**trace**software

eleccalc ™

////// Software for Low Voltage and High Voltage electrical installations calculation

eleccalc™

▶ MODELLING & SETTING

elec calc™ includes smart design features such as IntelliSense system which enables intuitive design of projects, highlighting components that can be logically connected to the selection. These intelligent features reduce design time and increase project productivity.
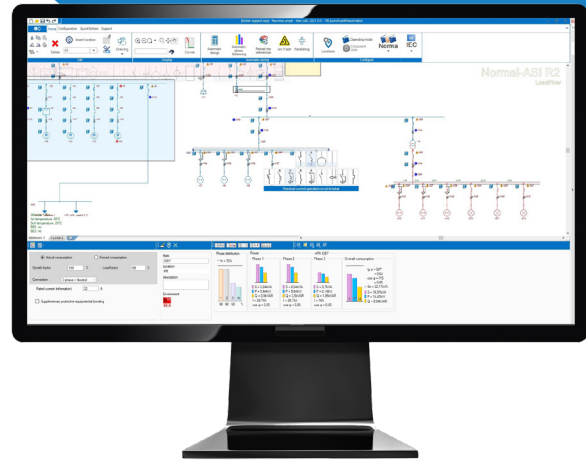
FEATURES

- Free entry of the single-line diagram thanks to the IntelliSense and a fully customisable schematic library
- Project management on multiple folios
- Integration of all voltage ranges in one single project: High and Low Voltage including DC
- Intuitive interface for management of cables methods of installation with management of several segments per cables
- Automatic and manual component marking, bulk processing on spreadsheet or Excel

▶ SIZING & OPTIMISATION

POWER BALANCE

- Real-time power balance management at all levels of the installation on sources and distributors
- Automatic phase balance
- Capacitor bank sizing tool
- Extraction of the power balance in Excel

MULTI-MANUFACTURER CATALOG

- Management of a multi-manufacturer catalog for all components
- Comprehensive database with a history of more than 20 years
- Catalog manager for content customization
- Customizable user catalog with integrated curve entry tools
- Automatic component reference selection function

REAL-TIME CALCULATION
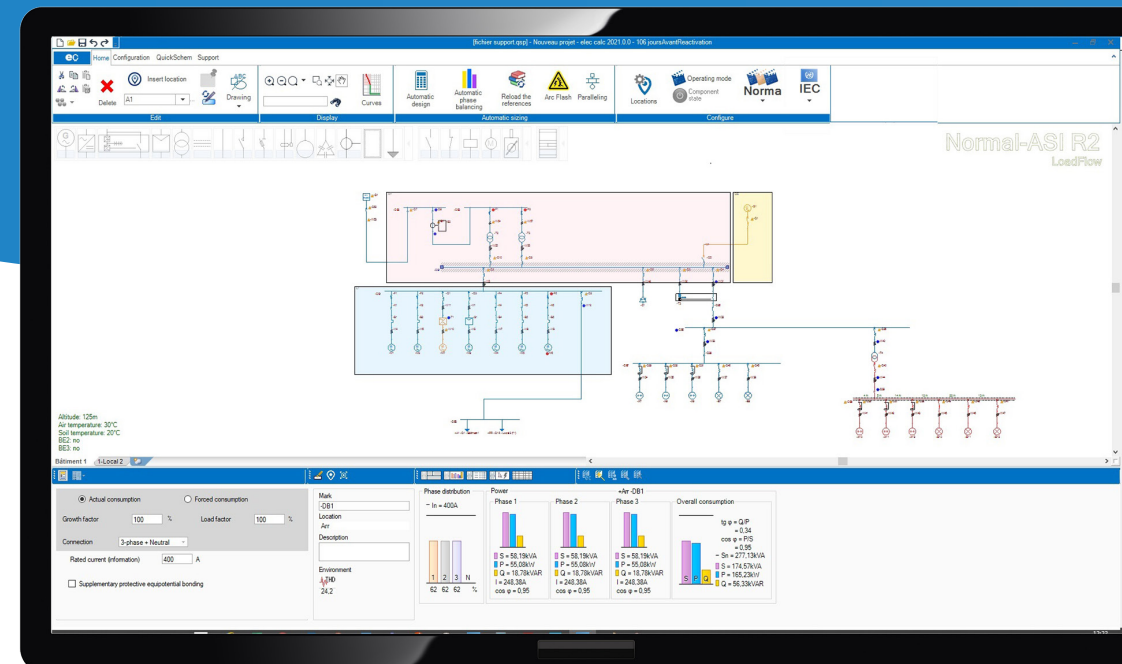
CALCULATIONS & CHECKS

- Multi-standard software (IEC, NF-C15-100 and NF-C13-200, NEN, RGIE, VDE, NIN, REBT)
- Calculation of short circuit currents according to the IEC 60-909 standard (symmetrical components method)
- Cable sizing according to IEC 60364-5-52 or national derivated standards
- Computing and checking the thermal stressed
- Calculation of the THD according to IEC 61800-3 §3.3.2
- Voltage drop calculation
- Normative errors indicated by explicit messages referring to the relevant paragraph of the standards

▶ SIMULATION & EDITING

elec calc™ allows the unlimited integration of operating modes in the synoptic in order to describe all the configurations of use of an electrical installation and thus to deduce the dimensioning cases in automatic. Moreover, the curve tool will allow to perform a set of simulations beyond the selectivity control by superimposing the curves of the different components and by simulating short circuits.
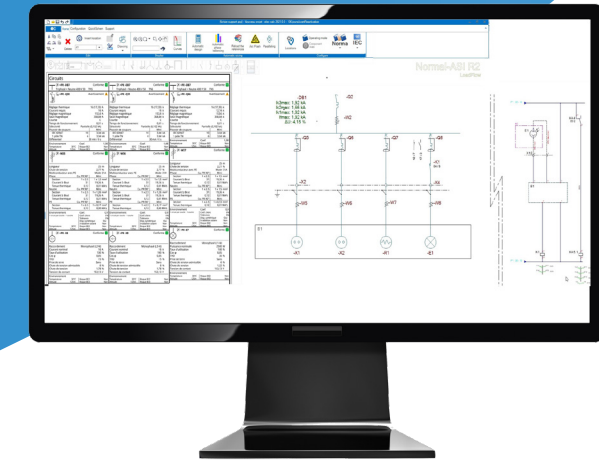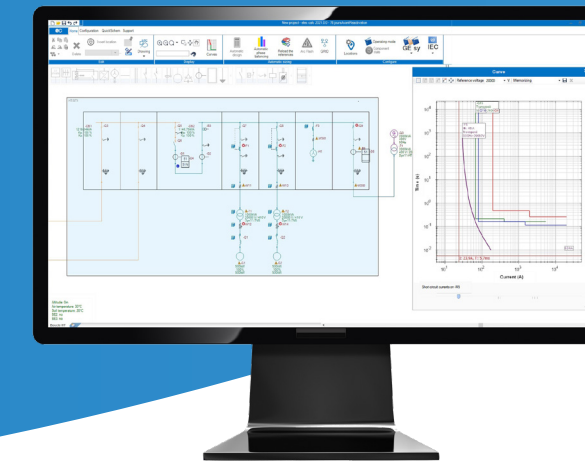
PROTECTIONS & COORDINATION

- Management of cascading and limitation
- Multi-level selectivity analysis
- Management of selectivity by manufacturers tables

HIGH VOLTAGE CHECKS

- Cable sizing according to the modes of installation of the NF-C 13-200
- Management of protection relays - ANSI code 50, 51 and 50N, 51N
- Thermal stress calculation
- Calculation of the maximum withstand time of the cables
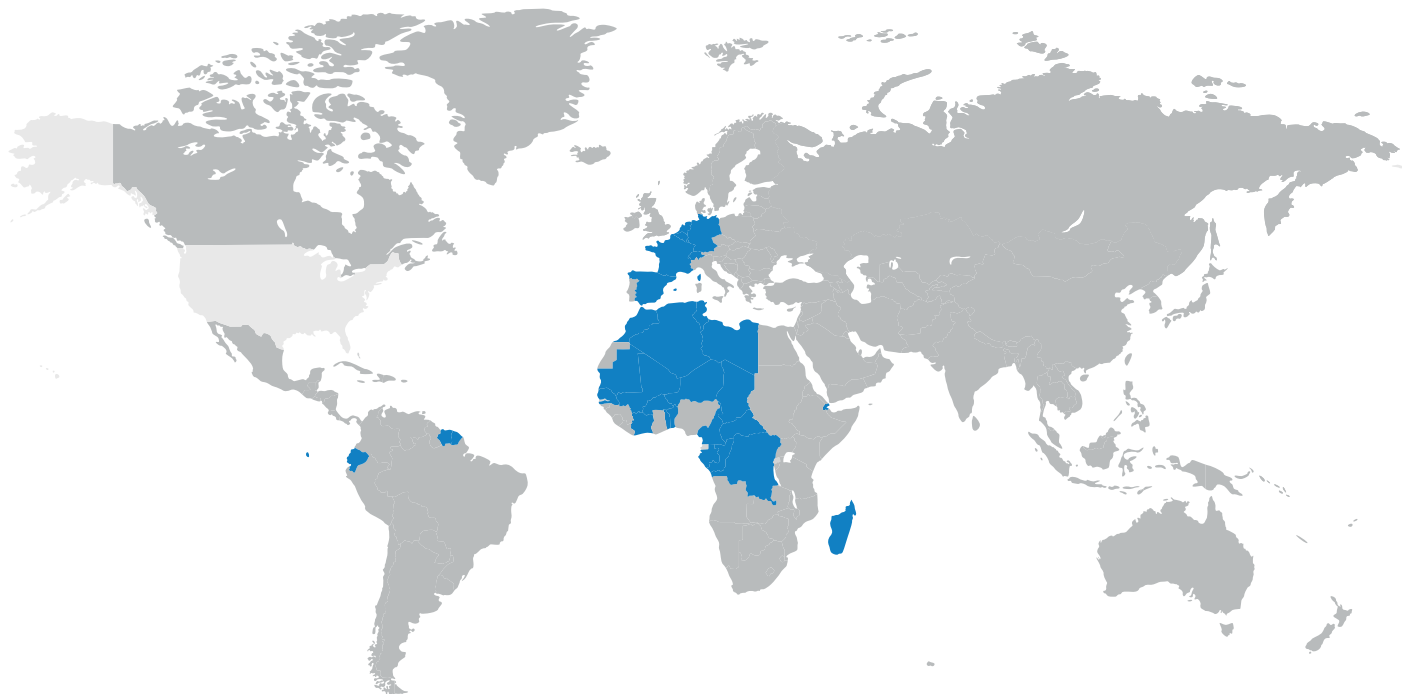- Homopolar generators management

DELIVERABLES

- Calculation report
- Single-line diagram (PDF, DWG)
- Excel export
- Exporting BOMs to the REXEL web-shop

HIGH & LOW VOLTAGE

MULTI-MANUFACTURER CATALOG

STANDARDS MANAGED IN ELEC CALC™ SOFTWARE

eleccalc ™

| ■ Spécific standards managed | ■ International standards managed | ■ Not managed by elec calc™ |

TRACE SOFTWARE INTERNATIONAL SERVICES

Hotline
Ticket or phone

Request manufacturer
references

Webinars &
video tutorials

Products updates

ELIE BT

The software is references by ELIE BT trademark and recognized by all inspection bodies in France.

> **Trace Software International has been developing software for over 30 years.**

We have acquired recognised expertise in calculation, in particular with the elec calc™ solution, software for sizing HV/LV electrical installations according to the international standards.
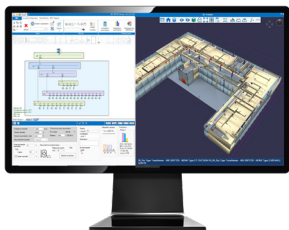
Software dedicated to electrical installations
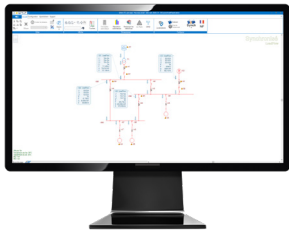
eleccalc™ **GRID**

#### Design and simulation software for multi-source mesh networks

This software provides a complete solution for the simulation of all types of multi-source mesh networks, in other words, the management of smart grids. elec calc™ GRID allows to manage HV/LV networks in the same interface.

eleccalc™ | **BIM**

The unique Open BIM solution for electrical installations calculation

elec calc™ BIM integrates the electrical project into the BIM process, giving priority to communication between the different teams thanks to the standard IFC and BCF collaboration formats.
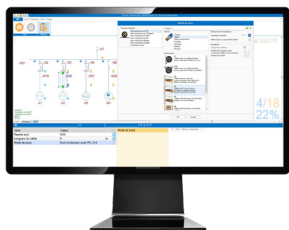
QuickSchem™

Software for electrical installation data recording and rapid SLD entry

This software is part of the elec calc™ suite to collaborate and exploit the recorded data directly for calculation. Quickschem™ uses the powerful modeling engine of elec calc™ to ensure fast schematic entry through the IntelliSense feature and associated schematic library.
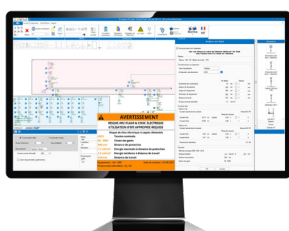
elec calc™ modules
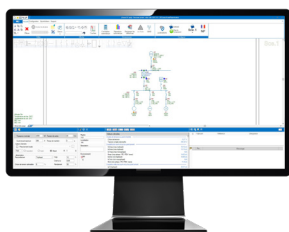
DC Module

Direct Current module for Low Voltage installations

This software allows the dimensioning of auxiliary networks (control command), distribution of sockets and/or lighting,... This module is intended for LV installations not covered by any specific standard up to 1500V.

Arc Flash Module

Protection against risks due to electric arcs

This module quantifies the level of risk in order to choose the PPE of workers during work and interventions on and near electrical installations in accordance with the IEEE 1584 - 2018 standard.