

# SalvisTEQ controller.

«SalvisTEQ looks ahead, thinks for itself and adapts, and does so at every stage of the process.»

The new Model Predictive controller and a high-resolution color touch screen once again make SalvisLab a pioneer in trend-setting laboratory technology.

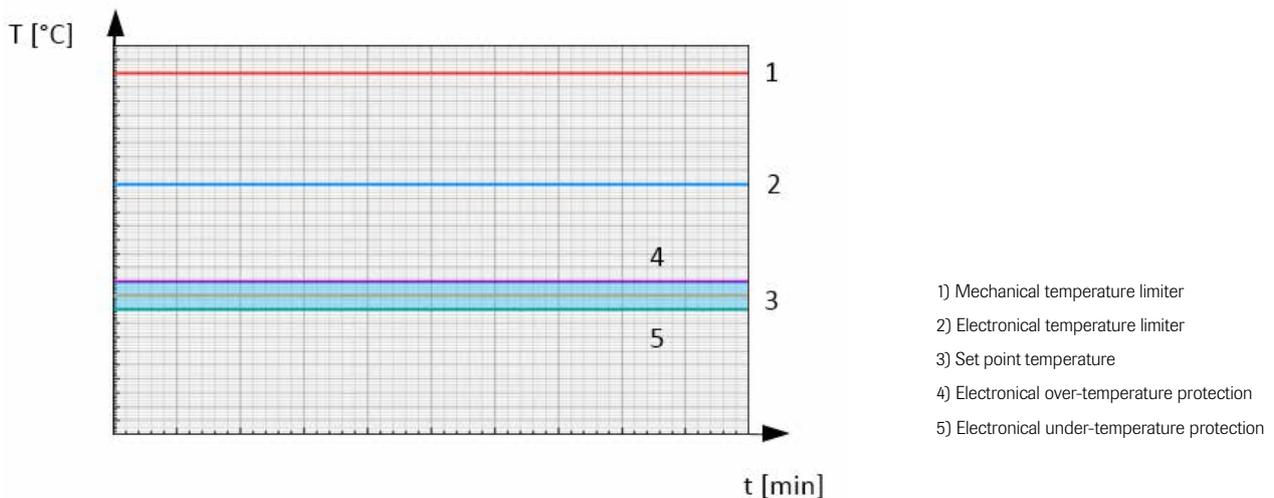
A SalvisTEQ controller monitors and registers the historical progression of process variables. With the predictive controller which was developed in house, we use equipment-specific process models of dynamic behavior, which means the controller knows at all times what it has done, where exactly it is, where it wants to go and how it can achieve the outcome in the most efficient way.

The advantages of the SalvisTEQ controller are very clear in comparison to PID controllers normally used in the sector:

- **shorter heating-up times**
- **dynamic control behavior**
- **no dead or waiting times**
- **higher precision**

## Safety class 3.3

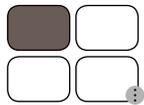
SalvisLab has upgraded the safety of the controller. All SalvisTEQ controllers are in safety class 3.3 as standard, which means they have lower and upper temperature limit protection.





## Operation

SalvisLab has stayed true to itself in terms of the operation of the SalvisTEQ controller. The touch screen is clearly laid out and intuitive to operate.



Real-time temperature monitoring during the heating-up phase (TC/VC)

Temperature settings:

- Selection of the sensor for temperature measurement (internal/external)\*\*
- Set-point temperature
- Gradient (only for linear heating process)
- Actual temperature



Real-time pressure monitoring during the heating-up phase (VC) or fan control (TC)

Settings depending on the equipment:

- Vacuum On/Off (VC)
- Fan (fan speed, adjustable between 40/60 and 100 %, depending on the equipment)
- Ventilation flap (opening width, adjustable between 0 and 100 %)\*
- Pressure (target pressure, adjustable between 0.1 and 999.9 mbar and hysteresis)\*\*



Real-time process duration

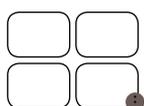
Time settings:

- Start in
- Start at (start at specified time)
- Hold for (heating up and holding of the set-point temperature for a specified time)



Play key

- Start/stop of the heating process with the selected settings
- Real-time display of process parameters (temperature, pressure and fan speed)\*\*



Menu/Stop

\* Available from 2017

\*\* Option

## SalvisTEQ standard functions

Self-check	SalvisTEQ checks itself for hardware and software errors on every boot.
Sterilization according to WHO	This standard technology enables sterilization of the chamber according to WHO guidelines.
°C or °F	Easy switching of the temperature measurement unit.
Time	Real time clock.
Automatic restart	Set the devices behavior on power outage: Restart, stop or continue the running program at the exact point it was stopped.
Heating	Reach the temperature set as quick as possible or follow a certain gradient while heating.
Logbook	Every change of settings or process parameters is being recorded in the logbook.
Internal storage	SalvisTEQ comes with 20 MB of internal storage.
Calibration	All SalvisLab products have 2-point factory calibration ex works.
Reference temperature	With an additional PT-100 sensor built in as standard, the SalvisTEQ controller measures the ambient temperature.
Alarms	Acoustic and visual alarms.
Info	Display of software version and serial number as well as QR code for downloading the user manual.
Connections	Standard USB and RJ45 connections at the front.

## SalvisTEQ options

Vacuum display	Digital display and logging of the actual vacuum.
Vacuum control	The controller controls the vacuum via the vacuum valve with set-point and hysteresis.
Vacuum and ventilation control	In addition to vacuum control, ventilation is also automatically controlled.
Programmable power socket	Programmable power socket, which for example enables connection of the vacuum pump.
Extended programs	Programs with up to 1500 programmable steps (Extension of programs via USB stick).
Users	Set individual permissions for every user.
Redundancy PT-100	Increased safety by using a redundant PT-100 probe.
Product temperature controller	The «product temperature controller» option enables you to adjust the holding temperature with an external product temperature sensor.
Ports	Additional USB or RJ45 ports are possible.
+ point calibration	As an option to the factory-based 2-point calibration, up to a 10-point calibration can be carried out.
Storage extension	Internal storage can be extended up to 32GB.
Process graph	Process graph can be viewed live on the display or exported to a USB flash drive.
Calendar/Scheduler	Schedule your programs to automatically run and repeat.