TCU • TEMPERATURE CONTROL UNIT

SMART 6 PLUS WIC140TS

Water temperature control unit for industrial aplications up to 140ºC in the field of plastic injection moulding, extrusion, chemical, pharmaceutical, cosmetics or steel.

Water
FLUID

140ºC
MAX. TEMP.

MAIN FEATURES

- Centrifugal pump
- Electronic flow measurement
- 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
- Indirect cooling system
- 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 electrode
- 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.
- *Automatic blow mould system (1" with three way valve)* OPT.
- *Plate exchanger 450 kw (standard plate substitution)* OPT.

EQUIPMENT TYPE

WATER PRESSURIZED

EQUIPMENT IMAGE

KEY DATA

Water
Fluid

140 ºC
Max. temp.

400/3/50hz
Power supply

CERTIFICATION
Industry 4.0 Ready

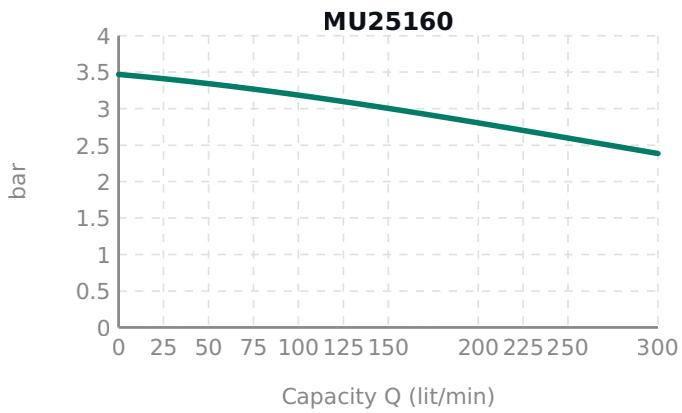
TECHNICAL DATA

PARAMETER	UNIT	SMART 6 PLUS WIC140TS	
SMART 6 PLUS WIC 140 TS			
Fluid		**Water**	
Maximum temperature	ºC	**140**	
PID temperature control heating / cooling		**Yes**	
Solid state relays + frontal cooler		**Yes**	
Heating power	kW	**25 – 32**	**48 – 57 – 64**
Cooling power at 15ºC (E5Tx20)	kW	**100**	
Cooling power at 15ºC (B12x30) OPT	kW	**235**	
Capacity heating cylinders	Lit.	**42**	**65**
Centrifugal pump MU25160	Max.Flow Max.Pressure Motor power	**300 lit/min 3,5 bar 1,5 Kw**	
Centrifugal pump MU25200 OPT	Max.Flow Max.Pressure Motor power	**320 lit/min 4,5 bar 2,2 Kw**	
Hydraulic process connections	inlet / outlet	**1”**	
Hydraulic cooling connections	inlet / outlet	**½”**	
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	**195**	
Voltage	V/Ph/Hz	**400/3/50hz** **480/3/60hz** OPT	

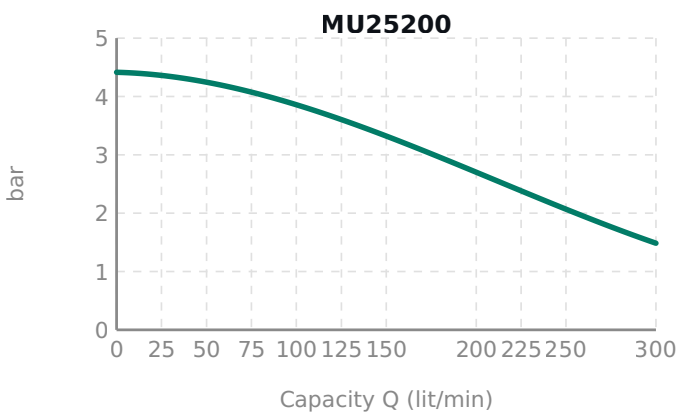
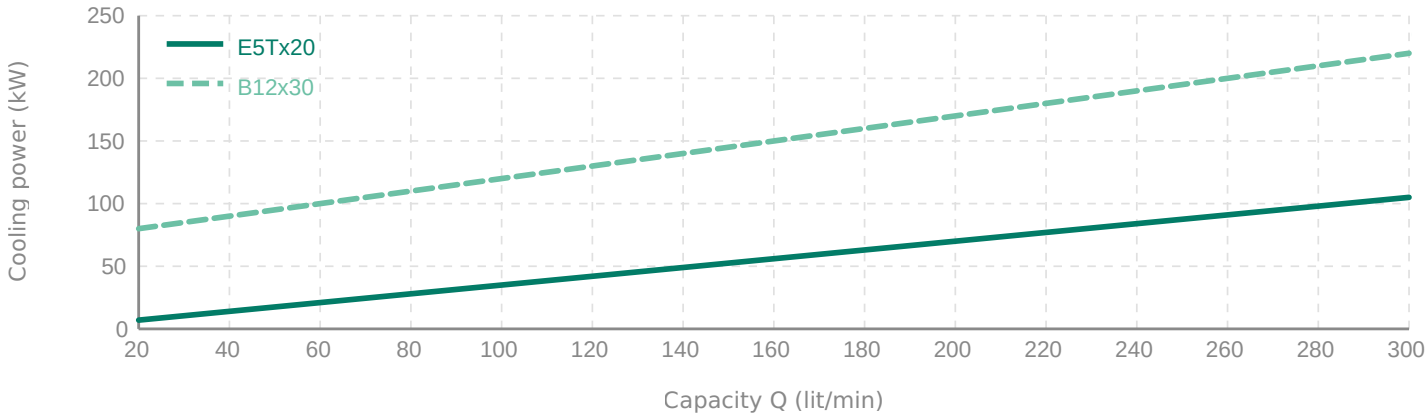
Note: Technical data subject to change. For custom specifications, contact the Marse technical department.

PUMP CURVES

MU25160 STANDARD



MU25200 OPT



COOLING CURVES