S.i.S.E.
INDUSTRIAL PROCESS UNDER CONTROL

Water Temperature Controllers
e.THERM Type W90

OPC UA *Ready*

New Generation !

The new generation of e.THERM atmospheric water temperature controllers 90°C(200°F) is available with either the advanced 7" anti-shock color touch screen or with the more economical 3" backlit screen option.

The 7" color interface is highly intuitive. Standardized across the entire range, it includes easily upgradable options such as the communication option. We supply our unit with a standard remote viewing option that uses VNC communication.

All technical components of this new generation are easily accessible and replaceable for easy maintenance.

Storage and graphical display of process data, energy consumption calculation, enhanced instrumentation, event history, provide process traceability and data transmission. This is also possible thanks to the open communication protocol OPC-UA. Fully in line with SISE 4.0 strategy.
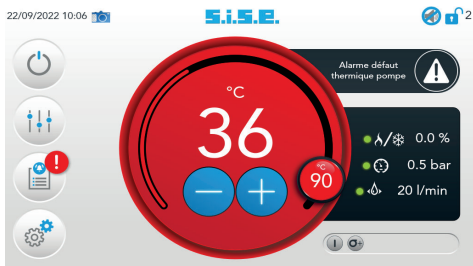
DISPLAY DETAILS SCREEN 7" SCREEN

Simplified home display (standard version)
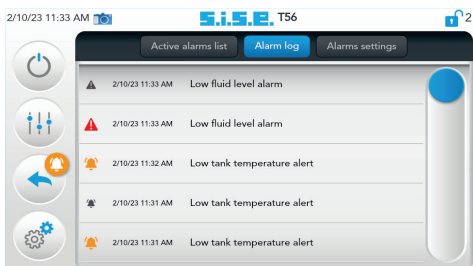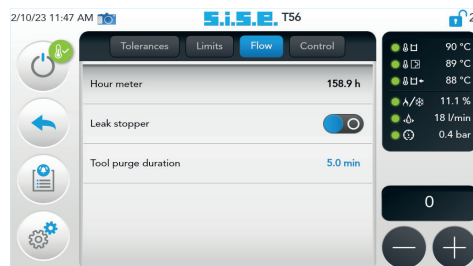

Detailed home display with Flow Option

Alarms

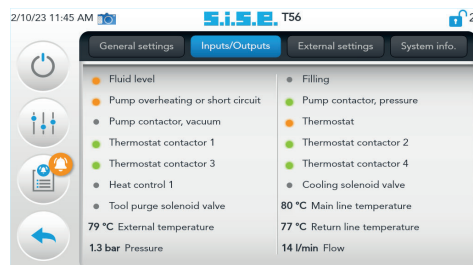*Alerts*

Alarm / Alert Log

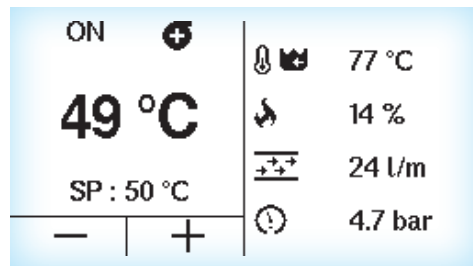*Vacuum Mode Configuration*
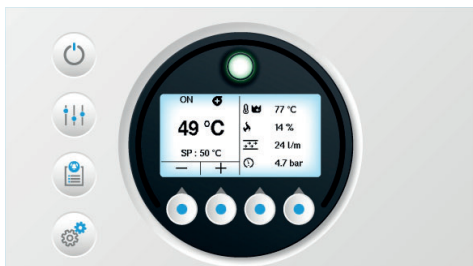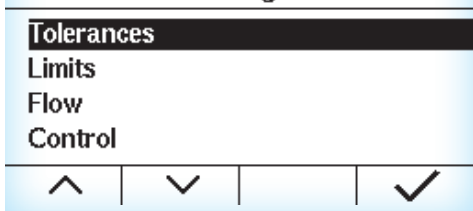

Tolerance Thresholds Configuration

Input/Output Display
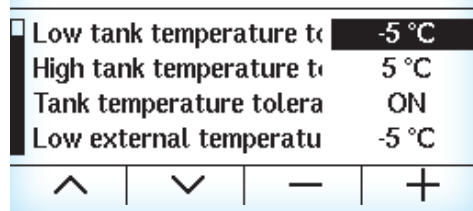

DISPLAY DETAILS 3" SCREEN (optional)

Home display

TECHNICAL FEATURES WATER TEMPERATURE CONTROLLER

MODEL	W90 - S6/9		W90 M6/9/12/15/18					W90 L9/18/27/36/45				
Maximum Temperature °C	90											
Heating Capacity (kW)	6	9	6	9	12	15	18	9	18	27	36	45
Heating Stages	1		1					1		2		3
Pump Type	Peripheral submersible		Peripheral submersible					Peripheral/Centrifugal submersible				
Maximum Flow L/Min	60		60 ou 70					200* - 140 - 200 - 400				
Maximum Pressure (bar)	3,5		3,5 ou 6					5* - 5,3 - 7,2 - 4,5				
Cooling Technology	Coil		Coil					Heat Plate exchanger 60 kW				
Cooling Power (kW) (Water 10°C - Maximum Process Temperature)	25		30					60				
Suction/ Anti-Leak function	Yes		Yes					OK for pump 200 L/Min*				
Filling	Auto											
Filling Volume (L)	8,2		15,5					34				
Expansion Volume (L)	2,2		7,4					10				
Process inlet / outlet	¾"		¾"					1"¼				
7" Anti-shock color touch screen	Standard											
3" Screen with membrane keyboard *New!*	Option							-				
Control and Regulation	MicroP - Self-Tuning											
Voltage	400V - 3Ph. + T - 50Hz											
Dimensions (mm) : Depth Width Height	542 270 498		811 328 540					1150 446 976				
Weight kg (empty)	≈ 26		≈ 53					From 110 to 150 kg depending on pump size				

* Peripheral submersible pump

STANDARDS / OPTIONS

MODEL	W90 - S6/9	W90 M6/9/12/15/18	W90 L9/18/27/36/45
PROCESS			
Mold cooling mode before stop	●	●	●
Operating range monitoring (Thresholds)	●	●	●
Solid State Relays	●	●	●
Pressure/Flow Rate Calculation Informations	●	●	●
VORTEX Flowmeter	○	○	○
Plate heat exchanger (kW)	60	60 or 100	100 or 180
Pseudo-Cascade Control	○	○	○
Manual / Automatic By-Pass	○	○	○
Variable speed drive (EcoFlo Mode)**	-	○	○
Manual Filling	-	○	○
(Air Pressure) Mold Cleaning	-	○ (except for 100 kW)	○
Direct cooling	-	○	○
COMMUNICATION			
VNC Connection**	●	●	●
Remote Alarm	○	○	○
Remote Set Point & Copy Process T°C	○	○	○
COM E82.1 ou TTY ou RS485 ou SPI...***	○	○	○
Package COM 1 (E82.1 + TTY)**	○	○	○
Package COM 2 (E82.1 + RS485)**	○	○	○
Package COM 3 (E82.1 + SPI)**	○	○	○
Package COM 4 (SPI + E82.1 + RS485)**	○	○	○
Package COM 5 (SPI + E82.1 + TTY)**	○	○	○
AUXILIARY EQUIPMENT			
Manifold Multi - Inlets / Outlets	○	○	○
LED Alarm Tower	○	○	○
VARIOUS			
Time, date, hour counter display **	●	●	●
Special lateral door color	○	○	○
230V/440V/480V - 3Ph. + T - 60Hz	○	○	○

●= standard ○= option - = pas disponible / ** = only with 7" / *** = 3" only RS485 or TTY
(Specific projects upon request...)

HYDRAULIC CIRCUIT :

EXAMPLE *SIZE S/M*

1 - FROM PROCESS
2 - TO PROCESS
3 - GENERAL WATER SUPPLY
4 - WATER OUTLET
5 - OVERFLOW
6 - TEMPERATURE PROBE
7 - COOLING EXCHANGER
8 - HEATING ELEMENTS
9 - SOLENOID VALVE - COOLING WATER
10 - SOLENOID VALVE - FILING
11 - PUMP
12 - LEVEL SENSOR
13 - SAFETY THERMOSTAT
14 - FILTER
15 - PRESSURE SENSOR
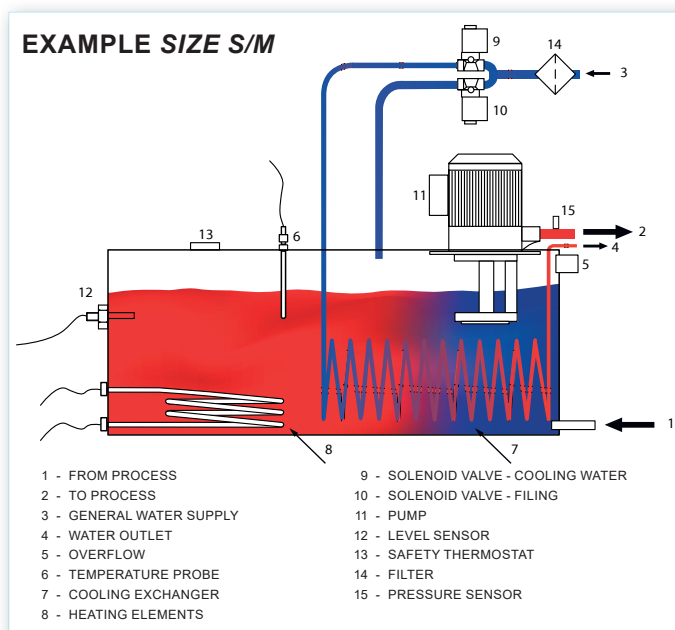
EcoFlo MODE with variable speed drive :

Annual cost savings (%)*
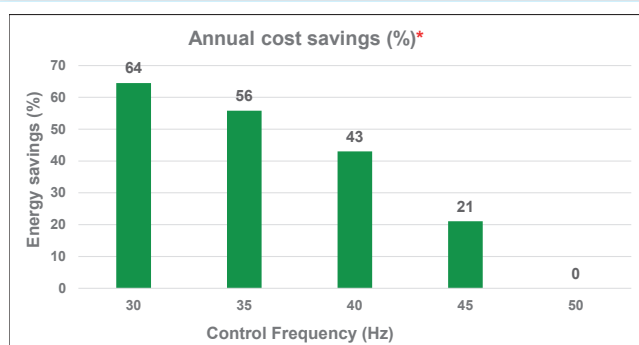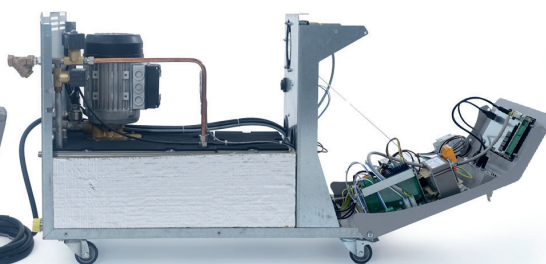
* Compared with 50 Hz

The **EcoFlo** mode offers genuine economic savings.

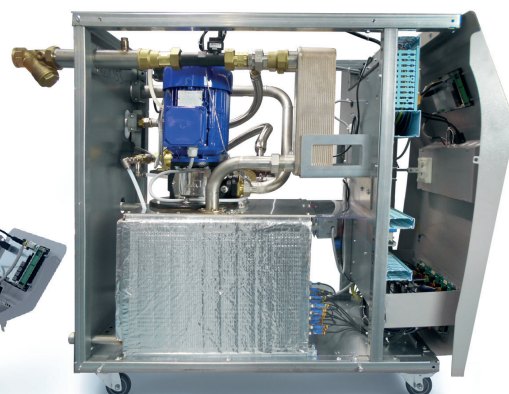SISE offers two main operating modes :
- The manual mode, which sets the pump's rotation speed in %
- The self-adaptive mode, where the pump's rotation speed adjusts automatically.
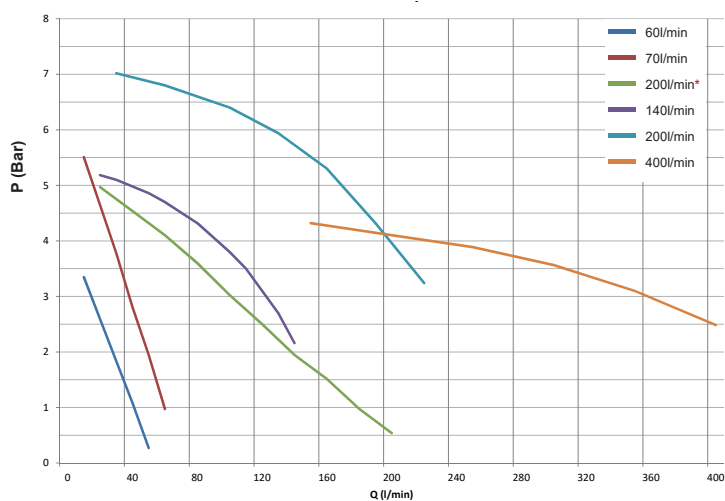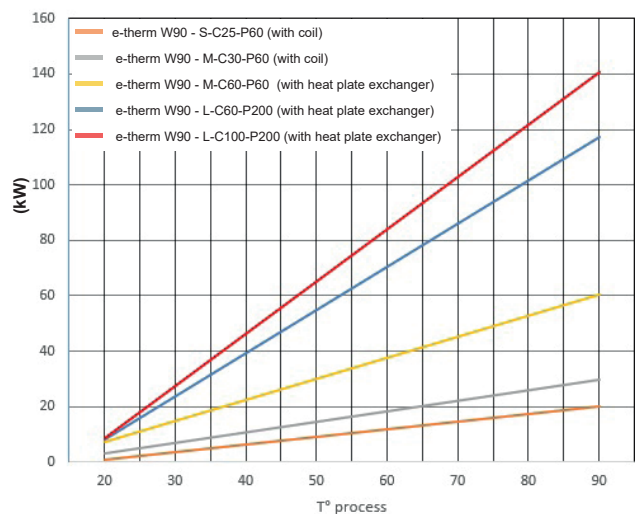

W90 - S6/9 (Size S)

W90 - M6/9/12/15/18 (Size M)

W90 - L9/18/27/36/45 (Size L)

PUMP PERFORMANCE :

Legend: 60l/min, 70l/min, 200l/min*, 140l/min, 200l/min, 400l/min

* Peripheral submersible pump

COOLING CAPACITY

Legend:
e-therm W90 - S-C25-P60 (with coil)
e-therm W90 - M-C30-P60 (with coil)
e-therm W90 - M-C60-P60 (with heat plate exchanger)
e-therm W90 - L-C60-P200 (with heat plate exchanger)
e-therm W90 - L-C100-P200 (with heat plate exchanger)

Conditions : Water 10°C - Maximum Process Temperature

SISE takes part regularly in training, assistance with start-up, or for existing installations