SolidWorks Electrical 2D Schematics

	Feature	SOLIDWORKS Electrical Schematics Standard	SOLIDWORKS Electrical Schematics Professional
1	**Single-line Schematics** Electrical system planning tool for creating complex embedded electrical system utilizing simple pictorial representations of electrical components and interconnectors.	✓	✓
2	**Multi-line Schematics** Schematic creation tool with a simplified user interface optimized for simplification of repetitive tasks.	✓	✓
3	**Mixed Schematic** Combine both single-line and multiline drawings on the same schematic, while maintaining associativity.	✓	✓
4	**2D Cabinet Creation** Generate 2D panel representations from an electrical schematic, with 2D outlines of electrical components.	✓	✓
5	**Electrical Component and Symbol Library** Extensive library of industry-standard schematic symbols (IEC, ANSI, JIS, GB) combined with a database of manufacturer parts to provide an easily customizable and adaptable parts database through easy-to-use import tools.	✓	✓
6	**Design and Reuse** Suite of integrated tools for intelligent cut and paste, an easy-to-access selection of "favorite" components and circuit design elements, and the ability to reuse non-SOLIDWORKS Electrical design elements though easy-to-use import wizards.	✓	✓
7	**Automated Terminal Drawing Creation** Automatically generate terminal drawings based on and synchronized with the real-time design.	✓	✓
8	**Automated Contact Cross-Referencing** Electrical contacts are automatically cross-referenced in real time and synchronized based on availability and type of contacts from manufacturer-specific components.	✓	✓
9	**Advanced Formula Manager** From wire naming to project name formulas, SOLIDWORKS Electrical includes enhanced formula capabilities.	✓	✓

#	Feature		
10	**SOLIDWORKS Electrical Content Portal**	✓	✓
	Web-based content portal providing access to an extensive library of industry-standard schematic symbols and a database of manufacturer parts.		
11	**Enhanced SOLIDWORKS PDM Connector**	✓	✓
	Enhanced PDM interface providing electrical and mechanical data management in one system based on proven SOLIDWORKS PDM capabilities.		
12	**Report Generation**	✓	✓
	Automatically generate reports based on real-time design database queries, with custom reports possible via integrated custom report creation tools.		
13	**Report Generation - Customized**		✓
	Customize the look and content of your reports. Use the integrated SQL editor to display any data from your designs including writing custom Design Rule Checks.		
14	**Link to SOLIDWORKS 3D CAD**		✓
	SOLIDWORKS Electrical Schematics linked to 3D SOLIDWORKS assemblies, facilitating verification of proper fit, planning of all wire, cable, harness routes, and calculation of all wire lengths prior to any assembly.		
15	**Common ECAD and MCAD Database**		✓
	SOLIDWORKS Electrical Schematics are bi-directionally linked and allow multi-user interaction in real time. ECAD and MCAD share a common database, ensuring consistency and facilitating creation of a single, unified BOM.		
16	**PLC Tools**		✓
	The Programmable Logic Controller (PLC) management tools automate many PLC wiring design tasks, along with the ability to import PLC data and labels.		
17	**Dynamic Connector Tools**		✓
	Powerful, easy-to-use connector wizard helps simplify the creation, design, and use of electrical connectors.		
18	**Real-time Collaboration**		✓
	Synchronized, bi-directional environment enables multiple users to work on the same project simultaneously in real time for easier project collaboration.		

19	**Real-time Synchronization** SOLIDWORKS Electrical synchronizes all project design data in real time, bi-directionally in a multi-user collaborative environment between 2D schematics and the 3D model. This synchronization unifies key information (such as Bill of Materials (BOM) and design data) between design disciplines and users.		✓
20	**Deferred Update Mode** Enhances schematic performance by minimizing network traffic and deferring real-time project updates. This technology provides a performance boost for large projects and users who work remotely.		✓
21	**Custom Part Library Classification** Create new folders with custom titles to tailor the parts library.		✓
22	**Excel Automation** Enhanced support of index and passive symbols.		✓
23	**User Rights Management** Enable different levels of access control to various functionality.		✓