TCU • TEMPERATURE CONTROL UNIT

SMART 4 WIC 160TS

Water temperature control unit for industrial aplications up to 160ºC in the field of plastic injection moulding, extrusion, chemical, pharmaceutical, cosmetics or steel.

Water
FLUID

160ºC
MAX. TEMP.

MAIN FEATURES

- Magnetic pump
- Booster pump
- Pump works under pressure
- 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
- 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.
- *Pump frequency converter* OPT.
- *Flow sensor SBT 634* OPT.
- *Flow sensor SBT 646 for magnetic pump 90 lit/min* 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

160 ºC
Max. temp.

400/3/50hz
Power supply

CERTIFICATION
Industry 4.0 Ready

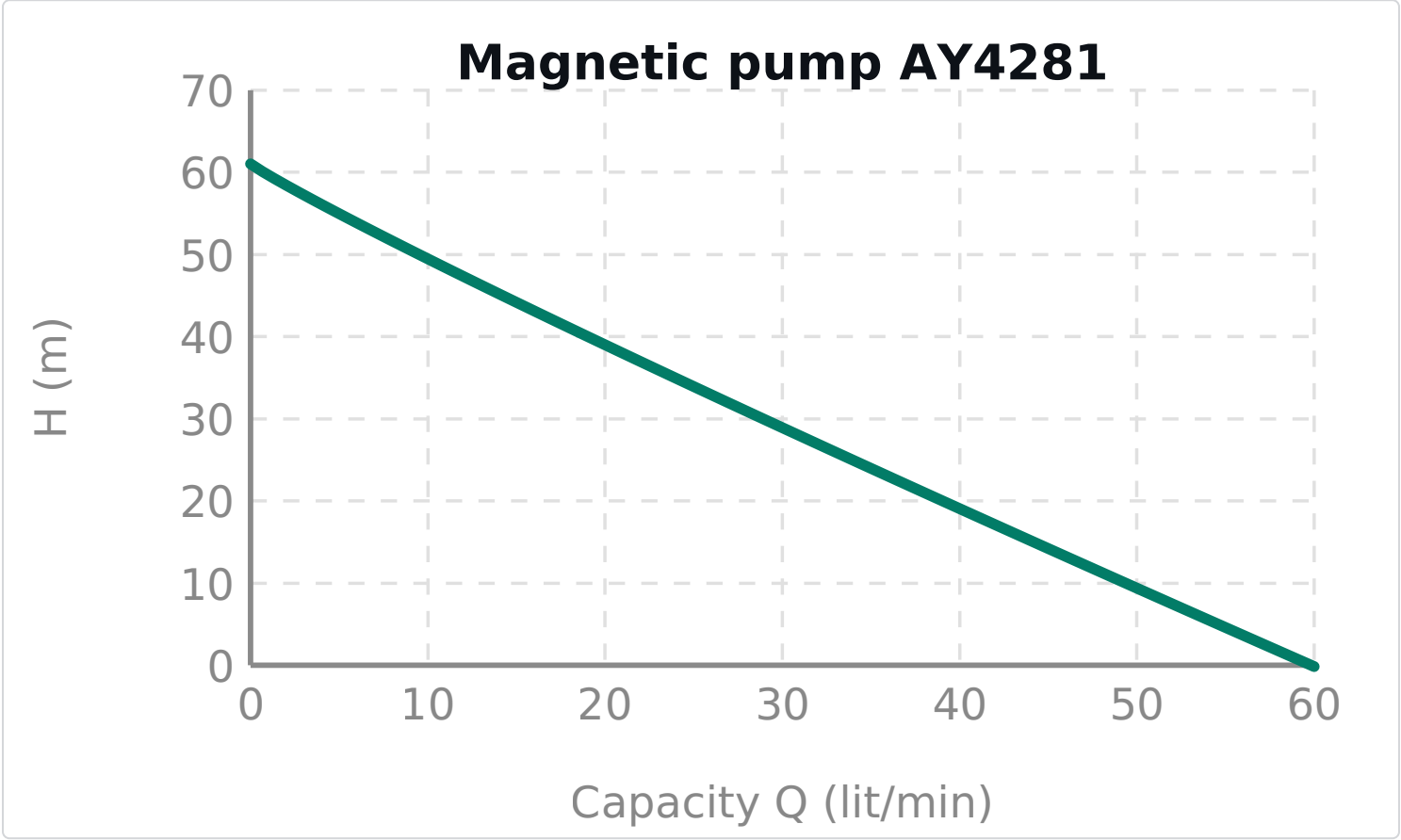
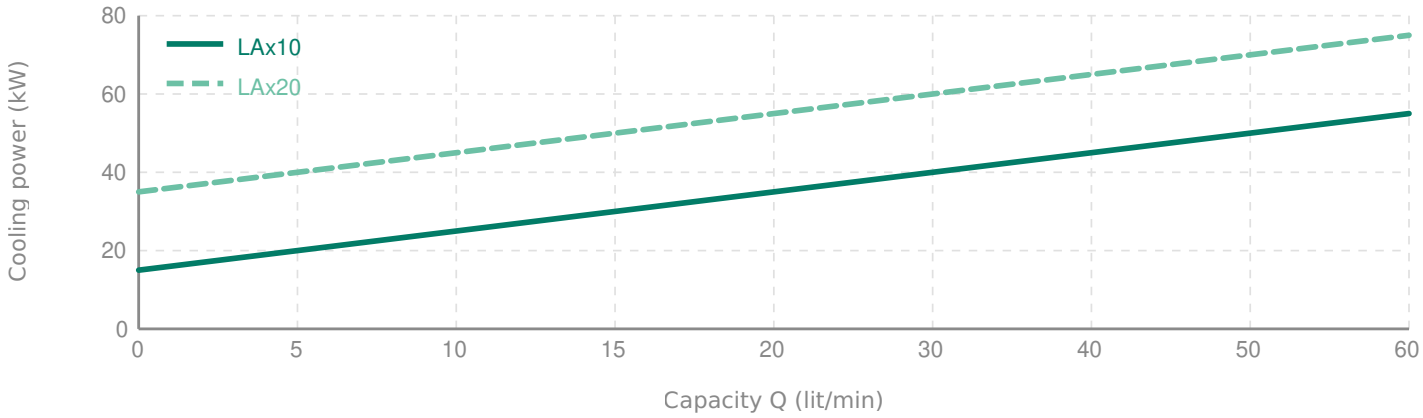
TECHNICAL DATA

PARAMETER	UNIT	SMART 4 WIC 160TS
SMART 4 WIC160 TS		
Fluid		**Water**
Maximum temperature	ºC	**160**
PID temperature control heating / cooling		**Yes**
Solid state relays + frontal cooler		**Yes**
Heating power	kW	**16**
Cooling power at 15ºC (LAx10)	kW	**40**
Cooling power at 15ºC (LAx20) OPT	kW	**60**
Capacity heating cylinder	Lit.	**9,6**
Magnetic pump AY4281	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	**95**
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

MAGNETIC PUMP AY4281 STANDARD



COOLING CURVES