TCU • TEMPERATURE CONTROL UNIT

SMART 2A TS

Oil temperature control unit for industrial aplications up to 150ºC in the field of plastic injection moulding, extrusion, chemical, pharmaceutical, cosmetics or steel.

Oil — FLUID

150ºC — MAX. TEMP.

MAIN FEATURES

- Pump works under pressure
- 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
- Manual oil filling
- Standard pump 60 l/m 3,8 bar
- Indirect cooling system (submersible coil)
- One solenoide valve for cooling
- Entire heaters, tank, process pipes and thermocouple in stainless steel
- Oil level sensor through stainless steel buoy
- 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.
- *Flow sensor for pumps 60 lit/min SBT 634* OPT.
- *Flow sensor for pumps 70 lit/min SBT 646* OPT.
- *By pass* OPT.
- *Pump frequency converter* OPT.

EQUIPMENT TYPE

OIL
OPEN TANK

EQUIPMENT IMAGE

KEY DATA

Oil
Fluid

150 ºC
Max. temp.

400/3/50hz
Power supply

CERTIFICATION
Industry 4.0 Ready

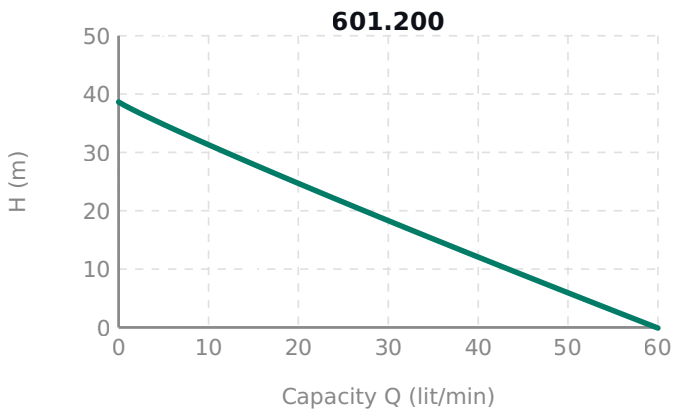
TECHNICAL DATA

PARAMETER	UNIT	SMART 2A TS
SMART 2A TS		
Fluid		**Oil**
Maximum temperature	ºC	**150**
PID temperature control heating / cooling		**Yes**
Solid state relays + frontal cooler		**Yes**
Heating power	kW	**6 – 9**
Cooling power at 15ºC	kW	**20**
Tank capacity	Lit.	**20**
Expansion volume	Lit.	**7**
Pump TM 601.200	Max.Flow Max.Pressure Motor power	**60 lit/min 3,8 bar 0,5 kw**
Pump TM 602.200 OPT	Max.Flow Max.Pressure Motor power	**60 lit/min 5,8 bar 1 kw**
Pump TM 701.200 OPT	Max.Flow Max.Pressure Motor power	**70 lit/min 5,8 bar 1 kw**
Hydraulic process connections	inlet / outlet	**3/4"**
Hydraulic cooling connections	inlet / outlet	**1/2"**
PCB card	Touch screen	**TG 111**
Thermocouple type		**PT1000**
Dimensions	mm	**325 x 610 x 700h**
Color	RAL	**7016 – 7035**
Max. electrical cabinet temperature	ºC	**40**
Sound pressure level	db (A)	**< 70**
Weight	kg	**40**
Voltage	V/Ph/Hz	**400/3/50hz** **480/3/60hz** OPT

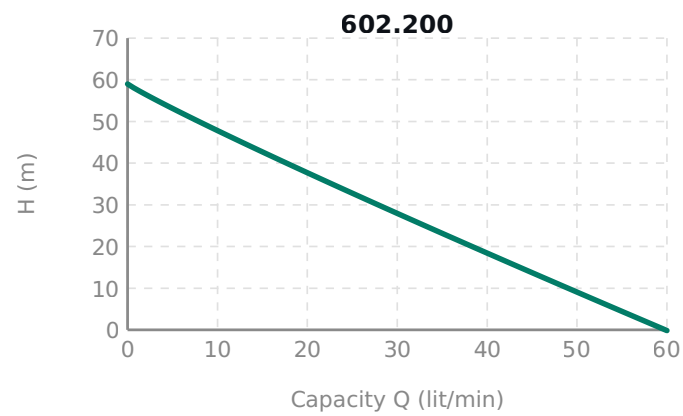
Note: Technical data subject to change. For custom specifications, contact the Marse technical department.

PUMP CURVES

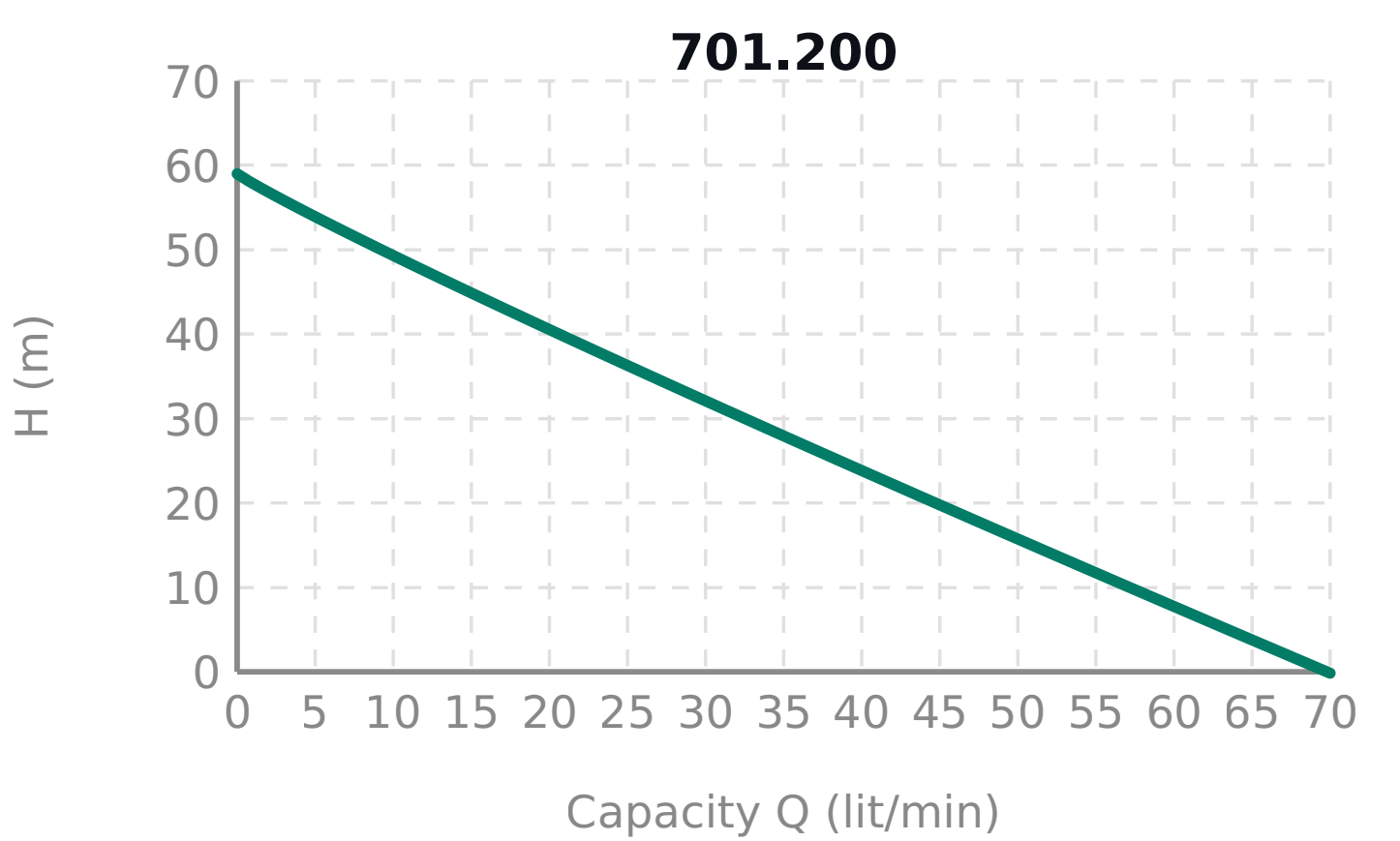
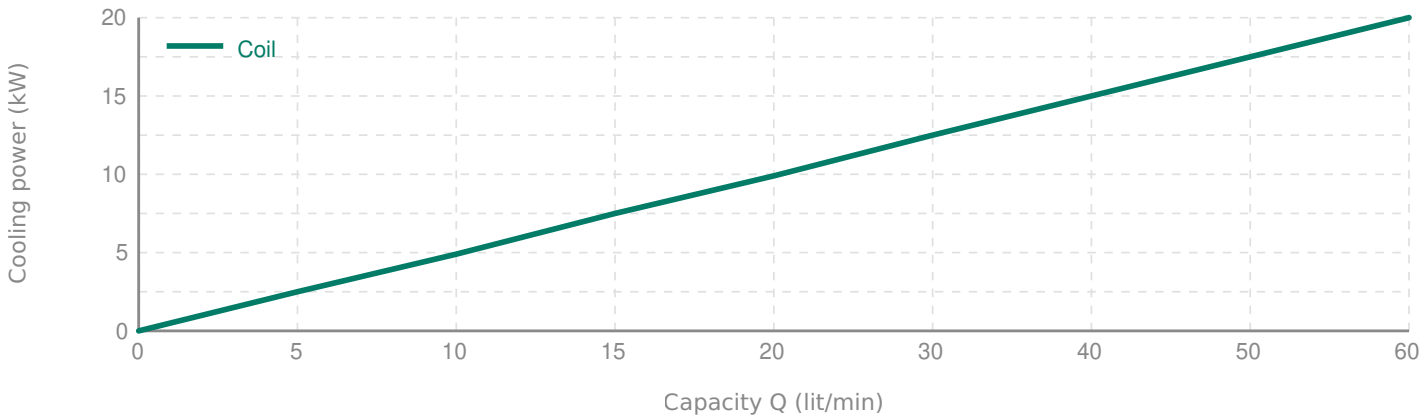
601.200 STANDARD



602.200 OPT



701.200 OPT



COOLING CURVES