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**CASTLINE SYSTEMS**

# **CAD Guide**



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*References*

*Requirements for Electrical Installations IEE Wiring Regulations Sixteenth Edition  
BS7671 : 1992 Incorporating Amendment No. 1, 1994 (AMD 8536).*

*IEE Inspection & Testing Guidance Notes 3*

*Protection Against Electric Shock IEE 16<sup>th</sup> Edition Wiring Regulations Guidance Notes  
Number 5 in a series*

*Castline Systems reserve the right to change specifications without notice.*

**Castline Systems.  
Welford House, 39 Alfriston Road,  
Worthing, West Sussex, BN14 7QS,  
United Kingdom.  
Telephone 01903 201837**

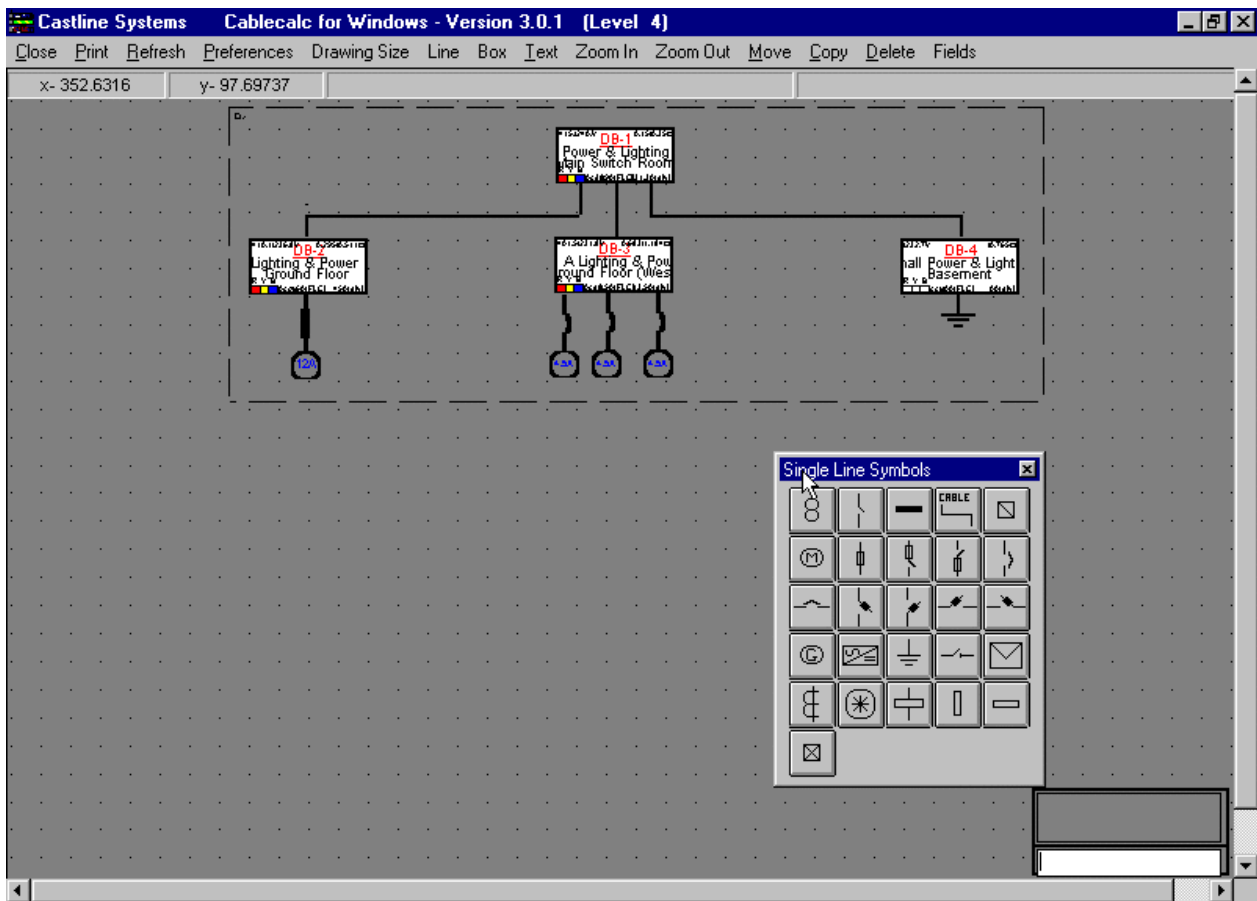


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# Drawing

## Overview



Cablecalc for Windows level 4 includes a drawing utility for creating single line diagrams.

Drawings may be created by first selecting symbols from the floating toolbar and then dragging them into position by holding down the left mouse button. Fine tuning to the final location may be achieved by using the four direction keys (up – down – left – right arrows).

Cables may be added by clicking on the cable symbol, then clicking on the screen at the required start position of the cable, then moving the mouse to the required end position of the cable. A 'rubber band' line will appear, clicking the mouse at the final position, the line will then appear as a dotted line, then clicking the screen somewhere between the two points to create a dog leg.

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## Floating Toolbar

Use the floating toolbar to select the symbols to use on your drawing.

The toolbar may be moved to any position on the screen.

A description of each of the symbols is displayed as you pass the mouse cursor over each of the buttons.

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## Symbols

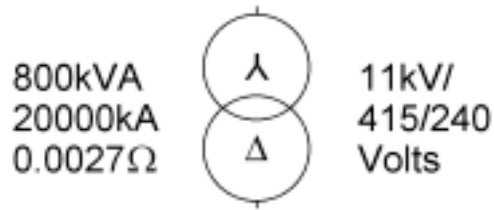
Symbols may be selected by clicking on the appropriate button on the floating toolbar.

The symbol will then appear in the top left corner of the drawing area and may then be dragged to its required location.

A description of each of the symbols is displayed as you pass the mouse cursor over each of the buttons.

Symbols include:-

# Transformer



Click on the transformer symbol to create a transformer



To access and edit the transformers properties 'right click' on the transformer. To display the 'Symbol Editor'

## Properties

location x	421.0024	width	49.98958
location y	56.00748	height	19.98905
Transformer Reference	TX-1		
Rating (kVA)	800kVA		
Primary voltage	11kV		
Secondary voltage	415/240		
Fault Current (kA)	20000		
Impedance (Z%)	0.0027		
Show as 3phase	<input checked="" type="checkbox"/>		
Notes	Details from rating plate		
Location	Basement Substation		
Description	GEC transformers		

<b>Location x</b>	The horizontal position (x axis) on the drawing in millimetres
<b>Location y</b>	The vertical position (y axis) on the drawing in millimetres
<b>Width</b>	The overall width of the transformer including text
<b>Height</b>	The overall height of the transformer including text
<b>Reference</b>	The reference of the transformer e.g. TX-1
<b>Rating (kVA)</b>	The rating of the transformer e.g. 800kVA
<b>Primary voltage</b>	The primary voltage of the transformer e.g. 11kV
<b>Secondary voltage</b>	The secondary voltage of the transformer e.g. 415/240V

<b>Fault Current (kA)</b>	The fault rating of the transformer e.g. 1000kA
<b>Impedance (Ze)</b>	The impedance of the transformer e.g. 0.0027Ohms
<b>Show as 3 phase</b>	This will display Star & Delta symbols on the transformer
<b>Notes</b>	Any relevant details may be entered (for information only)
<b>Location</b>	Any relevant details may be entered (for information only)
<b>Description</b>	Any relevant details may be entered (for information only)

## Isolator



Click on the isolator symbol to create an isolator



To access and edit the isolator properties 'right click' on the isolator.

A screenshot of a software dialog box titled 'Isolator [123]'. The dialog box has a blue title bar and a grey background. It contains several input fields and a checkbox. The fields are: 'location x' with value '334.1141', 'location y' with value '209.6511', 'width' with value '27.99179', 'height' with value '19.99718', 'Reference' with value 'ISO-1', and 'Current Rating (Amperes)' with value '1000'. There is a checkbox for 'Display Border' which is currently unchecked. At the bottom of the dialog box is an 'OK' button.

## Properties

<b>Location x</b>	The horizontal position (x axis) on the drawing in millimetres
<b>Location y</b>	The vertical position (y axis) on the drawing in millimetres
<b>Width</b>	The overall width of the isolator including text
<b>Height</b>	The overall height of the isolator including text
<b>Reference</b>	The reference of the Isolator e.g. ISO-1
<b>Current Rating</b>	The current rating of the Isolator e.g. 100A
<b>Display Border</b>	This will display the isolator within a box

# Busbar

DB-1

415.V - 0.15Ω - 16.kA

Click on the bus bar symbol to create a busbar



## To make the busbar longer

- 1) Click on the busbar
- 2) Hold down the 'shift' key and press the 'right arrow' key.

## To make the busbar shorter

- 1) Click on the busbar
- 2) Hold down the 'shift' key and press the 'left arrow' key.

To add a new busbar to the project click on the 'Add new' button, this will create a new busbar and add it to your project.

To access and edit the busbar properties 'right click' on the bus bar.

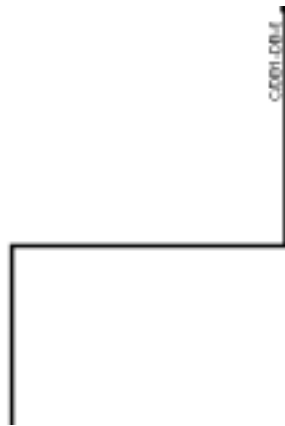
A screenshot of a software dialog box titled "Busbar [4]". The dialog box contains several input fields and a dropdown menu. The fields are: "location x" (303.5002), "width" (122.5206), "location y" (305.9931), "height" (2.0041), "Distribution Ref" (DB-1), "Current Rating (Amperes)" (1000), "Three phase voltage" (415), "Single phase voltage" (240), "Fault Current (kA)" (16), and "Impedance (Ze)" (.15). There is also a "Notes" field, a "Location" field (Substation), and a "Description" field (Main supply to building). At the bottom, there are two buttons: "OK" and "Add new board".

location x	303.5002	width	122.5206
location y	305.9931	height	2.0041
Distribution Ref	DB-1		
Current Rating (Amperes)	1000		
Three phase voltage	415		
Single phase voltage	240		
Fault Current (kA)	16		
Impedance (Ze)	.15		
Notes			
Location	Substation		
Description	Main supply to building		

## Properties

<b>Location x</b>	The horizontal position (x axis) on the drawing in millimetres
<b>Location y</b>	The vertical position (y axis) on the drawing in millimetres
<b>Width</b>	The overall width of the busbar including text
<b>Height</b>	The overall height of the busbar including text
<b>Distribution Reference</b>	The reference of the busbar e.g. TR-1
<b>Current Rating</b>	The current rating of the busbar e.g. 100A
<b>Three phase voltage</b>	The 3 phase voltage at the busbar e.g. 415
<b>Single phase voltage</b>	The single phase voltage at the busbar e.g. 240
<b>Fault current</b>	The fault current at the busbar e.g. 16kA
<b>Impedance</b>	The impedance at the busbar e.g. 0.015 Ohms
<b>Notes</b>	Any relevant details may be entered (for information only)
<b>Location</b>	Any relevant details may be entered (for information only)
<b>Description</b>	Any relevant details may be entered (for information only)

## Cable



Cables may be added by clicking on the cable symbol



- 1) Click on the screen at the required start position of the cable
- 2) Move the mouse to the required end position of the cable. A 'rubber band' line will appear, click the mouse at the final position, the line will then appear as a dotted line
- 3) Click the screen somewhere between the two points to create a 'dog leg' in the cable. Or to create a straight cable click once again at the final position.

Cables created with a 'dog leg' are in effect 3 separate cables and each section may be edited separately. The cable reference may be displayed adjacent to any one or all three sections.

To access and edit the cable properties, 'right click' on the cable (You may have to zoom in to do this).

location x	318.2473	width	0.9887642
location y	327.0092	height	62.22215
Cable Reference	C/DB1-DB-6		
Display reference	<input checked="" type="checkbox"/>		
Bottom of line	<input type="checkbox"/>		
OK			

## Properties

### Location x

The horizontal position (x axis) on the drawing in millimetres

<b>Location y</b>	The vertical position (y axis) on the drawing in millimetres
<b>Width</b>	The overall width of the cable excluding text
<b>Height</b>	The overall height of the cable excluding text
<b>Cable reference</b>	The reference of the Cable e.g. SM-1
<b>Display reference</b>	This will display the cable reference adjacent to the cable.
<b>Bottom of line</b>	This will display the cable reference adjacent to the cable at the bottom of the cable line for a vertical cable section. If this is left unchecked then the cable reference will be displayed at the top of the cable.
<b>Right end of line</b>	This will display the cable reference adjacent to the cable the right of the cable line for a horizontal cable section. If this is left unchecked then the cable reference will be displayed at the left of the cable.

## Distribution board



Click on the distribution board symbol to add a distribution board to the drawing.



### To make the distribution board longer

- 1) Click on the distribution board
- 2) Hold down the 'shift' key and press the 'right arrow' key.

### To make the distribution board shorter

- 1) Click on the distribution board
- 2) Hold down the 'shift' key and press the 'left arrow' key.

To add a new distribution board to the project click on the 'Add new' button, this will create a new distribution board and add it to your project. To access and edit the distribution board properties, 'right click' on the distribution board.

Distribution Board (193)			
location x	214.1573	width	59.96501
location y	493.9993	height	19.98505
Distribution Ref	DB-SPN		
Current Rating (Amperes)			
Three phase voltage			
Single phase voltage	237.4		
Fault Current (kA)	2.34		
Impedance (Ze)			
Notes			
Location	Main Switch Room		
Description	Ancillary equipment		
OK		Add new board	

## Properties

<b>Location x</b>	The horizontal position (x axis) on the drawing in millimetres
<b>Location y</b>	The vertical position (y axis) on the drawing in millimetres
<b>Width</b>	The overall width of the distribution board
<b>Height</b>	The overall height of the distribution board.
<b>Distribution Ref</b>	The reference of the distribution board e.g. TR-1. A list of the distribution boards that already exist in the project will be displayed in the drop down list.
<b>Current Rating</b>	The current rating of the distribution board e.g. 100A
<b>Three phase voltage</b>	The 3 phase voltage at the distribution board e.g. 415 . If the distribution board is include in your project and calculations have been performed then you will not need to enter this information.
<b>Single phase voltage</b>	The single phase voltage at the distribution board e.g. 240. If the distribution board is include in your project and calculations have been performed then you will not need to enter this information.
<b>Fault current</b>	The fault current at the distribution board e.g. 16kA. If the distribution board is include in your project and calculations have been performed then you will not need to enter this information.
<b>Impedance</b>	The impedance at the distribution board e.g. 0.015 Ohms. If the distribution board is include in your project and calculations have been performed then you will not need to enter this information.
<b>Notes</b>	Any relevant details may be entered (for information only)
<b>Location</b>	Any relevant details may be entered
<b>Description</b>	Any relevant details may be entered

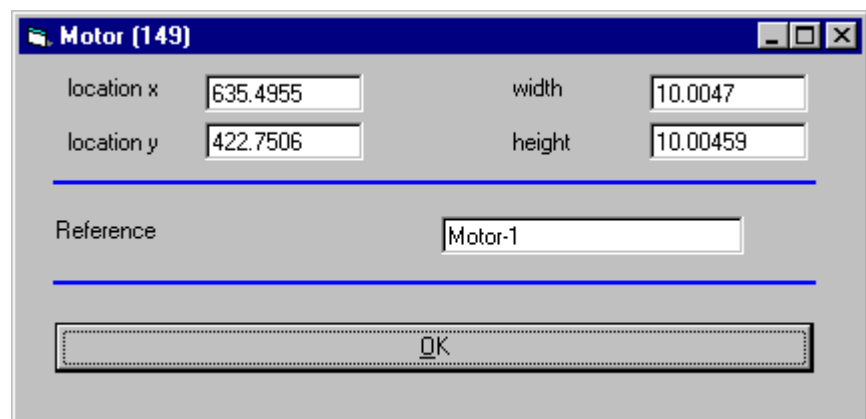
# Motor



Click on the symbol to create a motor



To access and edit the properties, 'right click' on the motor.



The screenshot shows a dialog box titled "Motor (149)". It contains the following fields:

location x	635.4955	width	10.0047
location y	422.7506	height	10.00459
Reference	Motor-1		

At the bottom of the dialog box is an "OK" button.

## Properties

<b>Location x</b>	The horizontal position (x axis) on the drawing in millimetres
<b>Location y</b>	The vertical position (y axis) on the drawing in millimetres
<b>Width</b>	The overall width of the motor including text
<b>Height</b>	The overall height of the motor including text
<b>Reference</b>	The reference of the motor e.g. M-1

# Fuse



Click on the symbol to create a fuse



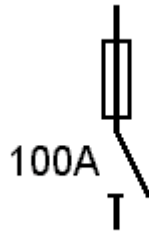
To access and edit the properties, 'right click' on the fuse.

Property	Value
location x	432.0081
width	27.99067
location y	194.0064
height	20.00528
Reference	F-1
Current Rating (Amperes)	60
Display Border	<input type="checkbox"/>

## Properties

<b>Location x</b>	The horizontal position (x axis) on the drawing in millimetres
<b>Location y</b>	The vertical position (y axis) on the drawing in millimetres
<b>Width</b>	The overall width of the fuse including text
<b>Height</b>	The overall height of the fuse including text
<b>Reference</b>	The reference of the fuse e.g. F-1
<b>Current Rating</b>	The current rating of the fuse e.g. 100A
<b>Display Border</b>	This will display the fuse within a box

## Switch Fuse



Click on the symbol to create a switch fuse



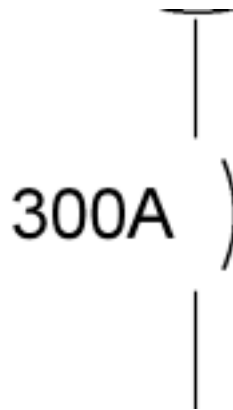
To access and edit the properties, 'right click' on the switch fuse.

location x	352.4838	width	27.97773
location y	307.5065	height	19.98505
Reference	SF-7		
Current Rating (Amperes)	100		
Display Border	<input type="checkbox"/>		
OK			

## Properties

<b>Location x</b>	The horizontal position (x axis) on the drawing in millimetres
<b>Location y</b>	The vertical position (y axis) on the drawing in millimetres
<b>Width</b>	The overall width of the switch fuse including text
<b>Height</b>	The overall height of the switch fuse including text
<b>Reference</b>	The reference of the switch fuse e.g. SF-1
<b>Current Rating</b>	The current rating of the switch fuse e.g. 100A
<b>Display Border</b>	This will display the switch fuse within a box

## Circuit Breaker



Click on the symbol to create a circuit breaker



To access and edit the properties, 'right click' on the circuit breaker.

location x	334.3934	width	27.99179
location y	249.6454	height	19.99718
Reference	CB-1		
Current Rating (Amperes)	800		
Display Border	<input type="checkbox"/>		

OK

### Properties

<b>Location x</b>	The horizontal position (x axis) on the drawing in millimetres
<b>Location y</b>	The vertical position (y axis) on the drawing in millimetres
<b>Width</b>	The overall width of the circuit breaker including text
<b>Height</b>	The overall height of the circuit breaker including text
<b>Reference</b>	The reference of the circuit breaker e.g.CB-1
<b>Current Rating</b>	The current rating of the circuit breaker e.g. 100A
<b>Display Border</b>	This will display the circuit breaker within a box

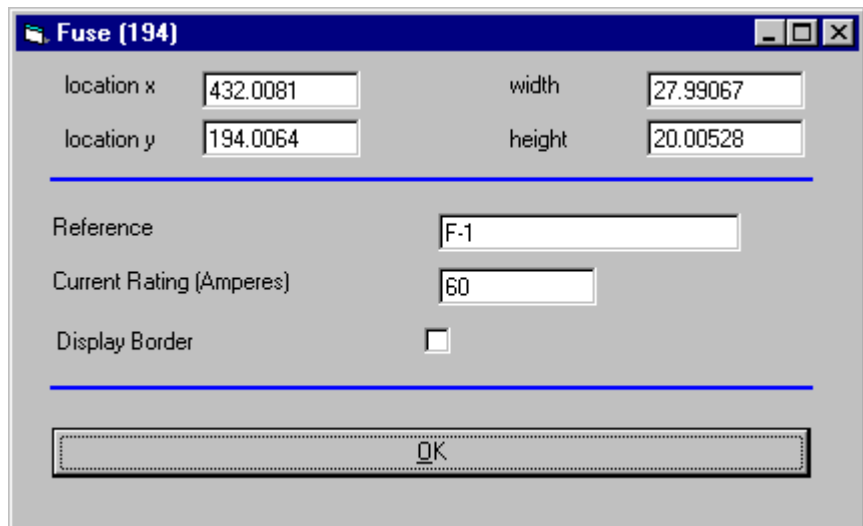
## Fused Switch



Click on the symbol to create a fused switch



To access and edit the properties, 'right click' on the fused switch.

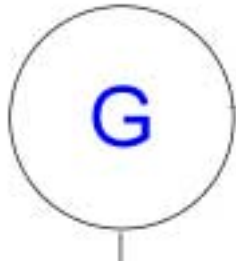


location x	432.0081	width	27.99067
location y	194.0064	height	20.00528
Reference	F-1		
Current Rating (Amperes)	60		
Display Border	<input type="checkbox"/>		
OK			

## Properties

<b>Location x</b>	The horizontal position (x axis) on the drawing in millimetres
<b>Location y</b>	The vertical position (y axis) on the drawing in millimetres
<b>Width</b>	The overall width of the fused switch including text
<b>Height</b>	The overall height of the fused switch including text
<b>Reference</b>	The reference of the fused switch e.g. FS-1
<b>Current Rating</b>	The current rating of the fused switch e.g. 100A
<b>Display Border</b>	This will display the fused switch within a box

## Generator



Click on the symbol to create a generator



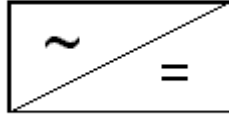
To access and edit the properties, 'right click' on the generator.

Generator (127)			
location x	492.9763	width	19.99194
location y	230.9322	height	20.00343
Reference	Gen-1		
OK			

## Properties

<b>Location x</b>	The horizontal position (x axis) on the drawing in millimetres
<b>Location y</b>	The vertical position (y axis) on the drawing in millimetres
<b>Width</b>	The overall width of the generator including text
<b>Height</b>	The overall height of the generator including text
<b>Reference</b>	The reference of the generator e.g. GEN-1

## Battery Charger



Click on the symbol to create a battery charger



To access and edit the properties, 'right click' on the battery charger.

BatteryCharger (150)			
location x	591.9984	width	19.99744
location y	376.0028	height	10.00459
Reference		BAT-1	
OK			

### Properties

<b>Location x</b>	The horizontal position (x axis) on the drawing in millimetres
<b>Location y</b>	The vertical position (y axis) on the drawing in millimetres
<b>Width</b>	The overall width of the battery charger including text
<b>Height</b>	The overall height of the battery charger including text
<b>Reference</b>	The reference of the battery charger e.g. BAT-1

## Earth Point



Click on the symbol to create an earth point



To access and edit the properties, 'right click' on the earth point.

EARTH (132)			
location x	532.9146	width	19.99878
location y	250.9368	height	20
Reference	CPC-1		
OK			

## Properties

<b>Location x</b>	The horizontal position (x axis) on the drawing in millimetres
<b>Location y</b>	The vertical position (y axis) on the drawing in millimetres
<b>Width</b>	The overall width of the earth point including text
<b>Height</b>	The overall height of the earth point including text

## Bus Section Switch



Click on the symbol to create a bus section switch



To access and edit the properties, 'right click' on the bus section switch.

Property	Value
location x	425.7554
width	19.99744
location y	296.492
height	19.99722
Reference	Section-1
Current Rating (Amperes)	1000
Display Border	<input type="checkbox"/>

## Properties

<b>Location x</b>	The horizontal position (x axis) on the drawing in millimetres
<b>Location y</b>	The vertical position (y axis) on the drawing in millimetres
<b>Width</b>	The overall width of the bus section switch including text
<b>Height</b>	The overall height of the bus section switch including text
<b>Reference</b>	The reference of the bus section switch e.g. BS-1
<b>Current Rating</b>	The current rating of the bus section switch e.g. 1000A
<b>Display Border</b>	This will display the bus section switch within a box

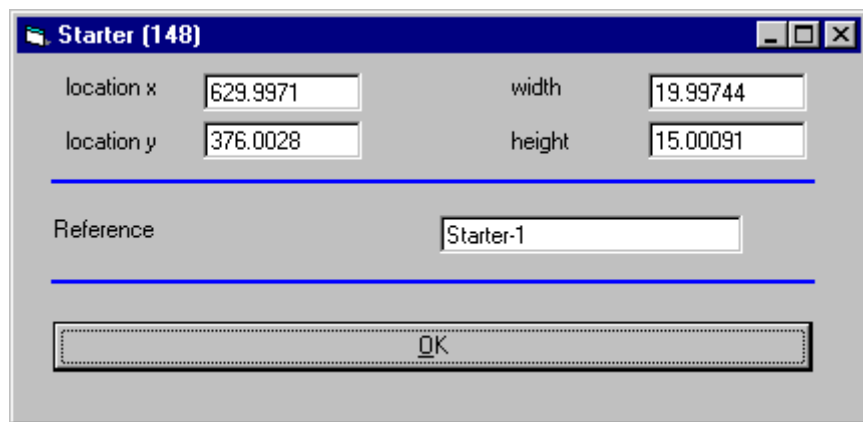
## Starter



Click on the symbol to create a starter



To access and edit the properties, 'right click' on the starter.



Starter [148]			
location x	629.9971	width	19.99744
location y	376.0028	height	15.00091
Reference	Starter-1		
OK			

## Properties

<b>Location x</b>	The horizontal position (x axis) on the drawing in millimetres
<b>Location y</b>	The vertical position (y axis) on the drawing in millimetres
<b>Width</b>	The overall width of the starter including text
<b>Height</b>	The overall height of the starter including text
<b>Reference</b>	The reference of the starter e.g. ST-1

## Current Transformer (CT)



Click on the symbol to create a current transformer (CT)



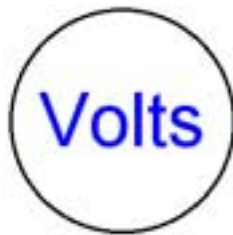
To access and edit the properties, 'right click' on the current transformer.

Property	Value
location x	259.9991
location y	91.99585
width	20.00477
height	20.00415
Reference	CT-1

### Properties

<b>Location x</b>	The horizontal position (x axis) on the drawing in millimetres
<b>Location y</b>	The vertical position (y axis) on the drawing in millimetres
<b>Width</b>	The overall width of the current transformer including text
<b>Height</b>	The overall height of the current transformer including text

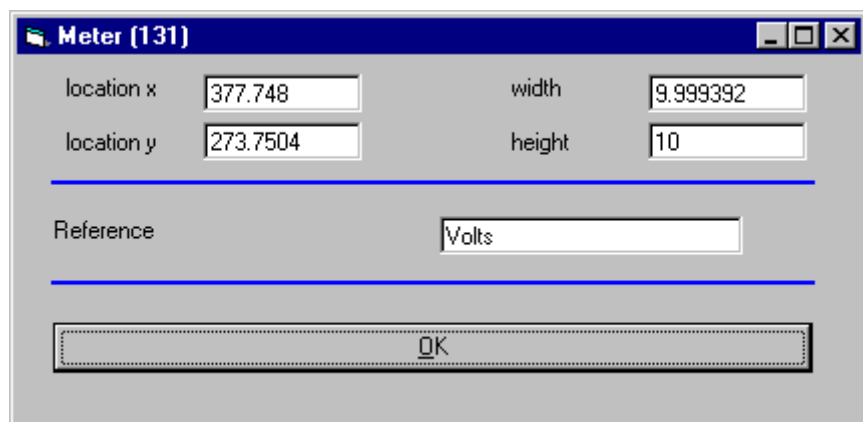
## Meter



Click on the symbol to create a meter



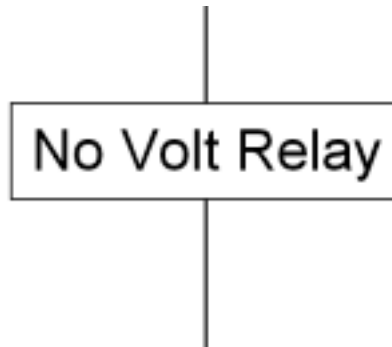
To access and edit the properties, 'right click' on the meter.



## Properties

<b>Location x</b>	The horizontal position (x axis) on the drawing in millimetres
<b>Location y</b>	The vertical position (y axis) on the drawing in millimetres
<b>Width</b>	The overall width of the meter including text
<b>Height</b>	The overall height of the meter including text
<b>Reference</b>	The reference of the meter e.g. V. This will be displayed in the symbol

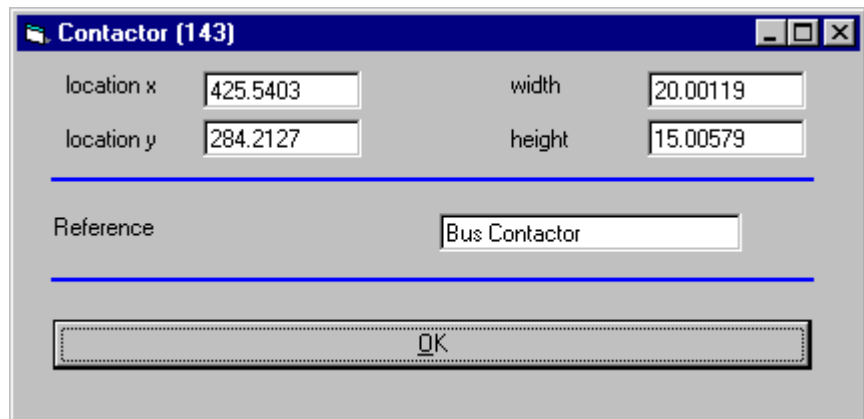
## Contactor



Click on the symbol to create a contactor



To access and edit the properties, 'right click' on the contactor.



## Properties

<b>Location x</b>	The horizontal position (x axis) on the drawing in millimetres
<b>Location y</b>	The vertical position (y axis) on the drawing in millimetres
<b>Width</b>	The overall width of the contactor including text
<b>Height</b>	The overall height of the contactor including text
<b>Reference</b>	The reference of the contactor e.g. C-1

## Vertical Busbar Trunking



Click on the symbol to create vertical busbar trunking



### To make the vertical busbar trunking longer

- 1) Click on the vertical busbar trunking
- 2) Hold down the 'shift' key and press the 'down arrow' key, or 'shift' and 'Page down' for larger increments.

### To make the vertical busbar trunking shorter

- 1) Click on the vertical busbar trunking
- 2) Hold down the 'shift' key and press the 'up arrow' key, or 'shift' and 'Page up' for larger increments.

To access and edit the properties, 'right click' on the vertical busbar trunking.

The image shows a software dialog box titled "Vertical Busbar Trunking (48)". It contains several input fields for configuring the trunking's properties:

location x	56.65728	width	9.99061
location y	43.08728	height	439.7072
Reference	VBB-1		
Current Rating (Amperes)	1000		

At the bottom of the dialog box, there is an "OK" button.

## Properties

<b>Location x</b>	The horizontal position (x axis) on the drawing in millimetres
<b>Location y</b>	The vertical position (y axis) on the drawing in millimetres
<b>Width</b>	The overall width of the vertical busbar trunking including text

<b>Height</b>	The overall height of the vertical busbar trunking including text
<b>Reference</b>	The reference of the vertical busbar trunking e.g. VBT-1
<b>Current Rating</b>	The current rating of the vertical busbar trunking e.g. 1000A

## Horizontal Busbar Trunking



Click on the symbol to create horizontal busbar trunking



### To make the horizontal trunking longer

- 3) Click on the horizontal busbar trunking
- 4) Hold down the 'shift' key and press the 'right arrow' key, or 'shift' and 'Page down' for larger increments.

### To make the horizontal busbar trunking shorter

- 3) Click on the horizontal busbar trunking
- 4) Hold down the 'shift' key and press the 'left arrow' key, or 'shift' and 'Page up' for larger increments.

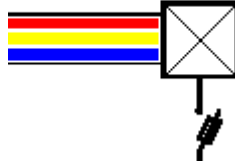
To access and edit the properties, 'right click' on the horizontal busbar trunking.

Property	Value
location x	68.00626
width	434.6354
location y	30.22309
height	9.996869
Reference	HBB-1
Current Rating (Amperes)	1000

## Properties

<b>Location x</b>	The horizontal position (x axis) on the drawing in millimetres
<b>Location y</b>	The vertical position (y axis) on the drawing in millimetres
<b>Width</b>	The overall width of the horizontal busbar trunking including text
<b>Height</b>	The overall height of the horizontal busbar trunking including text
<b>Reference</b>	The reference of the horizontal busbar trunking e.g. HBT-1
<b>Current Rating</b>	The current rating of the horizontal busbar trunking e.g. 1000A

## Busbar Trunking Tap-off Unit



Click on the symbol to create a busbar tap-off unit



To access and edit the properties, 'right click' on the busbar tap-off unit.

Property	Value
location x	502.479
width	15.0077
location y	27.75298
height	14.9927
Reference	TO-12
Current Rating (Amperes)	100

### Properties

<b>Location x</b>	The horizontal position (x axis) on the drawing in millimetres
<b>Location y</b>	The vertical position (y axis) on the drawing in millimetres
<b>Width</b>	The overall width of the busbar tap-off unit including text
<b>Height</b>	The overall height of the busbar tap-off unit including text
<b>Reference</b>	The reference of the busbar tap-off unit e.g. TO-1
<b>Current Rating</b>	The current rating of the busbar tap-off unit e.g. 100A

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## Zoom

### Zoom In

You may zoom in to any part of the drawing by selecting 'Zoom In' from the drop down menu on the top bar

### Zoom Out

You may zoom out by selecting 'Zoom Out' from the drop down menu on the top bar. This will maximise the drawing size.

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## Move

To move one item simply click on to it and then drag it to the required position.

If you want to move several items at one time then select 'Move' from the top bar and then using the mouse to draw a rectangle around the objects to be moved.

Click with the left mouse button and while holding the left mouse button drag downwards and to the right to create a rectangle and then release the left mouse button.

Click in the recangle and hold down the left mouse button while dragging the rectangle to the new location.

Release the left mouse button

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## Copy

If you want to copy one or several items at one time then select 'Copy' from the top bar and then using the mouse to draw a rectangle around the objects to be copied.

Click with the left mouse button and while holding the left mouse button drag downwards and to the right to create a rectangle and then release the left mouse button.

Click in the recangle and hold down the left mouse button while dragging the rectangle to the new location.

Release the left mouse button

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## Delete

To delete one item simply click on to it and then press the delete key.

If you want to delete several items at one time then select 'Delete' from the top bar and then using the mouse to draw a rectangle around the objects to be deleted.

Click with the left mouse button and while holding the left mouse button drag downwards and to the right to create a rectangle and then release the left mouse button.

A Delete warning message will the appear in the centre of the screen.

Click OK to continue with the delete operation or click cancel to return as required.

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## Line

Four types of lines may be drawn

**Solid**

**Dashed**

**Dotted**

**Dash Dot**

To draw a line select the desired line type from the Line menu

Click at the start point of the line. A 'rubber band' line will appear.

Move the mouse cursor to the end position of the line and release.

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## Box

Four types of lines may be used to drawn a box

**Solid**

**Dashed**

**Dotted**

**Dash Dot**

To draw a box select the desired line type from the Box menu

Click at the start point of the Box. A 'rubber band' line will appear.

Move the mouse cursor to the end position of the Box and release.

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# Text

Select 'Text' from the menu on the top bar

Type the required text into the text entry screen

## Properties

<b>Location x</b>	The horizontal position (x axis) on the drawing in millimetres
<b>Location y</b>	The vertical position (y axis) on the drawing in millimetres
<b>Width</b>	The overall width of the text
<b>Height</b>	The overall height text
<b>Text</b>	The text to appear on the drawing
<b>Text size</b>	The size of the font
<b>Text Colour</b>	The colour of the text
<b>Display Border</b>	Displays a border around the text
<b>Underline Text</b>	The text will be underlined
<b>Italic</b>	The text will be italic
<b>Bold</b>	The text will be bold

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## Drawing Size

The size of drawing may be selected sizes available are

A4 Landscape (297 x 210)

A4 Portrait (210 x 297)

A3 Landscape (420 x 297)

A2 Landscape (534 x 420)

A1 Landscape (840 x 534)

A0 Landscape (1188 x 840)

**NOTE:** Although the drawing size may be set to one size on the screen, it may be printed as a different size i.e. A0 on the screen may be printed as A4, the drawing will be scaled accordingly.

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## Preferences

### Display Boundries

This will display the extents of all items on the drawing by displaying a border to each item.

### Background Colour

This will display the colour dialog window for the available screen background colours

### Display Grid

This will display a grid on the screen

### Grid Size

The default grid is set at 10mm if you require a different intensity then adjust accordingly

### Display Border

Display a border line around the drawing

### Title Block

Display a title block on the drawing

To fill in the Title block click on the title block and type in the title and the drawing number as required.

### Lock

This will lock / unlock the drawing

Locking the drawing will fix all of the symbol positions on the screen

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## Refresh

Click to reload the drawing, this will remove any unwanted lines or text

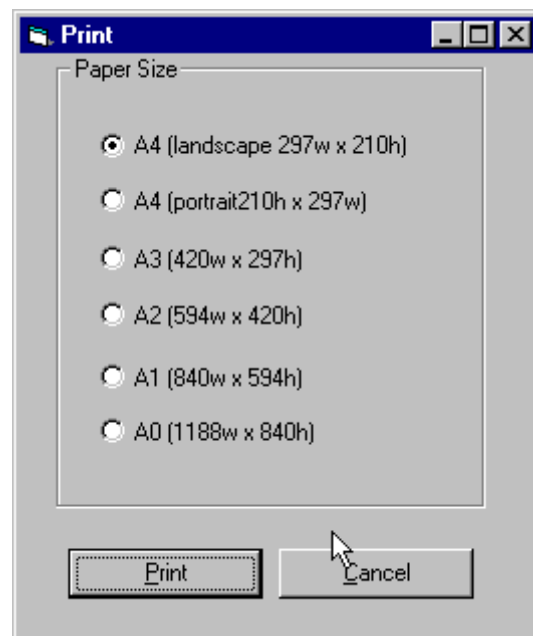
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## Fields

This will display all of the fields in the drawing database

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## Print



Select the paper size and then click print.