TCU • TEMPERATURE CONTROL UNIT

SMART 6 PLUS A300TS

Oil temperature control unit for industrial aplications up to 300ºC in the field of plastic injection moulding, extrusion, chemical, pharmaceutical, cosmetics or steel.

Oil FLUID | **300ºC** MAX. TEMP.

MAIN FEATURES

- Magnetic 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
- Indirect cooling system
- One solenoide valve for cooling
- Entire heaters, tank, process pipes and thermocouple in stainless steel
- Oil level sensor through stainless steel buoy
- Expansion tank
- 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.
- *Expansion tank 60 liters (Standard above 36 kW)* OPT.
- *Tubular cooling system* OPT.

EQUIPMENT TYPE

OIL
CLOSED CIRCUIT

EQUIPMENT IMAGE

KEY DATA

Oil
Fluid

300 ºC
Max. temp.

400/3/50hz
Power supply

CERTIFICATION
Industry 4.0 Ready

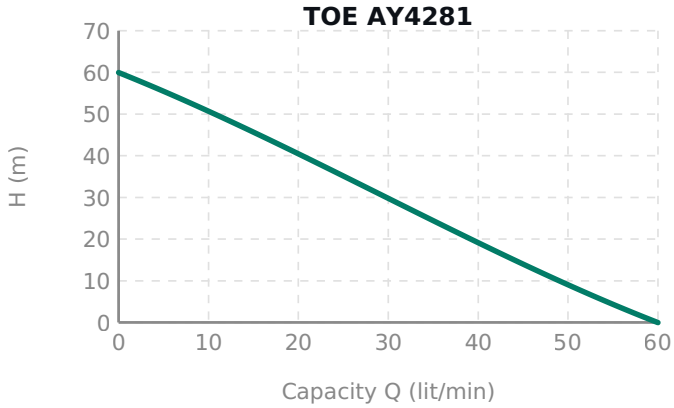
TECHNICAL DATA

PARAMETER	UNIT	SMART 6 PLUS A300TS		
SMART 6 PLUS A300TS				
Fluid			**Oil**	
Maximum temperature	ºC		**300**	
PID temperature control heating / cooling			**Yes**	
Solid state relays + frontal cooler			**Yes**	
Heating power	kW	**9 – 18**	**27 – 36**	**45 – 54 – 63 – 72**
Cooling power at 15ºC (Coaxial system)	kW	**85**	**85**	**120**
Cooling power at 15ºC (Tubular system) OPT	kW		**230**	
Capacity heating cylinders	Lit.	**16**	**16**	**32**
Capacity expansion tanks	Lit.	**30**	**30**	**60**
Magnetic pump	Max.Flow Max.Pressure Motor power	**60 l/min 6 bar 1 kw**	**90 l/min 8 bar 1,5 kw**	**200 l/min 8 bar 4 kw**
Hydraulic process connections	inlet / outlet	**¾”**	**¾”**	**1 ¼ ”**
Hydraulic cooling connections	inlet / outlet	**½”**	**½”**	**¾”**
PCB card	Touch screen		**TG 111**	
Thermocouple type			**PT1000**	
Dimensions	mm		**600 x 1250 x 13000h**	
Color	RAL		**7016 – 7035**	
Max. electrical cabinet temperature	ºC		**40**	
Sound pressure level	db (A)		**< 70**	
Weight	kg	**210**	**210**	**250**
Voltage	V/Ph/Hz		**400/3/50hz** 480/3/60hz OPT	

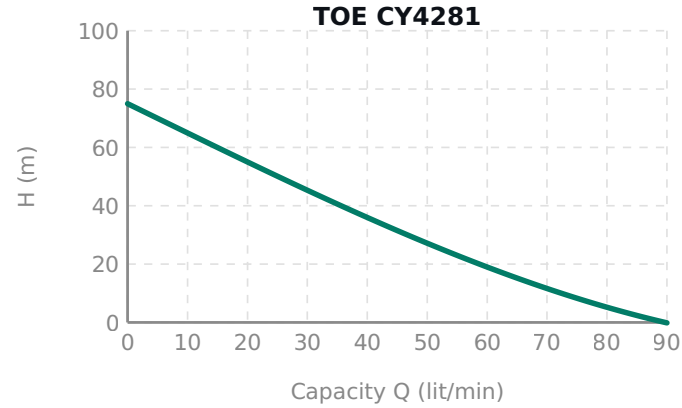
Note: Technical data subject to change. For custom specifications, contact the Marse technical department.

PUMP CURVES

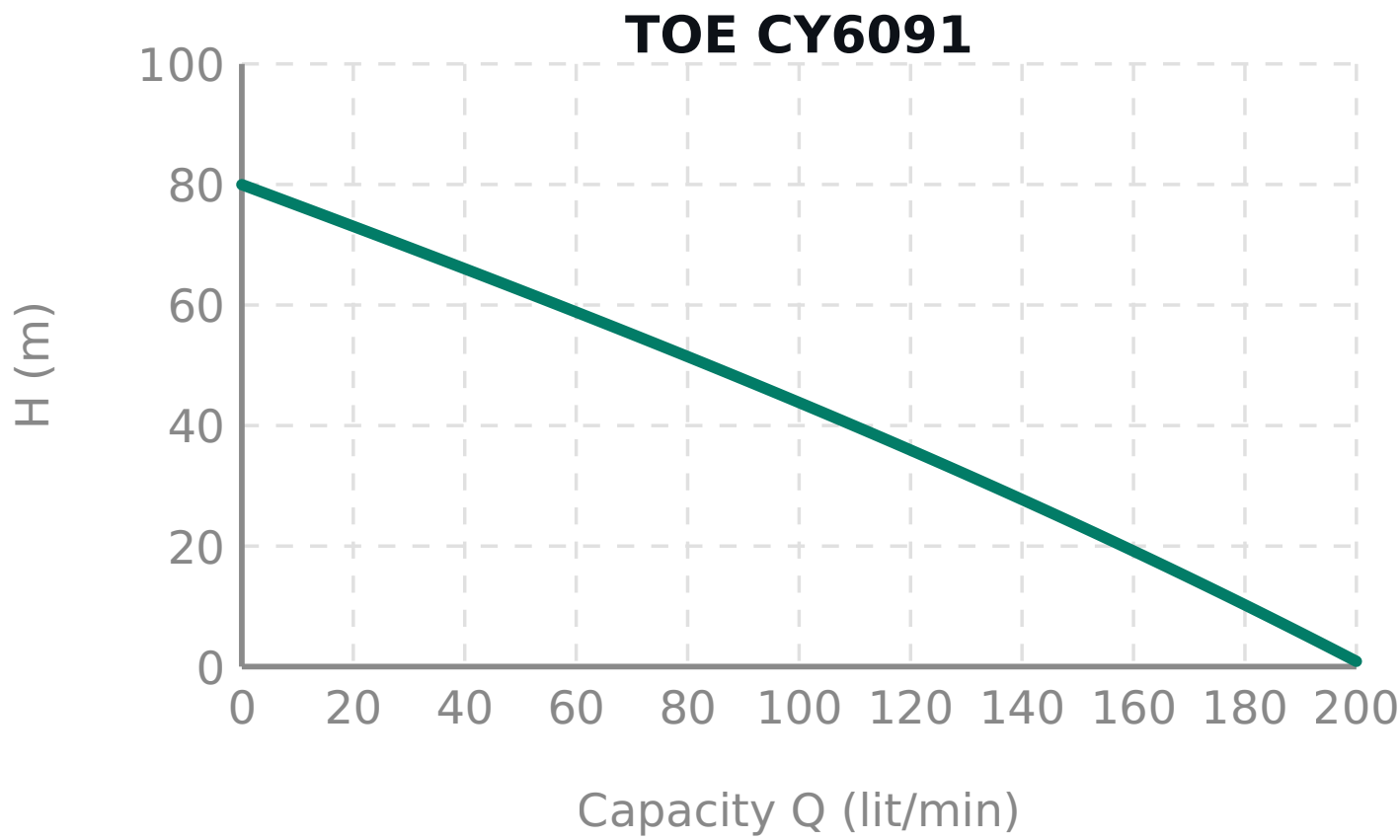
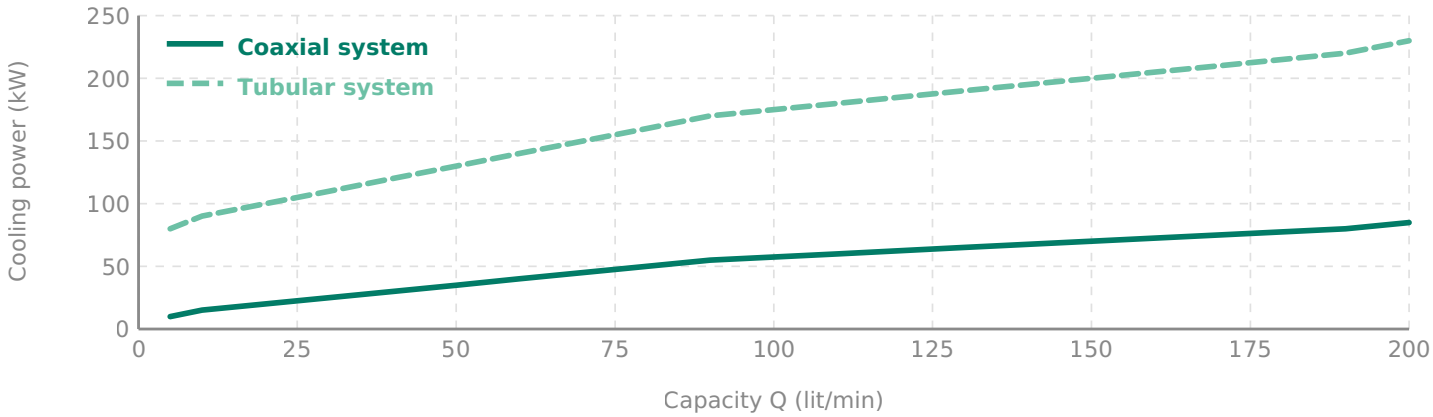
TOE AY4281 TCU 9-18 KW



TOE CY4281 TCU 27-36 KW



TOE CY6091 TCU 45-72 KW



COOLING CURVES