Using AutoCAD Electrical For More Than Just Schematics

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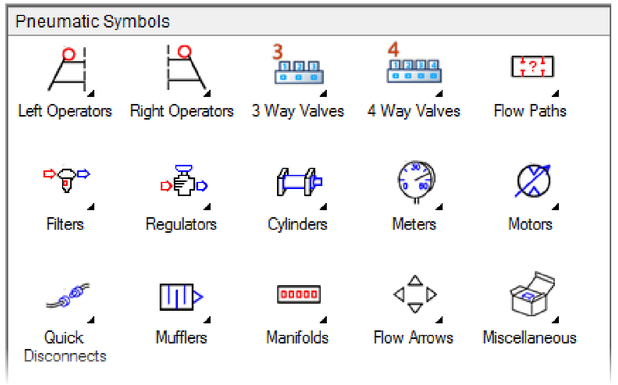
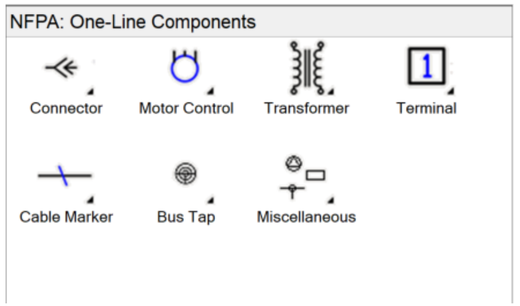
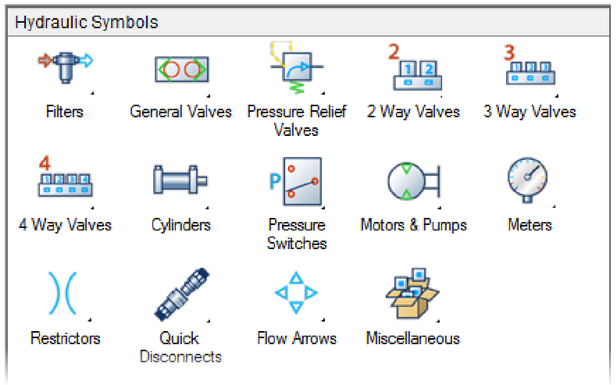
AUTODESK. UNIVERSITY

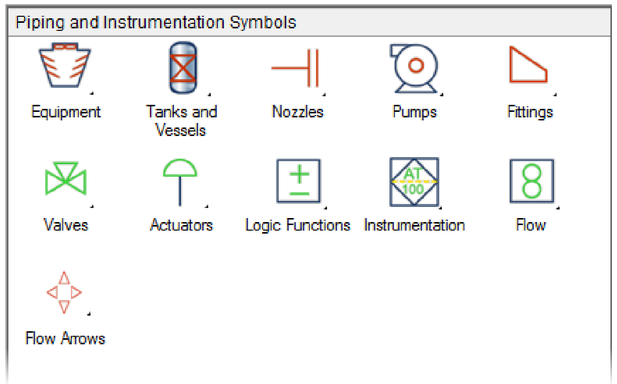
Agenda

- Introduction
- What are Peer Components?
- One-line Symbols
- Library Access
- WDType attribute
- WDTAGALT attribute
- Linking Peer Components
- Create Custom Categories









About me (technical)

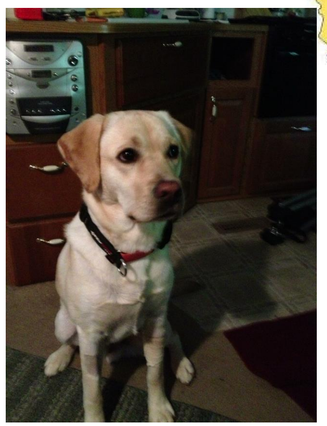
- 11 years owner of Brunette Technologies, LLC

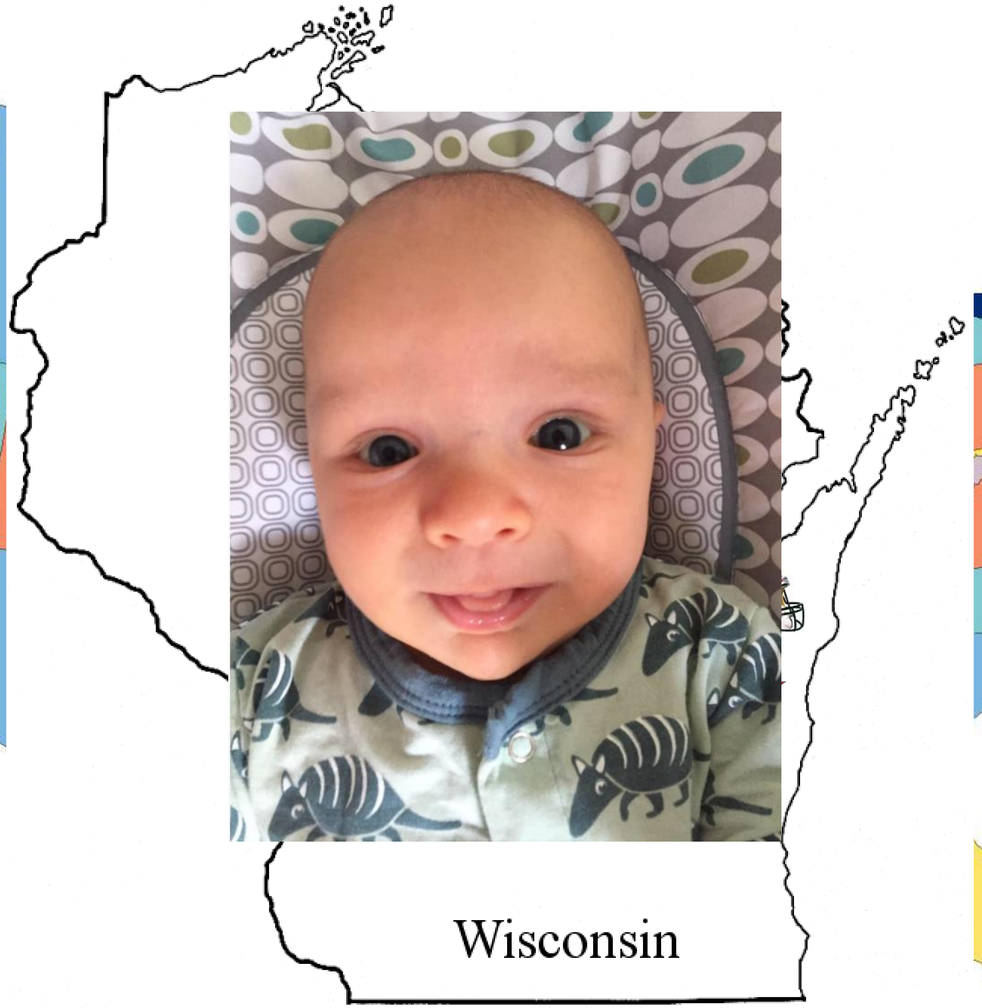
  As of 8 days ago, now with Spatial Business Systems, Inc.
- 34 years in industry as worker and designer
- AutoCAD since 1984
- AutoCAD Electrical since 1996
- 23 years as Application Engineer
- 12+ years authoring AutoCAD

Electrical materials, including AOTC

About Me… (personal)

- Hometown – Chilton, Wisconsin, USA
- Married, two daughters, two son-in-laws, one grand child, and a dog



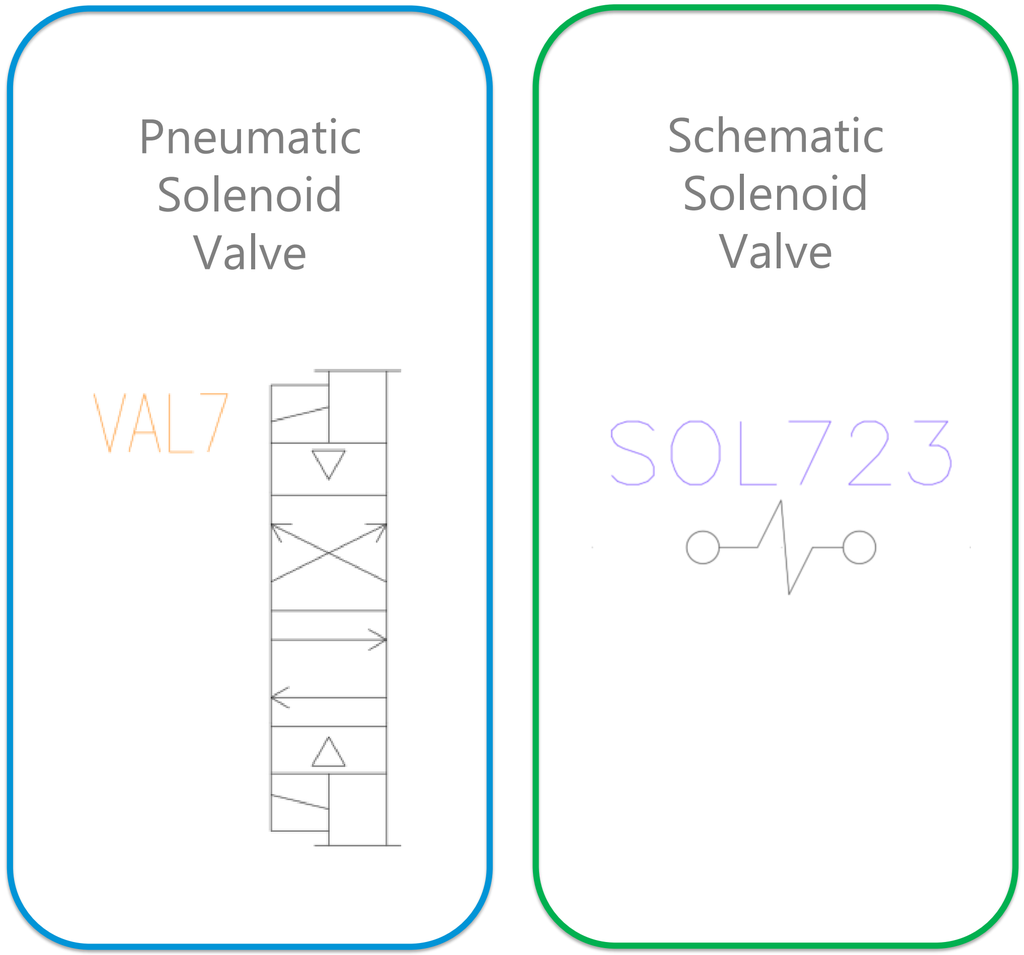


Fly Radio Control Aircraft

First rule of flying:
Takeoffs are optional,
Landings are mandatory.

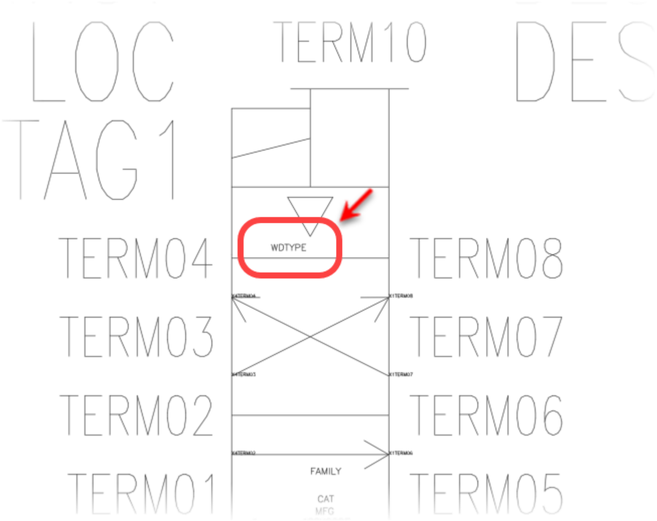
What Are Peer Components?

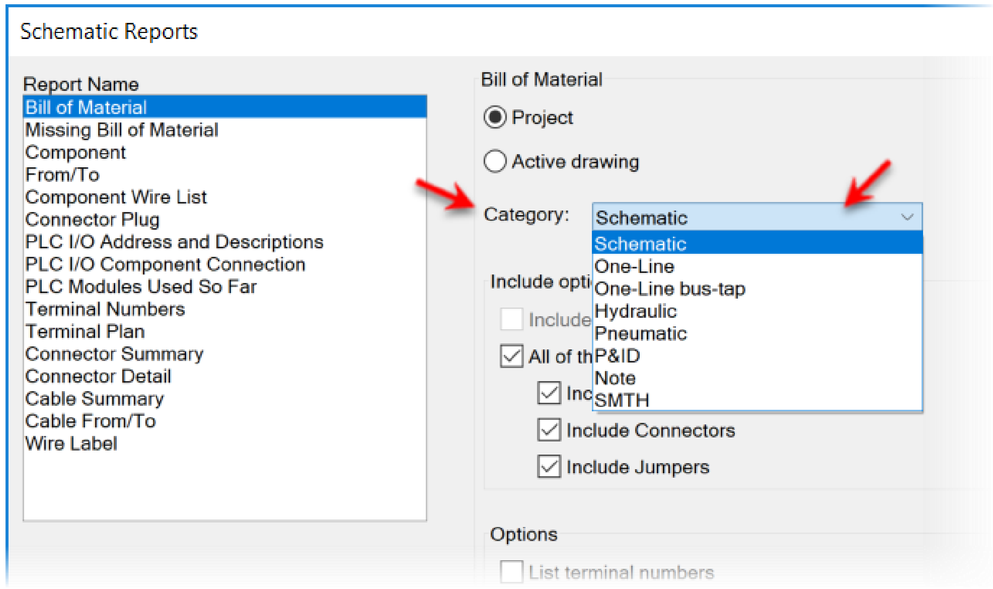
- The same components displayed in a different representation on a different style drawing
- Matching components on the same level or hierarchy
  - NOT a parent/child type relationship
  - Similar to Schematic and Panel relationship which links TAG1 and P_TAG1 attributes
  - Peers are linked using WDTYPE and WDTAGALT attributes
- Symbol Styles include:
  - One-line (but still electrical)
  - Pneumatic, Hydraulic, P&ID
  - Anything else you can think of…



WDTYPE Attribute

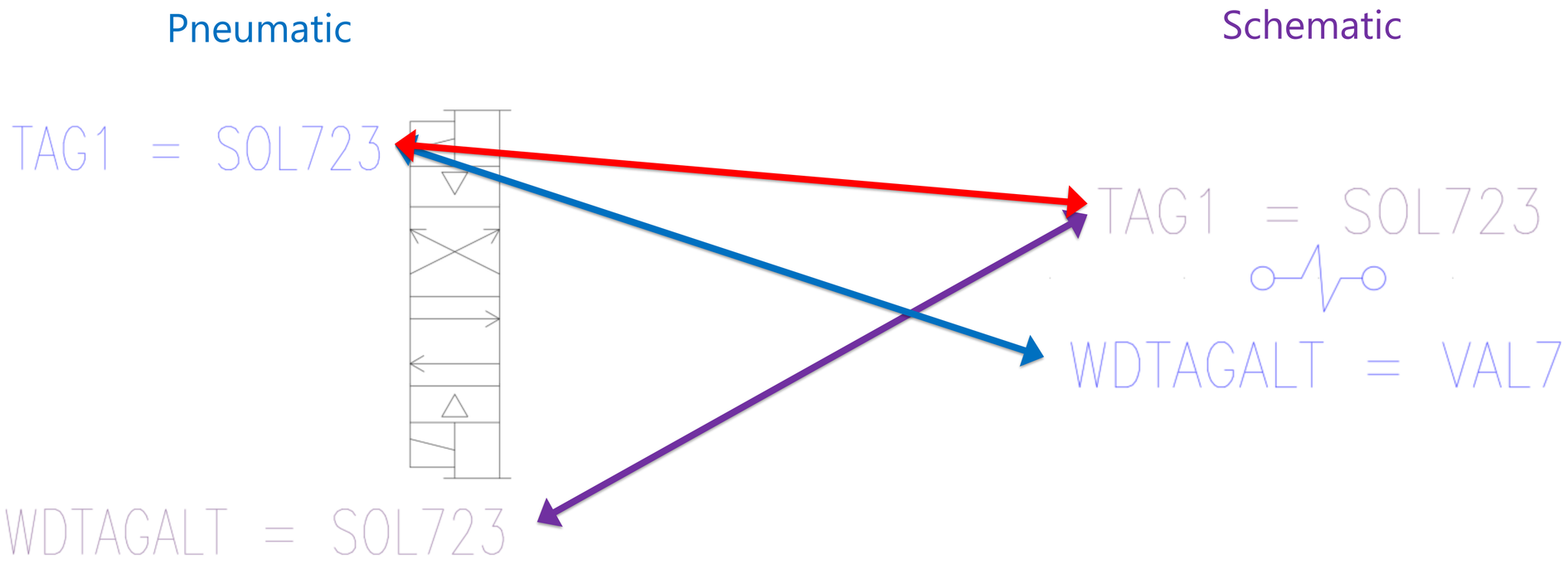
- WDTYPE identifies the style or category of the symbol
- Already inserted on the included peer symbols
  - PN = Pneumatic
  - HY = Hydraulic
  - PI = P&ID
  - 1- = One-line
- If symbol carries TAG1, and WDTYPE is missing or blank, *Schematic* type is assumed

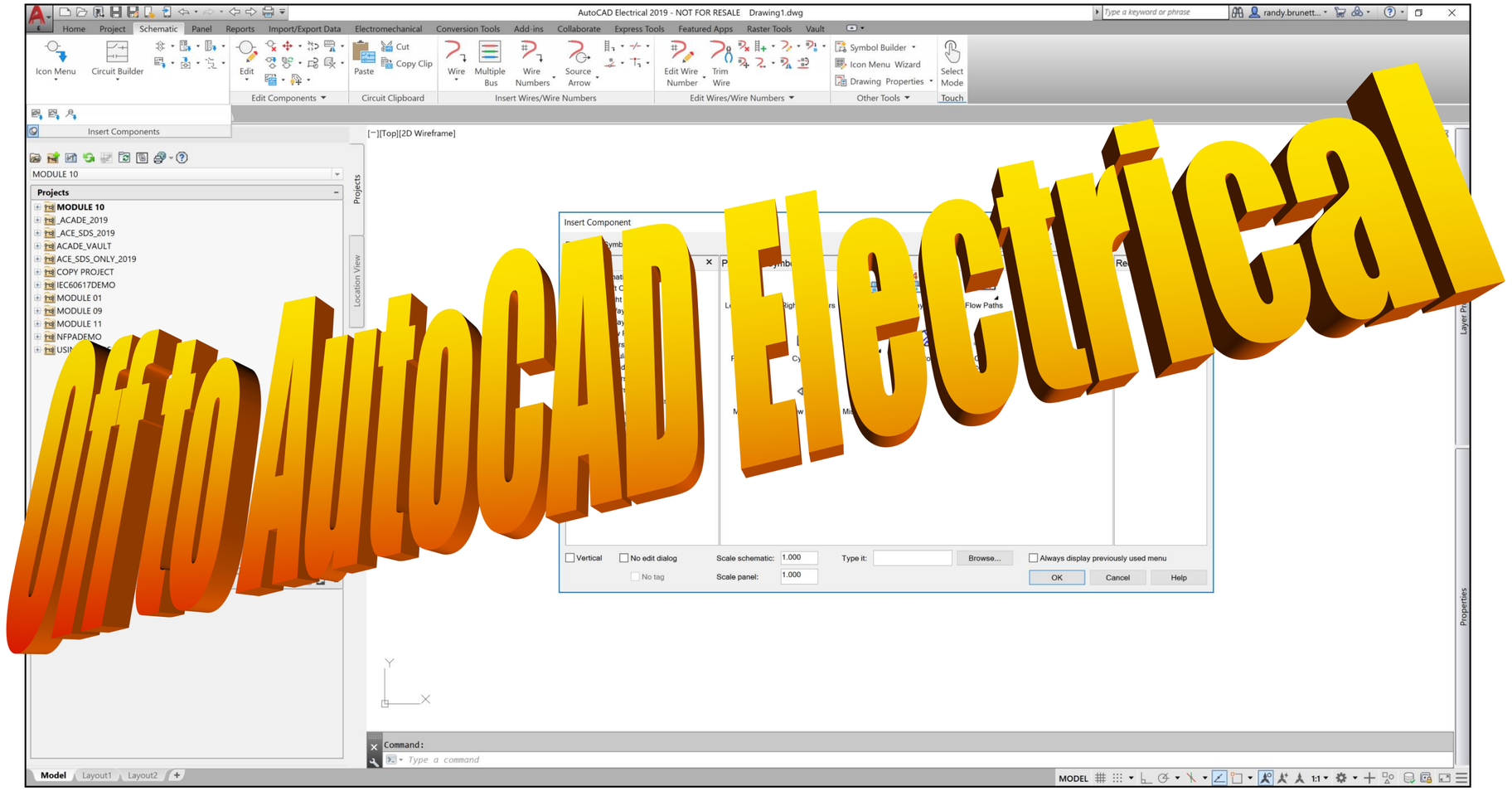




WDTAGALT Attributes

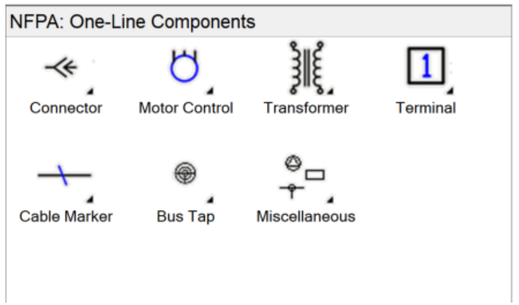
- Two methods to link peer components,
  - TAG1 – When both components will have matching tags values, only TAG1 is used
  - WDTAGALT – When components need different tag values, WDTAGALT is used
    - Using WDTAGALT links to the matching peer TAG1 value

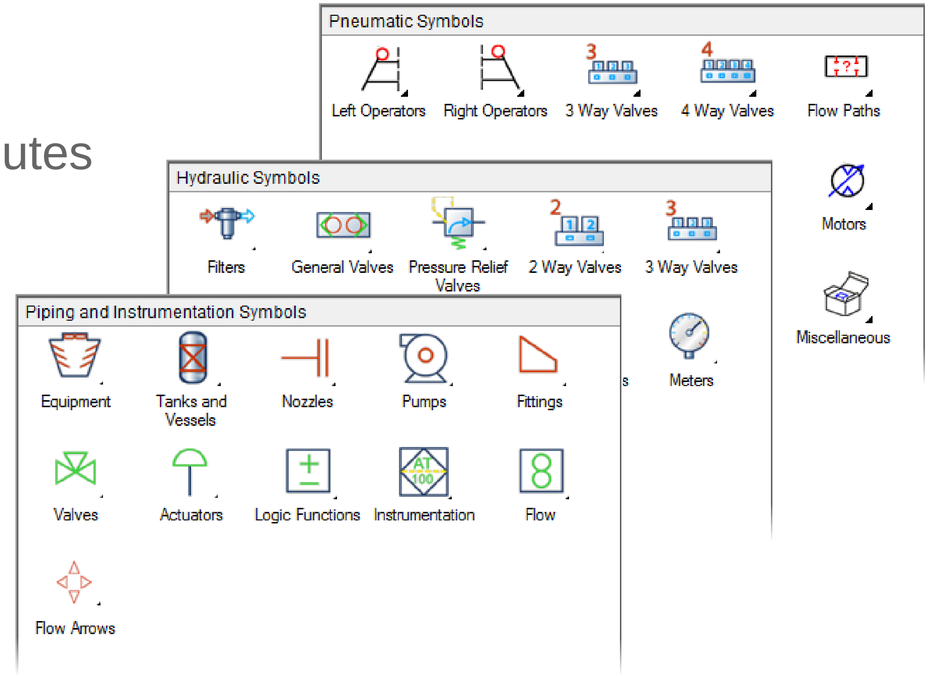



AutoCAD Electrical 2019 - NOT FOR RESALE Drawing1.dwg
Home Project Schematic Panel Reports Import/Export Data Electromechanical Conversion Tools Add-ins Collaborate Express Tools Featured Apps Raster Tools Vault
Icon Menu
Circuit Builder
Edit
Paste
Cut
Copy Clip
Wire
Multiple Bus
Wire Numbers
Source Arrow
Edit Wire Number
Trim Wire
Symbol Builder
Icon Menu Wizard
Drawing Properties
Select Mode
Edit Components
Circuit Clipboard
Insert Wires/Wire Numbers
Edit Wires/Wire Numbers
Other Tools
Touch
Insert Components
[−][Top][2D Wireframe]
MODULE 10
Projects
MODULE 10
_ACADE_2019
_ACE_SDS_2019
ACADE_VAULT
ACE_SDS_ONLY_2019
COPY PROJECT
IEC60617DEMO
MODULE 01
MODULE 09
MODULE 11
NFPADEMO
Location View
Insert Component
Flow Paths
Vertical
No edit dialog
No tag
Scale schematic: 1.000
Scale panel: 1.000
Type it:
Browse...
Always display previously used menu
OK
Cancel
Help
Command:
Type a command
Model
Layout1
Layout2
MODEL
Properties
Off to AutoCAD Electrical

Summary

- Described Peer Components, including One-line Symbols
- Showed how to access the symbol libraries
- Explained the WDTYPE and WDTAGALT attributes
- Linked Peer Components using TAG1 and WDTAGALT attributes
- Created new category types





Any questions?

Please, please, please
fill out class evaluations.

Remember,
the correct
answer is...

Randy Brunette IM225070

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