

CADprofi 2018

Summary of main changes made to the program since the CADprofi 2017.01 version.



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- Manufacturers libraries
- Adjustment to CAD programs



✓ CADprofi – Open BIM

Classification of objects and management of layers based on Open BIM (IFC classification) has been added to the program.



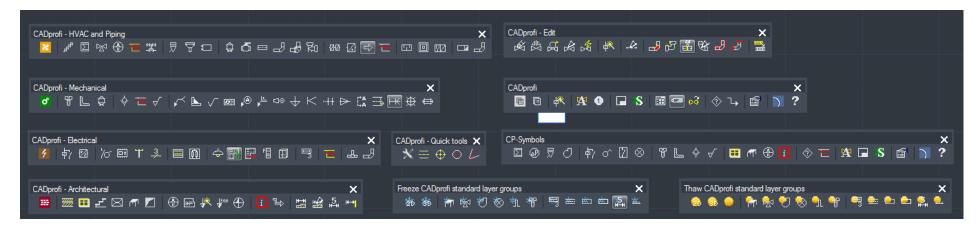
Video – Open BIM

	-	leport data	
You can sort data and specify wid	th of columns		
Name	BIM class	Sum	
Bed	IfcFurnishingElement	1	pcs
Binding circular ceiling lights	IfcLamp	15	pcs
Binding circular wall lighting	IfcLamp	10	pcs
Binding light triple	IfcLamp	6	pcs
Binding lighting, raster	IfcLamp	10	pcs
Binding single light	IfcLamp	2	pcs
Cabinet	IfcFurnishingElement	3	pcs
Cabinet	IfcFurnishingElement	1	pcs
Cabinet	IfcFurnishingElement	1	pcs
Car	IfcCivilElement	1	pcs
Chair	IfcFurnishingElement	4	pcs
Chest of drawers	IfcFurnishingElement	3	pcs
Chest of drawers	IfcFurnishingElement	2	pcs
Chest of drawers			-



✓ Icons for dark interface

CADprofi toolbars and ribbons have been customized for dark interface that is used on some newer CAD programs (AutoCAD, ZWCAD and others).

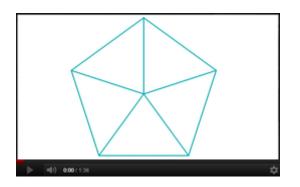




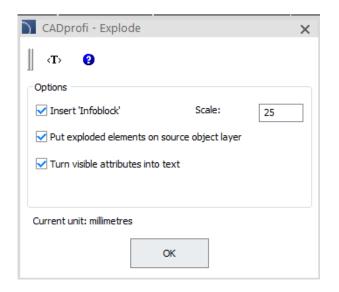
✓ CADprofi - Explode

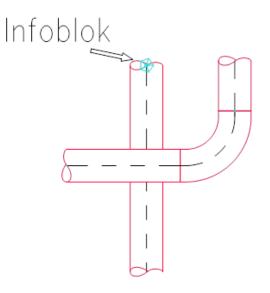
New command *CADprofi - Explode* \bowtie has been added to the program. This command explodes the indicated CADprofi blocks, allowing to freely edit the drawing without the loss of information from the exploded elements.

In case of indicating the *Insert 'Infoblock'* option the program creates a special block, to which all data from the exploded element will be taken over. This block will be placed on layer that is not visible on printouts, but it's attributes will be included in specifications.



Video – 'CADprofi Explode' + Infoblocks

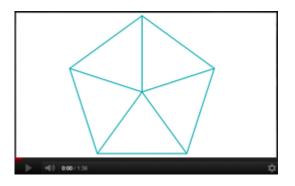




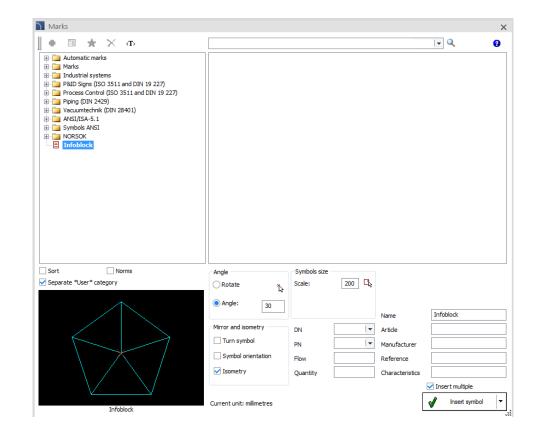


✓ Infoblocks in CADprofi program libraries

Infoblocks have been added to CADprofi libraries. They contain a set of attributes that user can freely fill. Thanks to Infoblocks user can insert a special block into the drawing whose attributes will be included in specifications, but the block itself will not be visible on printouts.



Video – 'CADprofi Explode' + Infoblocks

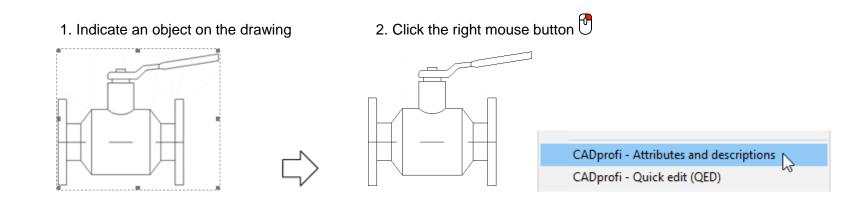




✓ Using commands from the context menu

In selected CAD programs, some commands are available in the context menu (right mouse button):

- Attributes and descriptions,
- Quick edit.



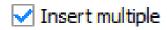


✓ Repeat the command. Insert multiple

For some dialog windows an additional options that enhance functionality have been added:

- **Repeat the command** allowing for automatic repetition of the last command without the need to manually run the command dialog window from menu or toolbar.
- **Insert multiple** allowing for multiple insertion of the selected object to the drawing with bypassing the dialog window. In this case, the command can be cancelled by pressing the *Esc* key.

Repeat the command





✓ CADprofi Architectural – holes in wall barriers

Holes in wall barriers (unbuilt door hole and unbuilt window hole) have been added to the program.

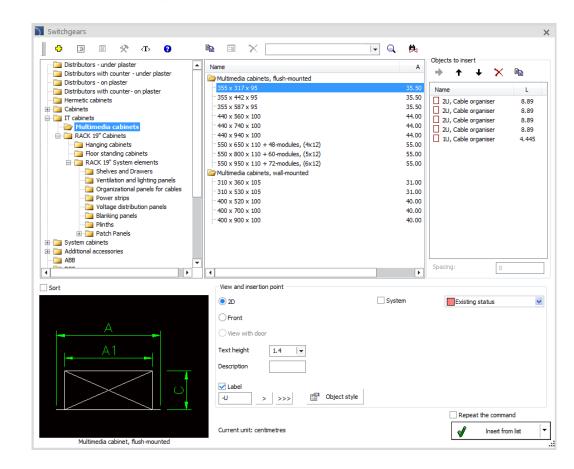
Doors, windows	B 3 X	↓ Q, 👯		
Windows Doors Holes in wall barriers Holes for doors Holes for windows	Name L Unbuilt door hole			
Sort	View and insertion point			
	Plan (without threshold) View	System		
	O Plan (with doorstep style 1)			
	 Plan (with doorstep style 1) Plan (with doorstep style 2) 	System	Point 1	
,SZ,	O Plan (with doorstep style 1)		Point 1 Diject style	
	 Plan (with doorstep style 1) Plan (with doorstep style 2) 		L	
	 Plan (with doorstep style 1) Plan (with doorstep style 2) Plan (with doorstep style 3) 		L	
m Z P1 P2 P3	 Plan (with doorstep style 1) Plan (with doorstep style 2) Plan (with doorstep style 3) 		L	
	Plan (with doorstep style 1) Plan (with doorstep style 2) Plan (with doorstep style 3) Dimensions SZ 900		L	
	Plan (with doorstep style 1) Plan (with doorstep style 2) Plan (with doorstep style 3) Dimensions SZ 900		Object style	



✓ CADprofi Electrical – changes in the Switchgear command

Functionality of the command has been extended by:

- Possibility to insert items from the list, thanks to which it is possible to insert to the drawing many elements.
- Extension of the switchgear database (distributors under plaster/on plaster and distributors with counters).
- Addition of IT cabinets (multimedia cabinets, RACK19" cabinets with system elements)
- Addition of system cabinets (wall mounted, flush mounted, floor standing with system elements).
- Addition of mounting rails DIN TH35, busbars and plastic wiring ducts.
- Switchgear blocks have got defined intelligent connection points that allow automatic positioning of products inserted into switchboard, such as building system elements and various electrical apparatus.

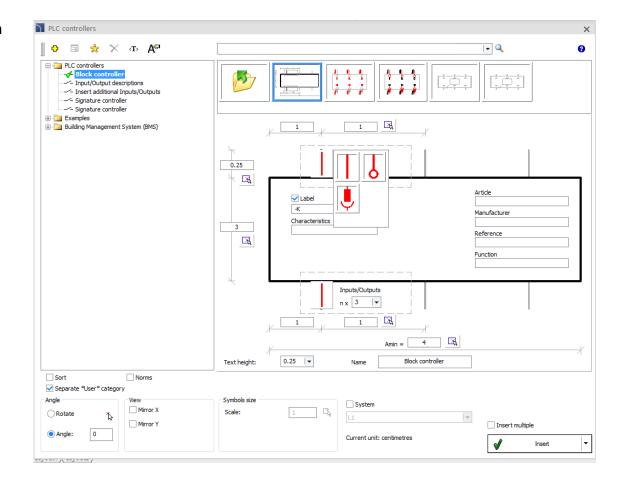




✓ CADprofi Electrical – changes in the *PLC controllers* command

The PLC controller command has been extended with the possibility to specify the input/output size. The way to describe and insert additional inputs/outputs has been rebuilt and adapted to the new functionality.







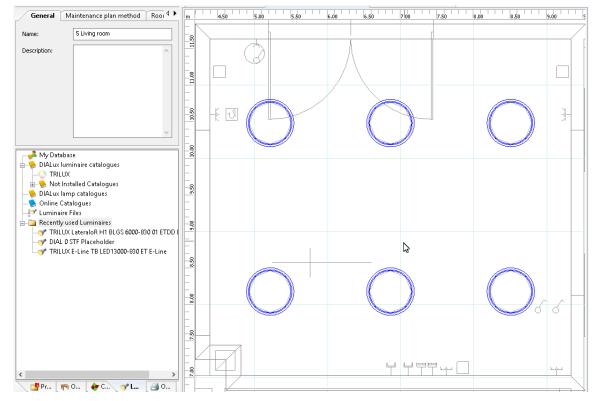
✓ CADprofi Electrical – cooperation with DIALux program

A possibility to export rooms do DIALux have been added to the program. Thanks to this we will receive a building outline and the project structure with room names imported from CADprofi.

Program also allows to import luminaires from DIALux. During import all luminaires will be replaced with standard CADprofi blocks and information about them (name, type) will be taken from DIALux and replaced with appropriate attributes.



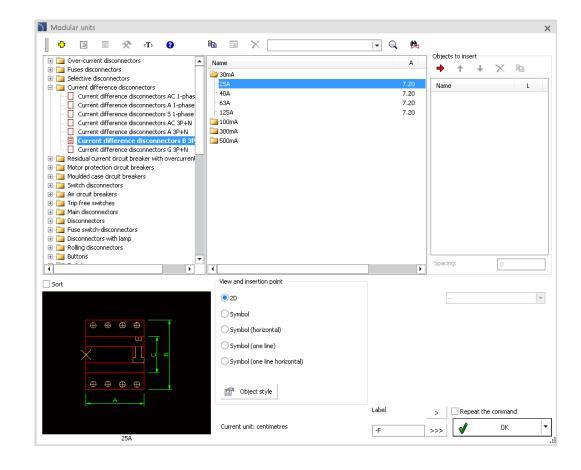
Watch how CADprofi works with DIALux





✓ CADprofi Electrical – extension of the current difference disconnectors database

New current difference disconnectors (type AC, A, B) have been added to the program.

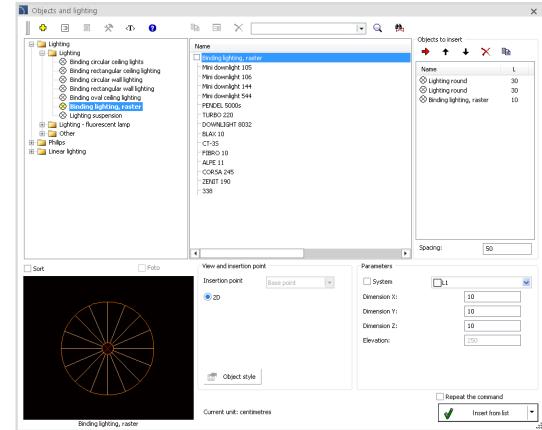




✓ CADprofi Electrical – changes in the Objects and lighting command

Functionality of the command has been extended by:

- Possibility to insert items from the list, thanks to which it is possible to insert to the drawing many elements with specified spacing.
- Possibility to repeat the command.

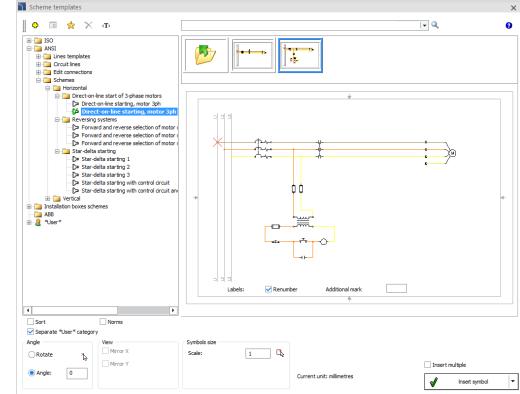




✓ CADprofi Electrical – scheme library extension

Additional symbols, potential & circuit lines and sample schemes have been added to the program, including:

- electrical symbols (IEC, NFPA);
- vertical and horizontal complex symbols (NFPA);
- potential and circuit lines (IEC, ANSI);
- vertical and horizontal schemes templates (ANSI).





✓ CADprofi Electrical – extension of the modular apparatus library

Modular units

Additional symbols and modular apparatus elements have been added to the program, including:

- Residual current circuit breaker with overcurrent protection 3-phase;
- Disconnectors with lamp 2-pole;
- Switch for panel mounting;
- Changover switch for panel mounting;
- Switches;
- Modular analogue and digital ammeter;
- Modular analogue and digital voltmeter;
- Installation relay;
- Interface relay;
- Time relay, flush mount version;
- Time relay for starting;
- Priority relay;
- Astronomical & digital time switch with weekly & yearly program;
- Shunt trip and undervoltage release;
- Front and side mountable auxiliary contact,
- Rotary handle,
- Direct and door handle,
- Residual-current boxes, characteristics A, AC, B,
- Selective residual-current boxes A, AC, B;
- Two states control lamp;
- Fuse modules;
- · Semiconductor heaters and electrical fans;
- Auxiliary contact for motor contactor.

🕞 🔍 🙌 ф 🗉 🛠 «Т» 😮 Ba -0 Objects to insert Low voltage fuse-links Name + Т. × Pa + + Tuse bases 🗉 🚞 Fuse modules 19W, 58m3/h 130.0 130.0 🗄 🚞 Soft starters Name 19W, 115m³/h 204.0 204.0 Contactors 45W, 250m3/h 250.0 250.0 Inverters Voltage surge protectors - Terminal blocks 🗄 🚞 Mounting rails Busbars 🖂 🧰 Cam switches 🗄 🚞 Measures Meter boards Current transformers Bells/Buzzers Power supplies 📜 Transformer 🗄 🚞 Relays Automatic phase switches Digital time switches for distribution board 🗀 🛄 Dimmers 🗄 🚞 Thermostats 🛯 🧰 Semiconductor heaters 🖻 Fans - 🗁 Fan 🗈 🚞 Pushbuttons, Indicator lights Additional accessories View and insertion poin Sort 2D Symbol O Symbol (horizontal) Symbol (one line) O Symbol (one line horizontal) Labe Cobject style > >>> Repeat the command Current unit: millimetres OK 12W, 25m3/

Additional signal cables and lighting have been added to the program.



✓ CADprofi Mechanical – ability to specify the type of steel in profiles

An ability to ability to specify the type of steel (material) in steel profiles have been added to the program.

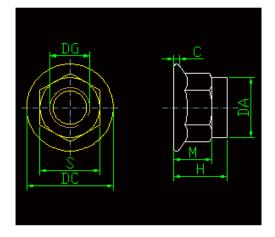
Material		-	
		A	
	S185		
	S235JR		
	S235JRG1		
	S235JRG2		
	S235J0		
	S235J2		
	S235J2G3		
	S235J2G4		
	S235JOW		
	S235J2W		
	S275JR		
	S275J0		
	S275J2		
Object style	S275J2G3		
,,	S275J2G4		
	S355JR	-	

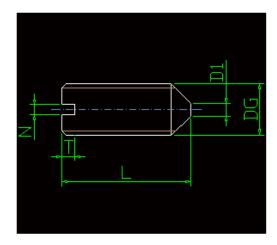


✓ CADprofi Mechanical – additional DIN, EN, ISO, PN standards

New standardized elements have been added to the program, including:

- DIN EN ISO 2342 Slotted headless screw with shank,
- DIN EN ISO 8735 Parallel pin with internal thread,
- DIN EN ISO 8746 Grooved pin with round head,
- DIN EN ISO 8765 Hexagon head bolt with metric fine pitch thread product A and B,
- DIN EN 14399-6 Plain washer, chamfered, hardened and tempered for high-strength structural bolting,
- DIN EN 14399-8 System HV Hexagon fit bolt
- DIN EN 27435 Slotted set screw with long dog point,
- DIN 920 Slotted pan head screws with small head,
- DIN 921 Slotted pan head screws with large head,
- DIN 923 Slotted pan head screws with shoulder,
- DIN 927 Slotted shoulder screws,
- DIN 986 Prevailing torque type hexagon domed cap nuts,
- DIN 6888 Woodruff key,
- DIN 6912 Hexagon socket head cap screws with centre, with low head,
- DIN 7349 Plain washers for bolts with heavy clamping sleeves,
- DIN 7603 Sealing ring,
- DIN 7968 Hexagon fit bolt,
- DIN 7984 Hexagon socket head cap screws with low head,
- ISO 2342 Slotted headless screw with shank,
- ISO 4766 Slotted set screws with flat point,
- ISO 7041 Prevailing torque type hexagon nut,
- ISO 7043 Prevailing torque type hexagon nut with flange,
- ISO 7044 Prevailing torque type hexagon nut with flange,
- ISO 7719 Prevailing torque type hexagon nut,
- EN 14399-8 System HV Hexagon fit bolt.
- PN-73/H-93460.01 (L-shape equal angles).



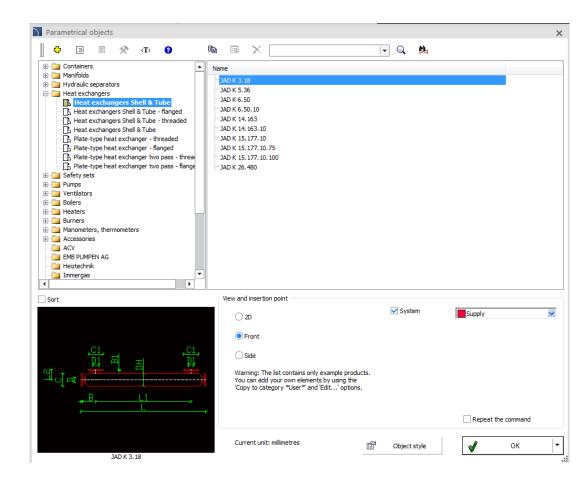




✓ CADprofi HVAC & Piping – addition of heat exchangers to the library

Do biblioteki programu dodano wymienniki ciepła, w tym:

- heat exchangers Shell & Tube;
- plate type heat exchangers;
- plate type heat exchangers two pass.





✓ CADprofi HVAC & Piping - addition of supply-exhaust air central plants to the library

Supply-exhaust air central plants have been added to the library, including:

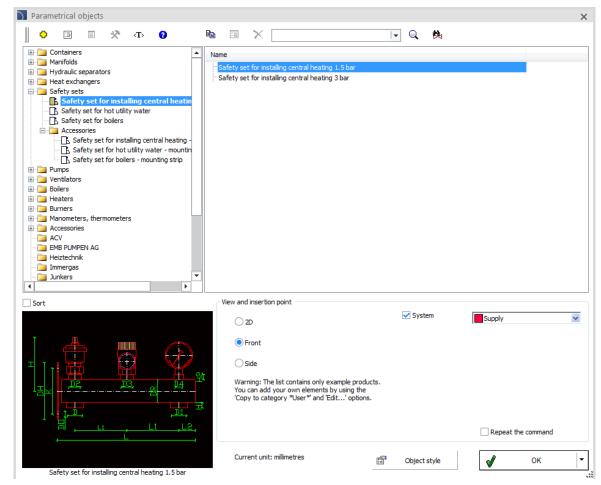
- cross flow exchanger;
- cross-flow exchanger with mixing box.

Supply-air centrals						J Q	热		
Supply-air central plant	Name	L	L1	н	w	- ~	в	Capacity	
Supply-air central plant		259.0	222.0	97.0	96.0	80.0	30.0	3 700 m3/h	
Supply-exhaust air centrals plant	5100 m3/h	259.0	222.0	123.0	96.0	80.0	40.0	5 100 m3/h	
Cross-flow exchanger	6750 m3/h	259.0	222.0	123.0	117.0	100.0	40.0	6 750 m3/h	
Heating	9700 m3/h	332.0	295.0	150.0	134.0	110.0	50.0		
	13500 m3/h	332.0	295.0	174.0	147.0	120.0	60.0	13 500 m3/h	
R Heating, Cooling	17700 m3/h	369.0	332.0	196.0	165.0	140.0	70.0	17 700 m3/h	
Cooling, Heating	21450 m3/h	369.0	332.0	202.0	189.0	160.0	80.0	21 450 m3/h	
R Heating, Cooling, Heating	26600 m3/h	406.0	368.0	223.0	209.0	180.0	90.0	26 600 m3/h	
Cross-flow exchanger with Mixing box	32300 m3/h	406.0	368.0	271.0	209.0	180.0	100.0	32 300 m3/h	
R. Heating	39600 m3/h	406.0	368.0	271.0	249.0	220.0	100.0		
- Cooling	53000 m3/h	515.0	478.0	331.0	259.0	240.0	140.0		
🖪 Heating, Cooling	62650 m3/h	515.0	478.0	378.0	309.0	280.0	160.0		
Cooling, Heating	79400 m3/h	515.0	478.0	378.0	359.0	340.0	160.0	79 400 m3/h	
🕒 Heating, Cooling, Heating	100000 m3/h	588.0	551.0	473.0	370.0	350.0	200.0	100 000 m3/h	
🗈 🚞 Pro-Vent	VTS-VS	00010	00110		0,010	00010	20010	100 000 110/11	
BH-Res	VS-21-PH-WS	258.7	222.1	97.6	96.1	80.0	30.0	3 658 m3/h	
	VS-30-PH-WS	258.7	222.1	124.0	96.1	80.0	40.0	5 118 m3/h	
Fujitsu	VS-40-PH-WS	258.7	222.1	124.0	116.8	100.0	40.0		
	VS-55-PH-WS	331.8	295.3	151.0	133.9	110.0		9 720 m3/h	
	VS-75-PH-WS	331.8	295.3	175.0	148.0	120.0		13 470 m3/h	
	VS-100-PH-WS	368.4	331.8	195.0	166.0	140.0		17 620 m3/h	
	VS-100 PH-WS	368.4	331.0	202.4	180.0	160.0		21 410 m3/h	
Sort	View and insertion po								
	Insertion point	Base	point 🖛			Sy	stem	Supply air	
<u>y L1</u>	2D								
	O Hiding 1								
	🔾 Side								
	◯ Scheme								
	Dbject style							Repeat the command	l
	Current unit: cen	timetres						ок	
Supply-exhaust air central plant								W OK	



✓ CADprofi HVAC & Piping – addition of safety sets to the library

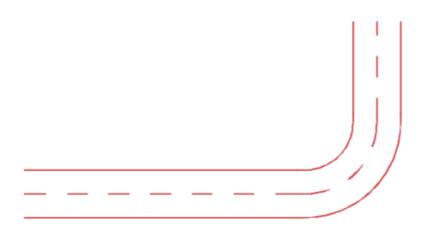
Safety sets used in central heating, hot utility water and for boilers that protect against dangerous pressure rise have been added to the program.





✓ CADprofi HVAC & Piping – additional drawing style for 2D pipelines

Additional drawing style for pipelines in general view (used for example in bent pipes) have been added to the program.



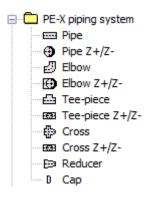
-	Installation and drawing					
	Installation	Supply				
	Туре	Pipe 🗸 🗸				
Ξ	Manufacturer and type	Pipe Disc. atula 2				
	_	Pipe - style 2				

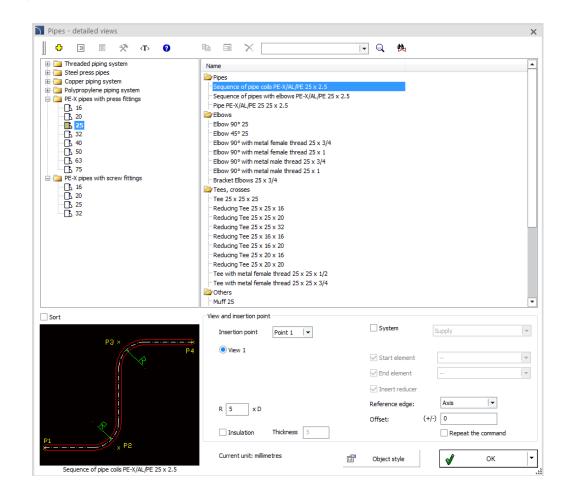
Ξ	Installation and drawin	g
	Installation	Supply
	Туре	Elbow - style 2
Ξ	Manufacturer and type	Elbow
	Manufacturer	Two-segment elbow
	Туре	Segmented elbow



✓ CADprofi HVAC & Piping – PE-X Piping system and fittings

PE-X Piping system (with screw and press fittings) have been added to the *Pipes-general views* and *Pipes – detailed views* commands. This system is used in hot and cold water installations, as well as, in central heating.



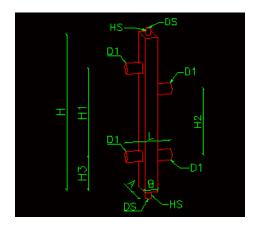


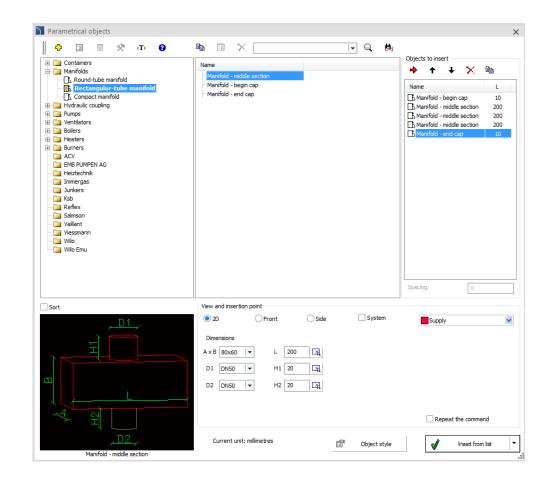


✓ CADprofi HVAC & Piping – upgraded insertion of manifolds

In the current program version the definition of manifolds is fully parametric, which makes it easier to define a manifold and it's caps. In addition, individual sections can be added to the objects to insert list, allowing user to immediately insert the entire manifold into the drawing.

Additionally a round type and compact hydraulic couplings have been added to the program.







✓ CADprofi HVAC & Piping – copying dimensions

In pipes and duct in general views an additional *Copy dimensions* option has been added.

Pipes - general views					×
1 2 4 3	Ξ	Installation and draw	ng		
		Installation	Supply		
Piping systems - general Pipe		Туре	Pipe		
Pipe Z+/Z-		Manufacturer and type			
Elbow		Manufacturer			_
Elbow Z+/Z-		Туре			
- 000 Tee-piece 2+/2- ⊕ Cross - 000 Cross 2+/2- - 62 Fuller - 62 Fuller 2+/2- - ∋ Reducer		Product			_
		Dimensions			
		Diameter: D	114.3		
	E	Options			
		Installation fit	V		_
D Cap		Diameter fit	V		
User objects defining		Join object	V		_
Special fittings		Insulation thickness	0		
Pipes flex					
Copper piping system Polypropylene piping system					-
PE-X piping system					
Press pipes and fittings					
🕀 🛄 Sewage					
, L ,					
4					_
₩ * · - · - · - · - · - · - · - · - · - ·					
	۰ ا	Description			
	_	Fixed dimensions			
Sort		Insert multiple			
		Copy dimensions		ОК	
Current unit: millimetres		Copy anner alloriann h	2	UK .	

In general views a possibility to retrieve dimensions by right clicking the mouse button and afterwards have been added to the program. Thanks to this user can:

• Copy dimension by indicating two points:

Dimensions		
Dimension: A	500	
Dimension: B	500	Copy dimension by specifying 2 points
Options		Copy dimension by selecting a fitting
Installation fit		Cancel
Width and height fit	~	

• Copy dimension by selecting a fitting:

Radius: R (100)	100	
Use multiplier		Copy dimension by specifying 2 points
Length: L	641	Copy dimension by selecting a fitting
Length automatically	•	Cancel 45



✓ CADprofi HVAC & Piping – drawing insulation in detailed view

The possibility to draw fittings and pipes with insulation in detailed views have been added to the program.

		4.0	
🗹 Insulation	Thickness	10	

Pipes - detailed views			
] 🗘 🗉 🗄 🛠 (t) 😢		I - Q, ₿,	
Threaded piping system	Name		
 Steel press pipes Copper piping system Polypropylene piping system 16 20 25 32 40 50 63 75 50 5110 	Pipes Pipes Pipes sequence 32 Pipe 32 Elbows Elbows 90° 32 Elbow 45° 32 Elbow 90° with metal female 32 Elbow 90° with metal female thread 32×1° Corner elbow 32 Tees, crosses Tee 32 Cross 32 Reducing Tee 32/32/16 Reducing Tee 32/32/20 Reducing Tee 32/20/20 Reducing Tee 32/20/20 Reducing Tee 32/20/20 Reducing Tee 32/20/25 Reducing Tee 32/25/25 Reducing Tee 32/25		
Sort	View and insertion point	System	_
	Insertion point Point 1 🗸	System Supply	~
P3/X	View 1	Start element	-
		Find element	Ŧ
		✓ Insert reducer	
		Reference edge: Axis	
		Offset: (+/-) 0	
P1 + *	Insulation Thickness 0.5	Repeat the command	
	Current unit: centimetres	🖆 Object style 🖌 DK	_
Pipes sequence 32			-

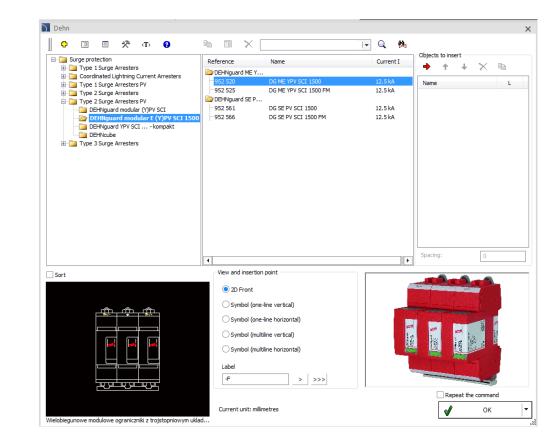


✓ New Dehn library

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

- type 1 surge current arresters;
- type 1 surge arresters PV;
- type 2 surge arresters;
- type 2 surge arresters PV;
- type 3 surge arresters;
- coordinated lighting current arresters.



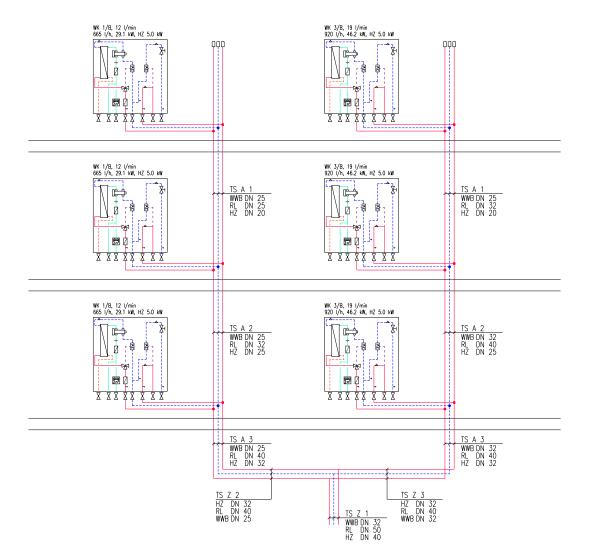




✓ Changes in the KaMo library

3-wire housing stations have been added to the program. These stations are also included in comprehensive hydraulic calculations and in the schemes generator.





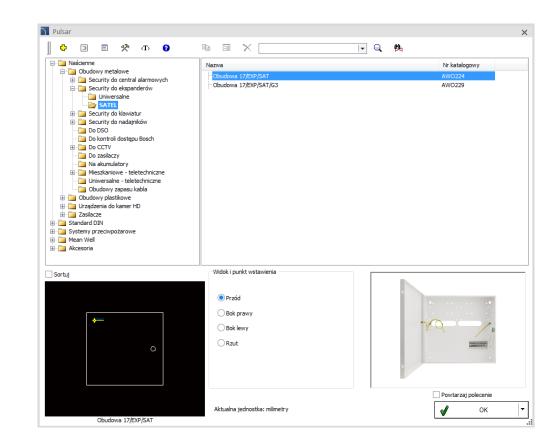


✓ New Pulsar library

New Pulsar library that contains covers and power supplies has been added to the program.

Library is available only in Polish language.





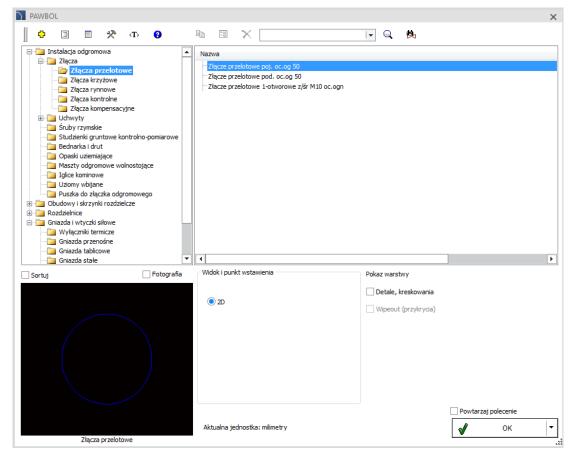


✓ New Pawbol library

New Pawbol library that contains distributors and lighting protection systems has been added to the program.

Library is available only in Polish language.







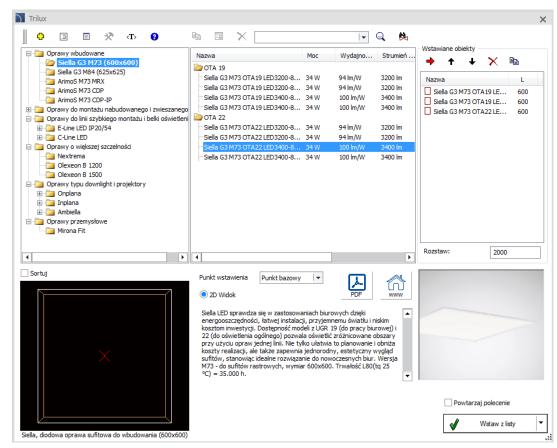
✓ New Trilux library

New Trilux library that contains lighting has been added to the program.

Library is available only in Polish language.

In case of importing DIALux stf files that contain Trilux products, then the appropriate lighting from Trilux is being added to the CAD program.







✓ New ABB library

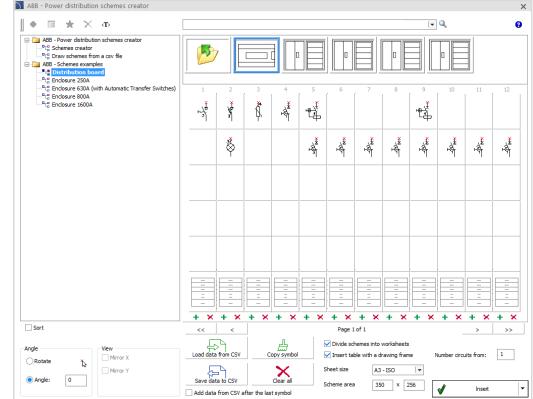
An intuitive and easy to use ABB library automates the design of electrical installations using ABB products. Library is currently translated in Polish and in English. More languages will come soon.

ABB library includes the following categories:

- Low voltage apparatus and cabinets contains a complete library of ABB products, including: modular and measuring apparatus, photovoltaics, circuit breakers and disconnectors, ABB i-bus KNX and ABB free@home® system devices, cabinets and others.
- Power distribution schemes creator that allows to easily create an electrical installation project with ABB products.
- Low voltage systems that includes products from the call ABB SIGNAL and video intercom ABB WELCOME systems.
- Low voltage systems that includes exemplary schemes: ABB i-bus KNX, ABB free@home®, ABB SIGNAL and ABB WELCOME.

Watch ABB library movie



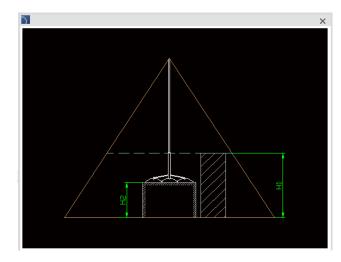


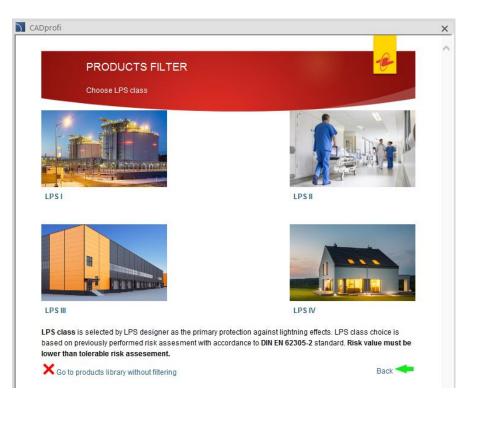


✓ ELKO-BIS – updated library for lighting protection design

New features in ELKO-BIS:

- Update of ELKO-BIS company products.
- A new products filtering creator that allows user to easily select the right product, starting from choosing the LPS protection class to the type of roofing and the lighting protection materials.
- Easier selection of accessories, handles etc.
- Parametric definition of object protection zone (protected by masts and needles).
- Dynamic creator of legends.







✓ Update of manufacturers' libraries:





✓ Adjustment to many base CAD programs

CADprofi 2018 has been adjusted to work with latest CAD programs, including: ArCADia PLUS 10.3, AutoCAD 2018, BricsCAD V18, CADian 2017, CMS IntelliCAD 8.3, GstarCAD 2017 SP1, GstarCAD 2018, progeCAD 2018, ZWCAD 2018.

CADprofi 2018 currently works with many base CAD programs including: AutoCAD (since the 2000 version), BricsCAD, GstarCAD, IntelliCAD, progeCAD, ZWCAD, ARES Commander Edition and others.







