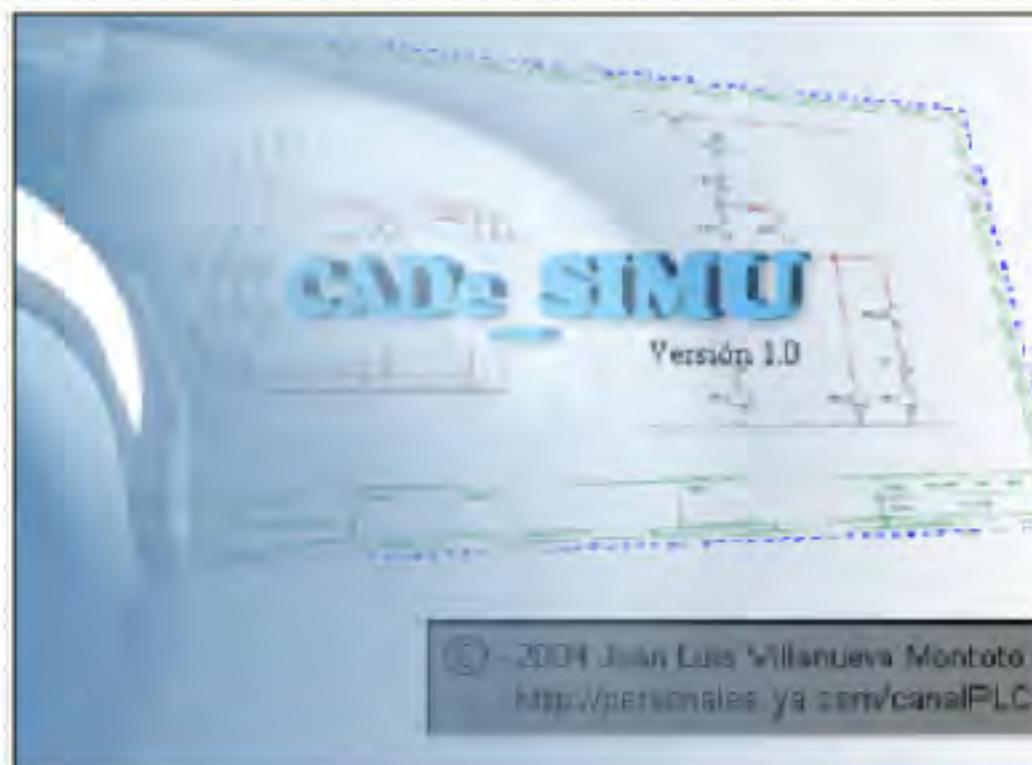




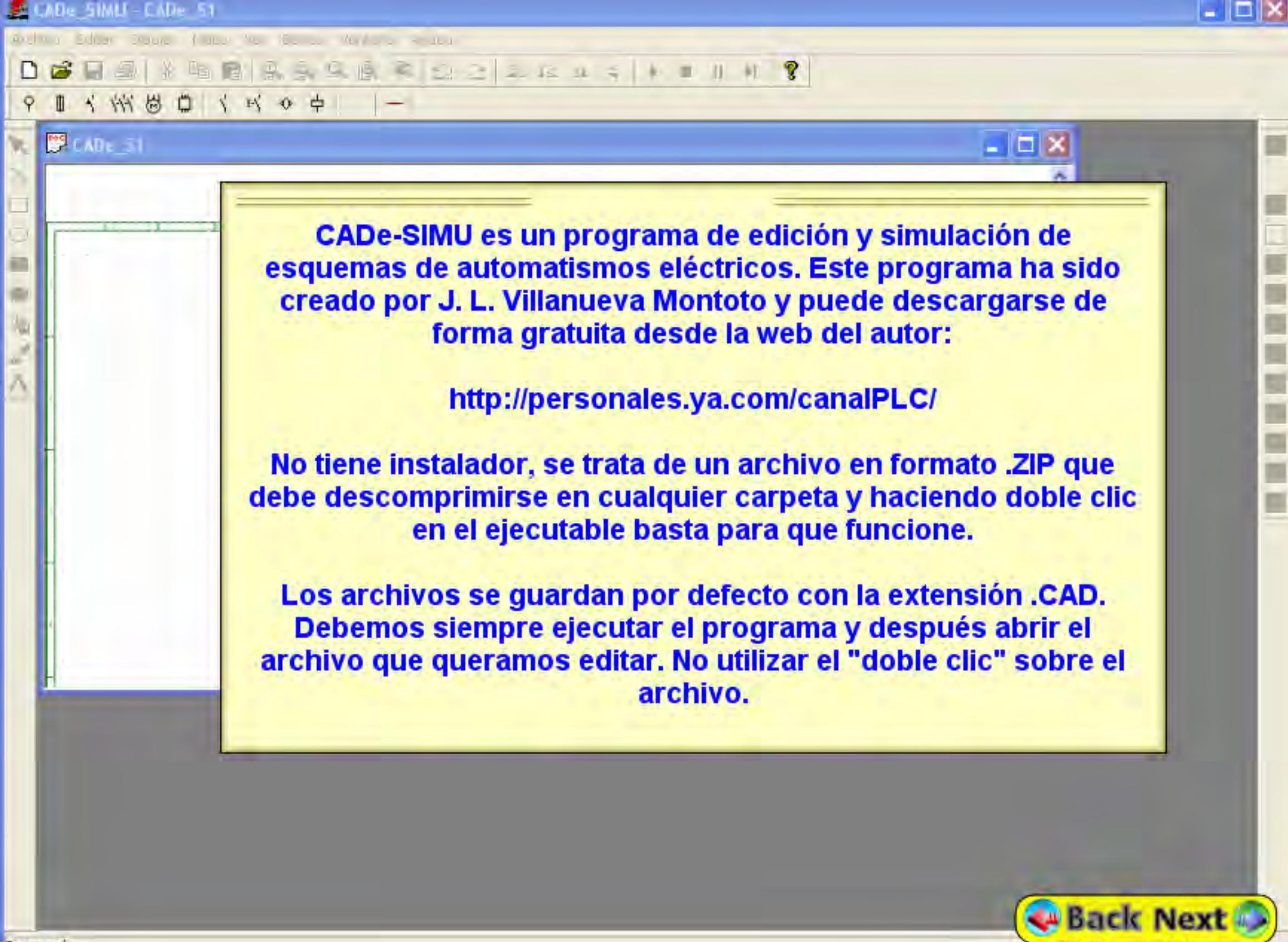
CADe\_S1



Para movernos por el tutorial,  
pulsamos en los botones NEXT y  
BACK de cada página.

Tutorial realizado por R. Álvarez  
Profesor de Sistemas Electrotécnicos y  
Automáticos  
MADE AVAILABLE BY JEAN MICHEL

Next



**CADe-SIMU es un programa de edición y simulación de esquemas de automatismos eléctricos. Este programa ha sido creado por J. L. Villanueva Montoto y puede descargarse de forma gratuita desde la web del autor:**

**<http://personales.ya.com/canalPLC/>**

**No tiene instalador, se trata de un archivo en formato .ZIP que debe descomprimirse en cualquier carpeta y haciendo doble clic en el ejecutable basta para que funcione.**

**Los archivos se guardan por defecto con la extensión .CAD.  
Debemos siempre ejecutar el programa y después abrir el archivo que queramos editar. No utilizar el "doble clic" sobre el archivo.**



CADe\_SI

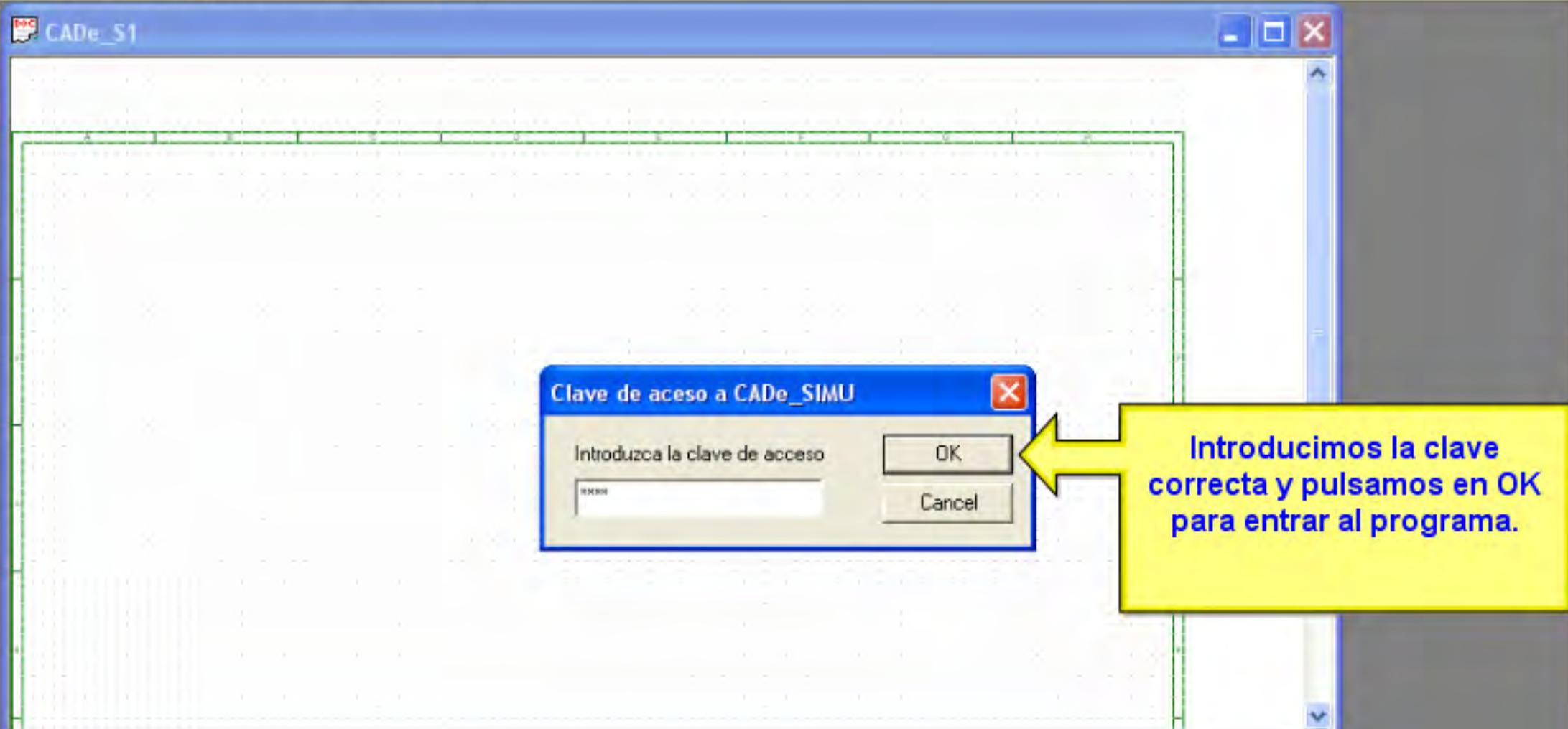
El programa tiene una clave de acceso que se proporciona por correo electrónico a través de la Web del programa.

Si no se introduce esta clave, no se podrán guardar los esquemas realizados

Clave de acceso a CADe\_SIMU

Introduzca la clave de acceso

OK Cancel

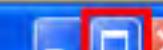




Archivo Editar Dibujar Modo Ver Barras Ventana Ayuda

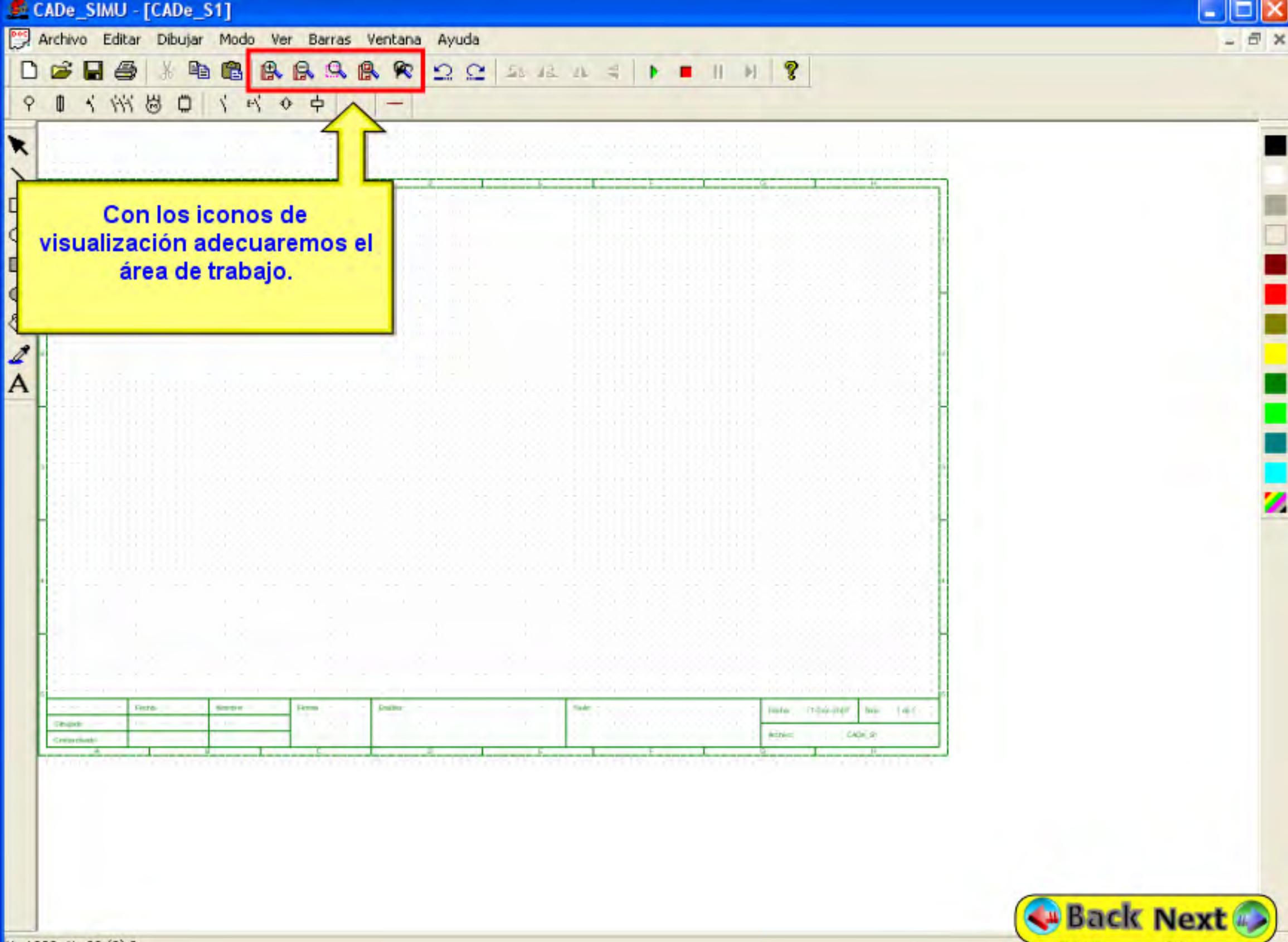


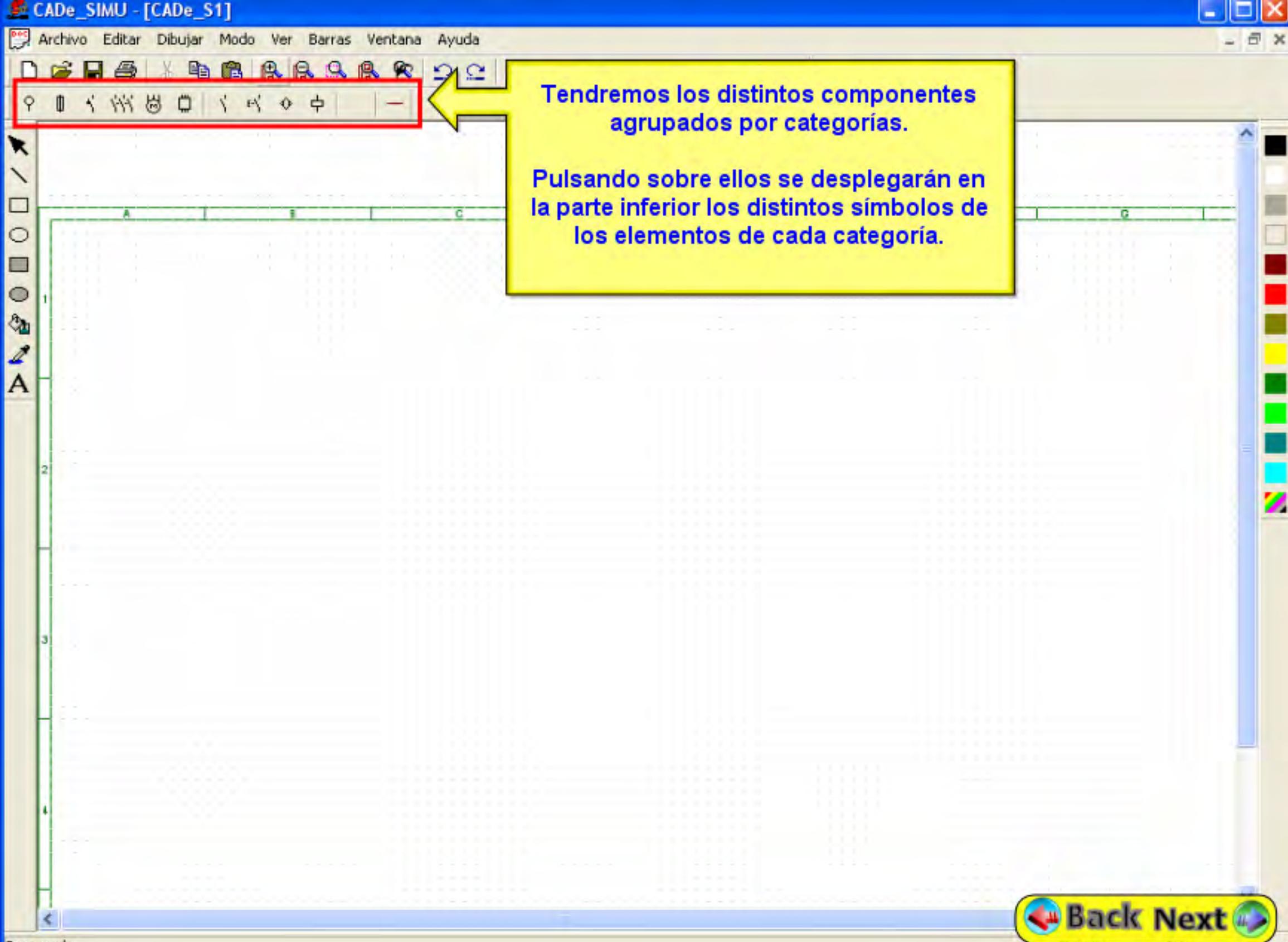
CADE\_S1



Maximizaremos el área  
de trabajo y ajustaremos  
después el ZOOM a  
nuestro dibujo.









A B C D E F G

1

2

3

4

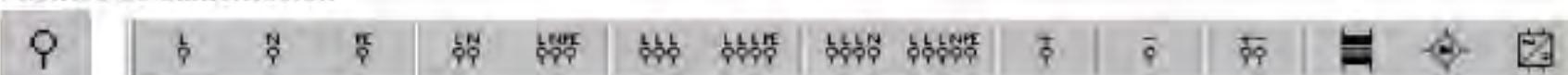
Las distintas categorías podemos verlas desplegadas en la página siguiente.

Pasando el cursor por encima del componente, nos parecerá una descripción del mismo.

Para insertarlo, bastará con pulsar sobre él y desplazar el cursor hasta el área de dibujo.

## Símbolos de componentes

## Fuentes de alimentación



## Fusibles, seccionadores



## Automáticos, disyuntores



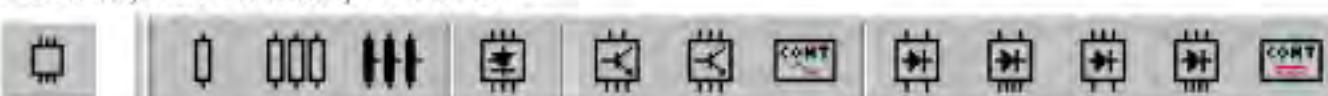
## Contactores, interruptores



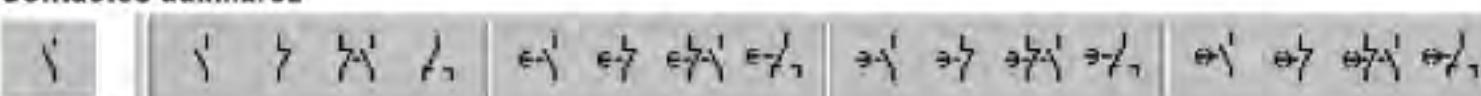
## Motores



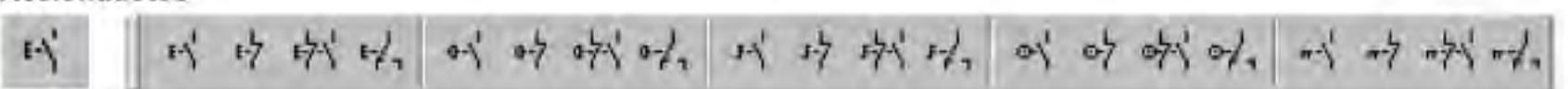
## Potencia, arrancadores, variadores



## Contactos auxiliares



## Accionadores



## Detectores

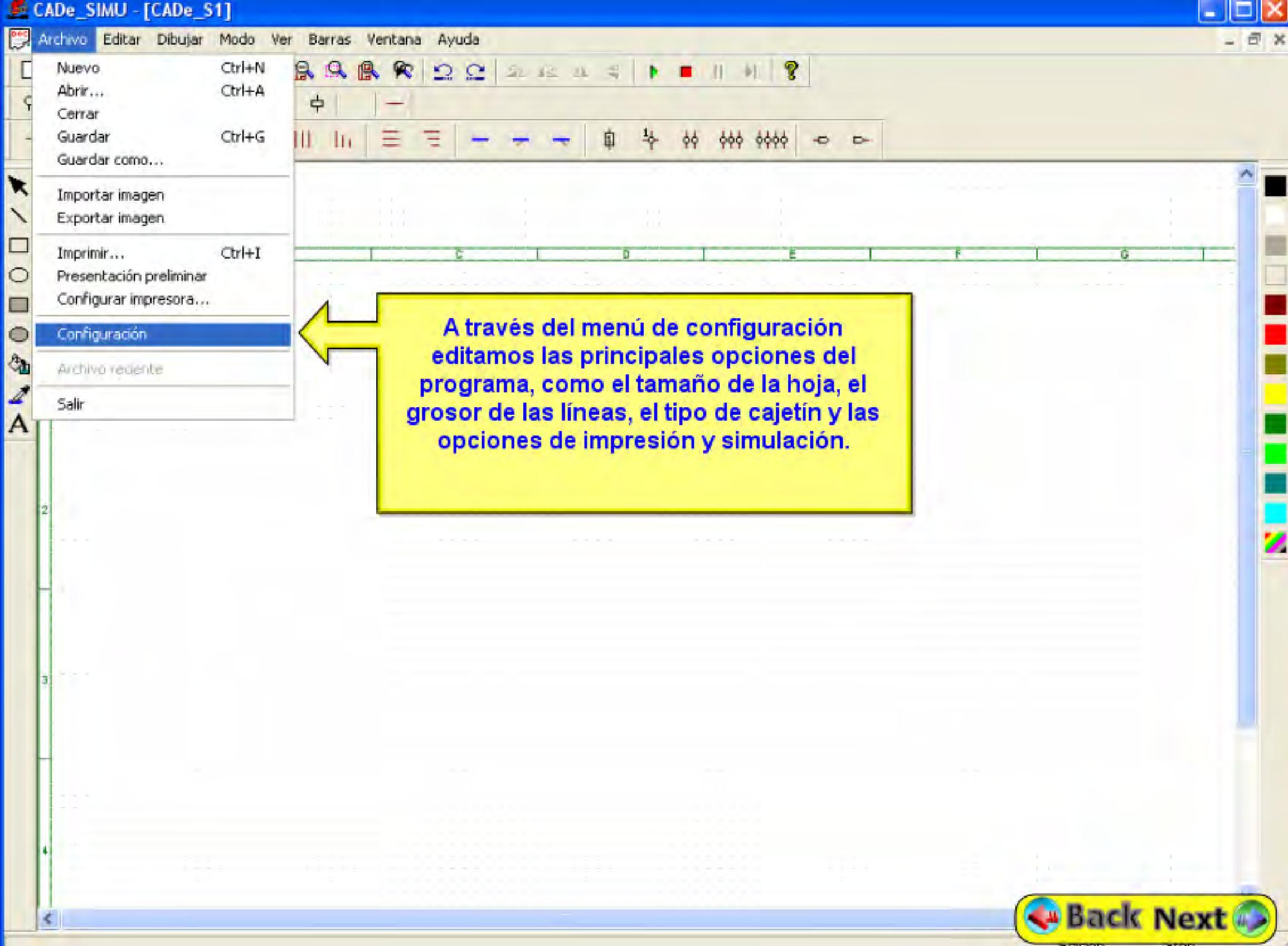


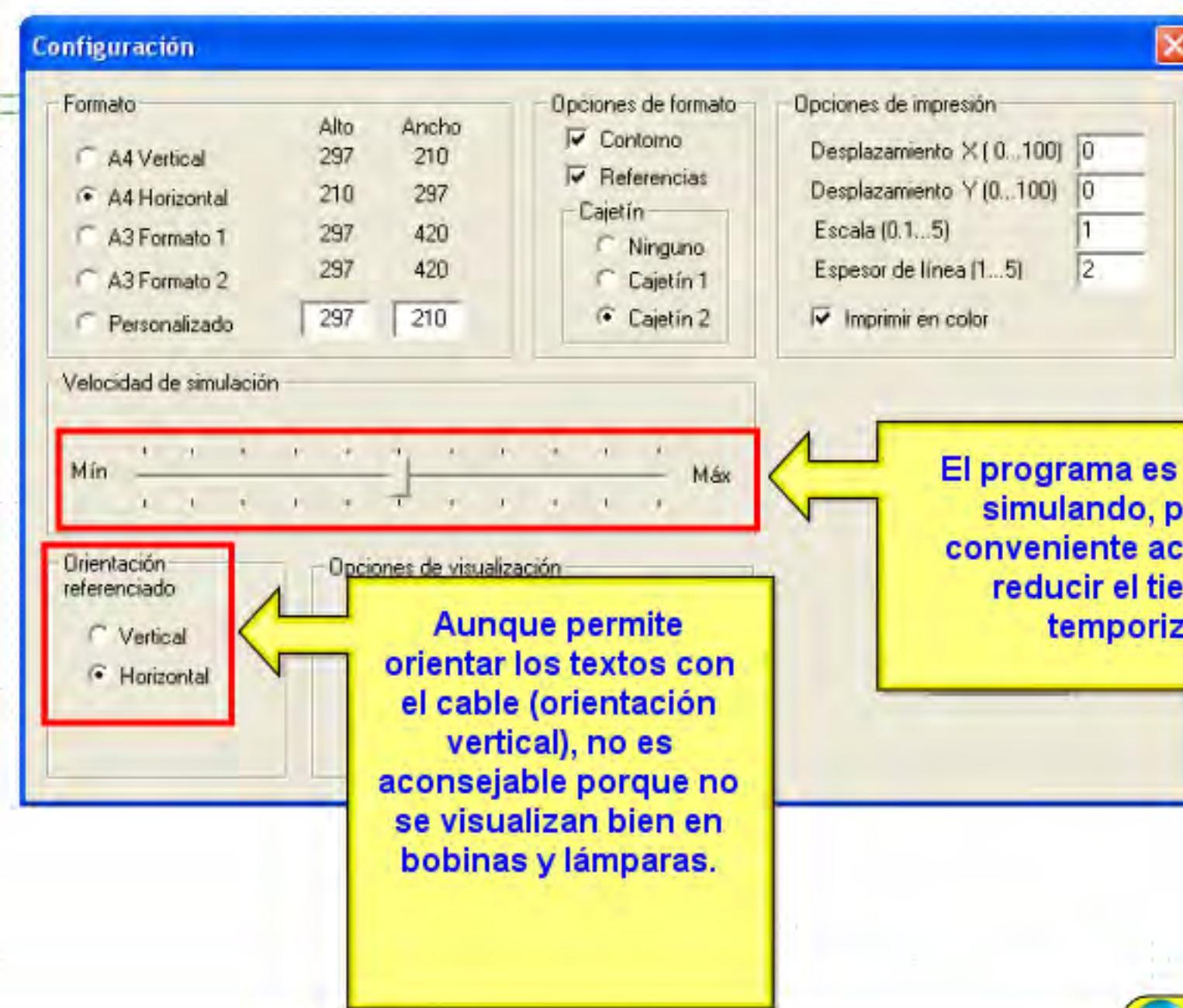
## Bobinas, señalizaciones



## Cables y conexiones



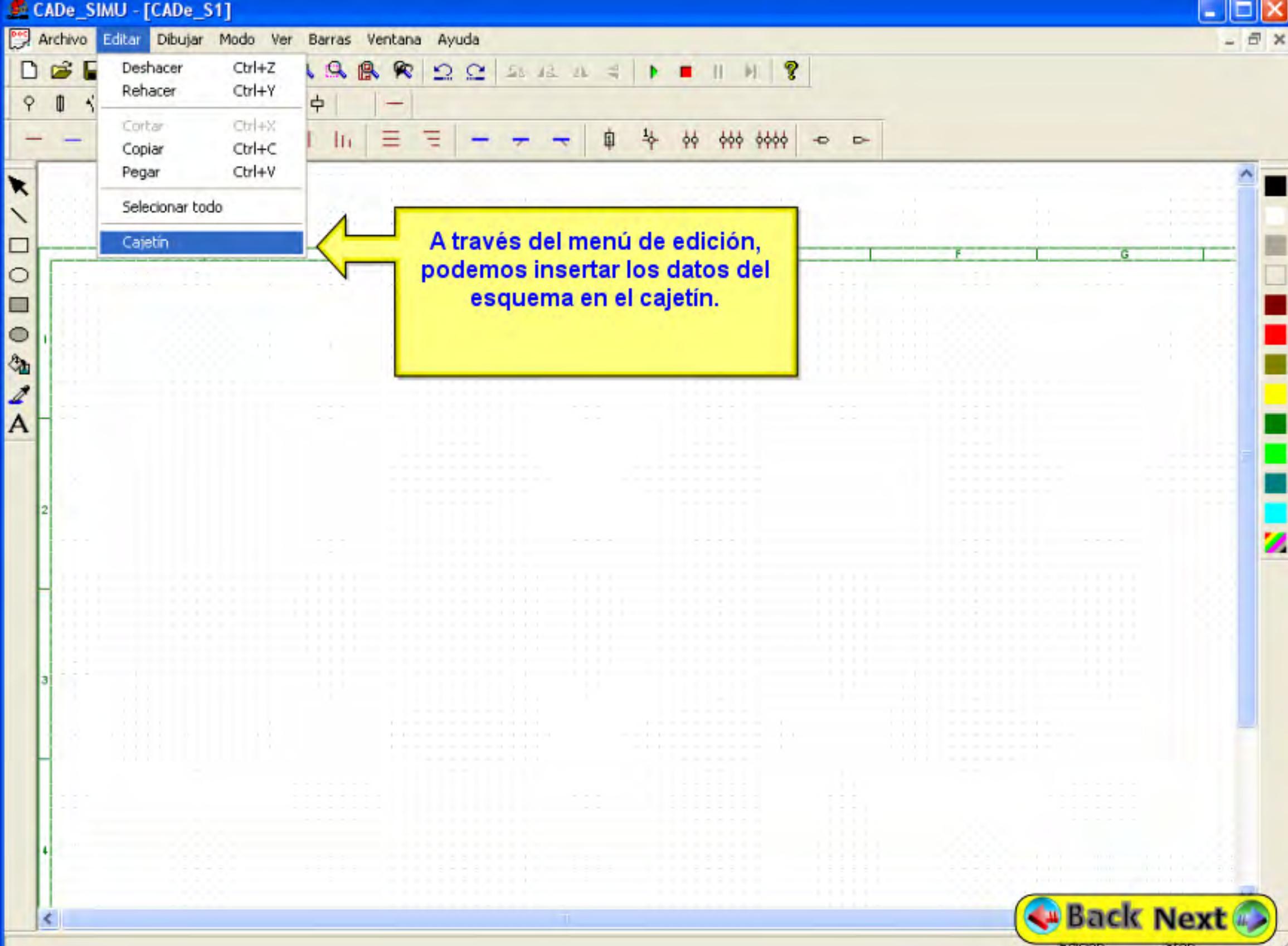






Deberemos ajustar la  
escala a 2 para imprimir  
correctamente un A4  
apaisado.

También será necesario  
desplazar el dibujo para  
que quede centrado.

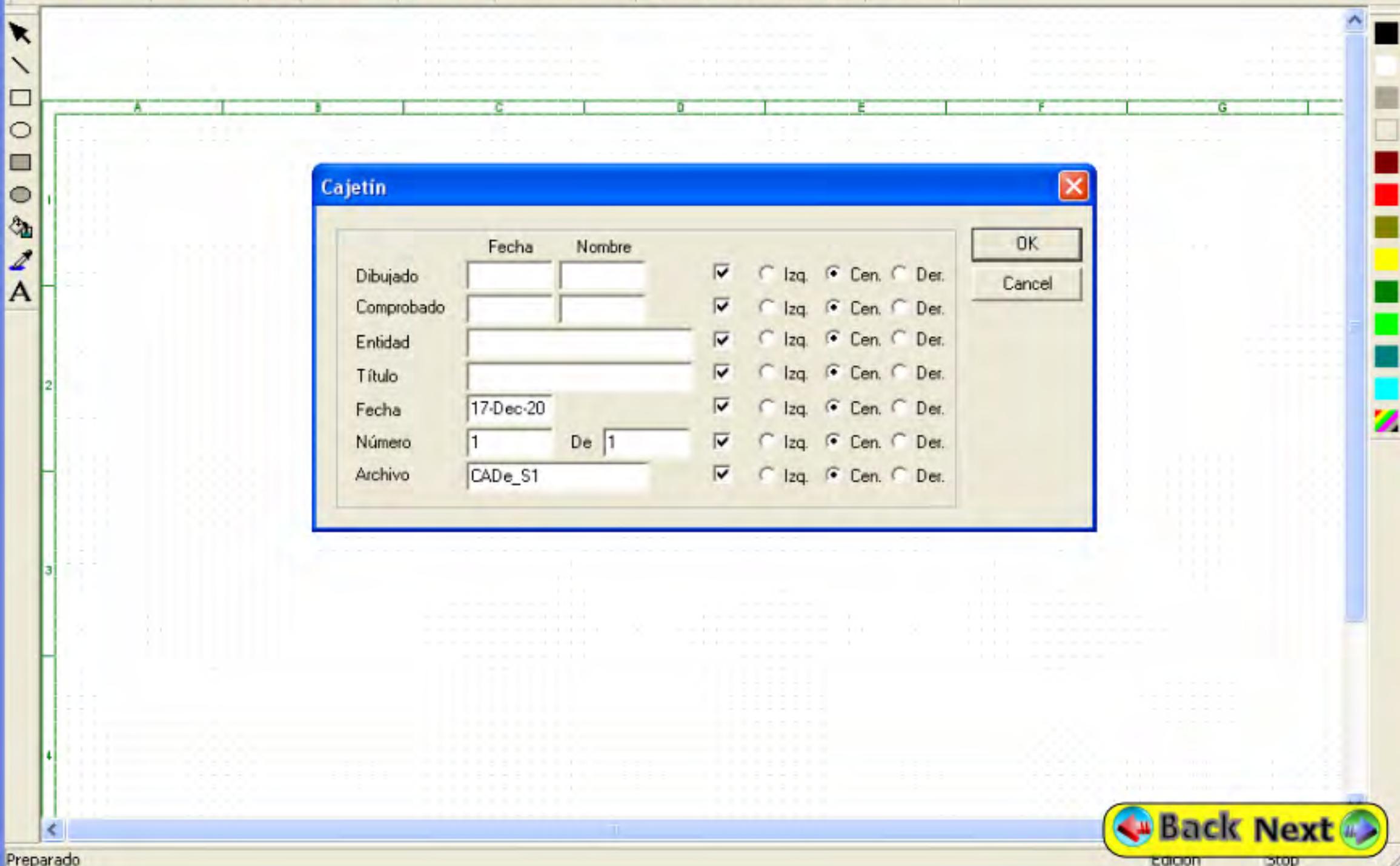


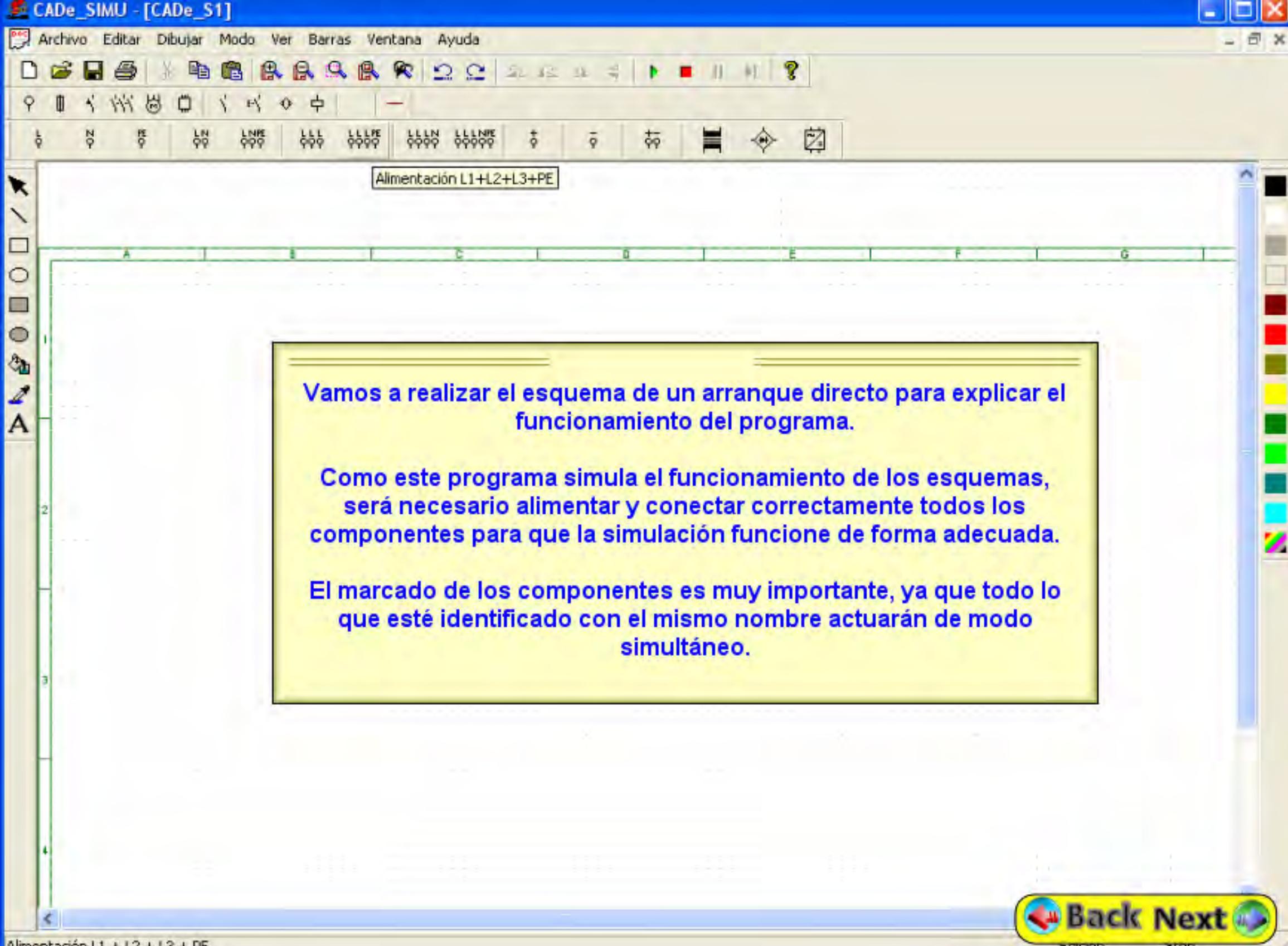


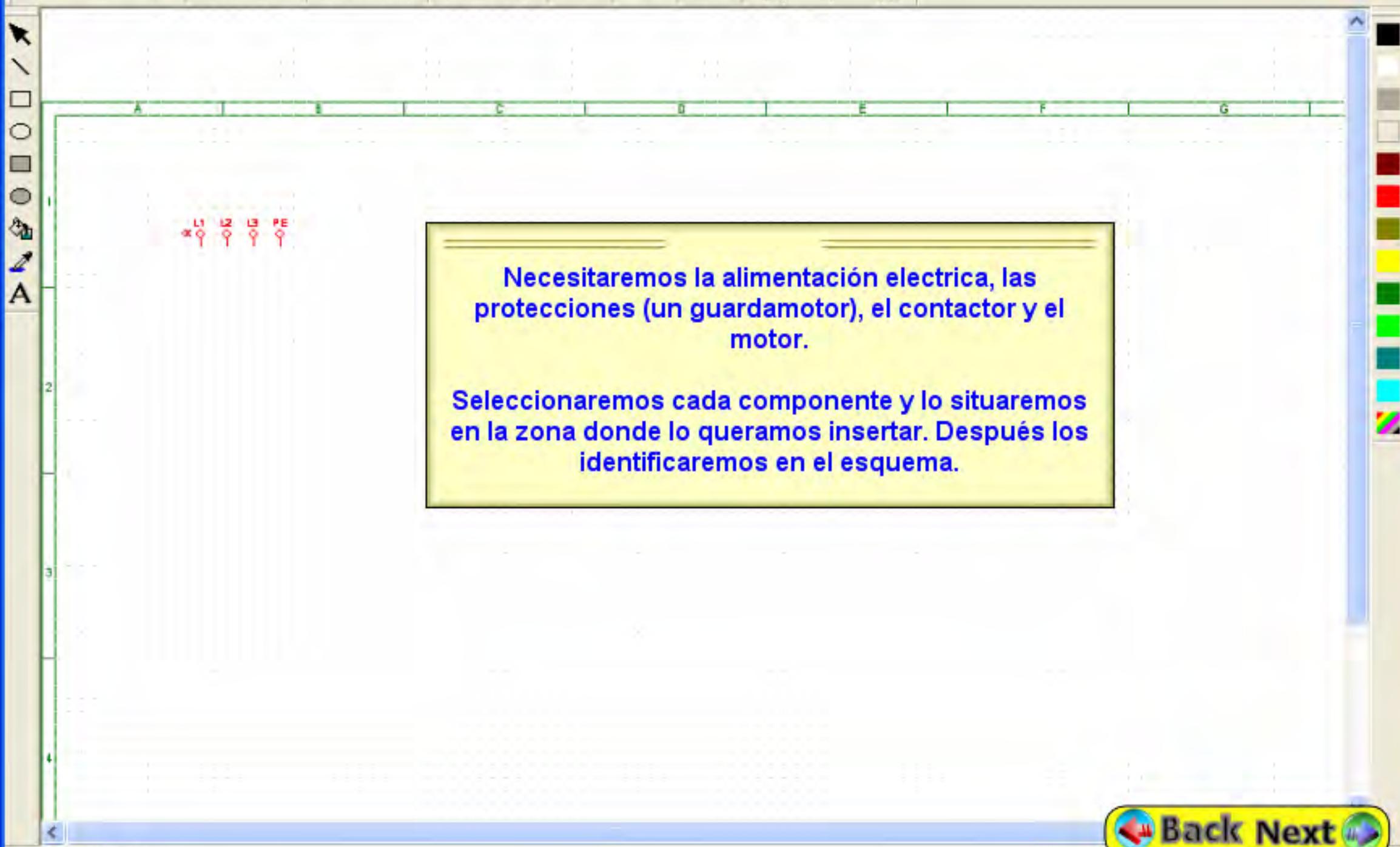
Cajetín

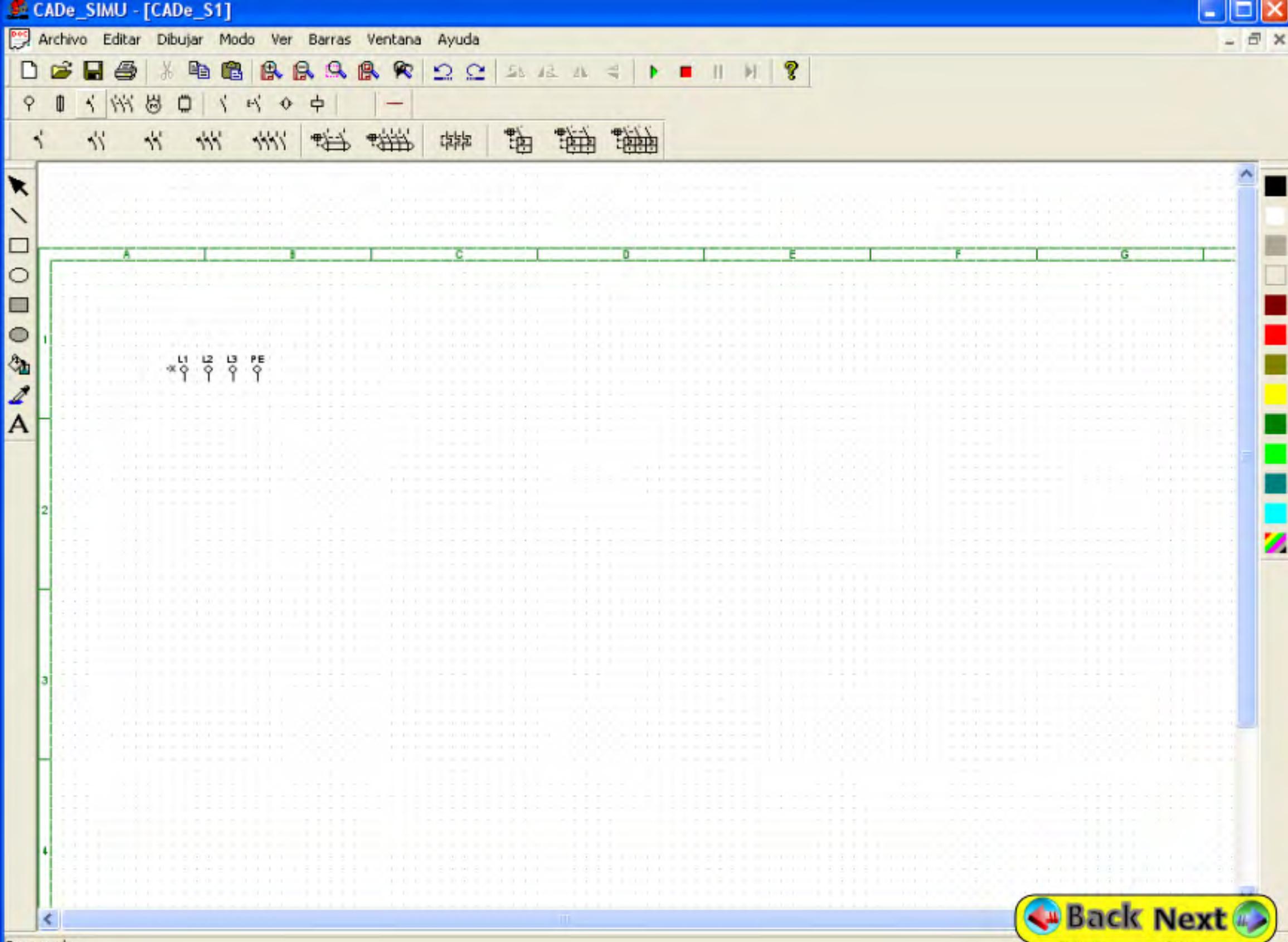
	Fecha	Nombre	
Dibujado			<input checked="" type="checkbox"/> Izq. <input type="radio"/> Cen. <input type="checkbox"/> Der.
Comprobado			<input checked="" type="checkbox"/> Izq. <input type="radio"/> Cen. <input type="checkbox"/> Der.
Entidad			<input checked="" type="checkbox"/> Izq. <input type="radio"/> Cen. <input type="checkbox"/> Der.
Título			<input checked="" type="checkbox"/> Izq. <input type="radio"/> Cen. <input type="checkbox"/> Der.
Fecha	17-Dec-20		<input checked="" type="checkbox"/> Izq. <input type="radio"/> Cen. <input type="checkbox"/> Der.
Número	1	De 1	<input checked="" type="checkbox"/> Izq. <input type="radio"/> Cen. <input type="checkbox"/> Der.
Archivo	CADe_S1		<input checked="" type="checkbox"/> Izq. <input type="radio"/> Cen. <input type="checkbox"/> Der.

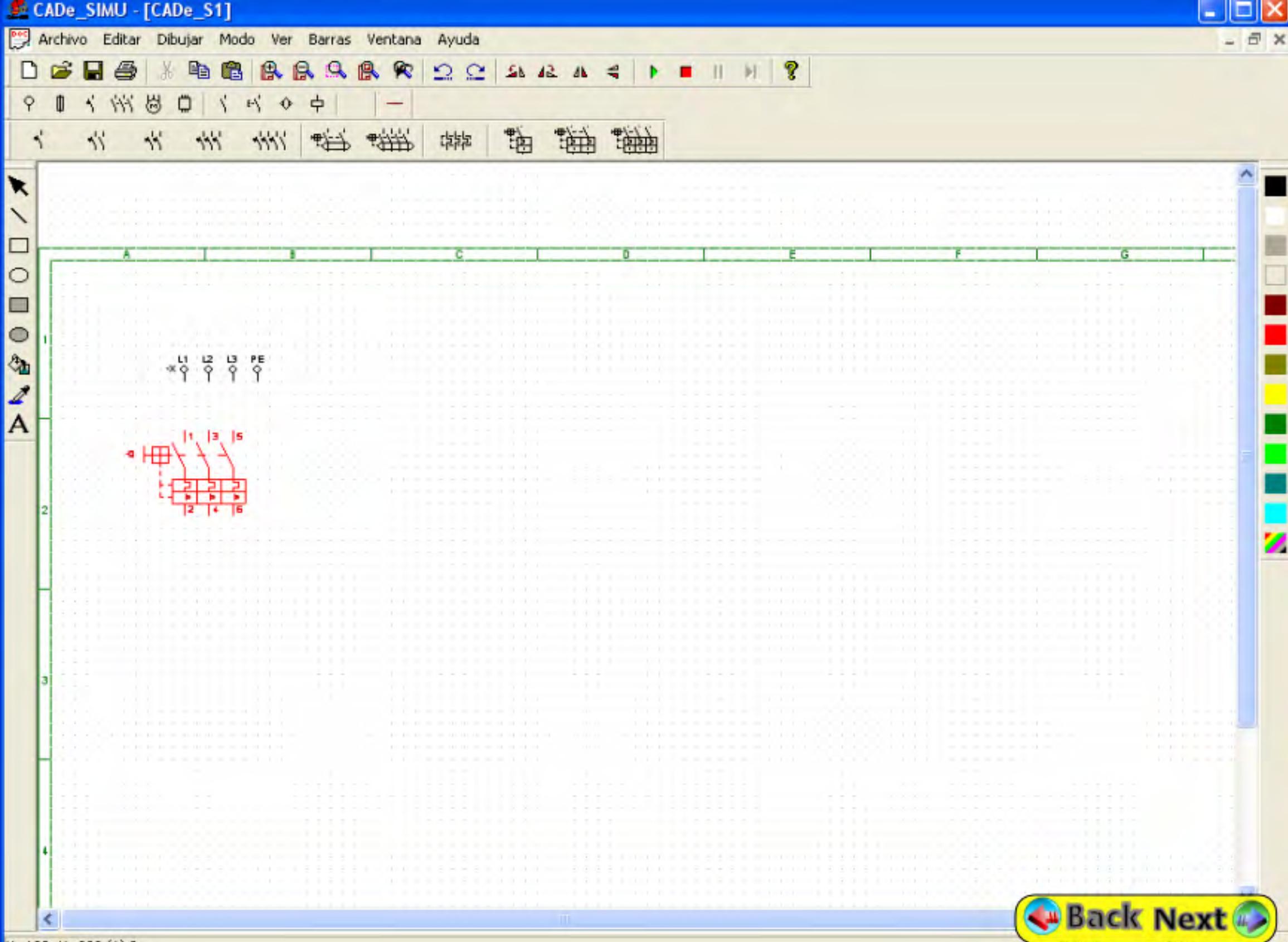
OK Cancel

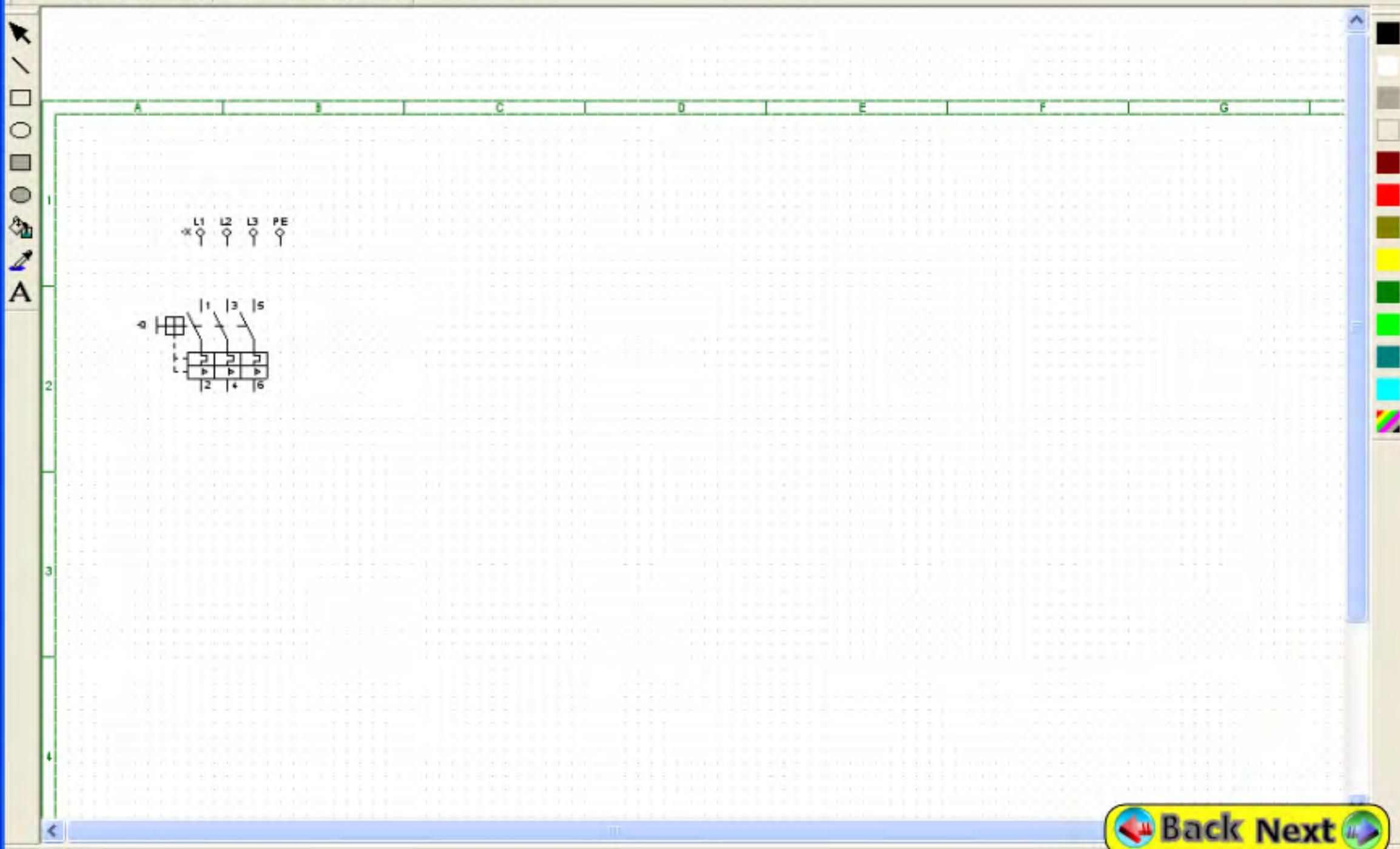
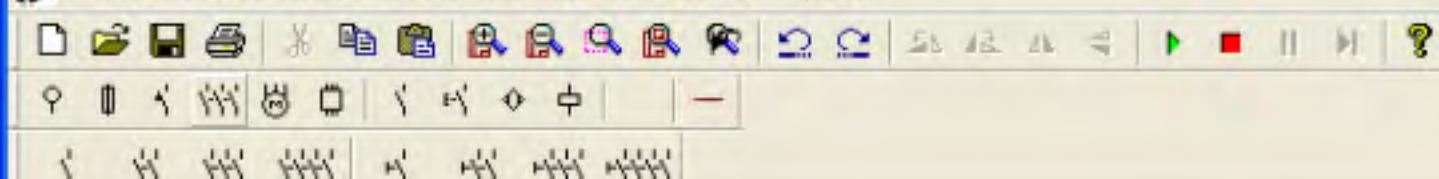


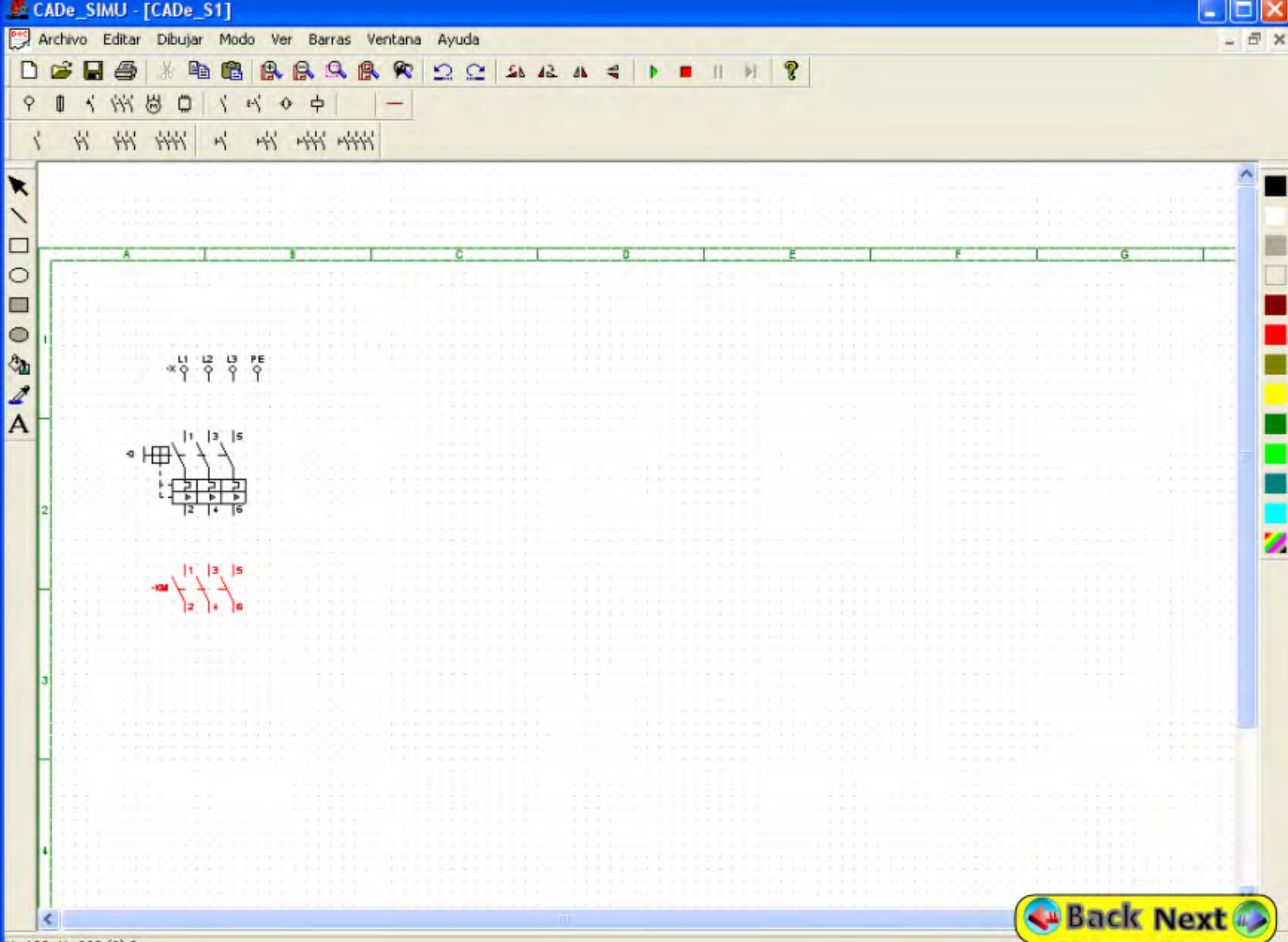


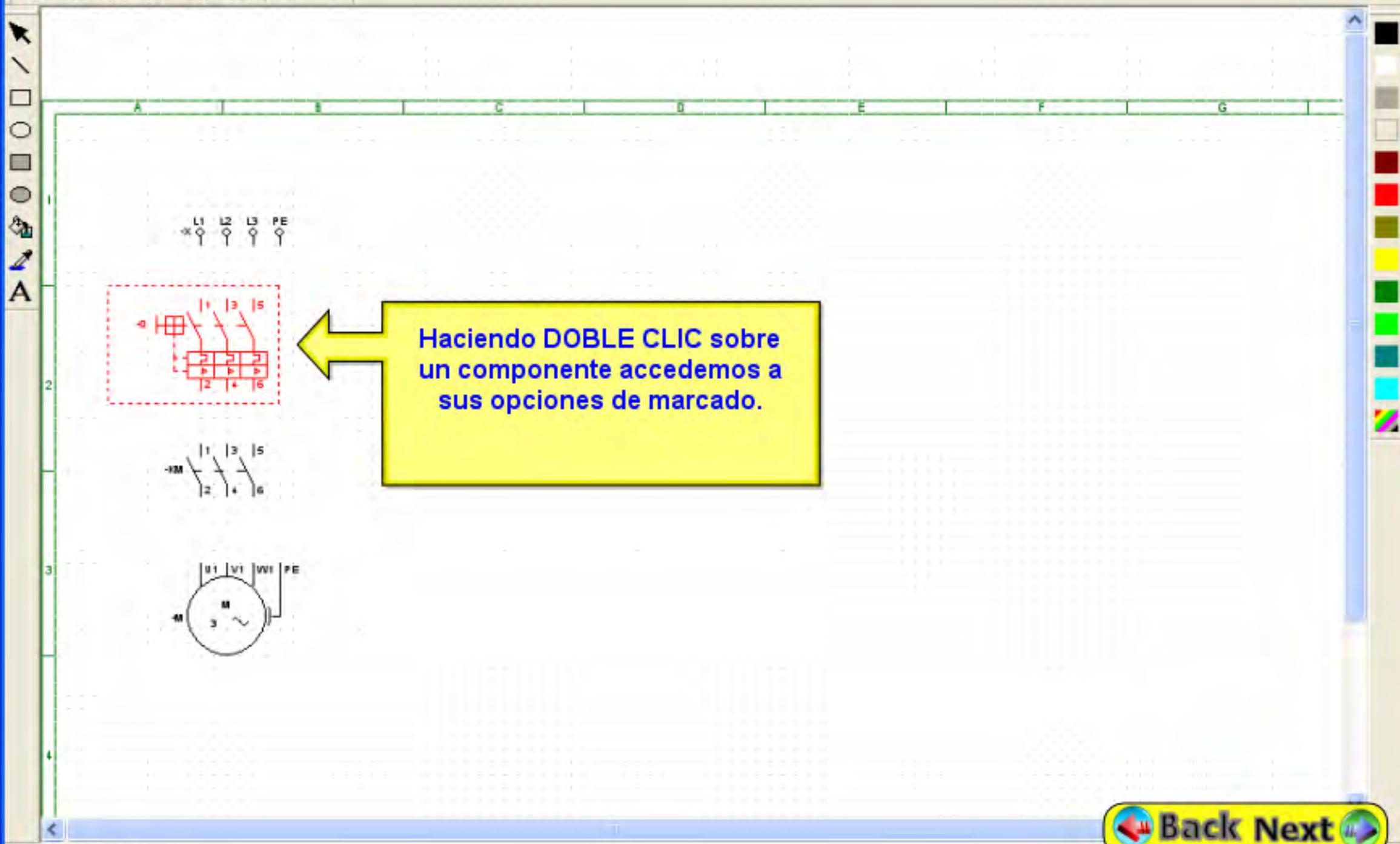














### Editar

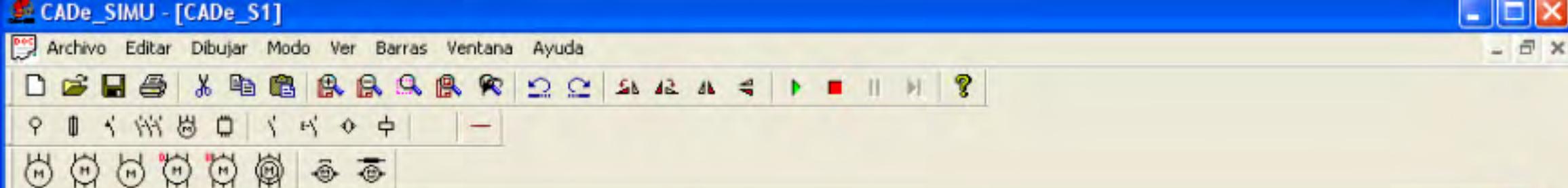
Disyuntor III

	Visualizar
Nombre:	<input checked="" type="checkbox"/> -Q1
Función:	<input type="checkbox"/>
Conexión 1:	<input checked="" type="checkbox"/> 1
Conexión 2:	<input checked="" type="checkbox"/> 3
Conexión 3:	<input checked="" type="checkbox"/> 5
Conexión 4:	<input checked="" type="checkbox"/> 2
Conexión 5:	<input checked="" type="checkbox"/> 4
Conexión 6:	<input checked="" type="checkbox"/> 6
Conexión 7:	<input type="checkbox"/>
Conexión 8:	<input type="checkbox"/>
Conexión 9:	<input type="checkbox"/>

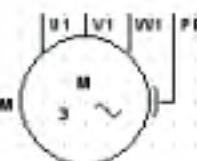
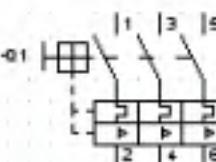
OK

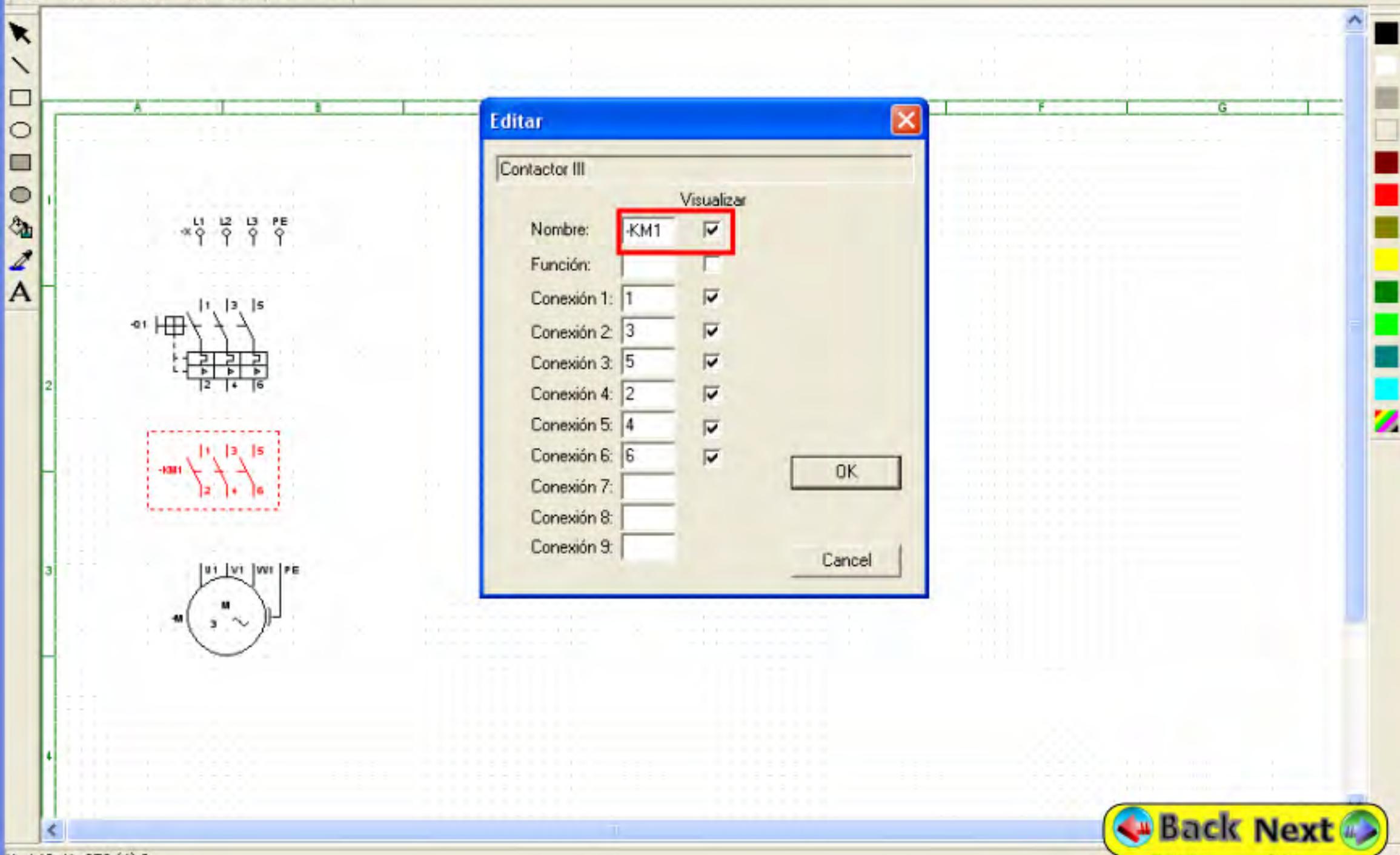
Cancel

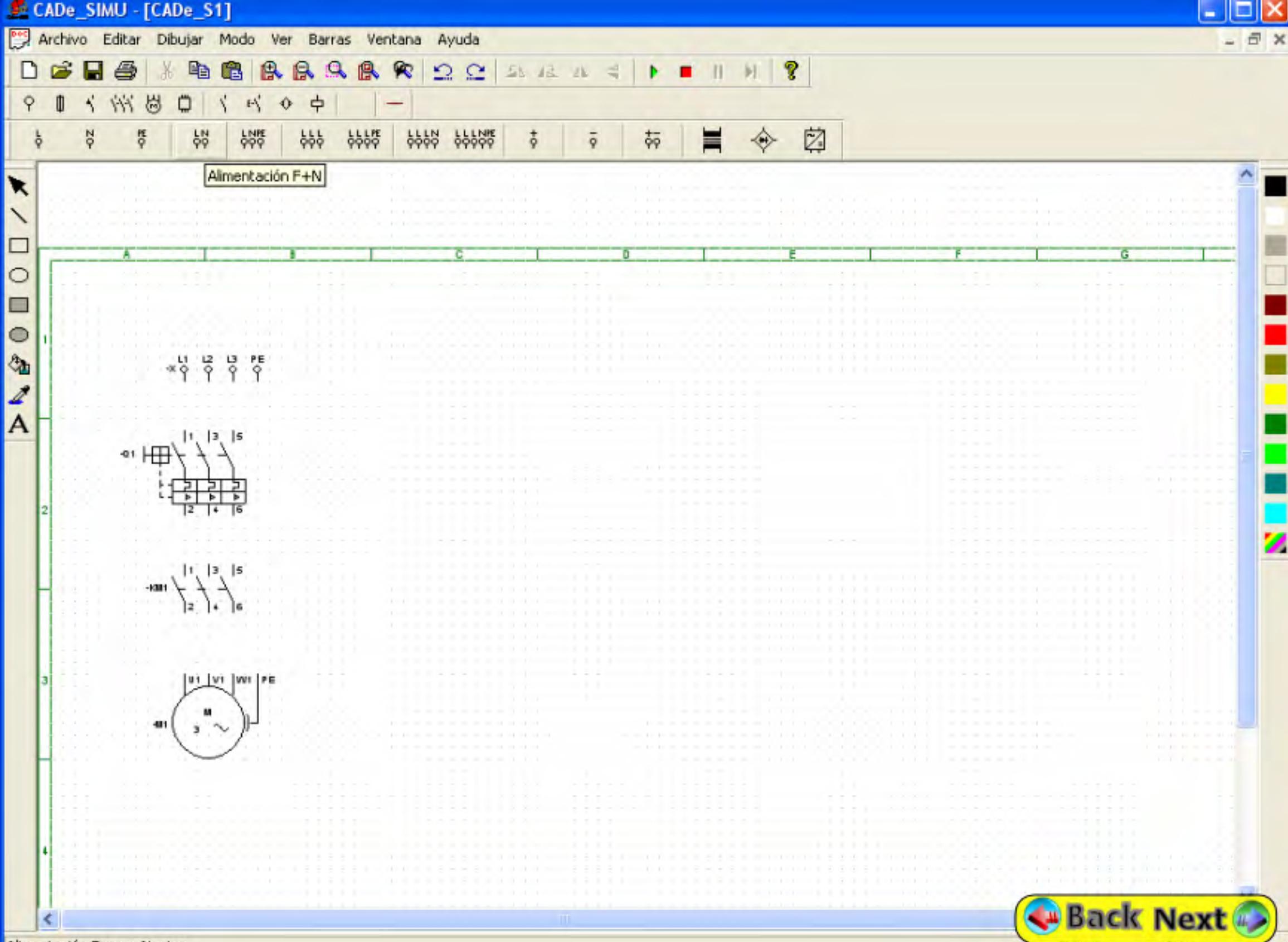
Lo identificamos como (-Q1) y nos aseguramos de que se visualicen los datos (por defecto aparecerá así).

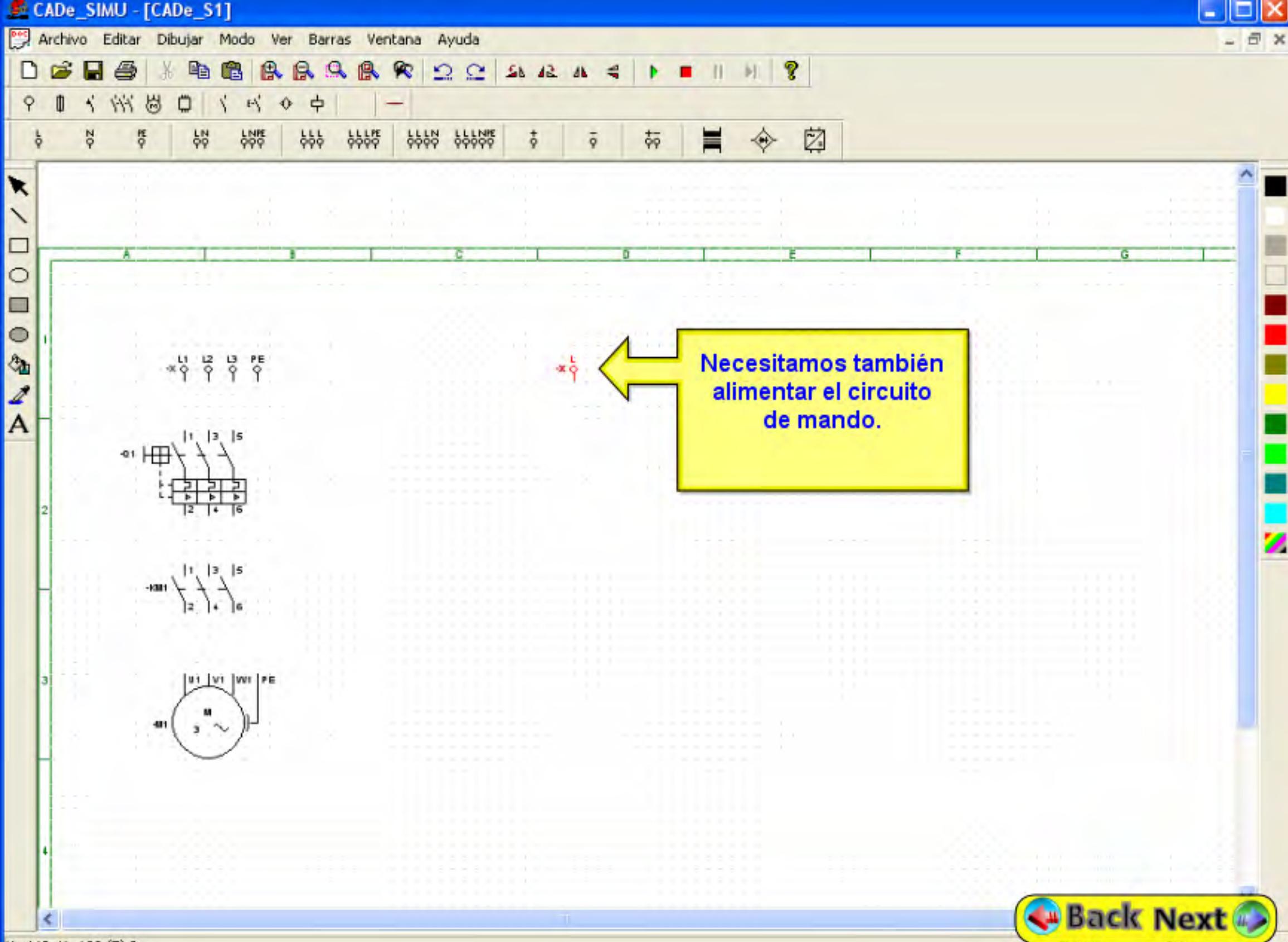


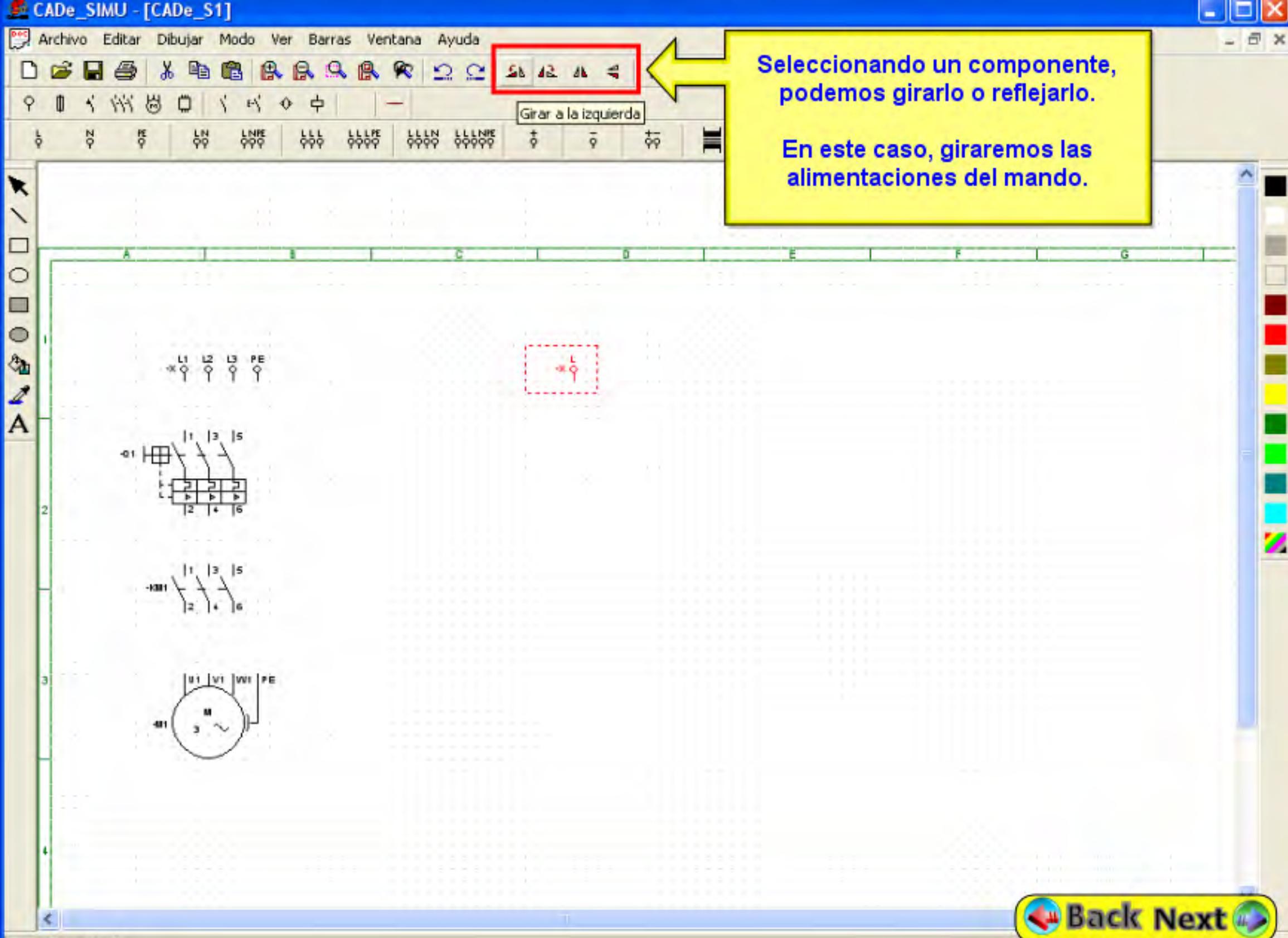
L1 L2 L3 PE

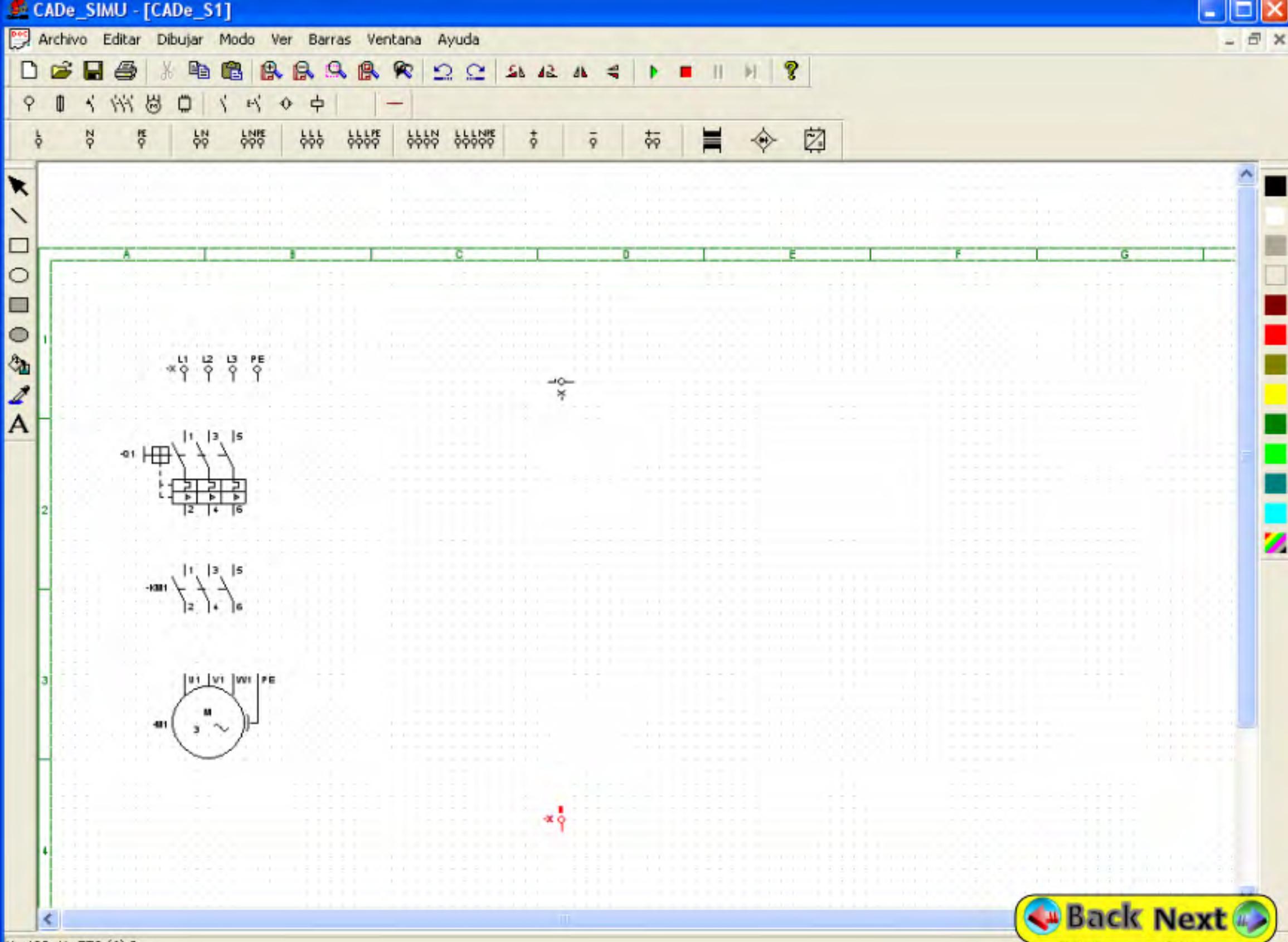


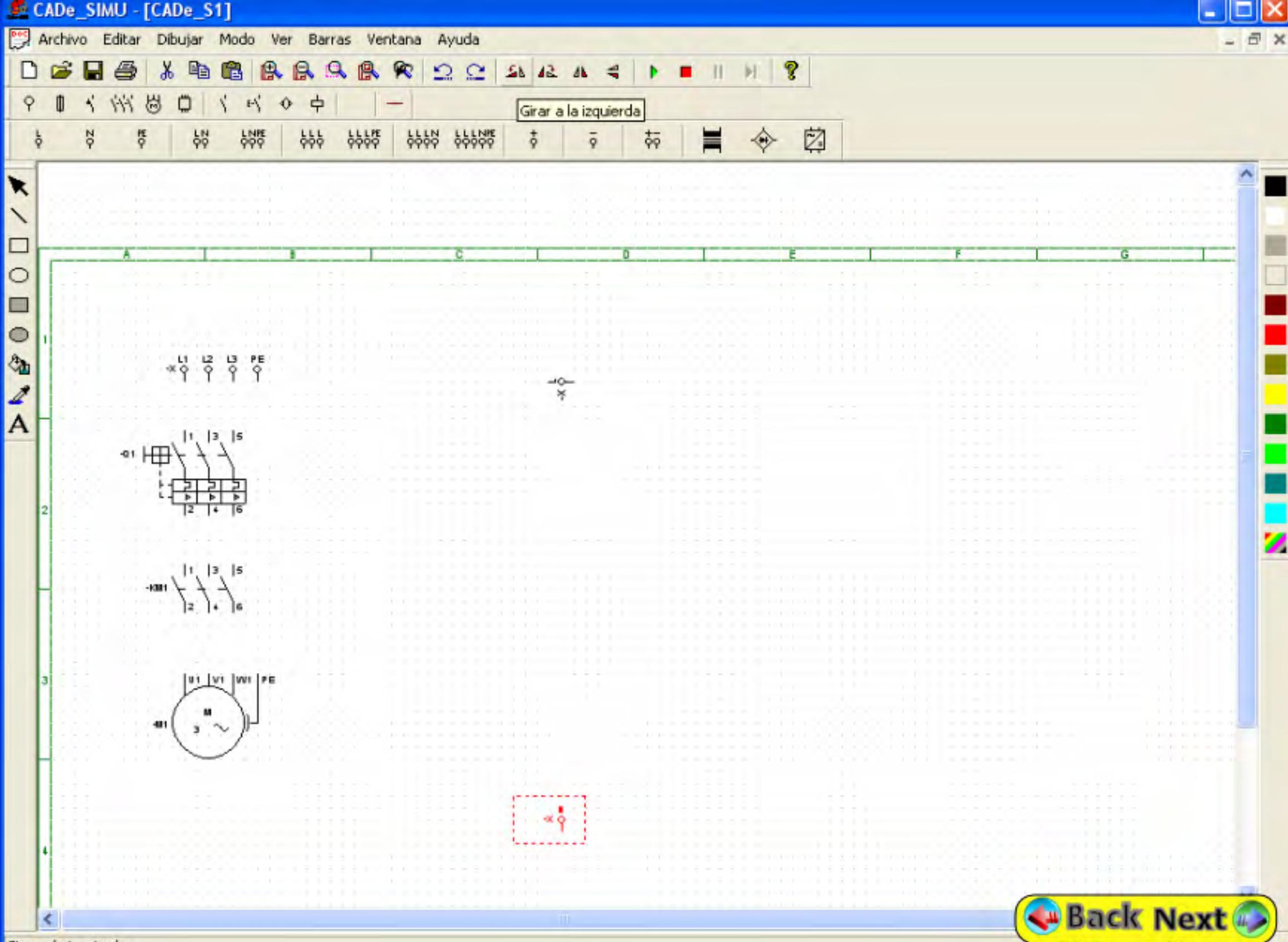


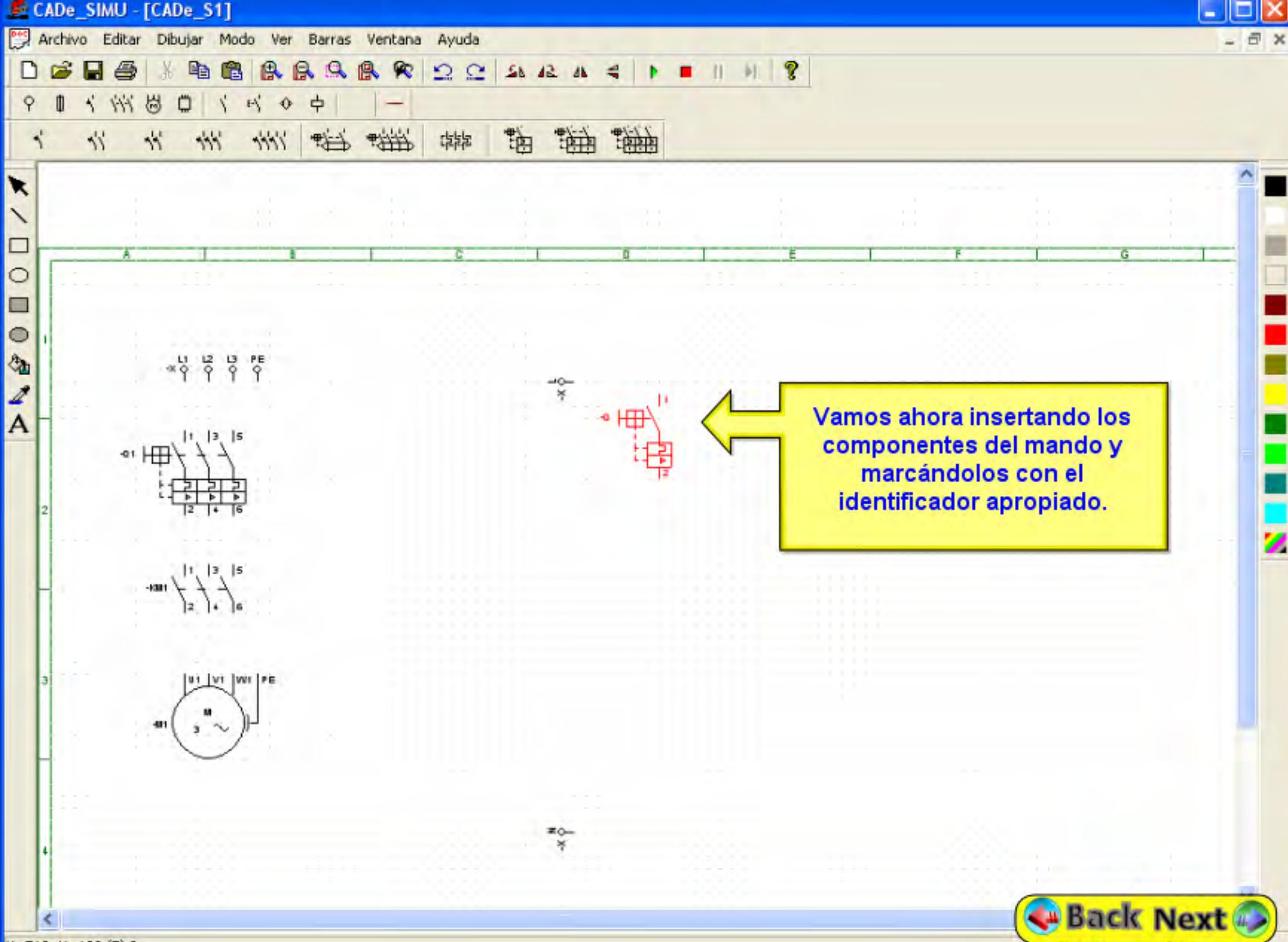


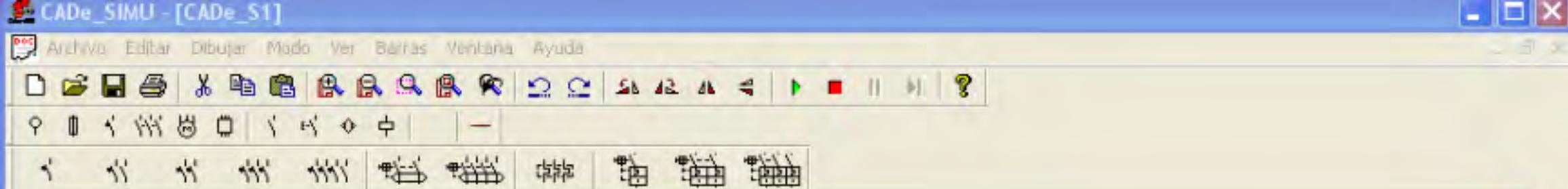


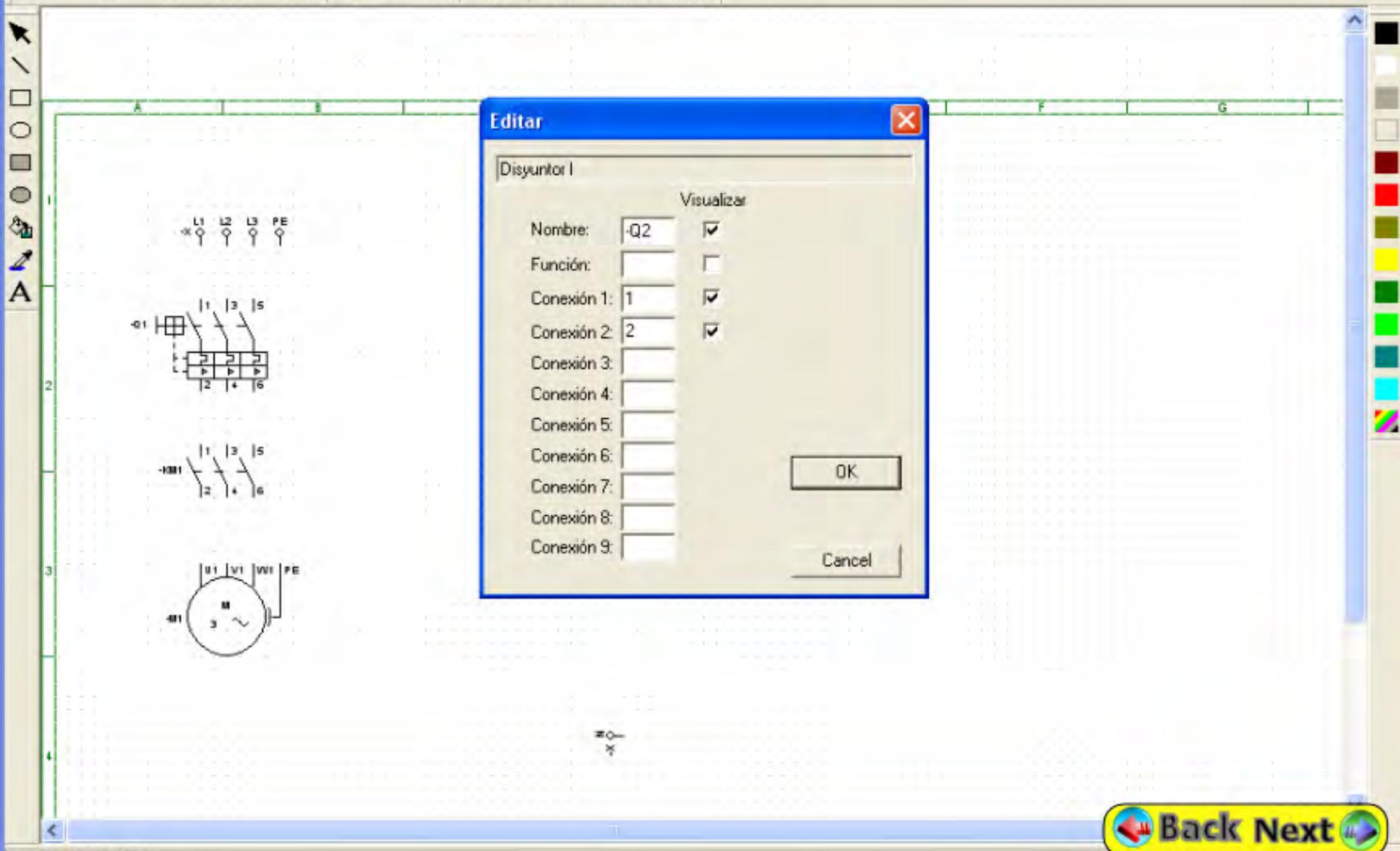
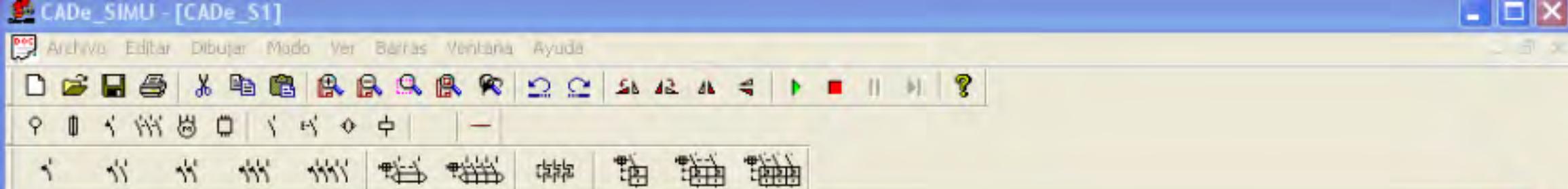


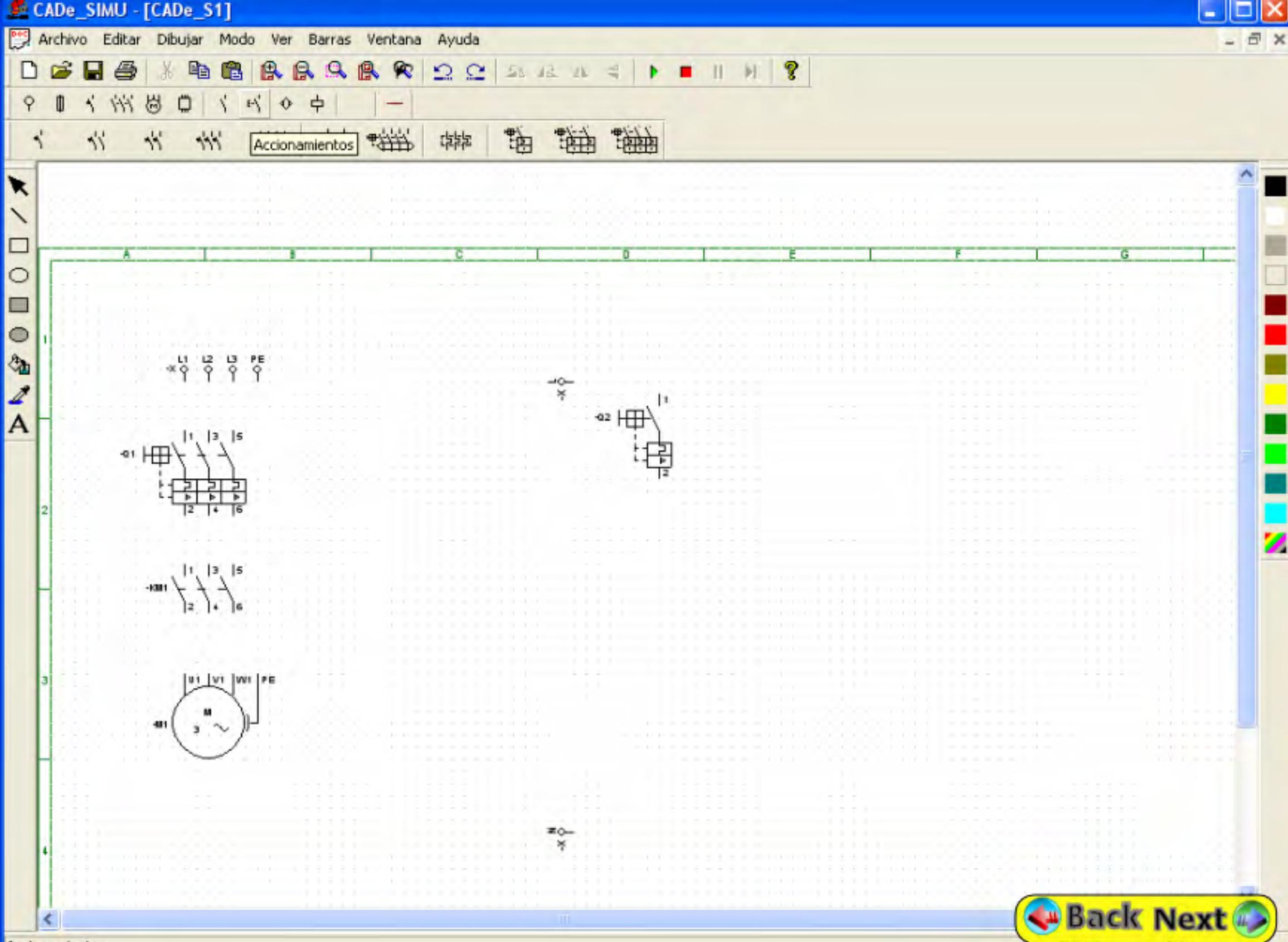


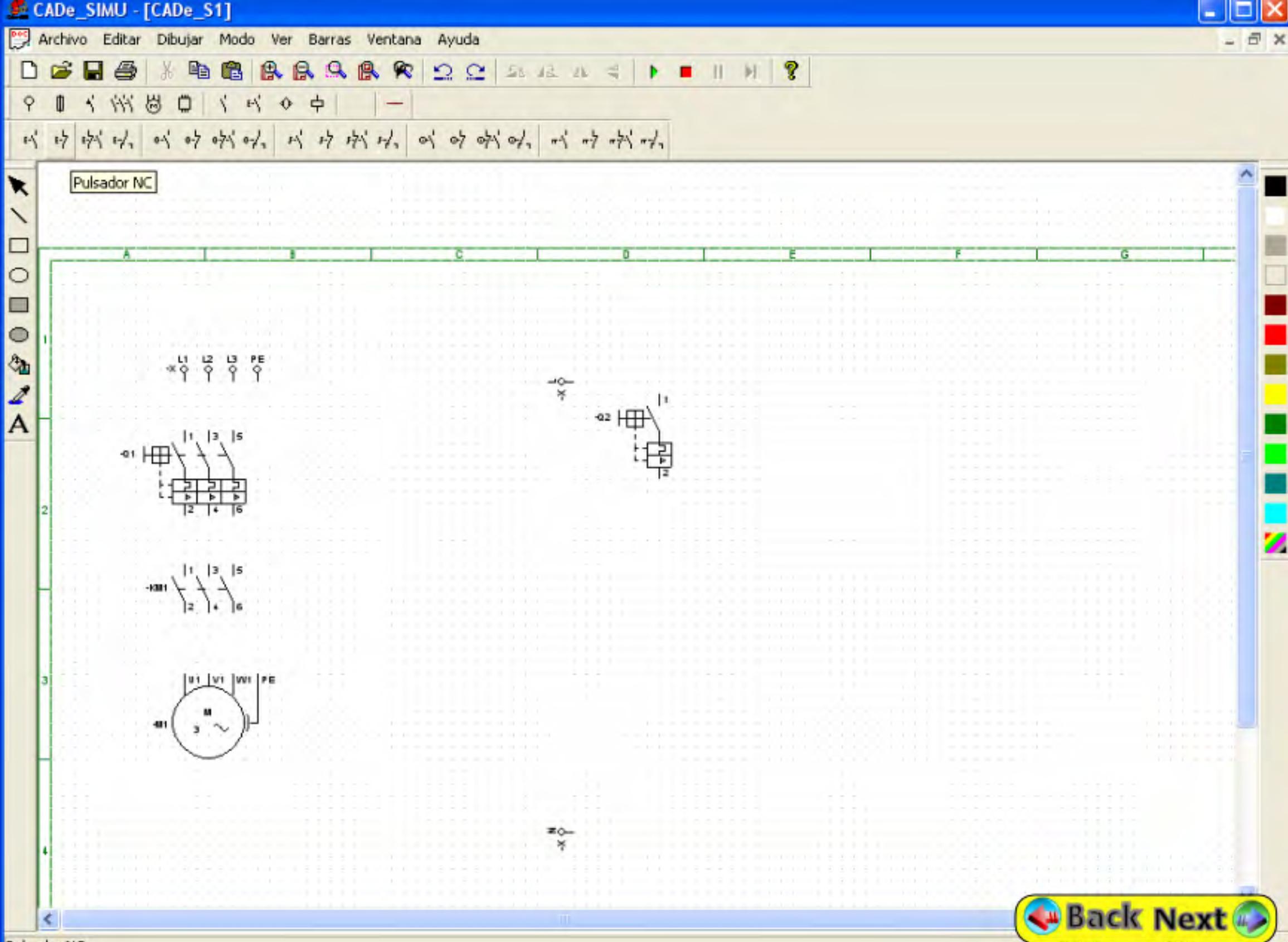


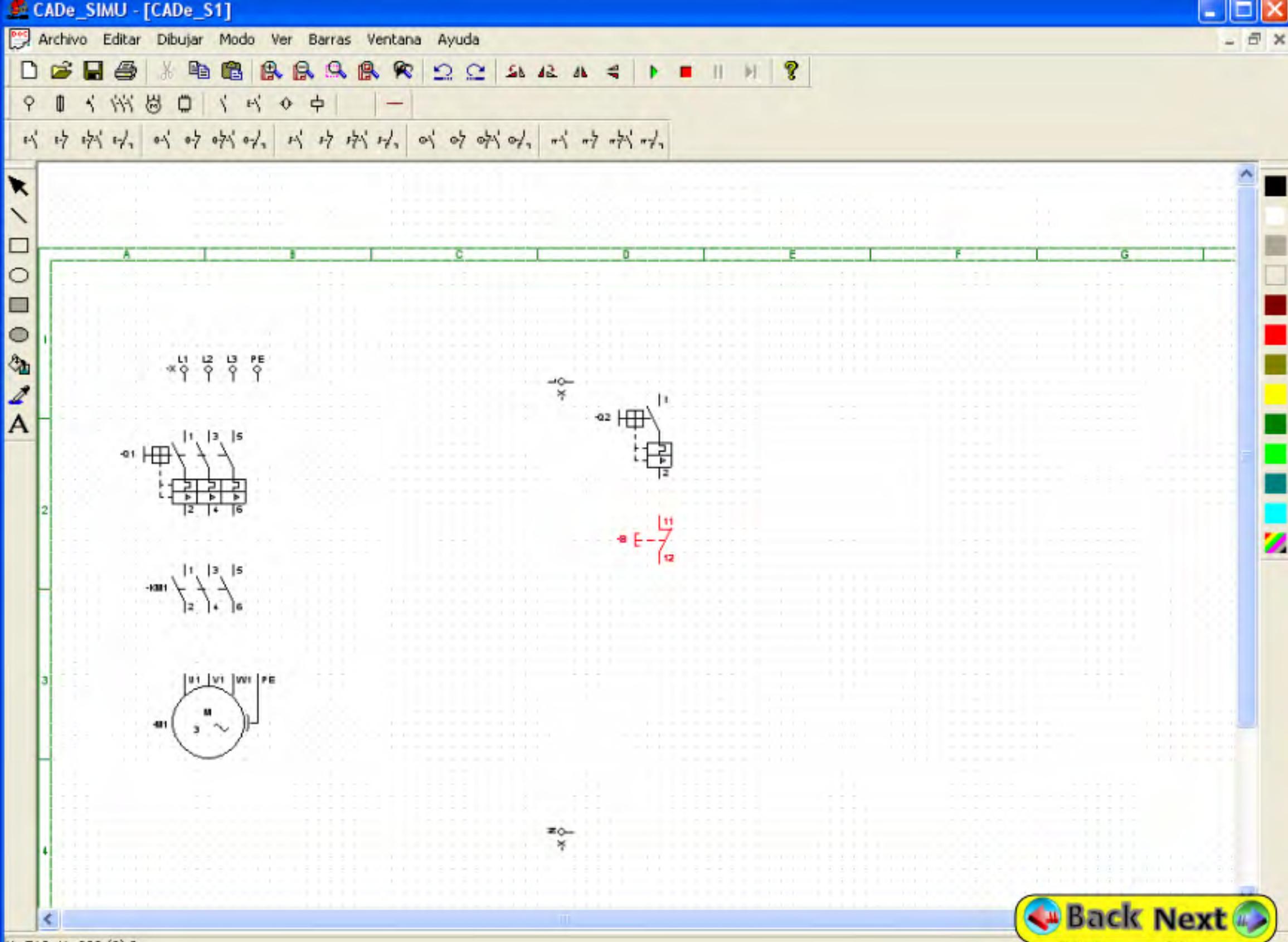


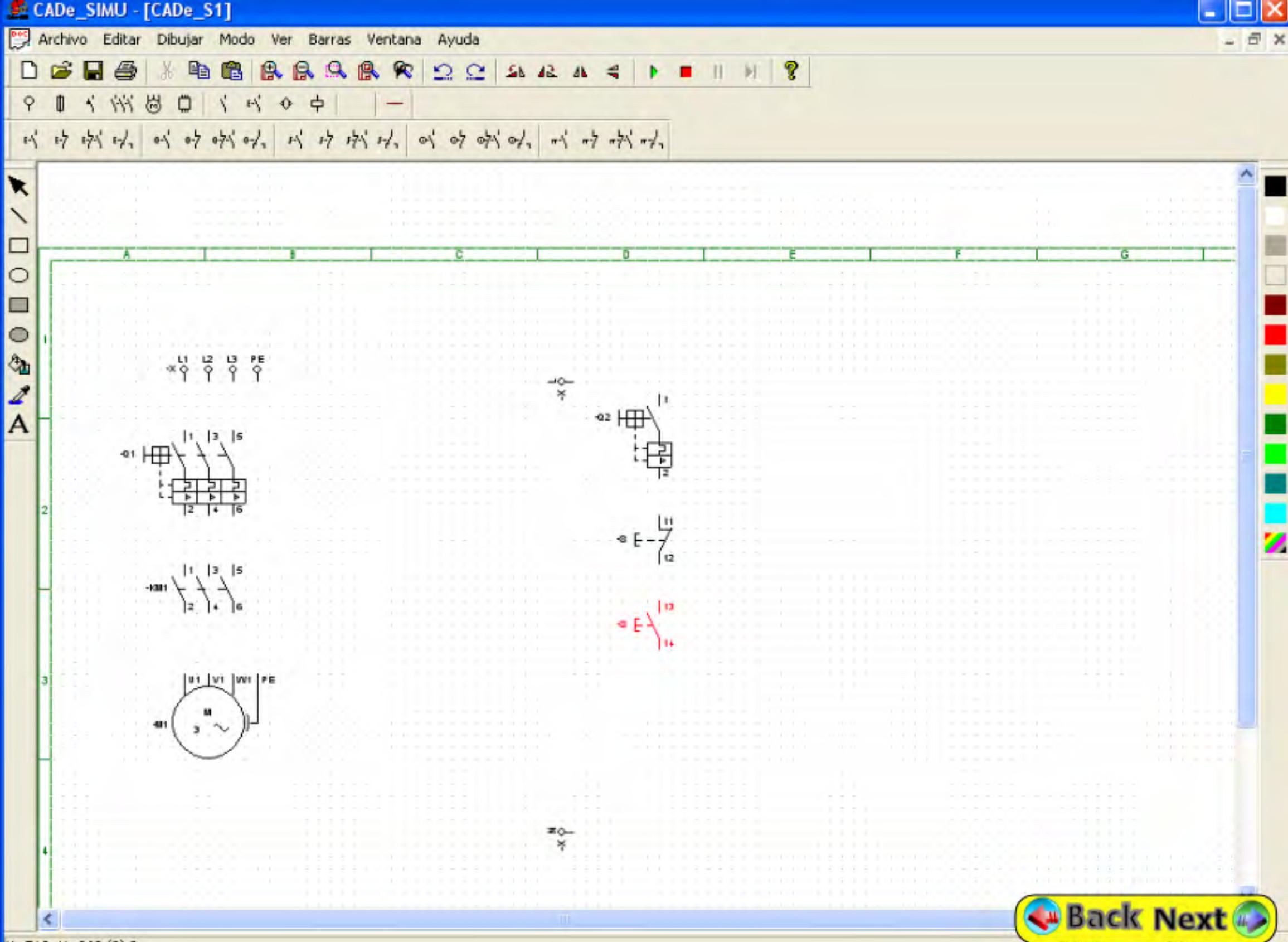


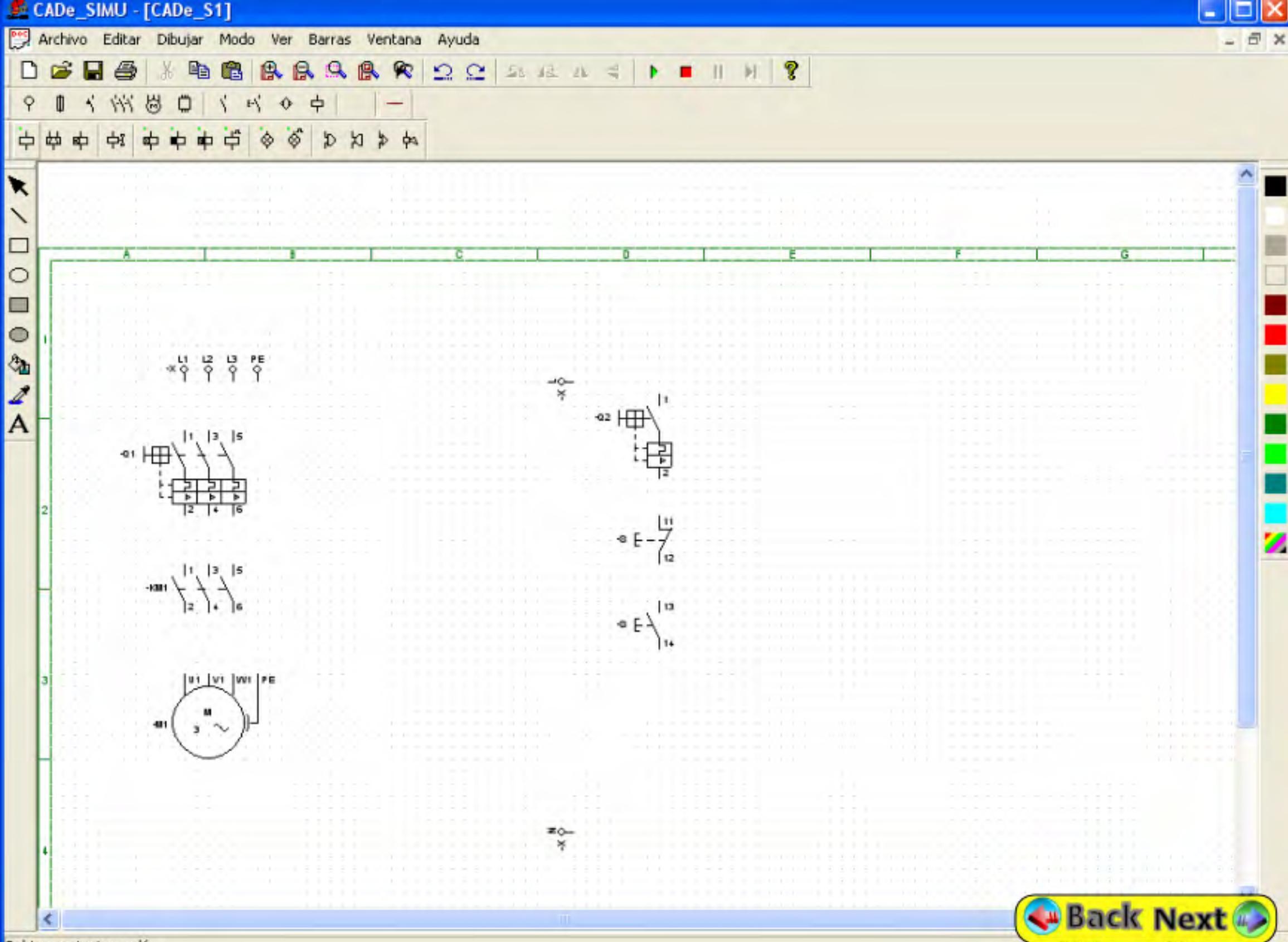


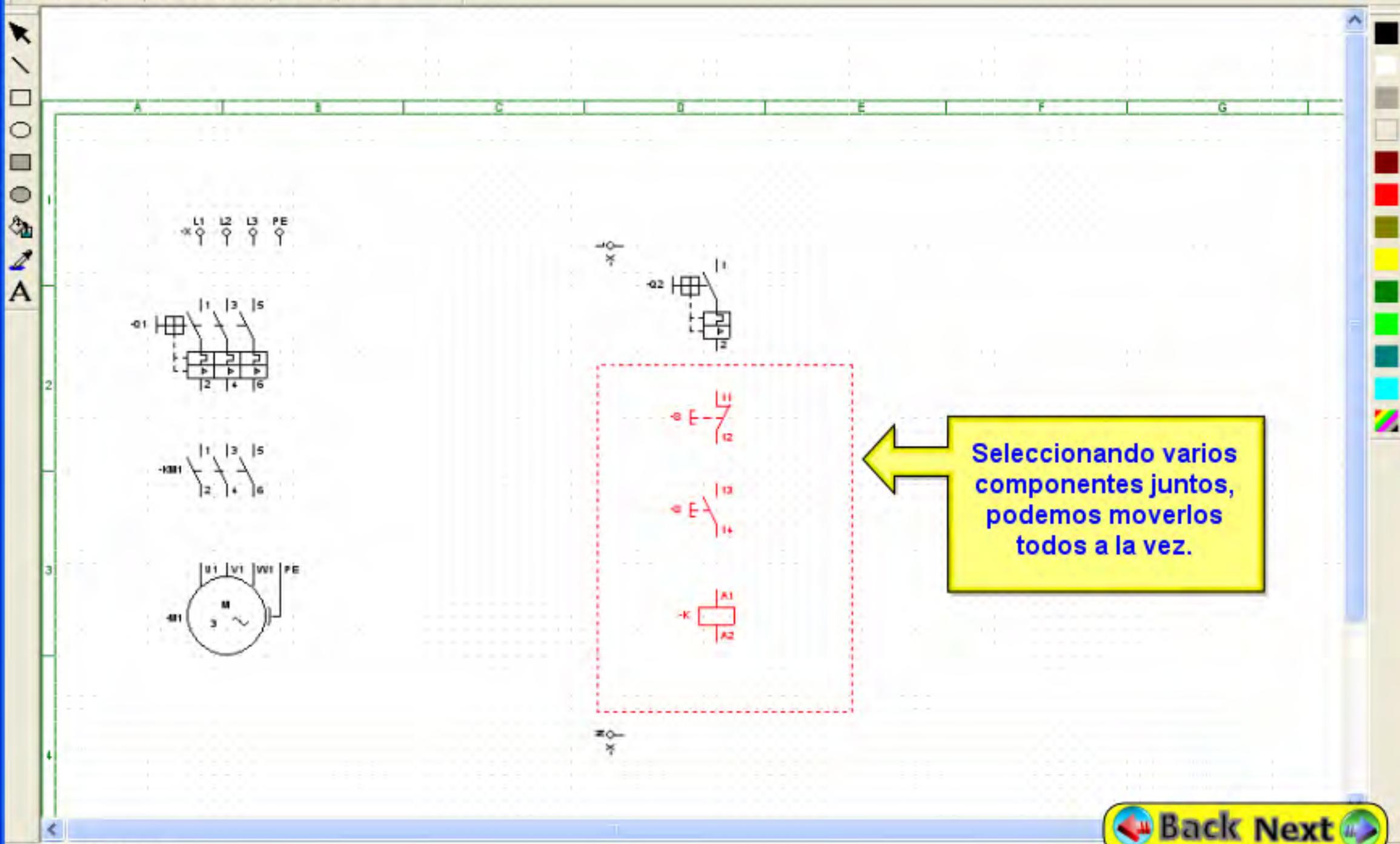


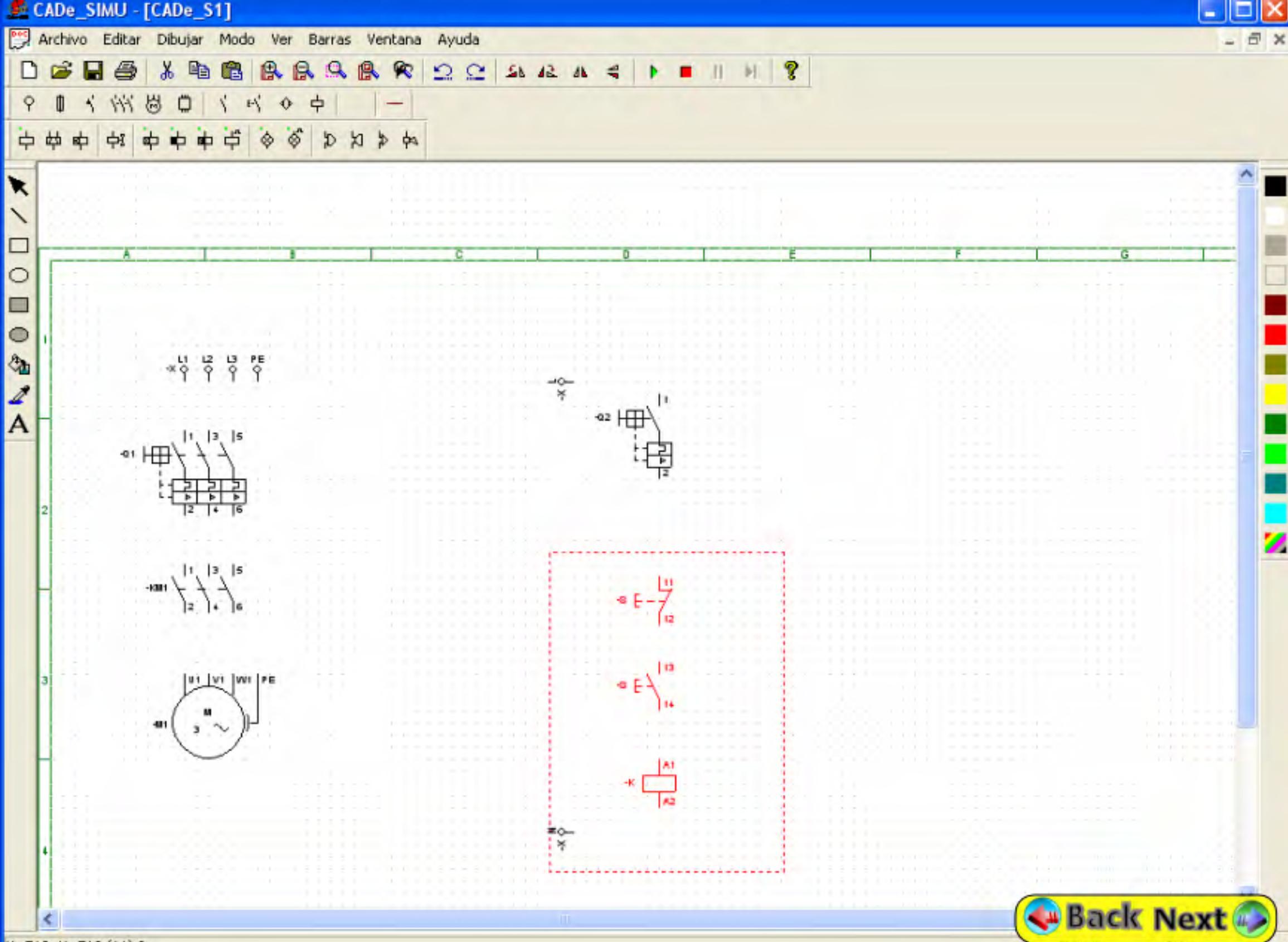


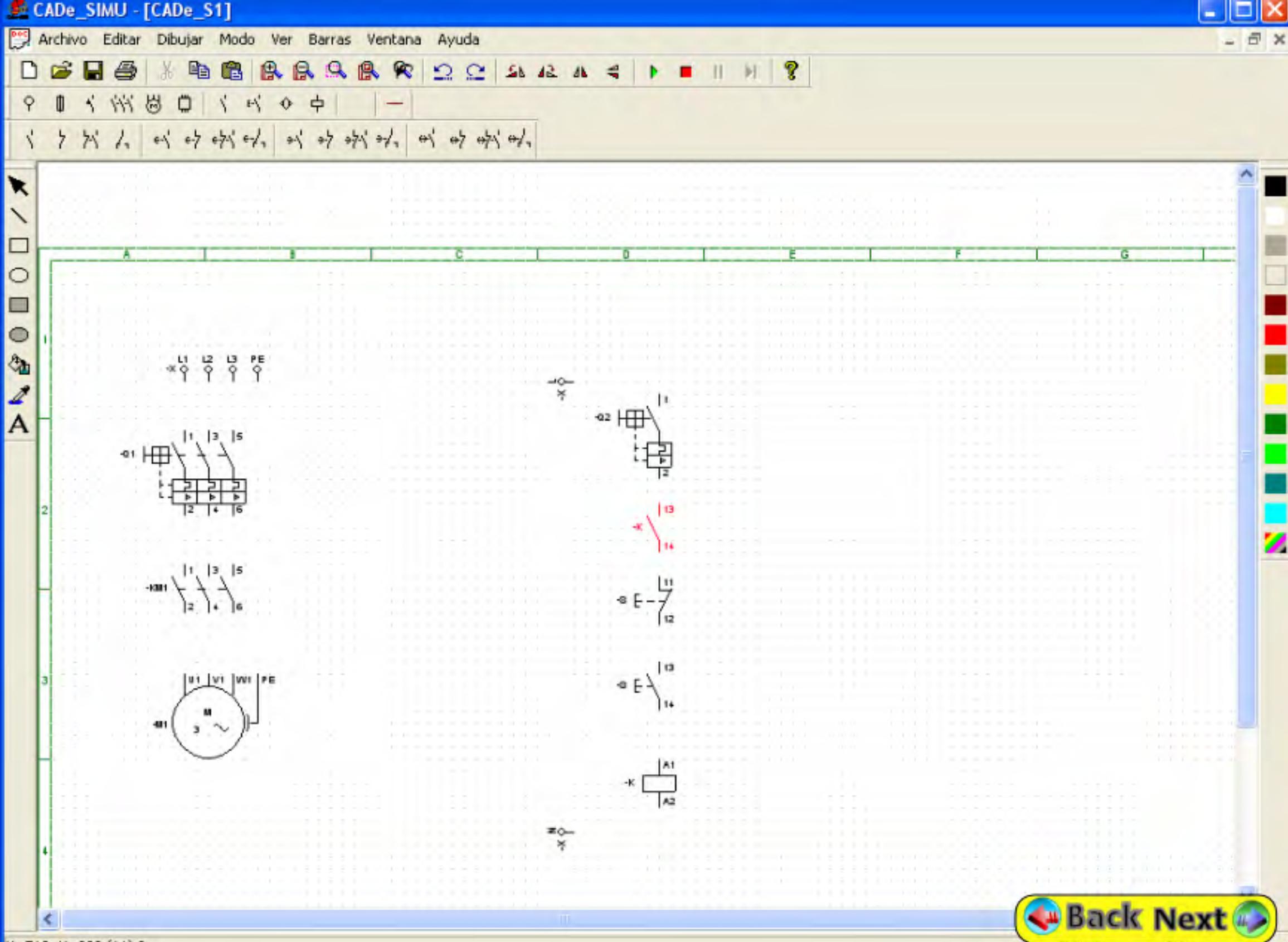


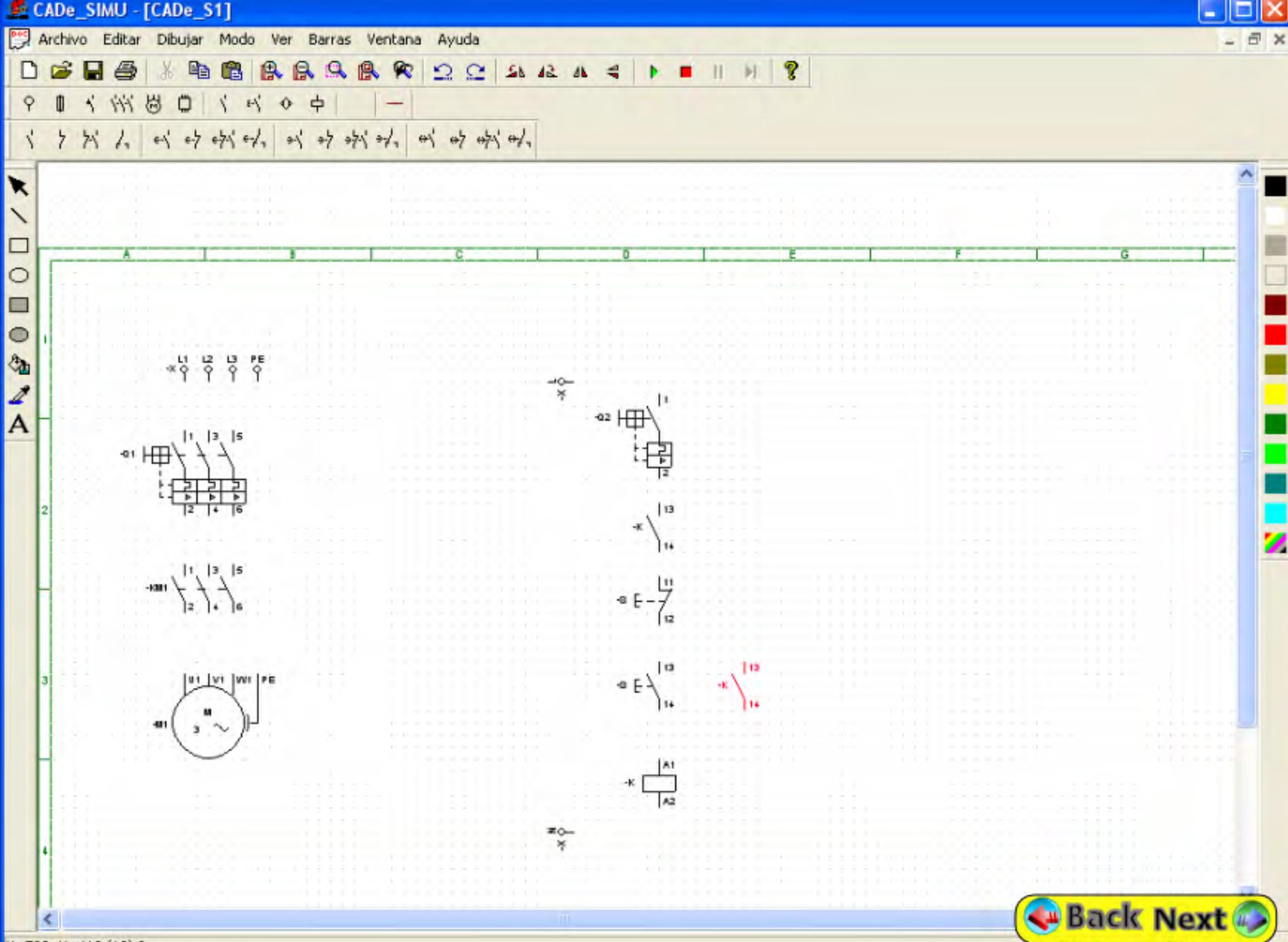


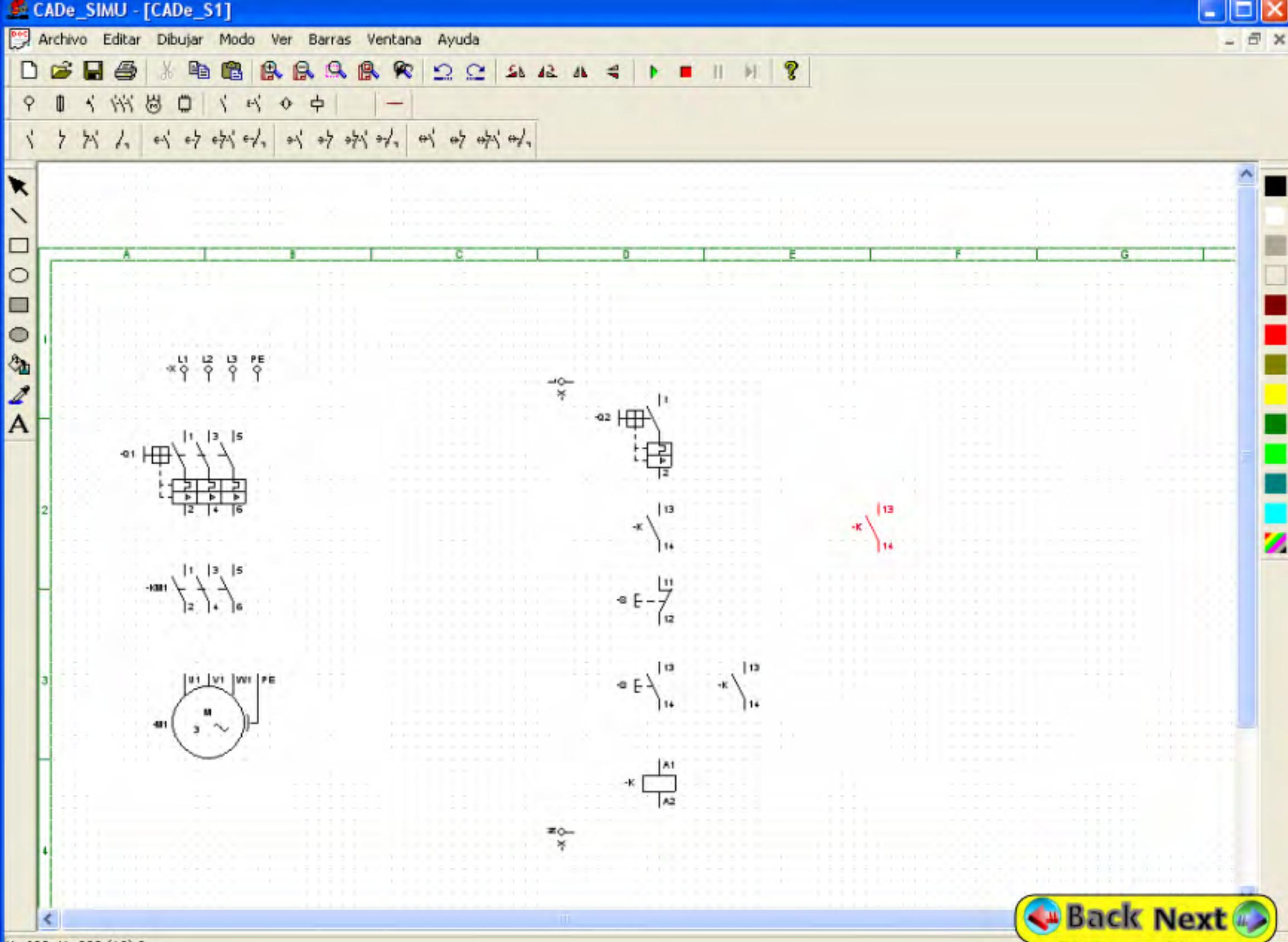


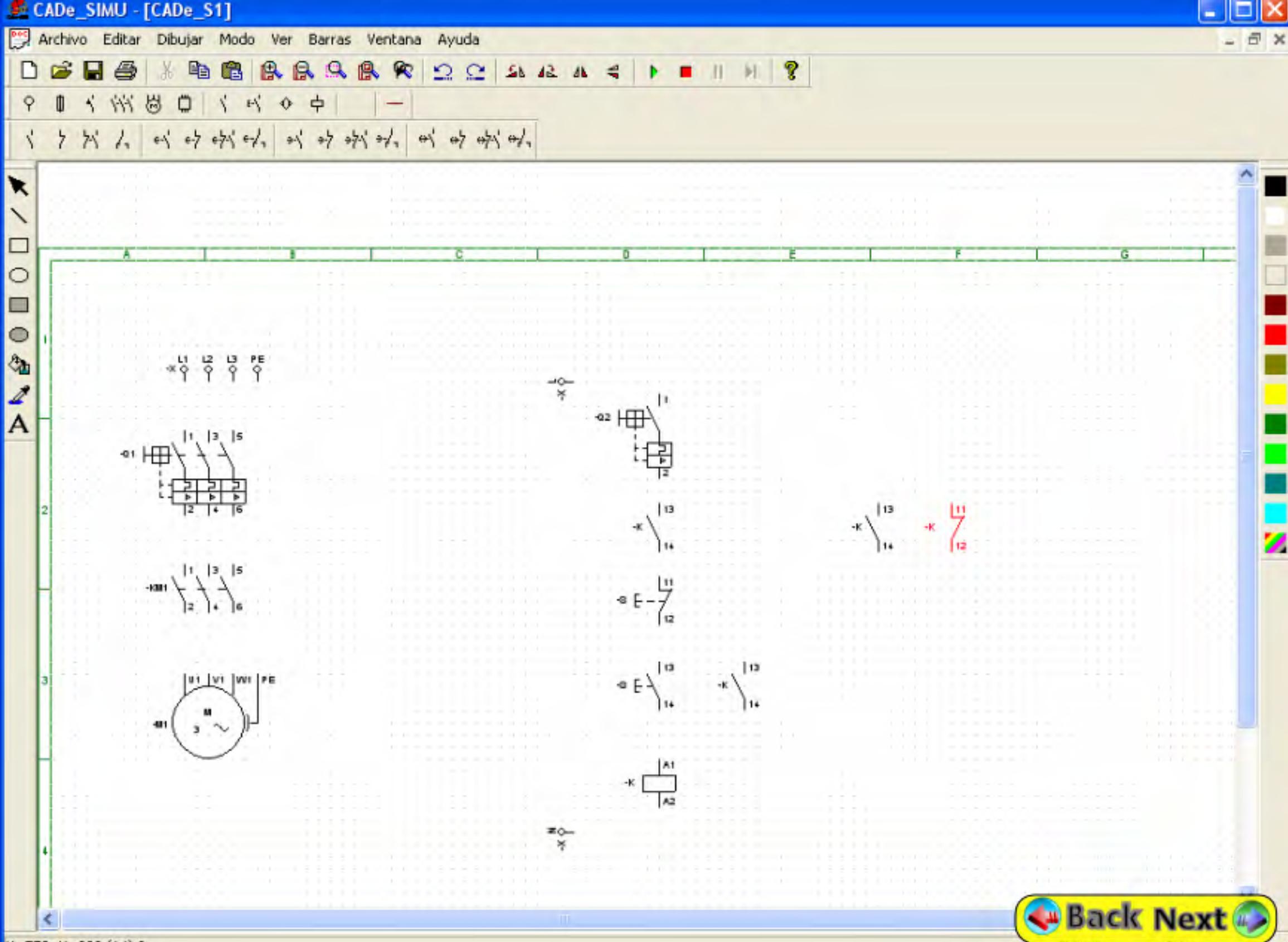


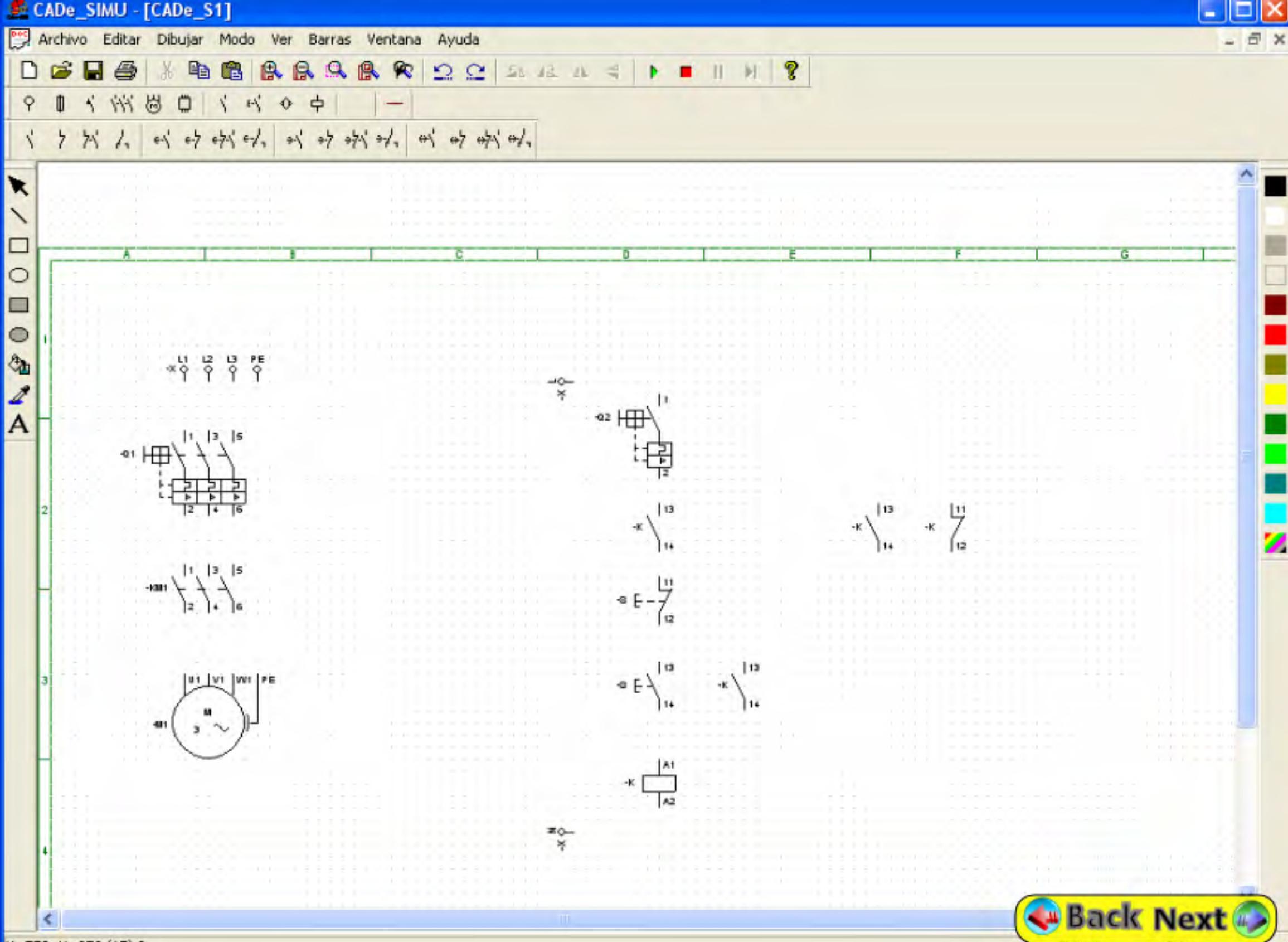


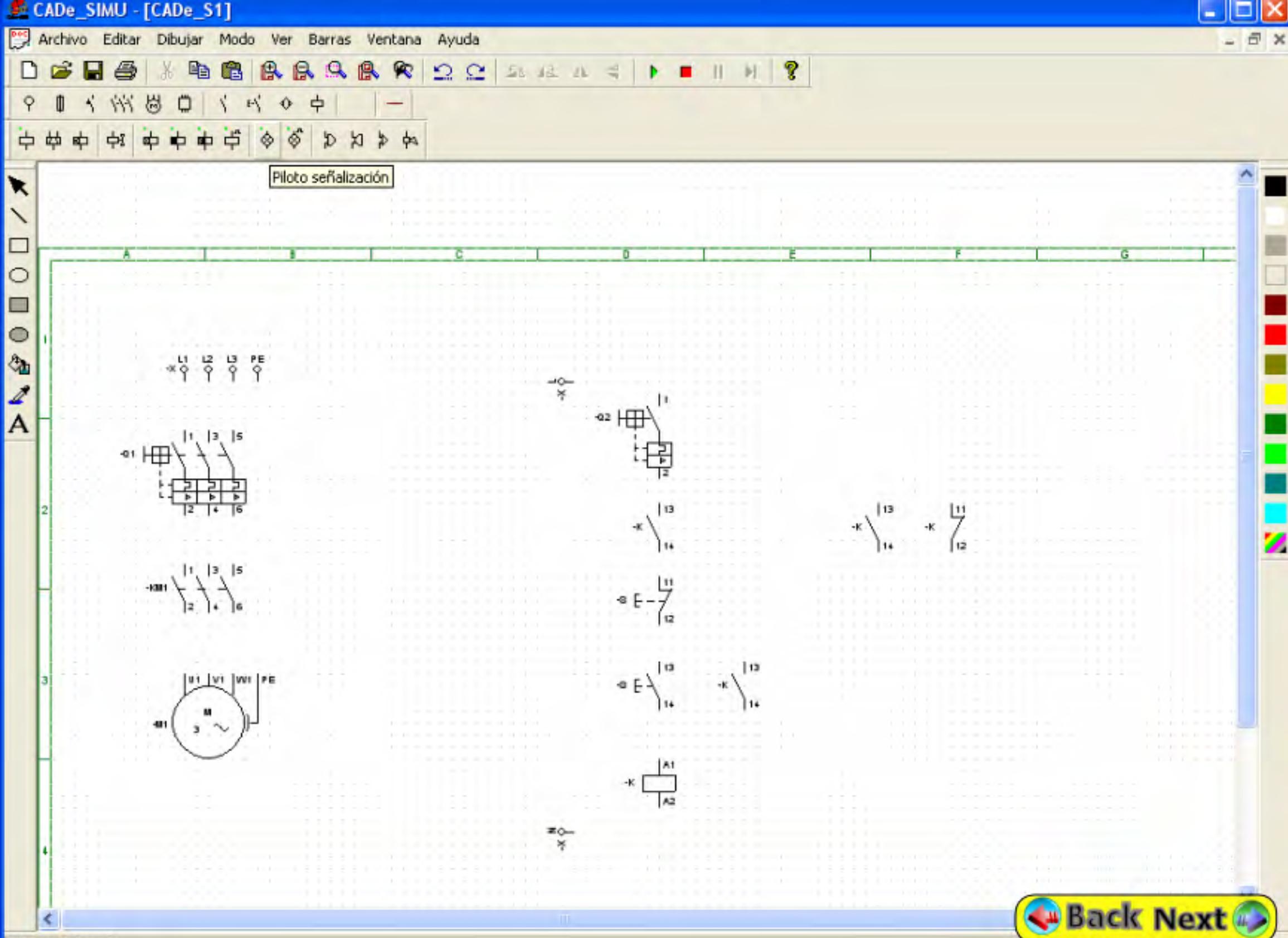


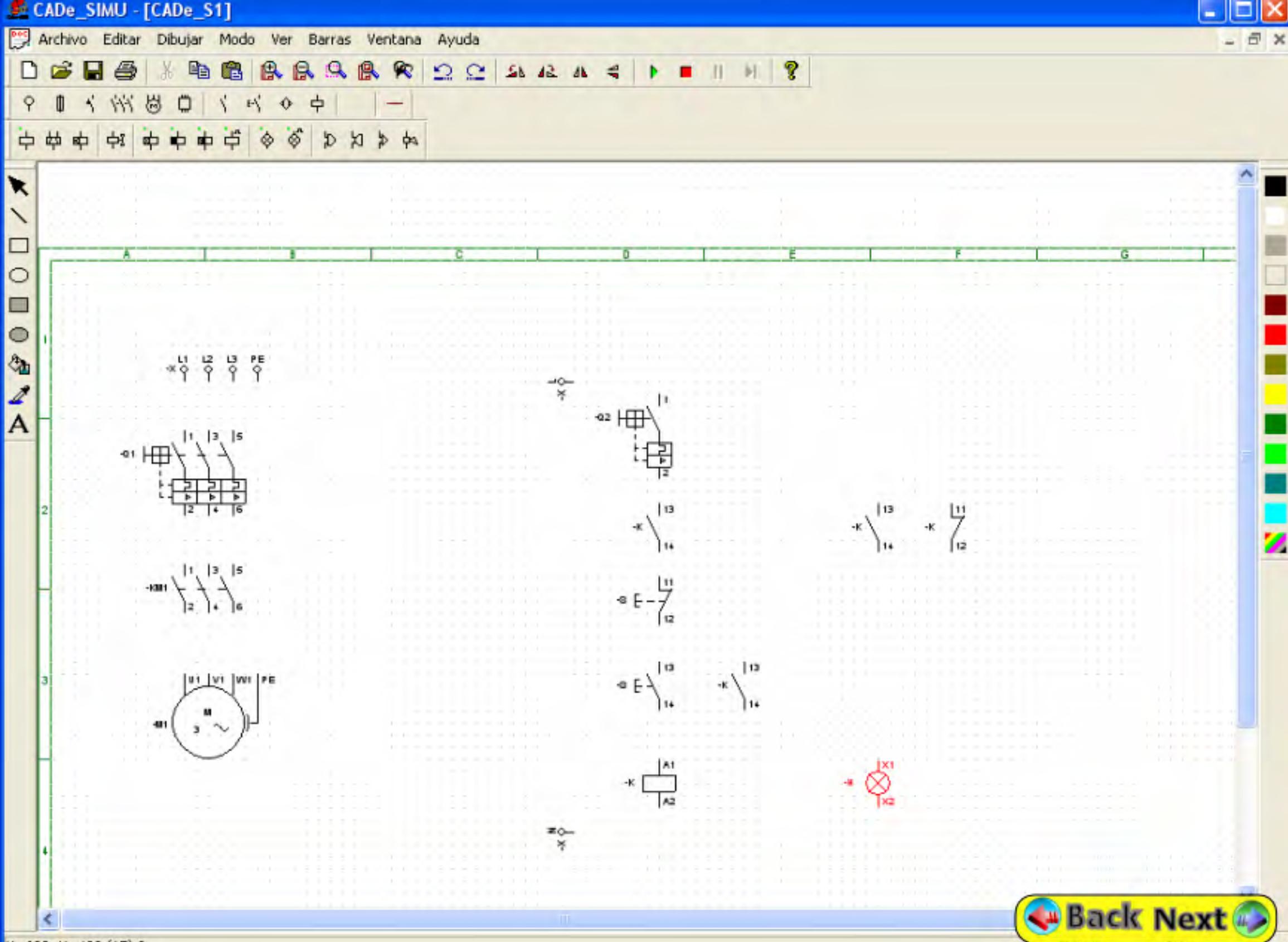


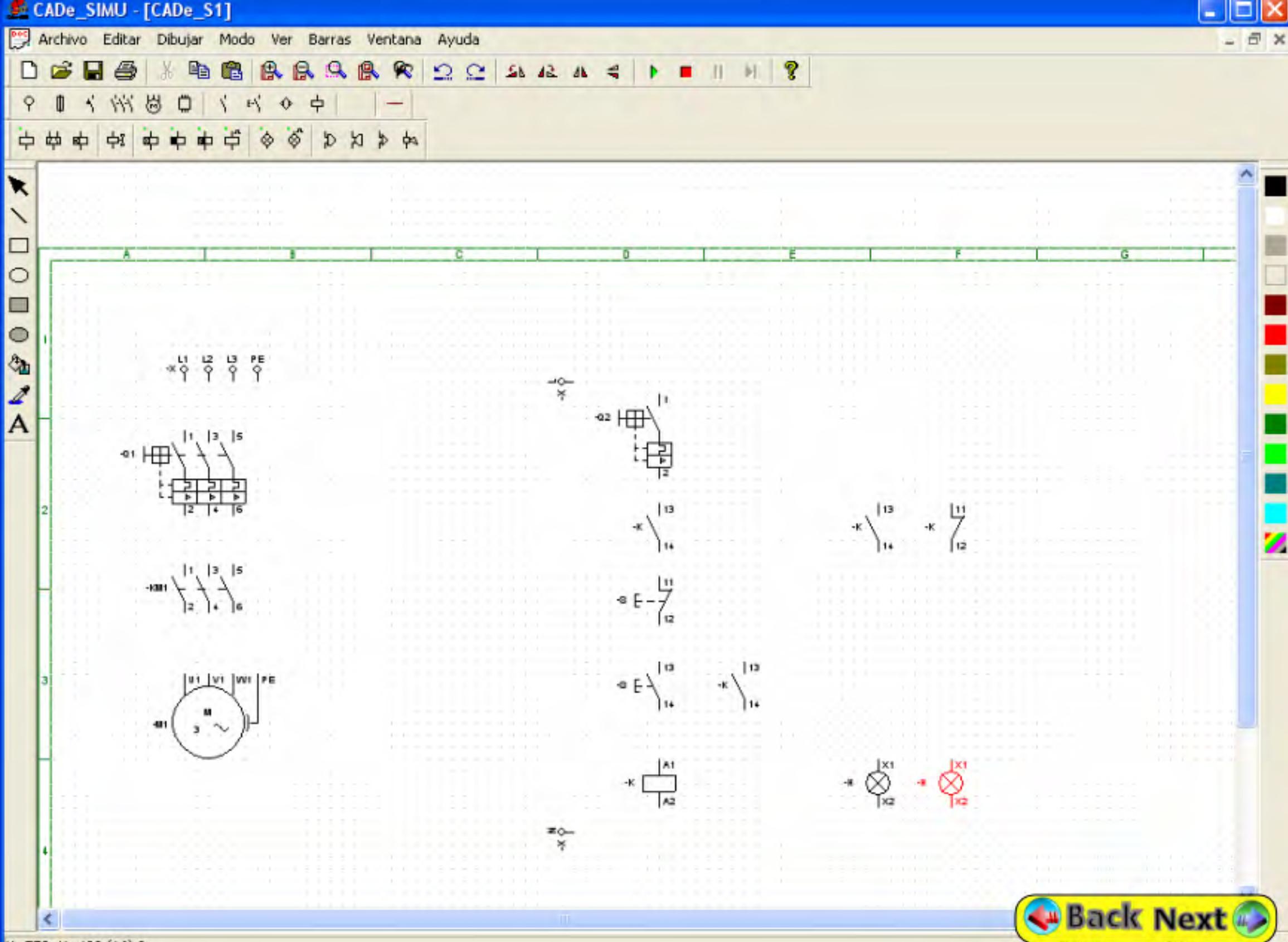


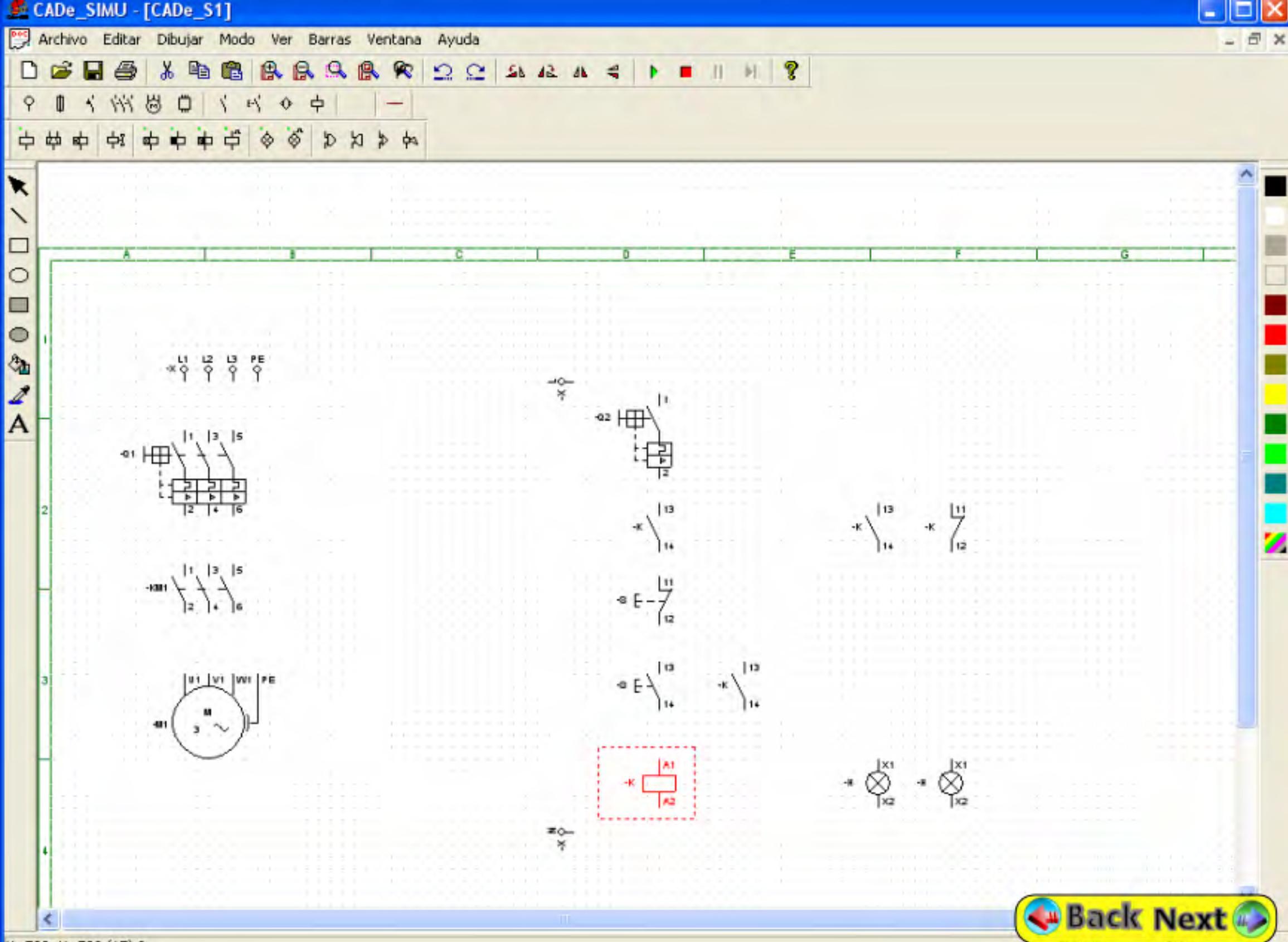


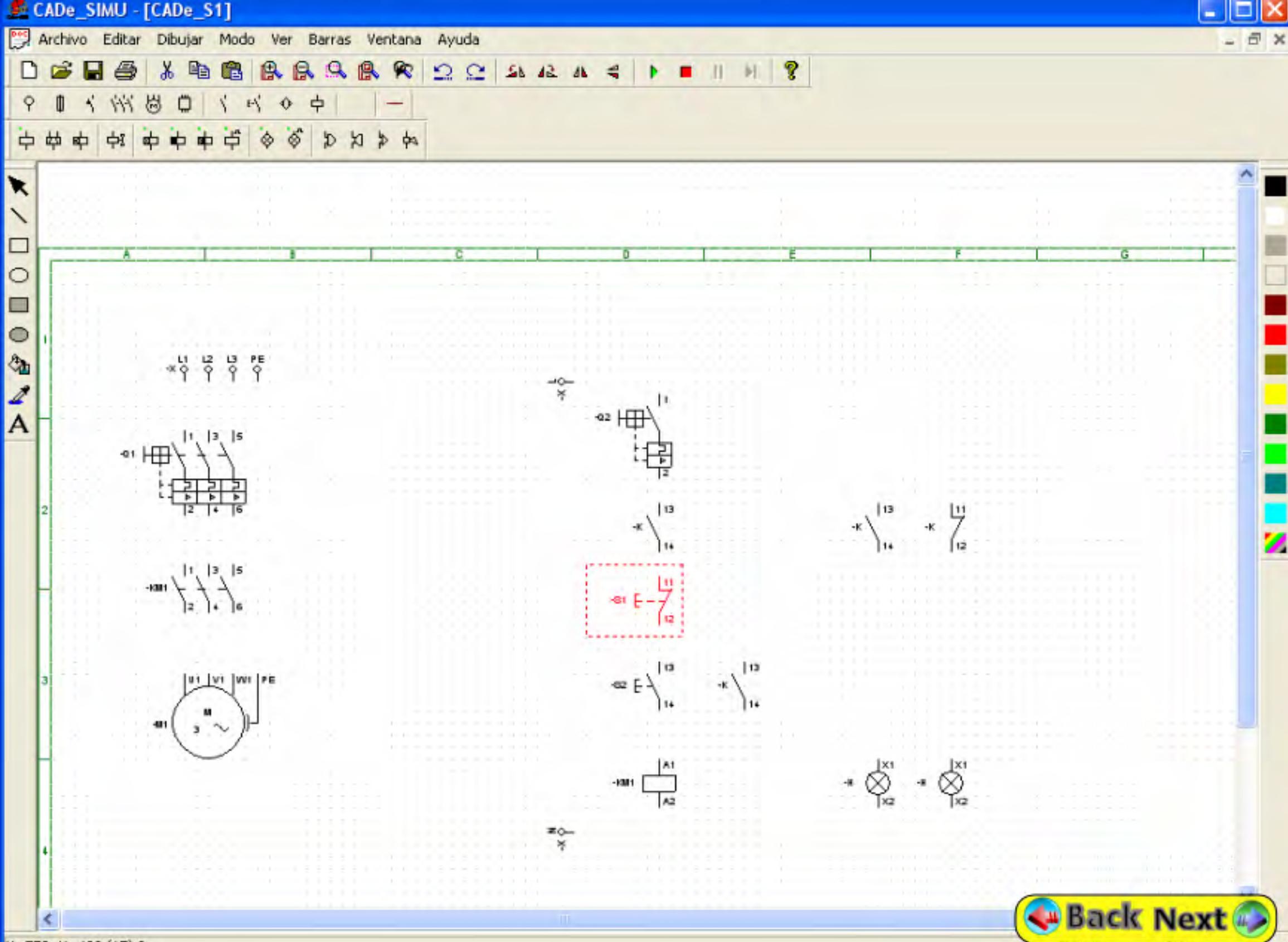


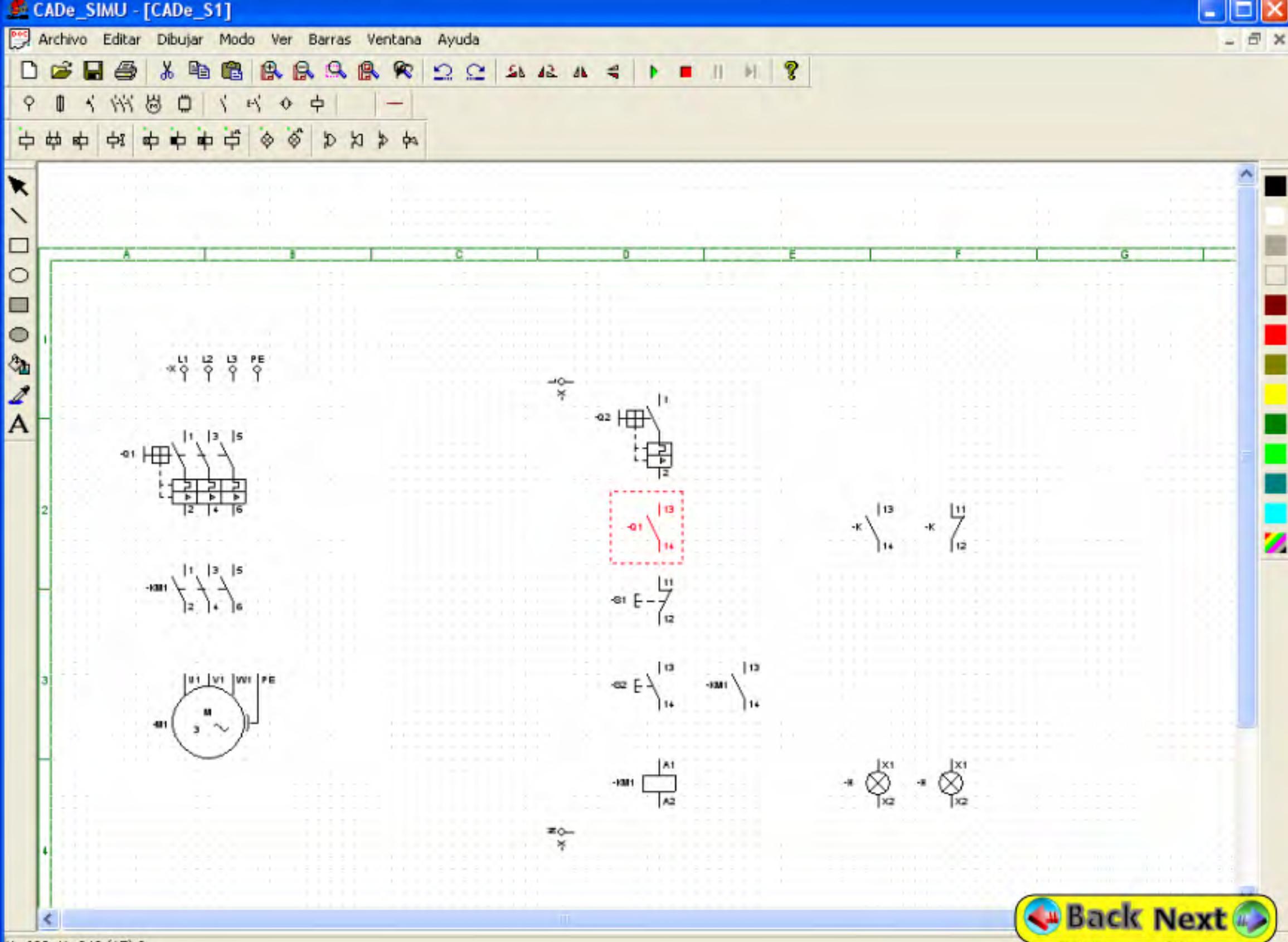


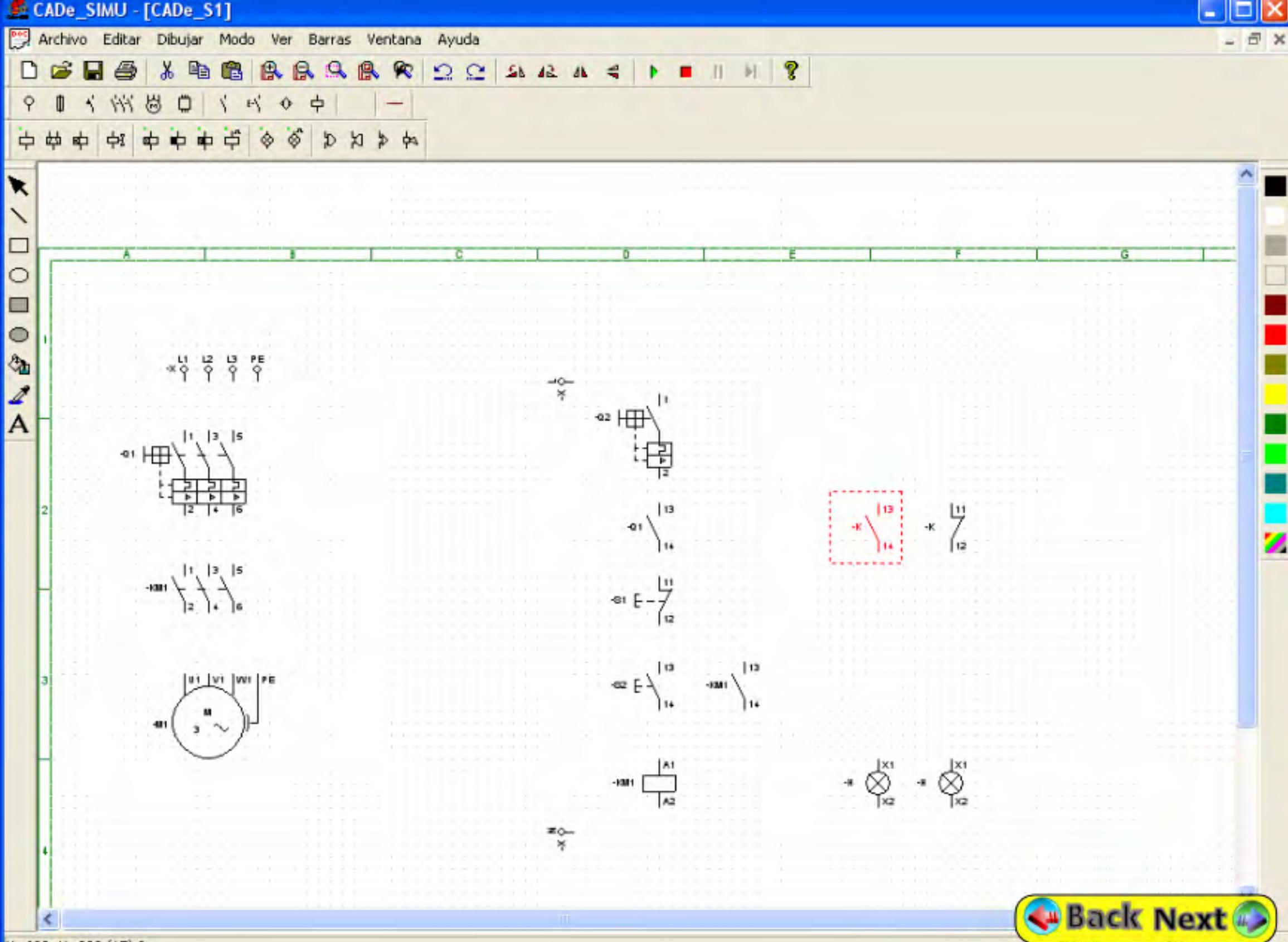














### Editar

Contacto auxiliar NA

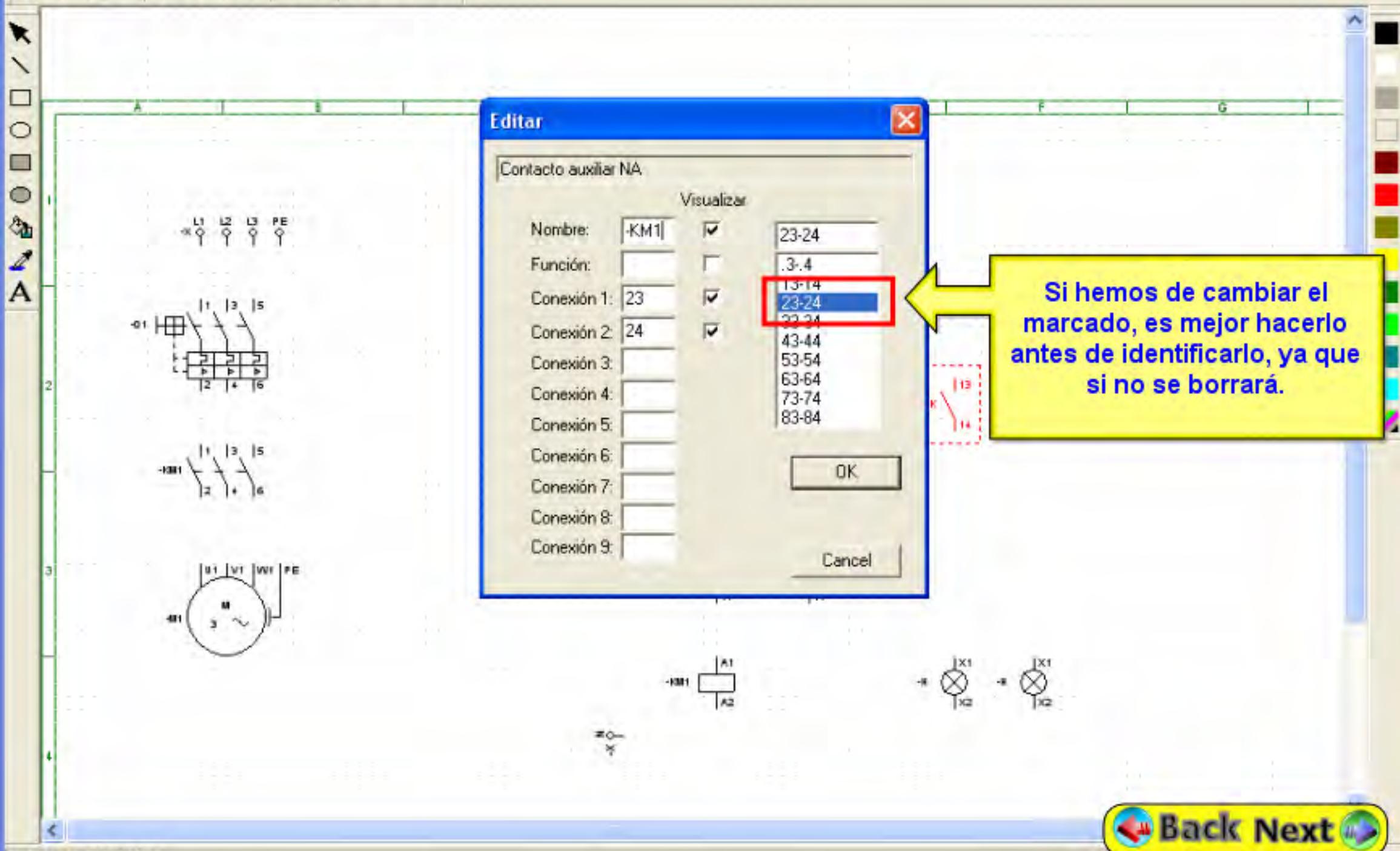
Visualizar

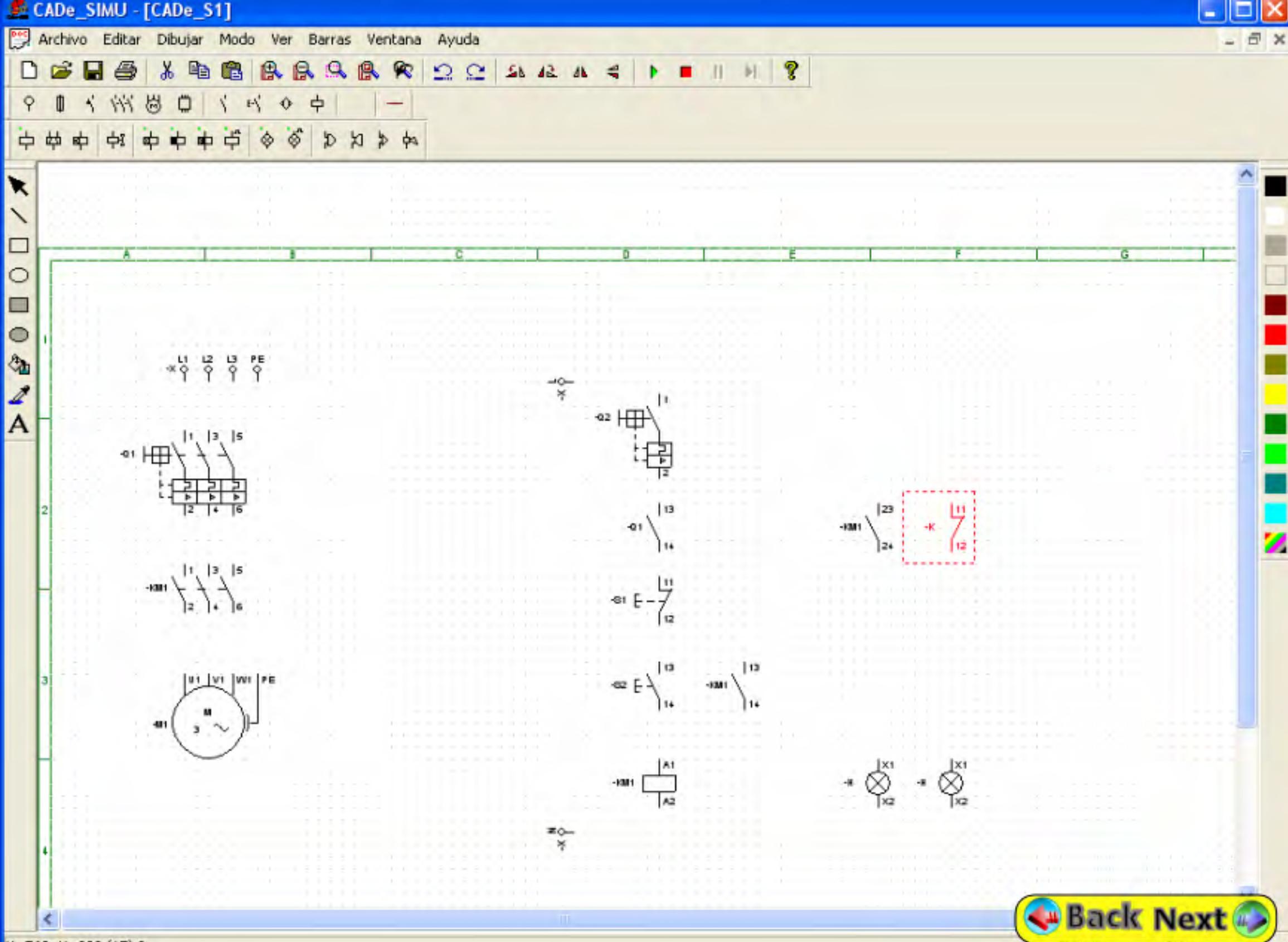
Nombre:	KM1	<input checked="" type="checkbox"/>	23-24
Función:		<input type="checkbox"/>	.3-4
Conexión 1:	23	<input checked="" type="checkbox"/>	13-14
Conexión 2:	24	<input checked="" type="checkbox"/>	23-24
Conexión 3:			43-44
Conexión 4:			53-54
Conexión 5:			63-64
Conexión 6:			73-74
Conexión 7:			83-84
Conexión 8:			
Conexión 9:			

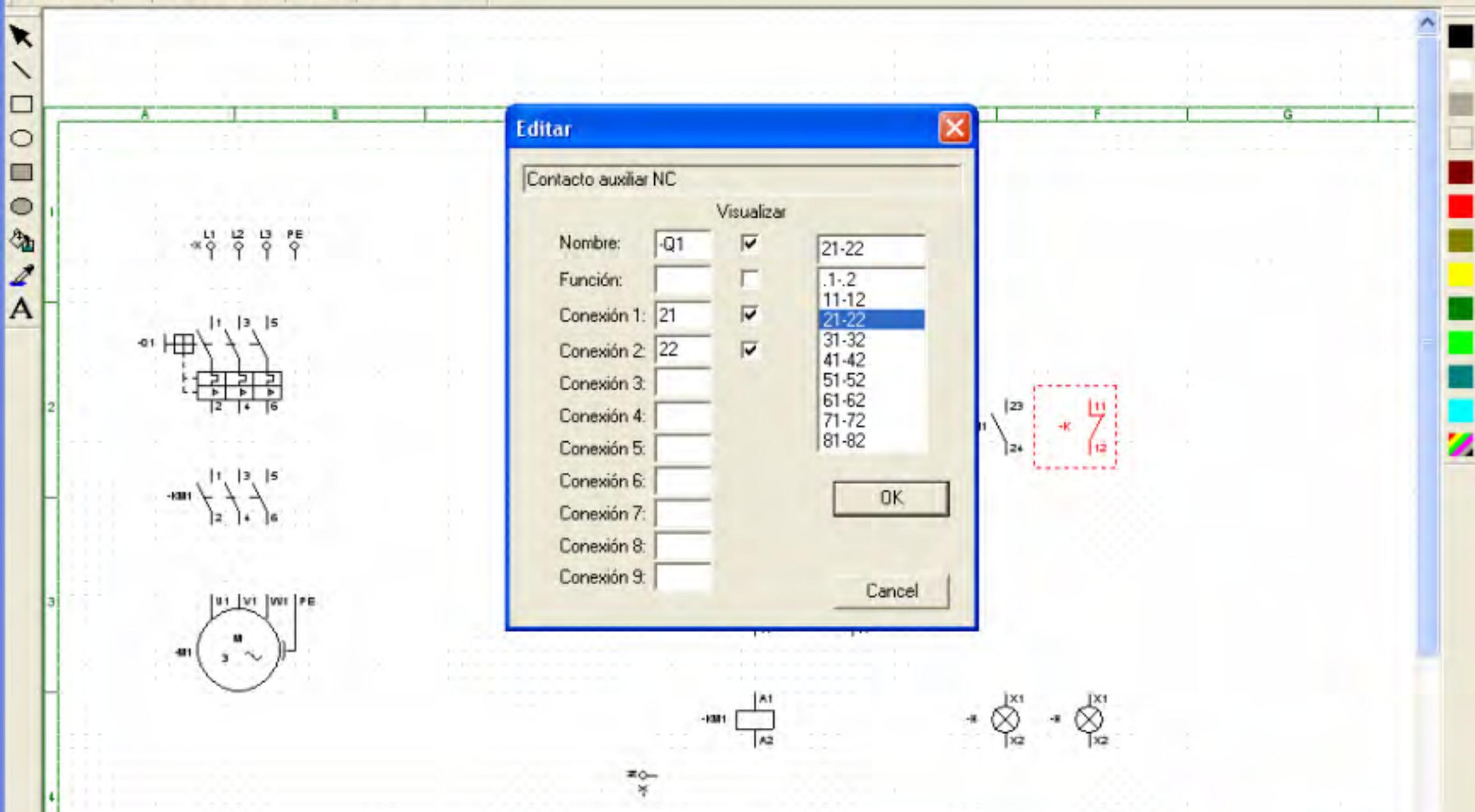
OK

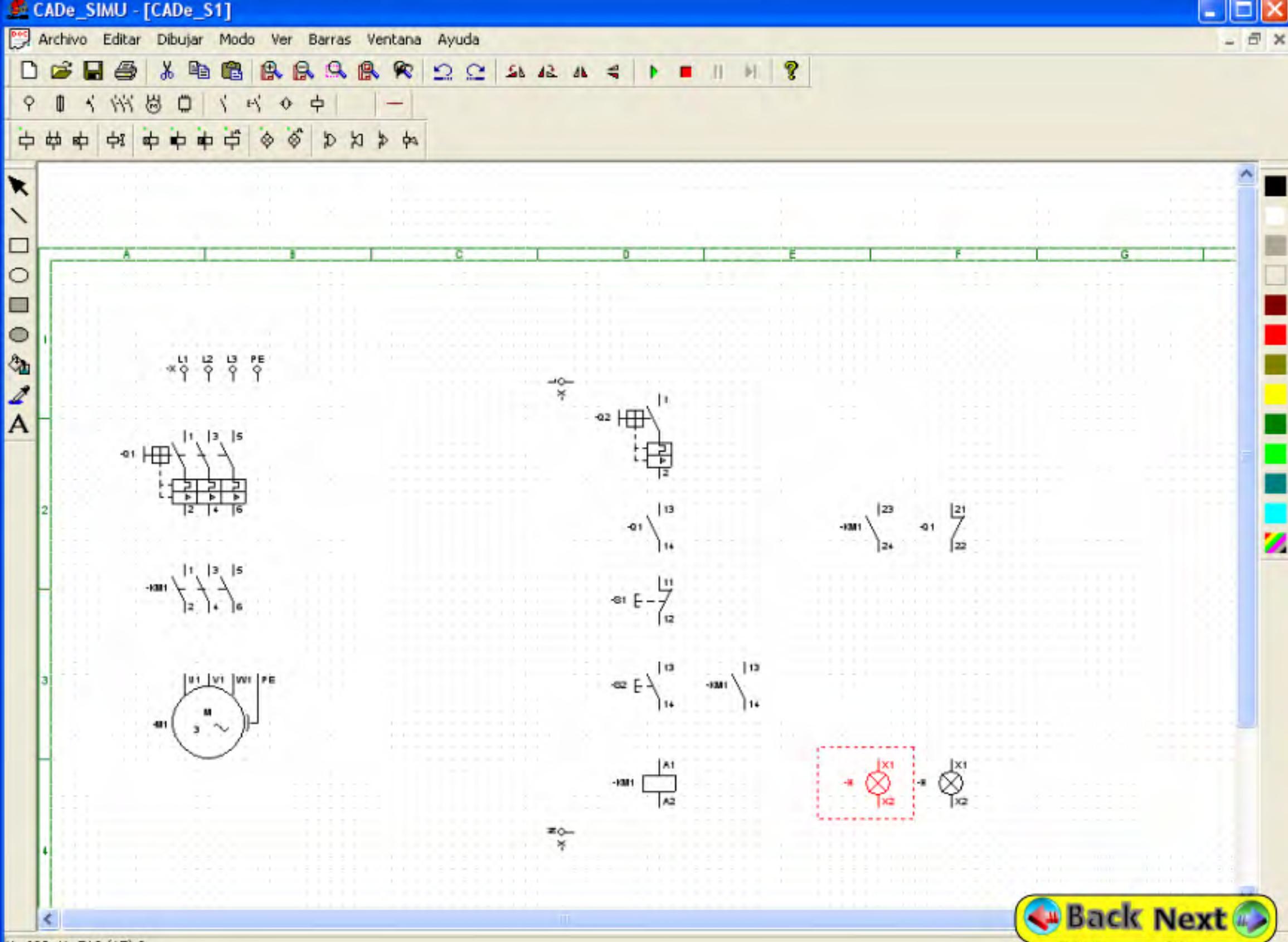
Cancel

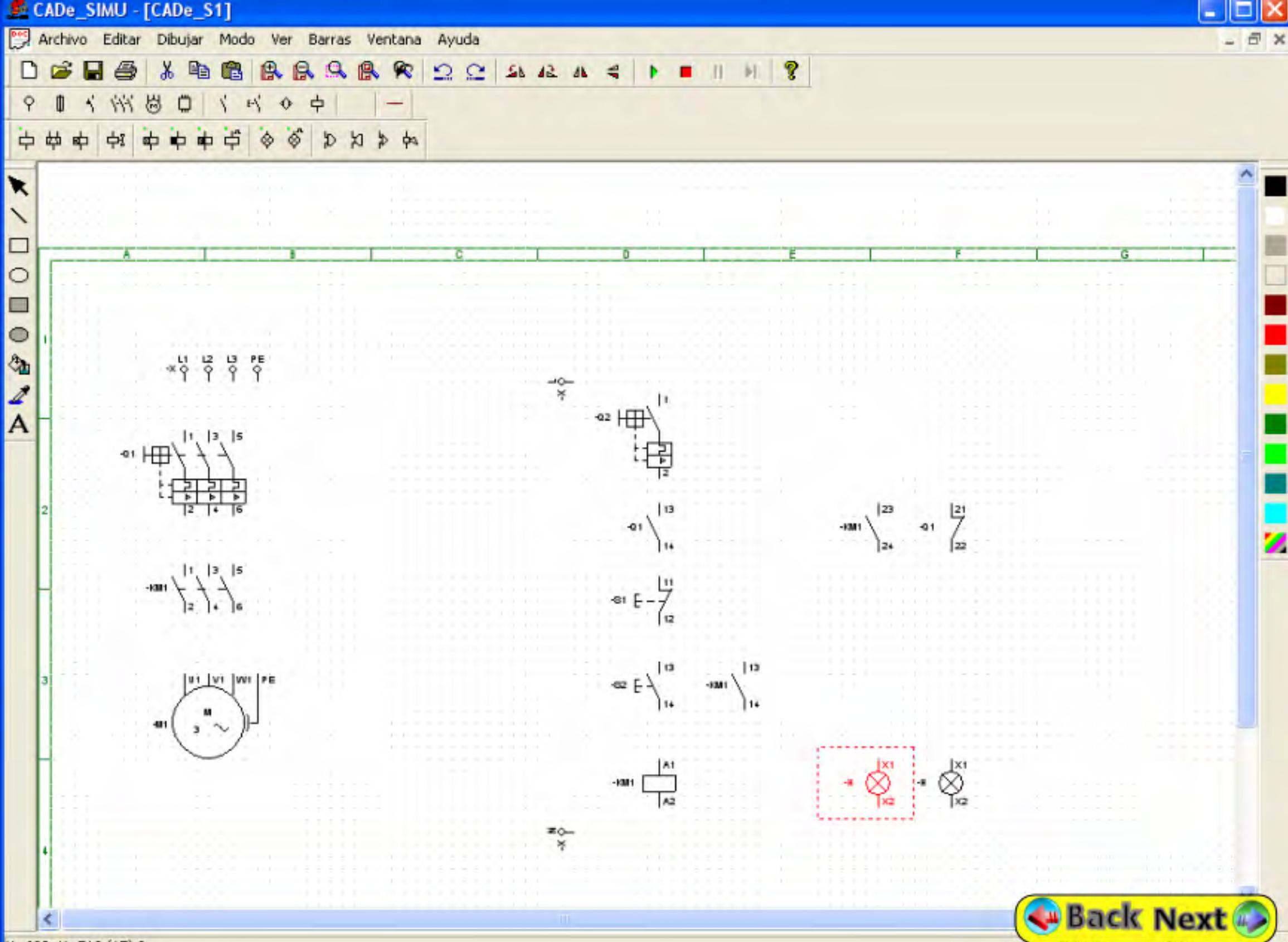
Si hemos de cambiar el  
marcado, es mejor hacerlo  
antes de identificarlo, ya que  
si no se borrará.













### Pilotos de señalización

Señalización óptica

Nombre:   Función:   Conexión 1:   Conexión 2:

Color

- Verde
- Rojo
- Amarillo
- Azul
- Gris

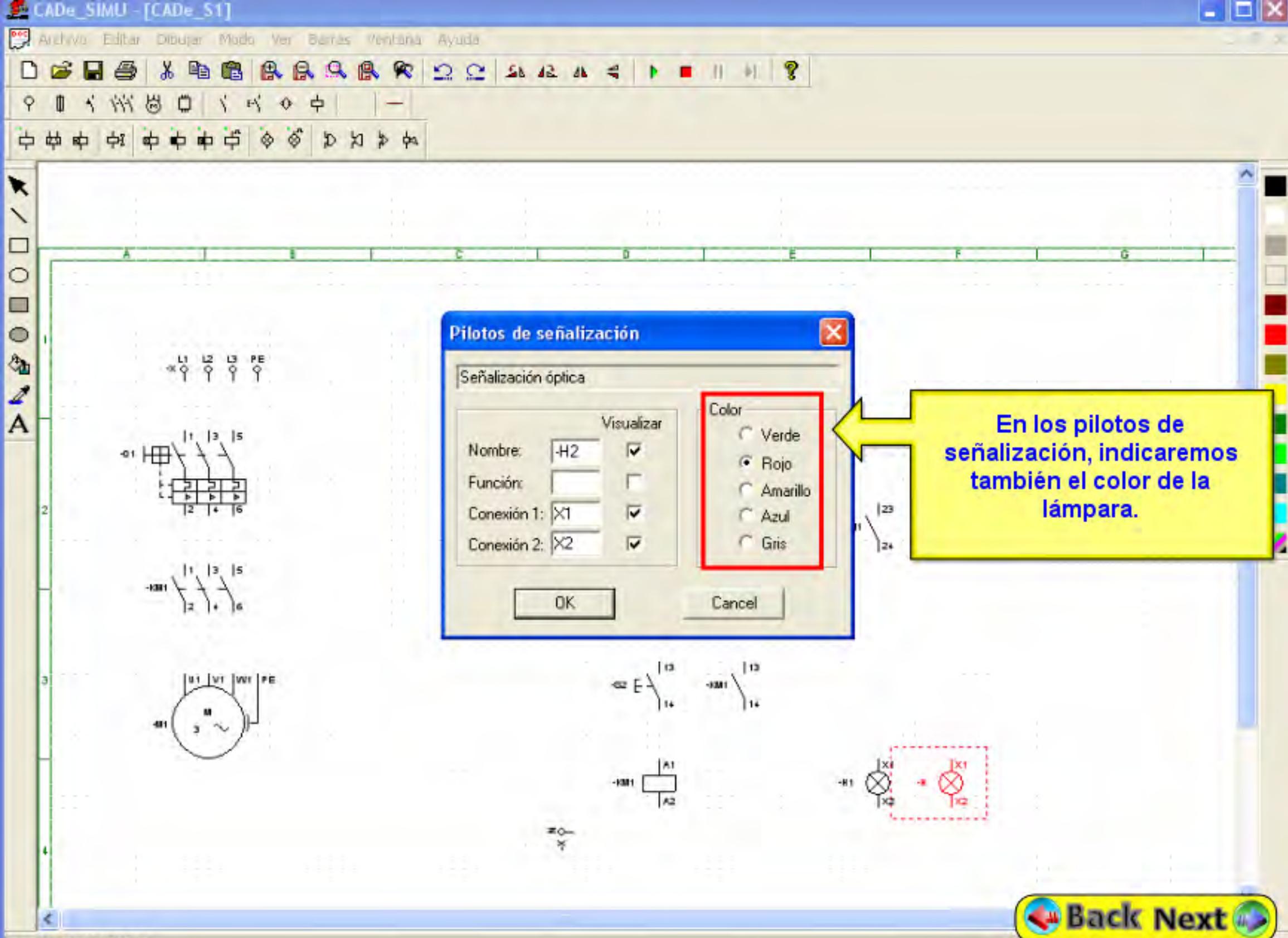
OK

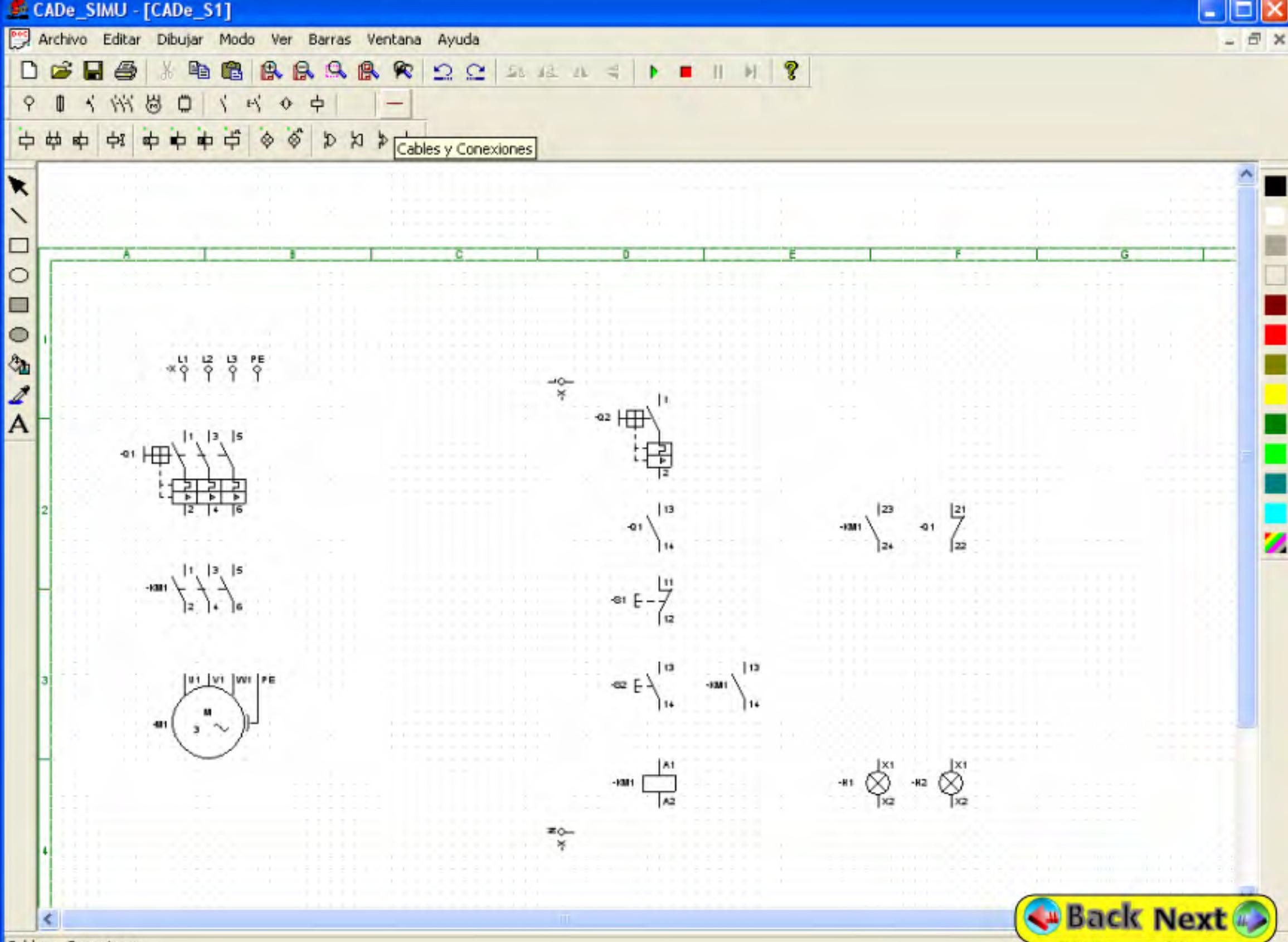
Cancel

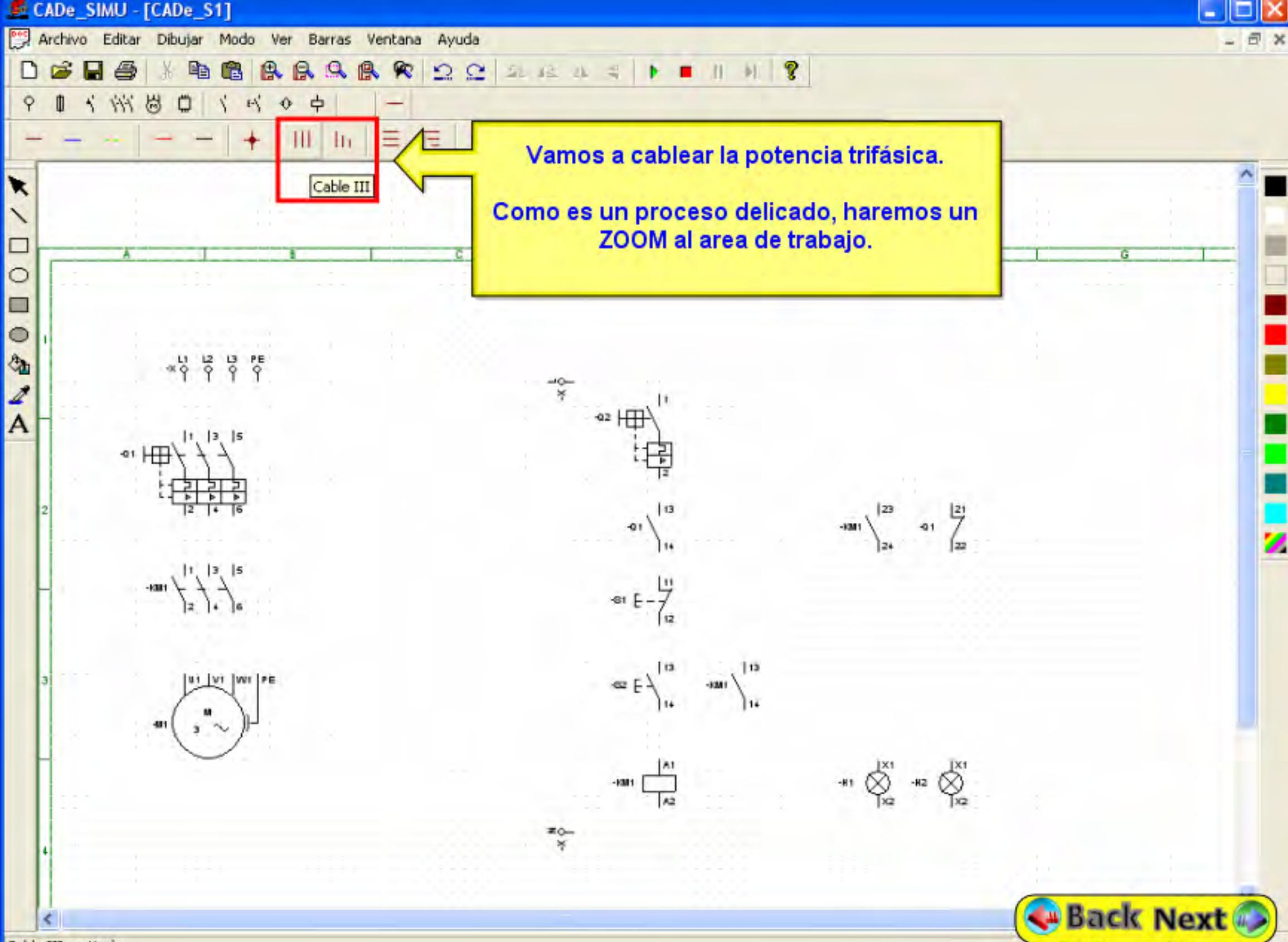
Back Next

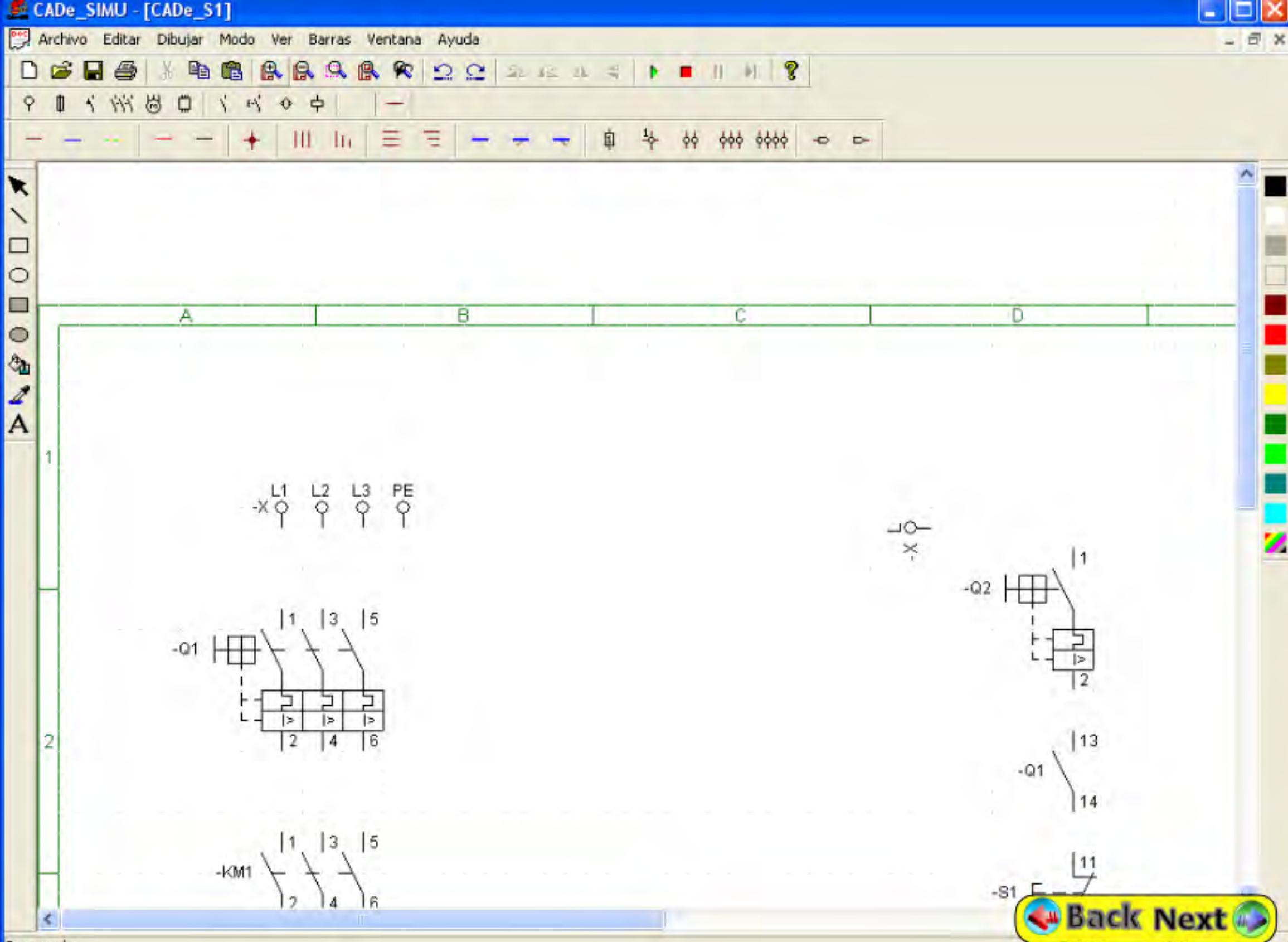
Edición

Stop





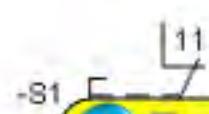
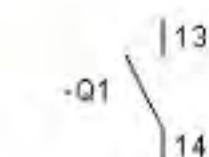
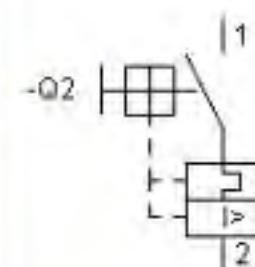
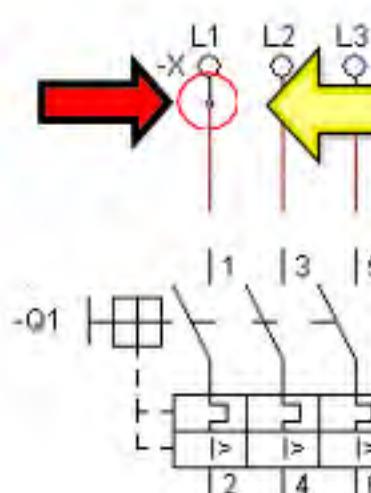


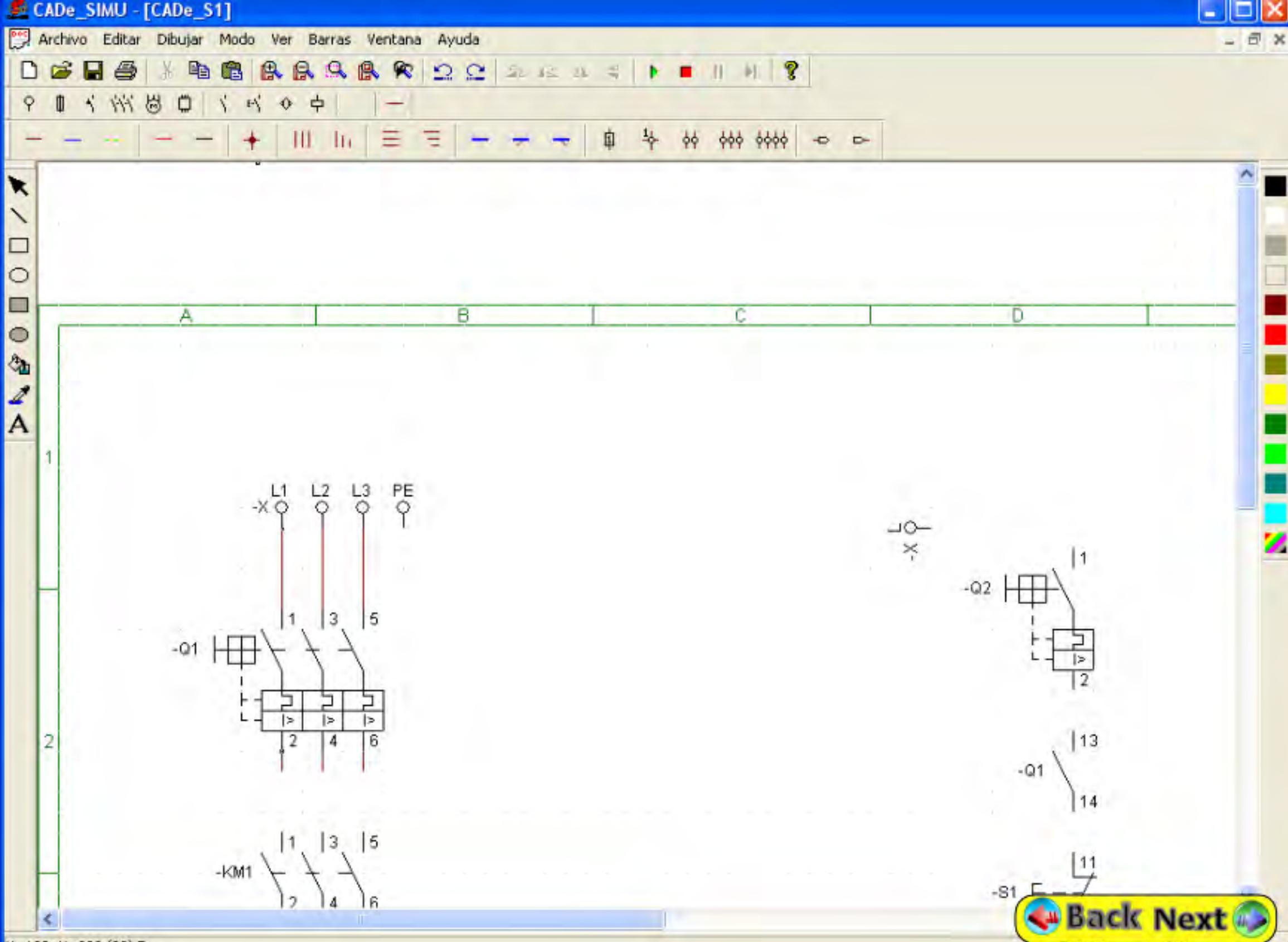


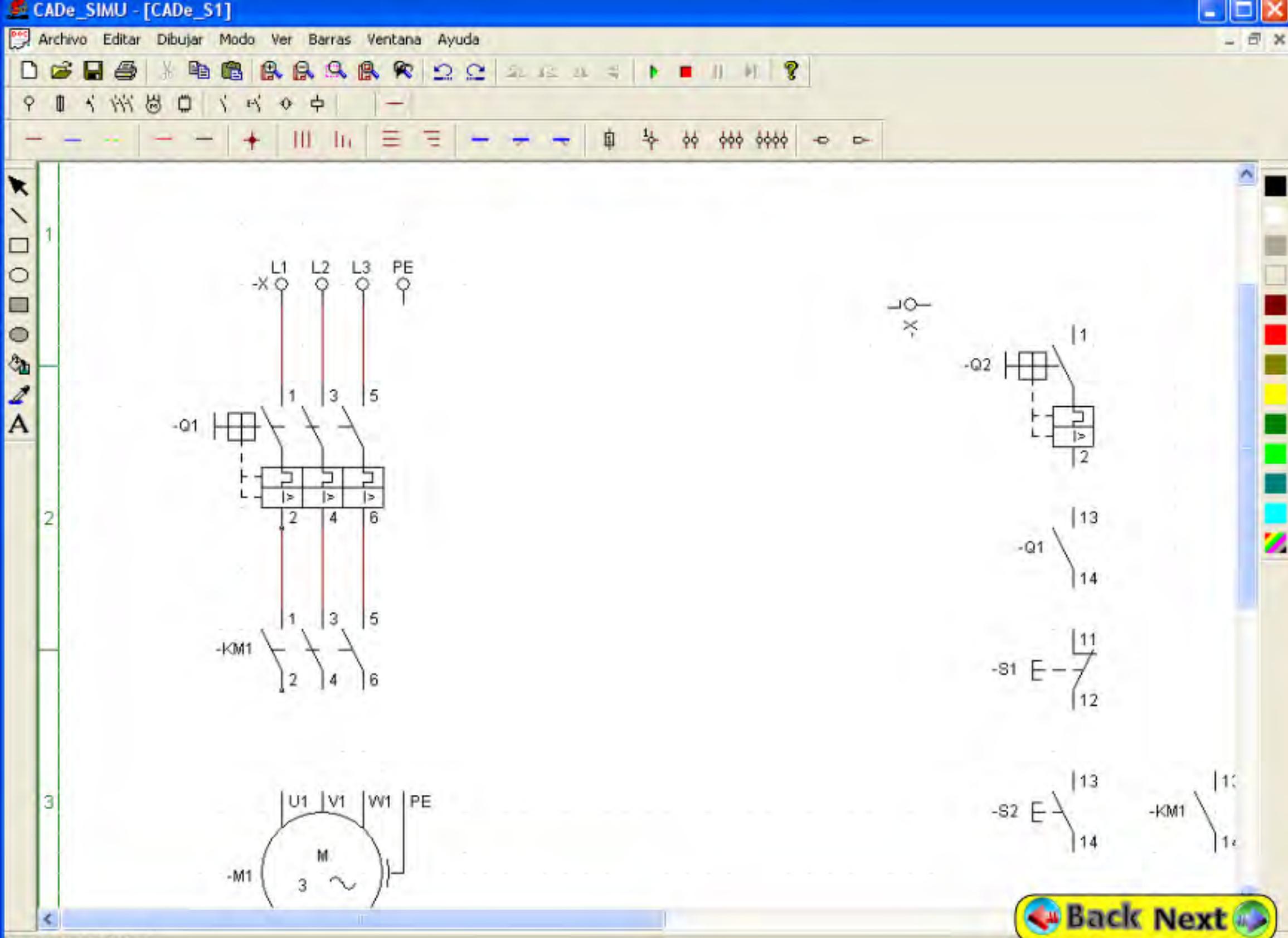


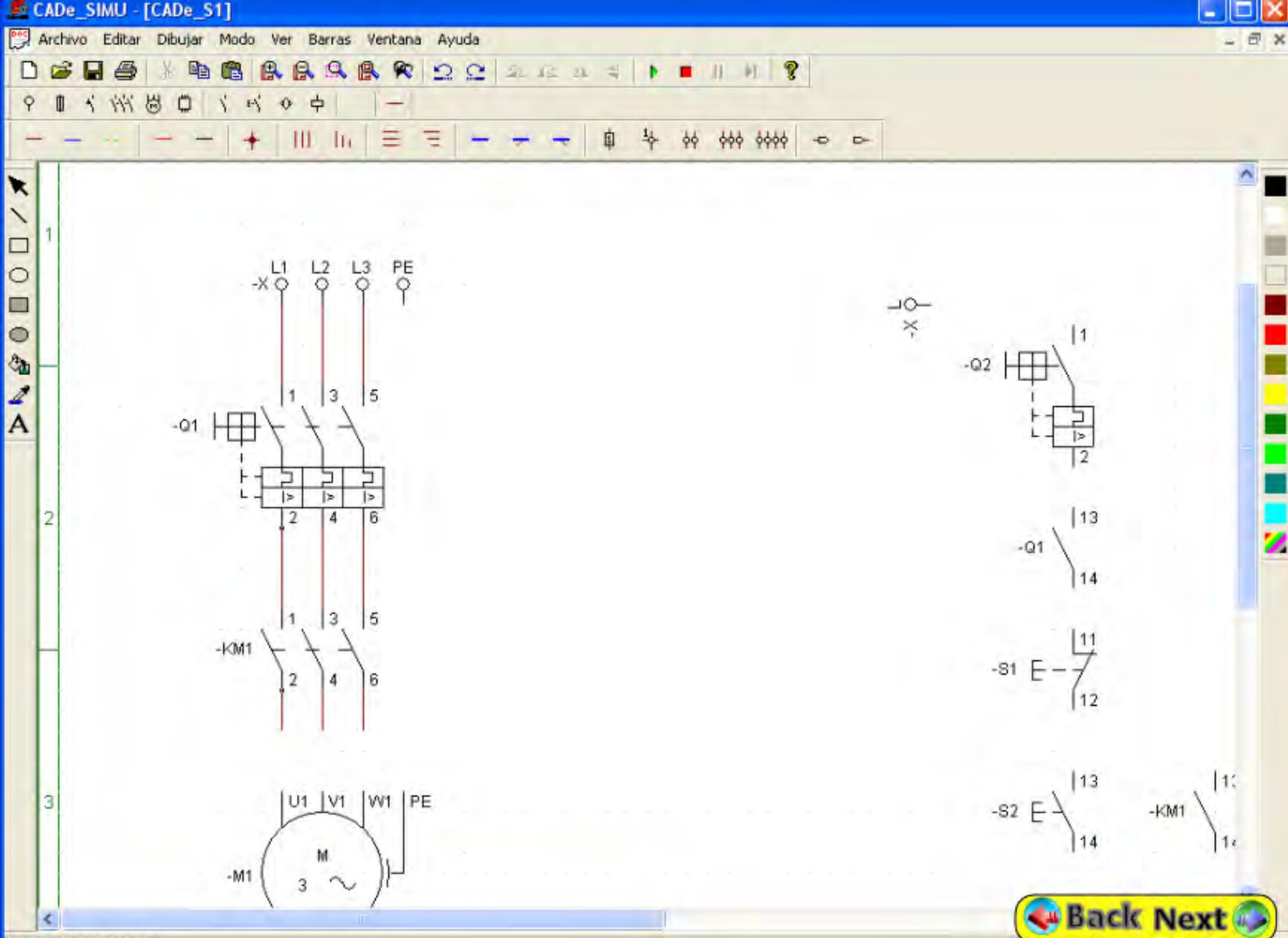
Ese pequeño punto es la única indicación para cablear correctamente. Debemos ser muy cuidados, ya que si no se hace bien, la simulación no funcionará.

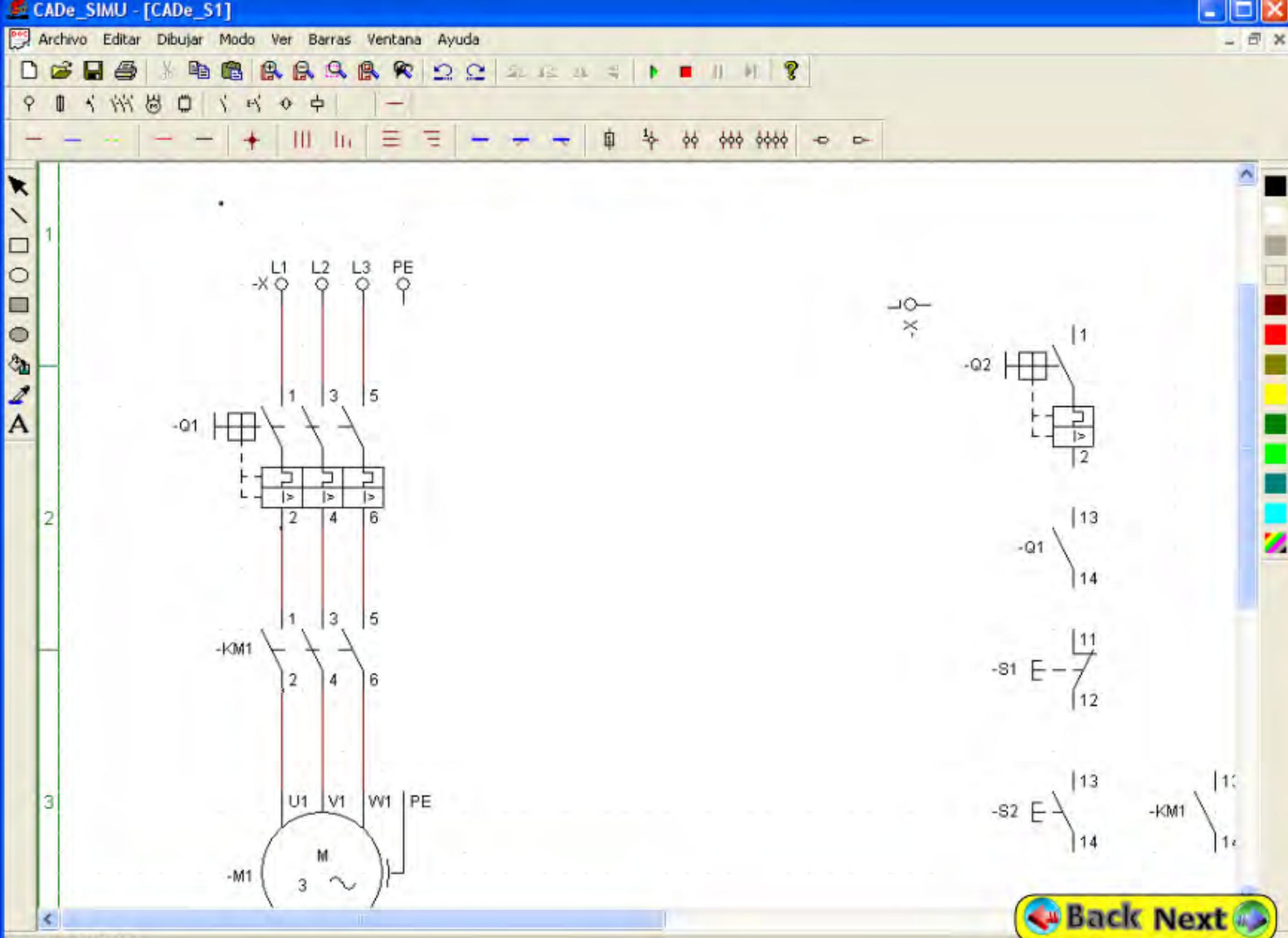
Iremos conectando componente a componente desde unos terminales a otros.

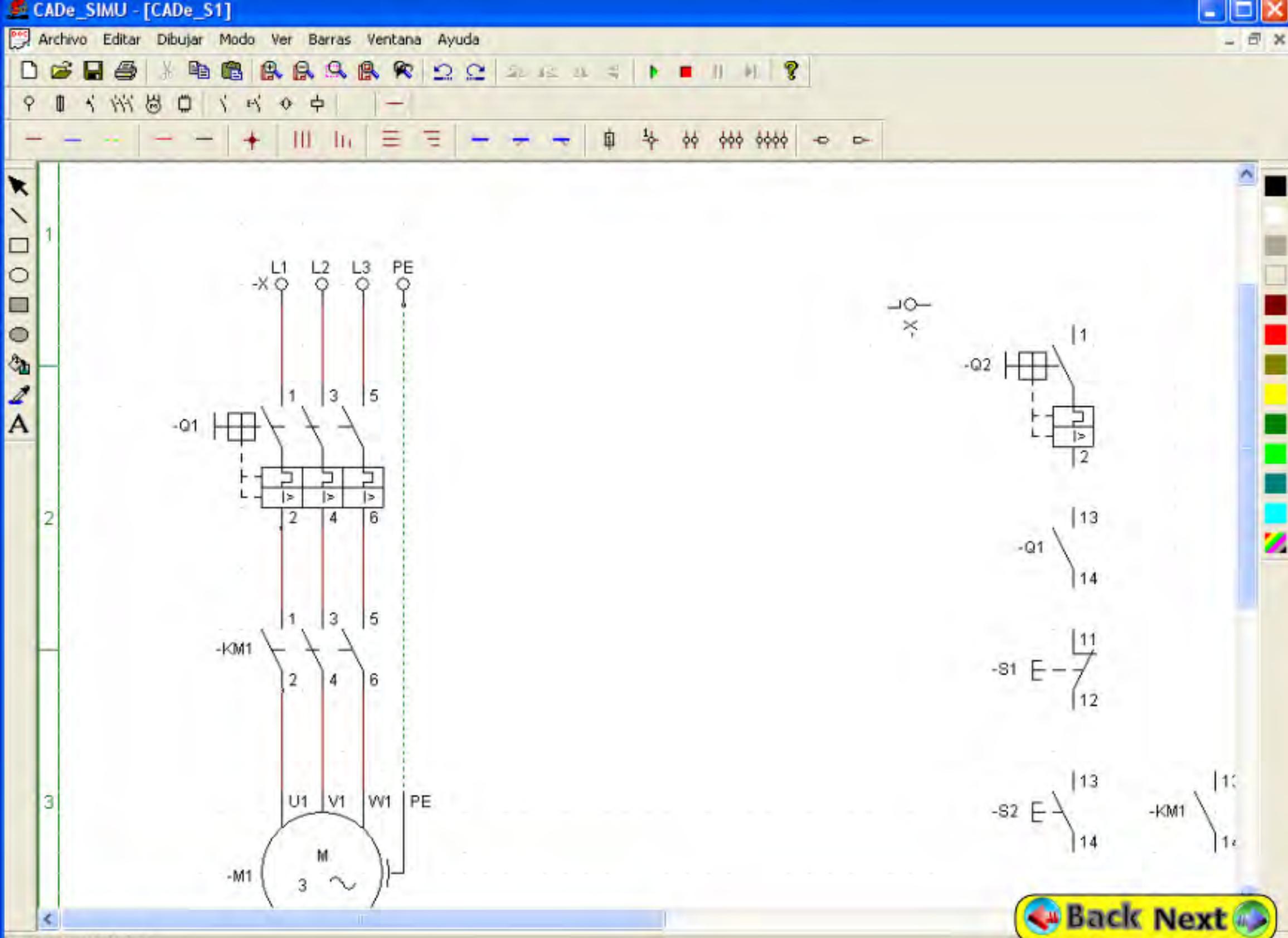


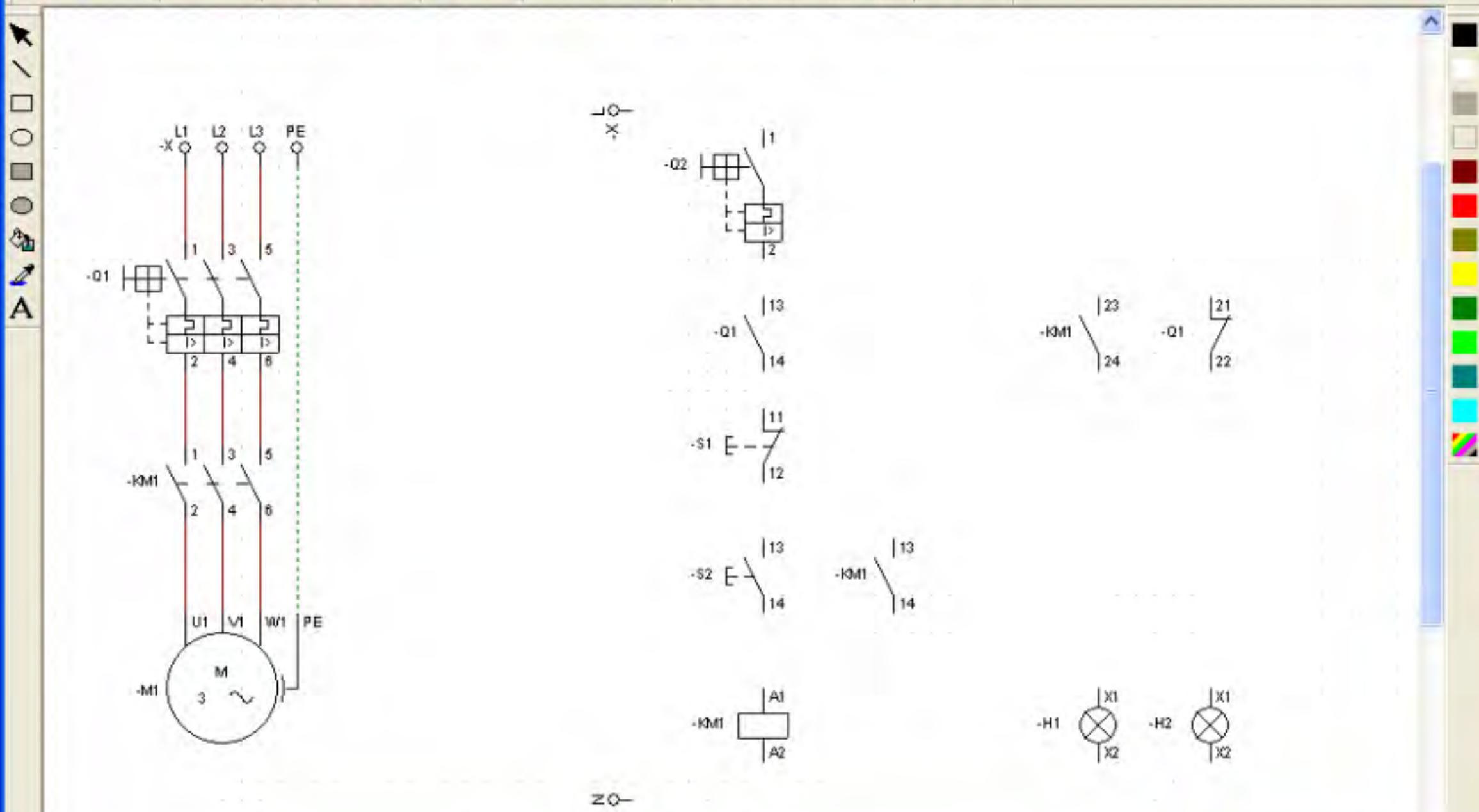


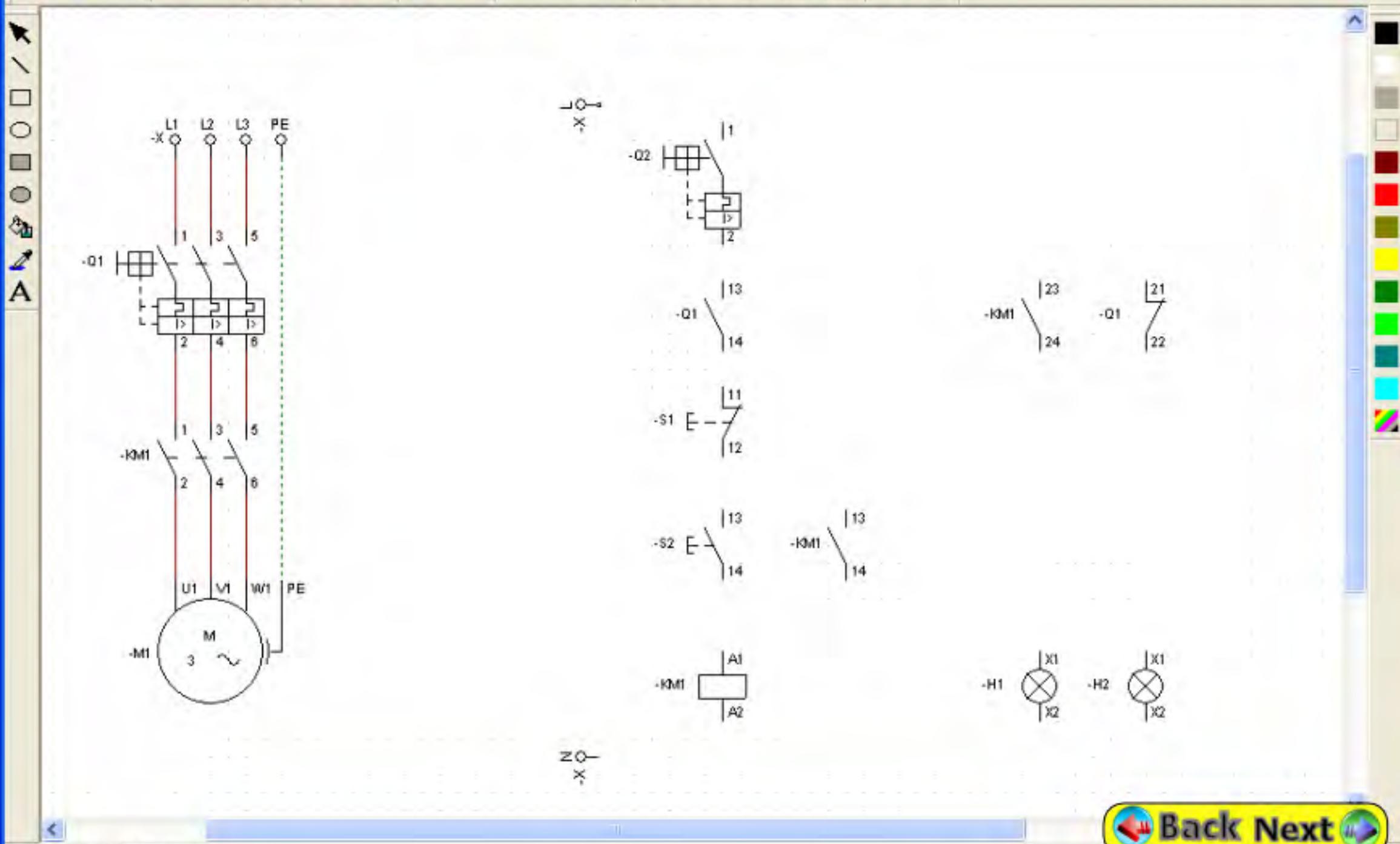


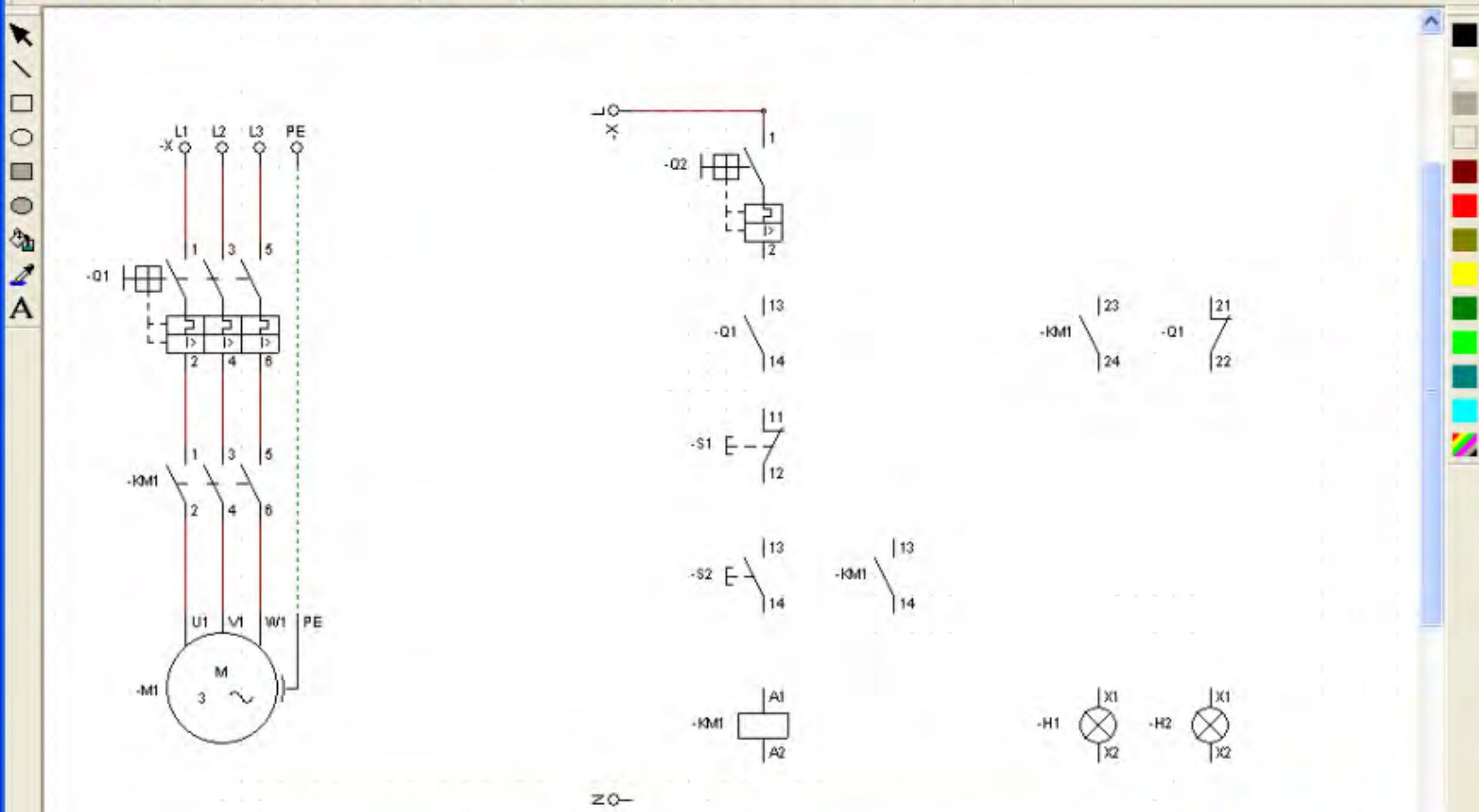


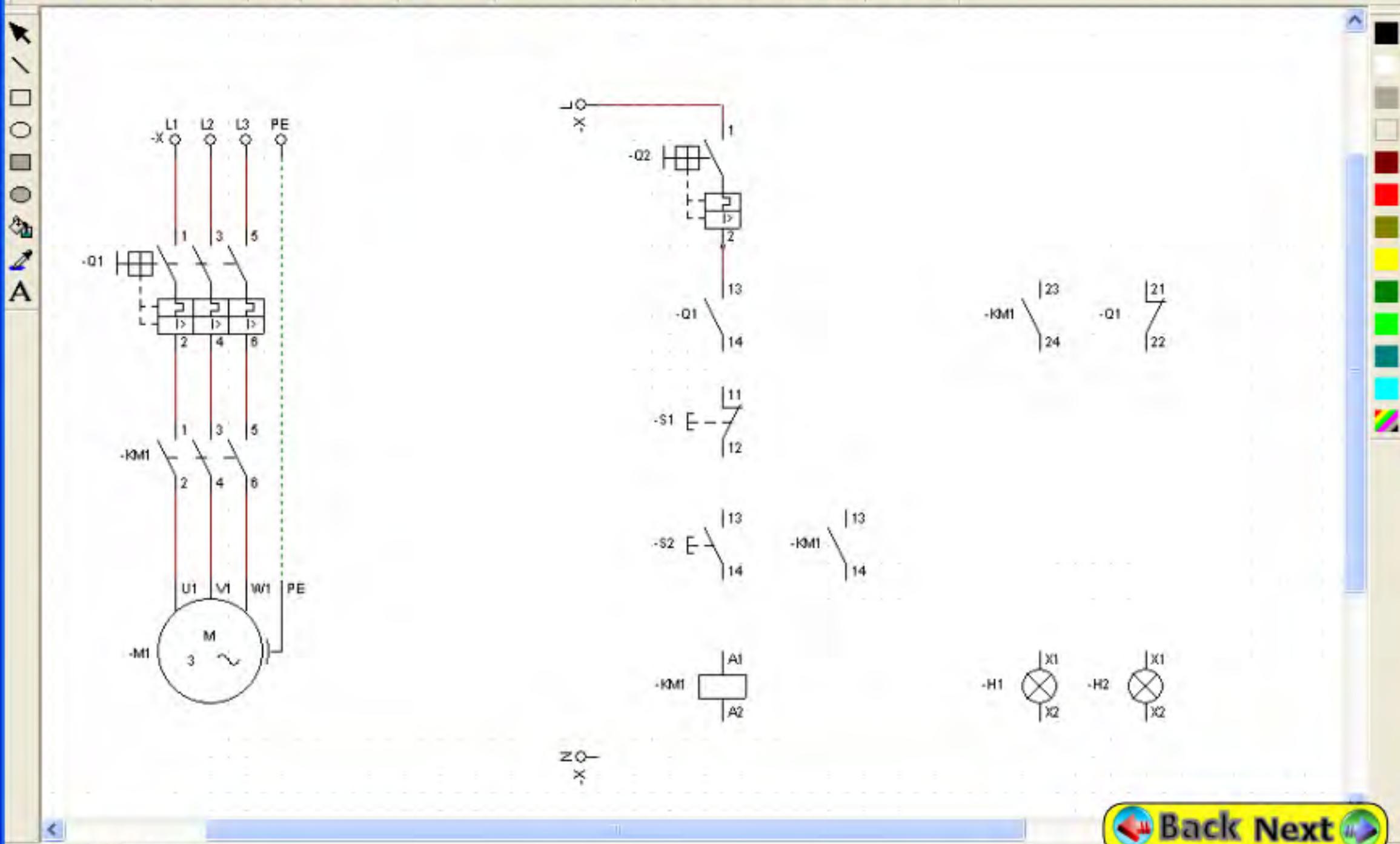




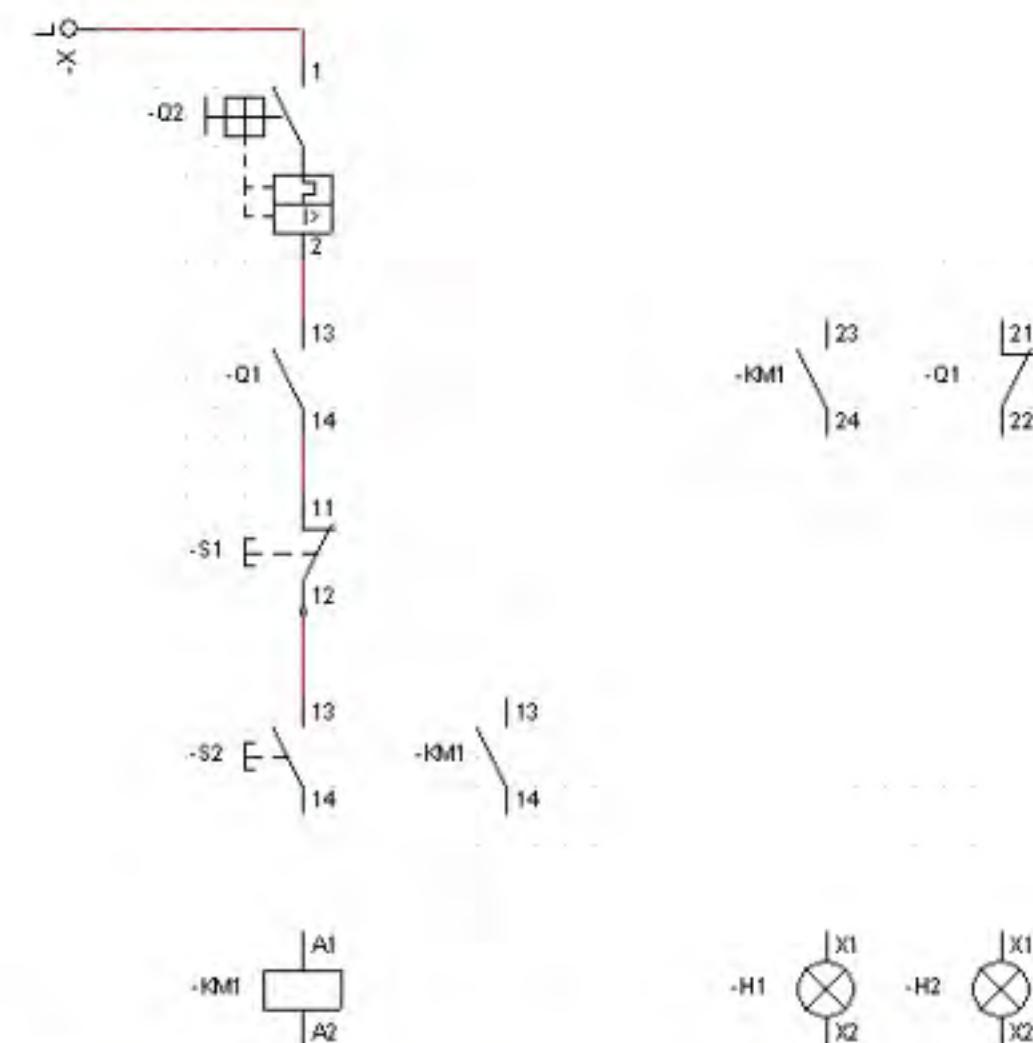
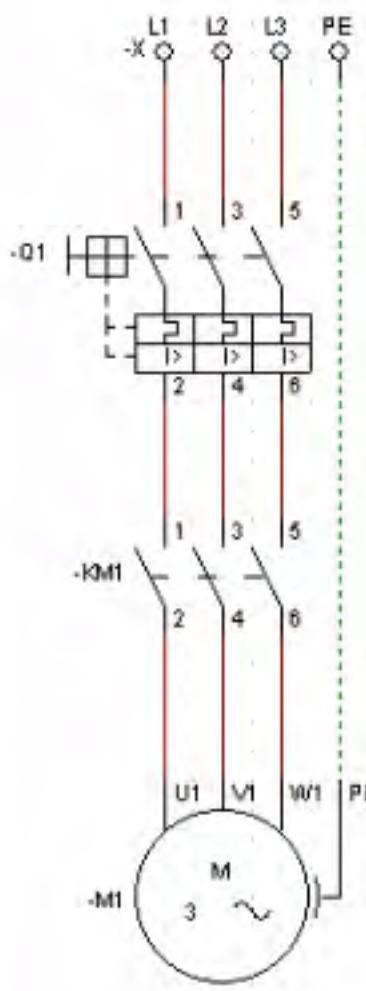






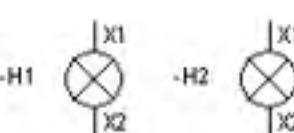
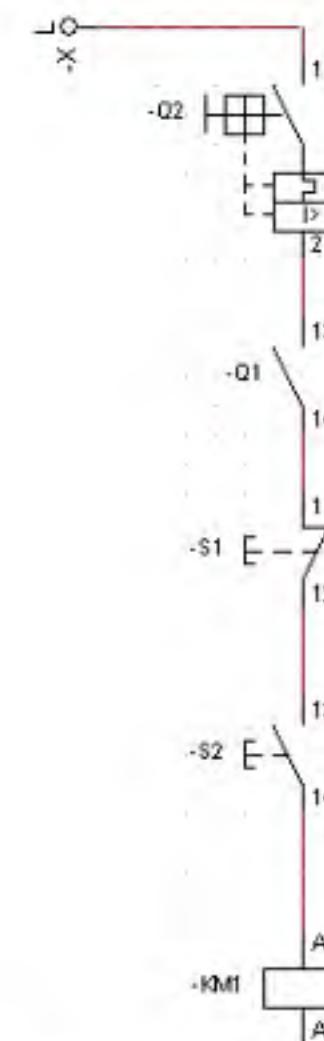
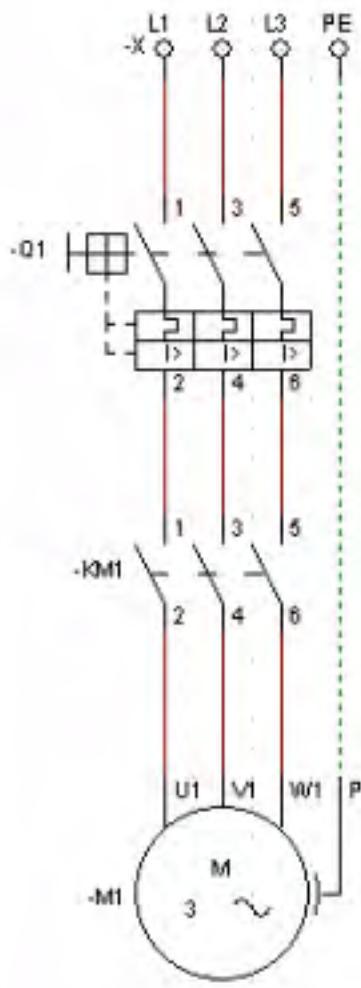


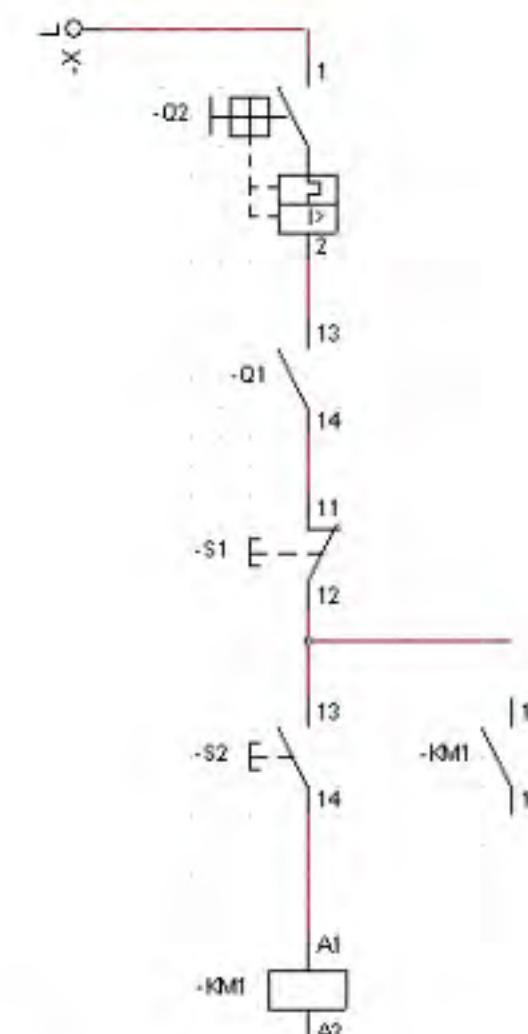
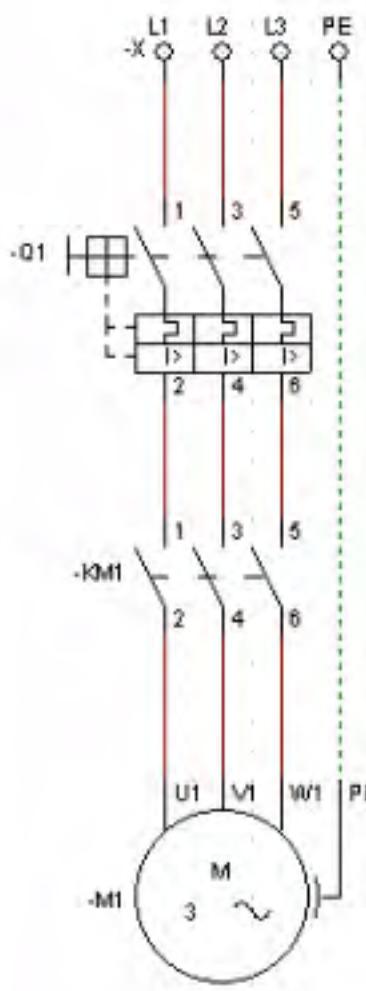
Back Next

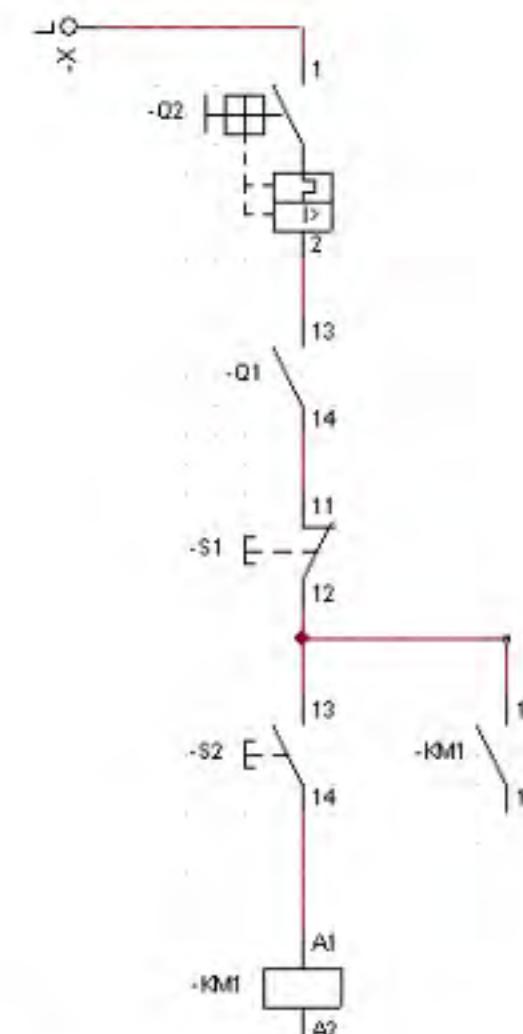
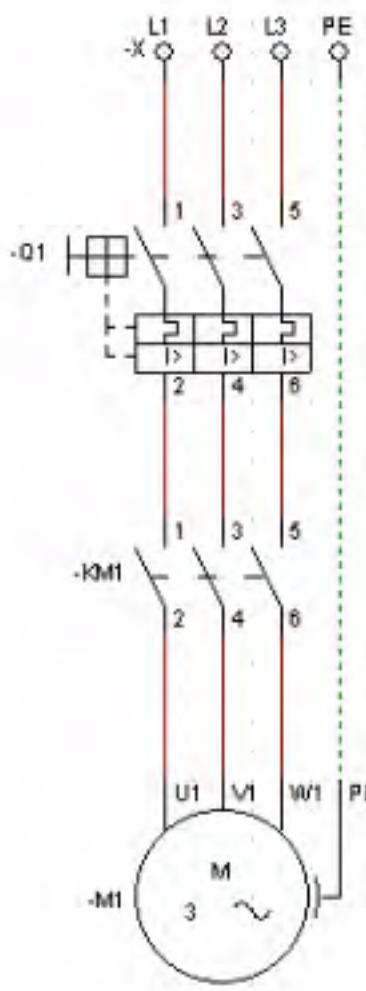


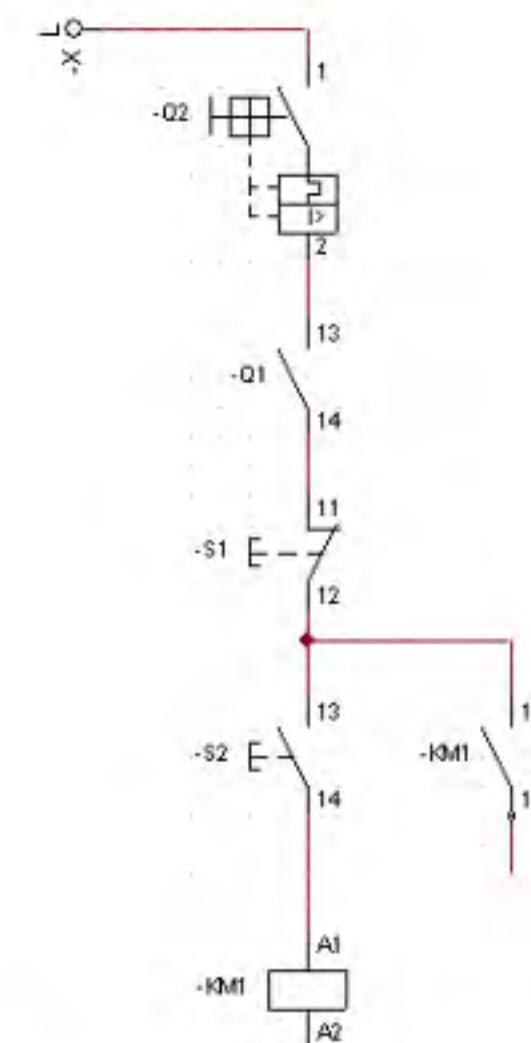
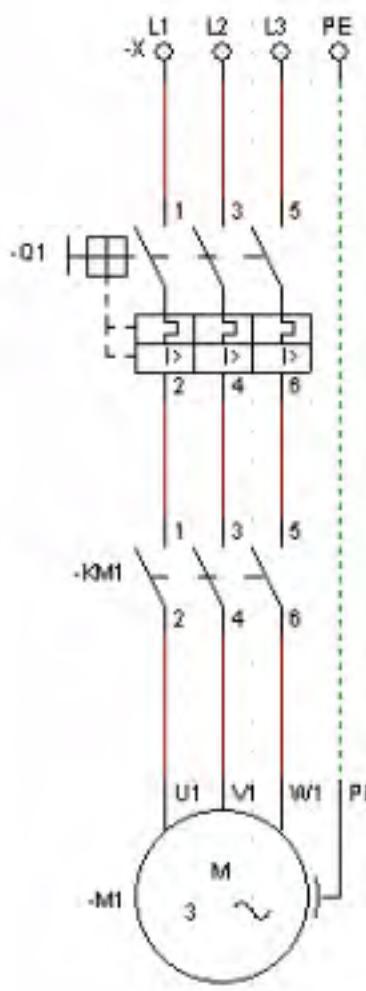
ZO

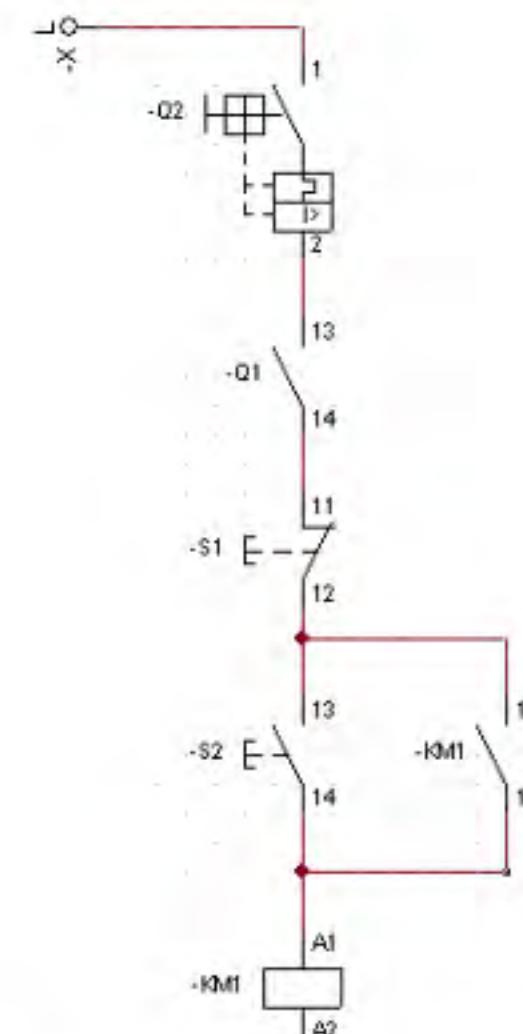
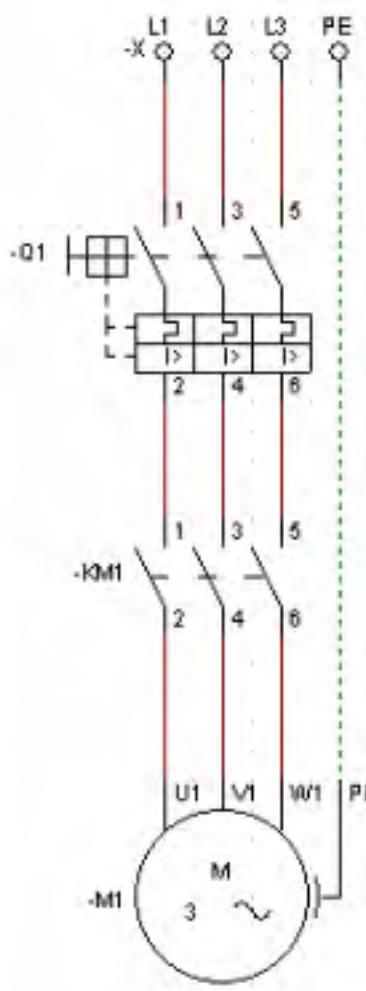
Back Next



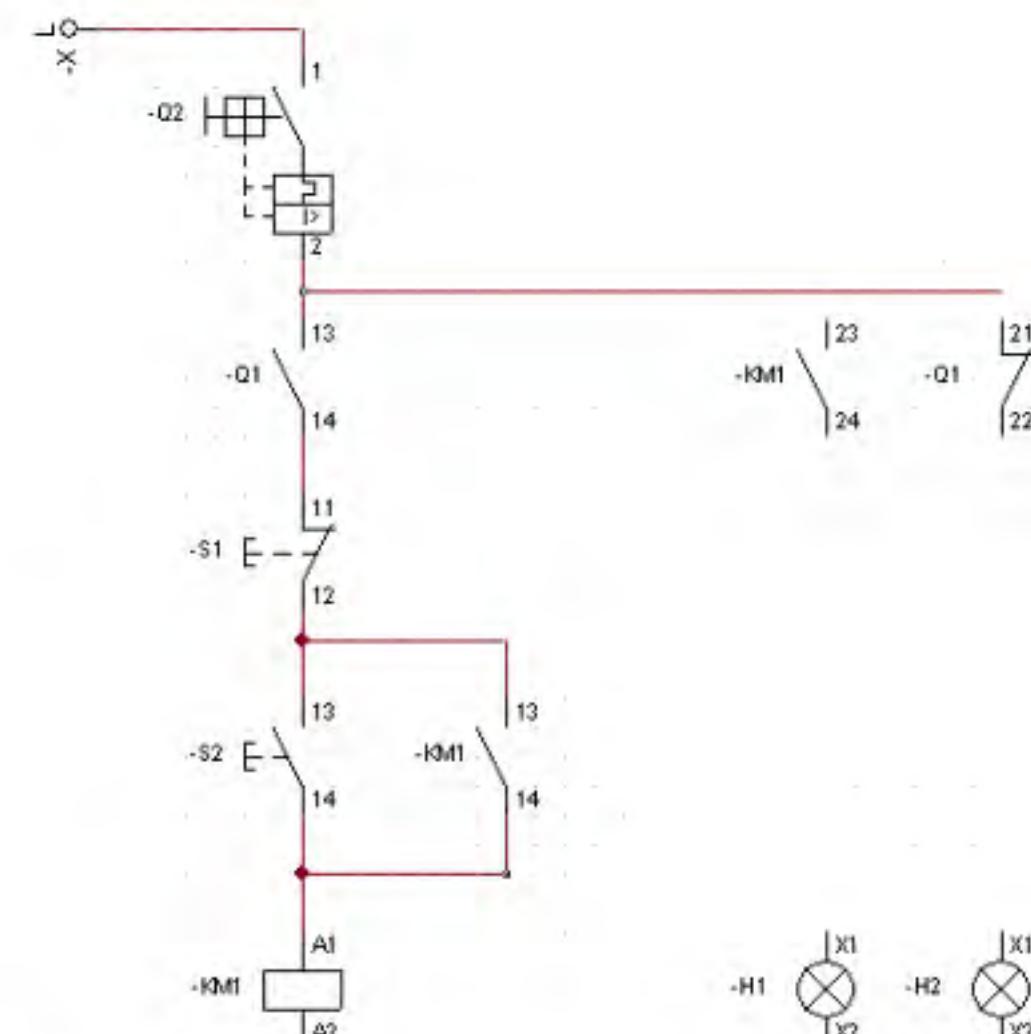
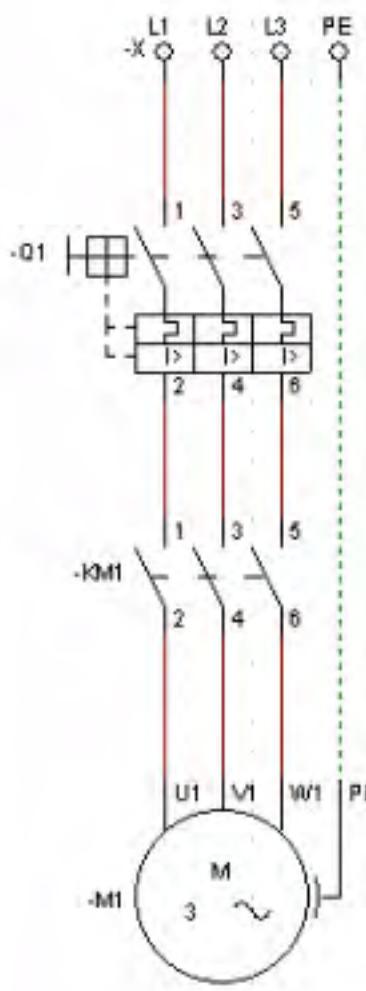


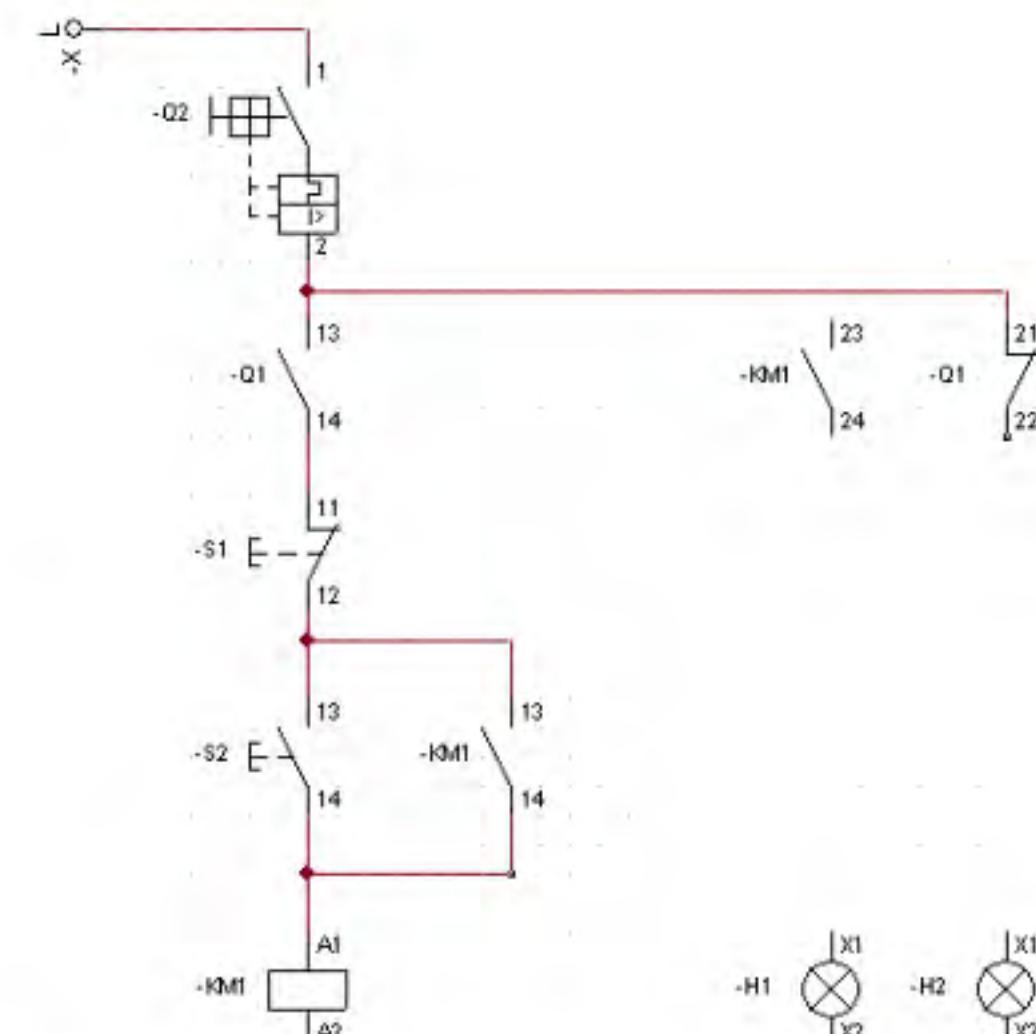
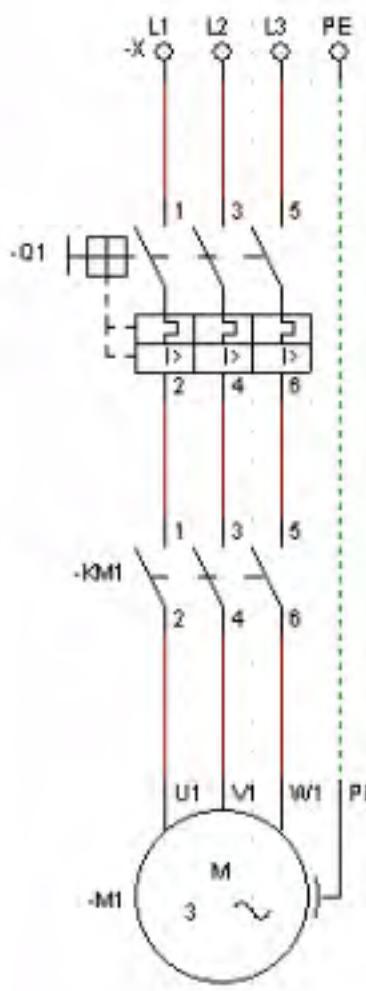


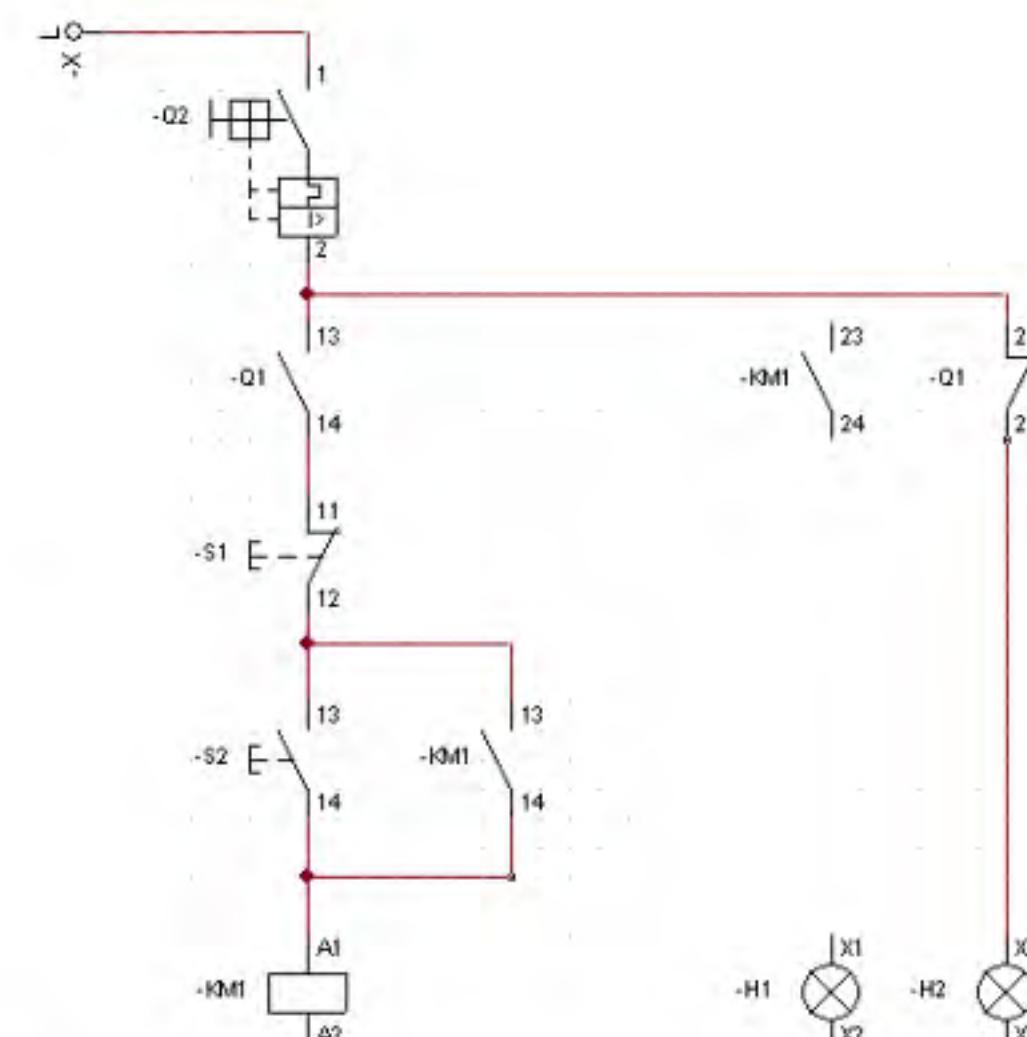
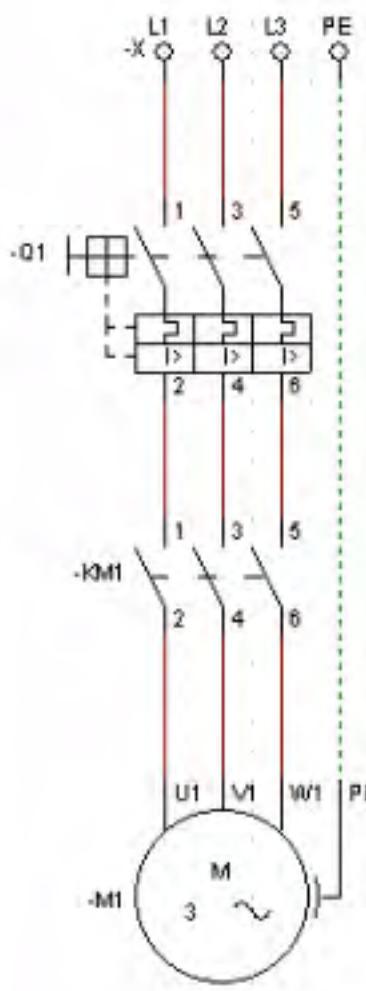


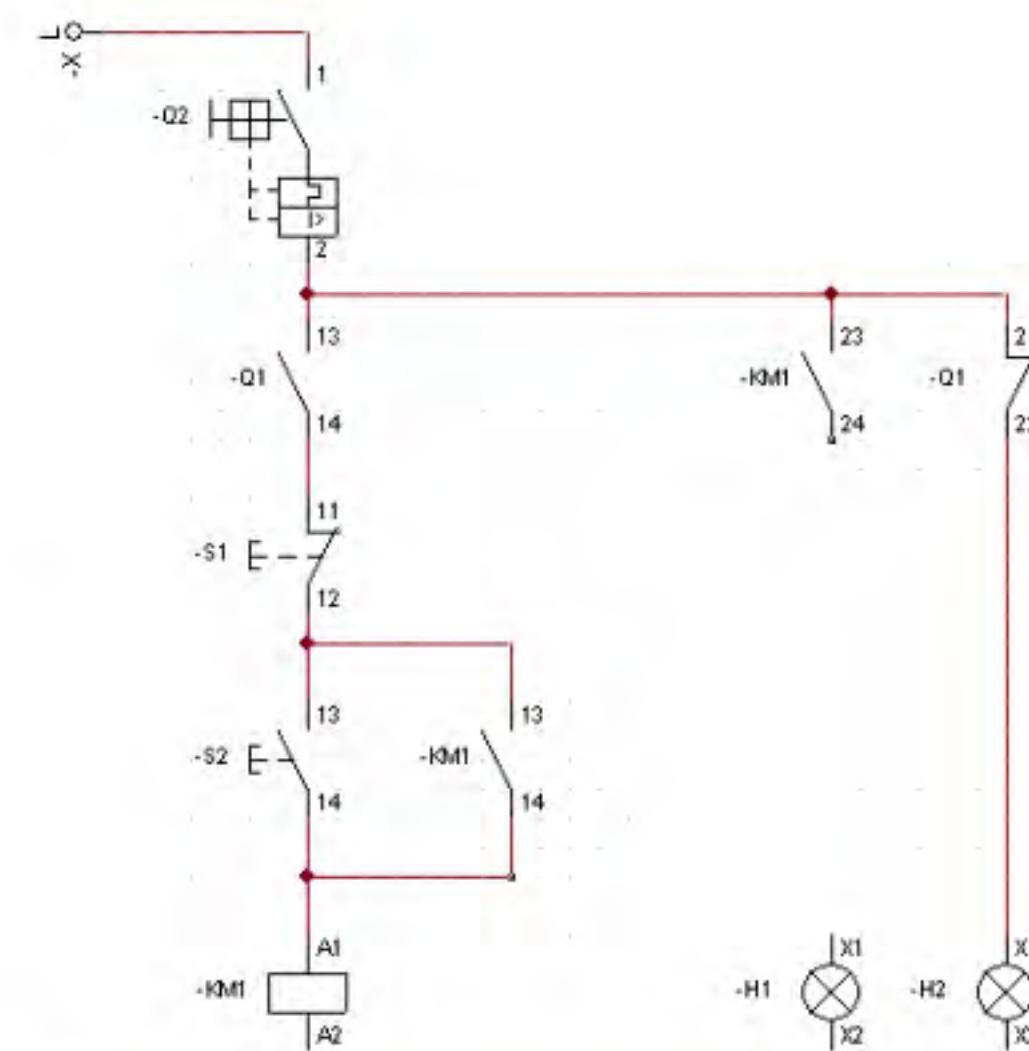
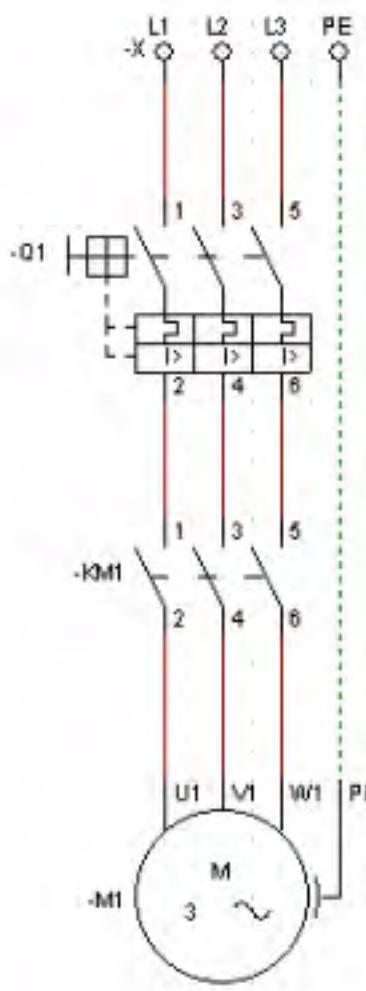


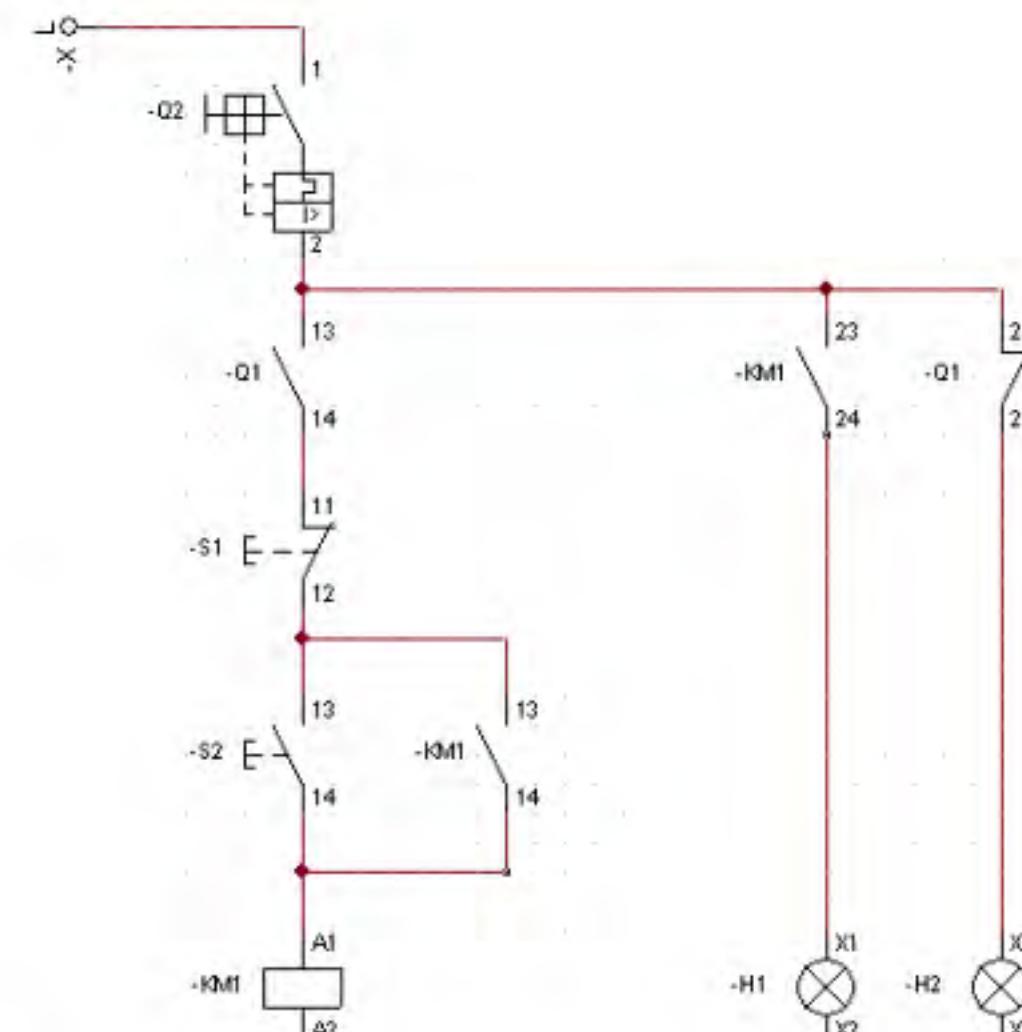
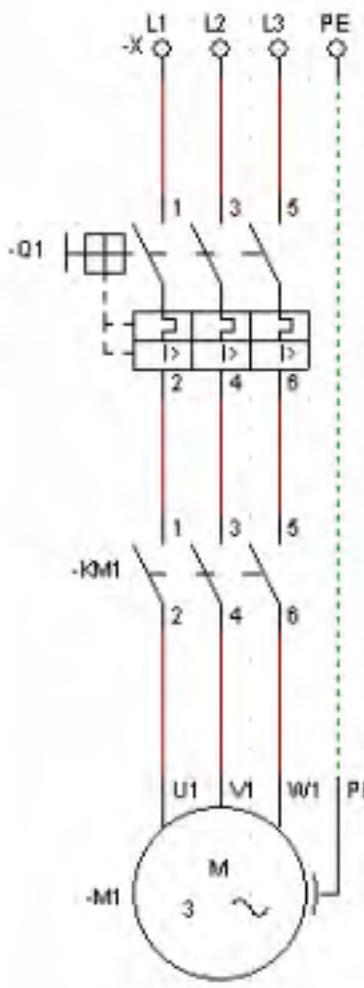
Z  
X

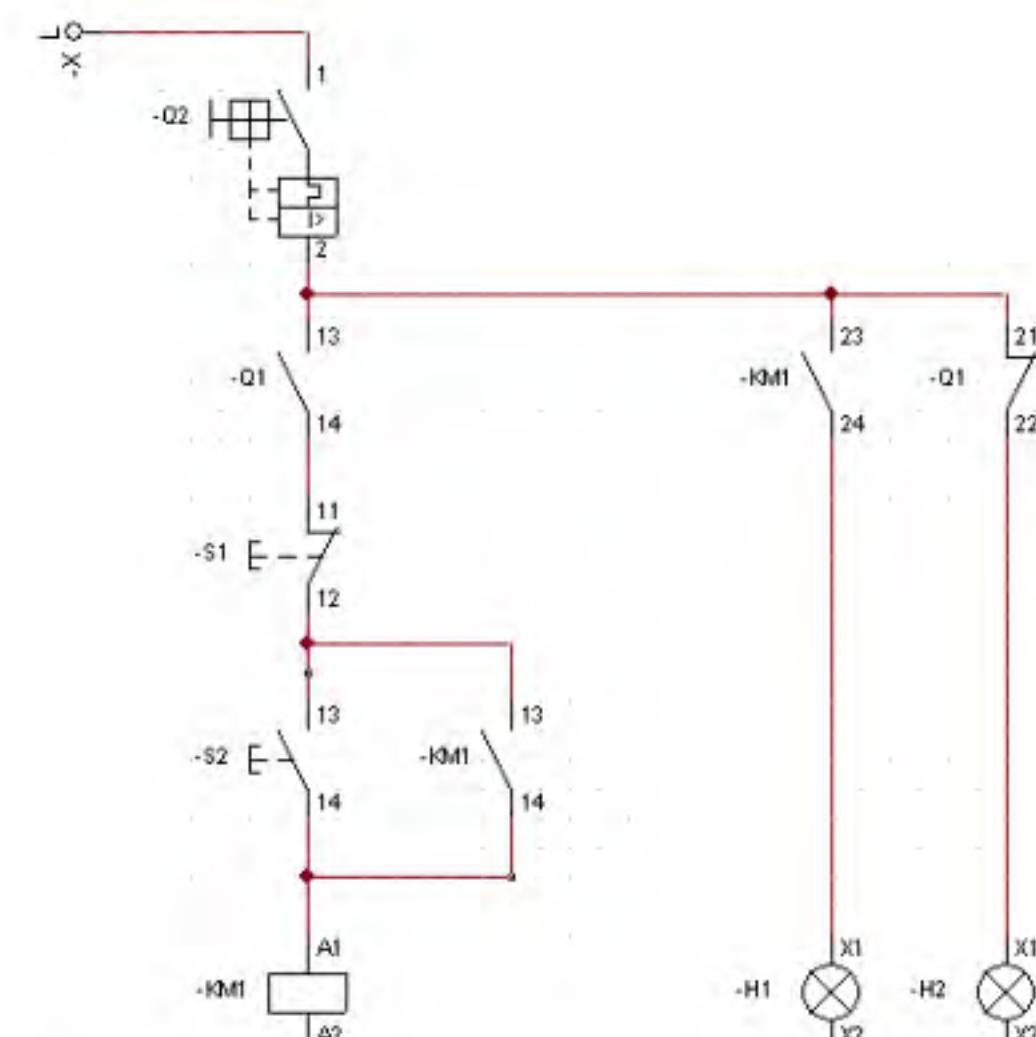
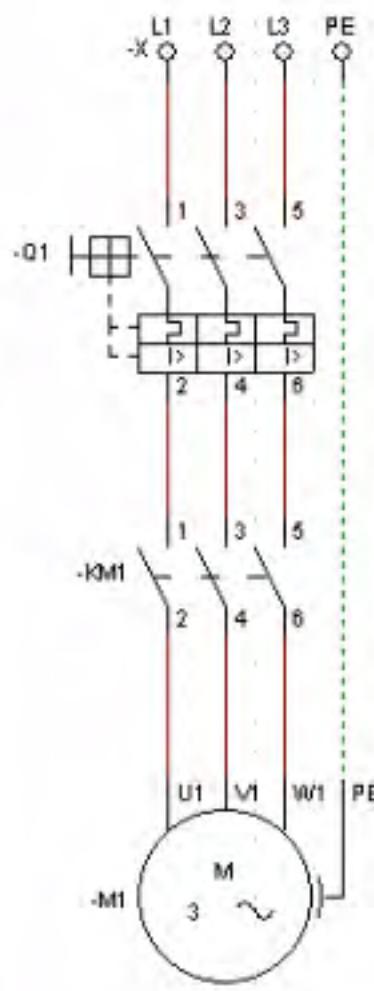


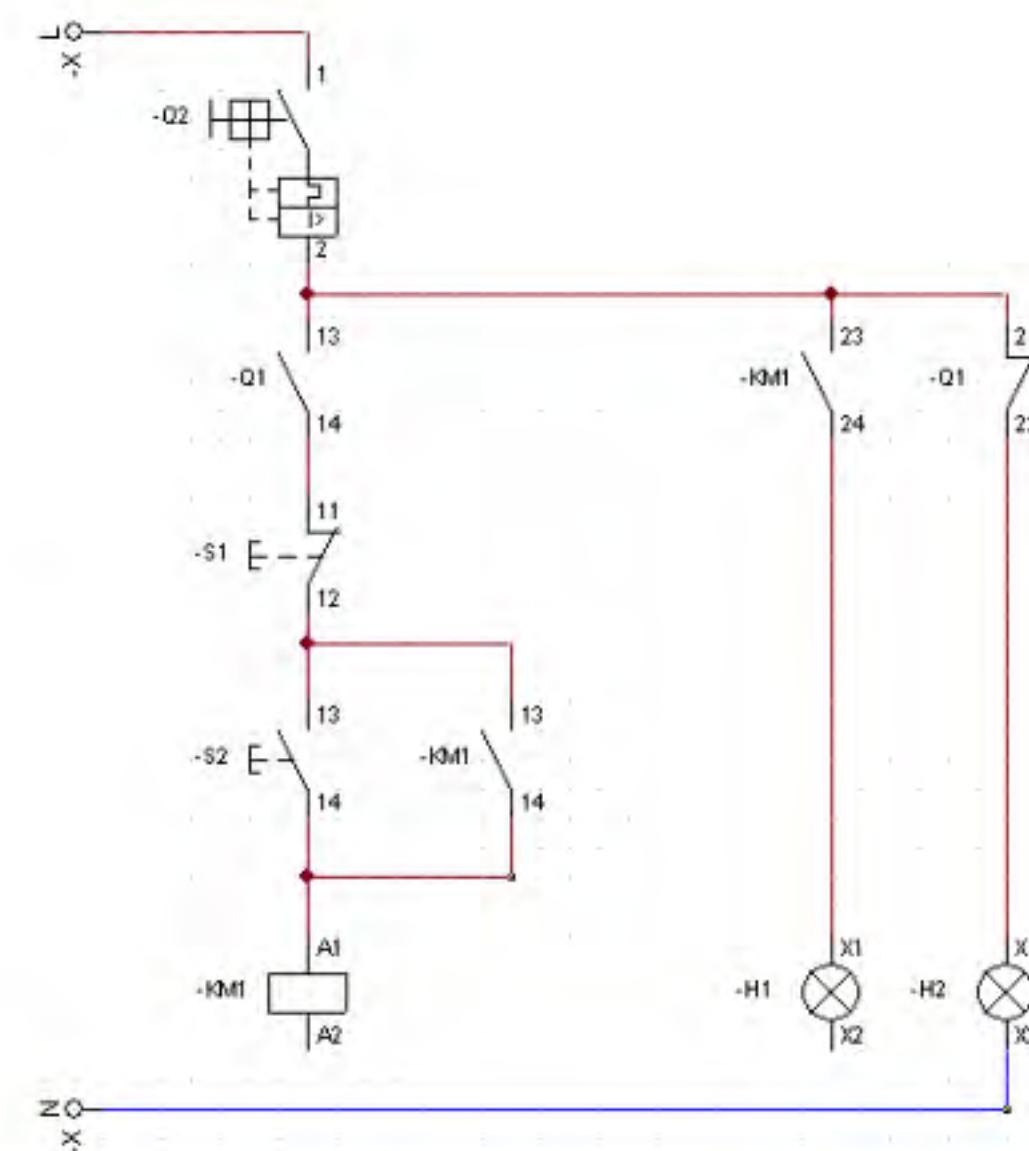
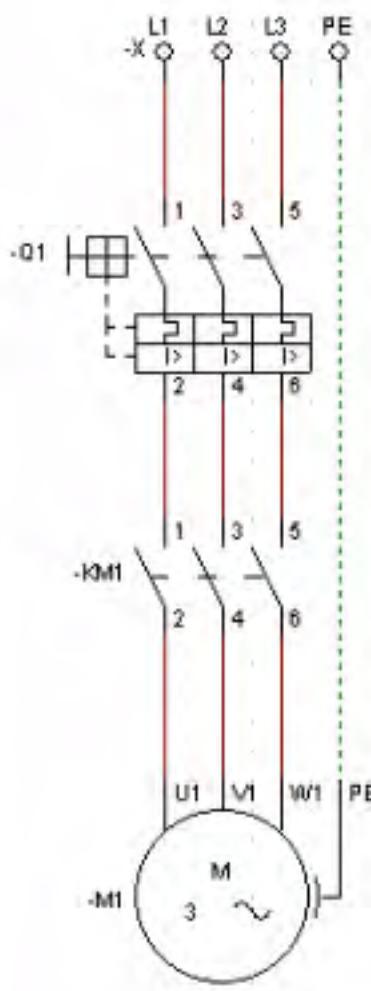


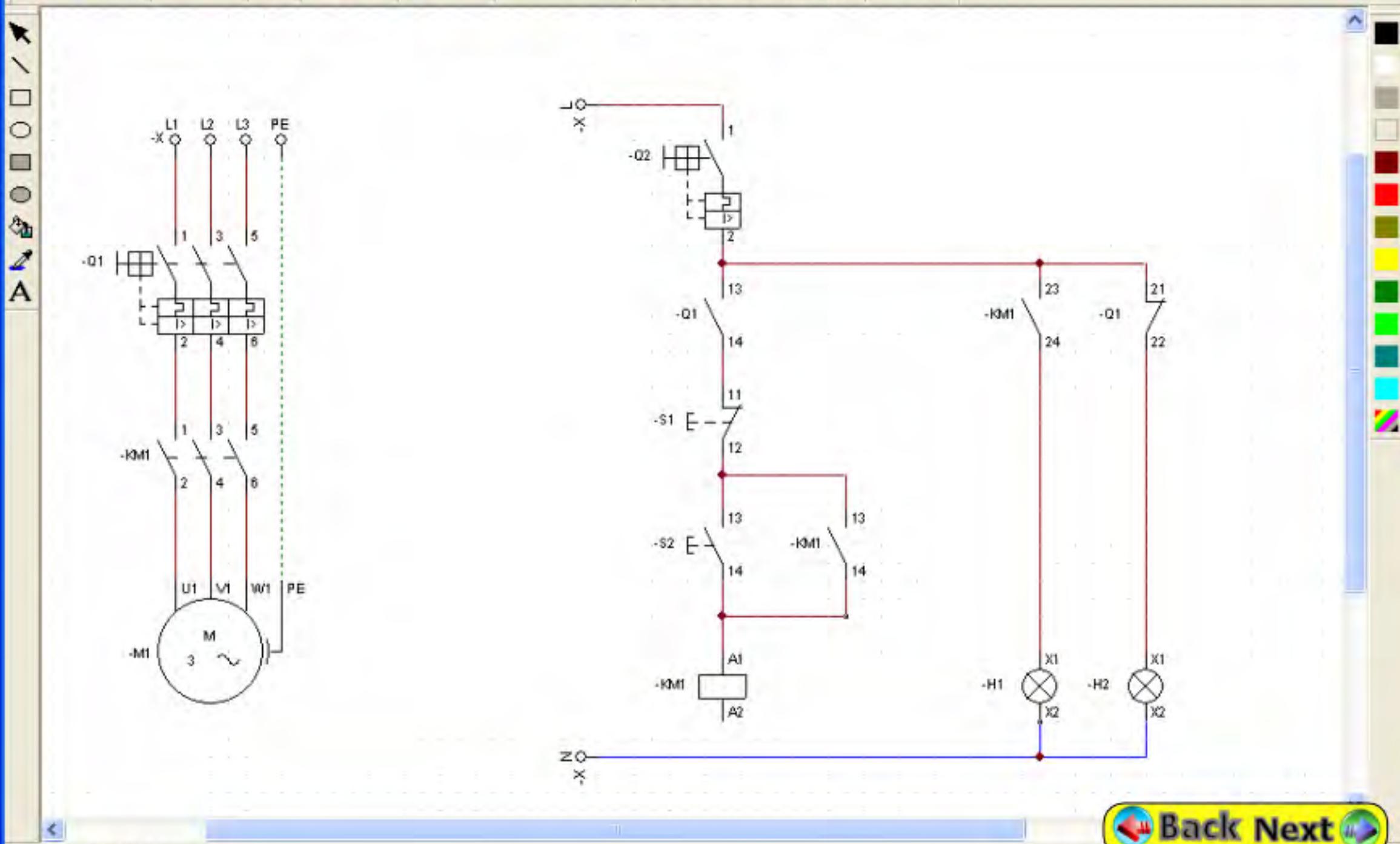


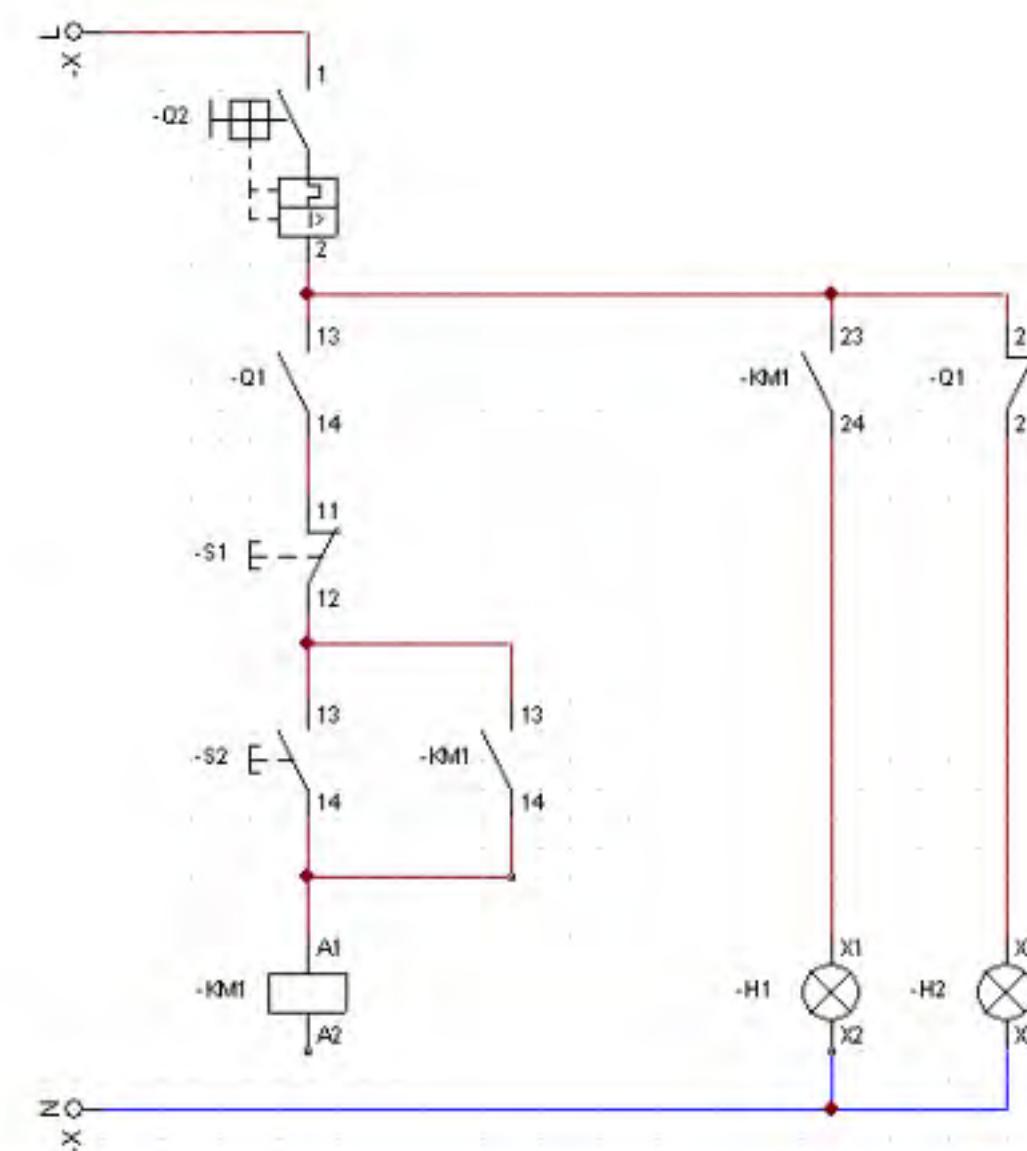
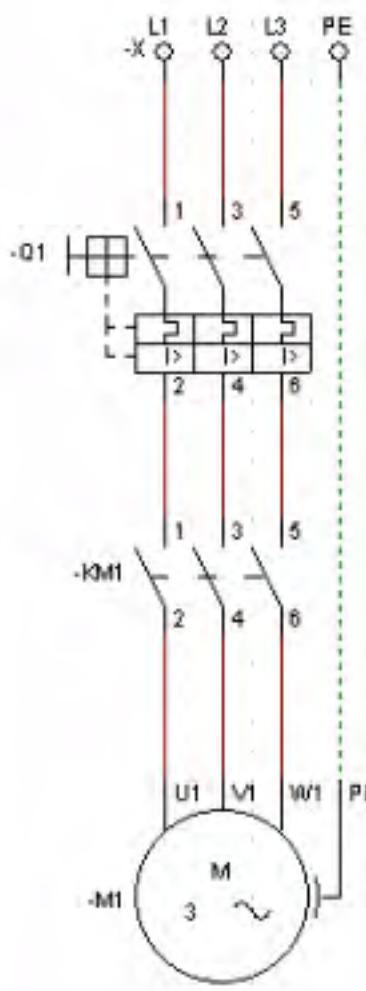


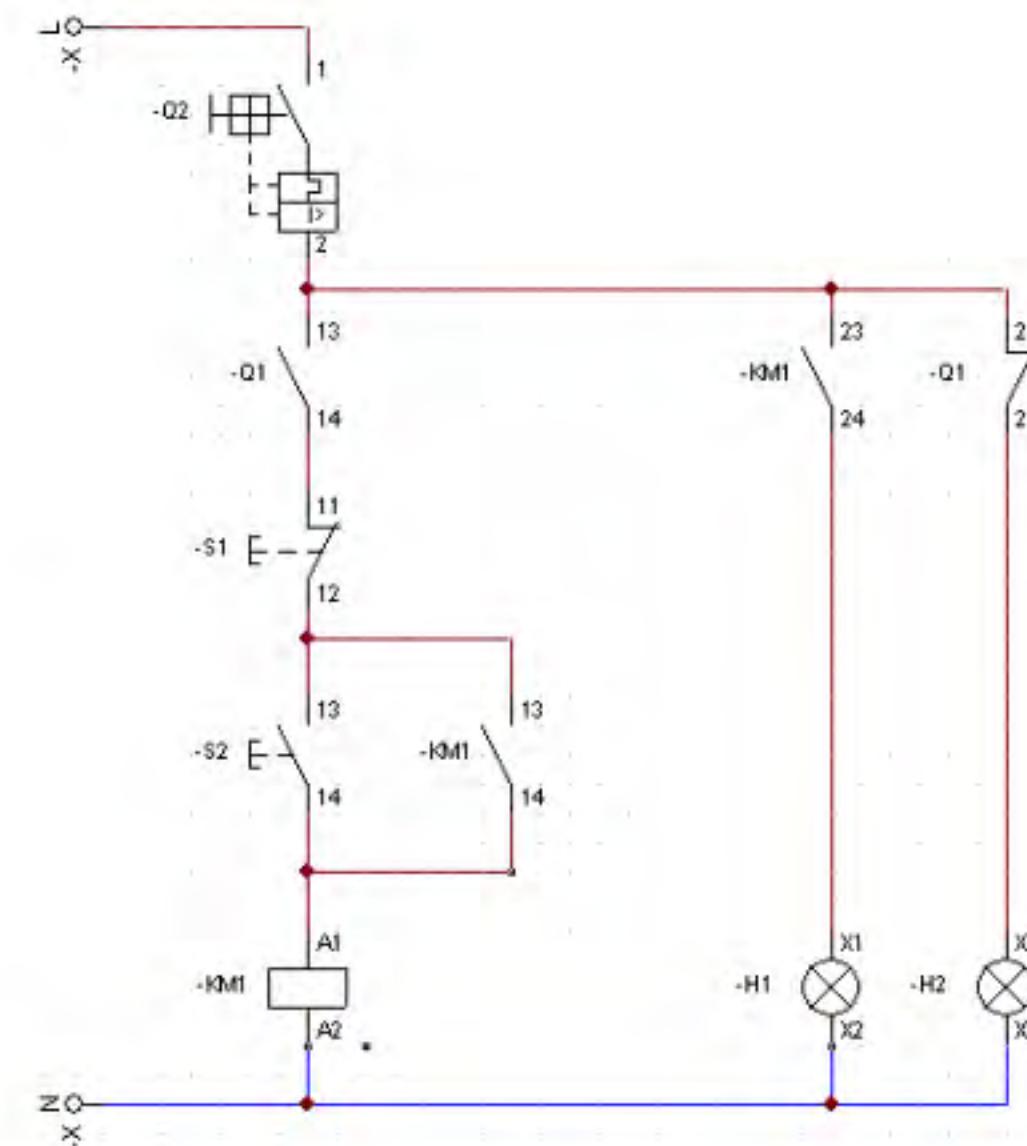
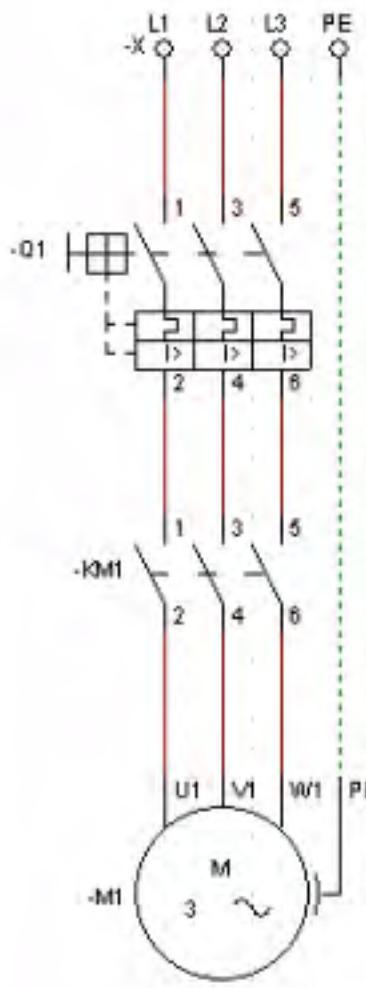


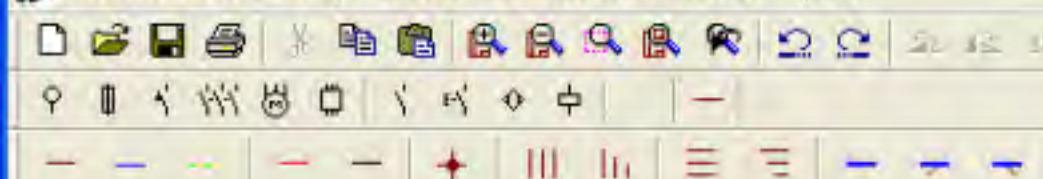






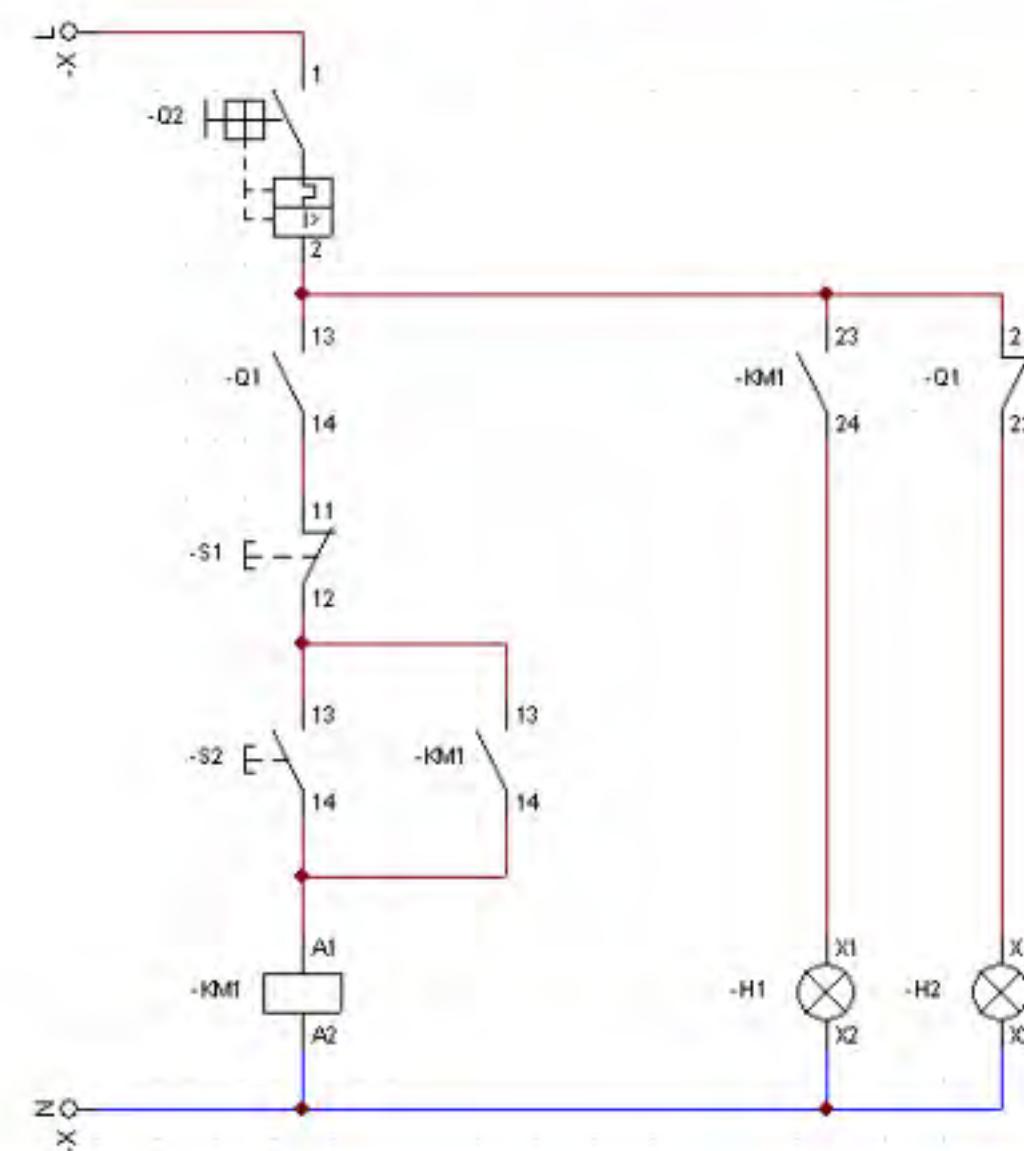
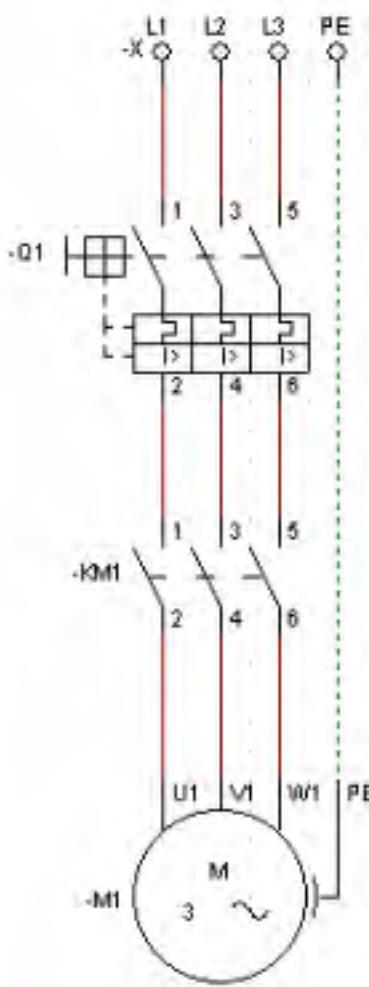


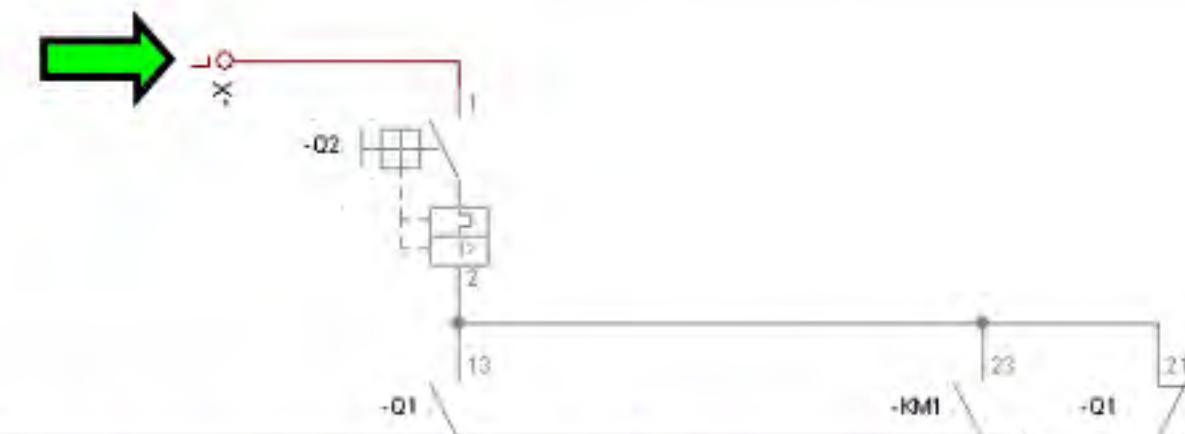
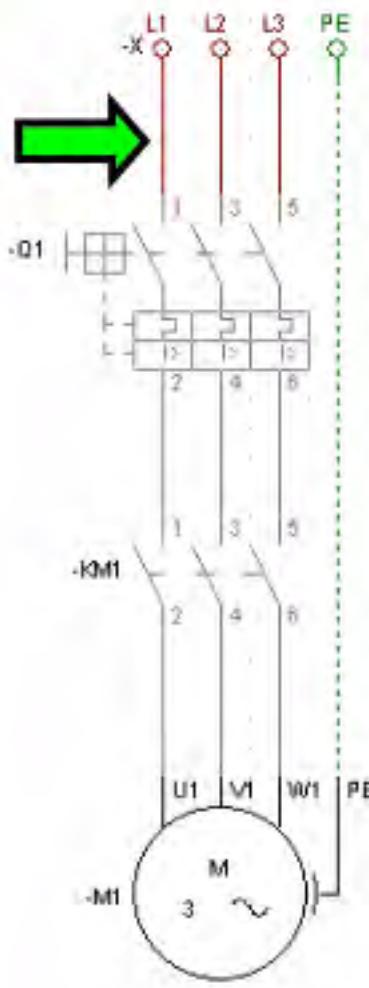




Simulación

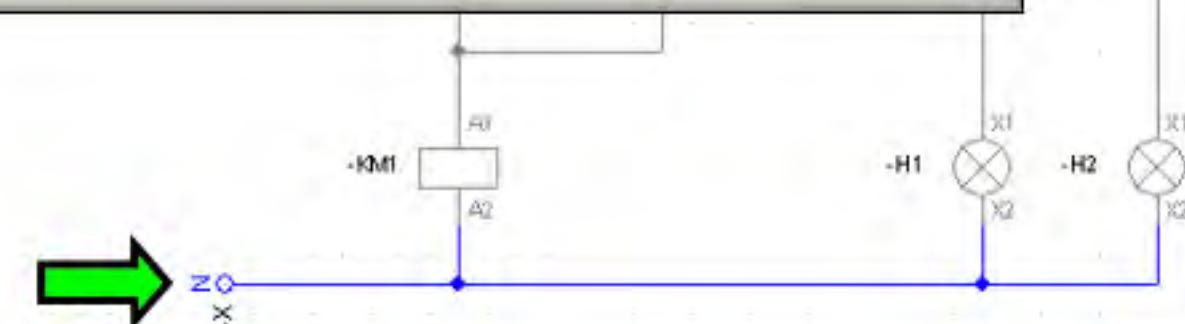
Una vez cableado todo,  
procedemos a activar la  
simulación pulsando sobre  
el ícono.

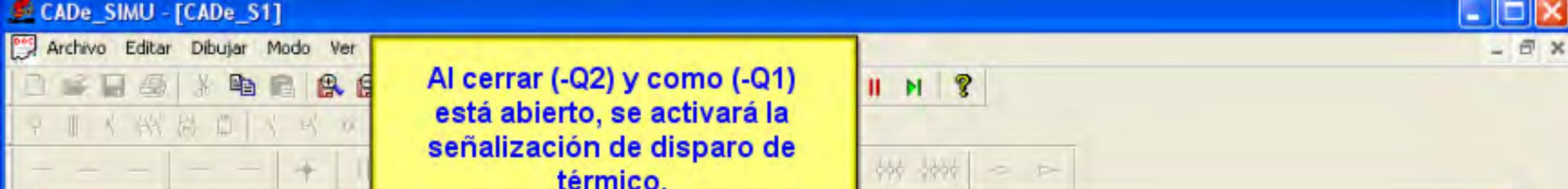




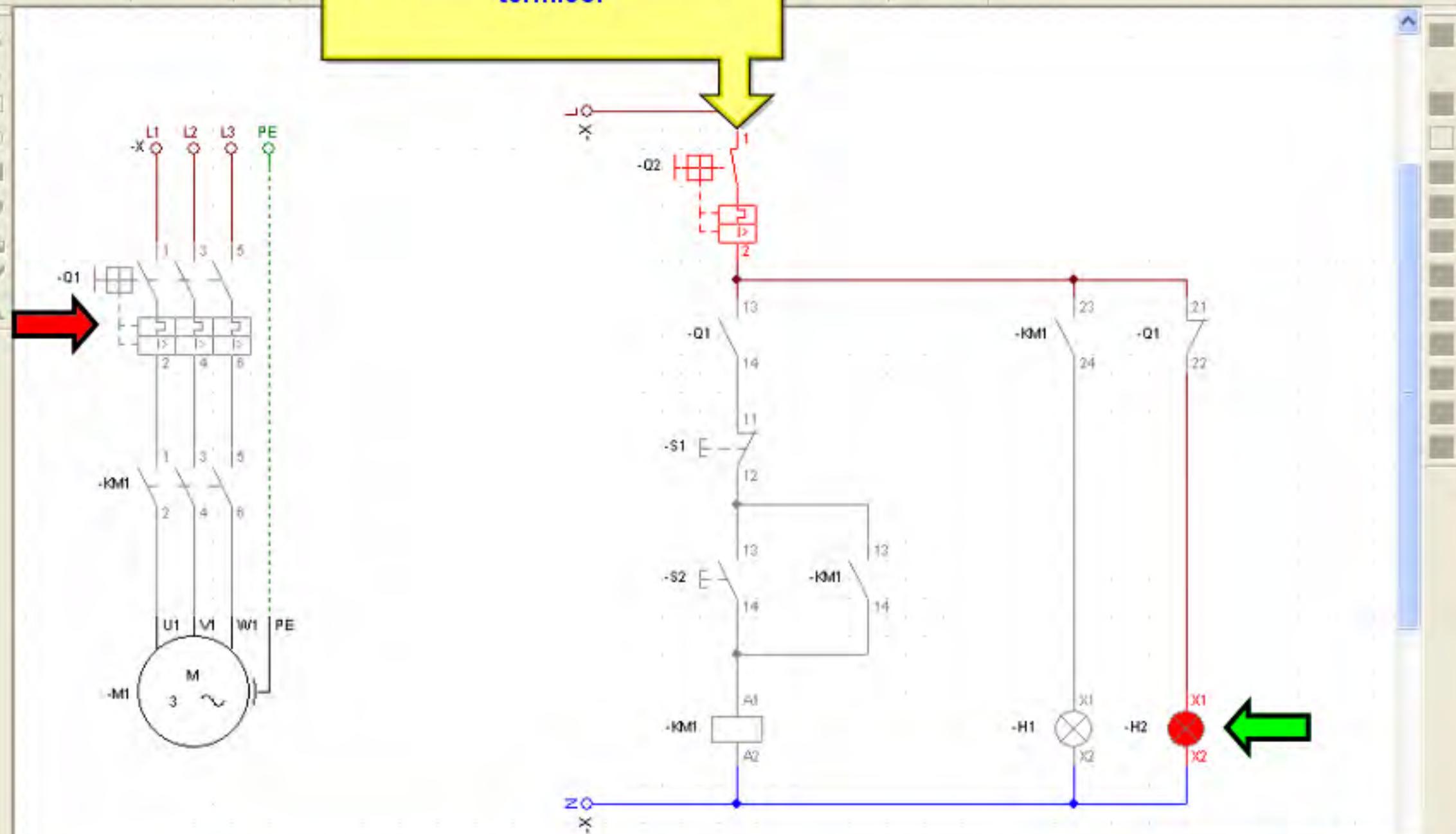
Al activar la simulación, los cables en tensión, tendrán un color más vivo, mientras que los que no tienen tensión, aparecerán difuminados.

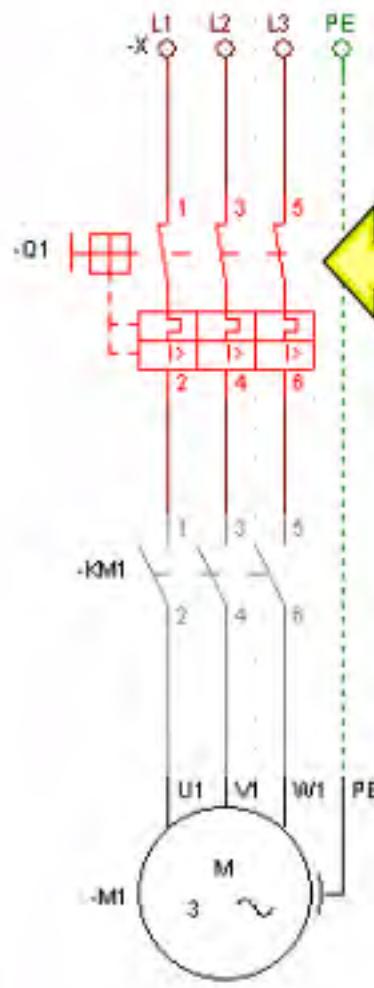
Según vayamos activando los mecanismos, se irán poniendo en tensión los componentes.



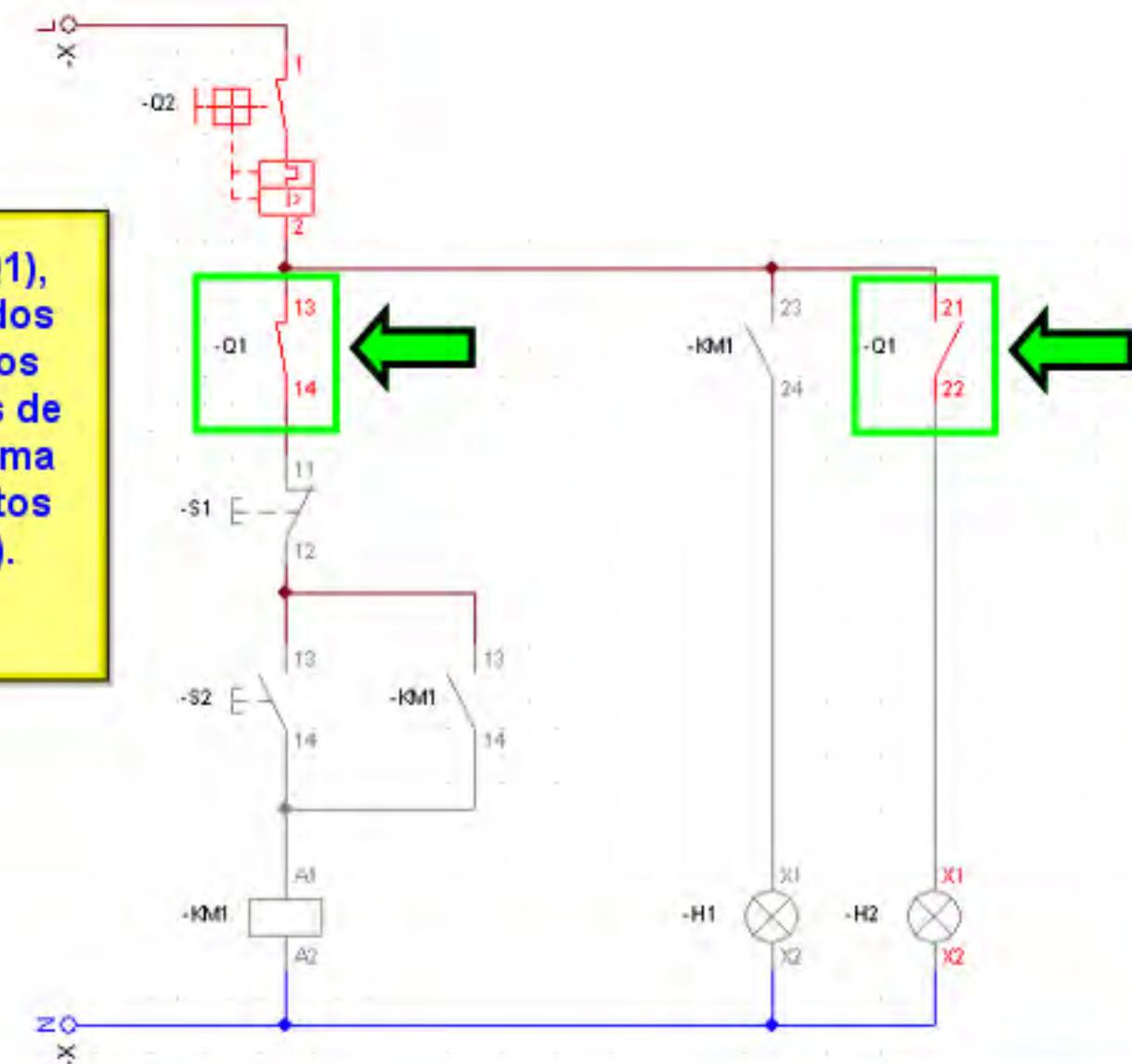


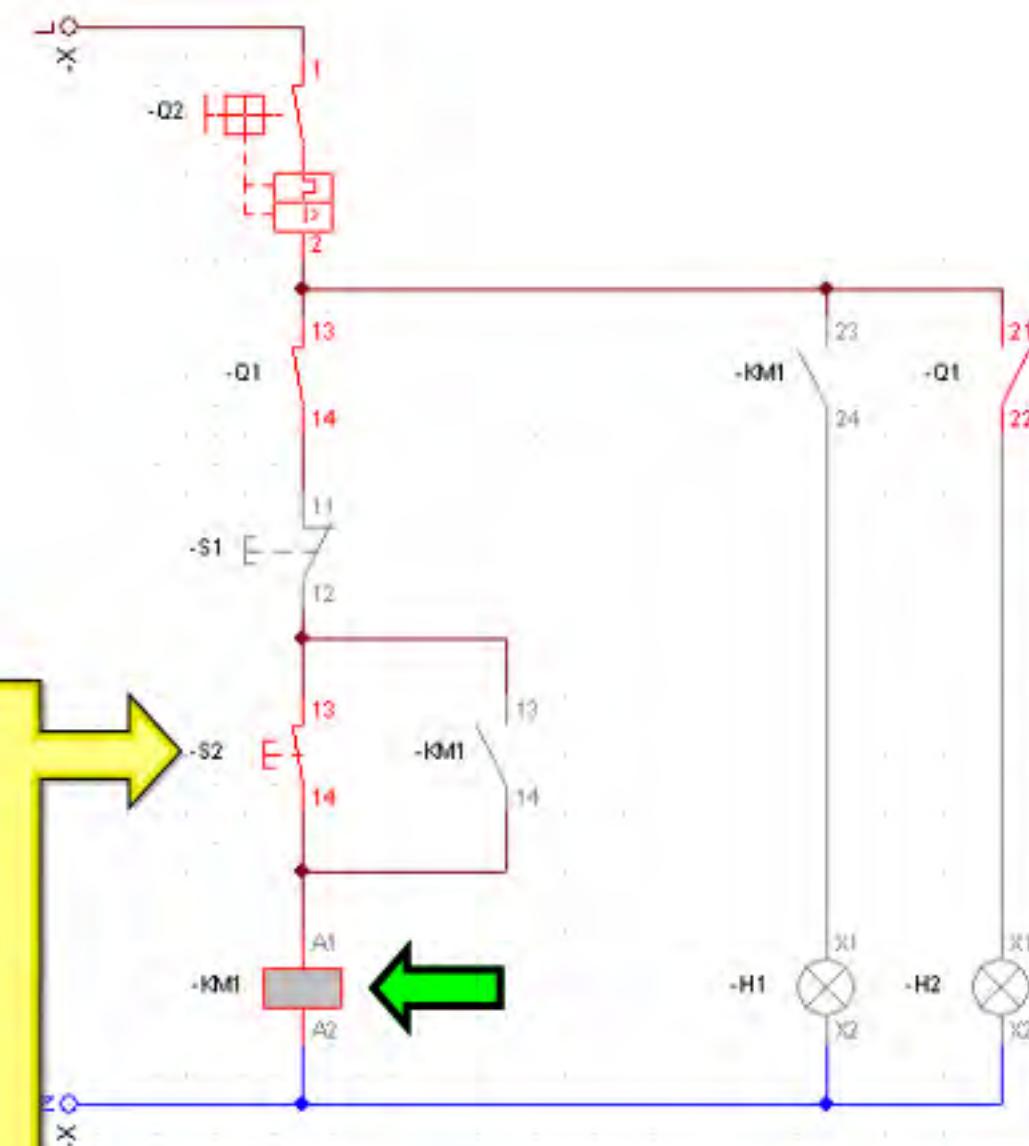
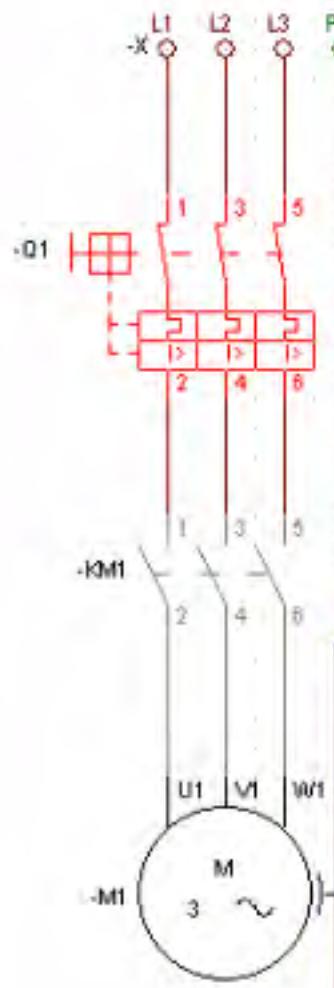
Al cerrar (-Q2) y como (-Q1)  
está abierto, se activará la  
señalización de disparo térmico.



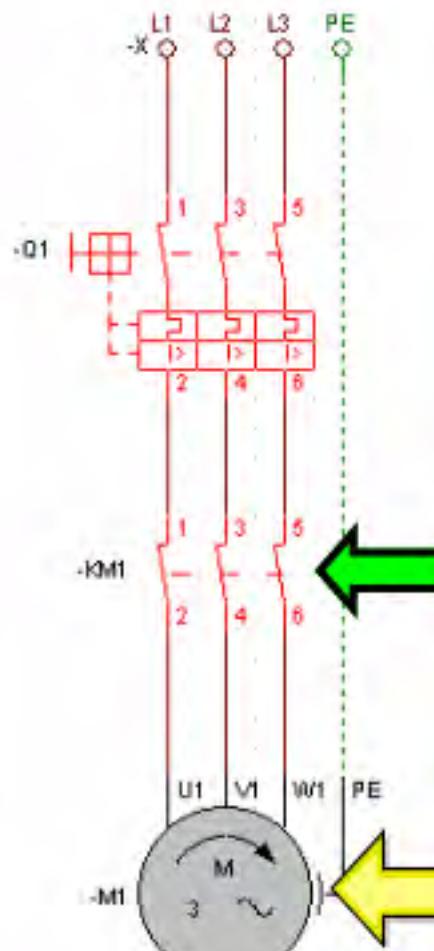


Al cerrar (-Q1),  
actuarán todos  
los contactos  
identificados de  
la misma forma  
(sus contactos  
auxiliares).

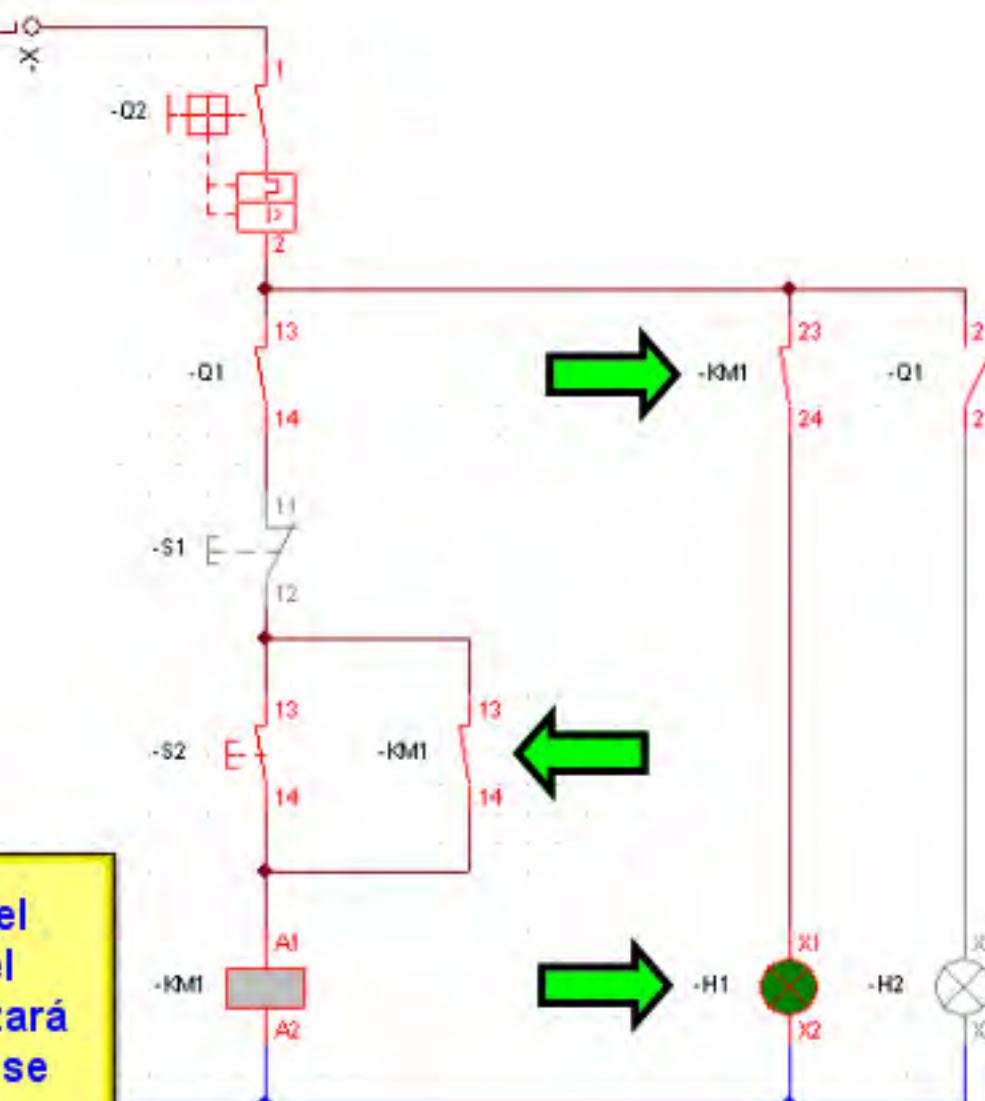


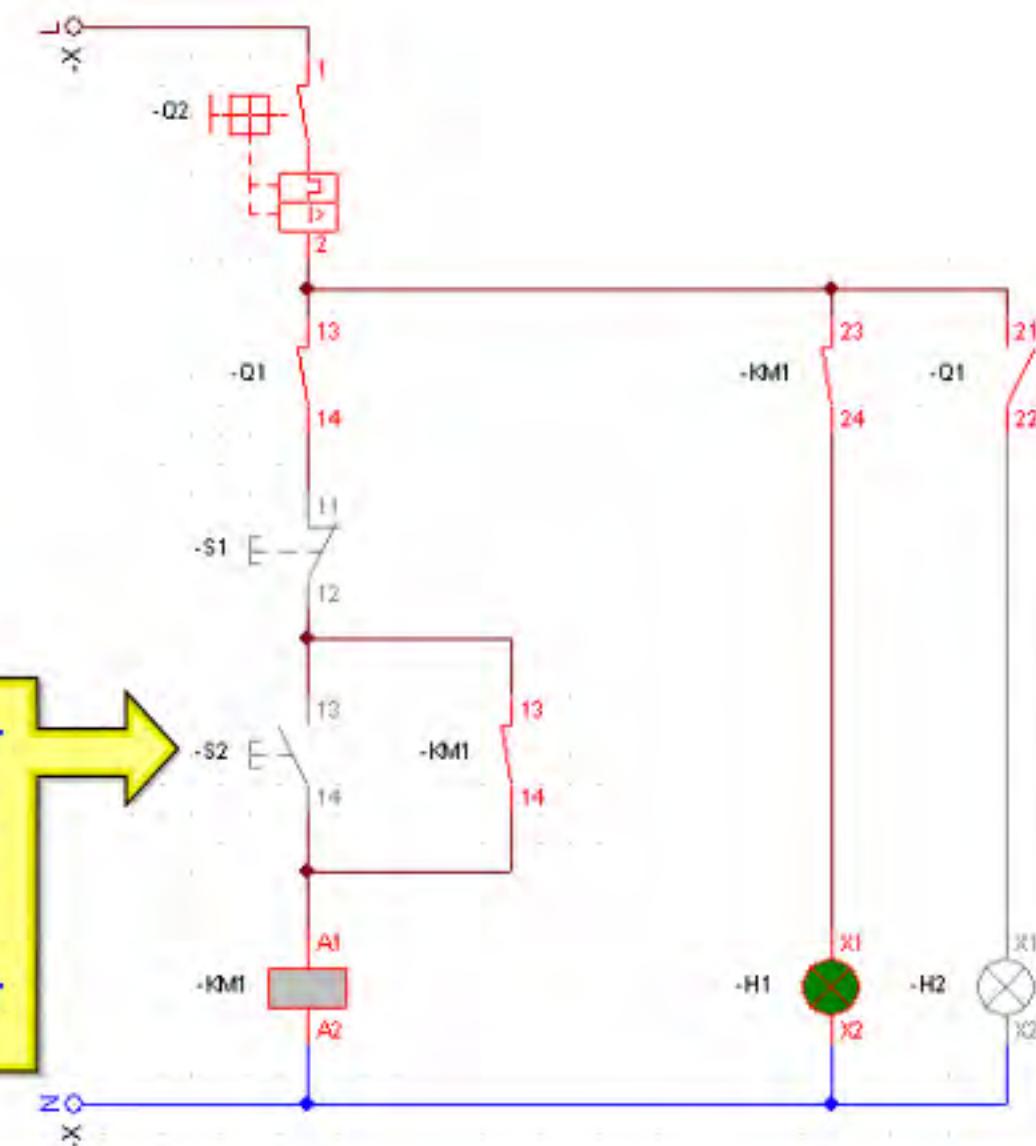
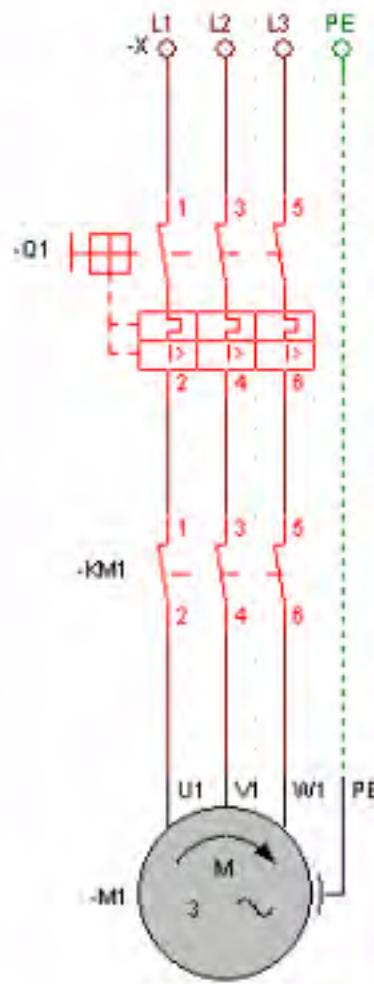


Al accionar la marcha, se alimentará la bobina del contactor (-KM1), con lo que se activarán sus contactos.



Al activarse el contactor, el motor comenzará a funcionar y se activará la señalización.





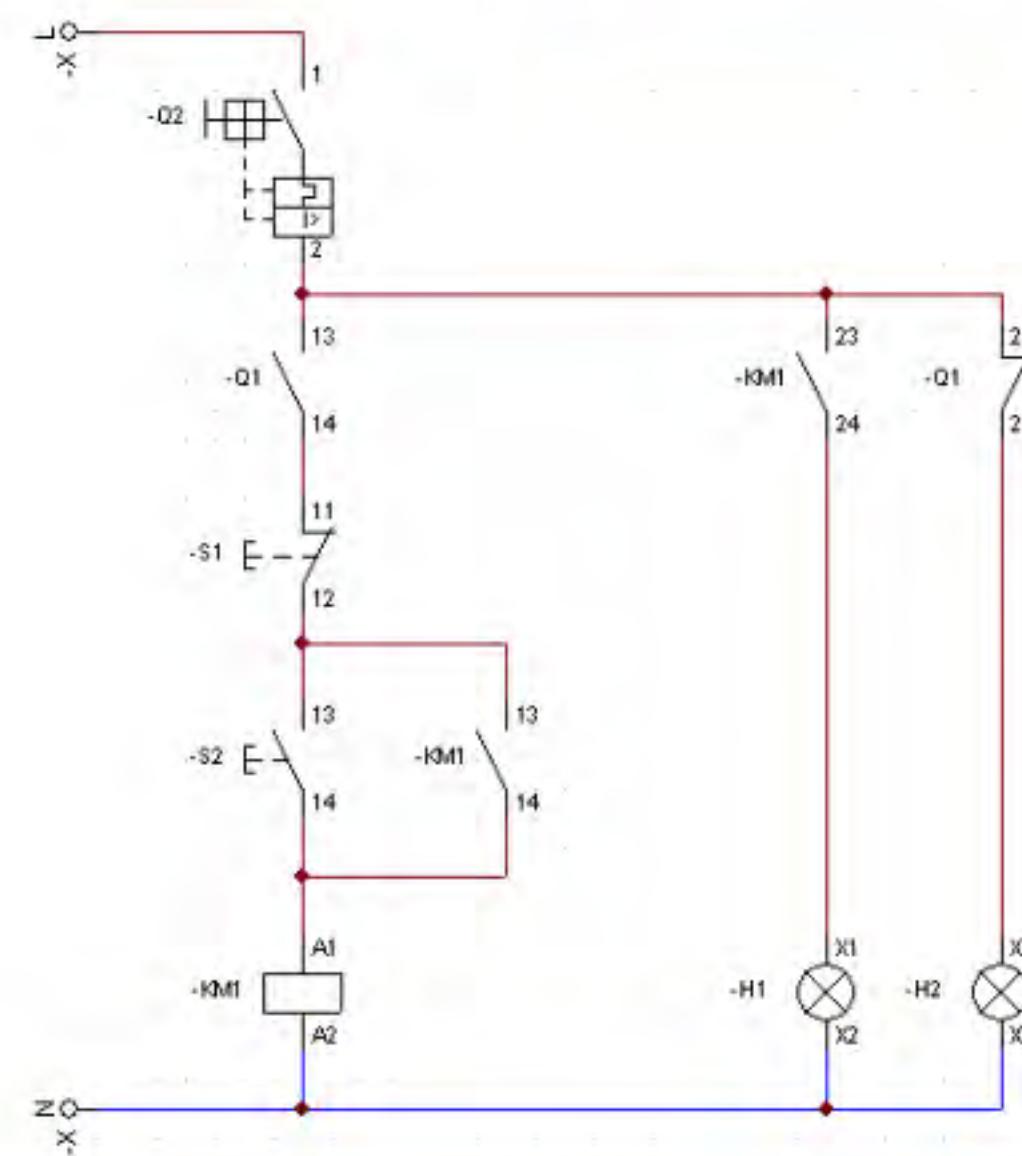
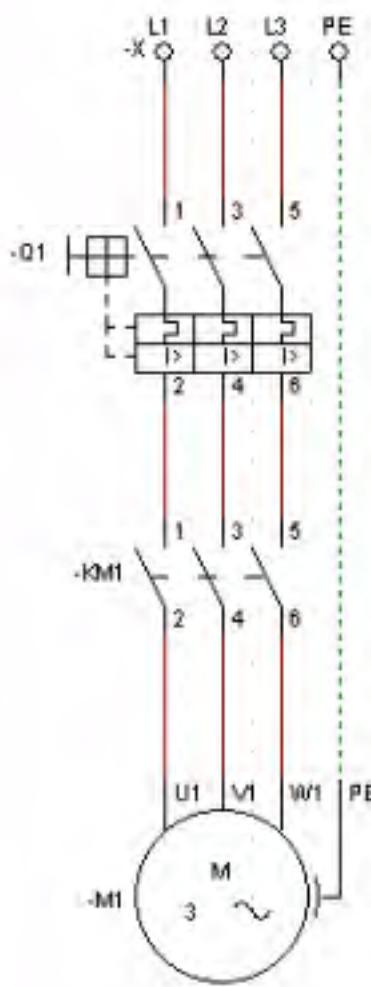
Podremos soltar el pulsador de marcha ya que enclavamos mediante un contacto auxiliar

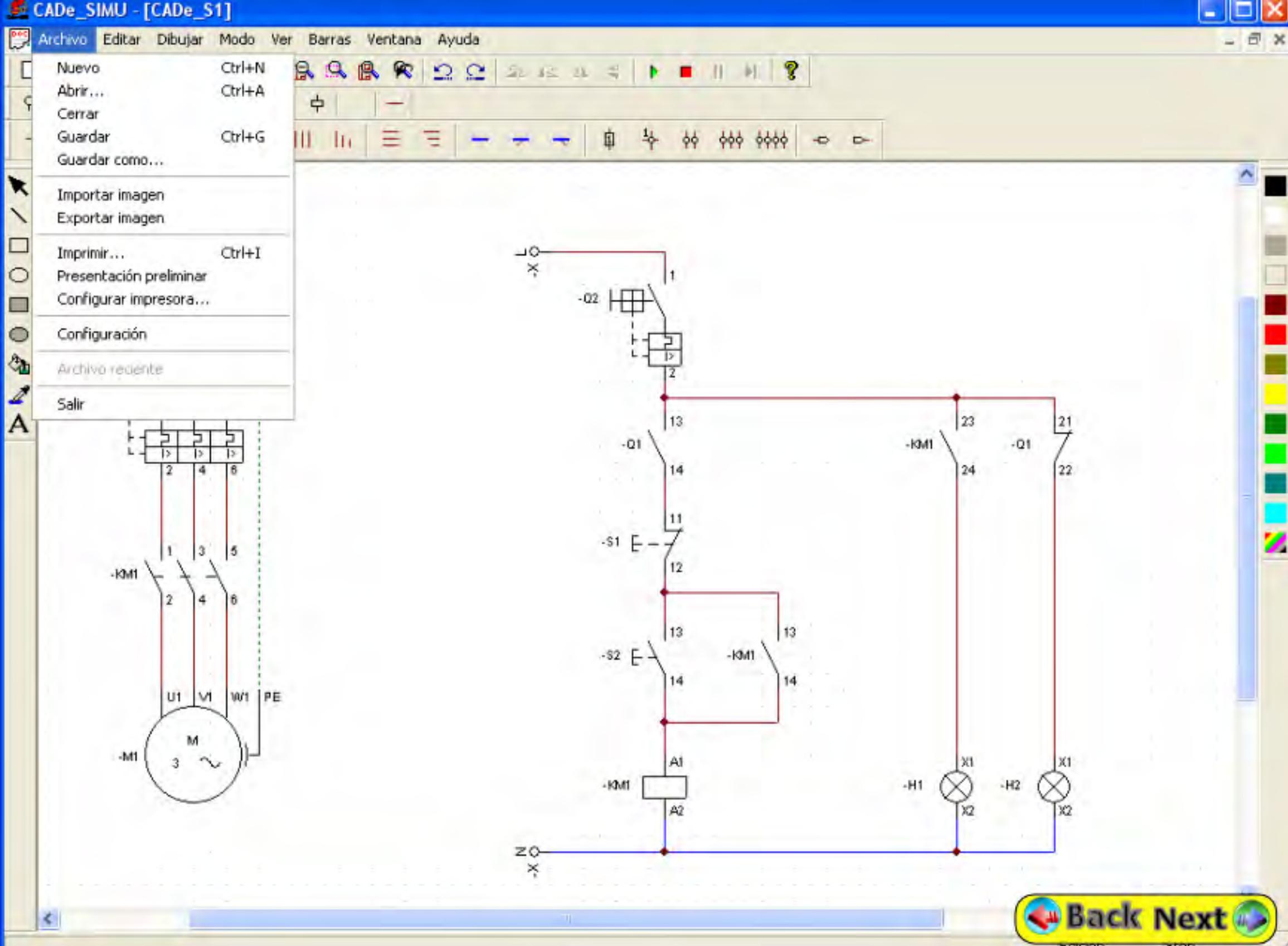


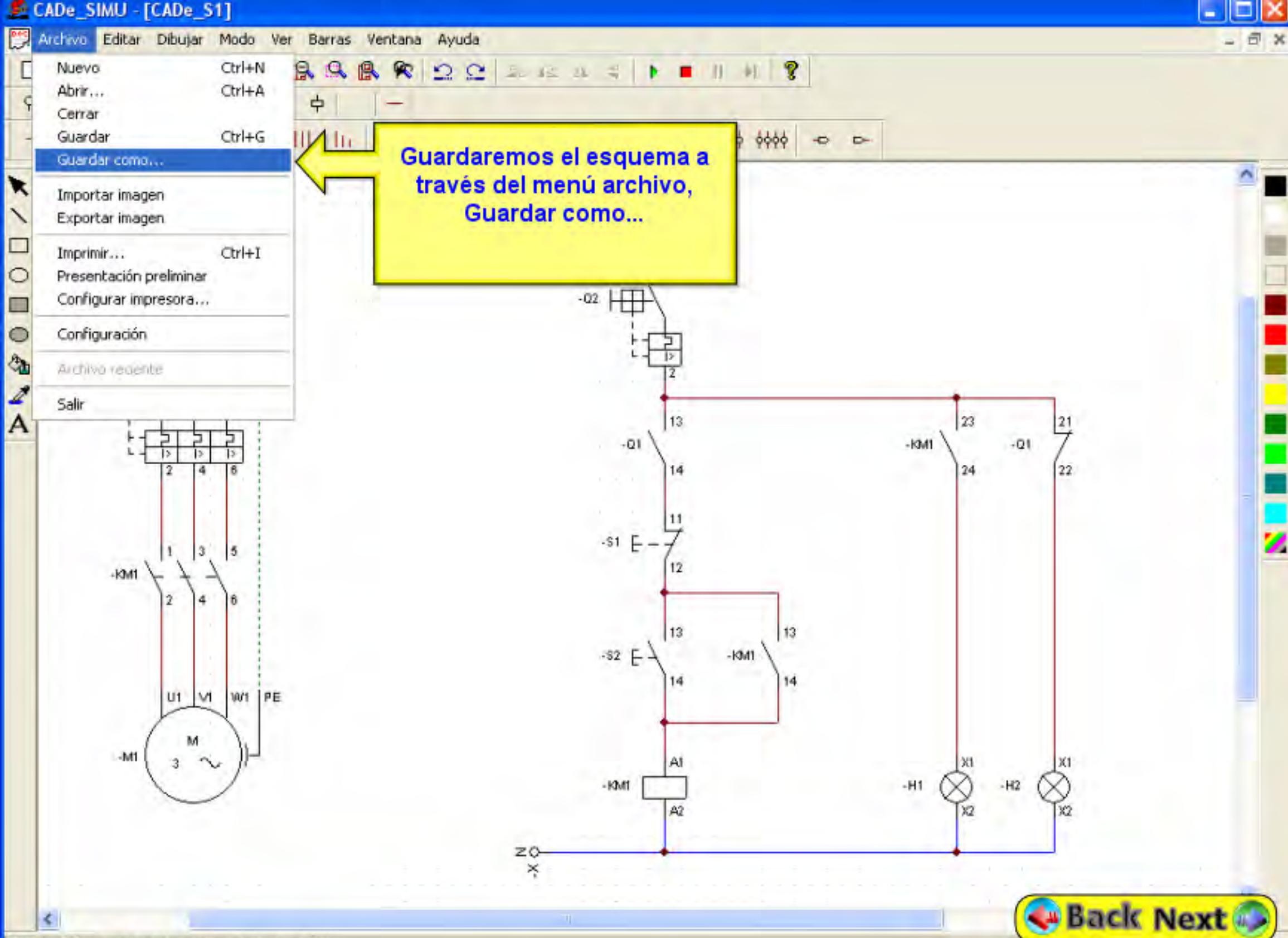
Pulsando sobre el  
paro, detendremos  
el funcionamiento  
de la máquina.



Detendremos la simulación pulsando sobre el cuadrado.









La extensión por defecto es .CAD y debemos escribirla nosotros ya que si lo borramos, el programa no lo añade de forma automática.

