The *Arrange* command allows user to quickly arrange objects in selected rooms. It is possible to arrange objects in selected rooms, in the indicated boundary (polyline) or in the newly drawn boundary. User can arrange objects by regular placement by offset or quantity.

The *Arrange* command significantly speeds up the insertion of fire detectors, sprinklers and other objects.

[Watch video](#)
The *Bill of Materials* command has been extended with the possibility to include select objects with a crossing polyline or an enclosing polyline. Thanks to this it is possible to obtain specifications from specific areas in the drawing.
On user request, the concentric air / flue gas system was expanded with additional sizes.
Additional insertion points have been introduced in the sewer wells in order to facilitate accurate positioning of the wells, e.g. relative to the terrain in the network profiles.
The woodwork library available in the CADprofi program has been expanded with new door views.
The IEC and NFPA symbols library has been expanded with additional electrical symbols.

The library of modular apparatus has also been extended with the possibility of inserting symbols with grouped or ungrouped main contacts. This allows the use of existing symbols in various types of schemes (e.g. in energy distribution schemes, automation, etc.)
The new library available in the CADprofi program contains EATON products, including:

- Accessories for circuit breakers.
- Surge protective devices.
- Switches and switch disconnectors.
- Contactors.
- Relays (including EASY control relays).
- Control and signaling.
New Budniok Technika library

The new library available in the CADprofi program contains Budniok Technika products in the field of lightning protection.

The library also has additional design tools - a calculator for calculating the resistivity of simple earthing systems and a calculator for elements of vertical earthing sets.

This library is currently available only in Polish language.
CADprofi

✓ Update of manufacturers’ libraries:
✔ Adjustment to many base CAD programs

CADprofi 2019.17 has been adjusted to work with latest CAD programs, including: CADopia 19.

CADprofi 2019 currently works with many base CAD programs including: AutoCAD (since the 2000 version), BricsCAD, GstarCAD, IntelliCAD, progeCAD, ZWCAD, ARES Commander Edition and others.
CADprofi

✓ CADprofi – side views and additional Z+/Z- views for 2D fittings

2D fittings side views for tees and offsets as well as additional views of Z+/Z- for tees and pipe crosses with reducers have been added to the library.

The new fittings are fully editable using the CADprofi program commands.
The functionality of complex apparatus available in the CADprofi program has been extended with the possibility of grouping or ungrouping main contacts which significantly improves and accelerates the creation of automation schemes.

Additionally in complex apparatus it is now possible to add technical and identification data.
At the users request the symbol library available in the schemes creator have been extended with contractors, circuit breakers and change-over breakers.
Additional standardized DIN elements have been added to the program, including:

- Slotted raised countersunk oval head wood screws (DIN 95).
- Slotted round head wood screws (DIN 96).
- Slotted countersunk flat head wood screw (DIN 97).
- Hexagon head wood screws (DIN 571).
A single-walled chimney system and a concentric air and flue system were added to the *Pipes – detailed views* command.
Fujitsu, LG, Daikin, Mitsubishi and Samsung (Monoblock, Split, Split with a hot water storage) air/water heat pumps and supply-exhaust air central plants have been added to the Objects – ventilation, air conditioning command.
The *Parametrical objects* command has been extended with LPG containers, including Gaspol company containers.
The library of doors and gates has been rebuilt and its functionality has been expanded. Program now allows user to visually choose models of door leaves, thanks to which user can choose and insert doors with the desired parameters much faster.
New library that is available in CADprofi program contains F&F products, including domestic and industrial automation.

Library is currently available in Polish language.
CADprofi

✓ Update of manufacturers’ libraries:

- Heiztechnik
- PUK
- Wilo
- Reflex
- Lovato
- Vaillant
CADprofi

✔ Adjustment to many base CAD programs

CADprofi 2019.14 has been adjusted to work with latest CAD programs, including: progeCAD 2020 and ZWCAD 2020.

CADprofi 2019 currently works with many base CAD programs including: AutoCAD (since the 2000 version), BricsCAD, GstarCAD, IntelliCAD, progeCAD, ZWCAD, ARES Commander Edition and others.
CADprofi 2019.11/12
Schemes creator allows user to select products from the modular apparatus library and place them in certain positions in the scheme. This way you can quickly and easily define the logical structure of the whole power distribution by focusing only on the selection of products, rather than draw it manually.
**Example:** Switchgear scheme automatically generated by the "Schemes creator" in the CADprofi program

<table>
<thead>
<tr>
<th>Circuit number</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description</td>
<td>Power supply from DG</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Power [kW]/Current [A]</td>
<td>32A</td>
<td>--</td>
<td>--</td>
<td>3kW</td>
<td>3kW</td>
<td>2kW</td>
<td>2kW</td>
</tr>
<tr>
<td>Cable</td>
<td>YKY, 5x10mm²</td>
<td>--</td>
<td>--</td>
<td>YDY, 5x2.5mm²</td>
<td>YDY, 5x2.5mm²</td>
<td>YDY, 3x2.5mm²</td>
<td>YDY, 3x2.5mm²</td>
</tr>
<tr>
<td>Circuit name</td>
<td>Power supply</td>
<td>Indicator light</td>
<td>Voltage surge protection</td>
<td>Kitchen - the induction cooker socket</td>
<td>Kitchen - the washing machine socket</td>
<td>Kitchen - the fridge socket</td>
<td>Kitchen - the general sockets</td>
</tr>
</tbody>
</table>

![Switchgear scheme diagram](image-url)
CADprofi – quick change of fitting type

The *Quick Edit* command has been extended with the possibility to quickly change the fitting type 🔄.

Watch movie
Fujitsu, LG, Daikin, Mitsubishi and Samsung (Split, Multi, VRF) air conditioners have been added to the Objects – ventilation, air conditioning command.

The existing Fujitsu air conditioner library has been completely updated and transferred to the CADprofi HVAC & Piping module.
CADprofi

✅ CADprofi HVAC & Piping – Bosch, Junkers and Immergas boilers

Bosch, Junkers and Immergas boilers have been added to the *Objects* command.

The existing Junkers and Immergas library has been updated and transferred to the CADprofi HVAC & Piping module.
The possibility to insert objects into sewerage and chimney ducts and other bare-socket systems has been added to the program. The new functionality allows for inserting drains, various fittings, revisions, etc.

Additionally, when inserting T-pieces or cross-pieces, it is possible to automatically connect to them other lines.
Windows available in the *Doors, windows* command have been extended with the possibility of specifying:

- Jamb dimensions, with an additional optional option of determining wall slant,
- windowsill dimensions, with an optional option of turning them off,
- window diagram (direction of opening of window wings).

[Image of CAD software interface showing window dimensions and options]
✓ Update of manufacturers’ libraries:

- reflex
  - Thinking solutions.
  - Library has been moved to CADprofi HVAC & Piping

- Lovato electric
  - Energy and Automation
  - Library has been moved to CADprofi HVAC & Piping

- Fujitsu
  - Product available in CADprofi HVAC & Piping

- Junkers
  - Library has been moved to CADprofi HVAC & Piping

- Immergas
  - Library has been moved to CADprofi HVAC & Piping

- Bosch
  - Product available in CADprofi HVAC & Piping
**Adjustment to many base CAD programs**

CADprofi 2019.11/12 has been adjusted to work with latest CAD programs, including: AutoCAD 2020 and Ares Standard 2019.

CADprofi 2019 currently works with many base CAD programs including: AutoCAD (since the 2000 version), BricsCAD, GstarCAD, IntelliCAD, progeCAD, ZWCAD, ARES Commander Edition and others.
When drawing lines / ducts, it is now possible to automatically connect them by using elbows, bends, T-pieces or cross-pieces.
Inspection chambers with detailed and schematic views have been added to the *Sewage system* command.
Double wall steel insulated chimney system has been added to the *Pipes – detailed view* command.

This system can be used to design chimneys from 80mm to 500mm. Both pipes and fittings (elbows, tees, offsets and inspection doors) are available, as well as, additional accessories (brackets, caps, base plates, roof passages).
CADprofi

✓ **Adjustment to many base CAD programs**

CADprofi 2019.07 has been adjusted to work with latest CAD programs, including: ARES Commander 2019, IBSCAD 2018.

CADprofi 2019 currently works with many base CAD programs including: AutoCAD (since the 2000 version), BricsCAD, GstarCAD, IntelliCAD, progeCAD, ZWCAD, ARES Commander Edition and others.
Additional symbols were introduced into the program in both vertical and horizontal views based on the IEC 60617:2012 standard.

Reference markings were also updated in accordance with the IEC 81246 standard.
The threaded piping system has been extended with additional elements and fittings, including bypass bends, nipples and elbows.
Additional symbols have been added to the program library, including:

- humidifiers (rotary, steam, spinning disc),
- dehumidifiers,
- filters (secondary, HEPA),
- air heaters (liquid, gas),
- air coolers (liquid, freon),
- air conditioners (duct, roof),
- fans (roof, duct),
- supply and extract air,
- air outlets,
- air terminals,
- louvers,
- caps,
- exhausts.
The sanitary symbol library has been extended with new symbols e.g. air curtains (water, electric), hand operated pumps and fan heaters.
CADprofi

✓ Update of manufacturers’ libraries:

[ABB logo]

[Lovato Electric logo]

[Vaillant logo]
Summary of main changes made to the program since the CADprofi 2018.01 version.
Table of contents:

- General commands (affects all modules)
- CADprofi Architectural
- CADprofi Electrical
- CADprofi Mechanical
- CADprofi HVAC & Piping
- Manufacturers libraries
- Adjustment to CAD programs
CADprofi program allows for object classification and layer management based on Open BIM (IFC classification). The latest version of the program also allows for exporting CADprofi projects to the IFC format with the appropriate BIM attributes.

Export of CADprofi objects to IFC files is currently possible in CAD programs compatible with BIM, e.g., BricsCAD BIM.
All CADprofi program objects are categorized in accordance with Open BIM (IFC classification). In CADprofi program it is possible to enable automatic layer management. With automatic layer management enabled, objects from individual BIM classes are inserted on the appropriate layer that is specified in the layer standard. User can create new layer standards on his own and adapt them to his needs.
The Quick edit command allows user to perform basic editing operations on symbols and objects using special markers. In the latest version of the program, this command has been extended to allow the symbol to be conveniently moved to a different location in the drawing. If the moved symbol was previously inserted into the line, the program will connect this line automatically.

CADprofi has also introduced the possibility of running a quick edition command by double clicking on the edited object.
In the CADprofi program, the **CADprofi – Explode** command is available, which allows, for example to explode the selected objects with insertion of ‘Infoblocks’ that retrieve information from exploded objects. Thanks to this, it is possible to make a graphical edition of the project, while preserving the data for the purpose of creating specifications. In the new version we have introduced the possibility to launch the **CADprofi – Explode command when** selecting the usual **Explode** command from the base CAD program.

**Smart explode of blocks can be activated in CADprofi - Options**

Notice: **CADprofi - Explode** will be launched, only when user selects blocks (symbols or objects) from CADprofi program. This command works in selected CAD programs.

**CADprofi - Explode** command is being described in the online help. [Read more...](#)
A convenient erasing of objects by using the Delete key have been added to the program. If user removes elements from lines then program will automatically connect these lines.

This command works in selected CAD programs.

Watch video
New version of CADprofi program have introduced the possibility to manage the action performed by double clicking. Depending on the selected option, double-clicking on the selected object can start the editing of symbols, editing attributes by using the "Attributes and descriptions" dialog window, quick edit or a standard base CAD program action.

This command works in selected CAD programs.

Watch video
A new "Gutters" command has been added to the program. In this command user can find steel and PVC gutters in both top and elevation views, as well as, pipe drains with equipment.
The symbols available in the furniture and equipment library have been extended with the inclusion of several available base points. This change makes it much easier and faster to insert elements into the drawing.
**CADprofi Architectural – extension of the evacuation symbols database**

Additional symbols prepared in accordance to the ISO 7010 and PN-92/N-01256 standards have been added to the program.
Furniture and equipment command has been extended with the possibility to specify the mounting height (H1 dimension) bathroom-kitchen fittings and others (front view).

L = 300
H = 500
H1 = 450
The possibility to hide the door leaf layer (CP.DOORON layer) has been added to the program. This view allows for easier design of evacuation plans and fire protection installations.
New parametrical symbols used for designing on building plans has been added to the program, including: heaters, air conditioners, fans, boilers, electric drives, rollers, descriptive symbols and many more.

Additional symbols for connection points have also been added to the program, including wall and ceiling outlets.
The content of *PLC controllers* and *Modular units* has been expanded with Siemens controllers (LOGO! 8, SIMATIC S7-1200, SIMATIC S7-1500 and operator panels).
Additional symbols including modular apparatus have been added to the program, including:

- Over-current disconnectors 4P.
- Selective disconnectors 2P.
- Selective disconnectors 4P.
Additional fire protection symbols (e.g. smoke exhaust system, smoke extraction button, ventilation switch and multisensor detectors) have been added to the program.
Additional standardized JIS elements have been added to the program, including:

- Bolts (JIS 1101, JIS 1111, JIS 1174, JIS 1177, JIS 1180).
- Washers (JIS 1256, JIS 1251).
- Nuts (JIS 1181).
- Taped holes (JIS 0205, JIS 0206).
- Screws (JIS 1101, JIS 1115, JIS 1122, JIS 1123).
- Pins (JIS 1354, JIS 1355, JIS 1358, JIS 1359-1, JIS 1359-2A, JIS 2808).
- Split pins (JIS 1351).
- Sealing rings (JIS 2401-1, JIS 2402-1, JIS 2402-4).
- L-shape equal angles, L-shape unequal angles, U-shape (rolled), T-shape (Hot rolled) (JIS G 3192)
- L-shape unequal angles (JIS G 3192-1).
- L-shape unequal angles (JIS G 3192-2).
- Z-shape (JIS G 3350B).
- I-shape (Hot rolled) (JIS G 3192 I).
- Welded square/rectangular structural tubing (For precision applications) (JIS G-3466).
- Round steel rod (JIS G 3191A).
- Square steel rod (JIS G 3191 B).
- Rectangular steel rod (JIS 3194).
- Hexagon steel rod (JIS 3191C).
CADprofi

**CADprofi Mechanical – additional ISO standards**

Additional standardized ISO elements have been added to the program, including:
- Flat steel bar (Hot rolled) (ISO 1035-3).
- L-shape equal angles (ISO 657-1).
- L-shape unequal angles (ISO 657-2).
- U-shape (rolled) (ISO 657-11).
- T-shape (Hot rolled) (ISO 657-21).
- Welded round/square/rectangular structural tubing (Cold formed welded structural hollow sections) (ISO 10799-2).
- Welded round/square/rectangular structural tubing.
- Round stainless steel bar (Hot rolled).
- Square steel bar (Hot rolled).
An option to calculate air flow rate for selected duct size have been added to Ducts – general views and Ducts sequences – general views commands.

When selecting rectangular ducts, the program also calculates the substitute diameter of the circular duct. In addition, it is possible to check the speed flow rate when selecting the standard diameters of the substitute duct.
Additional objects have been added to the program's library, including:

- roof air intake units (WDO-C; WDP-B; WDP-A; K; HN),
- wall air intakes (KWO-AL),
- expansion boxes (SR-HB40),
- displacement flow diffusers (CRAZ; CKA; CEA),
- roof bases (PD; PD-S; PD-ST),
- air grilles (YGC; WLS, WLS; AD; AE),
- air nozzles (DAD).

- Solar protection vessel
- Air separator
- Protective louvre
- Additional ground air grille
- Additional exhaust and supply air outlets
- Slotted outlets
- Wall and ceiling fans
- Venture Industries roof blowers.
The HDPE pipes system used for drinking water, liquid technological media, sewage and also used as protection pipes was added to the Pipes – detailed views.

The HDPE pipe system is available with welded connections and with pressure fittings.
A flanged piping system has been added to the Pipes – detailed view command.
CADprofi

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

To the library that contains armature views and other devices additional products have been introduced:

- water meter console,
- diaphragm/bellows meters,
- gas meter bars,
- gas pressure regulators,
- gas filters,
- upright, pendent, horizontal sidewall and dry pendent sprinklers,
- rectangular and round water meter chambers
An ability to insert fittings into any pipe sequence in detailed views have been added to the program. Additionally, when inserting T-pieces or cross-pieces, it is possible to automatically connect to them other pipelines.
The ABB product database has been updated and new product groups have been added:

- Compact/air circuit breakers (withdrawable version).
- F-ATI and F-ARI residual current devices.
- Fuse links (E 9F Gg, E 9F gPV, D0 ..., NH ...).

The power distribution schemes creator has been extended with additional functions that accelerate design work:

- N line guidance from the top.
- Drawing electric circuits with automatic insertion and numbering of terminals.
- Additional apparatus numbering options.
- Predefined templates of commonly used automation systems, ie control systems, measurement and fire protection shutdown.
- Function of selecting additional accessories, eg triggers, auxiliary contacts, drives of communication devices, fuse links, etc.
New Saunier Duval library

New library that is available in CADprofi program contains Saunier Duval products, including:

- Gas condensing (compact and wall hanging appliance).
- Heat pumps.
- Cylinders.
- Solar thermal.
New library: designing hager underfloor trunking systems

New hager Tehalit library allows user to design installation systems in concrete floor screed in a simple and intuitive way. This library allows to easily draw floor ducts, quickly insert steel boxes, covers and installation accessories in 2D views, 3D models and schematic views.

Hager library is available in Polish language (with more languages coming soon) but thanks to our translation system user can easily change necessary translations and adapt the library to his own native language. [Watch translation video](#).
New TKRem library

New library that is available in CADprofi program contains TKRem products, including:

- Cable trays (mesh, KP perforated, KB unperforated, heavy KC and KLC).
- Cable ladders (DUK, DKN).
- E90 system (KP cable trays, DUK cable ladders).
- Underfloor channels (B28, B38, B48 height system).
New EL-PUK library

New library that is available in CADprofi program contains EL-PUK products, including:
- Mesh cable trays.
- Sheet metal trays (full, perforated).
- Cable ladders.
- Self-supporting systems.
- E-90 system.
- Underfloor channels.

Library is currently available in Polish language.
✓ Update of manufacturers’ libraries:
CADprofi

✓ **Adjustment to many base CAD programs**

CADprofi 2019 has been adjusted to work with latest CAD programs, including: 4MCAD 19, ActCAD 2019, ArCADia 10.4 (64bit), ARES Commander 2018 SP2, AutoCAD 2019, BricsCAD V19, CADMate 2018, CMS IntelliCAD 8.4, GstarCAD 2019, progeCAD 2019, ZWCAD 2019.