CADprofi 2024

Summary of main changes made in the program
since the CADprofi 2023.01 version.

CADprofi

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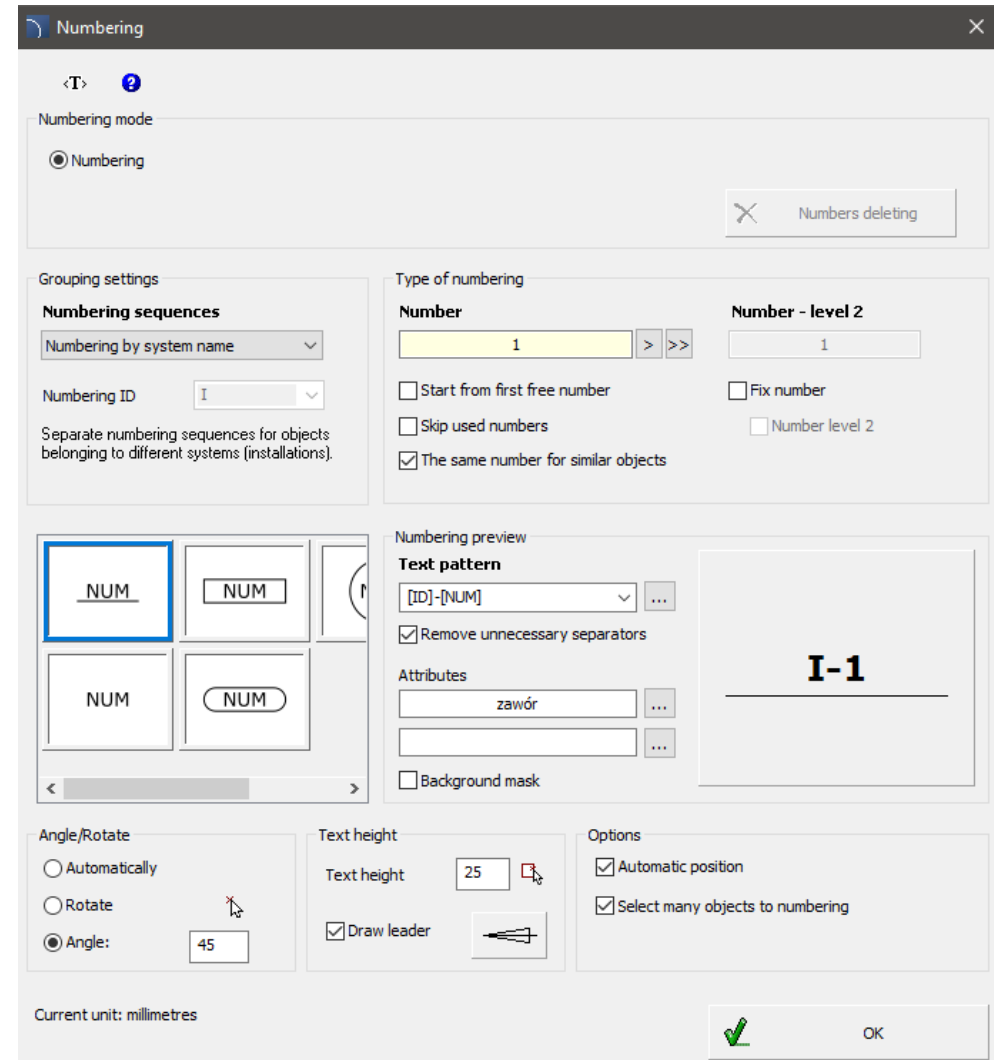
CADprofi

✓ CADprofi – advanced „Numbering"

The *Numbering* ① command has been improved in the latest version of CADprofi.

Currently, the program allows user to:
- define his own number sequences,
- separate numbering of different systems,
- determine the text pattern,
- define two-level numbering.

Additionally, user can define the numbering style and use attribute numbers and other data taken from numbered objects in symbols.

Thanks to this user has complete freedom to create numbers in accordance with the requirements of various industries.

CADprofi

✓ CADprofi – object placement (command extension)

In the latest version of the program, the *Arrange* command has been extended with the possibility of arranging objects in the dynamic area.

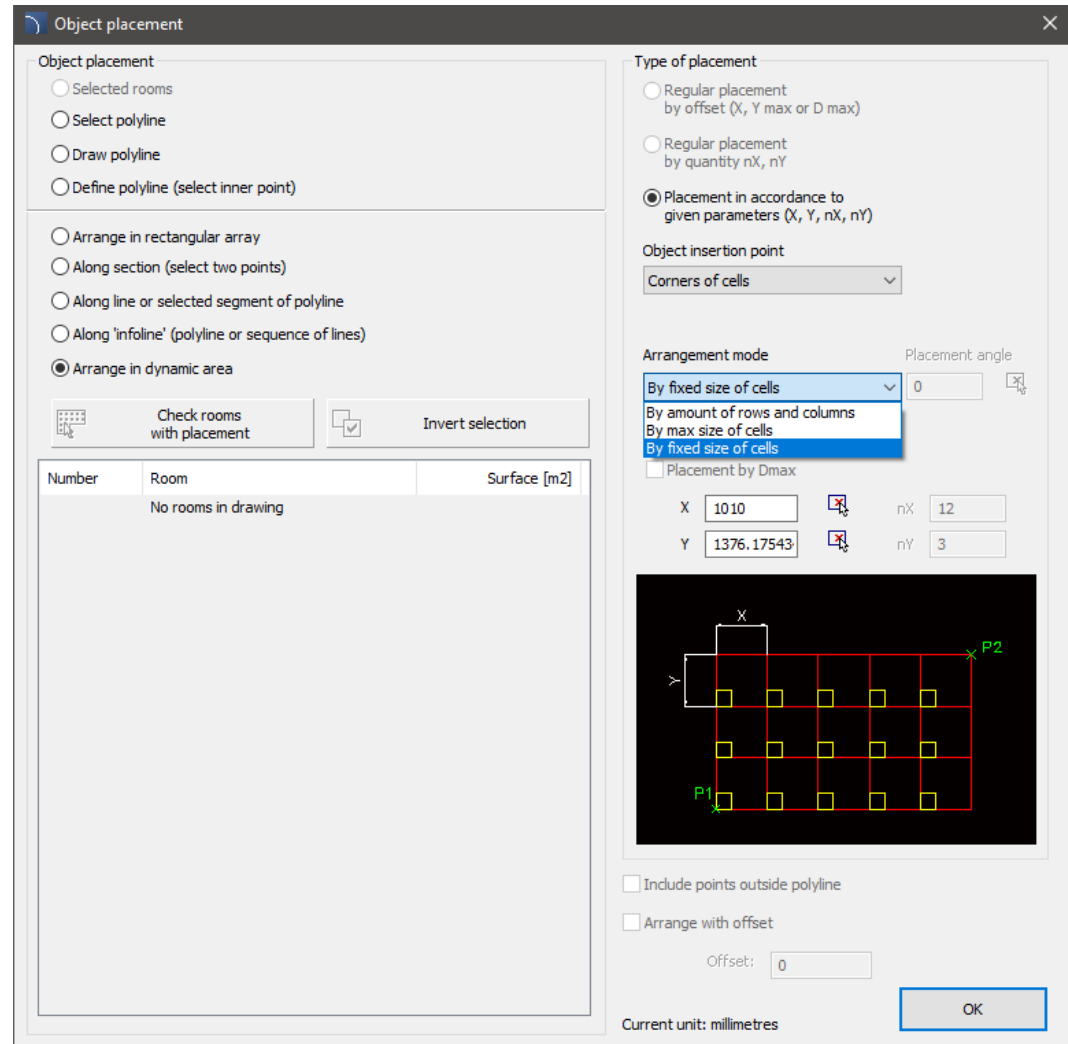The "Arrange in dynamic area" option allows user to quickly and visually insert multiple copies of a given object at regular intervals.

Various options allow user to customize the arrangement of objects to his needs.

Watch movie

The *Arrange* command significantly speeds up e.g. placement of fire detectors, sprinklers, lighting, as well as objects such as photovoltaic panels and other objects.

CADprofi

✓ CADprofi – user parametrical objects

The possibility to add user parametric objects has been introduced to CADprofi.

A parametrical object is an object that can contain any number of parametric dimensions. By changing the parameters, you can insert objects of various sizes into the program without having to draw each of the variants. Parameters can be freely edited by the user and saved in program's libraries.

Watch movie
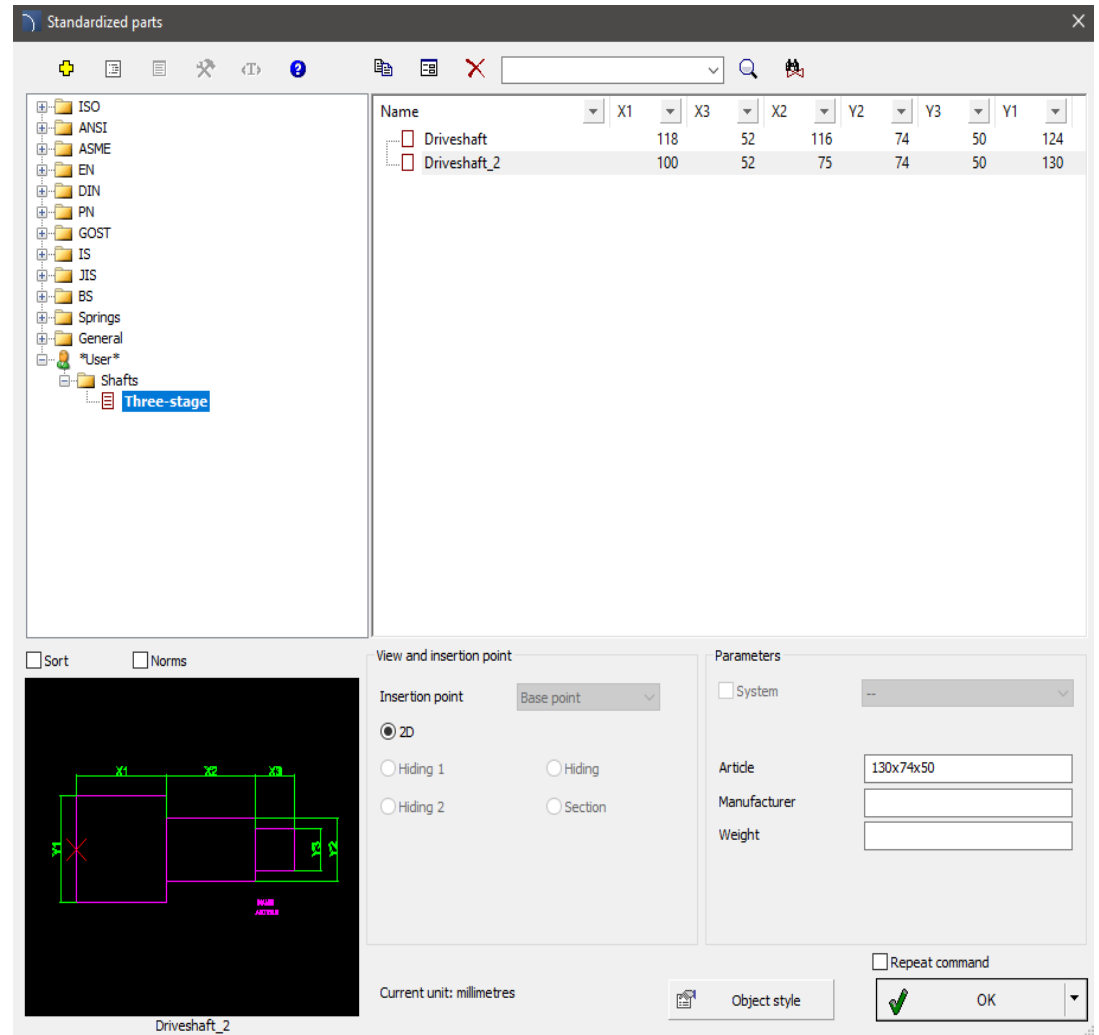
CADprofi

✓ CADprofi – dynamic connections between objects

Dynamic connections between objects have been introduced in CADprofi, which allows for mutual interaction, and changing one object may affect others. This allows user to automatically and instantly update the related object after any edit.

Examples:

- changing the area of the room outline will automatically update the room descriptions associated with it,
- changing the reference point will automatically update the level marks associated with it.

Dynamic object connections are available in the latest versions of AutoCAD, BricsCAD, GstarCAD, and ZWCAD.

Watch movie

CADprofi

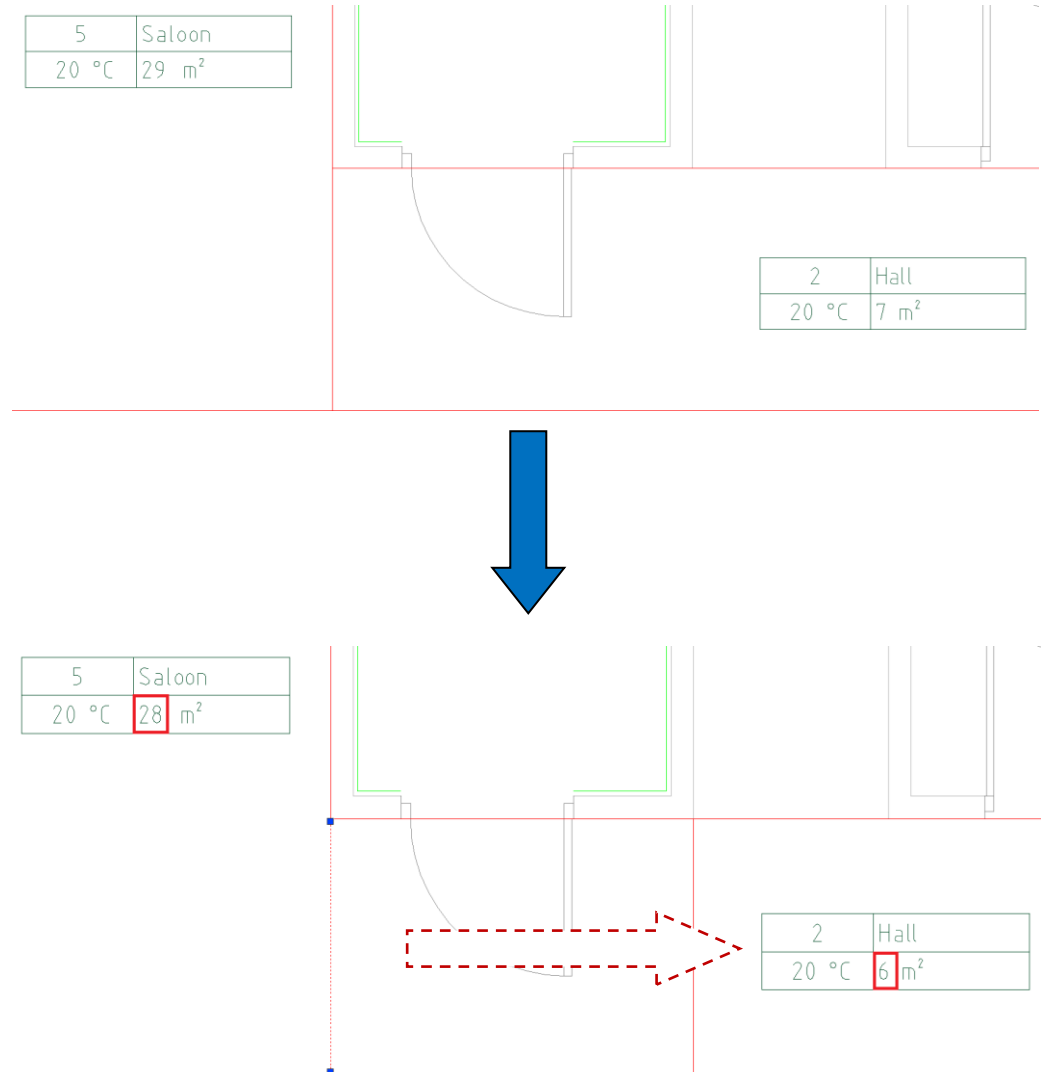## ✓ CADprofi Architectural – changes in the „Furniture and equipment" command

The *Furniture and equipment* command has been extended with new functions and elements, including:

- a preview list with thumbnails that allows for quick and visual selection of an object,
- option to insert items from a list,
- modular cabinets in which user can choose the type of door, handle and cabinet size,
- kitchen hoods with possibility to automatically connect ventilation ducts of specific diameters.

Additionally, elements from other commands have been transferred to this command, including: fireplaces and waste containers.

Watch movie
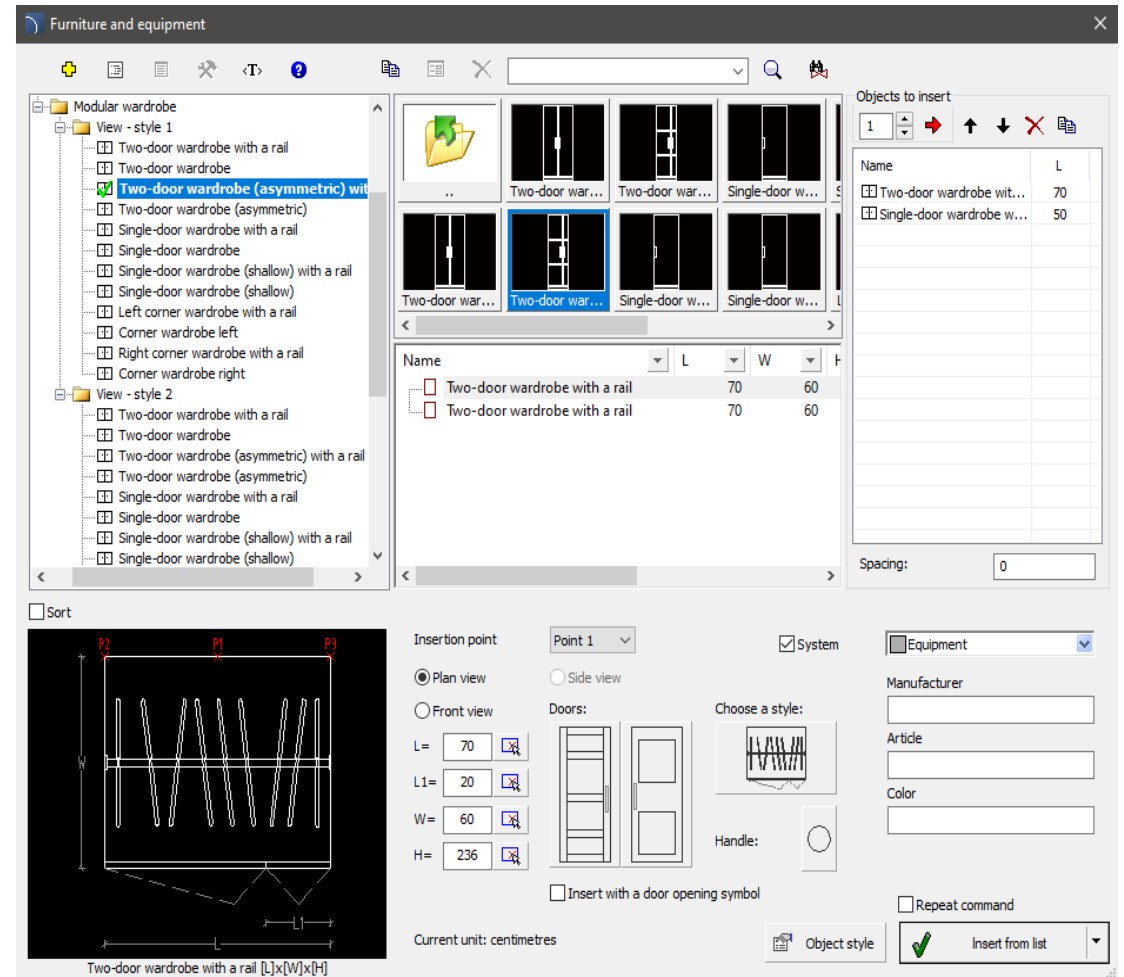
CADprofi

✓ CADprofi Architectural – extension of "Doors, windows" library

The *Doors, Windows* 🔲 library available in the CADprofi Architectural program has been extended with:

- new door schemes,
- new styles of door extensions,
- selection of door handle.

CADprofi

✓ CADprofi Electrical – extension of the „Scheme creator and templates" command

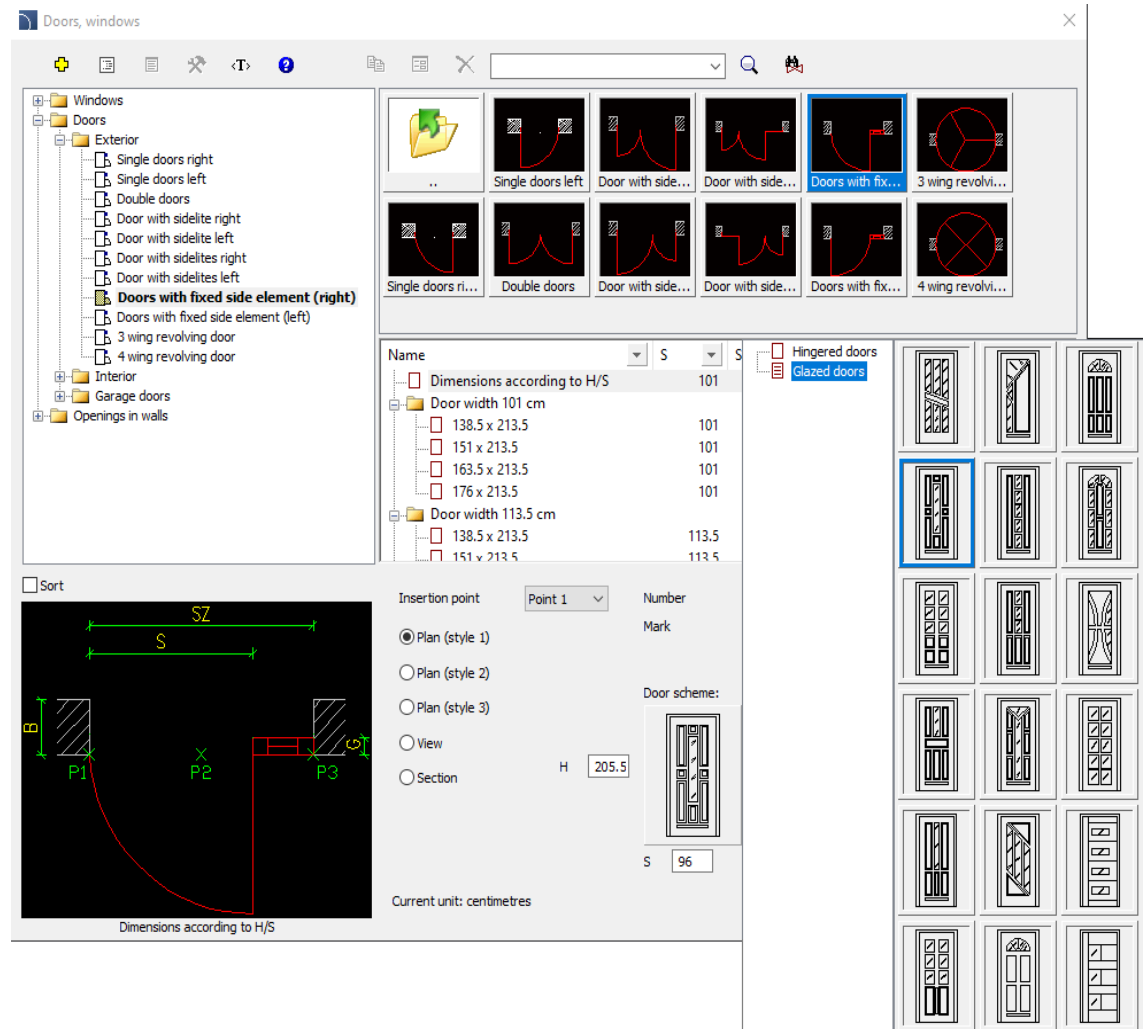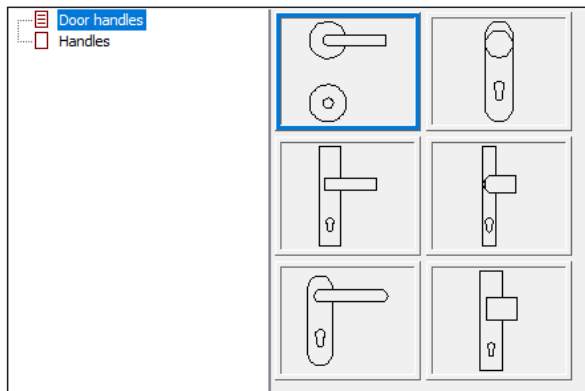*Scheme creator* available in the CADprofi Electrical program has been extended with the ability to enter markings for potential lines and including:

Ready-made clutch systems for:

- load switches, compact and air,
- molded case and air circuit breakers.

Measuring systems:

- ammeter with current transformer, fuse or circuit breaker,
- network parameter analyzer with current transformers, fuse device or overcurrent circuit breaker,
- energy meter with current transformers, fuse device or overcurrent switch.

Moreover, in the product selection window it is possible to specify the installation area of the devices and the method of their installation in the switchgear (vertically or horizontally).

Additionally, the "Design data - general settings" window has been extended with the possibility of inserting a cover page sheet and a sheet with technical parameters and project description.
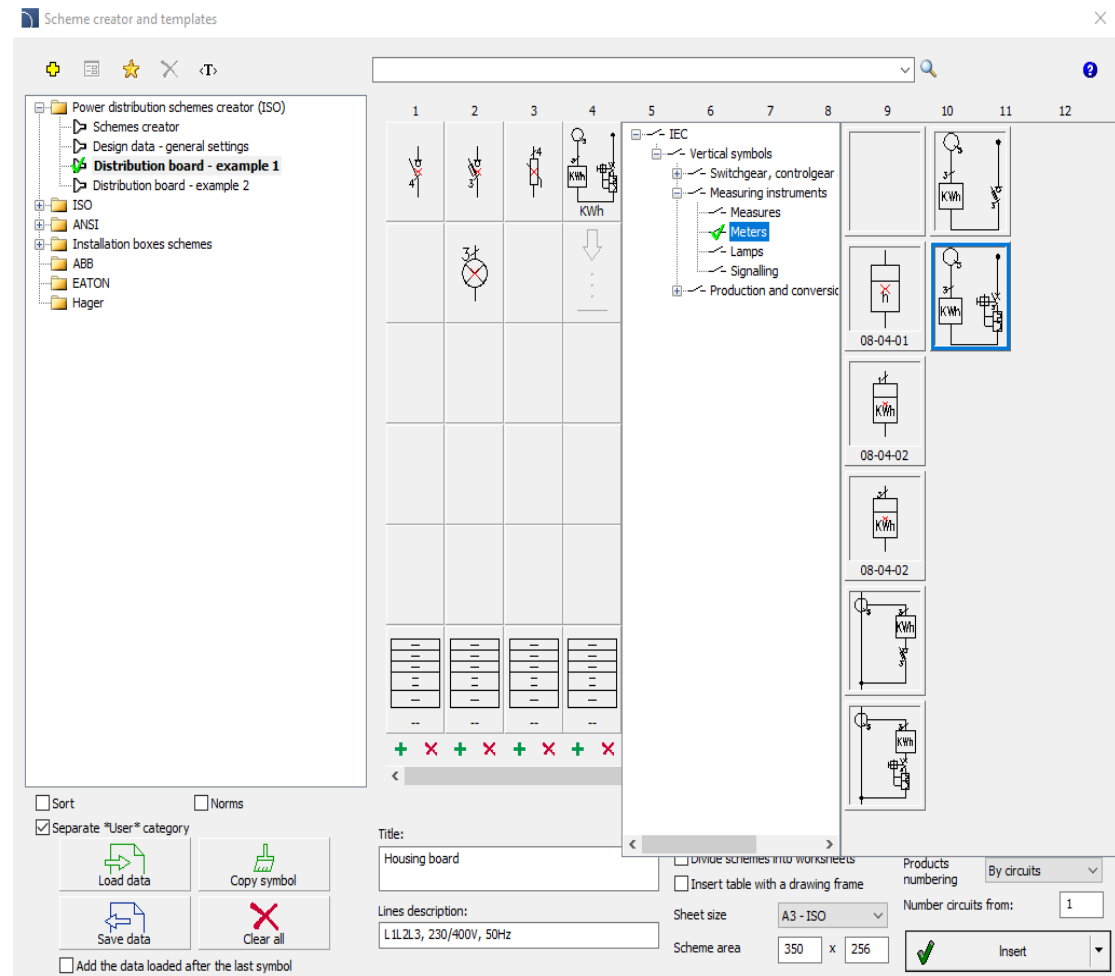
CADprofi

✓ CADprofi Electrical – extension of the „Frames and tables" command

The *Frames and tables* ▦ command has been extended with:

- a sheet of the title page in A4 and A3 format in landscape version,
- a sheet for describing project parameters in A4 and A3 format.

Additionally, the dialog window includes options that allow user to insert frames with a reference grid, centering or crop marks.
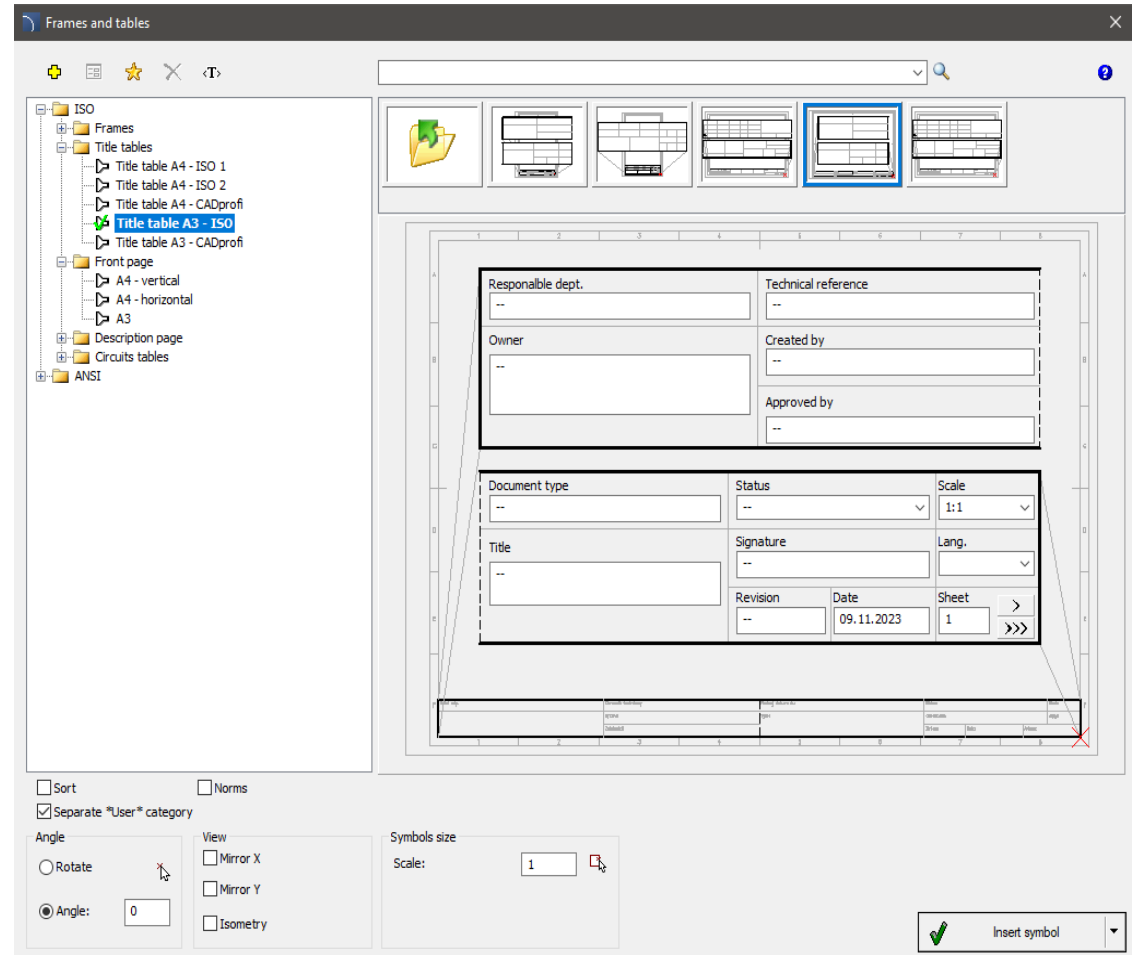
CADprofi

✓ CADprofi Electrical – extension of the „Modular units" command

The *Modular units* ⊞ command has been extended with new functionalities, including:

- inserting equipment with an assembly field (horizontally or vertically),
- horizontal or vertical installation,
- specifying user own dimensions or retrieving dimensions from a drawing, option to insert items from a list.
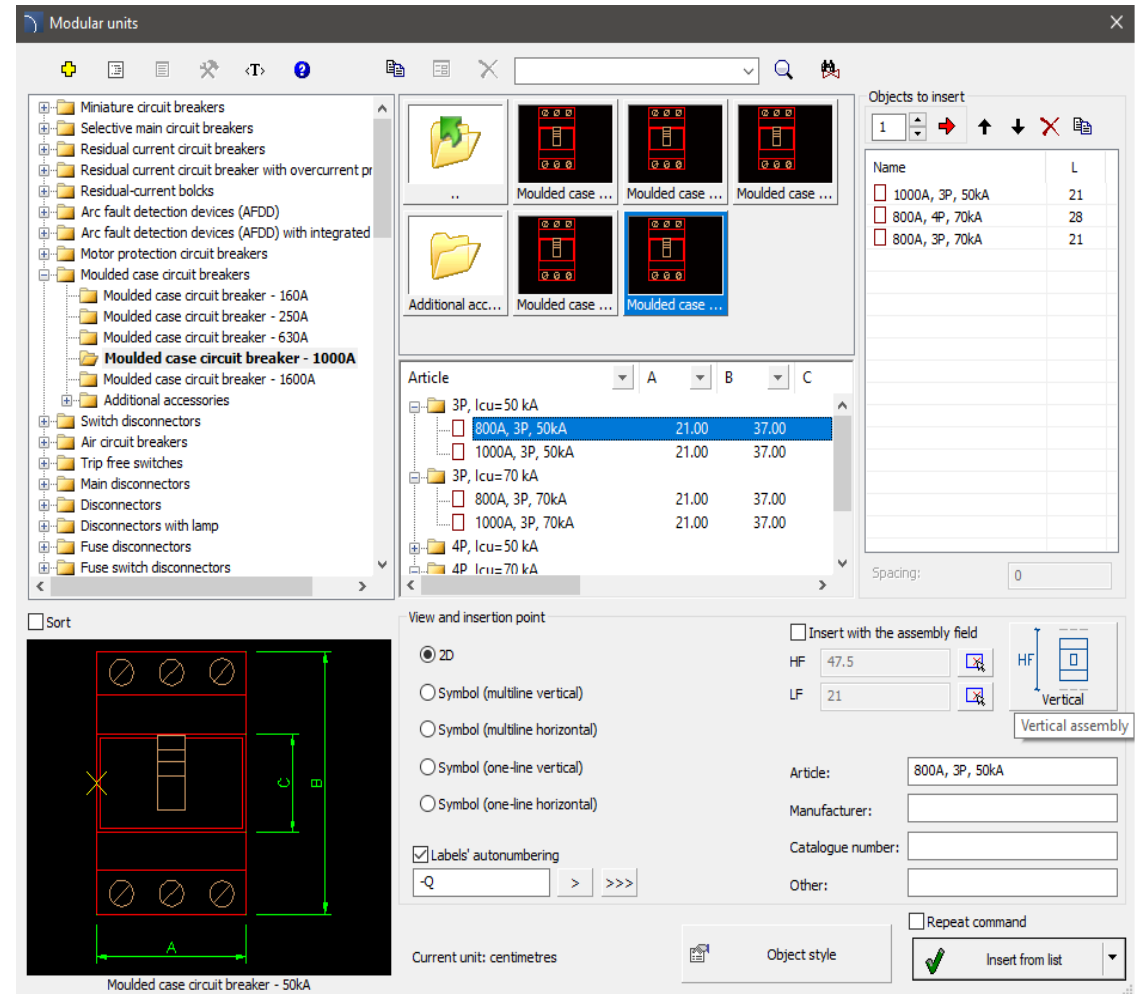
CADprofi

✓ CADprofi Electrical – lightning protection systems

CADprofi Electrical has been extended with a new command *Lightning protection systems* ⚡. Library contains products used for designing a complete building lightning protection system, including:

- various types of masts (without a base, on a metal base, on a concrete base, on a tripod, on a quadruped, screwed into the ground, on the foundation or high-voltage) and spiers (chimney, on a ridge-tile base, gable base, as well as for high-seam sheet metal) ,
- lightning wires, insulating wires and tapes,
- various types of joints (cross, diagonal, universal, through, parallel, compensation, control and gutter),
- ground casings and facade boxes,
- class A (pins) and class B (hoops) earth electrodes.
- additional accessories for masts (adjustment sets, support rods and washers for roofing felt and membrane).

Program enables the design of installations in four LPS protection classes and the determination of mast protection zones using the rolling ball method and the cone method (protective angle).

Air-termination rod on a metal base
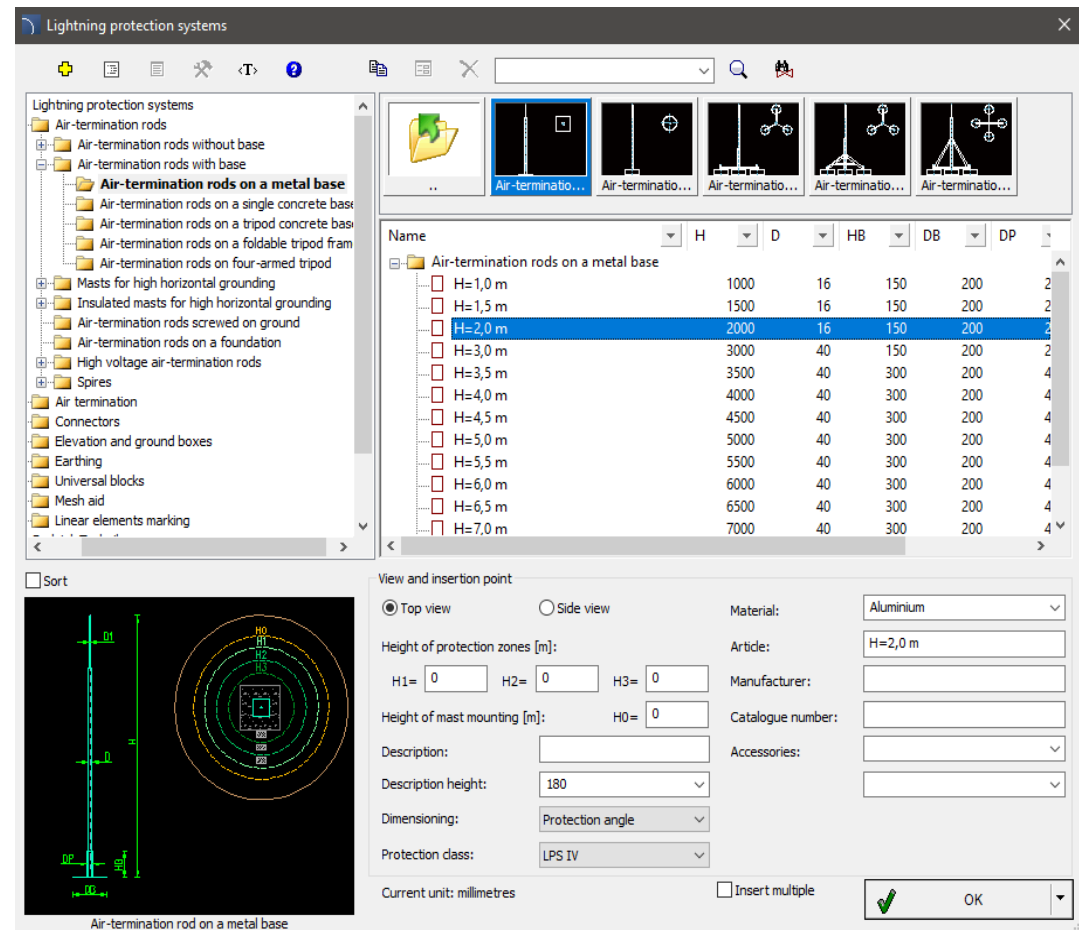
CADprofi

✓ CADprofi Electrical – extension of IEC, NFPA library symbols

The *Symbols - IEC, NFPA* 📇 library available in CADprofi Electrical has been extended with new symbols, including:

- reversible contactor 3- and 4-pole,

- moulded case circut breaker with motor operator,

- mechanical block,

- twilight switches (additional variants),

- phase control relays (additional variants),

- multifunctional relays (additional variants),

- single-phase and three-phase electric meters (additional variants).
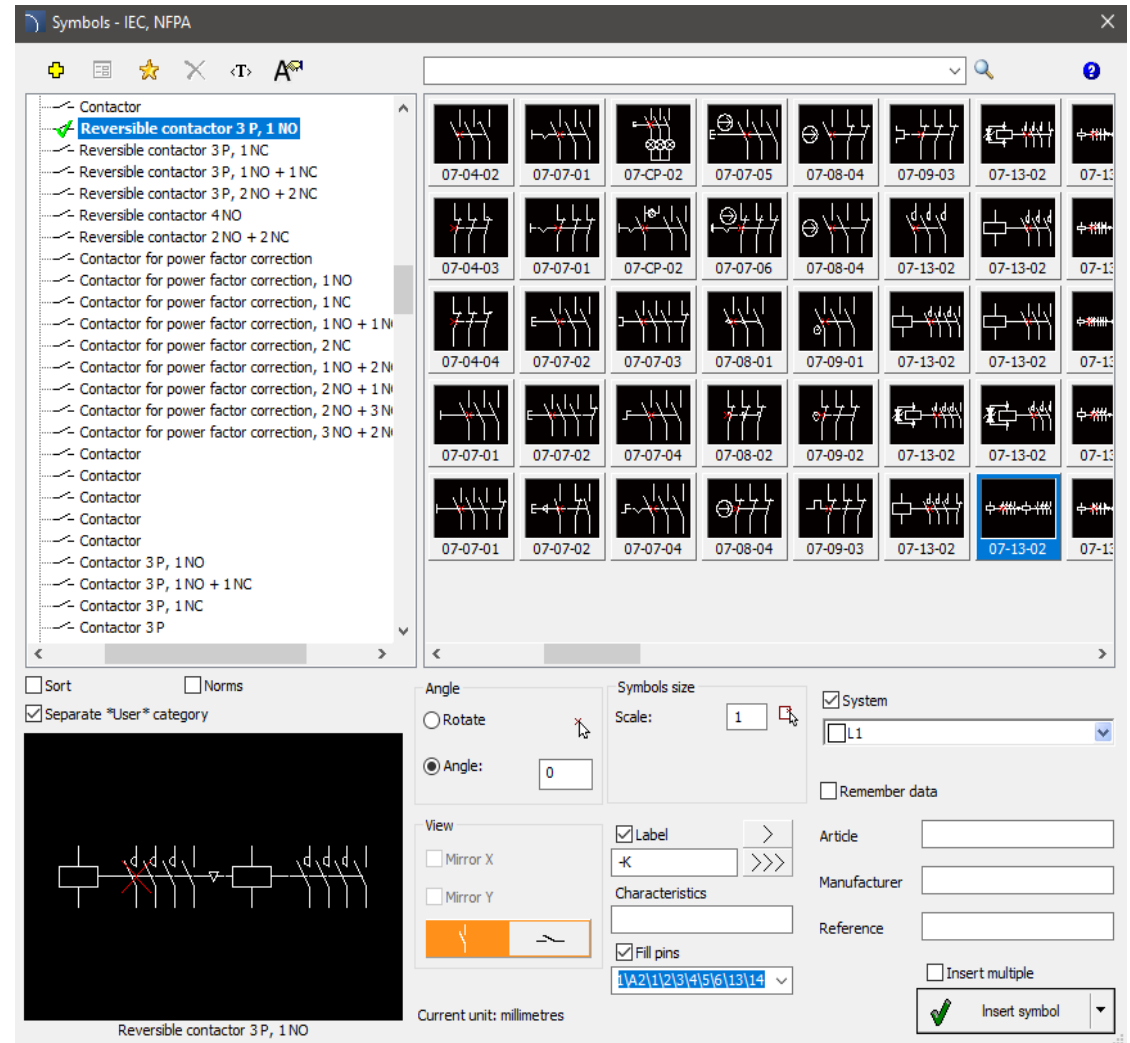
CADprofi

✓ CADprofi HVAC & Piping – extention of symbols library

Symbols ∑ command has been extended with new valves, including:

- Angular valve with servo device,
- Static balancing valve,
- Thermostatic valve,
- Three-way thermostatic valve,
- Thermostatic valve with servo device,
- Strainer,
- Regulating valve,
- Angular valve with servo device,
- Drain-fill valve,
- Volumetric flow meter.

Additionally, some of the valves can be expanded with a drive from the existing list.
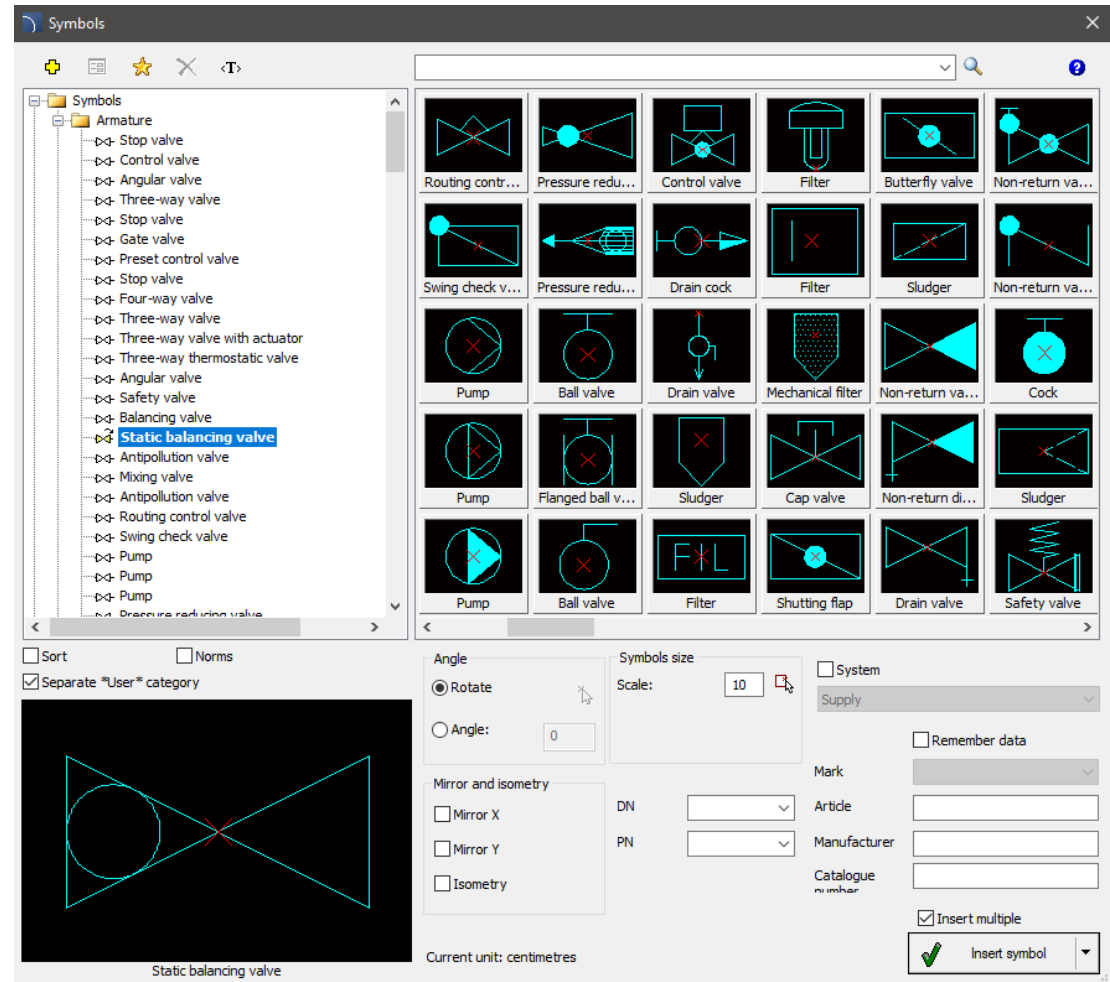
✓ **CADprofi HVAC & Piping – access doors for ventilation ducts**

In the *Outlets* ⊡ command, a new category – *access doors* has been added, which includes:

- access doors for round ducts,
- access doors for rectangular ducts,

Newly created categories include:

- universal and high-temperature access doors,
- acces doors for spiro pipe,
- pipes with preinstalled access doors,
- hinged and insulated access doors.

Products that were added are based on Alnor and Lindab catalogs.
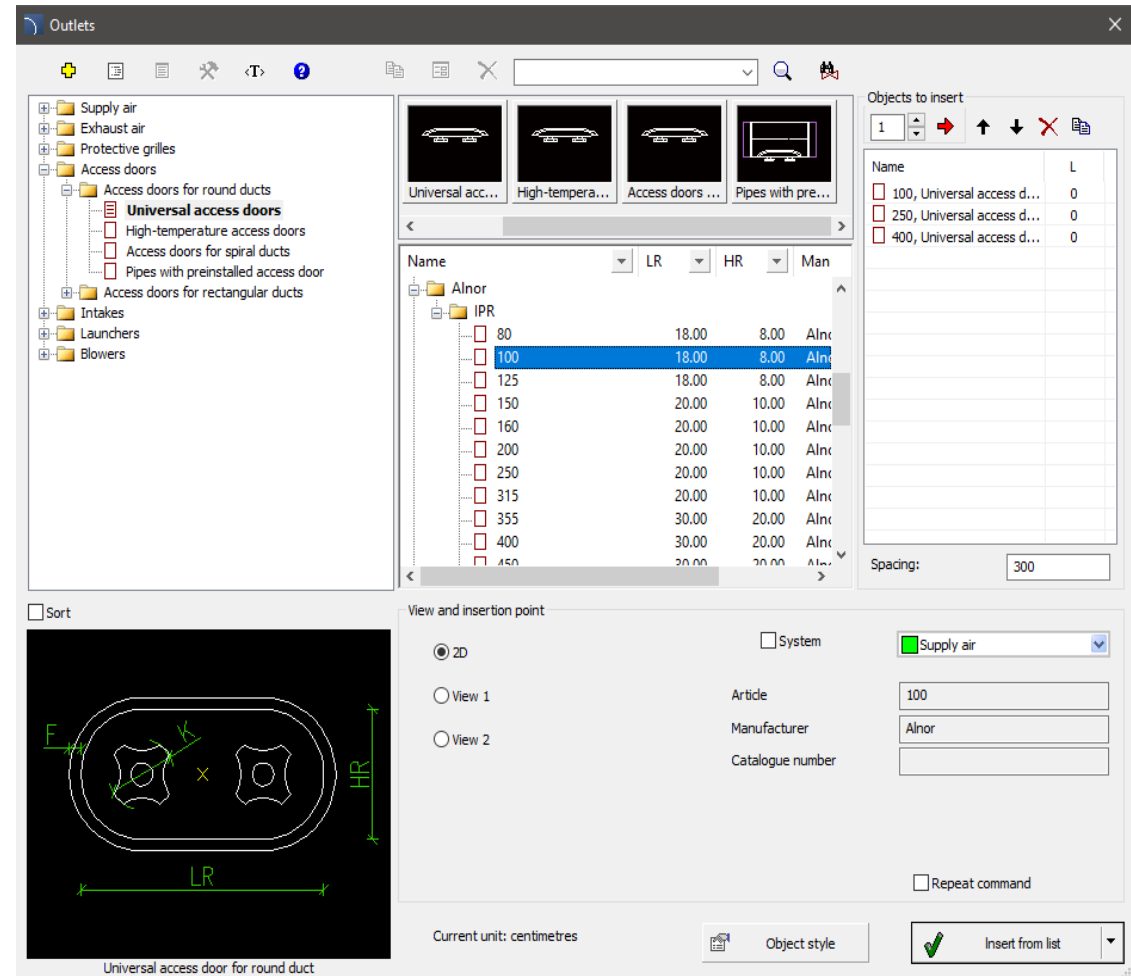
CADprofi

✓ **CADprofi HVAC& Piping – extension of threaded armature library**

The *Parametrical armature* command has been extended with the following types of threaded fittings:

- amortising fitting, threaded based on Socla and Jafar manufacturers.

- antipolution valve (EA type male/female), based on Socla company specifications.
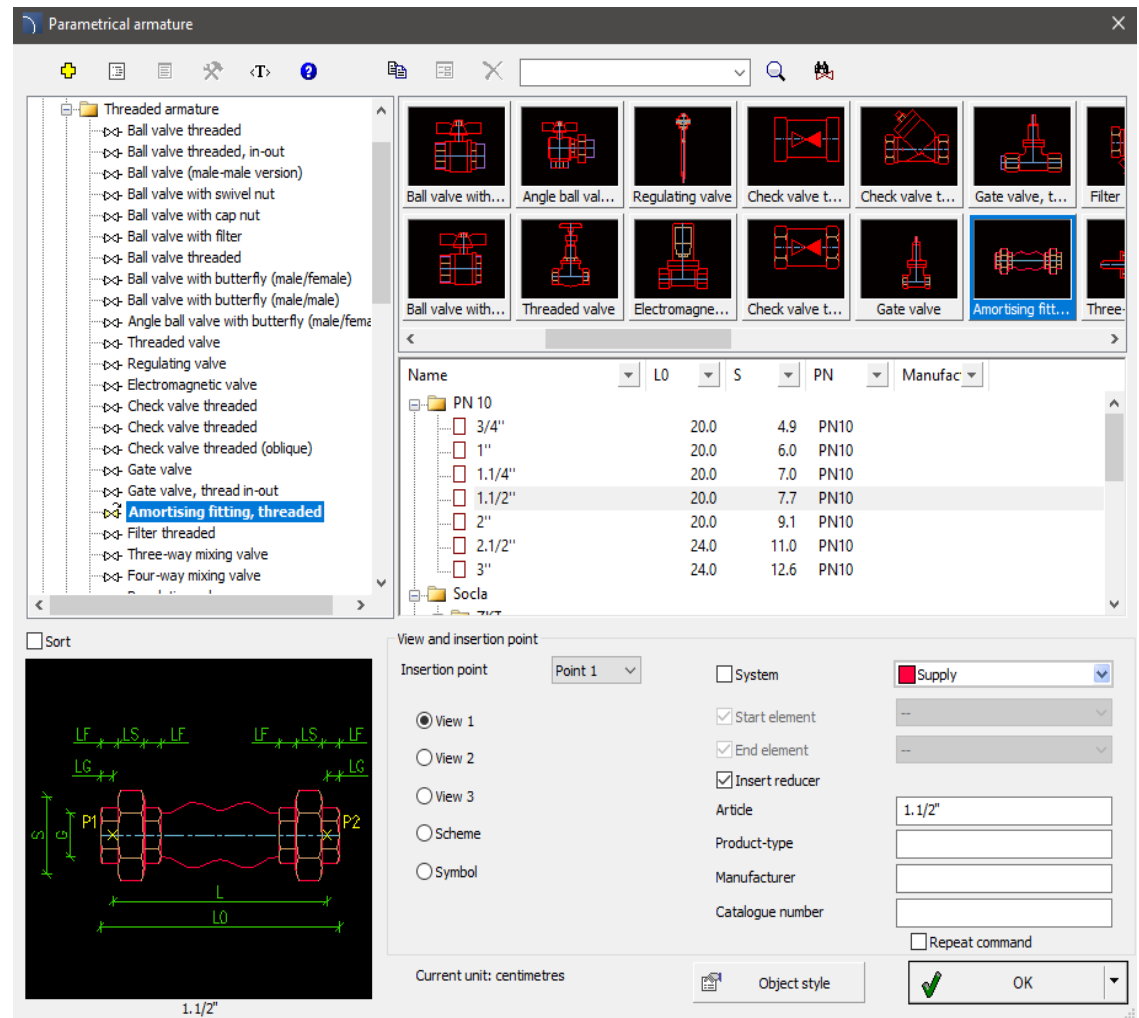
✓ CADprofi HVAC & Piping – cabinets for installation manifolds

The *Parametrical Objects* command has been extended with surface and flush cabinets for installation manifolds (e.g. for central heating, radiator, floor, tap water, etc.). Cabinets from the following manufacturers are available:

- KaMo,
- TECE,
- Teira,
- TiA,
- Uponor,
- Viega.

The command also includes general cabinets for manifolds, which allow the designer to quickly and easily modify dimensions and create his own type of series of products.
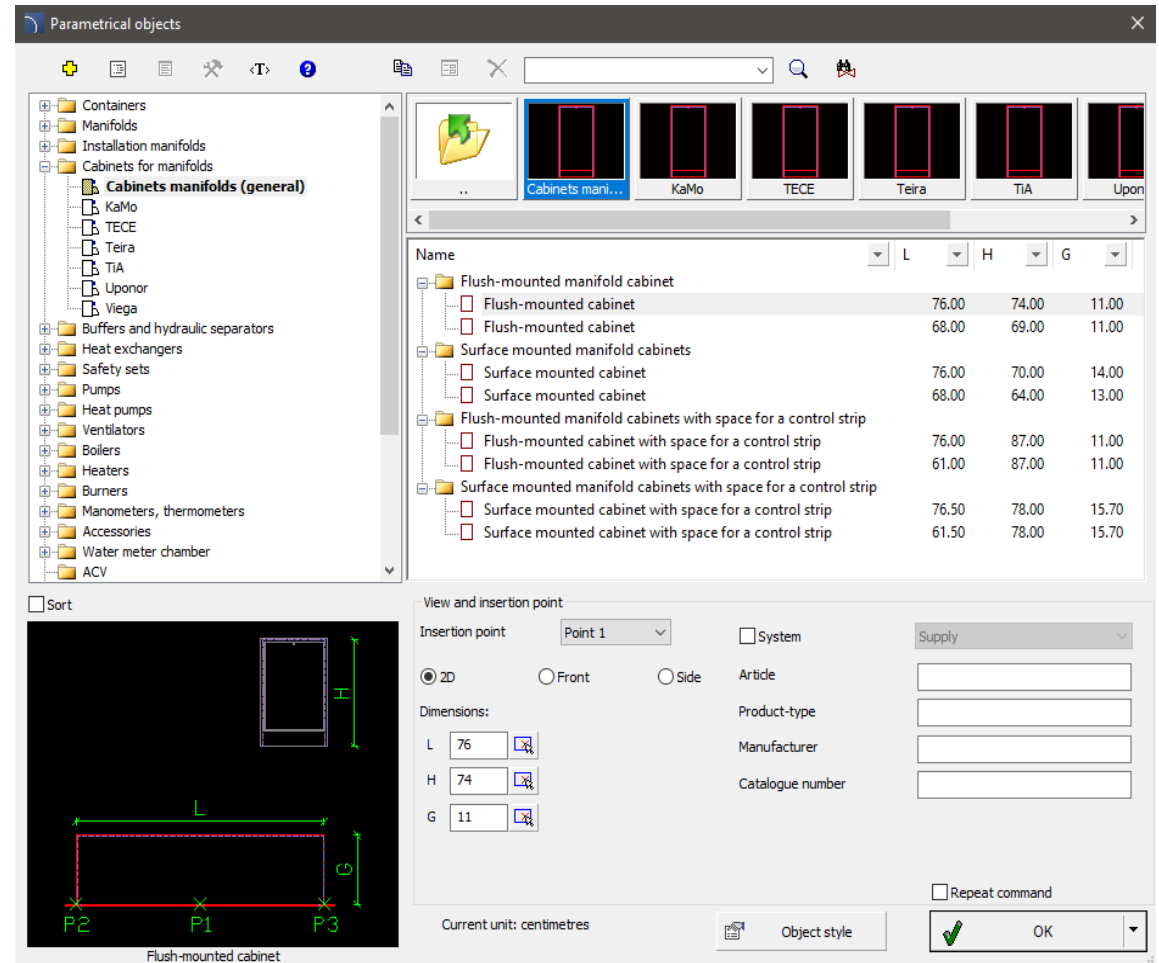
CADprofi

✓ **CADprofi HVAC & Piping – water meters half pipe-unions and lengthening pipes**

The *Parametrical armature* command has been extended with *water meters half pipe-unions* and *water meters lengthening pipes*.

Additionally the *Parametrical armature* command has been extended with new types of threaded armature, including *angle and straight butterfly valves*.
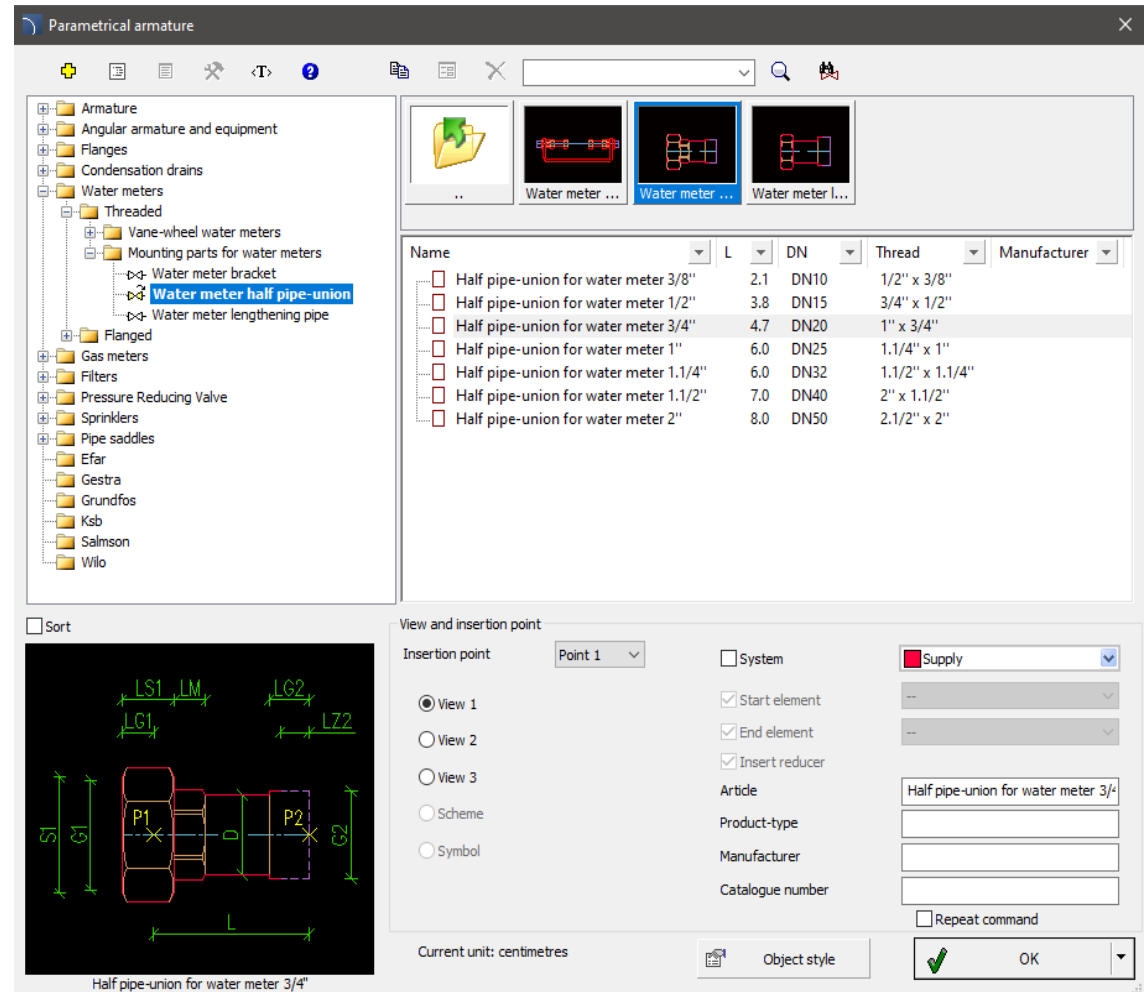
CADprofi

✓ CADprofi HVAC & Piping – on-pipe water filters

The *Parametrical armature* command has been extended with *on-pipe water filters* together with accessories and mounting elements.

Filters have the ability to quickly select predefined filter cartridges, such as: string filter, carbon filter, ceramic filter, etc.
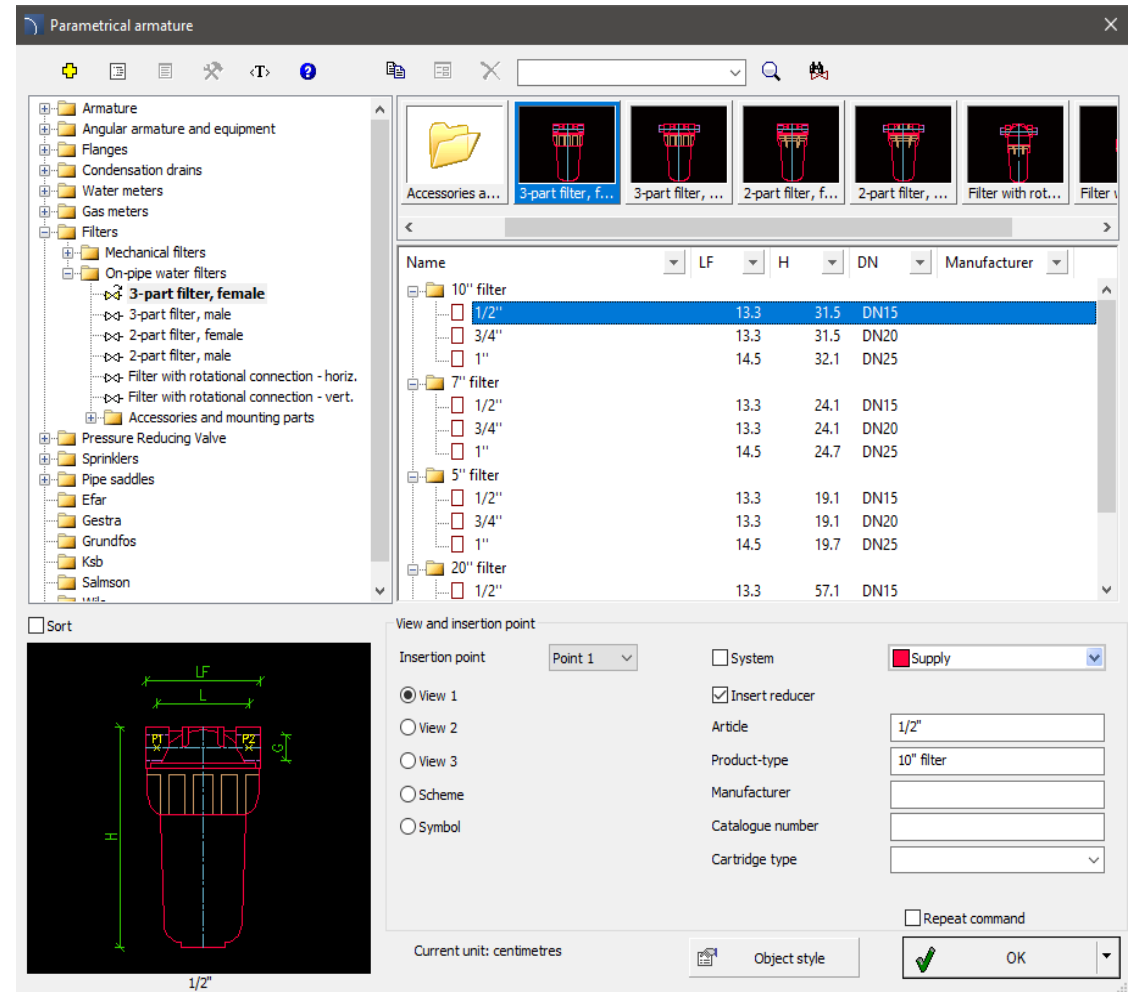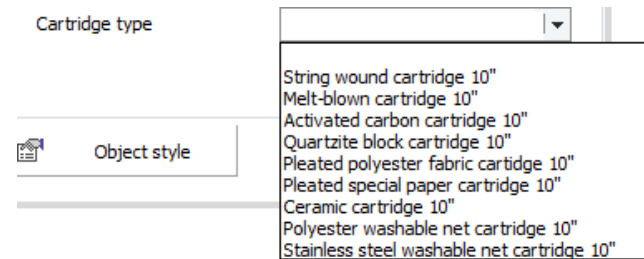
CADprofi

✓ CADprofi HVAC & Piping – interflange mounting armature

The *Parametrical armature* 🔧 command has been extended with *SOCLA* company valves.

Additionally the *Parametrical armature* 🔧 command has been extended with centric butterfly valves, including:

- Centric butterfly valve – Wafer type,
- Centric butterfly valve – LUG type.

CADprofi

✔ CADprofi Mechanical – rolling bearings according to BS standard

The *Standardized parts* 🔧 command has been extended with a new category – rolling bearings (British Standards). This category contains:

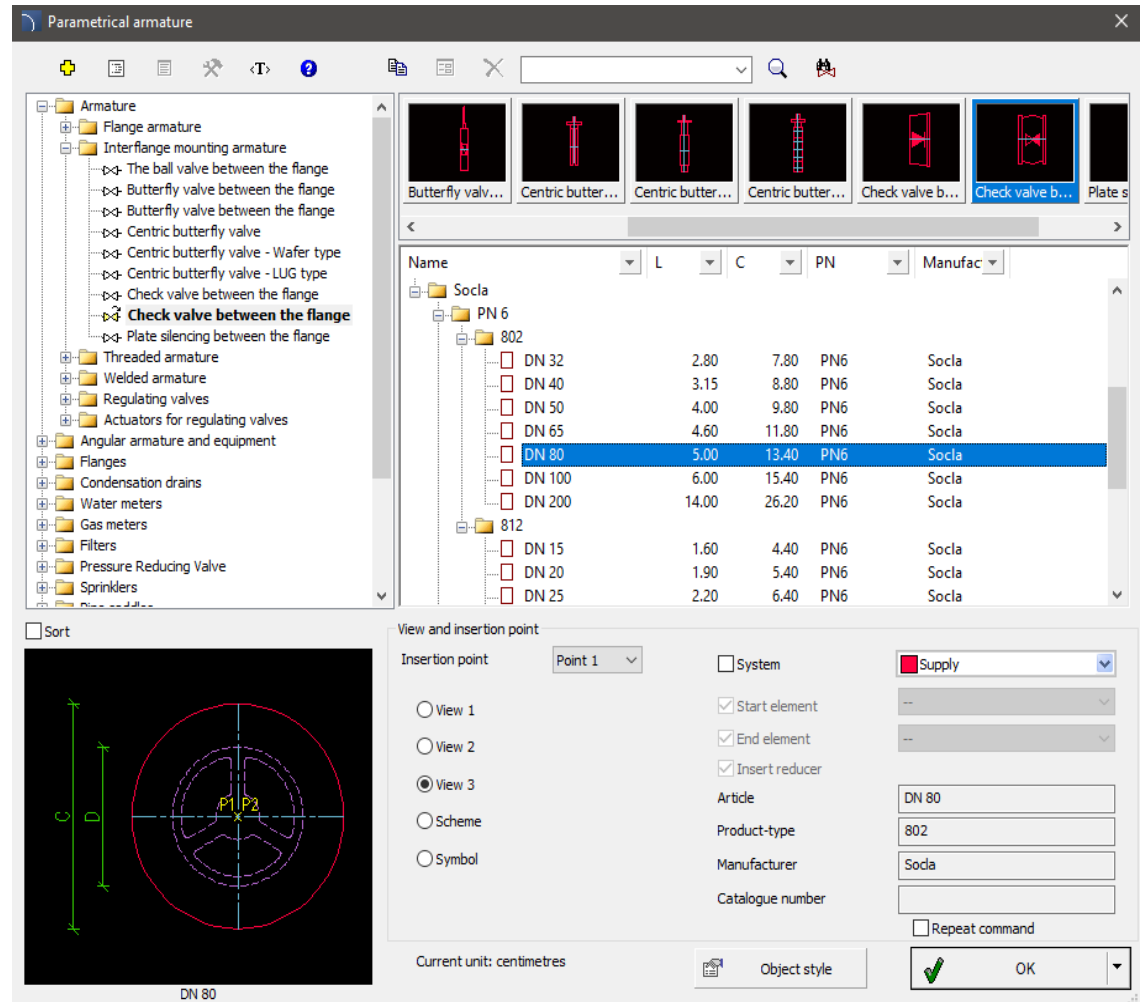- ball bearing with a cylindrical bore,
- ball bearing with one or two protective plates,
- ball bearing with one or two rubber seals,
- ball bearing with a groove on the outer ring,
- single row angular contact ball bearing series 72 and 73 and QJ2 and QJ3,
- self-aligning ball bearing with a cylindrical and tapered bore,
- double-row spherical roller bearing with a cylindrical and tapered bore,
- thin-wall needle roller bearing with a through ring and cage.
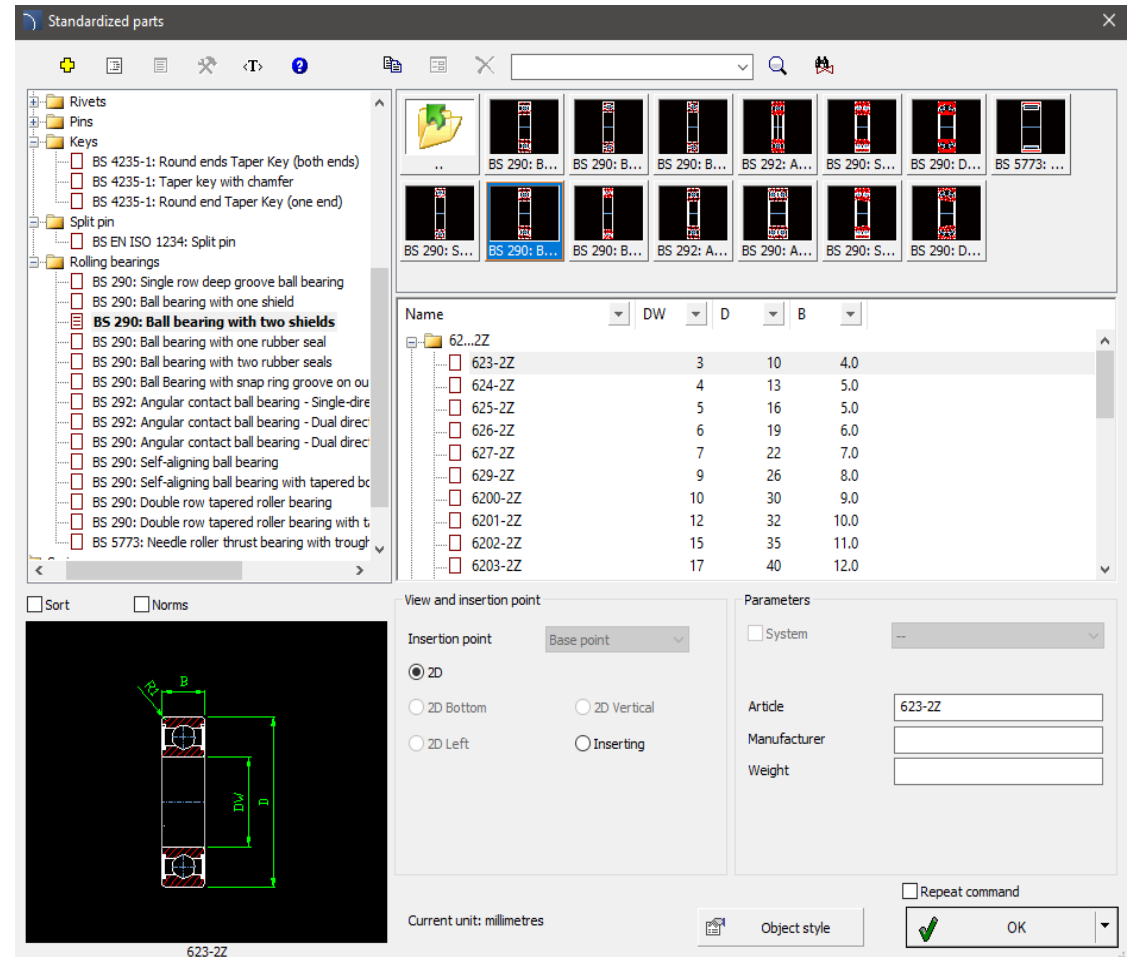
CADprofi

✓ CADprofi Mechanical – flanges according to ASME standard

Flanges prepared according to the ASME standard have been introduced to the *Exchangers, pipes, fittings* 🔔 command, including:

- Welding neck flanges **ASME B16.5,**
- Blind flange **ASME B16.5,**
- Threaded flanges **ASME B16.5,**
- Socket Welding flange **ASME B16.5**
- Slip-on Welding flanges **ASME B16.5,**
- Rolled flanges **ASME B16.5,**
- Flanges **ASME B16.1,**
- Blind flanges **ASME B16.1.**
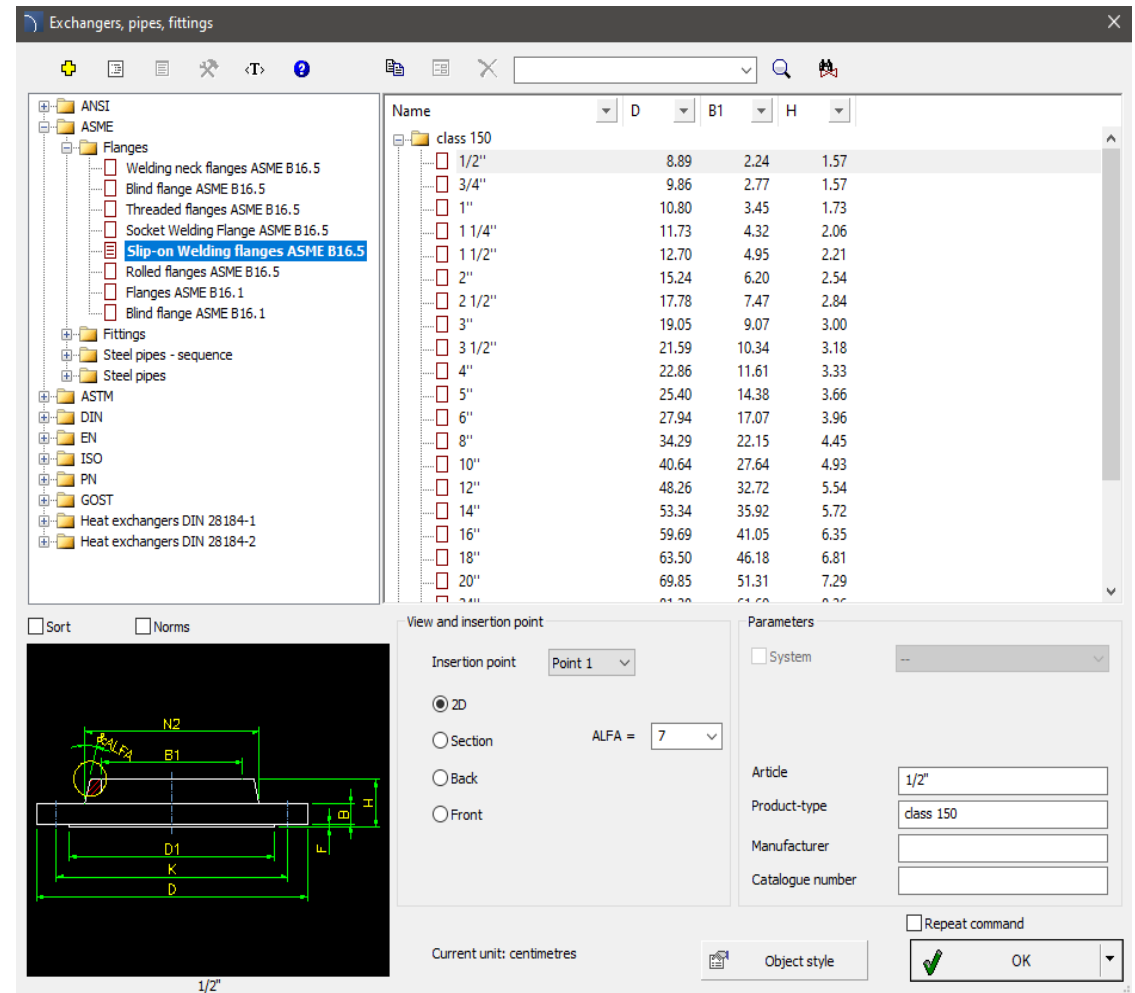
CADprofi

✓ CADprofi Mechanical – springs

The *Standardized parts* 🔧 command has been extended with the *Springs* category (compression, disc).

Watch movie
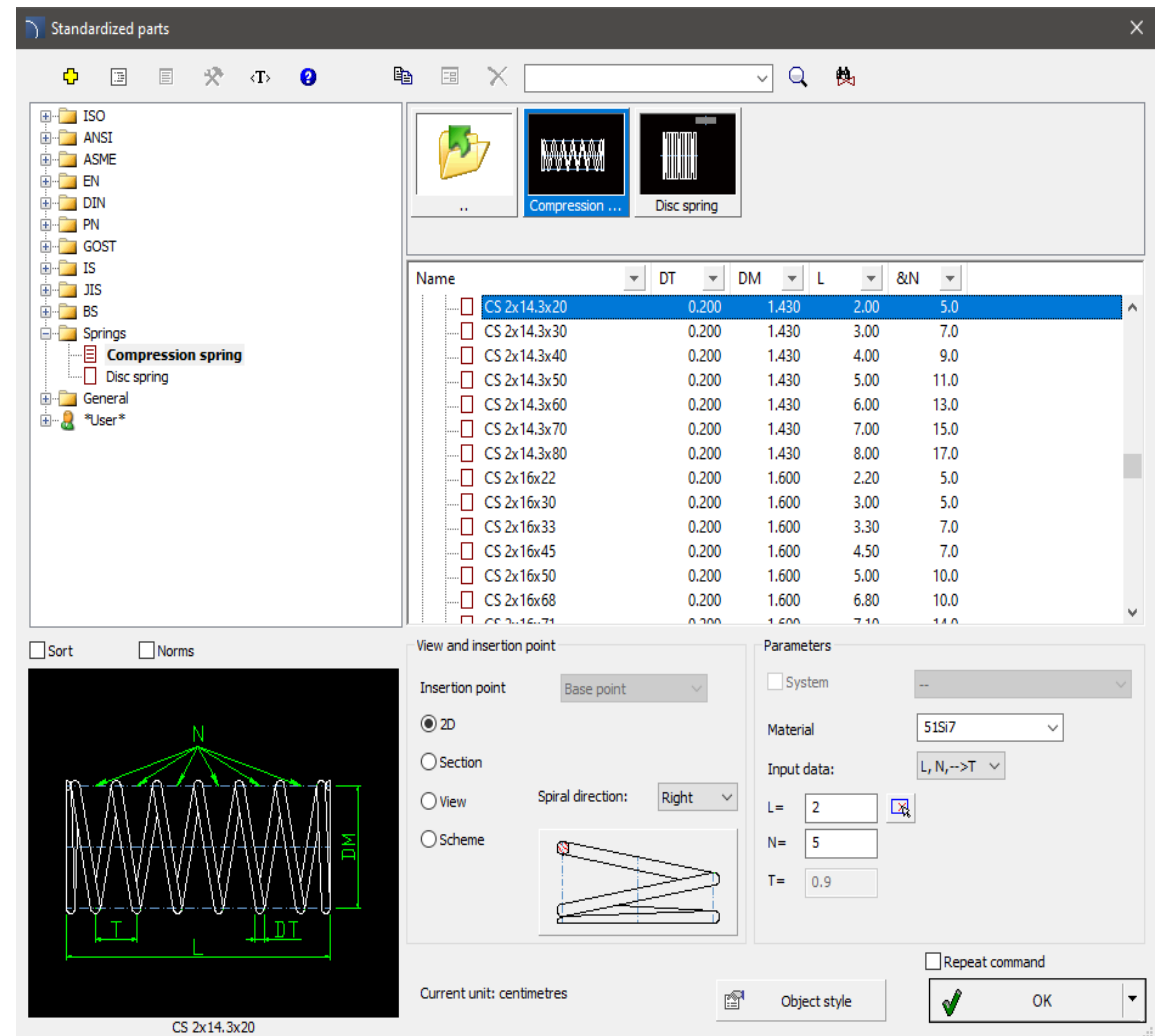
CADprofi

✓ CADprofi Mechanical – British Standards (BS)

The *Standardized parts* ⛏ prepared according to British Standards (BS) have been added to CADprofi Mechanical, including:

- Hex head screws
- Hexagonal nuts,
- Round washers,
- Ball head and flat head rivets,
- Cylindrical, conical, spring pins,
- Pins with tapered and parallel notches,
- Rivet pins,
- Cotter pins,
- Holes,
- Rolled head screws,
- Countersunk head screws,
- Rounded and beveled mortise wedges,
- Bearings.
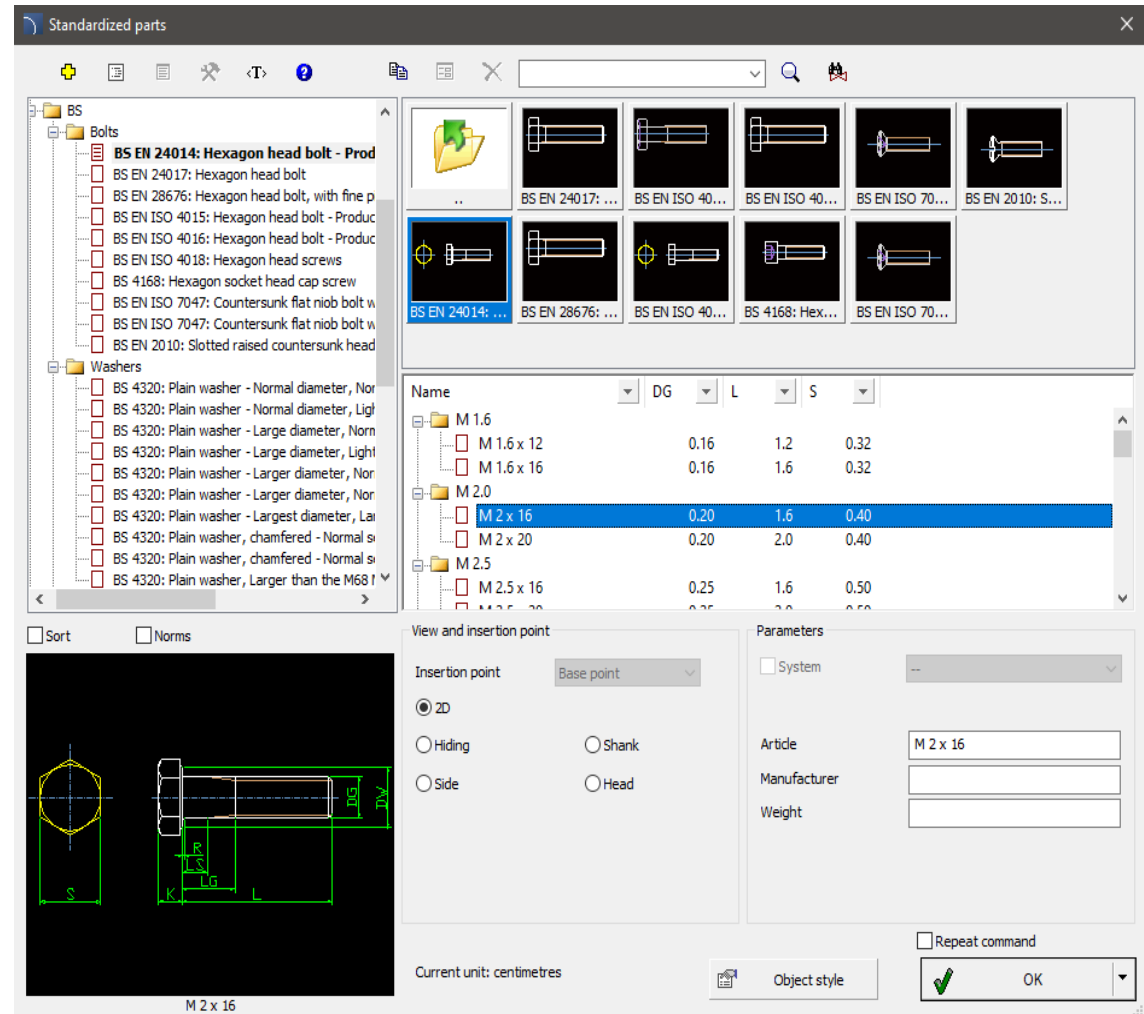
CADprofi

✓ CADprofi OEM – extension of the Siemens library

Siemens library has been extended and updated with:

- 3NP1, 3NC, 5SG7 fuse switch disconnector and accessories.
- light indicators,
- Pushbuttons,
- switchboards and cabinets ALPHA 160 and ALPHA SIMBOX (surface-mounted, flush-mounted and plaster/cardboard walls).

Additionally, the product library dialog box has been rebuilt. Real camera views, PDF catalogs and links to pages with technical and product description information have been added.

In addition, it is possible to automatically select a housing based on the devices used in the project and determine the size of labels for products.
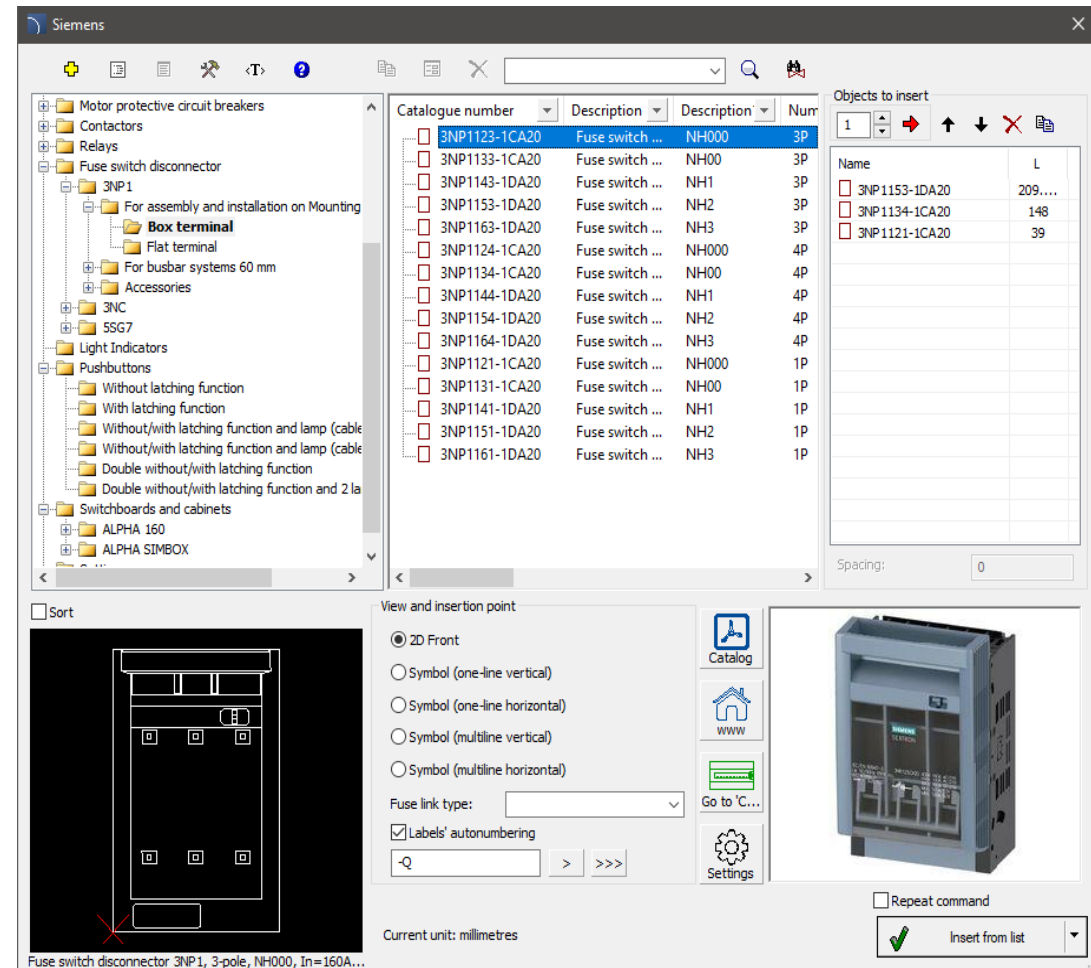
CADprofi

✓ CADprofi OEM – extension of Eaton product libraries

*EATON* library has been extended with additional enclosures:

- xEnergyBasic up to 630A
  (floor-standing switchboards IP30 and IP55),
- xEnergyLight do 1600A
  (floor-standing switchboards IP31, IP42
  and IP55),
- accessories to xEnergyBasic
  and xEnergyLight.
  BC enclosures up to 63A (surface and flush
  mounted).
- KLV flush mounted switchboards.
- IKA surface mounted up to 63A.
- BF flat switchboards/enclosures up to 160A
  (surface and flush mounted).
- CS enclosures.

In the new version of the program, the dialog box of floor-standing switchgears has been extended with the option of selecting the appropriate cabinet based on the apparatus selected from the drawing. Additionally selection lists that specify the assembly method, plinth type or a variant with a door view has also been added.


Choose an EATON cabinet for the selected apparatus from the drawing
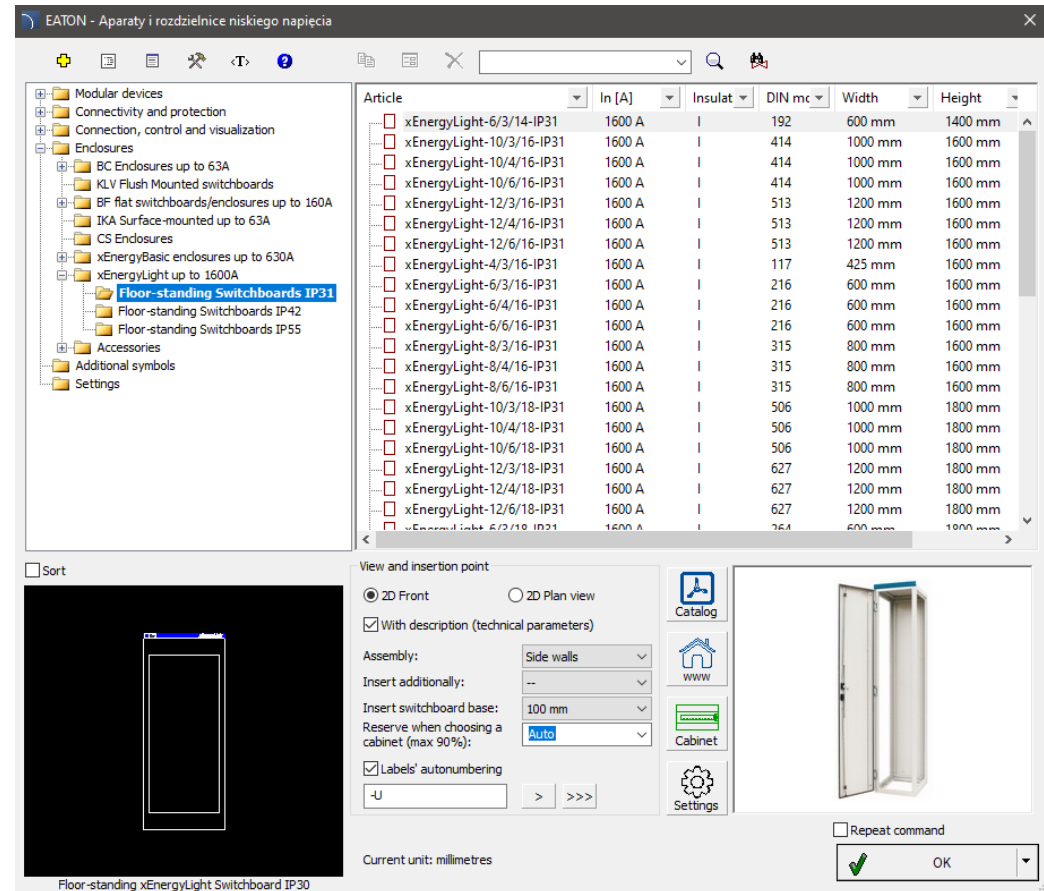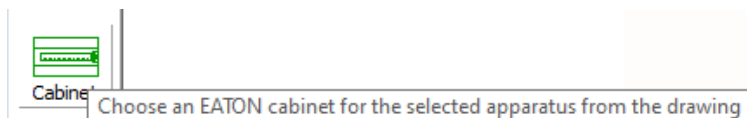
CADprofi

✓ CADprofi – extension of Noark Electric product libraries

Noark Electric library has been updated and extended with:

- slim type overcurrent circuit breakers,
- overcurrent circuit breakers for PV applications,
- single-module electronic residual current devices with overcurrent protection,
- modular bells,
- control clocks,
- dusk and stair switches,
- plug-in, timer monitoring relays,
- control cassettes,
- power supplies,
- installation contactors with the possibility of manual control,
- miniature reversing contactors,
- industrial reversing contactors,
- energy meters,
- compact air circuit breakers,
- compact disconnectors,
- accessories for installation devices, industrial apparatus and power switches.

In addition, the product library dialog windows were completely rebuilt, a new classification tree layout was created, real views of devices were added, and personalized technical and identification data of the products were adapted to device series.
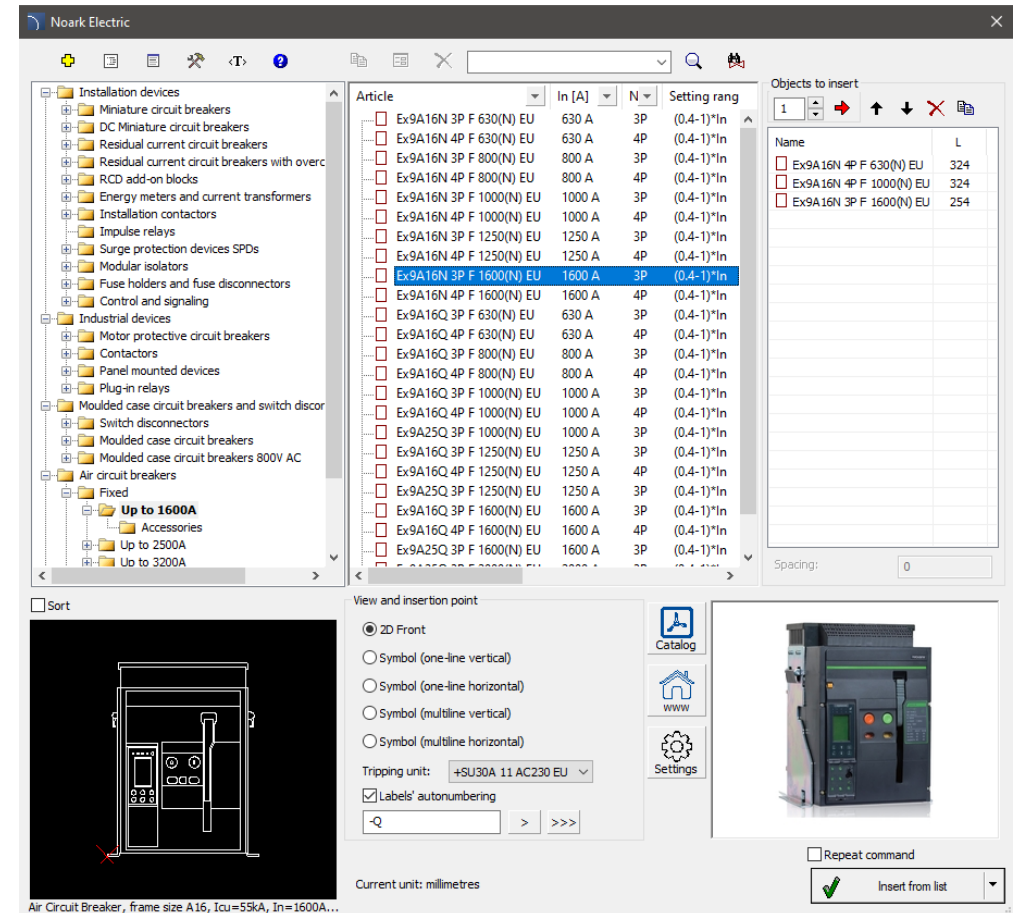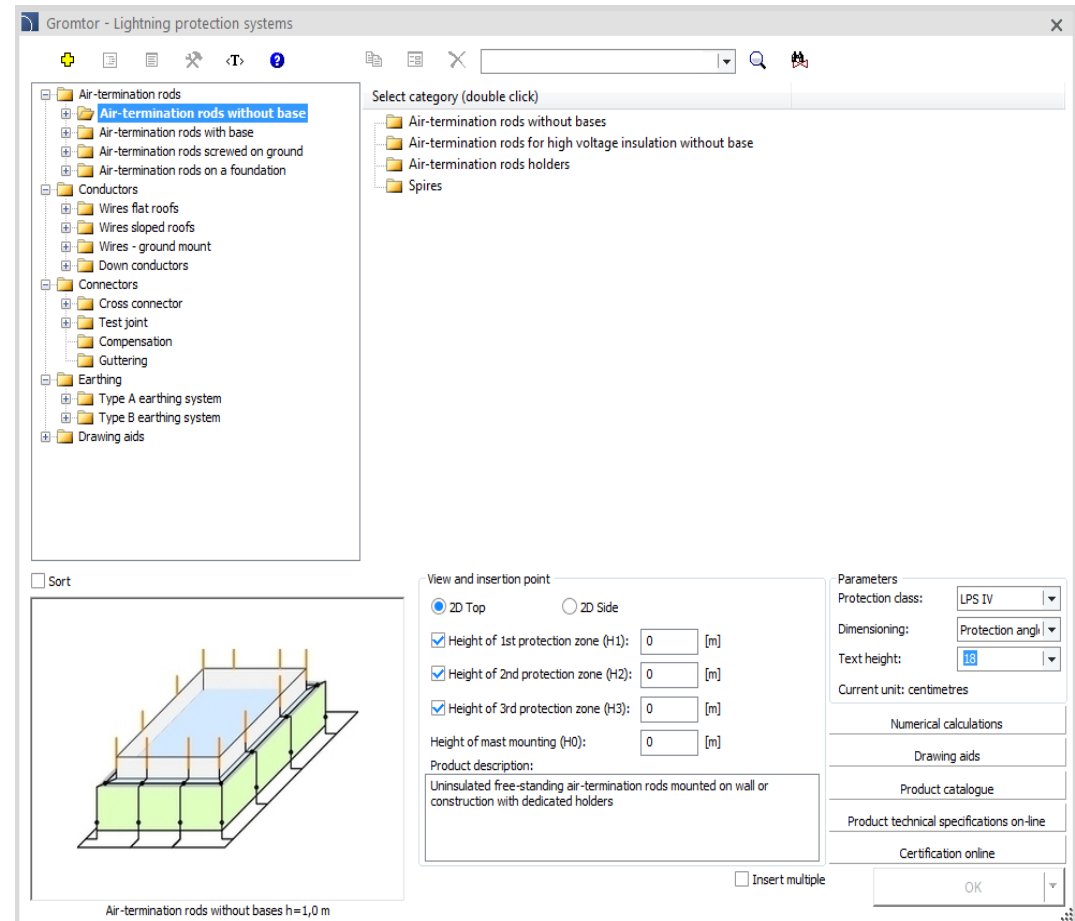
CADprofi

✓ CADprofi OEM – new Gromtor library

A system for designing lightning protection systems by using *Gromtor* products has been introduced to the CADprofi program. The library includes:

- masts and spiers,
- lightning wires, insulating wires,
- various types of joints (cross, control, gutter, etc.),
- type A (pin) and type B (hoop iron) earthing systems,
- additional drawing aids,
- dimensioning of protection zones by using the cone and rolling sphere method.

Gromtor CAD program has received an award at the Elektrotechnika 2023 Fair in the category "Best product of the Fair".

CADprofi

✓ **CADprofi OEM – new Ewimar library**

A library of *Ewimar* surge protection devices has been added to CADprofi. The library includes:

- Surge protectors for burglary alarm systems (1 and 8 channel) with accessories.
- Surge protectors for Gigabit Ethernet LAN (1, 4, 8 and 16 channel) with accessories.
- Surge protectors for LAN (1, 4, 8 and 16 channel) with accessories.
- Surge protectors for power line (1 channel).
- Surge protectors for M-BUS (1 channel).
- Surge protectors for RS-485 (1 channel).
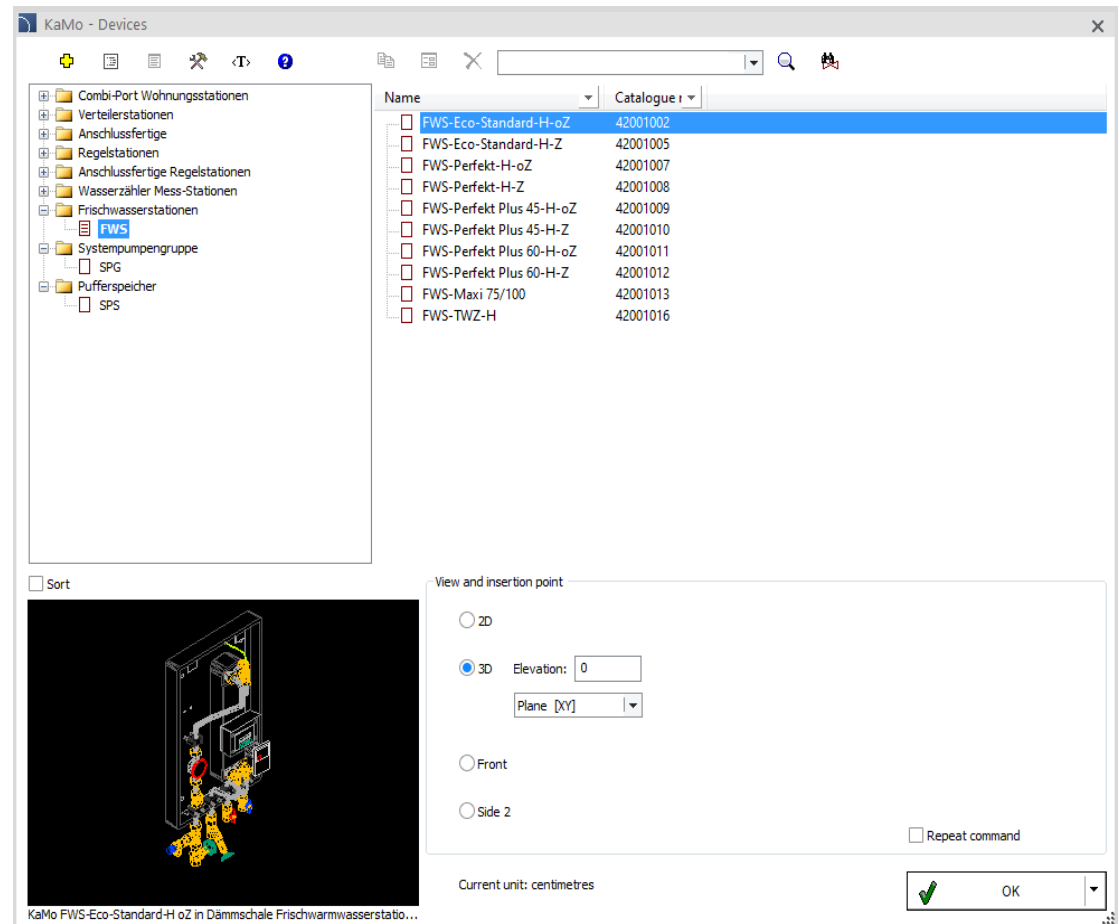- Active RS-485 bus distributors (1 and 4 channel repeaters).
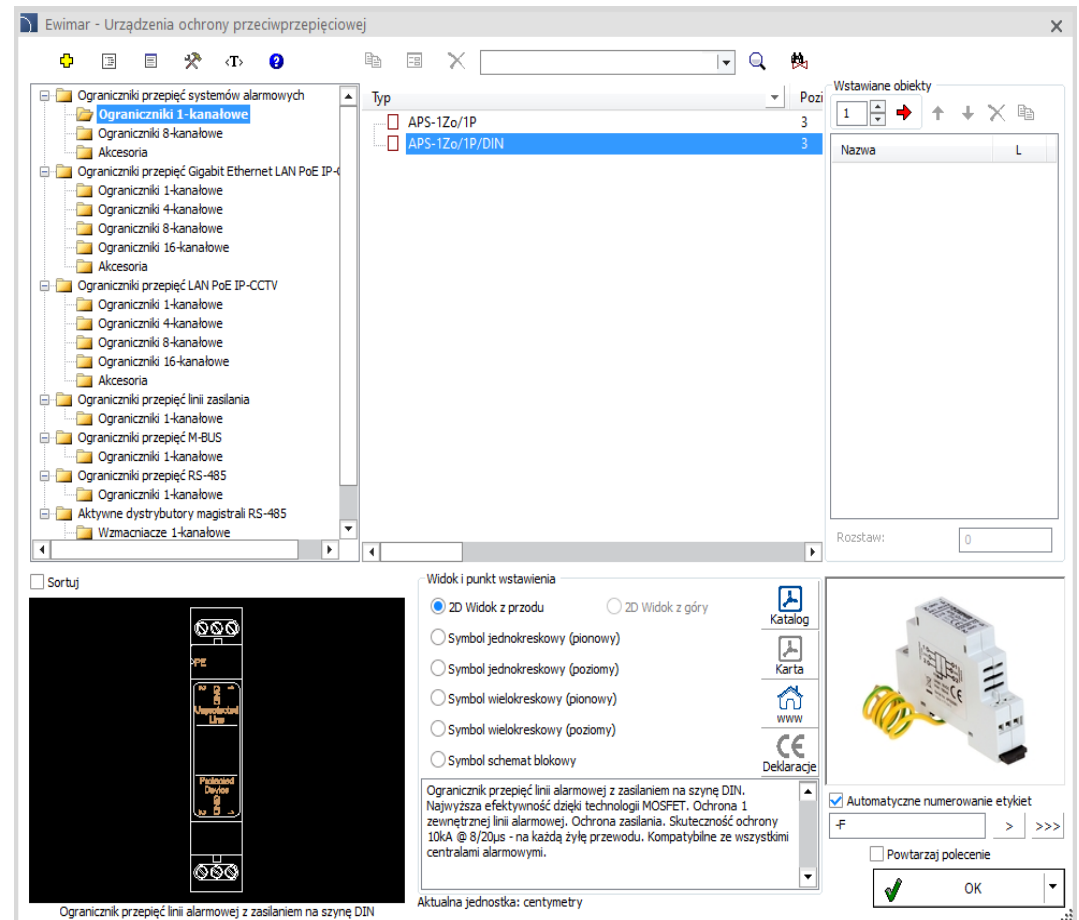
CADprofi

✓ CADprofi OEM – extension of KaMo library

KaMo library has been extended with the following products:

- Fresh water stations (FWS-Eco-Standard, FWS-Perfekt, FWS-Perfect Plus, FWS-Maxi, FWS-TWZ).
- Pump groups (SPG 32 – M4, M6, M10, TM, UM).
- Buffer tanks (SPS - 500, 750, 1000, 1500, 200).

CADprofi

✓ **Update of product libraries:**

CADprofi

✓ **Adjustment to many base CAD programs**

CADprofi 2024 has been adjusted to work with latest CAD programs, including: AutoCAD 2024, Ares Commander 2024, ARES Mechanical 2024, AviCAD 2024, BricsCAD 2024, CADdirect 2024, CADian 2023, GstarCAD 2024, CMS IntelliCAD 11.1, INTELLICAD 2023, INTERsoft, progeCAD 2024 and ZWCAD2024.

CADprofi 2024 currently works with many base CAD programs including: AutoCAD (since 2004 version), ARES Commander 2024 BricsCAD, GstarCAD, IntelliCAD, progeCAD, ZWCAD and others.