TCU • TEMPERATURE CONTROL UNIT

SMART 4 WIC 140TS

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

- 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
- 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
- By pass

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.
- *Electronic flow measurement* OPT.
- *Booster pump* OPT.
- *Frequency converter only for magnetic pumps* OPT.
- *Plate exchanger - 20 plates (standard plate substitution)* OPT.
- *Plate exchanger - 40 plates (standard plate substitution)* OPT.
- *Automatic blow mould system (Standard pump; 1" with three way valve)* OPT.
- *Automatic blow mould system (Magnetic pump; 3/4" with three way valve)* 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

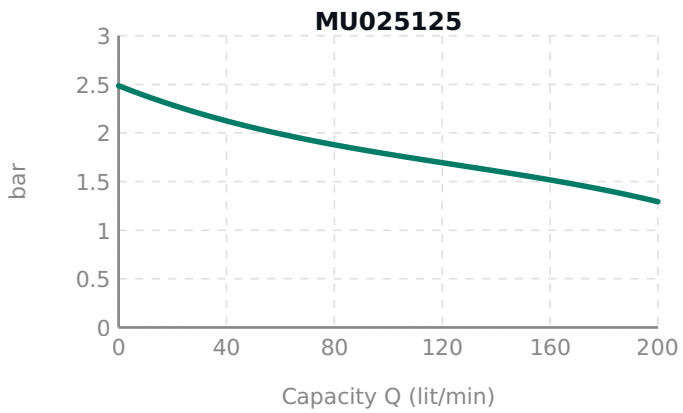
TECHNICAL DATA

PARAMETER	UNIT	SMART 4 WIC 140TS
SMART 4 WIC140 TS		
Fluid		**Water**
Maximum temperature	ºC	**140**
PID temperature control heating / cooling		**Yes**
Solid state relays + frontal cooler		**Yes**
Heating power	kW	**9 – 16**
Cooling power at 15ºC (E5Tx10)	kW	**40**
Cooling power at 15ºC (E5Tx20) OPT	kW	**60**
Cooling power at 15ºC (E5Tx40) OPT	kW	**80**
Capacity heating cylinder	Lit.	**9,6**
Centrifugal pump MU025125	Max.Flow Max.Pressure Motor power	**200 lit/min 2,5 bar 1 Kw**
Magnetic pump EY2251 OPT	Max.Flow Max.Pressure Motor power	**40 lit/min 5 bar 0.5 Kw**
Magnetic pump EY4281 OPT	Max.Flow Max.Pressure Motor power	**60 lit/min 6 bar 1 Kw**
Hydraulic process connections	inlet / outlet	**1”**
Hydraulic cooling connections	inlet / outlet	**½”**
PCB card	Touch screen	**TG 111**
Thermocouple type		**PT1000**
Dimensions	mm	**390 x 800 x 850h**
Color	RAL	**7016 – 7035**
Max. electrical cabinet temperature	ºC	**40**
Sound pressure level	db (A)	**< 70**
Weight	kg	**85**
Voltage	V/Ph/Hz	**400/3/50hz** **480/3/60hz** OPT

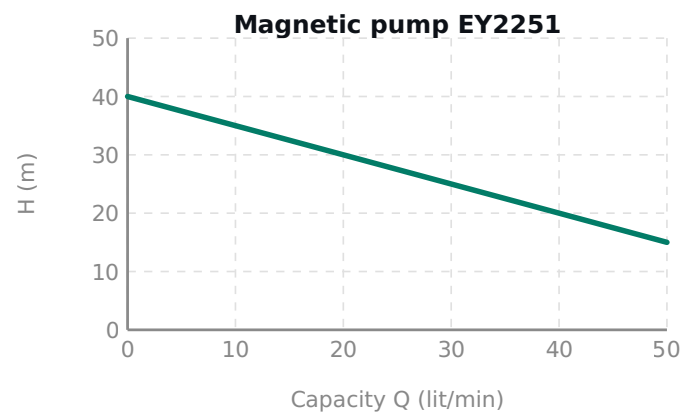
Note: Technical data subject to change. For custom specifications, contact the Marse technical department.

PUMP CURVES

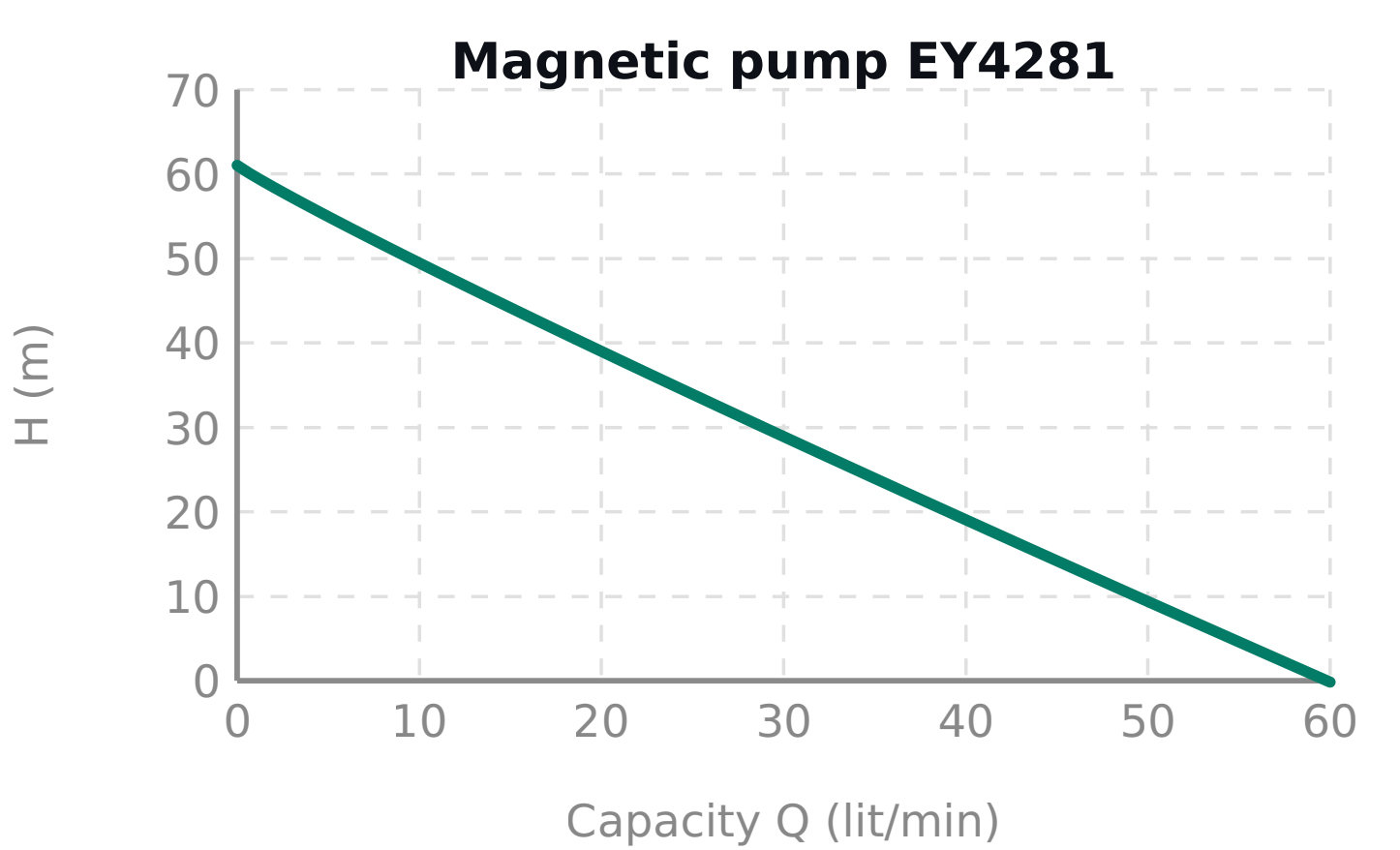
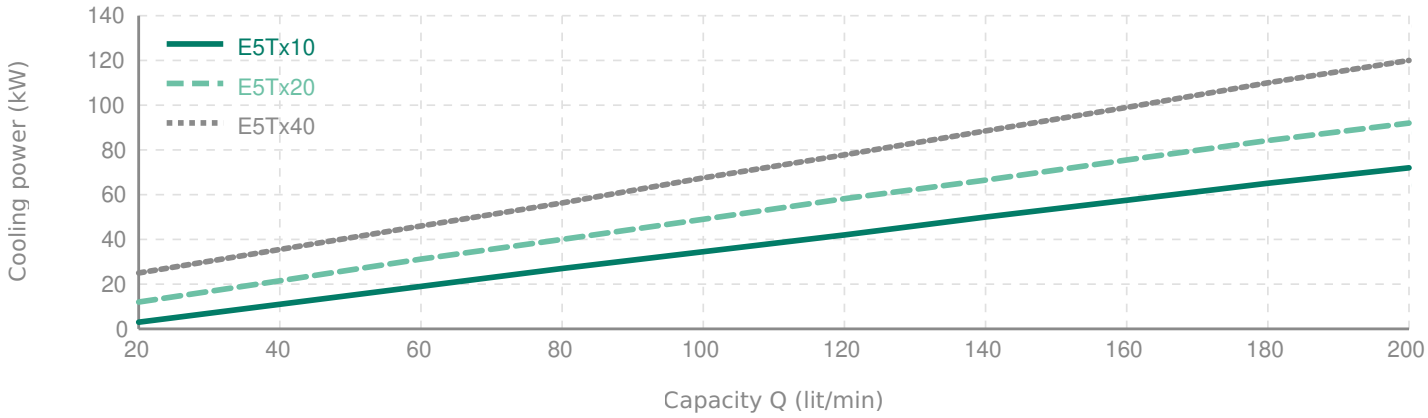
MU025125 STANDARD



MAGNETIC PUMP EY2251 OPT



MAGNETIC PUMP EY4281 OPT



COOLING CURVES