TCU • TEMPERATURE CONTROL UNIT

SMART 2 WIC 140

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
- User friendly digital control display
- Manometer
- By pass

OPTIONS

- *Analogic Input/Output temperature 4...20mA / 0-10 volt* OPT.
- *Electronic flow measurement* OPT.
- *Booster pump* OPT.
- *Plate exchanger - 20 plates (standard plate substitution)* OPT.
- *Plate exchanger - 40 plates (standard plate substitution)* OPT.
- *Pressure transducer* OPT.
- *Thermocouple in process return* 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

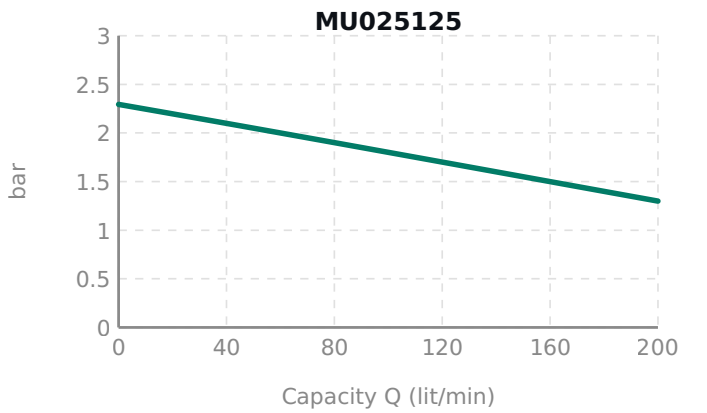
TECHNICAL DATA

PARAMETER	UNIT	SMART 2 WIC 140
SMART 2 WIC140		
Fluid		**Water**
Maximum temperature	ºC	**140**
PID temperature control heating / cooling		**Yes**
Solid state relays + frontal cooler		**Yes**
Heating power	kW	**9**
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.	**5,12**
Centrifugal pump MU025125	Max.Flow Max.Pressure Motor power	**200 lit/min 2,3 bar 0,5 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	Displays	**TG 121**
Thermocouple type		**J type** PT1000 OPT
Dimensions	mm	**330 x 625 x 790h**
Color	RAL	**7016 – 7035**
Max. electrical cabinet temperature	ºC	**40**
Sound pressure level	db (A)	**< 70**
Weight	kg	**55**
Voltage	V/Ph/Hz	**400/3/50hz** 480/3/60hz OPT

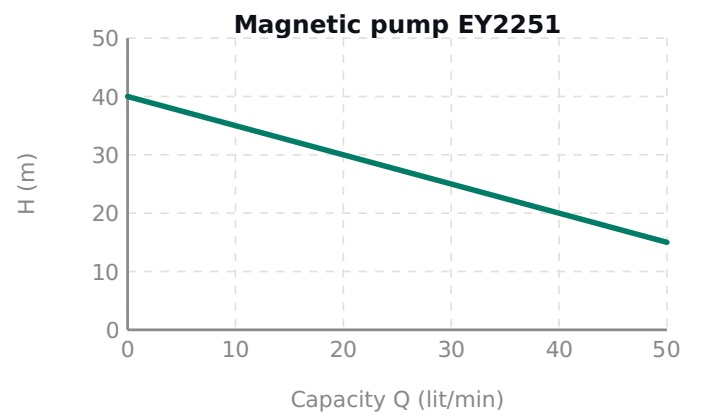
Note: Technical data subject to change. For custom specifications, contact the Marse technical department.

PUMP CURVES

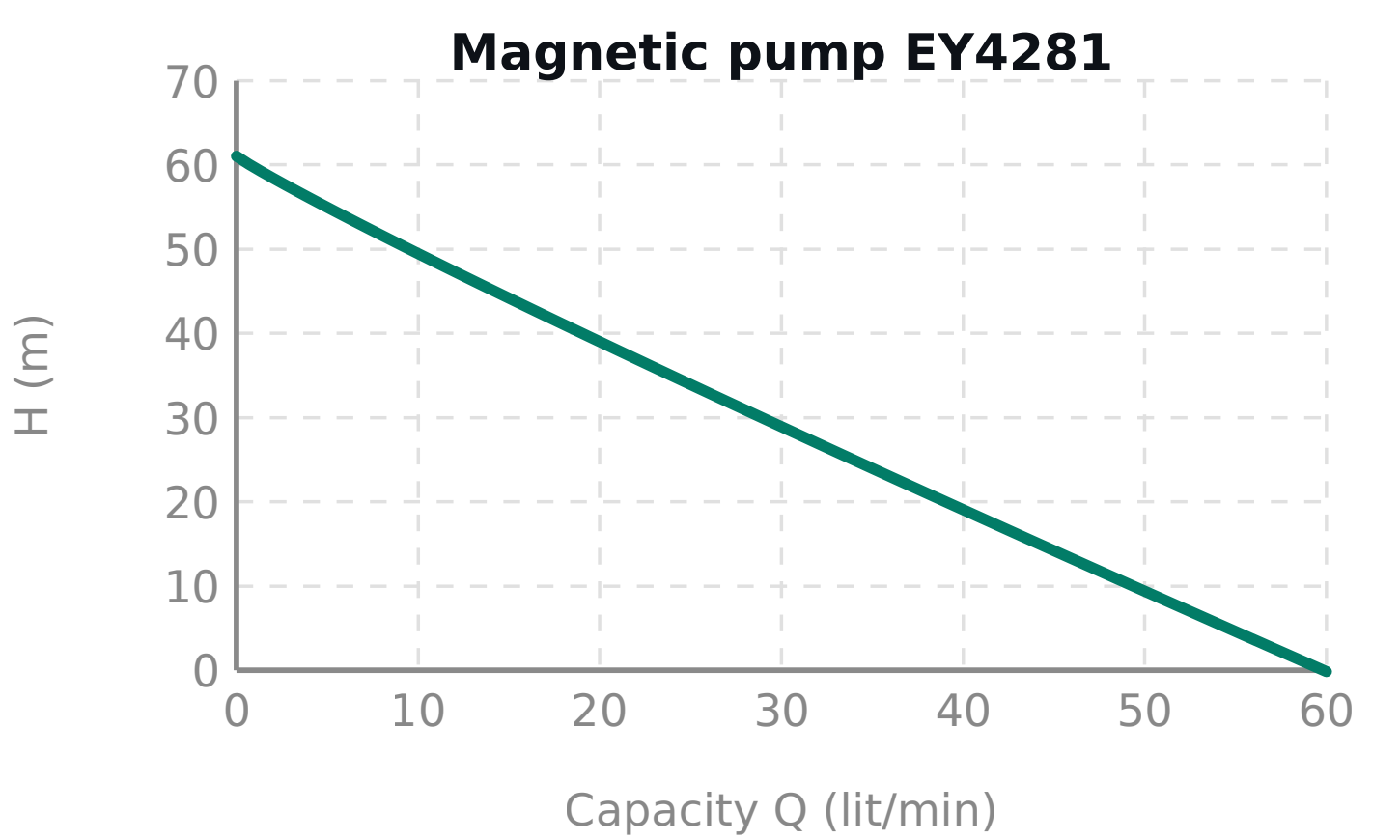
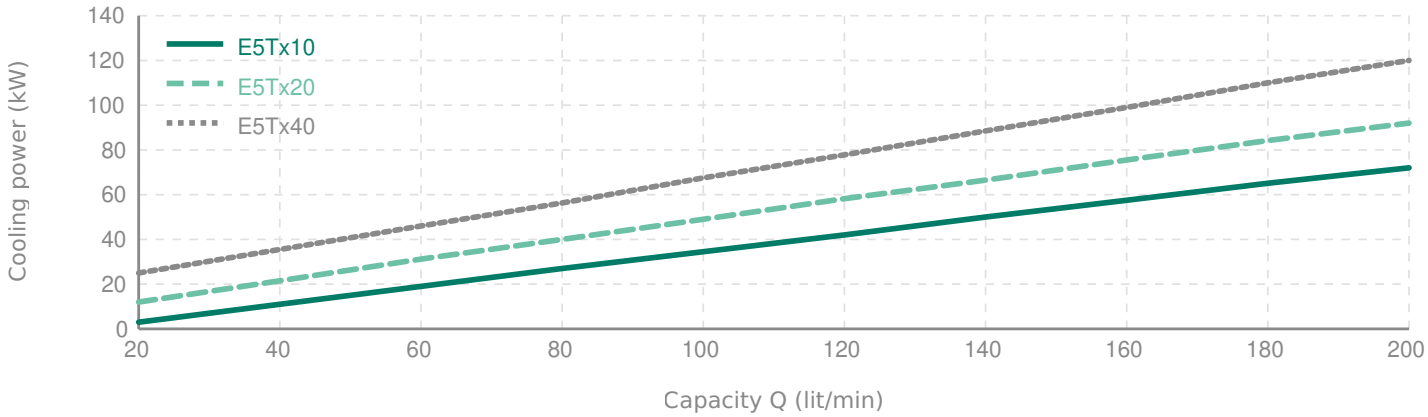
MU025125 STANDARD



MAGNETIC PUMP EY2251 OPT



MAGNETIC PUMP EY4281 OPT



COOLING CURVES