

# The AutoCAD® Electrical Advantage

To succeed in today's global marketplace, electrical controls designers can no longer afford to rely on generic software applications to get the job done. AutoCAD<sup>®</sup> Electrical software delivers the tools to help design control systems quickly and accurately with significant cost savings.

### Facing these issues?

- Creating electrical controls designs with generic software is limiting your productivity.
- Errors are reaching the shop floor and causing delivery delays.
- Components are not being ordered because of inaccurate bills of materials (BOMs).
- Manually adding electrical controls information into 2D or 3D mechanical designs is tedious.
- Sharing designs with downstream users is error-prone and difficult.
- Designers are spending too much time manually generating reports.
- Use of design standards is inconsistent.
- Designers are unable to easily find and reuse designs.

Discover why so many electrical controls designers are using AutoCAD<sup>®</sup> Electrical.



Image courtesy of Amerimax Home Products, Inc.

### The Logical Choice for Electrical Controls Design

AutoCAD<sup>®</sup> Electrical is AutoCAD<sup>®</sup> software for controls designers, purpose-built to create and modify electrical control systems. Automated tasks and comprehensive symbol libraries help to increase productivity, reduce errors, and provide accurate information to manufacturing.

Stay ahead of the competition with AutoCAD Electrical software, which offers significant productivity gains over AutoCAD software by automating many of the complex tasks associated with creating accurate, industry-standard electrical control systems.

### **Increase Productivity**

When engineers create electrical control systems using software not specifically built for electrical design tasks, they must often find manual workarounds to get the job done—wasting valuable design time and limiting productivity. Since AutoCAD Electrical software is AutoCAD for controls designers, it contains many features and benefits that enable users to dramatically increase design efficiency, while maintaining a smooth integration with the familiar AutoCAD environment. A recent study shows up to an 80 percent increase in productivity when moving to AutoCAD Electrical from AutoCAD.\* AutoCAD Electrical helps manufacturers get their products to market faster with lower costs.

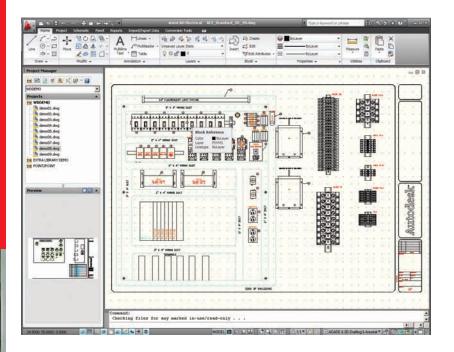
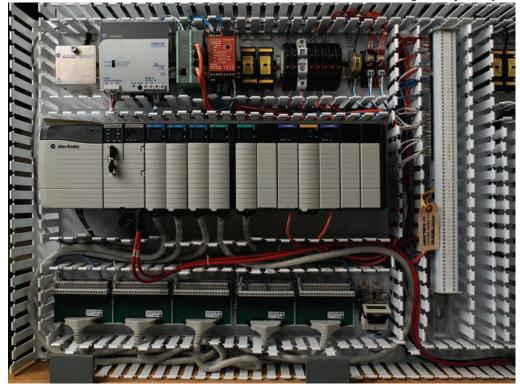


Image courtesy of R.A. Jones



### Reduce Errors and Comply with Industry Standards

As engineers create electrical controls designs using generic tools, it is easy to introduce errors and design inconsistencies. The ability to virtually eliminate errors before they reach the shop floor can provide a distinct competitive advantage. AutoCAD Electrical includes automatic error-checking capabilities that help designers perform real-time diagnostics to catch problems before the build phase of a project. In addition to reducing errors, AutoCAD Electrical helps companies compete in the global marketplace by offering support for regional and international standards. With more than 350,000 components from the industry's most popular vendors-including more than 3,000 intelligent PLC I/O modules-AutoCAD Electrical provides a comprehensive library of manufacturer content, enabling users to produce consistent, standards-based designs.

### Manage Design Data

Once the design is complete, it is important to share accurate design and part information with manufacturing. Creating crucial parts lists, BOMs, and from/to wire lists using software that is not built specifically for these tasks can waste valuable time and resources. AutoCAD Electrical includes robust automated reporting tools so the design data being shared with downstream users is correct and current. In addition, AutoCAD Electrical is tightly integrated with Autodesk Data Management applications, which enables the efficient and secure exchange of design data and promotes earlier collaboration between design and manufacturing workgroups.

### **Facilitate Collaboration**

AutoCAD Electrical enables both electrical and mechanical teams to work collaboratively by making it easy to share the electrical design intent for cables and conductors directly with team members using Autodesk<sup>®</sup> Inventor<sup>®</sup> software, adding valuable electrical controls design data to the digital prototype. Users can also publish DWF<sup>™</sup> files directly from AutoCAD Electrical and securely collaborate on 2D and 3D designs with customers, suppliers, and others outside the group. Different workgroups can manage and track all components of a digital prototype with the free<sup>†</sup> Autodesk<sup>®</sup> Design Review software—the all-digital way to review, measure, mark up, and track changes to designs-enabling better reuse of critical design data, management of BOMs, and collaboration with other teams and partners.

### Now Is the Time

Want to get unparalleled productivity from your controls design process? Then now is the time to move to AutoCAD Electrical and get wired today.

### Top 10 Reasons to Move from AutoCAD to AutoCAD Electrical

- 1. Comprehensive symbol libraries
- 2. Automatic wire numbering and component tagging
- 3. Automatic project reports
- 4. Real-time error checking
- 5. Real-time coil and contact cross-referencing
- 6. Smart panel layout drawings
- Electrical-specific drafting features
- Ability to automatically create PLC I/O drawings from spreadsheets
- Ability to share drawings with customers and suppliers and track their changes
- 10. Reuse existing drawings

For more details, visit **www.autodesk.com/** autocadelectrical-productivity.

# Digital Prototyping for the Manufacturing Market

Autodesk is a world-leading supplier of engineering software, providing companies with tools that help them experience their ideas before they are real. By putting powerful Digital Prototyping technology within the reach of mainstream manufacturers, Autodesk is changing the way manufacturers think about their design processes and is helping them create more productive workflows. The Autodesk approach to Digital Prototyping is unique in that it is scalable, attainable, and cost-effective, which allows a broader group of manufacturers to realize the benefits with minimal disruption to existing workflows, and provides the most straightforward path to creating and maintaining a single digital model in a multidisciplinary engineering environment.

#### Learn More or Purchase

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\* 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 can help increase your productivity by as much as 80 percent. To learn more, visit **www.autodesk.com/autocadelectrical-whitepapers**.

<sup>†</sup> Free products are subject to the terms and conditions of the end-user license agreement that accompanies download of the software.

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