Update 4

General Information

This update can exclusively be used for the **PSS®SINCAL Platform 21.5**, not for other product versions!

Procedure for Installation

- Close all running PSS SINCAL Platform applications.
- Decompress the Zip archive.
- Start the installation using AutoRun.exe or Sincal\SincalSetup.exe. The setup automatically detects the existing PSS SINCAL Platform installation and updates all components.

If you have any questions, please contact **PSS SINCAL Platform Support** (fon +43 699 12364435, e-mail <u>sincal.support.it@siemens.com</u>).

Additions/Corrections Update 4 (August 29, 2025)

This update contains all the additions of the previous updates and on top of that the following error corrections and additions.

PSS SINCAL User Interface

- Diagrams
 - Improved performance when creating/updating diagrams after opening the network model.
 Previously, all interactive diagrams were completely updated after opening the network model; now only the missing diagrams are generated.
 - Fixed a bug in the display of user-defined signals in diagrams, which meant that depending on the configuration, they were no longer displayed correctly.
- Feeder

When selecting the longest path of a feeder, the last element was not selected if it was connected to a terminal. This problem has been corrected.

PSS SINCAL Electrical Networks

- Protection Devices
 When copying a DI setting via the dialog box, the pickup data was not copied.
- Optimal Branching (OT)
 Improvement in the algorithm for unbalanced networks in "voltage-based" mode. The maximum voltage is still used for comparison, but the smallest total current (of all phases) is also considered.
- Protection Analysis (PSA)
 During the pickup security check, recloser zones that are not actually active were considered.
- Arc Flash (AFH)
 Correction to the display of results in the network graphic. The worst-case results were not always shown.

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Voltage Curve Diagrams

Correction of an error that caused incorrect nodes to be included in the route diagram that were not actually part of the route.

Additions/Corrections Update 3 (July 29, 2025)

This update contains all the additions of the previous updates and on top of that the following error corrections and additions.

PSS SINCAL User Interface

Network Browser

Fixed a problem with updating the pop-up menu when switching between electrical and pipe networks.

Copy Add-Symbols

Correction of an error when copying and pasting additional symbols (protection devices, fault observations, etc.) from other views, where an incorrect graphic layer and object type were stored in the database.

PSS SINCAL Electrical Networks

Protection Coordination (OC)

Corrected a problem with the consideration of the data for pickup phase/ground when entered separately. Now it is possible to specify a pickup in phase for "DI Settings Phase" and a pickup in ground for "DI Settings Ground".

Protection Routes

An error when creating the protection route highlighting has been corrected. This caused several highlights to be assigned the same result ID, meaning that they could no longer be displayed correctly or made visible/invisible.

Optimal Branching (OT)

Extension of the implementation so that supply sources are also possible in the switch area.

Feeder Tracing (FEEDER)

Correction of an error in feeder tracing in unbalanced networks.

• Operating Point and Time Series Calculation (LP)

Asynchronous machines and variable shunt elements did not always behave correctly during time series and operating point calculations. Errors occurred when changing the power.

Resupply

An error in the algorithm has been corrected that caused the calculation to run in an endless loop and had to be aborted.

• Arc Flash Calculation (AFH)

Correction of a problem with calculations using the DGUV standard, whereby the entered limitation of the clearing time was not taken into account.

Verify Connection Conditions (EEG)

For the variation P/Pmax, the sign was not correctly taken into account for cosphi.

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Additions/Corrections Update 2 (June 26, 2025)

This update contains all the additions of the previous updates and on top of that the following error corrections and additions.

PSS SINCAL User Interface

Formatting Diagrams

In the Format dialog, the user-defined signals can now also be moved to the area with the predefined signals.

Heat-Map

The visualization types "Power Flow V/Vn" and "Power Flow Deviation V/Vn" were only available if branch results were available in the network model. However, these visualizations only require node results.

TSDI Result View

Fixed a bug when disabling highlighting via the dropdown button in the result view, which did not delete the highlighting in the network diagram.

PSS SINCAL Electrical Networks

Short Circuit (SC)

The algorithms for dynamic voltage support have been improved so that they continue to function even when only a small amount of short-circuit power is available in the network and the voltage is supported by many converters.

- Verify Connection Conditions (EEG)
 - Fixed a bug in the automation of the calculation when the directory for the result database in the network model ("xxx_files\DES") did not exist.
- Operating Point Calculation (LP)
 - Corrected an error when creating diagram pages for voltage profile diagrams when operating points were calculated.
- CIM Import/Export
 - Corrections when processing dynamic data from CGMES 2.4.15:
 - CIM export: Duplicate controller values
 - o CIM import: User-defined controllers were not assigned to the machine
 - CIM Export Geographical (GL-profile)
 Correction converting coordinates to Lat/Long when exporting from CIM16 using a background map.

Additions/Corrections Update 1 (May 30, 2025)

This update contains the following error corrections and additions.

PSS SINCAL User Interface

Supplementary graphics object Line
 Correction of an error in drawing the arrowheads.

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Highlight

- Improved activation/deactivation of temporary result highlighting.
- Hosting capacity: Fixed a bug when using the "Element Contour" option. Only the first terminal of the network elements was taken into account.
- Fixed a bug when saving highlights in variants.

Feeder Evaluation

The entries in the Evaluations and Filters dialog box are now sorted alphabetically for all feeder evaluations.

PSS SINCAL Electrical Networks

Load

Correction of an issue when updating the base load data from customer data for Pi and Qi.

Limits with characteristic curves
 Limits with a voltage greater than 100% were not limited correctly.

- Protection Documentation
 - Corrected a program crash when displaying the pop-up menu in the protection documentation.
 - o In the network graphic display of the protection documentation, additional elements for harmonics (frequency characteristics) are no longer displayed.

PSS SINCAL Automation

- Automation of the User Interface
 Automatic updating of drop-down lists in the toolbar when calling the automation function
 Reload() for graphic layers, object types, network levels, etc.
- Automation of the Calculation Modules
 An error has been corrected that occurred when switching multiple times between the physical and virtual databases.

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