

Creating 4-Pole Devices

AutoCAD Electrical 2016

Whilst AutoCAD Electrical has a very comprehensive symbol library, it doesn't have a 4 pole isolator defined in the library or a 3-pole isolator plus neutral as some examples of 4-pole devices.

These could be made up of a 3 pole and an extra contact or neutral link but this means that each time you want to use this type of device you would have to place the extra symbol down.

Any combination of symbols can be created as a multi-pole device.

The command syntax for this function is the following. This can be found in the AutoCAD Electrical API help. (*c:ace_multipole symname polecnt xy options*)

The symbol for a 4 pole isolator is made up of two devices: a parent and a child

HDS11 = parent device; HDS21 = child device

Therefore the command syntax in this instance would be:

Command / Symbols used / No.poles / Insertion point /Options

(c:ace_multipole (LIST "HDS11" "HDS21" "HDS21" "HDS21") 4 NIL 8+16)

Options

- bit 1 set means suppress edit dlg after insert (edits first component inserted)
- bit 2 set means force default to start with "H" symbol orientation (horiz wire insert)
- bit 4 set means force default to start with "V" symbol orientation (vertical wire insert)
- bit 2+4 blank = no forced default
- bit 8 set means force build vertical wire insertion to the LEFT or horizontal wire insertion UP
- bit 16 set means force build vertical wire insertion to the RIGHT or horizontal wire insertion DOWN
- bit 8+16 blank means prompt user for direction
- bit 64 suppress any prompt for user pick on child wire (if wire not found)
- bit 128 set means that all LINES are viewed as valid wires and can be connected to, even if not on a wire layer (used by CIRC BLDR utility)

Select  Icon Menu Wizard

Ensure that you have chosen the correct menu.dat file (ace_iec_menu.dat = IEC)

Select

Double click on *Breakers/Disconnects*

Double click on *Disconnect 3 Poles*

Screen capture the image of the Disconnect 3 Pole (e.g. Function > PrtScr (print screen)) and paste into Microsoft Paint or similar



Copy the last pole and paste so that a new image is created



Save As the file as *4PISOL.PNG* to your desktop

Add a small black triangle at the corner of the symbol



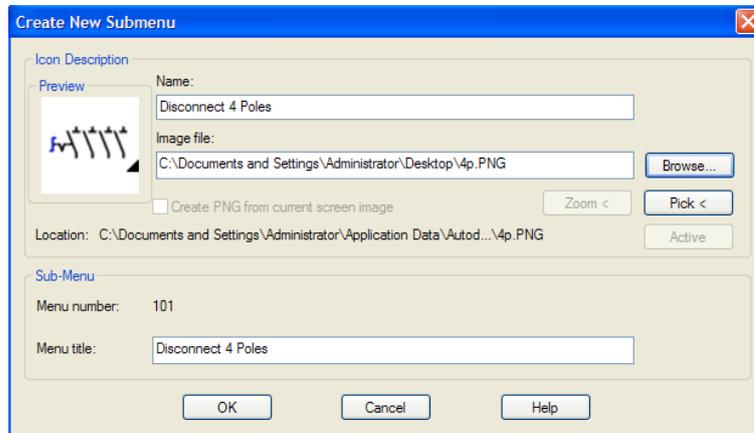
Save As the file as *4P.PNG* to your desktop

In the icon menu wizard, double click on *Breakers/Disconnects*

Select > *New Submenu*

Enter a name and browse to the desktop for the *4P.PNG* file

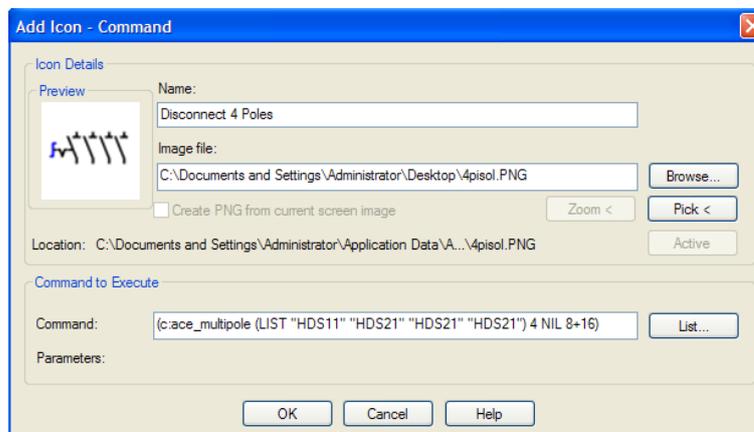




Select 

Double click on *Disconnect 4 Poles*

Select  ↓ > *Command*



Enter a name, browse to the desktop for the *4PISOL.PNG* file and type the command syntax defined earlier.

Select  until the command is completed

Additional Tags: *isolator, disconnect, neutral, earth, four, phase, multiple, multi*