



Dual-purpose Water/Oil Heater

STM-607W/O



Refer carefully to this manual before operation.



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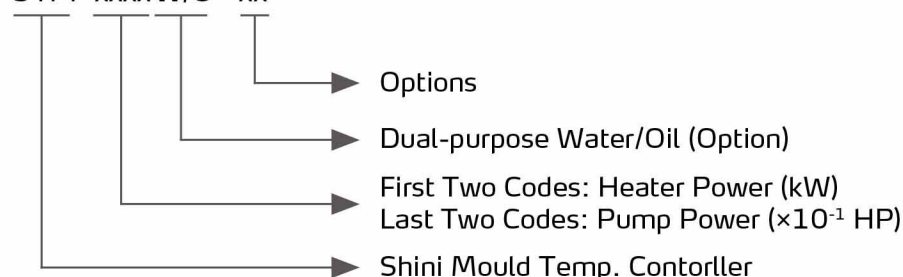
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Coding Principle

STM- xxxx W/O - xx



Features

- Adopt water or oil as heating medium, the maximum temperature can reach: water 95°C/203°F and oil is 160°C/320°F.
- Controller adopts 3.2" LCD for easy operation.
- In build weekly timer with °C/°F unit conversion.
- P.I.D controller with 3.2" LCD with a user-friendly interface.
- The multi-stage controller can maintain stable mould temperature with a precision of $\pm 0.5^{\circ}\text{C}/0.9^{\circ}\text{F}$.
- Adopt high efficiency, vertical dual-purpose of water/oil high temperature.
- In build multiple safety with display and alarm buzzer, such as reverse phase, pump overload, overheat, and low oil level alarm.
- Equipped with pump reversion evacuation, automatic water supplying and negative pressure operation.
- Modbus RTU data communication via RS485.



Inner Structure



Control Panel

Options

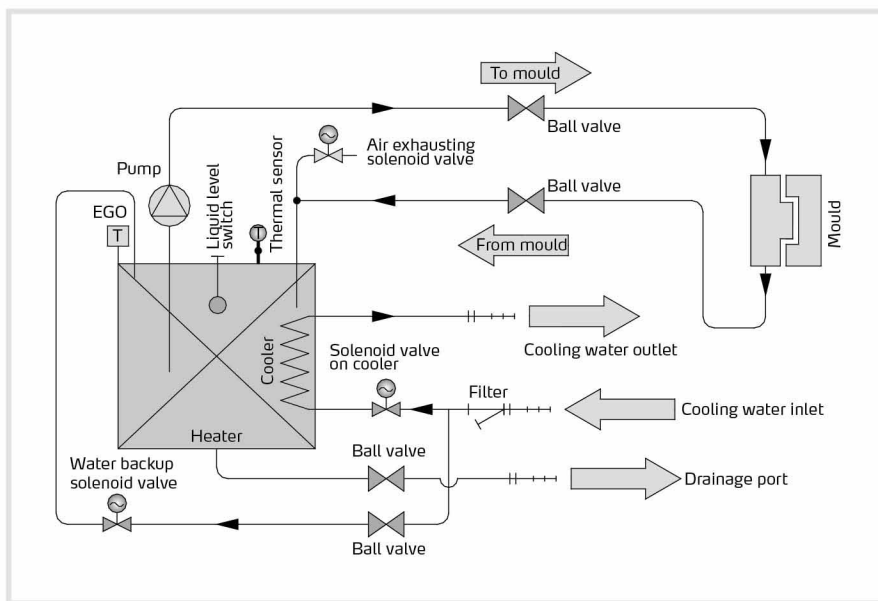
- Displays of mould temperature and return oil/water temperature of mould are optional, and add "TS" at end of the model code.

Application

STM-W/O series dual-purpose heaters are used to heat up the mould and maintain temperature, and also they can be used in other similar applications. This series of machines can use oil or water as heat transfer media according to different production processes, as to adapt to different production conditions. Besides, this series of models have multiple options and accessories to meet different production demands.

STM-W/O Series

Working Principle



System Flow (Indirect Cooling)

Specifications

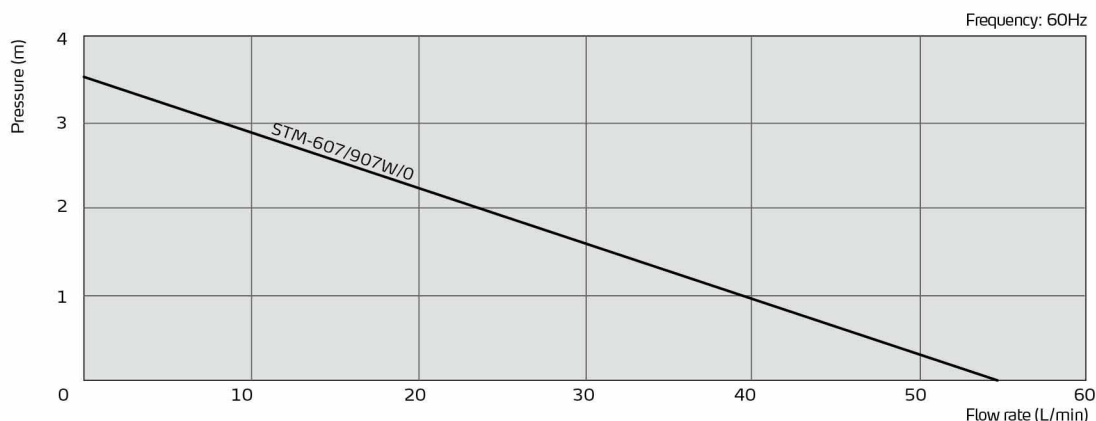
Model		STM-607W/O	STM-907W/O
Max.Temp.		W: 95°C / 203°F O: 160°C / 320°F	
Heater(kW)		6	W: 9 O: 6
Pump Power(kW) (50/60Hz)		0.55/0.55	
Max. pump Flow (50/60Hz)	L/min	55/62.7	
	gal/min	14.5/16.6	
Max. pump Pressure(bar)(50/60Hz)		3.4	
Heating Tank Number		1	
Heating Tank Capacity	L	12	16
	gal	3.2	4.2
Cooling Method		Indirect	
Mould Coupling* (inch)		3/8 (2×2)	
Inlet/Outlet (inch)		3/4 / 3/4	
Dimensions (H×W×D)	mm	845×325×907	832×353×807
	inch	33×12.7×35.4	32.5×13.8×31.5
Weight	kg	75	84
	lb	165	184.8

Notes: 1) Pump testing conditions: Power of 50/60Hz, purified water in 20°C/68°F. (There is ± 10% tolerance for either max. flowrate or max. pressure).

2) 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°C) × temperature difference between mould and environment (°C) × safety coefficient / heating duration(h) / 860

Notes: safety coefficient range 1.3~1.5.

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

Notes: Water specific heat =1kcal/kg°C

Heating medium oil specific heat =0.49kcal/kg°C

Water density =1kg/L

Heating medium oil density =0.842kg/L

Time for heating=the time needed to heat from room temperature to set temperature

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