


MATIC Duo

90/150 18 E

90/150 18 H

	Water	Oil
	up to 90°C	up to 150°C
	Heating capacity 18 kW	6 kW
	Cooling capacity 45 kW @ 90°C	10 kW @ 150°C
	Cooling method indirect (shell & tube)	

Robust Mechanical Design

- Tin-bronze submersible pump
- Calcification-free heat exchanger
- Fully immersed heaters made of high-temperature corrosion-free Nickel alloy (Incoloy 800)
- Maintenance-free flow meter
- Stainless-steel solid piping

Features

- IRIS control system
- Pt100 temperature sensors in feed and return lines
- Heater control by solid-state relays
- Variable-speed pump with automatic eco-mode
- Time limited water refill
- Mould evacuation
- Leakstop operating mode

Predictive Maintenance

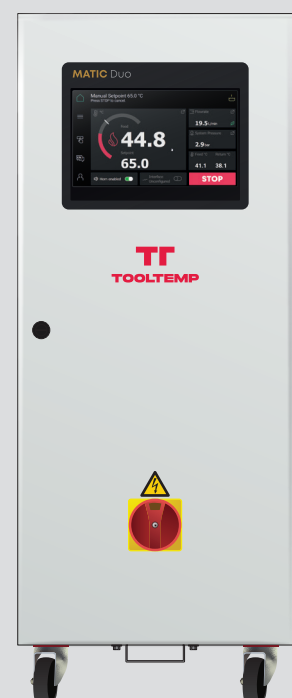
- Continuous monitoring and self-diagnosis of the system
- Clear indication and description of errors
- Condition monitoring of the heat-transfer fluid (oil)
- Condition monitoring of the pump (coming soon)

Safety

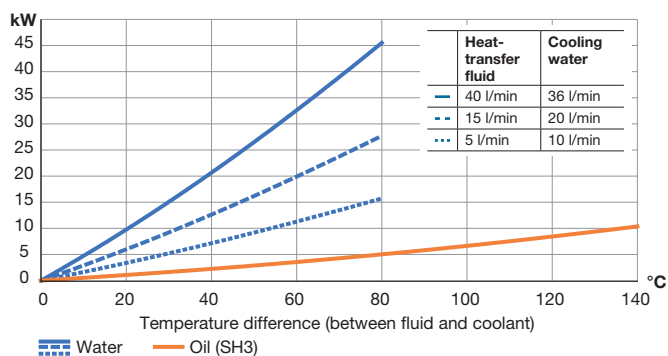
- Redundant, mechanical temperature limiter
- Pump motor monitored by the variable-frequency drive
- Configurable safeguard limits and corresponding reactions
- Configurable audible alarm

Operation

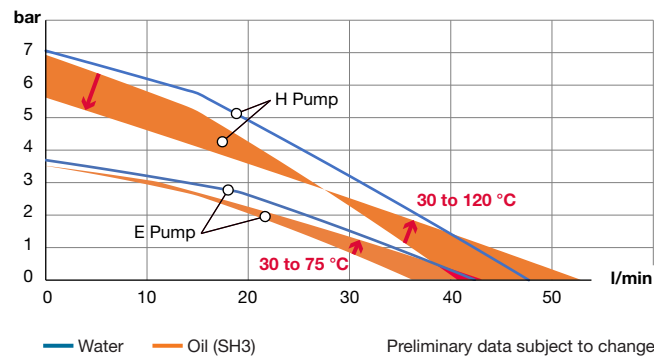
- Industrial-grade, tiltable 7" IPS touch-screen
- Intuitive user interface for commissioning and operation
- Broad range of connectivity features including external temperature sensor
- Automatic actions for common operations
- User-defined time-resolved recipes



Cooling capacity



Pump capacity



Technical specifications

	Water	Oil
Maximum temperature	90 °C	150 °C
Heating capacity	18 kW	6 kW
Filling volume (heat-transfer fluid)	Minimum 16 litres, Maximum 20 litres	
Pump		
Pump type: MATIC Duo 90/150 18 E	E	
Pressure and Maximum flow rate	See diagram	
Motor rated power	0.73 kW	
Pump type: MATIC Duo 90/150 18 H	H	
Pressure and Maximum flow rate	See diagram	
Motor rated power	1.5 kW	
Control system	IRIS	
Temperature measurement	3-wire Pt100 (F0.15 acc. IEC 60751), feed and return	
Pump-pressure measurement	Piezoresistive pressure transmitter	
Flow measurement (heat-transfer fluid)	0-60 l/min, paddle-wheel sensor with inductive pickup	
Dimensions (L x W x H)	683 x 322 x 736 mm, incl. castors, approximate	
Connections		
Heat-transfer fluid (feed and return)	½" BS female thread	
Cooling water inlet	¾" BS female thread, with water filter	
Cooling water outlet	¾" BS external thread	
Empty weight	67 kg	
Colour	RAL 7035	
Environment		
Temperature range	5-40 °C	
Relative humidity	40-80 % RH (non-condensing, no icing)	
Continuous noise level	< 70 dB (A)	
Power supply	200-240 V and 380-480 V, 50 and 60 Hz	
Ingress protection code	IP44, IP54 optional	
Marking	CE, UL-ready	