

# Panel Layout and Wiring

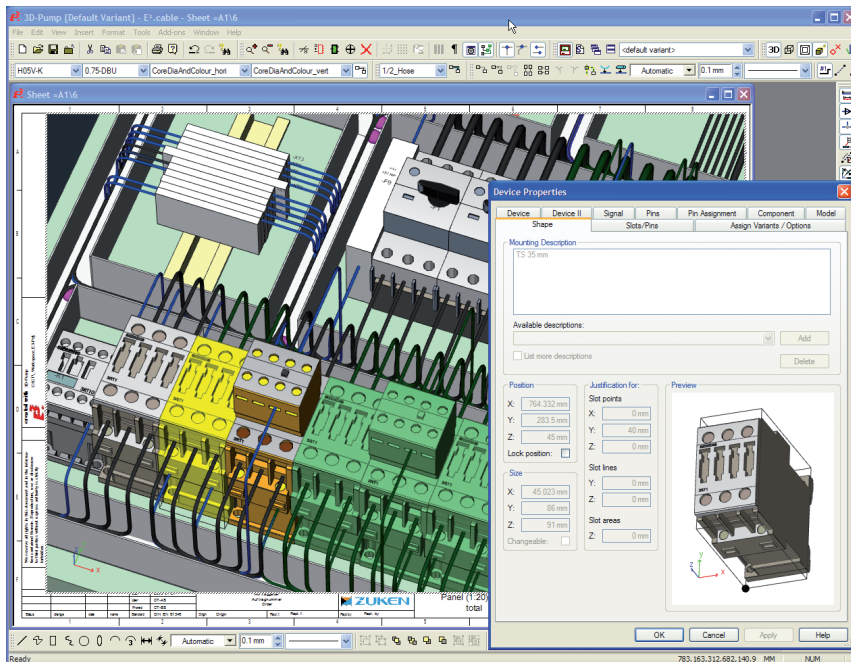
## E<sup>3</sup>.panel

D A T A S H E E T

### Introduction

E<sup>3</sup>.panel is fully integrated in E<sup>3</sup>.schematic and E<sup>3</sup>.cable and the complete solution for placing and wiring components in panels and on mounting plates alternatively in 2D and 3D.

E<sup>3</sup>.panel contains all information about the schematic data and as a result of the object-oriented data structure the modifications can be implemented immediately. Modifications to the panel layout and wiring are automatically updated in the schematic. The optional routing module calculates all routing pathways and wire lengths automatically. In doing so, these specifications are considered using signal classes. E<sup>3</sup>.panel outputs wiring lists with the exact routing pathways and wire lengths as well as additional attributes necessary for production.



3D Panel View with STEP Model

## The E<sup>3</sup>.series Standard

- Completely integrated in Windows® environment
- User-interface in numerous languages; easy to switch
- Supports all Windows® fonts using UNICODE
- Configurable user interface and toolbars
- Object-oriented user interface with possibility to directly integrate in other applications
- Display drawings using different norms (DIN, ANSI, JIC)
- Supports any sheet format, e.g. DIN, Ladder, special formats
- Translate texts into any language
- Search mechanisms for symbols, devices, connections, texts and attributes...
- Context-sensitive Online Help
- 256 object-related display levels
- Print and plot using all Windows® standard drivers
- Supports standard formats like STEP, DXF/DWG, SVG, PDF, pixel graphics
- Bidirectional API (COM/DCOM Standard)
- Integrated database editor
- Compatible with all previous E<sup>3</sup>.series versions

## The E<sup>3</sup>.series Base Functionality

- Automatic and parallel connections
- Drag & Drop
- Dynamic zooming and panning
- Save, load, copy, rotate and mirror drawings and areas
- Extensive functionality for exchanging symbols and components
- User-defined connection attributes
- User-defined grid sizes, fonts and line types
- Online cross-references for connections and devices
- Object and text hyperlinks also within E<sup>3</sup>.series projects
- Continuous verification of adherence to manufacturing specifications, such as multiple assignment of symbols and overcrowding of components
- Supports variants and options, Boolean operators and alias names

## Special Functionality in E<sup>3</sup>.panel

- One-of-a-kind, integrated 3D design environment
- Optionally work in 2D or 3D, switch by pressing a button
- Automatic transformation in 2D
- Import optimized STEP models into model library
- Panel layout design
- Define mounting rails and cable ducts
- Semi-automatic and automatic placement
- Specify signal class for controlling the routing
- Manual and (optional) automatic routing
- Connections through jumpers
- Scalable sheets
- Detailed representation on additional sheets
- Export projects using STEP AP203/AP214
- Export wire/cable lengths also to CNC machines (optional)
- Export milling and drilling data (optional)

## Additional E<sup>3</sup>.series Modules

### E<sup>3</sup>.view

E<sup>3</sup>.view is the free-of-charge viewer for all E<sup>3</sup>.series projects (.e3s) and special viewer files (.e3v). It can be used by anyone within a company or passed on to suppliers and customers.

### E<sup>3</sup>.schematic

E<sup>3</sup>.schematic – the E<sup>3</sup>.series base module. Easy to use and operate. Complete functionality for the electrical design, inline terminals and connection plan.

### E<sup>3</sup>.fluid

E<sup>3</sup>.fluid – the integrated design system for hydraulics, pneumatics, cooling and lubrication. Special functionality supports the development of fluidics also in connection with electrical design.

### E<sup>3</sup>.cable

E<sup>3</sup>.cable offers enhanced functionality for designing cables and cable harnesses. Different views of the design enable specific documents to be created for production, start up and service.

### E<sup>3</sup>.formboard

E<sup>3</sup>.formboard – the module used to create 1:1 nailboard drawings for manufacturing cable harnesses. Quickly and easily place views, define the cable harness structure as well as specify the mounting and cable protection.