

# IM10423-AutoCAD Electrical 2016 (and 2015)

## What's New

Randy Brunette

AutoCAD Electrical Evangelist

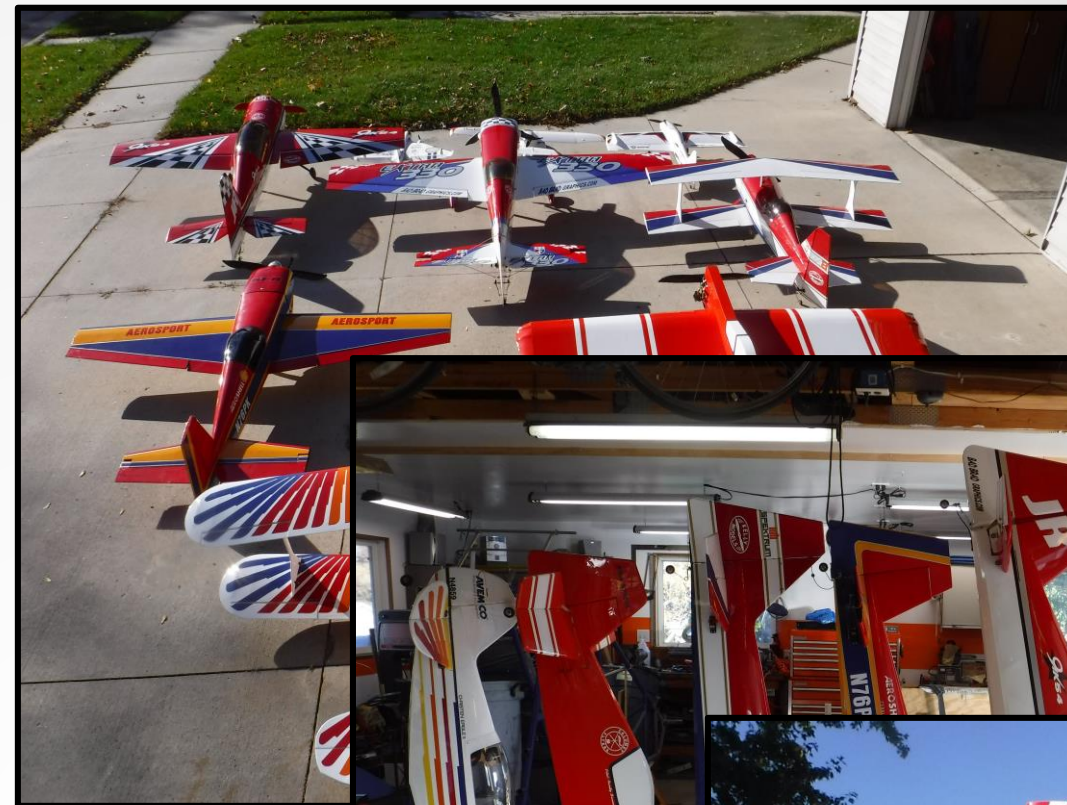


# About your instructor



Randy Brunette  
AutoCAD Electrical Evangelist

- AutoCAD since 1984
- AutoCAD Electrical since 1996
- 16<sup>th</sup> Year Teaching @ Autodesk University
- Fly radio control airplanes, helicopters, and quad copters



# About You??

How many: (Raise hands)




- ✓ Currently use AutoCAD Electrical 2016?
- ✓ Currently use AutoCAD Electrical 2015?
- ✓ Currently use older AutoCAD Electrical?
- ✓ Currently use basic AutoCAD or other software?

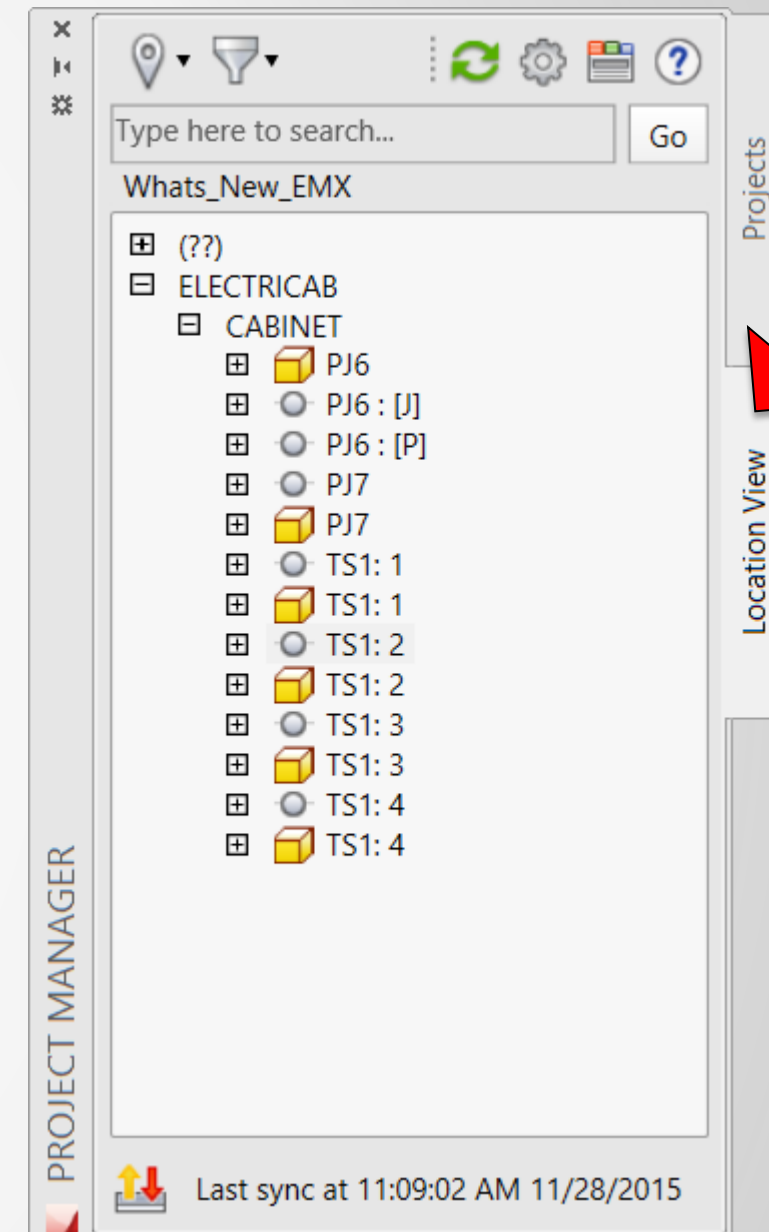




# What's New AutoCAD Electrical 2016

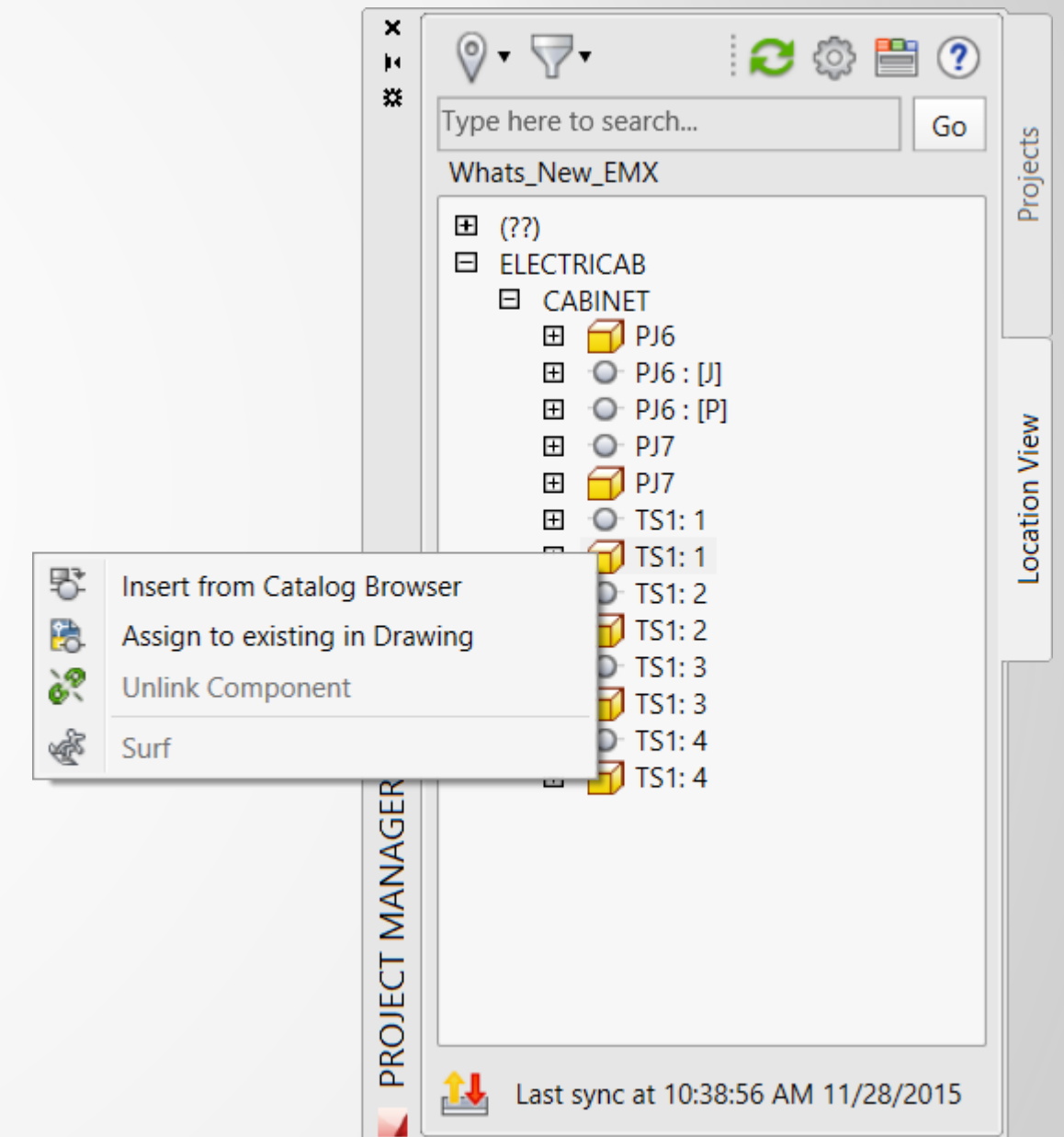
# Location View Tab on Project Manager

- Hover over a device to view catalog, description, and rating information.
- Expand the device to view the component pin values.
- Filter the list based on installation and location values. 
- Refresh the view to reflect changes across the project 
- Right-click to surf to a selected component.
- Display the Details pane to view component details and the Connections pane to view wiring from/to information. 



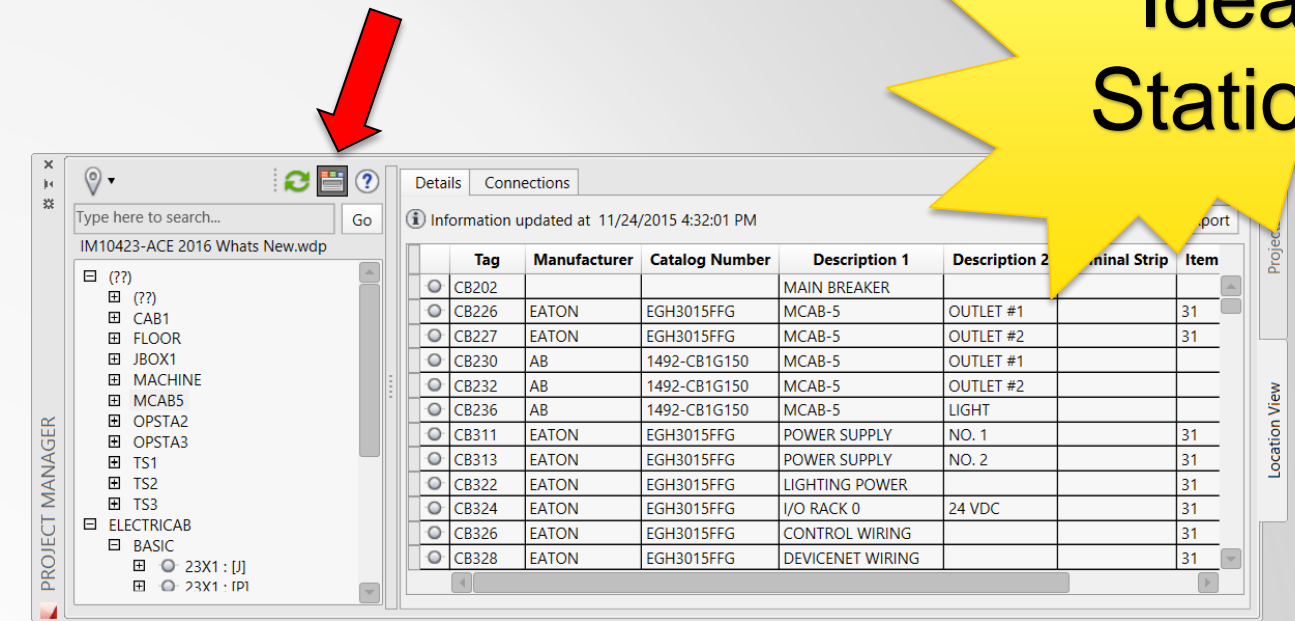
# AutoCAD Electrical and Inventor Interoperability

- The EMX link provides data exchange between your 2D and 3D electrical designs. Use the Location View tab to view both the AutoCAD Electrical and Inventor components and data.
- **Insert from Catalog Browser.** Performs a catalog lookup, using the catalog information from the Inventor part, where you can insert a symbol to link to the Inventor part.
- **Link to Existing in Drawing.** Select a symbol from the drawing to link to the Inventor part.

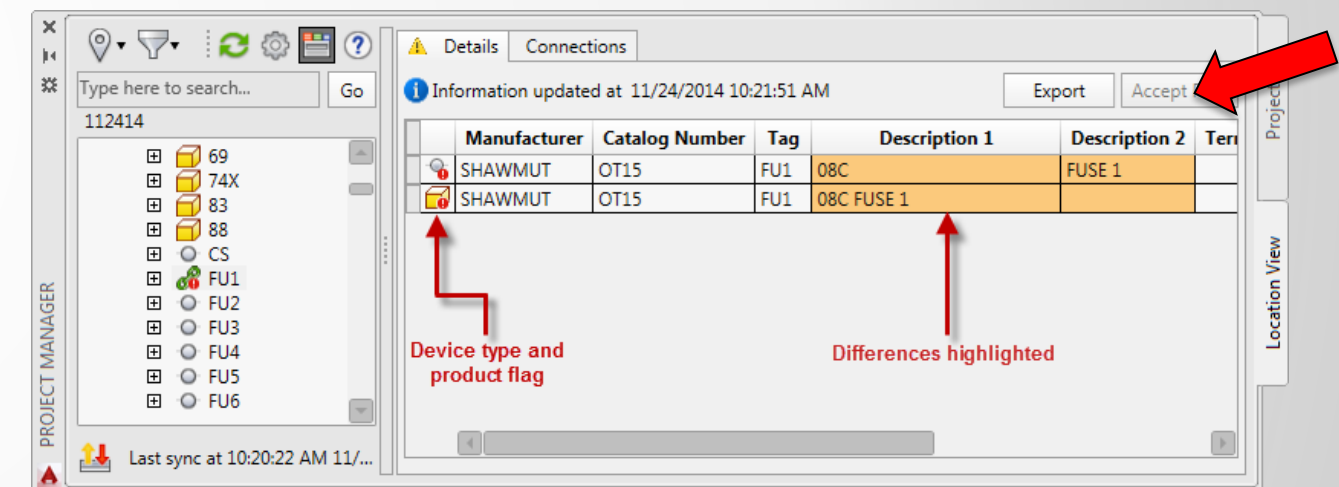


# Details & Connections

- Display the Details pane to view component details and the Connections pane to view wiring from/to information.
- Use the Details and Connections pane to view differences between the linked components
- Use the Accept Inventor button to reconcile the differences between the linked components.



Idea Station



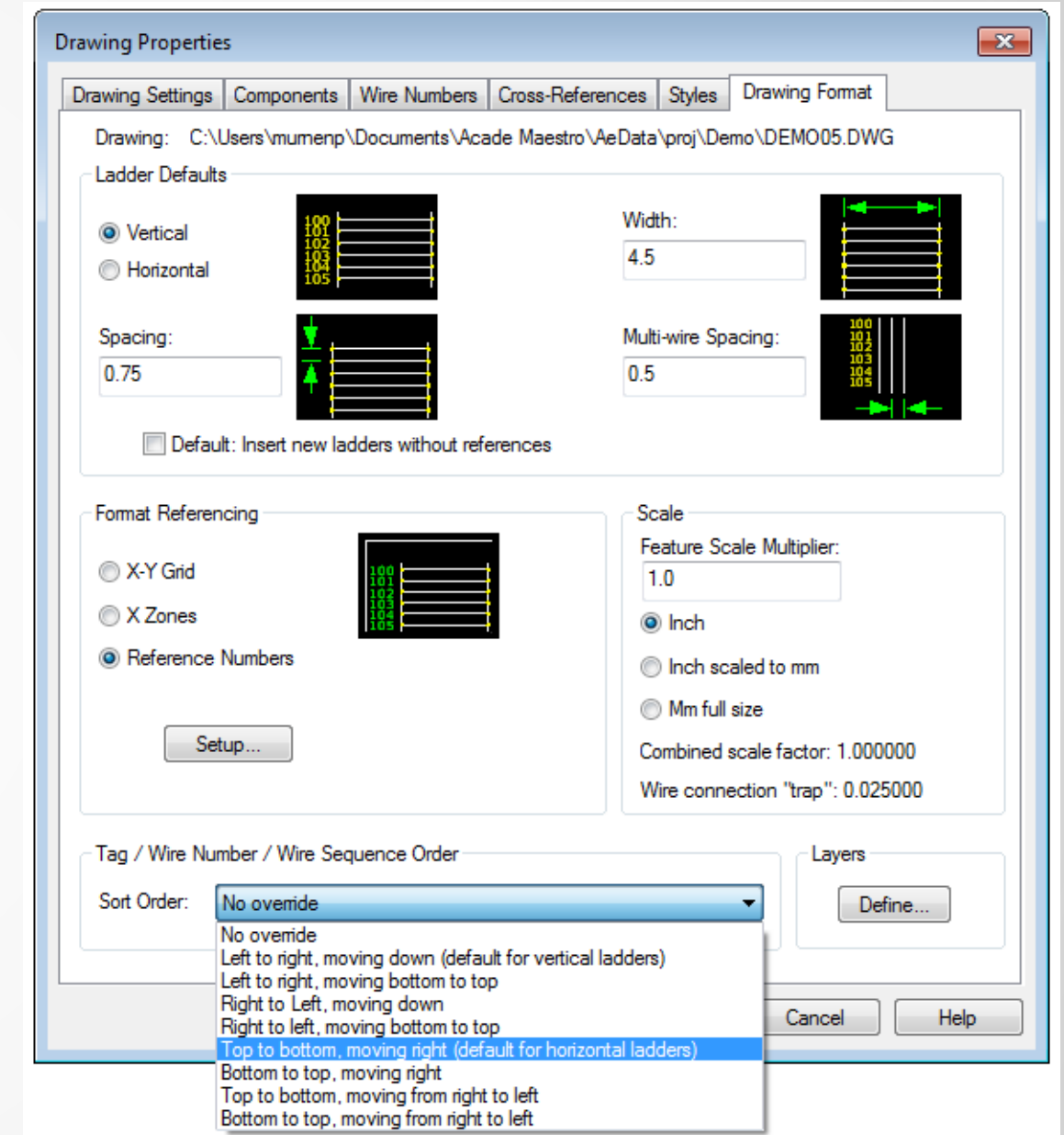
**Note:** This same functionality is available in Inventor from the new Electromechanical tab on the Assembly ribbon.



# Default Wire Sequence

AutoCAD Electrical performs the following steps when determining wire connection sequence:

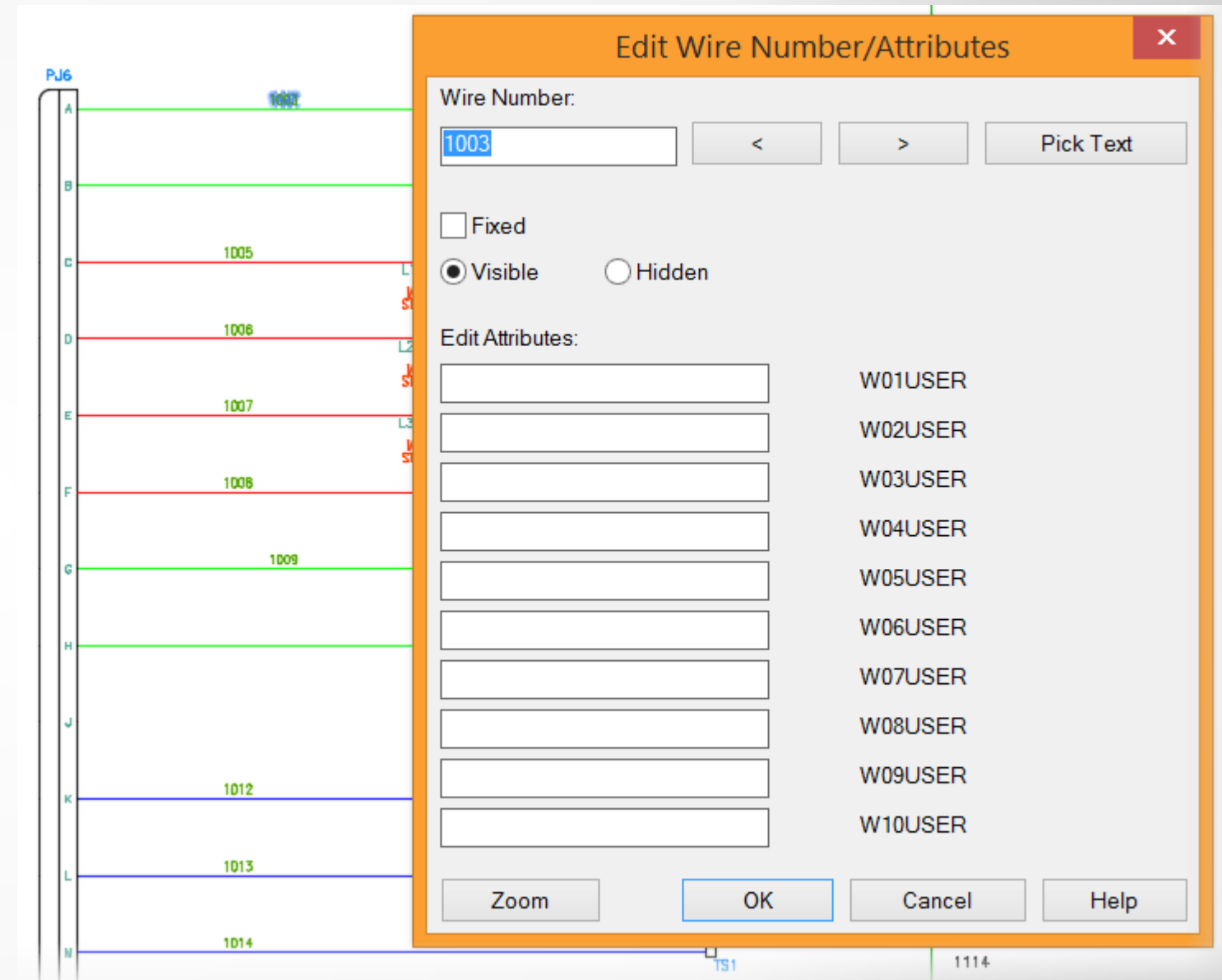
1. Check for a wire sequence defined using the Edit Wire Sequence command, including any Direct-to-Terminal connections. (manual edits)
2. Check for angled tees on the wire network.
3. Check if any of the components have the same Location.
4. Use the Sort order drawing property to determine the connections for anything not accounted for in the previous checks.





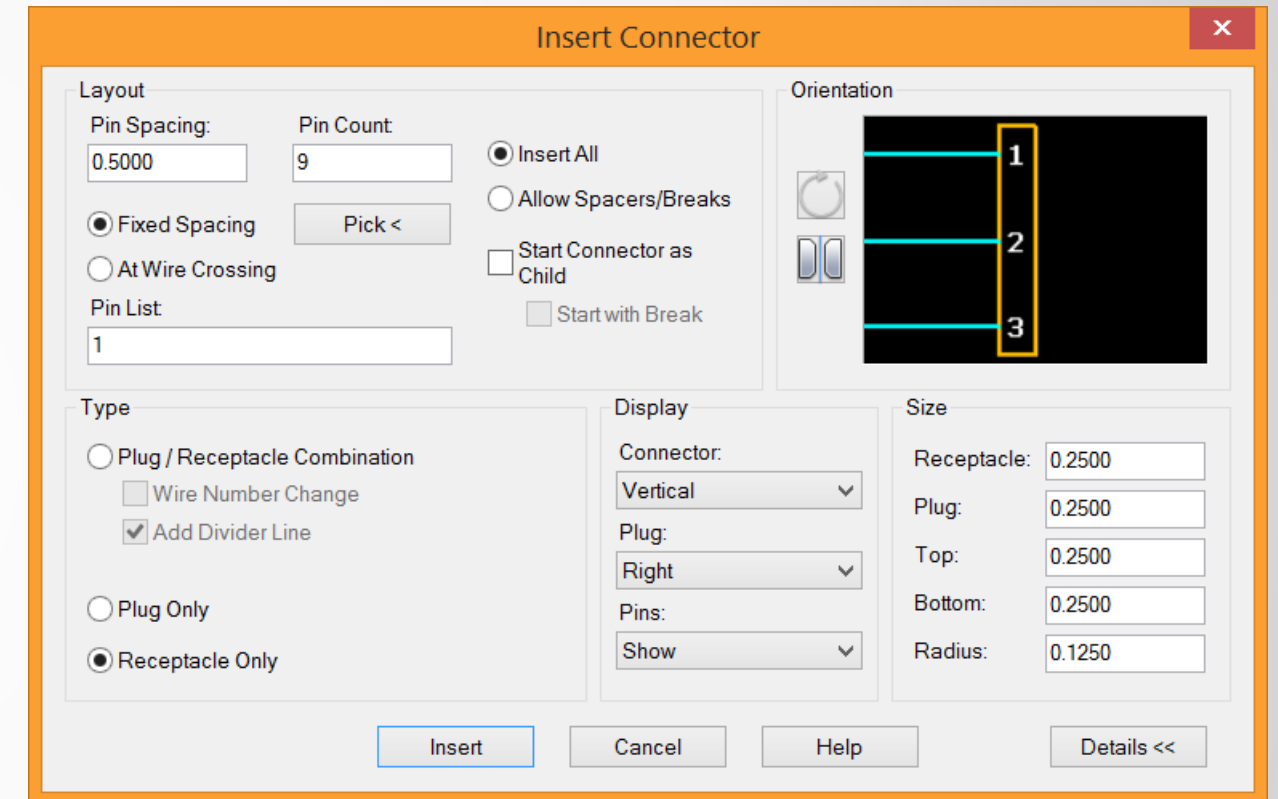
# Wire Number Attributes

- Edit the wire number attributes, W01USER-W10USER, on the Edit Wire Number/Attributes dialog box.
- These values are now available fields in the following reports:
  - Wire From\To
  - Component Wire List
  - Connector Plug
  - Terminal Plan
  - Cable From\To



# Insert Connector

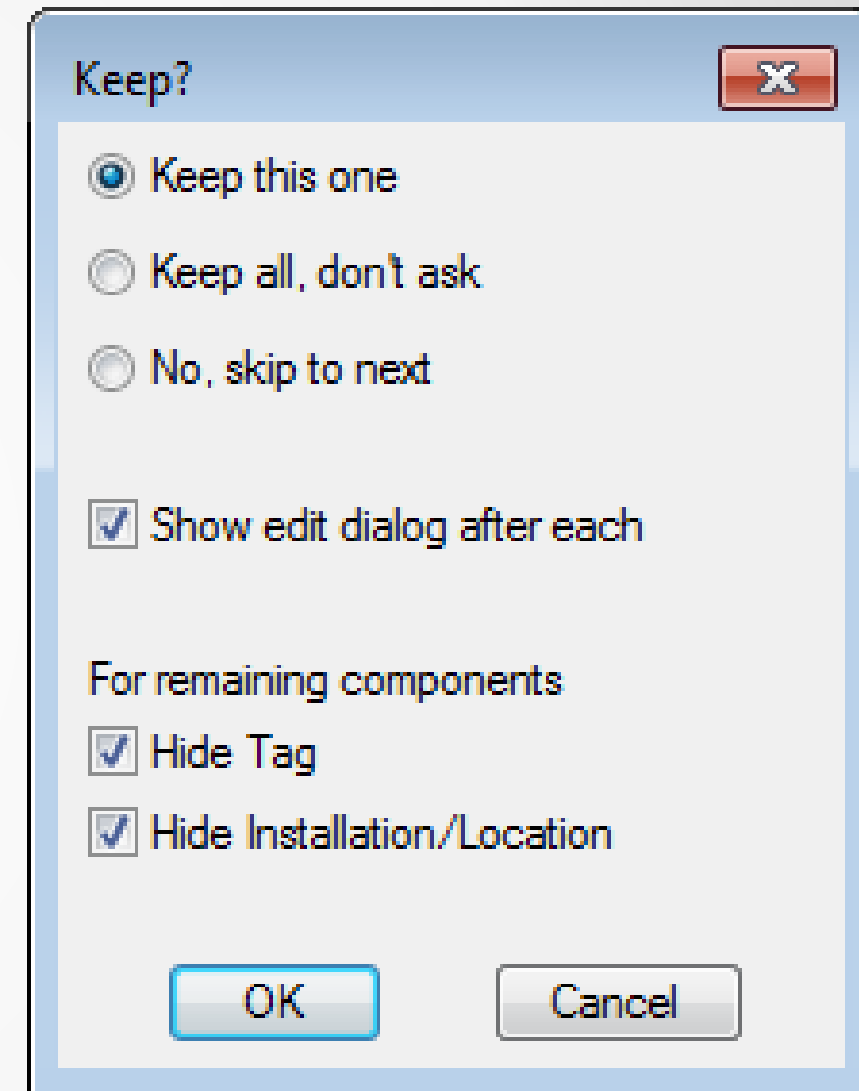
- The Insert Connector dialog box settings are maintained across sessions of AutoCAD Electrical.
- The product supports two groups of settings, one for metric drawings and another for imperial drawings.
- The appropriate settings are used automatically based on the active drawing.
- Insert/Edit Component dialog box opens after completing insertion of connector.



# Schematic Terminals

Idea  
Station

- If you insert schematic terminals using the Multiple Insert commands, there are now options to hide the tagstrip, installation, and location attribute values.

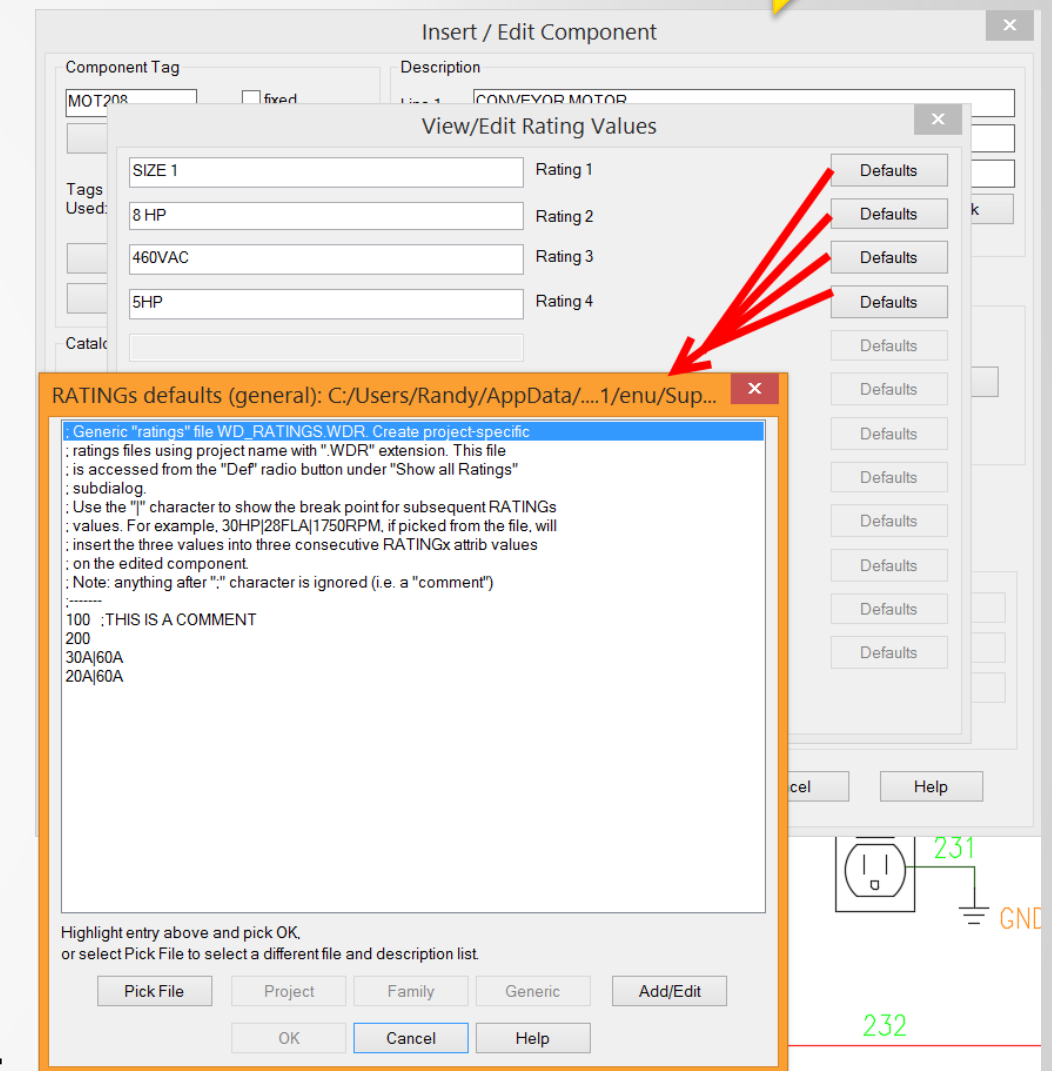




# Miscellaneous

Idea  
Station

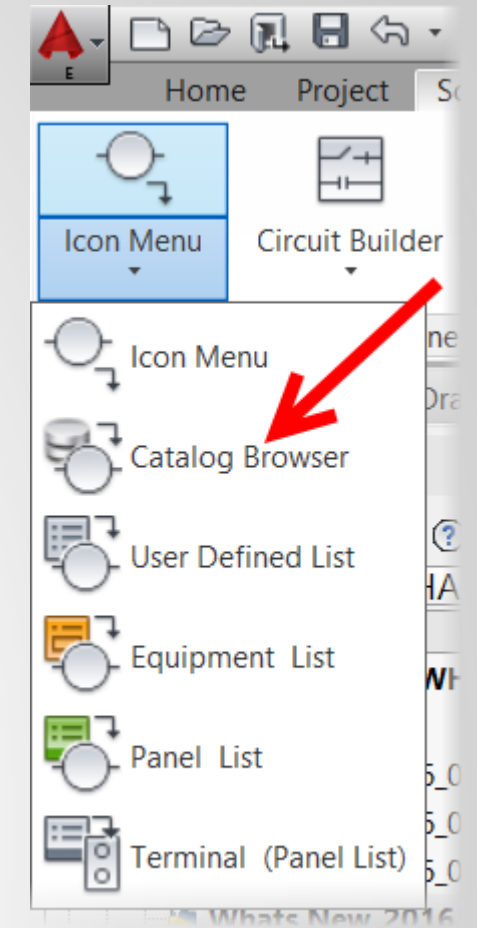
- Child components linked to the parent with the dashed link line are filtered out of the cross-referencing on the parent component.
- Buttons for individual rating defaults added to the View/Edit Rating Values dialog box when editing a panel component.
- The Copy Circuit command defaults to selecting multiple insertion points for creating multiple copies on the same drawing.
- The Export to Spreadsheet now freshens the database automatically before performing the export.
- A new check box on Terminal Strip Editor lets you save the internal and external device assignments



# What's New AutoCAD Electrical 2015

# Catalog Browser

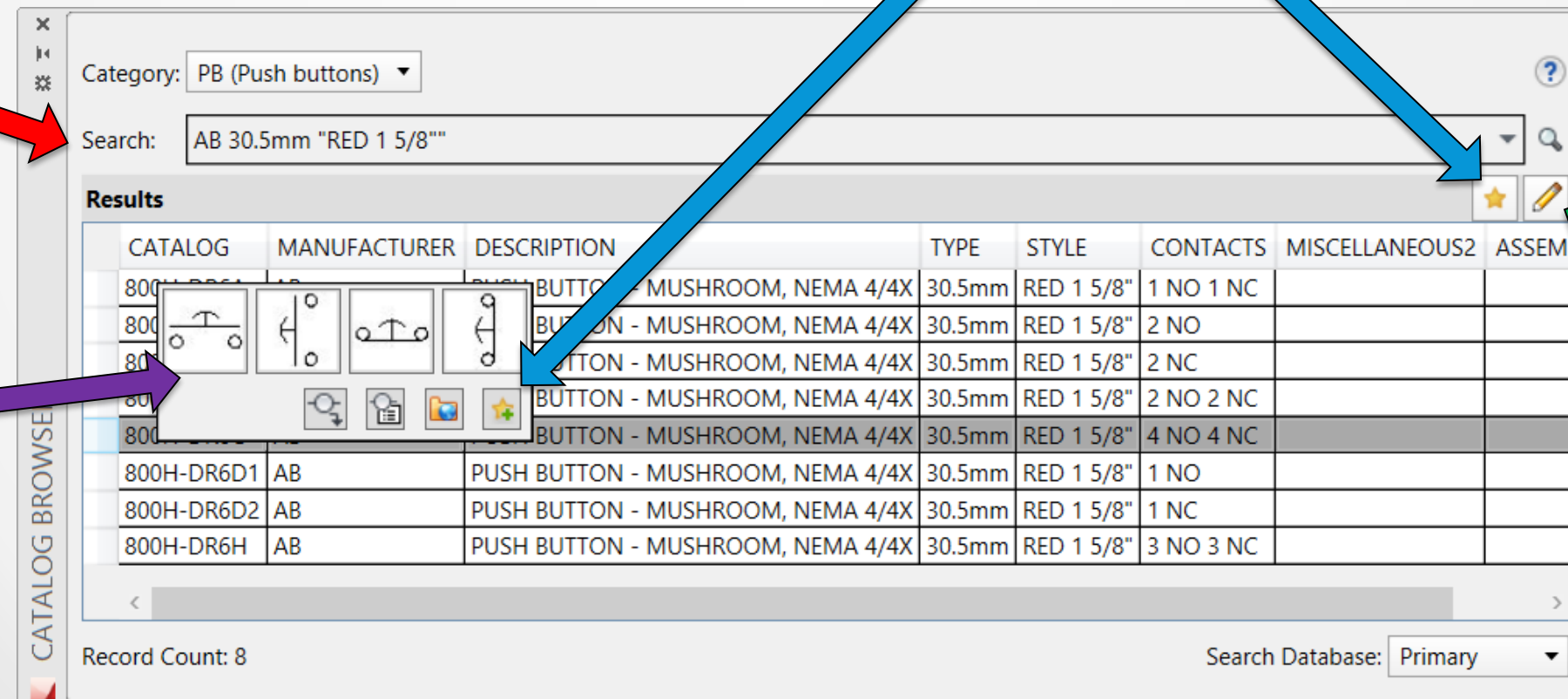
- The Catalog Browser is the new interface for accessing the catalog content. The Catalog Browser is search-based. Enter your search criteria and select from a list of catalog values that match your search criteria.



Free style  
searching

Favorites

Insert from  
catalog search

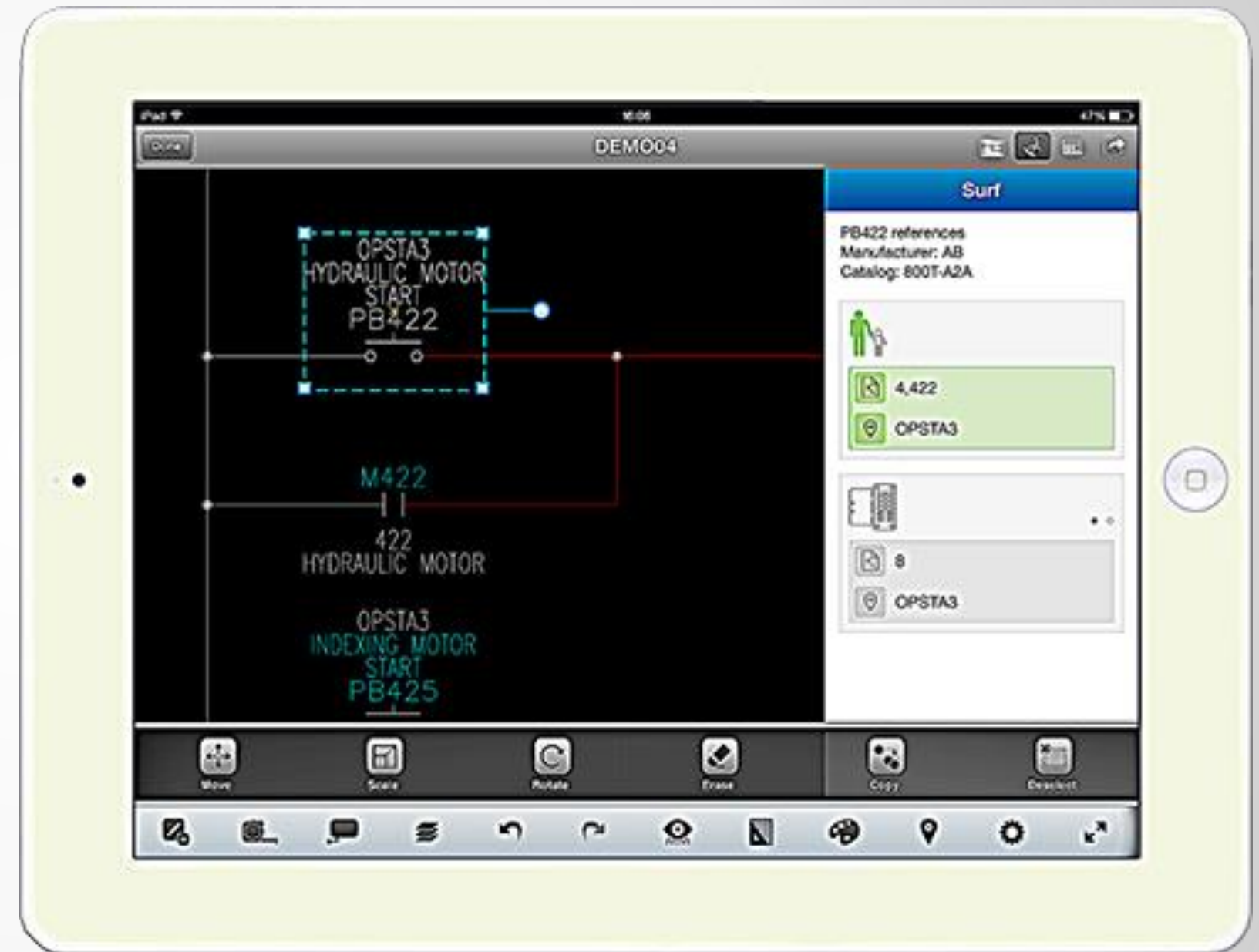


Edit



# AutoCAD Electrical Mobile App

- Free on App Store.
- Integrate with Autodesk 360 or some other cloud storage for immediate access to your projects and drawings.
- Integrated with AutoCAD 360 mobile app.
- Use Design Feed for markup and collaboration.
- Navigate the project, surfing on components, terminals, and signal arrows.



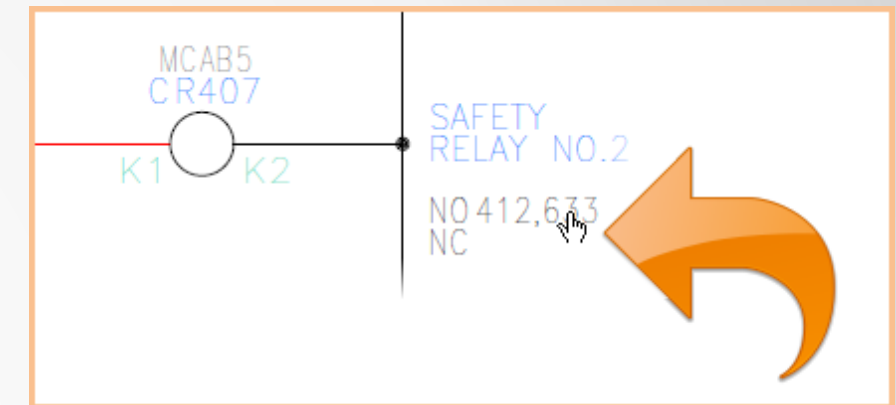
# PDF Publish with Hyperlinks

Publish a set of drawings to a single multipage PDF file with hyperlinks.

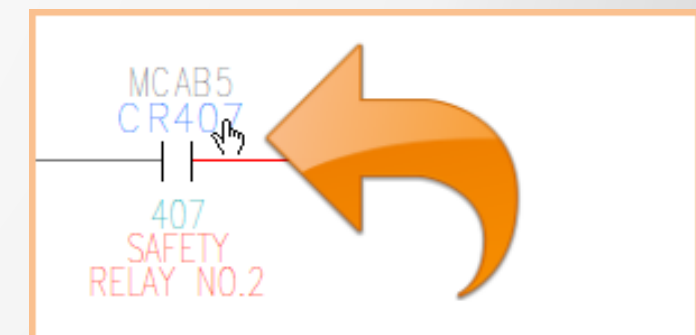
Open the PDF and use the hyperlinks to:

- Jump between related schematic parent and child components.
- Jump between related schematic parent and panel footprints.
- Jump between related one-line and schematic components.
- Follow a wire network across signal arrows.
- Follow stand-alone cross-references

## Jump to Child

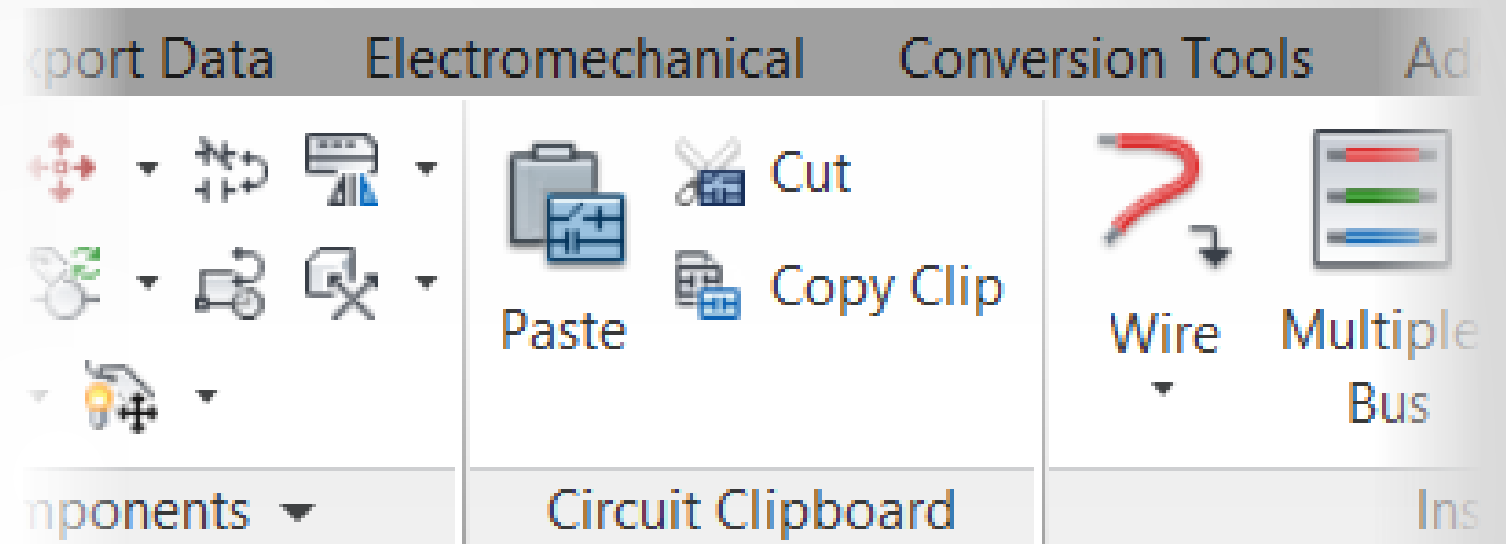


## Jump to Parent



# Cut, Copy, Paste

New commands allow you to cut, copy, and paste electrical objects from one drawing to another.



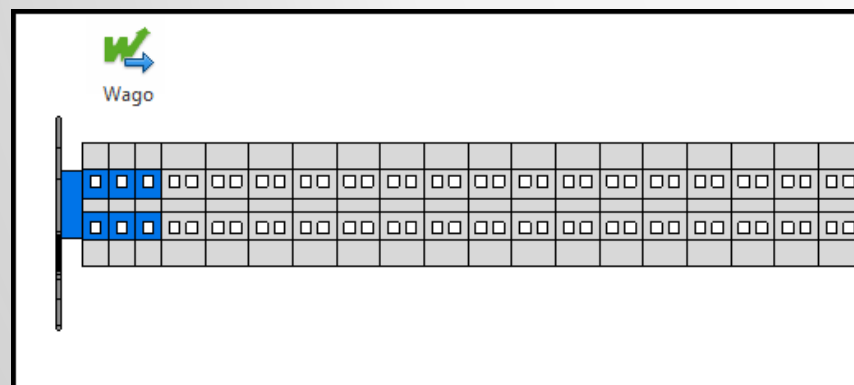
**Note:** Objects placed on the circuit clipboard can only be pasted on an AutoCAD Electrical drawing using the AutoCAD Electrical Paste command.  
(This is NOT the Windows CTRL-C, -X and -V)



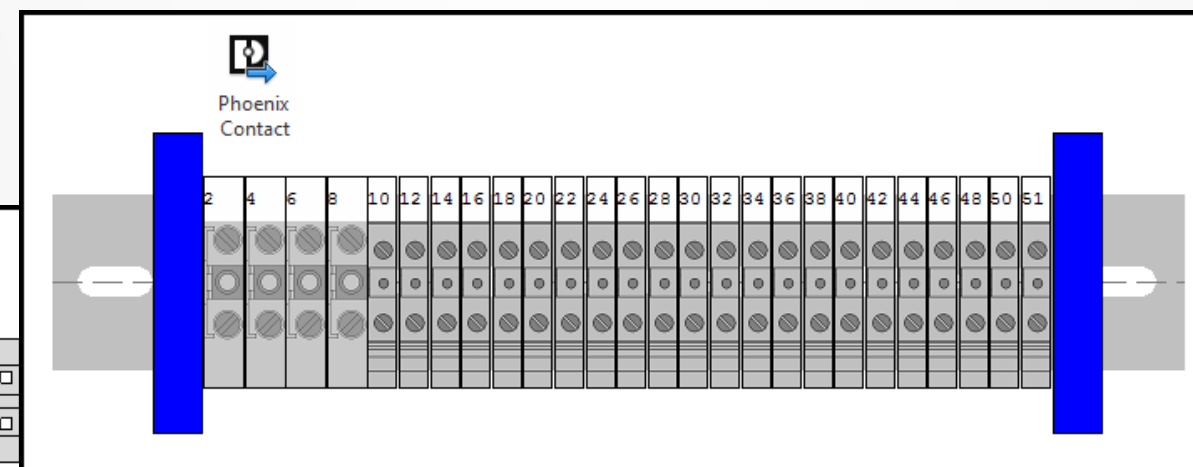
# Export Terminal Strips to Wago and Phoenix

- Export the terminal data such as catalog number, terminal number, installation code, location code, tag, quantities, spare, and accessories on a terminal strip to the Wago and Phoenix Contact applications. From Vendor tools, create model or drawing for insertion.

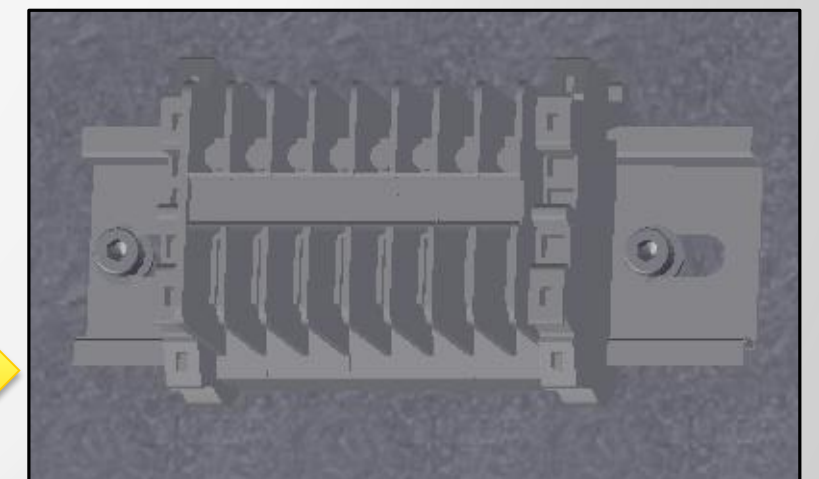
## Wago Proserve Smart Designer



## Phoenix Contact Clip Project

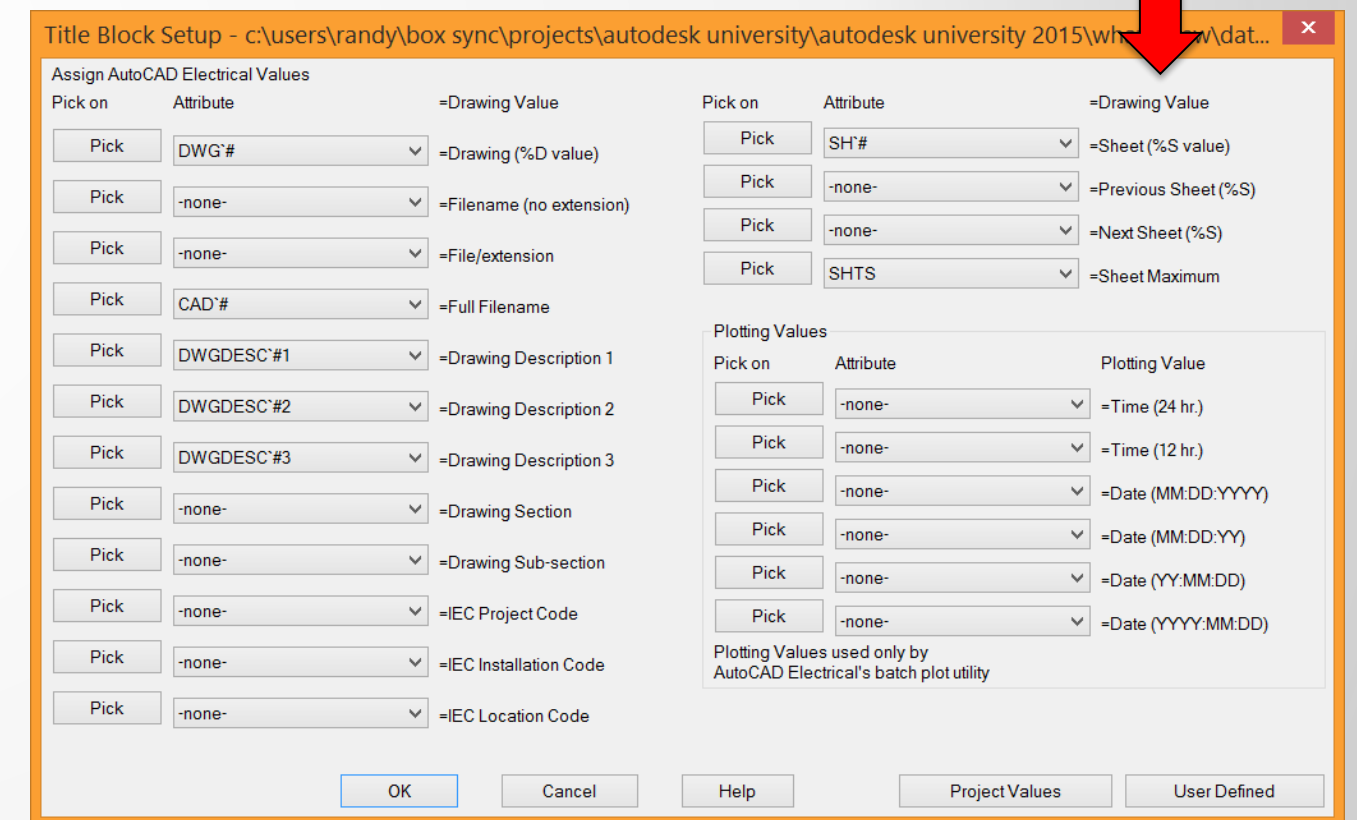


## Inventor Model



# Miscellaneous

- Report Format Setup lets you select a table style for table settings.
- Standard paths to library symbols are now saved in the project file. The symbol library paths use a variable to indicate the default library path, for example **%SL\_DIR%**jic125/,**%SL\_DIR%**jic125/1-/.
- You can now define a User Post option in your report format .SET file.
- Next and Previous Sheet options added to the Title Block Setup and Title Block Update.
- Various HELP updates.



The screenshot shows the 'Title Block Setup' dialog box. A large red arrow points to the title bar of the window, which reads 'Title Block Setup - c:\users\randy\box sync\projects\autodesk university\autodesk university 2015\wh... \dat...'. The dialog box is divided into two main sections: 'Assign AutoCAD Electrical Values' and 'Plotting Values'. The 'Assign AutoCAD Electrical Values' section has two columns: 'Pick on' and 'Attribute', with a third column for the 'Drawing Value'. The 'Plotting Values' section also has two columns: 'Pick on' and 'Attribute', with a third column for the 'Plotting Value'. At the bottom of the dialog box, there are buttons for 'OK', 'Cancel', 'Help', 'Project Values', and 'User Defined'.

Pick on	Attribute	=Drawing Value
Pick	DWG*#	=Drawing (%D value)
Pick	-none-	=Filename (no extension)
Pick	-none-	=File/extension
Pick	CAD*#	=Full Filename
Pick	DWGDESC*#1	=Drawing Description 1
Pick	DWGDESC*#2	=Drawing Description 2
Pick	DWGDESC*#3	=Drawing Description 3
Pick	-none-	=Drawing Section
Pick	-none-	=Drawing Sub-section
Pick	-none-	=IEC Project Code
Pick	-none-	=IEC Installation Code
Pick	-none-	=IEC Location Code

Pick on	Attribute	=Drawing Value
Pick	SH*#	=Sheet (%S value)
Pick	-none-	=Previous Sheet (%S)
Pick	-none-	=Next Sheet (%S)
Pick	SHTS	=Sheet Maximum

Pick on	Attribute	Plotting Value
Pick	-none-	=Time (24 hr.)
Pick	-none-	=Time (12 hr.)
Pick	-none-	=Date (MM:DD:YYYY)
Pick	-none-	=Date (MM:DD:YY)
Pick	-none-	=Date (YY:MM:DD)
Pick	-none-	=Date (YYYY:MM:DD)

Plotting Values used only by AutoCAD Electrical's batch plot utility

OK Cancel Help Project Values User Defined

# Class Handout

- Download from AU Website.
- Includes most What's New features from 2005-2016.



# Questions And Feedback





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# Autodesk University Session Feedback

Your feedback is very important to Autodesk

- ✓ Attendees can complete session survey on their mobile device, PC or at a survey station
- ✓ Each session survey completed will be entered for a daily drawing for a free AU 2016 pass.
- ✓ You can help make AU 2016 better!

Complete the AU Conference Survey at a survey station and receive an AU 2015 T-Shirt

Remember,  
the suggested  
response is...

**Awesome!**

# Thank You!

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