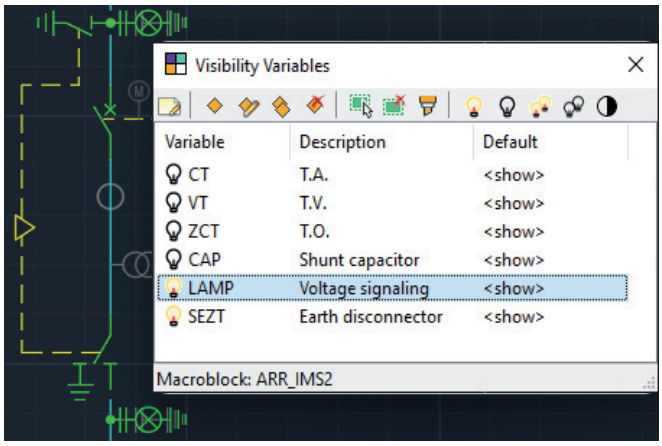
News 2025 Series

Software for electrical and photovoltaic engineering

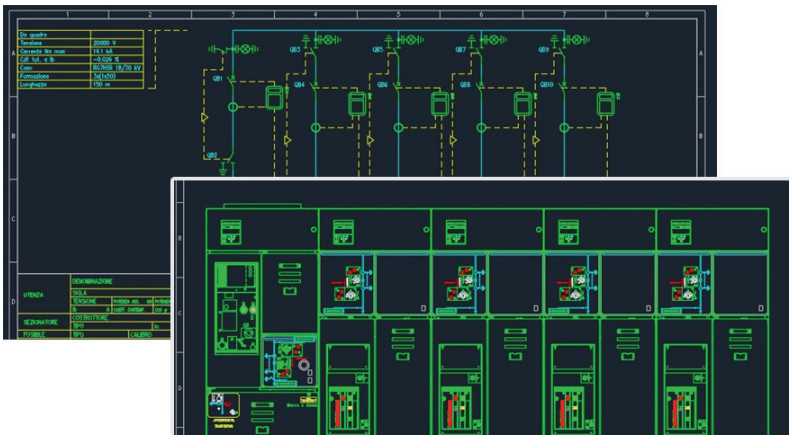
CADelet, iDEA, Eplus - Electrical CAD

• CADelet supports AutoCAD 2025.
• New Autodesk OEM 2025 CAD engine for Eplus and iDEA, significantly speeding up schema file opening times.
• SQL database support for local network symbol library management, improving editing and searching performance by more than 80%.
• Optimised access to symbol libraries and material archives on a remote network, taking full advantage of SQL-type database features, with radical performance gains.
• Cross-reference management settings can be saved as profiles to be applied to the diagram.
• Definition of dynamic parametric macro-blocks, with variables to manage the visibility of elements within the macro-block.
• Visibility of macroblock elements dependent on diagram or system parameters or variable configurations managed with FastBuilder.
• Use of variables on texts or multi-line texts of the macroblock.

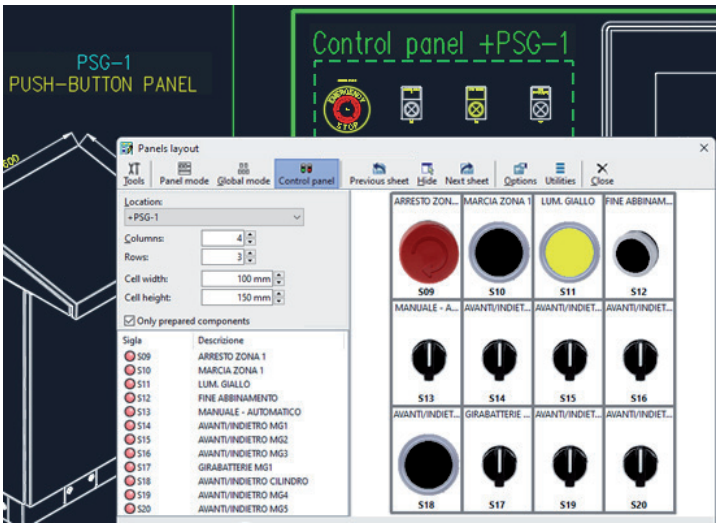


• Vario: update function to synchronise parameter values; import from file to retrieve parameters defined in other projects, Copy() function and GetVar() function to extract information from the diagram.

• New types of use, MT and PLC synoptics, for macroblocks.
• PLC: drawing in distributed representation of the I/O chain with parametric macroblocks with type of use and variables specific for PLC management.
• Archive with typical MT cell types and associated macroblocks, with preview of the final state according to visibility variables.



• Single-wire diagram generation using MV cells composed of parametric macroblocks.
• Assignment of device type for control panels generation, with assignment of synoptic symbol holder.
• Quick definition of control panels and button panels,

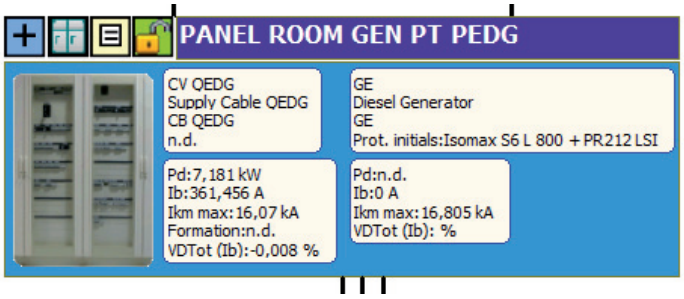


by dragging and dropping on a user-definable grid, with identification symbols for the type of components used.
• Automatic generation of control panel and button panel layouts, with front panel and related rear panel drawings.
• Element labelling table and drilling plate drawing for control panels and push-button panels.
• New interactive, dockable window for arranging components on the panel layout drawing and full data editing.
• Possibility to set the number of cooling devices in the panel overtemperature calculation.
• Marking of electrical equipment on the floor plan with a customisable profile.

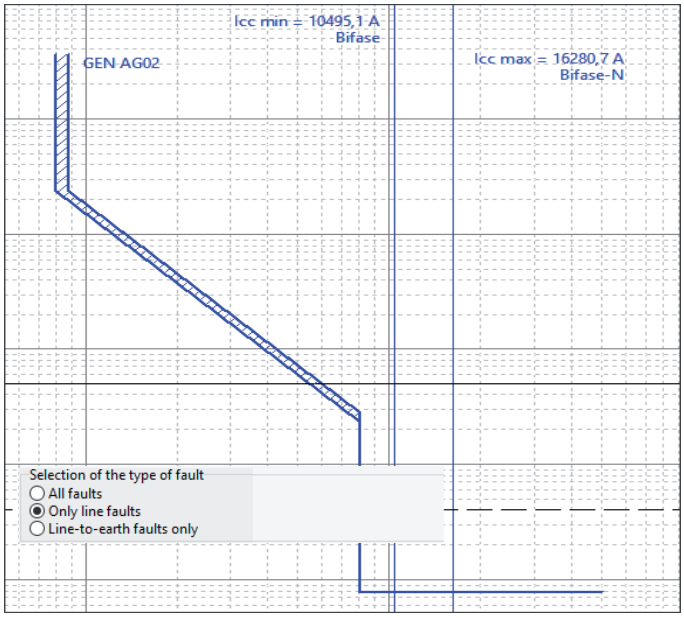
Cabling and bill of materials
• Optimised use of Microsoft's SQL Server database in a client-server environment to manage material archives, cables, terminals and protection devices on a local network.
• Significantly increased speed when using search filters, basic archive operations (new, edit, duplicate, delete) and import/export operations where applicable.
• Fast access to material and device archives and symbol libraries via remote network connection and VPN.

Electrical network calculation

• Improvement of the interface and speed of operation.
• Integrazione di impianti esistenti attraverso la definizione di punti di fornitura con i parametri elettrici della sezione di taglio del punto di stacco della nuova parte di impianto.
• Integration of already dimensioned installations by defining the supply points with the electrical parameters at the point of connection of the new part of the installation (cut-off section).
• Management of locked panels that cannot be modified in the project mesh, with multiple unlocking functions by zone.
• Possibility of excluding panels and/or zones from the general recalculation, to speed up operations in the case of extended installations.
• Display of the network in compressed mode with



closed panels, with summary display of the electrical parameters of the units entering the panel.
• Fast functions for switching and opening a control panel.
• Configuration management can affect the data of units that are part of locked panels without the need for unlocking.
• Further checks and verifications on the consistency of the assigned cables, according to the chosen laying and flow conditions.
• Possibility of taking into account a typical mechanical delay for MV circuit-breakers in the design; it is also possible to assign a specific mechanical delay to each element in the circuit-breaker library.
• Improvements in the drawing of the single-wire diagram of panels, in particular with grid-ups switches.
• Management of an library of MV cells with parametric macro blocks for the single-wire diagram, with the possibility of assigning carpentry shapes for drawing the front view of the cabinet following the single-wire diagram.
• Improvements in the visualisation of selectivity curves, with highlighting of the curve concerned, selection of the fault type to be referred to and placement of information labels.
• Definition of the insertion point on the grid of indirect CTs/TOs, with acquisition of the unit's electrical quantities for the control of the relevant trip units.
• Possibility of assigning CTs/TOs to LV units and protection devices.
• Preparation for adaptations to the new CEI 64-8 Ed.9 soon to be issued regarding the maximum trip times on terminal circuits and protection against indirect contacts downstream of inverters.
• EGlink: adjustments to ensure compatibility with Revit 2025.
• Extension and updating of the device database, which now manages more than 91.000 protection



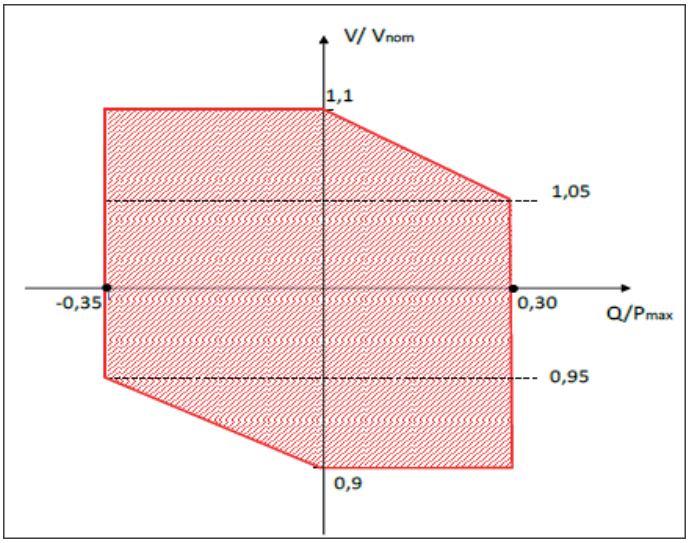
devices, 18.000 converters, UPSs, inverters and 16.000 PV modules are now managed.

• Ampère Evolution: improvements on distributed generation grid;

- Management of an archive of P/Q Capability curves according to the manufacturer's model, with curves definable by a sequence of points and with the active and reactive power value.

- Association of the P/Q curves by points to the generating elements of the grid; the curves are adapted to the nominal power of the machine.

- Generation of the system's V/Q Capability curve: the software calculates the relative voltage V/Vnom of the delivery point in supply and plots the voltage curve as Q varies at Pnd, i.e. at the maximum active power transmitted.



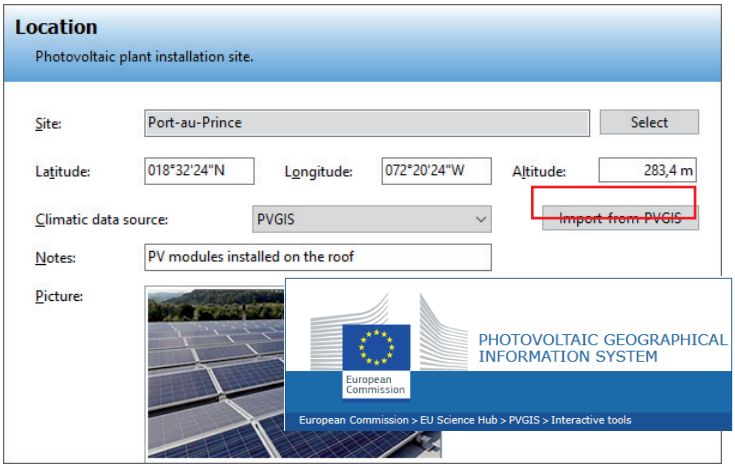
Solergo - Photovoltaic engineering

• Management of energy communities according to the CACER decree (Italy).

• Generation of an energy community project by importing already realised installations.

• Import from PVGIS of the horizon profile of the selected location considering the set orientation and inclination angles.

• Direct import from PVGIS of the climatic data of the selected location, with calculation of producibility.



• Management of inverters with multiple trackers and different characteristics.

• Increased flexibility in the use of two-module optimisers, which can be set to be used with only one module.

• Revised of technical and economic documentation in line with the regulatory developments.

• Extension and updating pv modules (over 16.000), inverters (over 11.000) and storage systems databases.

EG Cloud

• New function to create links to files to be shared, generate related Qrcodes and automatically send an email with the URL.

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