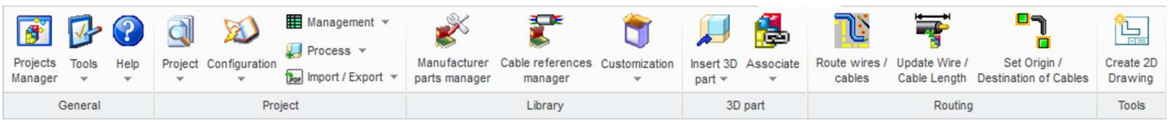
elecworks™ Tips & Tricks

Inserting Parts Into The 3D PTC Creo Assembly Prior To The Schematic

Components can be inserted at any stage throughout a project whether in the single line diagram, cable block, topology, system architecture, schematic, 2D panel layout or in this instance the 3D assembly within PTC Creo. Within PTC Creo, this can either be from the elecworks integration or simply by inserting a part through the standard PTC Creo functionality and then subsequently associating it to an elecworks components retrospectively.

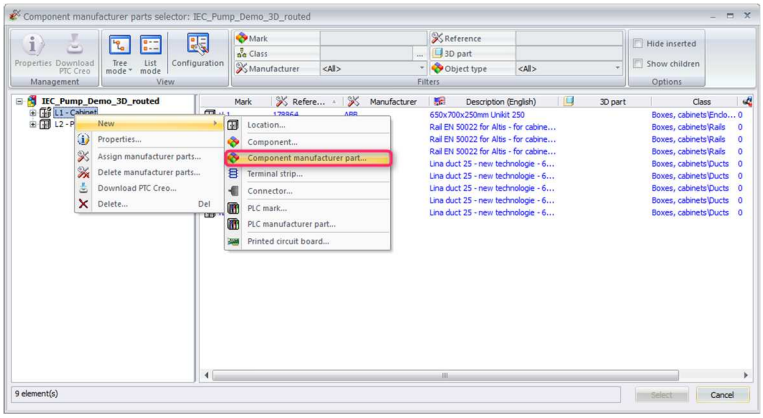
Select the elecworks™ ribbon



Select 

> 

Right click over the *Location* you wish to add the electrical part > *New* > 



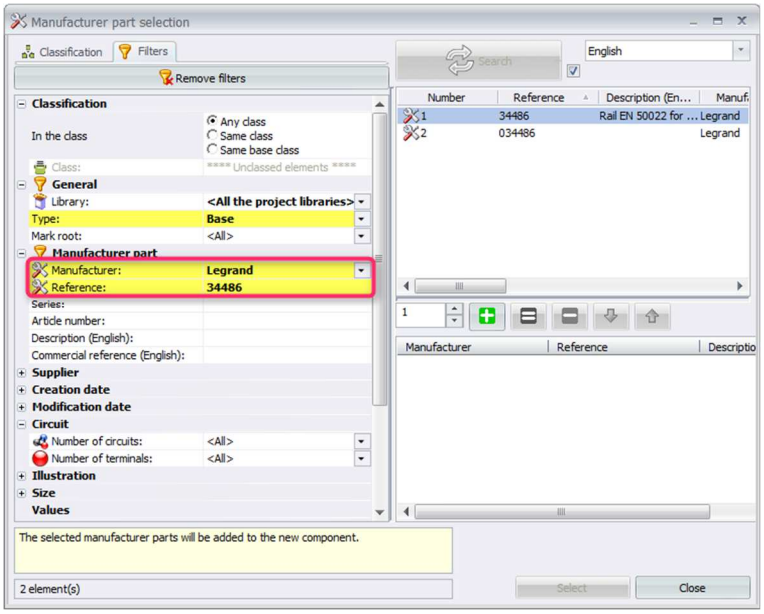
This inserts a component that will be inserted into the schematic and allows the user to define the type of component (classification), the component tag and the manufacturer and reference details

This inserts a manufacturer and reference into the list of parts. The classification is automatically picked up from the part reference information and the component tag is automatically defined without user input

In this example, we are going to insert a piece of DIN rail so that you know how to change the length information. This is also useful for ducting / trunking.

Other types of parts such as door mount, back plate and DIN rail mounted components should ideally have their mating faces defined. Please refer to:

[Defining A Mating Surface Face For A PTC Creo Part]

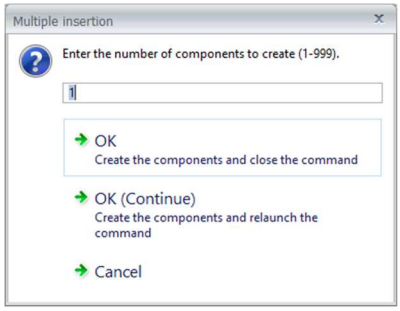


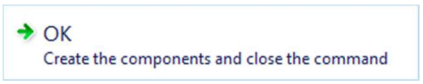
Manufacturer: Legrand
Reference: 34886

Double click on the part & select 

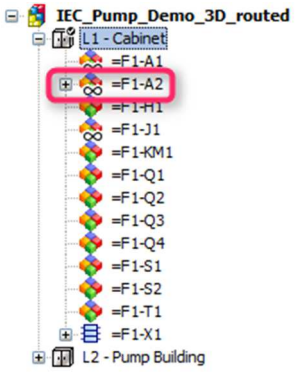
Select 

You can define how many [parts you would like to add

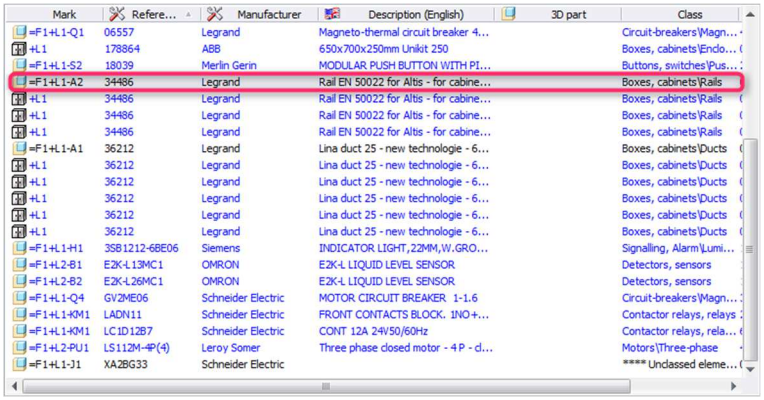


Select 

The part will be added to the Component tree. The icon for a symbol inserted in the assembly and not in the schematic is different 



The new part will be shown in black

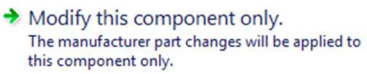


Mark	Refere...	Manufacturer	Description (English)	3D part	Class
=F1-L1-Q1	06557	Legrand	Magneto-thermal circuit breaker 4...		Circuit-breakers\Magn...
+L1	178864	ABB	650x700x250mm Unikit 250		Boxes, cabinets\Enclo...
=F1-L1-S2	18039	Merlin Gerin	MODULAR PUSH BUTTON WITH PI...		Buttons, switches\Pus...
=F1-L1-A2	34486	Legrand	Rail EN 50022 for Altis - for cabine...		Boxes, cabinets\Rails
+L1	34486	Legrand	Rail EN 50022 for Altis - for cabine...		Boxes, cabinets\Rails
+L1	34486	Legrand	Rail EN 50022 for Altis - for cabine...		Boxes, cabinets\Rails
+L1	34486	Legrand	Rail EN 50022 for Altis - for cabine...		Boxes, cabinets\Rails
=F1-L1-A1	36212	Legrand	Lina duct 25 - new technologie - 6...		Boxes, cabinets\Ducts
+L1	36212	Legrand	Lina duct 25 - new technologie - 6...		Boxes, cabinets\Ducts
+L1	36212	Legrand	Lina duct 25 - new technologie - 6...		Boxes, cabinets\Ducts
+L1	36212	Legrand	Lina duct 25 - new technologie - 6...		Boxes, cabinets\Ducts
+L1	36212	Legrand	Lina duct 25 - new technologie - 6...		Boxes, cabinets\Ducts
+L1	36212	Legrand	Lina duct 25 - new technologie - 6...		Boxes, cabinets\Ducts
=F1-L1-H1	3SB1212-6BE06	Siemens	INDICATOR LIGHT,22MM,W.GRO...		Signalling, Alarm\Lumi...
=F1-L2-B1	E2K-L13MC1	OMRON	E2K-L LIQUID LEVEL SENSOR		Detectors, sensors
=F1-L2-B2	E2K-L26MC1	OMRON	E2K-L LIQUID LEVEL SENSOR		Detectors, sensors
=F1-L1-Q4	GV2ME06	Schneider Electric	MOTOR CIRCUIT BREAKER 1-1.6		Circuit-breakers\Magn...
=F1-L1-KM1	LADN11	Schneider Electric	FRONT CONTACTS BLOCK. 1NO+...		Contactor relays, relays
=F1-L1-KM1	LC1D12B7	Schneider Electric	CONT 12A 24V50/60Hz		Contactor relays, rela...
=F1-L2-PU1	LS112M-4P(4)	Leroy Somer	Three phase closed motor - 4 P - d...		Motors\Three-phase
=F1-L1-J1	XA2BG33	Schneider Electric			**** Unclassed eleme...

To define the length information for the ducting / trunking, right click over the part > 

Change the *Depth* value to the required length

Select 

Select 

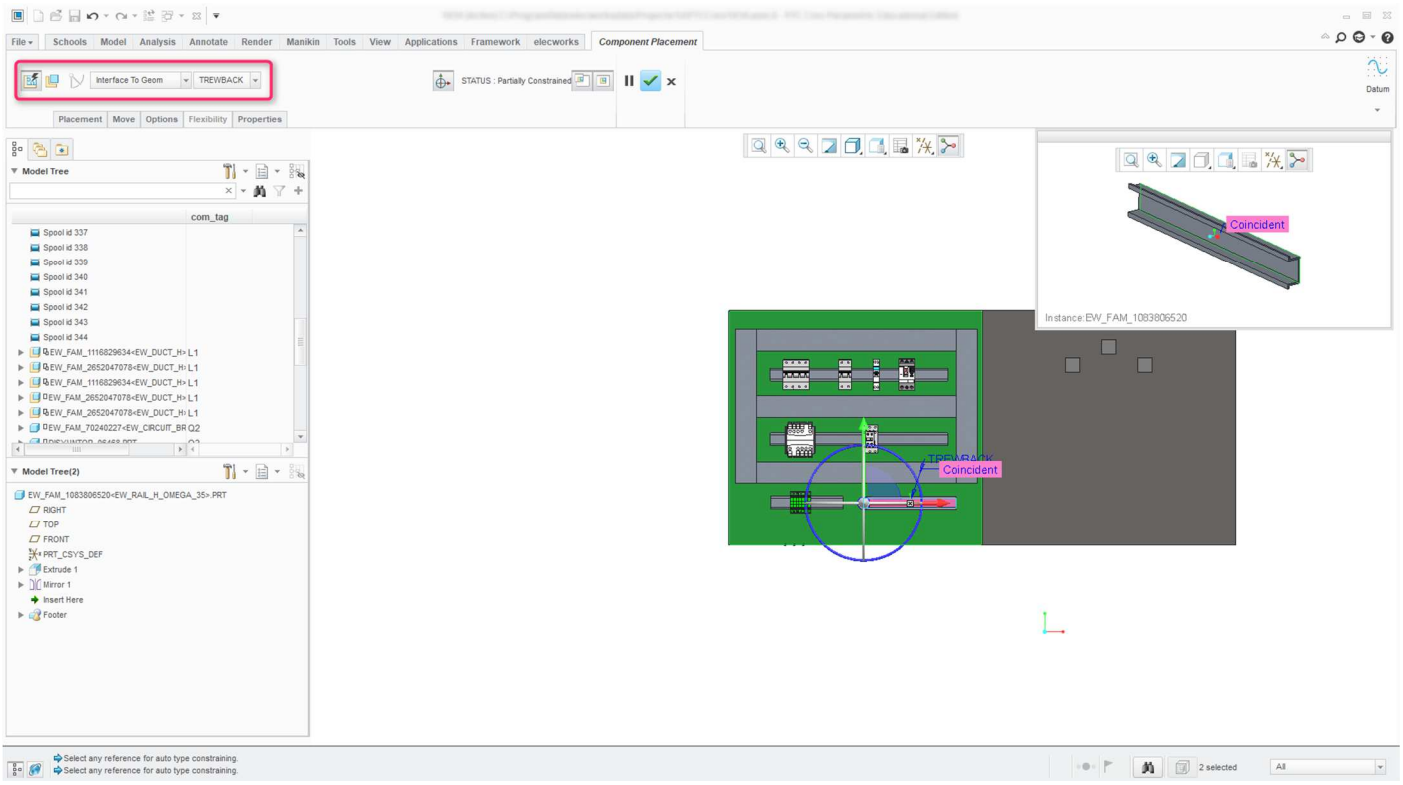
Select 
 to insert

If mating faces have been defined on both surfaces, the component placement will automatically mate up. If they haven't then the component placement will have to be manually mated.

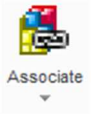
Defining A Mating Surface Face For A PTC Creo Part

They should also have their electrical connections defined, if required, within the PRT/ASM. Please refer to:

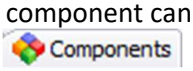
Defining An Electrical Connection Point For A PTC Creo Part



Select  to accept



You can associate existing parts or assemblies to an elecworks intelligent component by using the command

If you have inserted an electrical component, the component can be inserted into the schematic from within elecworks™ from the Component tree side panel 

Right click over the component and select