heating / cooling		**Yes**
Solid state relays + frontal cooler		**Yes**
Heating power	kW	**18 – 24 – 30 – 36**
Cooling power at 15ºC (Double submersible coil)	kW	**60**
Cooling power at 15ºC (B12x30) OPT	kW	**235**
Cooling power at 15ºC (B28x56) OPT	kW	**350**
Tank capacity	Lit.	**70**
Expansion volume	Lit.	**24**
Pump T 2001.200	Max.Flow Max.Pressure Motor power	**200 lit/min 5,8 bar 2,8 kw**
Hydraulic process connections	inlet / outlet	**1 1/2"**
Hydraulic cooling connections	inlet / outlet	**1”**
PCB card	Touch screen	**TG 111**
Thermocouple type		**PT1000**
Dimensions	mm	**510 x 1000 x 930h**
Color	RAL	**7016 – 7035**
Max.electrical cabinet temperature	ºC	**40**
Sound pressure level	db (A)	**< 70**
Weight	kg	**120**
Voltage	V/Ph/Hz	**400/3/50hz** **480/3/60hz** OPT

Note: Technical data subject to change. For custom specifications, contact the Marse technical department.

PUMP CURVES

2001.200 STANDARD



COOLING CURVES