SIEMENS
Ingenuity for life

SIMARIS therm calculation tool
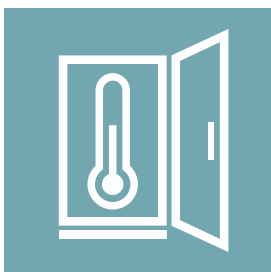
Easy calculation of heat rise

siemens.com/simaristherm

Since the end of the transitional period from the IEC 60439 series to the IEC 61439 series new provisions have applied to the temperature rise limits of low-voltage switchgear and controlgear assemblies. To ensure standard-compliant and simple dimensioning, the free SIMARIS therm planning tool has been specially developed for electrical installers and machine and control panel builders.

SIMARIS therm provides you with efficient support in the planning and configuring of your switchgear and controlgear assembly. This enables you to detect any underdimensioning or overdimensioning of heat dissipation simply and reliably and thus to optimize the values.

SIMARIS therm – for even more efficiency in control panel engineering

To calculate the temperature rise you just have to enter the ambient conditions of your switchgear and controlgear assembly and import the devices and enclosures on the basis of a bill of materials, or select them manually. More than 20,000 tested, maximum possible heat dissipation values are already stored in the software for calculating the power loss, for example for the following devices:

- ALPHA SIMBOX small distribution boards
- SIVACON sicube 8MF1 system cubicle
- SENTRON protection and switching devices
- SIRIUS modular system
- SIMATIC controllers
- SINAMICS frequency converters
- SITOP power supplies
- SIVACON 8MR cooling units / filter fans *
- SIVACON 8MR heater units *

* available as of Version 2.0

SIMARIS therm – the highlights

User-friendly
Quick selection of pre-defined enclosures and devices – easy creation of other empty enclosures and devices

Efficient
Testing of the switchgear and controlgear assembly according to already stored power loss data

Standard-compliant
A certificate can be issued as verification of the temperature rise calculation in compliance with IEC 61439-1, Supplement 2; IEC 60204-1; etc.

Free-of-charge
Available for download at **www.siemens.com/simaristherm**

SIMARIS calculation tool – for even more efficiency in control panel engineering
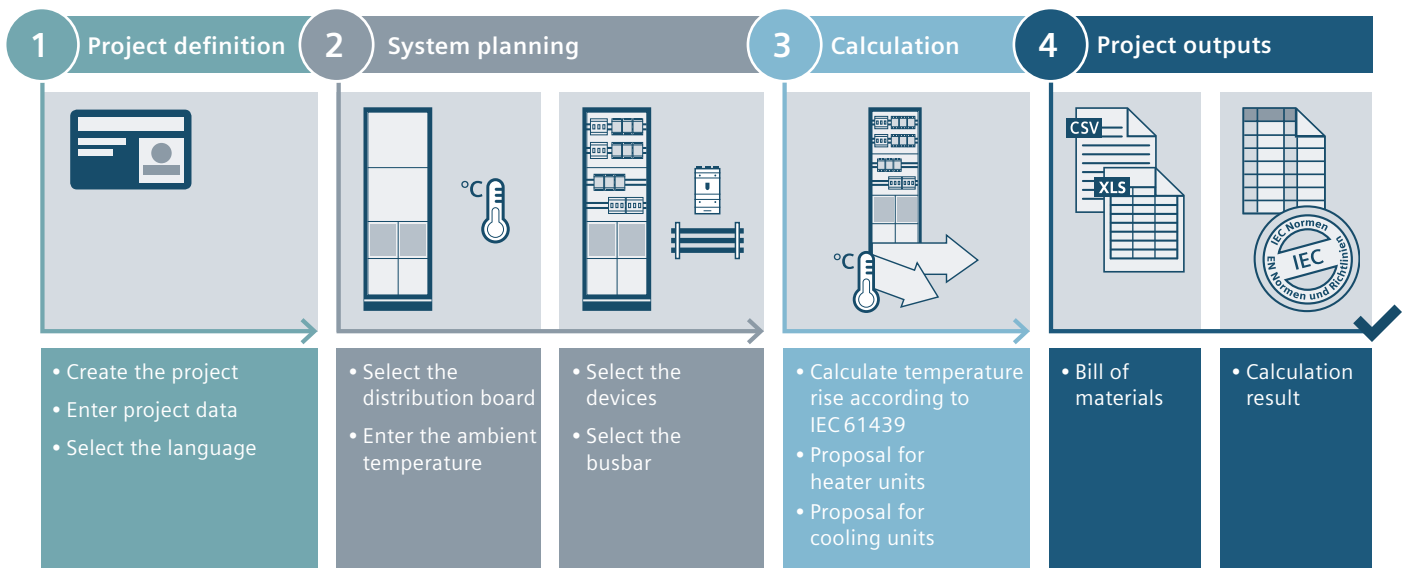
SIMARIS therm – open for all third-party components

In addition to Siemens products, you can also link up devices and enclosures of other manufacturers with SIMARIS therm for your calculation. For this purpose, the SIMARIS planning tools have an additional flexible software.

Documentation and calculation result included

For your documentation you will receive a bill of materials and a calculation result that can be used as design verification of temperature rise limits in compliance with IEC 61439-1/2.

The easy way to calculate temperature rise with SIMARIS therm:

1 Project definition	2 System planning	3 Calculation	4 Project outputs
• Create the project • Enter project data • Select the language	• Select the distribution board • Enter the ambient temperature	• Select the devices • Select the busbar	• Calculate temperature rise according to IEC 61439 • Proposal for heater units • Proposal for cooling units

(Project outputs: • Bill of materials • Calculation result)

SIMARIS therm – system requirements	
Supported operating systems	Windows 7 32-bit / 64-bit Windows 8 32-bit / 64-bit Windows 10 32-bit / 64-bit with .NET Framework 4.6
MS Office versions	2007, 2010, 2013, 2016
Hard disk space	150 MB (local)
Processor	Intel Core i3, i5, i7 or AMD Athlon II, Fusion, FX
Clock frequency	1.7 MHz min. / 2 GHz recom.
Main memory (RAM)	4 GB min.
Screen resolution	1280 x 1024 min.