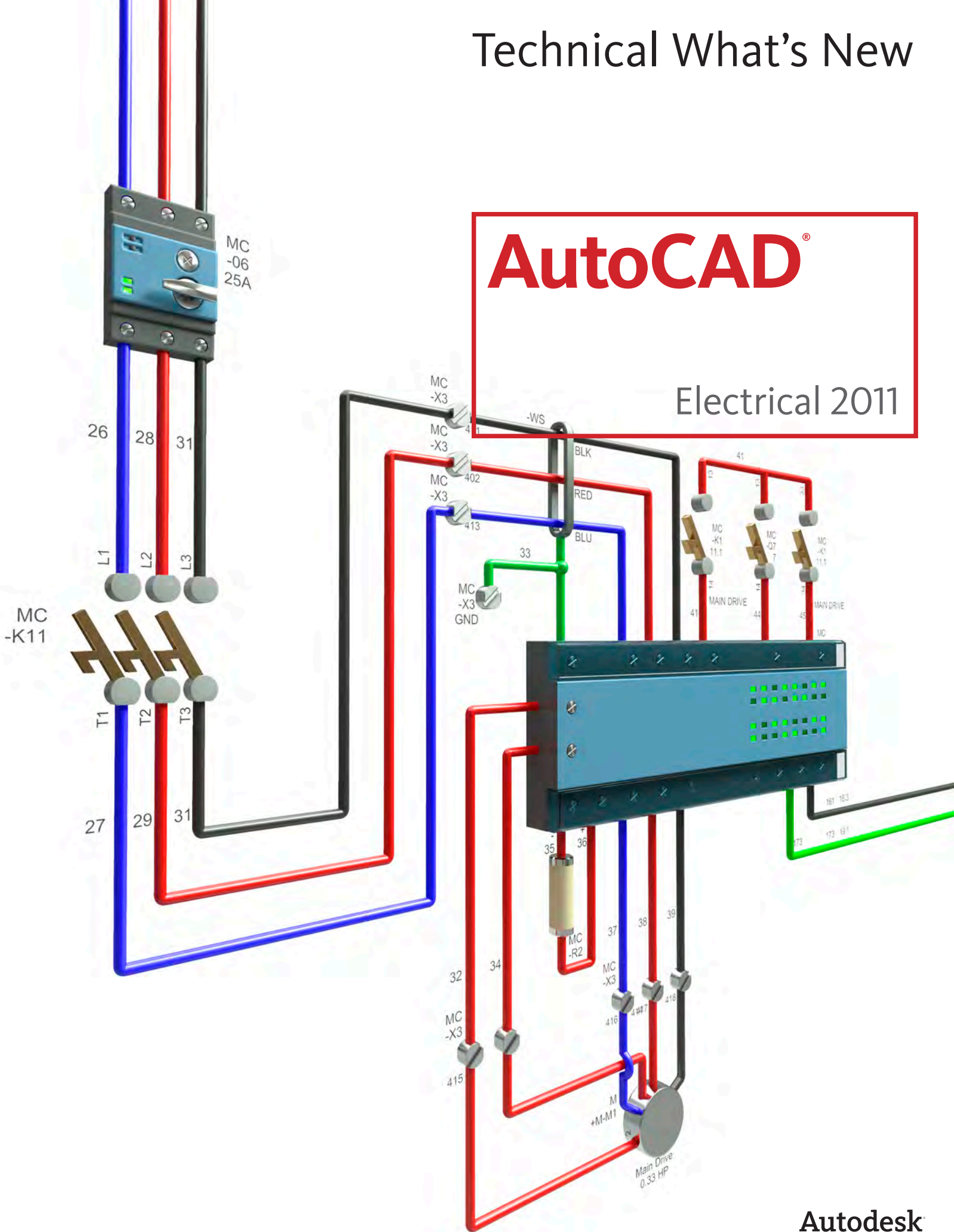


# Technical What's New

# AutoCAD®

## Electrical 2011

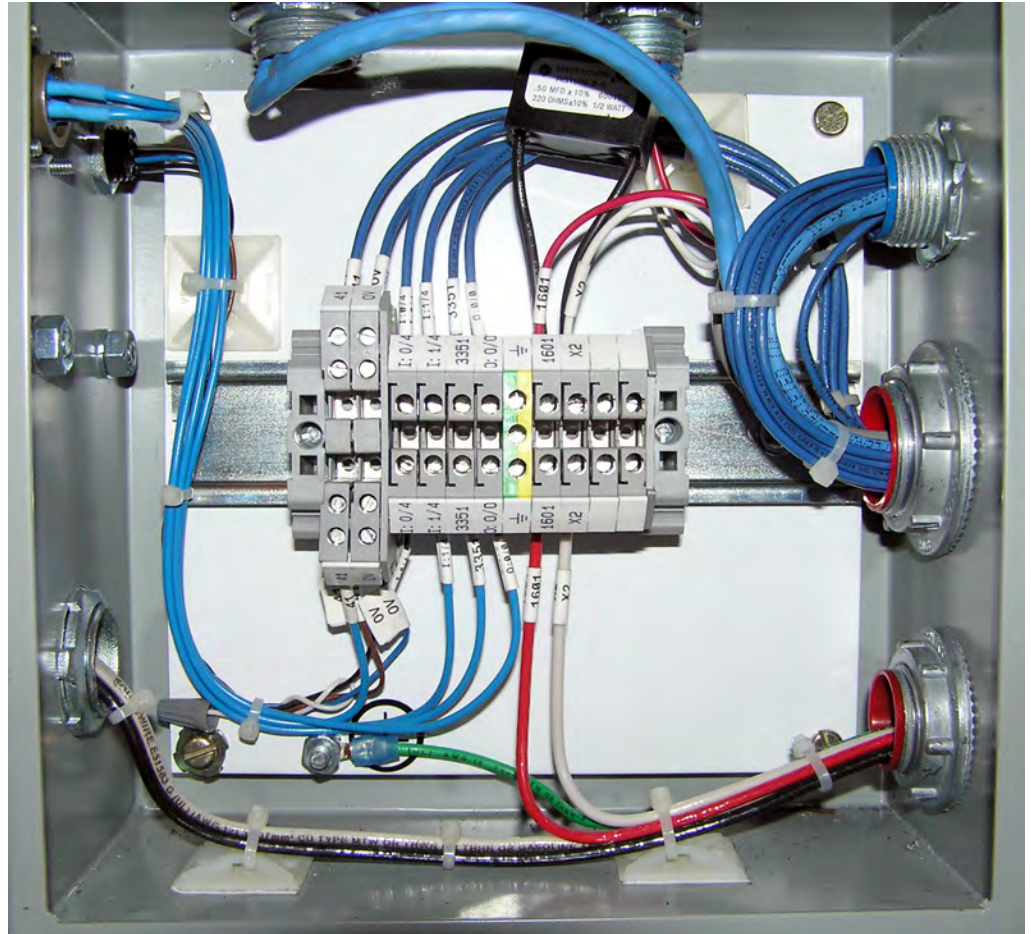


# Technical What's New

## Welcome to AutoCAD® Electrical 2011

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AutoCAD® Electrical is AutoCAD® software for controls designers, purpose-built to create and modify electrical control systems. It contains all the functionality of AutoCAD, the world's leading CAD software, plus a comprehensive set of tools for automating control engineering tasks, such as building circuits, numbering wires, and creating bills of material. AutoCAD Electrical provides a library of more than 650,000 electrical symbols and components, includes real-time error checking, and enables electrical and mechanical teams to collaborate on digital prototypes built with Autodesk® Inventor® software.

AutoCAD Electrical 2011 includes new features and functionality designed to make you more productive while allowing you to maintain existing workflows. With new tutorial material and an intuitive user interface, the software makes it even easier to save time, reduce errors, and create innovative electrical control designs.

# Technical What's New

## Productivity Enhancements

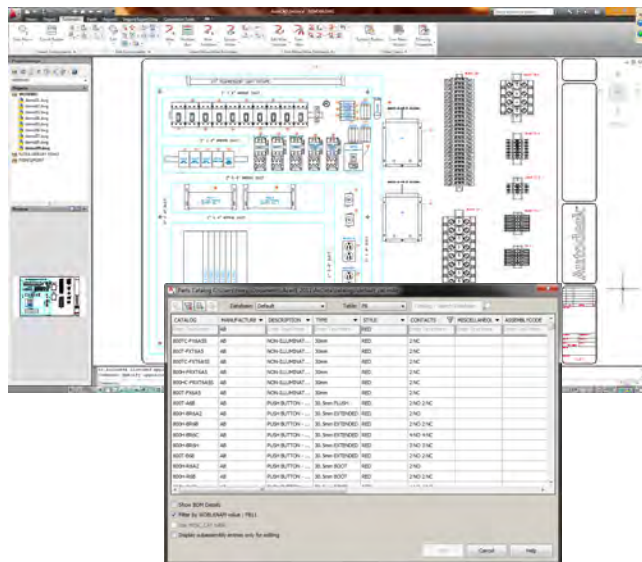
AutoCAD Electrical 2011 software offers controls designers immediate productivity gains with a set of enhanced features and tools designed to help you create accurate electrical control systems in less time.

## Catalog Lookup

Searching and assigning catalog information for large projects, which can contain hundreds or even thousands of symbols, can be time-consuming and frustrating. AutoCAD Electrical 2011 makes significant improvements to the catalog lookup process. Database performance enhancements enable dramatically faster loading times. So, you now have instant access to the extensive catalog, where improved filtering and sorting make it quick and easy to find exactly the component you need.

Catalog lookup user-interface enhancements include:

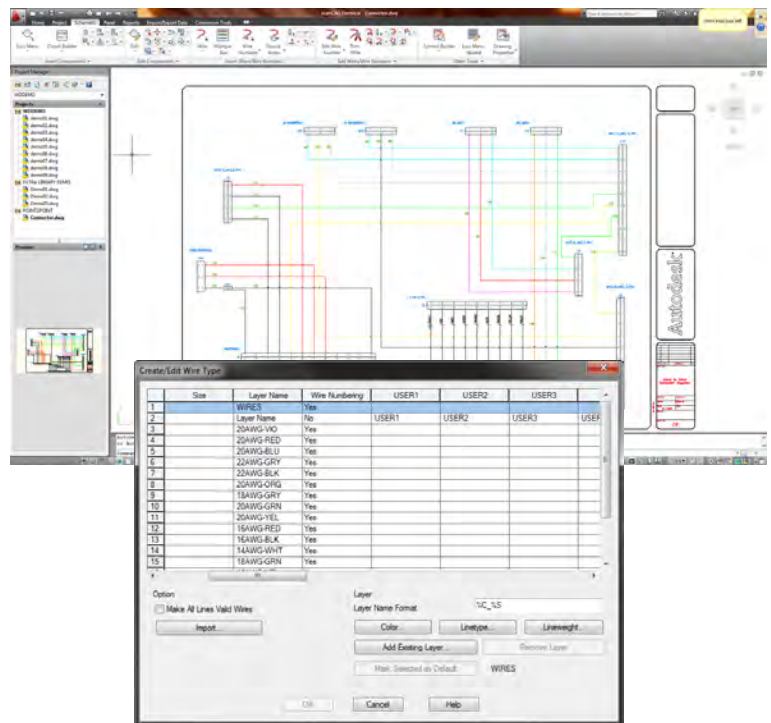
- Control the fields to display and the field order in the catalog lookup dialog box.
- Filter catalog records by selecting existing values from any of the catalog fields.
- Search for a catalog record based on a value you supply, including wild cards, for any one of the catalog fields.
- Sort catalog records by clicking the column header of any of the displayed fields.
- BOM details displayed on the main dialog box (formerly called Catalog Check).
- Define a default filter value for any catalog field using the expanded \_LISTBOX\_DEF table in the catalog database.
- Dialog box tooltips describe the function of each control on the dialog box.



## Import Wire Types

AutoCAD Electrical 2011 saves you time and helps to ensure consistent standards across projects by enabling you to easily reuse frequently specified wire types. You can now import wire types from an existing drawing or template into another drawing.

- Wire Types are defined on a per-drawing basis.
- Use the Import button on the Create/Edit Wire Type dialog box to import wire types to the active drawing.
- Use Project-wide Utilities to import wire types to a set of project drawings.



# Technical What's New

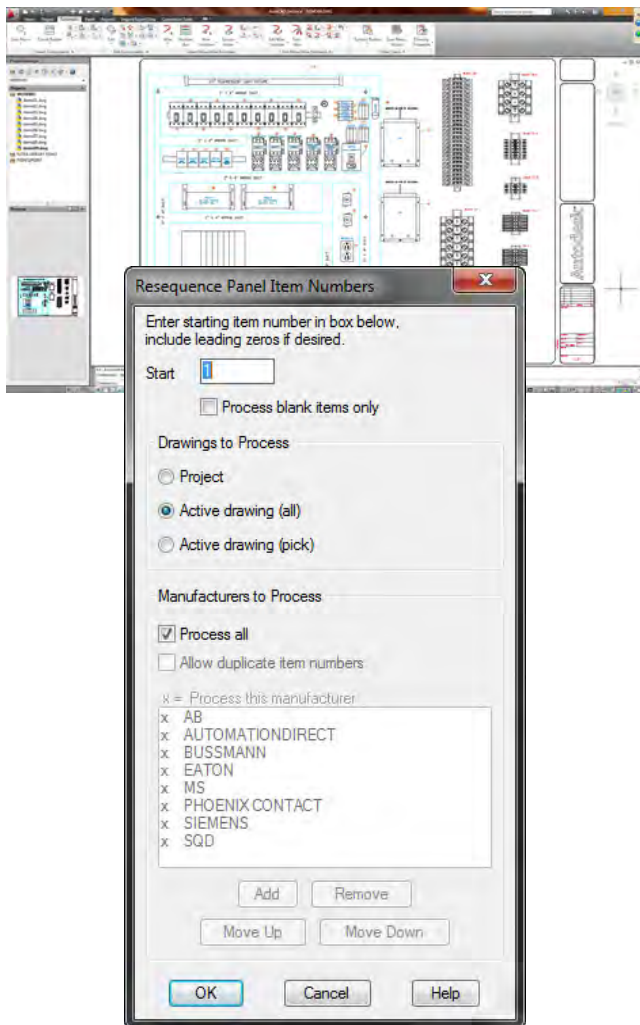
## Item Numbering

The powerful panel layout tools in AutoCAD Electrical have been enhanced to save you time and reduce the potential errors inherent in resequencing.

Item numbering now supports fixed item numbers on panel components. Fixed item numbers do not change when the Resequence Item Numbers command is run.

Resequence item numbers based on the manufacturer values of the components. Select the manufacturers from a list of values used in the project. Only item numbers on components with selected manufacturers change.

Define the resequence order based on the manufacturer values of the components. Use the Move Up and Move Down buttons to change the order of the manufacturers for processing by the Resequence Item Numbers command.



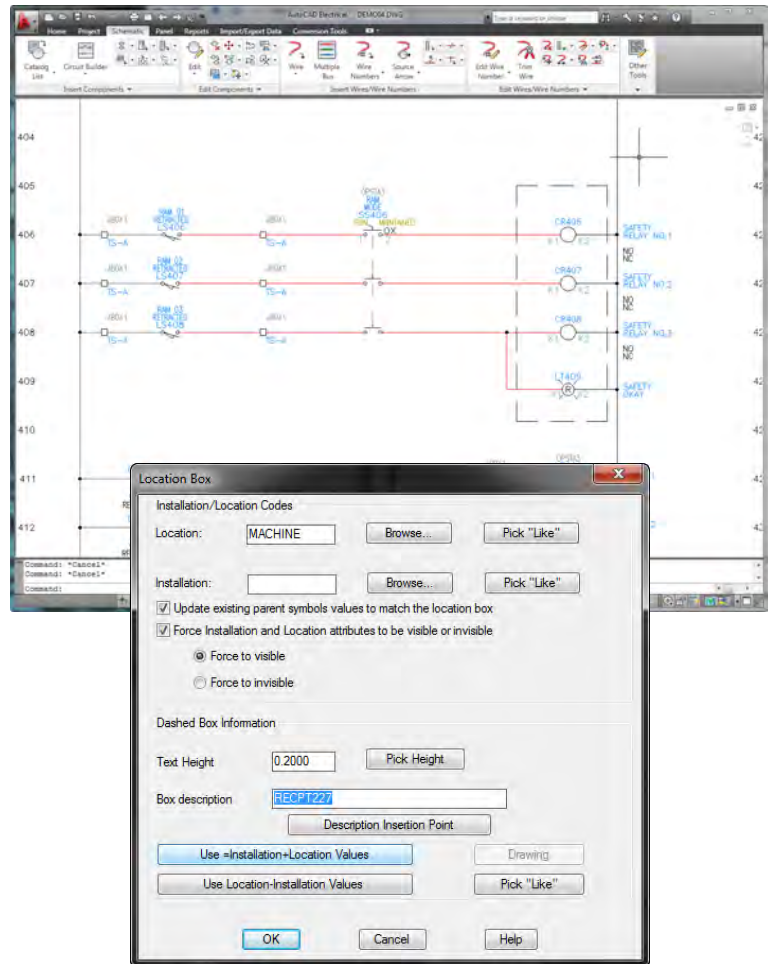
## Location Boxes

Enhancements to the Location Box functionality make it easy to identify locations for a device or group of devices, resulting in more accurate panel layouts.

When inserting a Location Box, a check box on the Location Box dialog box indicates whether to update the Location and Installation values for parent components that fall within the new location box.

AutoCAD Electrical commands are now aware of location boxes. If you insert or move schematic parent components into an existing location box, location and installation values update to match the location box.

When you move schematic parent components out of a location box, you can choose whether to update component values to match the drawing defaults.



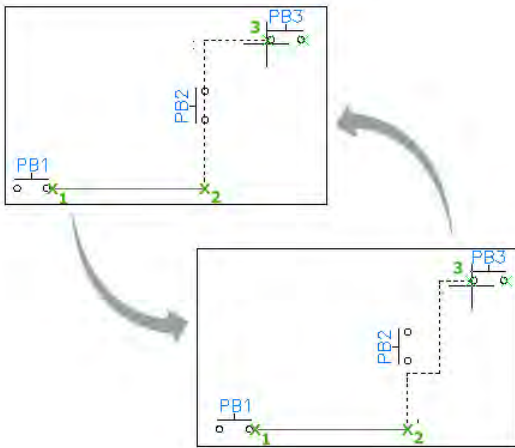
# Technical What's New

## Suppress Wire Collision Check

AutoCAD Electrical 2011 makes wiring components into your designs faster by enabling users to turn Wire Collision on or off with a single click of the mouse.

Temporarily disable or enable collision checking during wire insertion. Default behavior routes around a component when routing a wire from one location to another.

With collision checking turned off, AutoCAD Electrical automatically breaks the wire across components encountered as you insert the wire. This setting is remembered only for the current session. Collision checking is on when AutoCAD Electrical restarts.



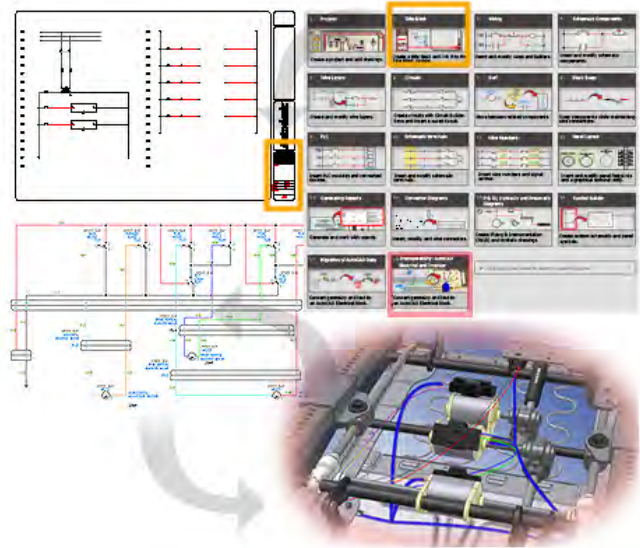
## Ease of Use Enhancements

Enhancements to the help system, data migration tools, and catalog sharing make AutoCAD Electrical easier than ever to learn and use.

## Improved Learning Experience

AutoCAD Electrical 2011 introduces new in-product learning tools and tutorials designed to help you take advantage of the advanced functionality in AutoCAD Electrical and realize immediate productivity gains:

- Getting Started exercises added to the Help.
- The new Title Block tutorial guides AutoCAD Electrical users through the steps of creating a template, creating a title block, and defining the title block mapping for a title block update.
- The new Cable Design Interoperability tutorial explores the mechatronic capabilities of Digital Prototyping, demonstrating the seamless interoperability between AutoCAD Electrical and Autodesk Inventor, and includes exercises in both environments.



## promis•e Data Migration

Users of promis•e® software can avoid hours of rework by easily migrating designs into AutoCAD Electrical design software using the promis•e data migration tool. AutoCAD Electrical 2011 enhances this powerful tool to simplify and accelerate the data migration process.

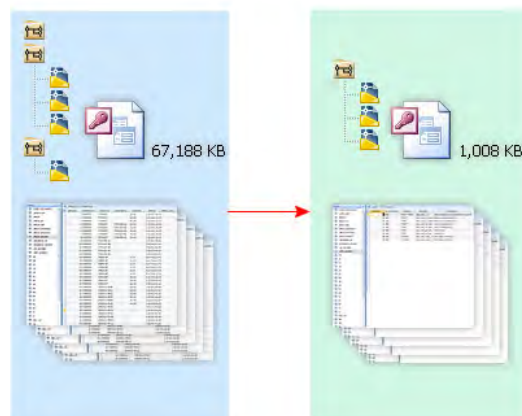
## Project-Specific Catalog Database

AutoCAD Electrical 2011 makes it easier for you to share catalog data from projects with your clients, or collaborate with other departments to specify which catalog selections to use.

Users can now create a project-specific catalog database by including just the relevant portion of the catalog database that was used for this project. This command starts with the default\_cat.mdb database and removes all catalog values not used in the project drawings.

Use this smaller catalog database to:

- Send to a client with the finished project.
- Limit future catalog selections to components used in the project.



# Technical What's New



## Award-Winning Software

For seven consecutive years, AutoCAD Electrical has been the winner of the *Control Design Readers' Choice Award* in the category of ECAD software.

## Proven Benefits

An independent productivity study<sup>1</sup> comparing standard AutoCAD and AutoCAD Electrical concluded that when using AutoCAD Electrical:

- Creation of new designs is 84 percent faster.
- Editing existing designs is 77 percent faster.
- Risk of errors is greatly reduced because of a 30 percent reduction in number of commands used.

For the complete study, go to:

[www.autodesk.com/autocadelectrical-productivity](http://www.autodesk.com/autocadelectrical-productivity).

## Stay Up to Date

Autodesk gives you more. Gain access to technical expertise, utilize training and support programs direct from Autodesk, stay up to date with the latest product releases, and give us your feedback. Not only does Autodesk want to help you use AutoCAD Electrical more effectively but also make sure AutoCAD Electrical is working effectively for you.

## Subscription

Autodesk<sup>®</sup> Subscription gives you immediate access to software upgrades and exclusive access to service and support benefits designed to help you get the most out of your Autodesk software. Learn more at

[www.autodesk.com/subscription](http://www.autodesk.com/subscription).

## Product Updates

If you experience an issue with AutoCAD Electrical 2011 that has already been solved in a service pack or hotfix, a dialog box appears when you submit the problem to Autodesk, enabling you to immediately install the new service pack or hotfix.

## Autodesk Learning and Education

From instructor-led or self-paced classes to online training or education resources, Autodesk offers learning solutions to fit your needs. Get expert guidance at an Autodesk Authorized Training Center (ATC<sup>®</sup>) site, access learning tools online or at your local bookstore, and validate your experience with Autodesk certifications. Learn more at

[www.autodesk.com/learning](http://www.autodesk.com/learning).

## Feedback

AutoCAD Electrical customers can provide feedback to the AutoCAD Electrical development team through several different avenues. For example:

- Provide tips or join newsgroups at [www.autodesk.com/autocadelectrical](http://www.autodesk.com/autocadelectrical)
- Keep up to date on what's happening in your industry, stay in touch with other industry professionals, and take advantage of a host of online resources at the Manufacturing Community Portal at [mfgcommunity.autodesk.com](http://mfgcommunity.autodesk.com)
- Talk with your Autodesk Authorized Reseller and support staff

Your input is crucial to our success and we look forward to receiving your suggestions.

## Conclusion

We thank you for your continued support of AutoCAD Electrical and hope you feel we are listening to your needs. We added the new and enhanced functionality to AutoCAD Electrical 2011 to help make you more productive, make your company more competitive, and return true value to your bottom line.

<sup>1</sup> Designed by Autodesk and commissioned to an independent consultant, this study explores 10 common design challenges and shows direct comparisons of the time and effort required to accomplish each specific task in AutoCAD and AutoCAD Electrical software. Read the complete study at [www.autodesk.com/autocadelectrical-productivity](http://www.autodesk.com/autocadelectrical-productivity).