

Defining Electrical Intelligence to a 3D Part

Inventor / AutoCAD Electrical

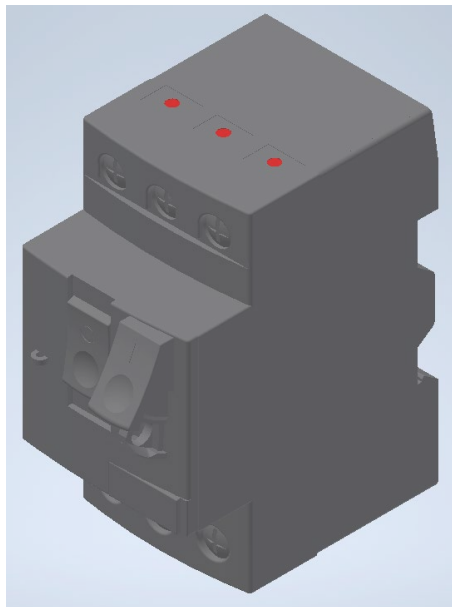
The following shows you how to correctly define electrical intelligence to a 3D Inventor part.

You can download the example 3D model directly from the [TraceParts](#) website.

The part should be placed in one of your IPJ library paths e.g.

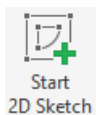
C:\Users\Public\Documents\Autodesk\Inventor Electrical Library 2021

Using Autodesk Inventor, open the file *GV2ME20.ipt*




A sketch point should be defined for each terminal or cable connection point required.

Select the *Sketch* ribbon tab.

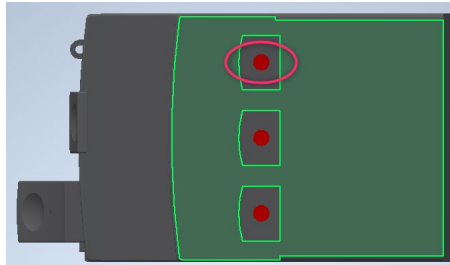


Select

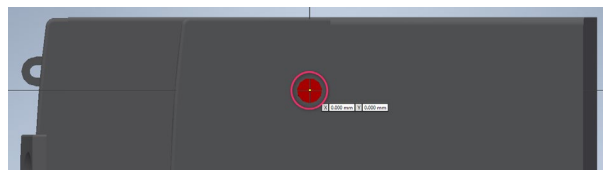


Select  Point

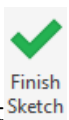
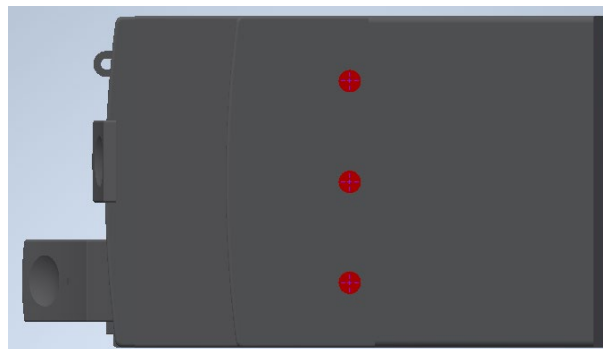
Select the plane to create the sketch on:




Define each centre point for the connections.



An example of how the connection points are defined is as follows:



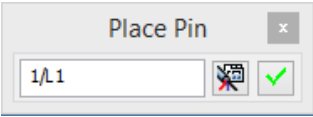

Select

Select the *3D Model* ribbon > *Harness* panel >  Pin

(you may have *right-click* over and existing panel > *Show Panels* > ✓ *Harness*)

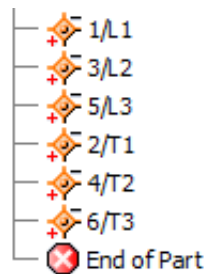
Select each sketch work point in turn.

A GV2ME20 has connection points numbered 1/L1, 3/L2, 5/L3 numbered across the top and 2/T1, 4/T4 and 6/T6 numbered across the bottom.

Enter the terminal designation value  and select 

Repeat for the remaining pins.

If defined correctly the pins will appear in the Model Browser side panel:



The pins must match the value of the terminal designation in the electrical part.

iMates could also be utilised so that the components automatically connect to din rail.

