

Top 10 Reasons to Move from AutoCAD® to AutoCAD® Electrical 2008

The Power of AutoCAD Electrical

If you design machines or products that move, electrical controls are probably a key component of your design requirement. Until now, electrical controls designers have relied on generic applications to get their job done. This can be problematic because those applications require manual layout of electrical schematics, can introduce design errors, and provide no simple way to share design information—a combination that ultimately costs your company time and money. AutoCAD® Electrical software, part of the familiar and trusted AutoCAD family you already know and trust, is the leading application built specifically to create and modify electrical control designs. It delivers the tools you need to design and modify electrical controls systems faster and more accurately than ever before.

Discover why so many electrical controls designers are using AutoCAD Electrical

1. Comprehensive Symbol Libraries

AutoCAD® Electrical software ships with more than 2,000 standards-based schematic symbols. A simple, menu-driven system for inserting electrical, pneumatic, hydraulic, and piping and instrumentation diagram (P&ID) devices is provided, allowing you to quickly build standards-based controls designs by selecting commonly used devices from a menu. Symbol libraries include support for the AS, GB, IEC, JIC, and JIS standards. The comprehensive symbol library includes devices such as the following:

Electrical Symbols

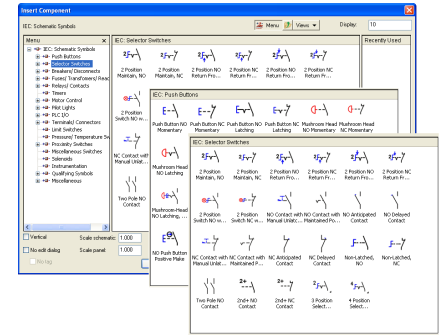
- Push buttons
- Selector switches
- Pilot lights
- Relays
- Contacts
- Fuses
- Terminals and more

Hydraulic and Pneumatic Symbols

- Valves
- Regulators
- Filters

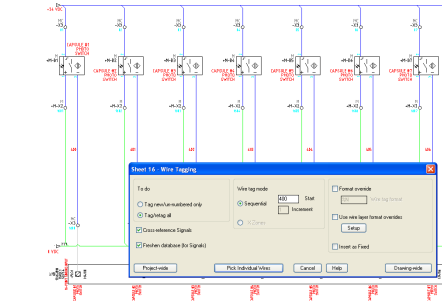
P&ID Symbols

- Tanks and vessels
- Valves
- Pumps
- Nozzles
- Flow arrows



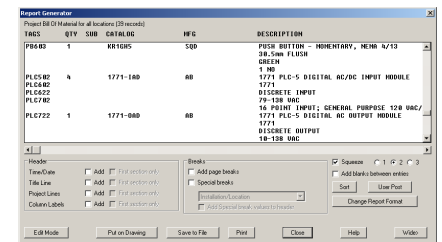
2. Automatic Wire Numbering and Component Tagging

Automatically assign unique wire numbers and component tags in your drawings and reduce the time you spend tracking design changes—resulting in fewer errors. AutoCAD Electrical automatically places sequential or reference-based numbers on all wires and components based on the chosen configuration. AutoCAD Electrical can determine if an inserted wire number will “bump” into anything and automatically searches laterally along the wire for a clear spot to place the wire number. If no clear spot is found, AutoCAD Electrical continues to search for a clear spot away from the wire and, when found, automatically draws a ladder back to the wire.



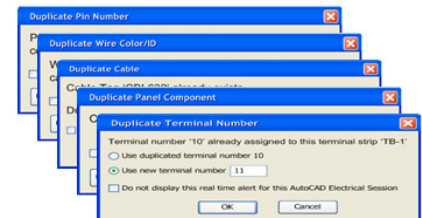
3. Automatic Project Reports

Drastically reduce time required to manually generate and update reports while removing associated errors. Report generation in AutoCAD Electrical is simple with automatic reports that cover everything from bills of materials (BOMs), cable lists, terminal reports, from/to wire lists, plus many more. The report function gives you the option of generating multiple reports with a single command and includes flexible export options.



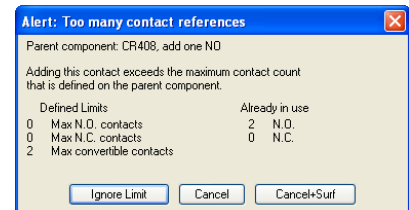
4. Real-Time Error Checking

Avoid costly errors before the build phase begins by catching and removing errors during design. AutoCAD Electrical monitors and alerts users to potential design errors as they occur by constantly comparing the requested changes with the current project.



5. Real-Time Coil and Contact Cross-Referencing

Reduce the risk of assigning too many contacts to any relay, and minimize time spent manually tracking assignments. AutoCAD Electrical sets up parent/child relationships between coils and contacts, keeping track of how many contacts are assigned to any coil or multicontact device, and alerting users when they have exceeded the limit.



6. Create Smart Panel Layout Drawings

Simplify panel layout drawing creation to reduce errors and help ensure that all parts are placed and that drawings are automatically updated. Once the schematic creation phase is complete, AutoCAD Electrical extracts a list of schematic components for placement into panel layout drawings. Users choose the panel location and a physical “footprint” representation of each device to be inserted into the layout, and a link is automatically created between the device and its representation. Any changes to the schematic or panel representation automatically update the other. Nonschematic items such as wire duct and mounting hardware can be added to the layout and automatically combined to create a “smart” panel BOM report.

7. Electrical-Specific Drafting Features

Slash design time by using commands designed specifically for electrical controls designers. AutoCAD Electrical includes drafting features developed specifically for creating electrical controls designs. Specialized features such as trim wire, copy and delete component or circuit, and scoot and align components make it much easier to create drawings quickly.

8. Automatically Create PLC I/O Drawings from Spreadsheets

Automatically create PLC I/O drawings from the design data stored in a spreadsheet. AutoCAD Electrical gives users the ability to generate a comprehensive set of PLC I/O drawings by simply defining the project’s I/O assignments in a spreadsheet. AutoCAD Electrical then automatically creates drawings, complete with ladders per the drawing configuration, I/O modules, addresses and description text, and component and terminal symbols connected to each I/O point. Once the drawings have been created, the I/O address and description report can be exported to the PLC program.

9. Share Drawings with Customers and Suppliers and Track Their Changes

Easily exchange data with customers or suppliers in native DWG format. Edit and view AutoCAD Electrical drawings in any DWG™-compatible program, such as AutoCAD or AutoCAD LT software. When designs are edited by outside sources, AutoCAD Electrical can create a report of any modifications made to the drawings by others. Also, when you are ready to issue a new revision to your design process, AutoCAD Electrical can create a report of changes made to the drawings since the last revision update.

10. Reuse Existing Drawings

Get a head start on your design projects by reusing drawings from another project. Make a copy of a specific part, or reuse an entire drawing set when starting a new design. Save commonly used circuits for reuse in future designs. AutoCAD Electrical automatically rennumbers the wires and devices to match the configuration of the current drawing or project in which they are placed. You can also reduce design time and errors by retagging all components in a project with a single command.

Now Is the Time

Interested in having more time for design and engineering? Then now is the time to take a look at AutoCAD Electrical. See why so many electrical controls engineers are using AutoCAD Electrical to automate the tedious task of creating ladder and point-to-point style drawings.

For more information about AutoCAD Electrical, visit

www.autodesk.com/autocadelectrical.

To locate the reseller nearest you, visit www.autodesk.com/reseller.

