Top 10 Reasons to Move from AutoCAD® to 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 enables you to quickly build standards-based controls designs by selecting frequently used devices from a menu. Symbol libraries include support for the AS, GB, IEC, JIC, JIS, NFPA and IEEE standards. The comprehensive symbol library includes devices such as the following:

Electrical Symbols

- Push buttons
- Selector switches .
- **Pilot lights**
- Relavs
- Contacts
- Fuses
- Terminals and more
- Hydraulic & Pneumatic Symbols Valves
 - Regulators

Filters

P&ID Symbols

- Nozzles
- Flow arrows
- Pictight 0 P ۶ X. Times Breaken/T. Terminals/ I.I. <u>1</u> PLC 10 OK Care



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	CR403	١		700-P201A1	AB	P TYPE ELECTRICALLY HELD TYPE P 128Noc
while re-	CR406	3		700-P200A1	AB	2 NO 115-120UAC 60Hz / 110UAC P TYPE ELECTRICALLY HELD
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rts, from/	Header Time/Dot			Add Pirst section or Add First section or		Breaks Add page breaks Special breaks

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File Print

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Adding this contact exceeds the ma				
that is defined on the parent compo	nent.			
Defined Limits	Already in use			
0 Max N.O. contacts	2 N.O.			
0 Max N.C. contacts	0 N.C.			
0 Max N.C. contacts 0 N.C. 2 Max convertible contacts				
	Cancel Cancel+Surf			



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 for a clear spot to place the wire number.

3. Automatic Project Reports

Drastically reduce the time required to manually generate and update reports, moving associated errors. Report generation in AutoCAD Electrical is simple with of automatic reports, including bills of materials (BOMs), cable lists, terminal repor to wire lists, and 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 multi-contact device, and alerting users when they have exceeded the limit. Cross reference locations are added automatically to both parent and child components as they are inserted.

- Valves .
 - Pumps

Tanks and vessels



6. Create Smart Panel Layout Drawings

Easily create panel layout drawings and help reduce errors with automatic tracking and updating of all part placements. 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. Non-schematic 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 purpose-built for electrical controls designers. Auto-CAD Electrical includes all the functionality of AutoCAD plus a comprehensive set of functions developed specifically for designing electrical control systems. 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. AutoCAD Electrical offers productivity gains of up to 80 percent over AutoCAD.*

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 Auto-CAD 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 frequently used circuits for reuse in future designs. AutoCAD Electrical automatically renumbers 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

Want to increase your productivity by up to 80 percent?* Then now is the time to move to AutoCAD Electrical.

* The AutoCAD Electrical Productivity Study compares the time required to complete 10 tasks in both basic AutoCAD and AutoCAD Electrical. The conclusion: switching to AutoCAD Electrical may help increase your productivity by as much as 80 percent. To learn more, visit www.autodesk.com/autocadelectrical-whitepapers.

For more information about AutoCAD Electrical, visit www.autodesk.com/autocadelectrical. To locate the reseller nearest you, visit www.autodesk.com/reseller.

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Copy Project: Step 4 Enter Base Path for Project Drawings	×				
C:(Users) Desktop(ACADE)ACADE Demo(New folder)					
	Browse				
The base path above will be substituted for this path in the existing project c/users/ \desktop(acade)acade demo\					
Copies of the chawings will be copied to this new path. If the directory path does not exist, it will be created.					
Select Project-Related Files to be Copied					
Title Block Setup (wdt)	Location Codes (Joc)				
Project Line Labels (wdl)	Installation Codes (inst)				
Component Description Defaults (wdd)	Ratings Defaults (wdr)				
Catalog Lookup Database (cat.mdb)	Component Tagging (wcb)				
Footprint Lookup Database (lookup mdb)	Spreadsheet PLC UO Utility Settings (wd)				
Family Code Mapping (wd_fam.dat)	RSLogix Import Mapping (wdf)				
Wire Color/Gauge Label (wdw)	User Defined Attributes (wda)				
Schematic Lookup Database (schematic_lookup.mdb)	Terminal Audit Filter (wdr)				
OK	Cancel				

