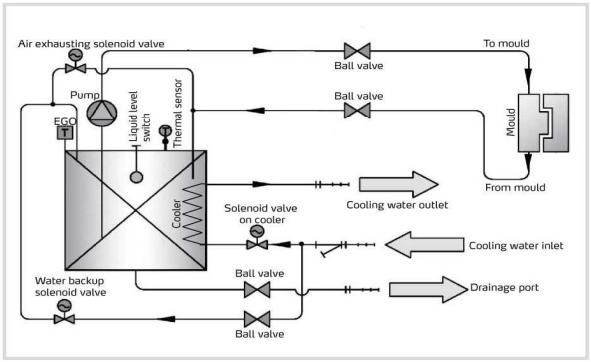
■ Working Principle

High temperature water returns to the machine and then be pressured by pump to the heaters. After being heated, water will be forced to mould and continue the circle. In the process, if the temperature is too high, the system will activate the solenoid valve to let cooling water lower the temperature directly till the water temperature is down to the system requirement. If the temperature keep rising and reach the set point of EGO, the system will alarm and stop operation. The system will have low pressure alarm and stop working if cooling water pressure doesn't reach the set point.



System Flow (Indirect Cooling)

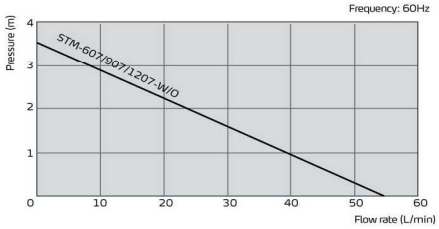
■ Specifications

Model	Max. Temp.	Heater (kW)	Pump (kW)	Max. Pump Flow (L/min)	Pump Pressure (bar)	Heating Tank	Heating Tank Volume (L)	Cooling Method	Mould Coupling* (inch)	Inlet/Outlet (inch)	Dimensions (mm) (H × W × D)	Weight (kg)
STM-607-W/O	W: 95℃ O: 160℃	6	0.55	55	3.4	1	12	Indirect	3/8 (2×2)	3/4 / 3/4	820×312×725	75
STM-907-W/O		W: 9 O: 6	0.55	55	3.4	1	16		3/8 (2×2)	3/4 / 3/4	815×360×860	84
STM-1207-W/O		W: 12 O: 6	0.55	55	3.4	1	16		3/8 (2×2)	3/4 / 3/4	815×360×860	85

Notes: 1) Pump testing conditions: Power of 50 / 60Hz, purified water in 20℃. (There is ± 10% tolerance for either max. flowrate or max. pressure).
2) "*" stands for options.
3) Power supply: 3Φ, 230/400/460/575VAC, 50/60 Hz.

We reserve the right to change specifications without prior notice.

Pump Performance



Reference formula of Mould Controllers model selection

Heater Power (kW) = mould weight (kg) × mould specific heat (kcal/kg℃) × temperature difference between mould and environment (℃) × safety coefficient / heating duration / 860

Notes: safety coefficient range 1.3~1.5.

Flow Rate (L/min) = heater power (kW) × 860 / [heating medium specific (kcal/kg℃) × heating medium density (kg/L) × in/outlet temperature difference (℃) × time (60)]

Notes: Water specific heat =1kcal/kg℃
Heating medium oil specific heat =0.49kcal/kg℃
Water density =1kg/L
Heating medium oil density =0.842kg/L