

UNIDADES TECNOLÓGICAS DE SANTANDER
FACULTAD DE CIENCIAS NATURALES E INGENIERÍAS

TECNOLOGÍA EN OPERACIÓN Y MANTENIMIENTO ELECTROMECAÁNICO

Unidades Tecnológicas de Santander

ACCIONAMIENTOS ELÉCTRICOS

FUNCIONES LÓGICAS DISPOSITIVOS BÁSICOS
DE MANIOBRA

CUADERNO 1 DE EJERCICIOS PRÁCTICOS

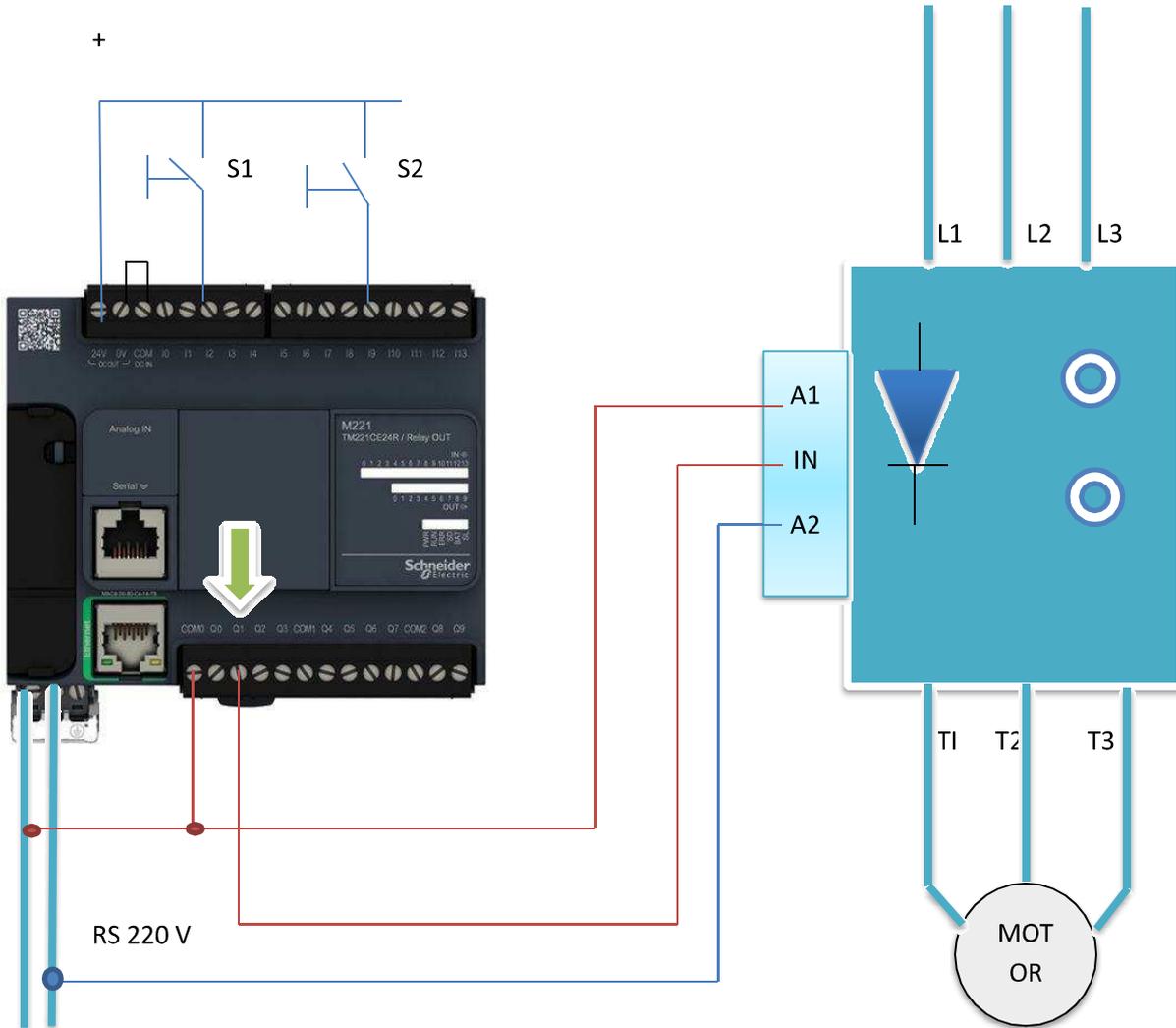
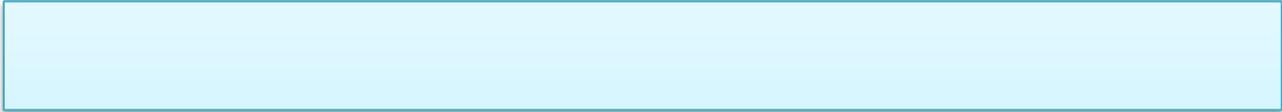
DOCENTE: MILTON REYES JIMENEZ



Ingeniería Electromecánica
Operación y Mantenimiento Electromecánico

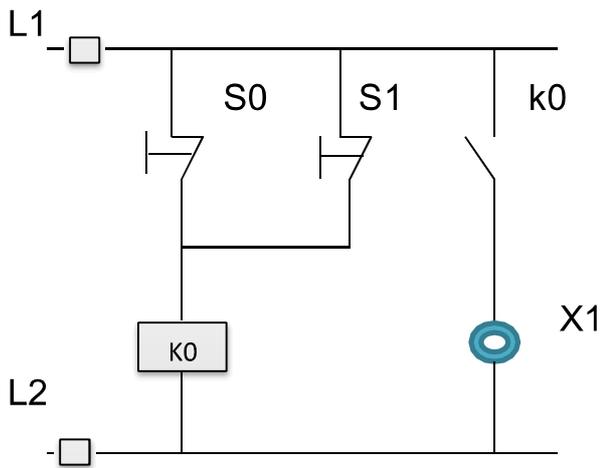


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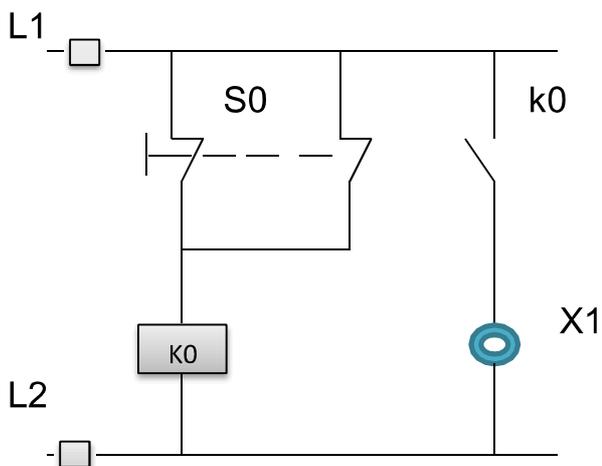
TEMA 1 FUNCIONES LOGICAS APLICADAS EN LOS ACCIONAMIENTOS ELECTRICOS

1.1 Determinar tabla logica.



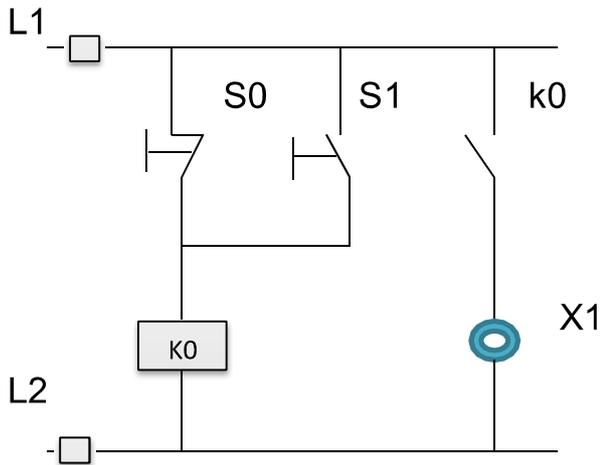
S0	S1	X1
0	0	
1	0	
0	1	

1.2 Determinar tabla logica



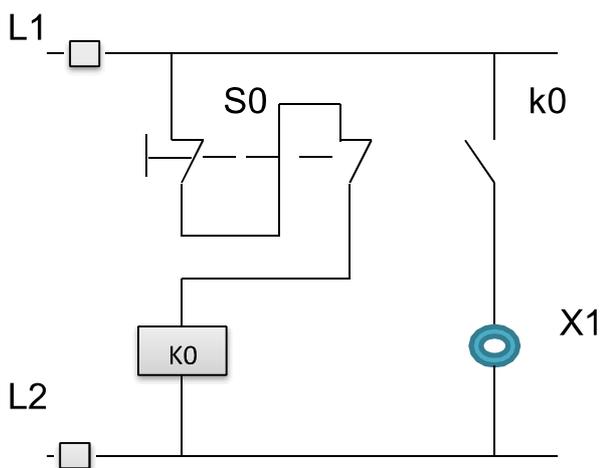
S0	X1
0	
1	

1.3 Determinar tabla logica.



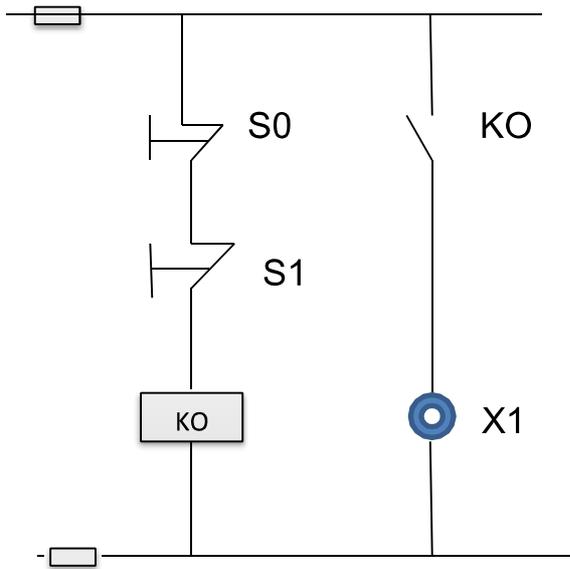
S0	S1	X1
0	0	
1	0	
0	1	

1.4 Determinar tabla logica



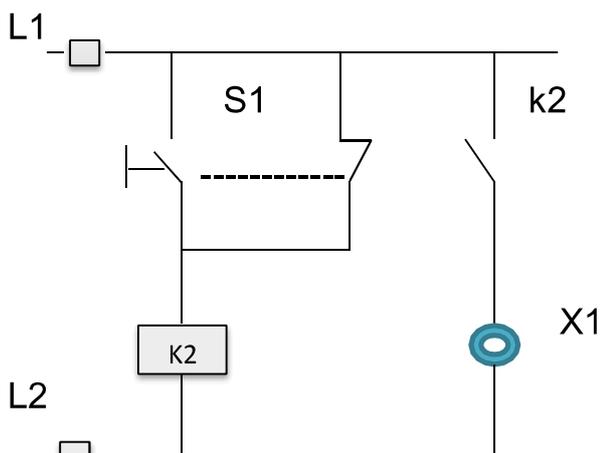
S0	X1
0	
1	

2.0 Determinar tabla logica



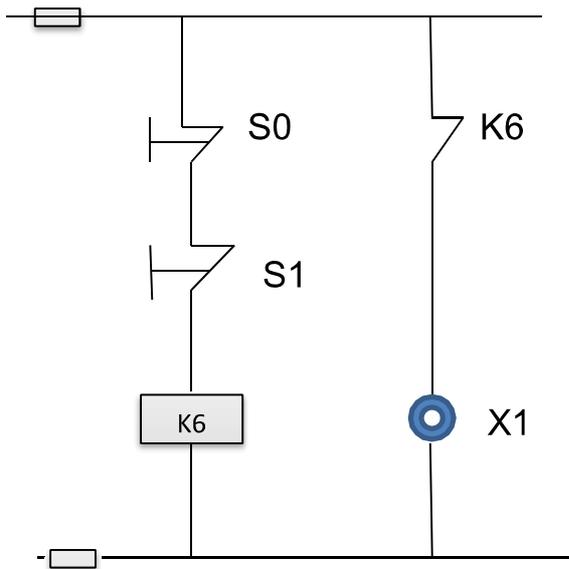
S0	S1	X1
0	0	
1	0	
0	1	

3.0 Determinar tabla logica



S1	X1
0	
1	

4.0 Determinar tabla logica



S0	S1	X1
0	0	
1	0	
0	1	

5.0 Determinar tabla logica

Determinar el circuito eléctrico de las siguientes expresiones:

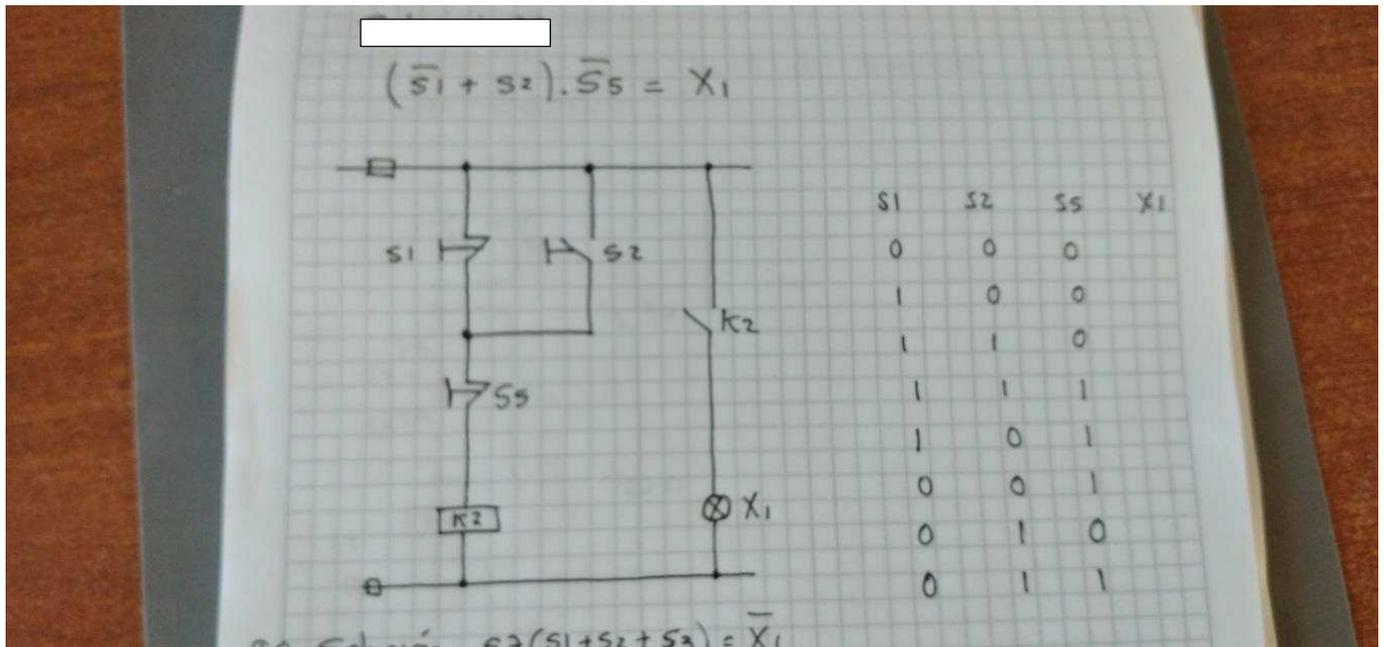
5.1 $(S1 + S2)(S3 + S4) = X1$.

Solución

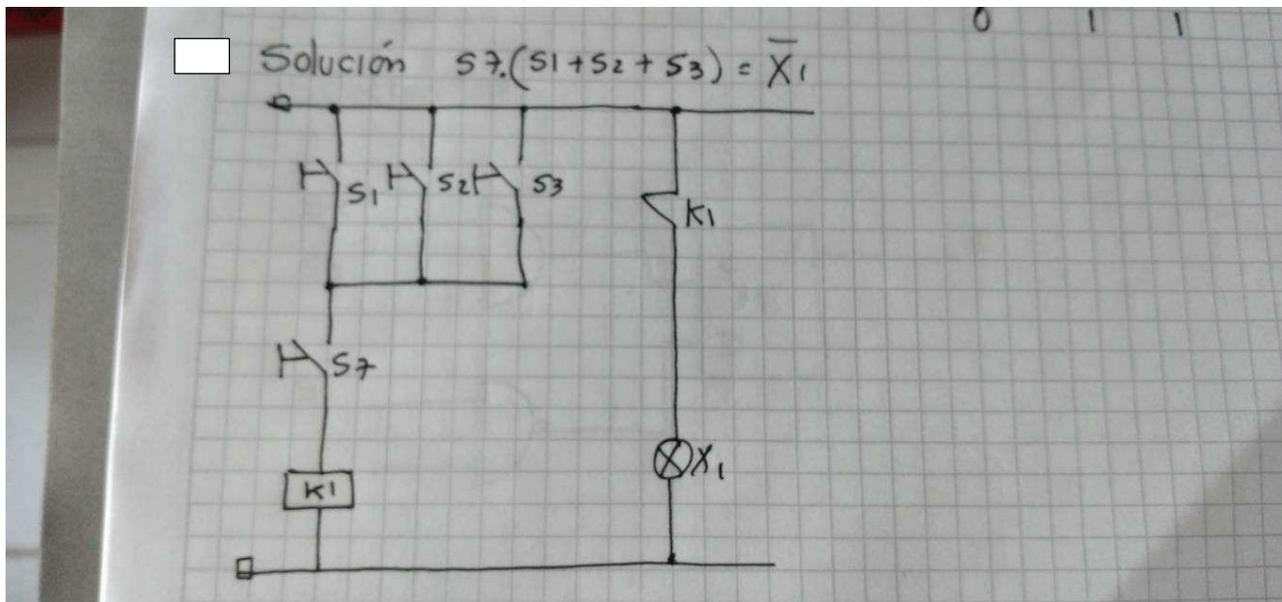
$(S1 + S2)(S3 + S4) = X1$

S1	S2	S3	S4	X1
0	0	0	0	0
1	0	0	0	0
1	1	0	0	0
1	1	1	0	0
1	1	1	1	1
0	0	0	1	0
0	0	1	1	0
0	0	1	0	0
0	1	1	1	1
1	0	0	1	0

5.2 $\overline{(S1 + S2)} \overline{S5} = X1$.



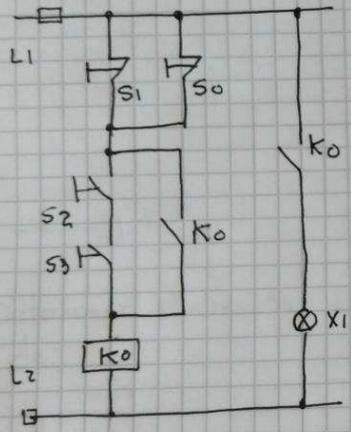
5.3 S7. $(s_1 + s_2 + s_3) = X_1$



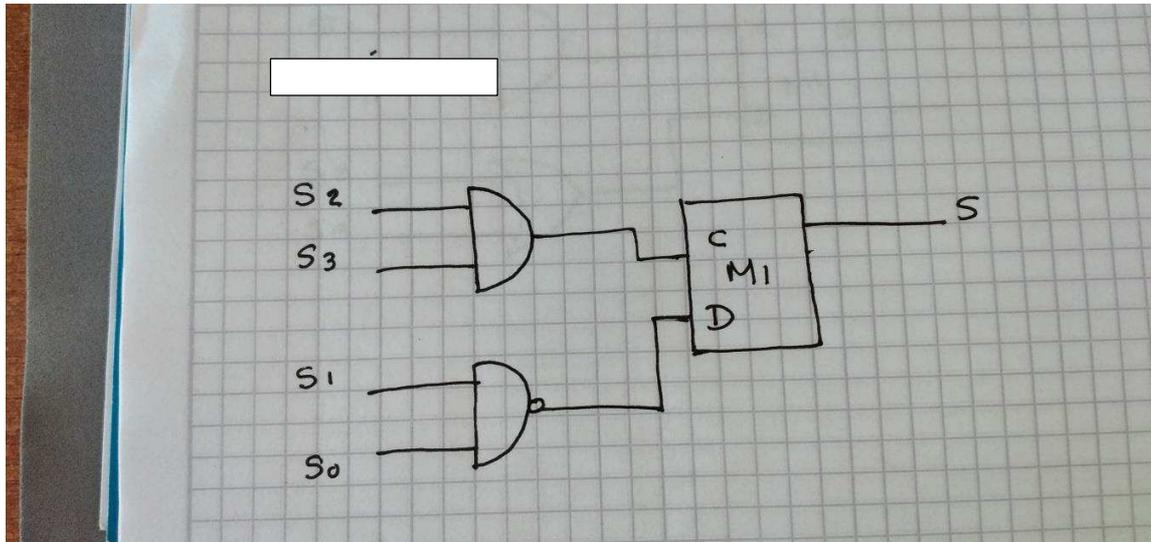
6.0 Determinar el circuito lógico de:

Ejercicio: Memorias

□ Determinar el circuito lógico del siguiente Circuito Eléctrico

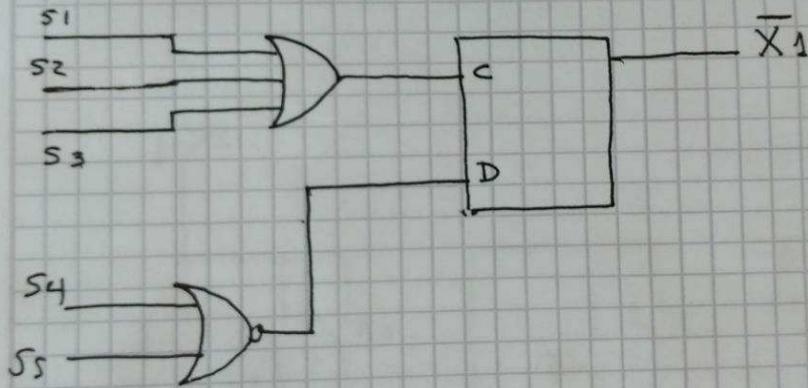


SOLUCION



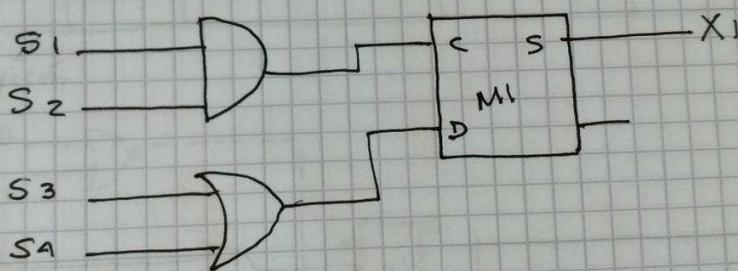
7.0 Determinar el Eléctrico del siguiente circuito lógico de:

Determinar el Circuito Eléctrico del
 Siguinte Circuito lógico

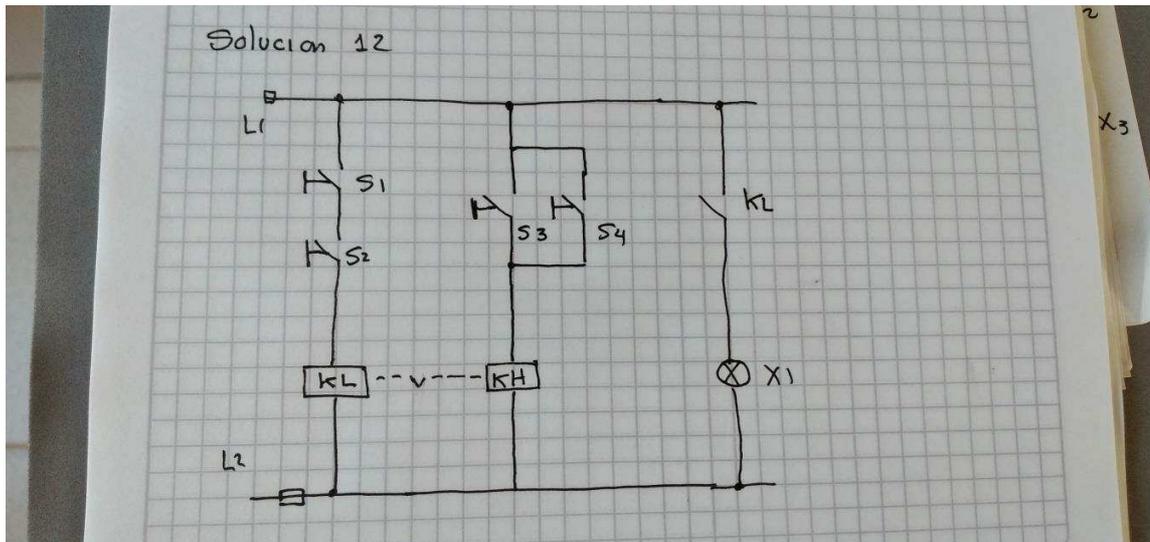


8.0 Determinar el Eléctrico del siguiente circuito lógico de:

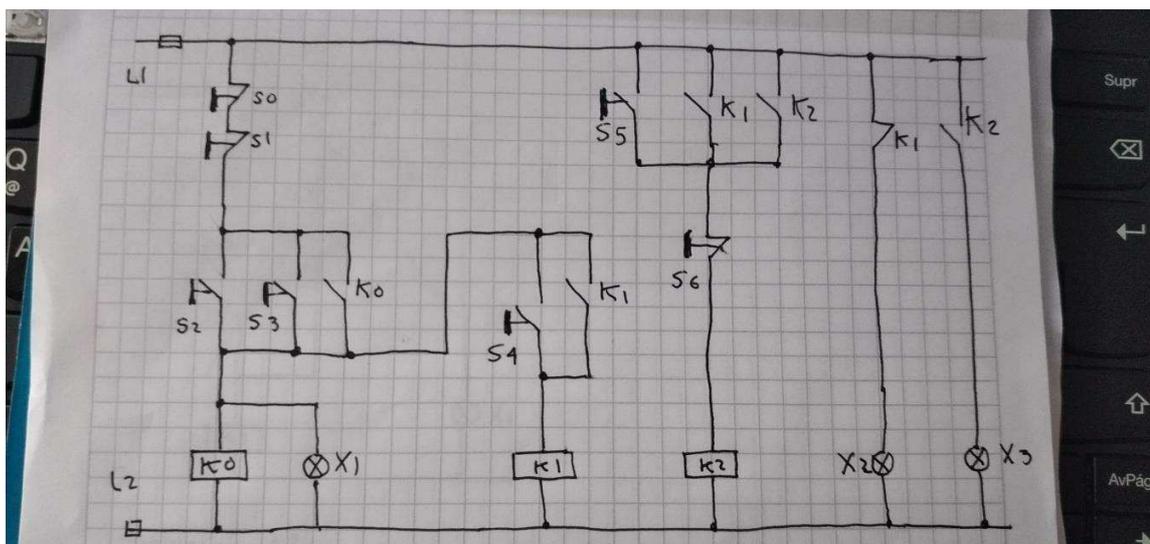
Determinar el Circuito Eléctrico y la expresion booleana
 de:



SOLUCION de 8



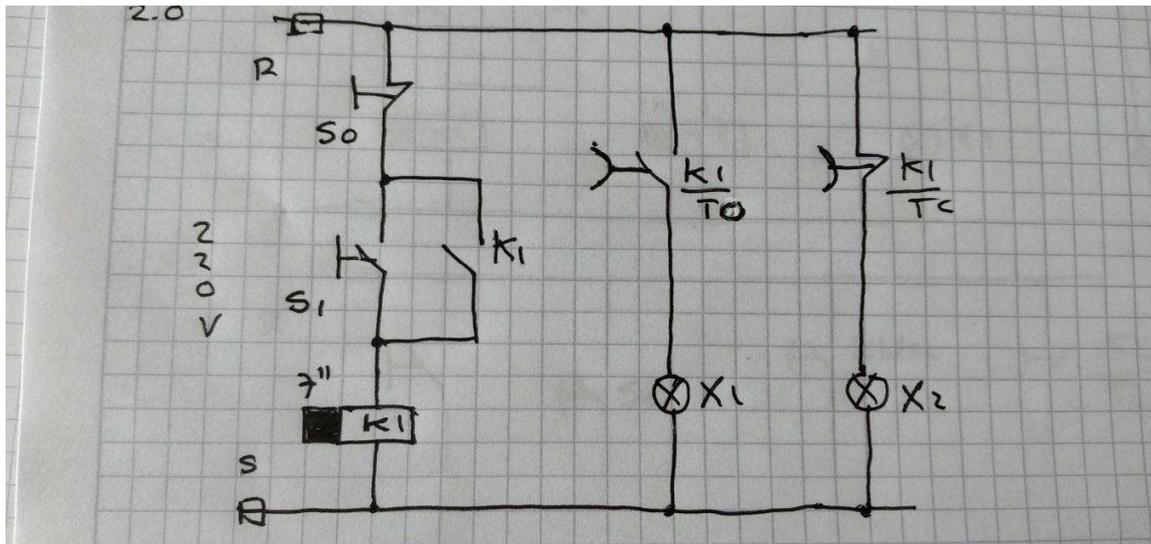
EJERCICIO 9 determinar el circuito electrico del siguiente circuito logico



SOLUCION 9

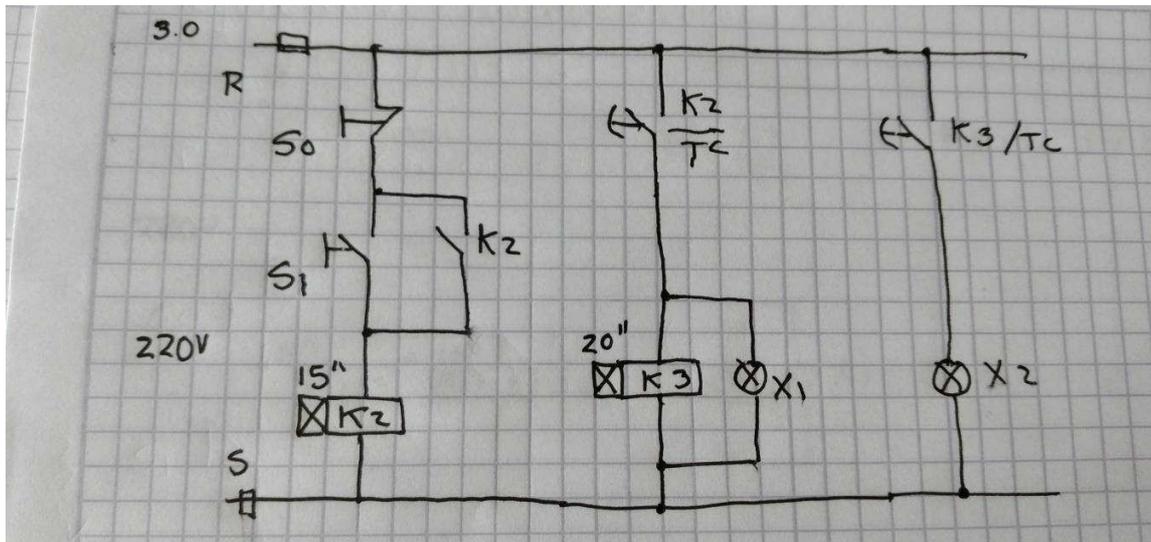
S1	S0	X1	X2
0	0		
1	0		
0	1		

TEMPORIZADOR NEUMATICO OFF DELAY



S1	S0	X1	X2
0	0		
1	0		
0	1		

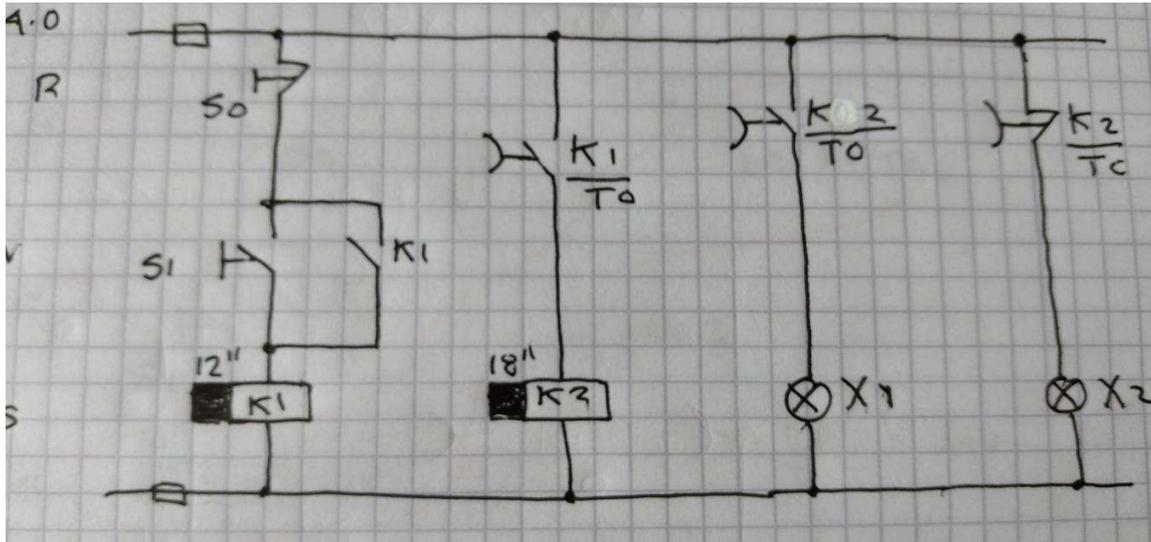
SUMA DE TIEMPOS TEMPORIZADORES NEUMATICOS ON DELAY



S1	S0	X1	X2
0	0		

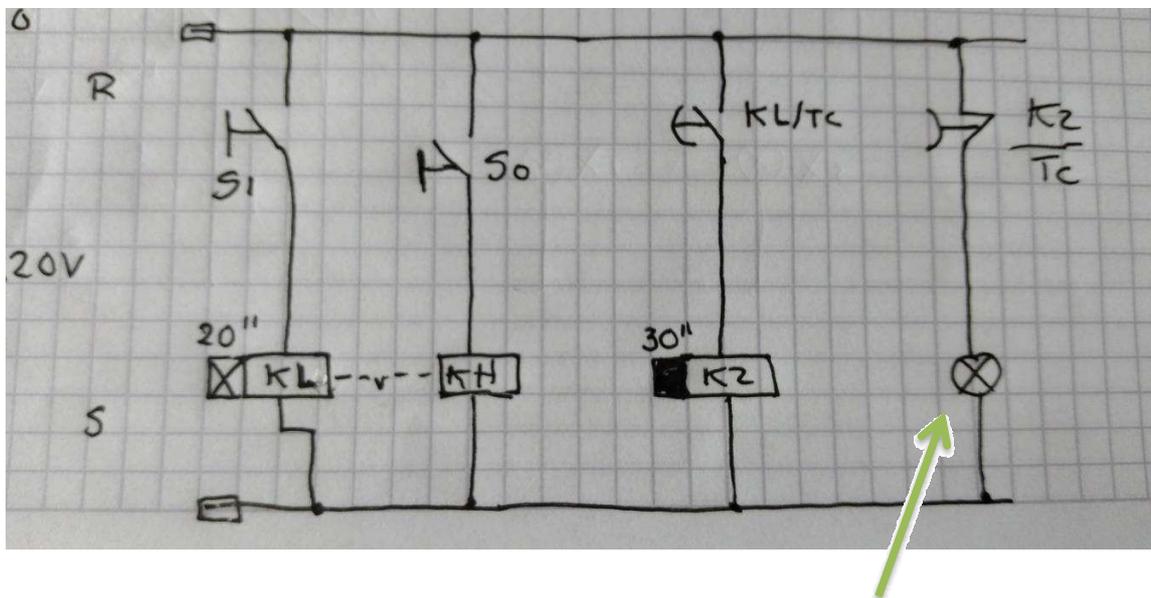
1	0		
0	1		

SUMA DE TIEMPOS TEMPORIZADORES NEUMATICOS OFF DELAY



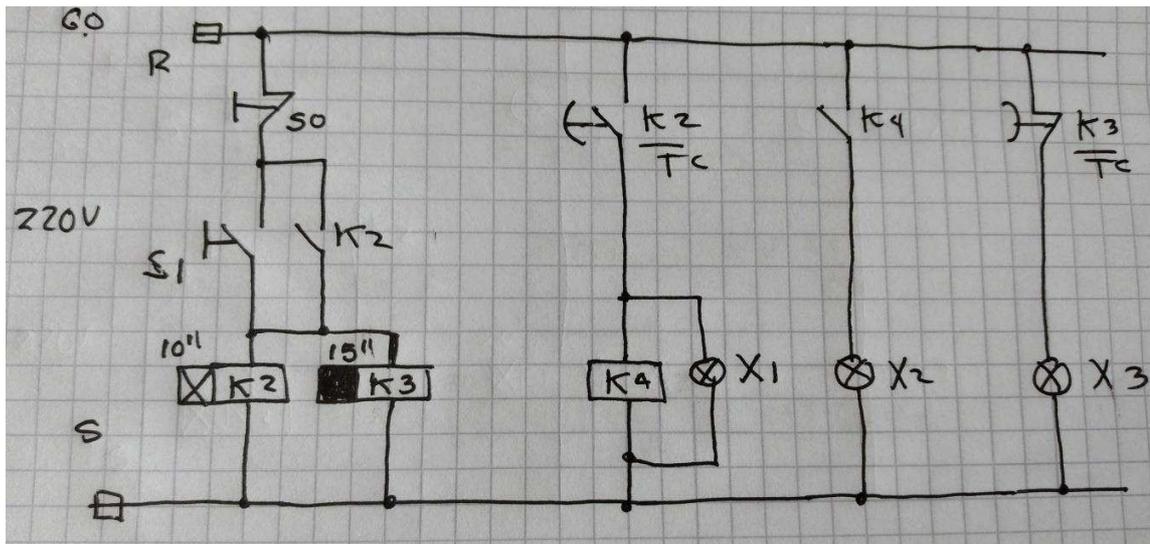
S1	S0	X1	X2
0	0		
1	0		
0	1		

MEMORIA MECANICA TEMPORIZADORES NEUMATICOS ON - OFF DELAY



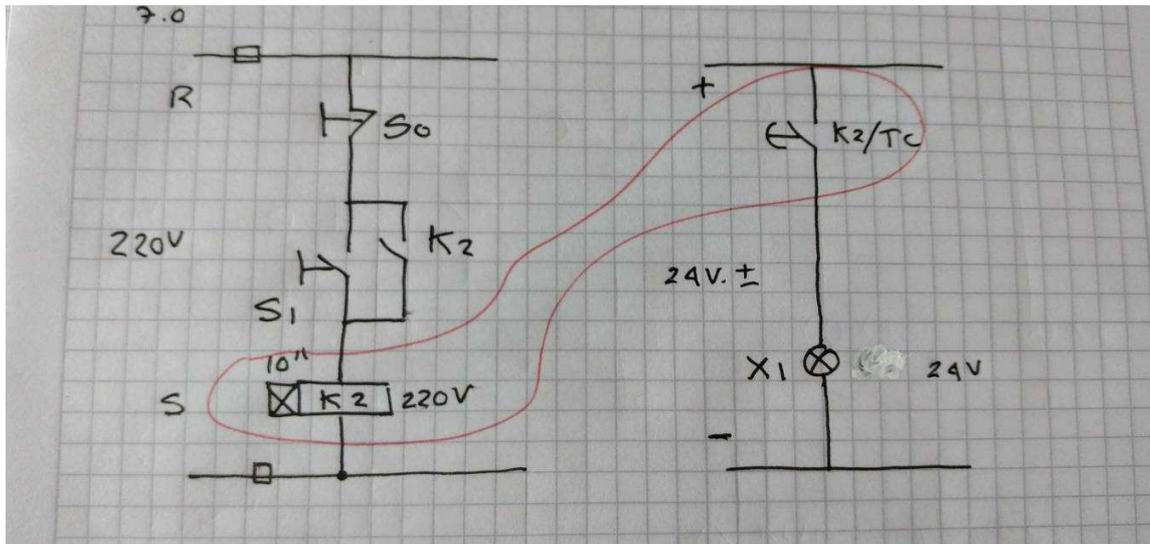
S1	S0	X1
0	0	
1	0	
0	1	

COMBINACION TEMPORIZADOR NEUMATICO ON Y OFF DELAY



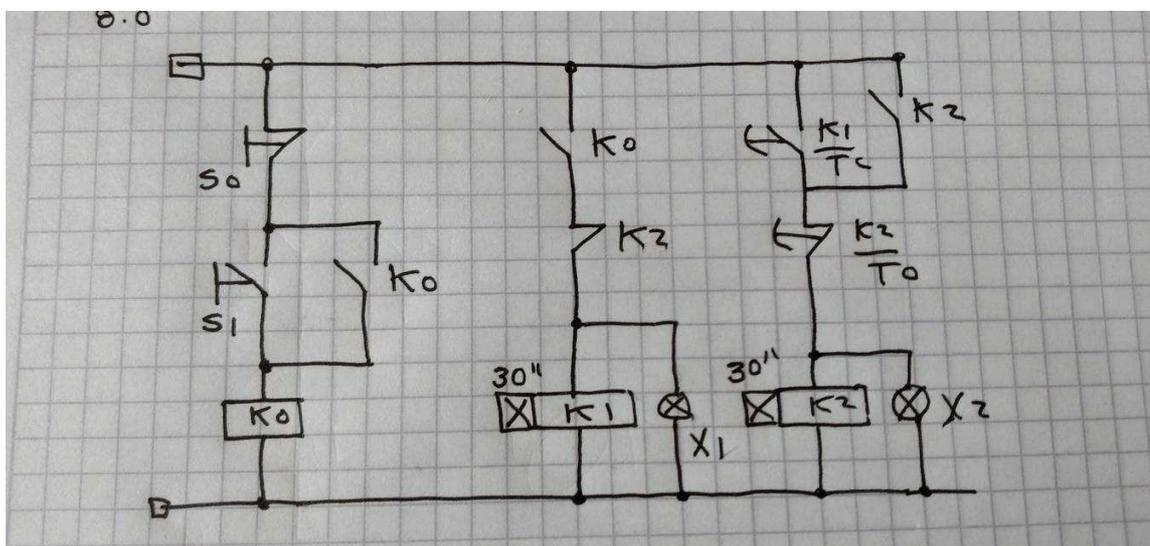
S1	S0	X1	X2	X3
0	0			
1	0			
0	1			

COMBINACION DE DOS NIVELES DE TENSION TEMPORIZADOR NEUMATICO ON DELAY



S1	S0	X1
0	0	
1	0	
0	1	

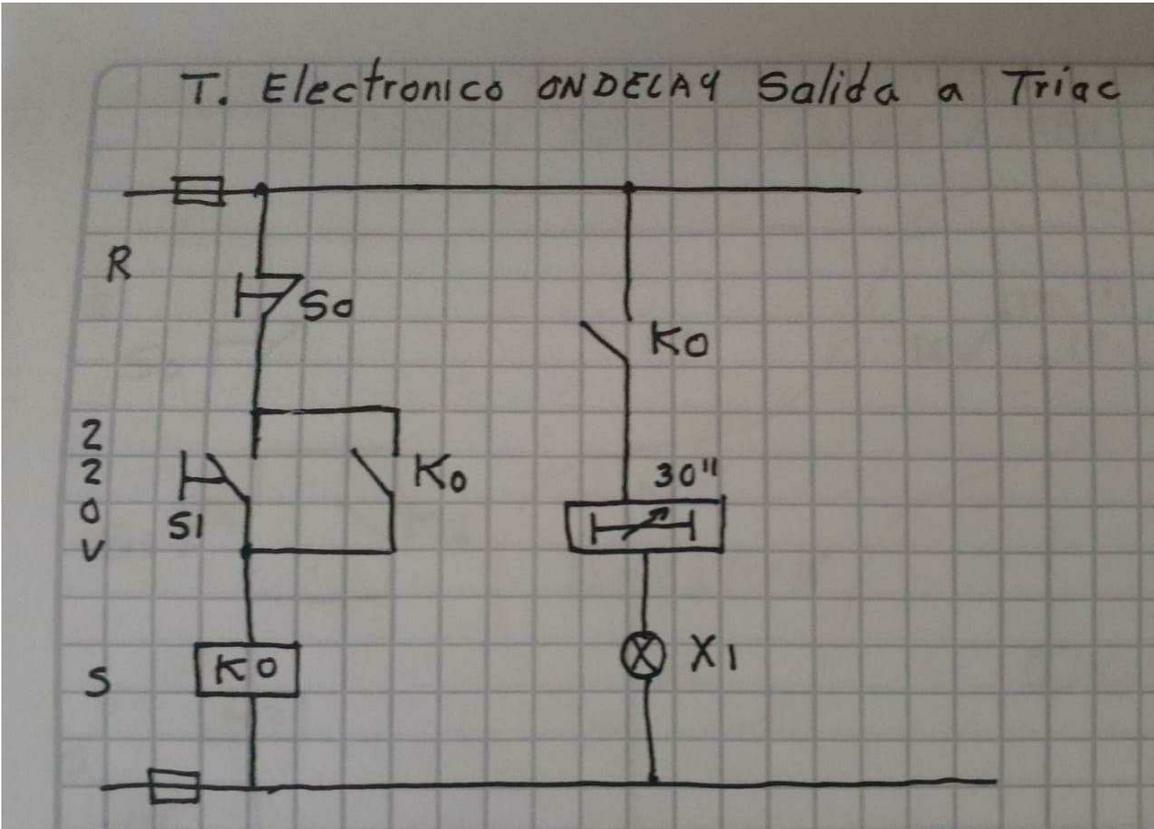
INTERMITENCIA CON DOS TEMPORIZADORES NEUMATICOS ON DELAY



S0	S1	X1	X2
0	0		
1	0		
0	1		

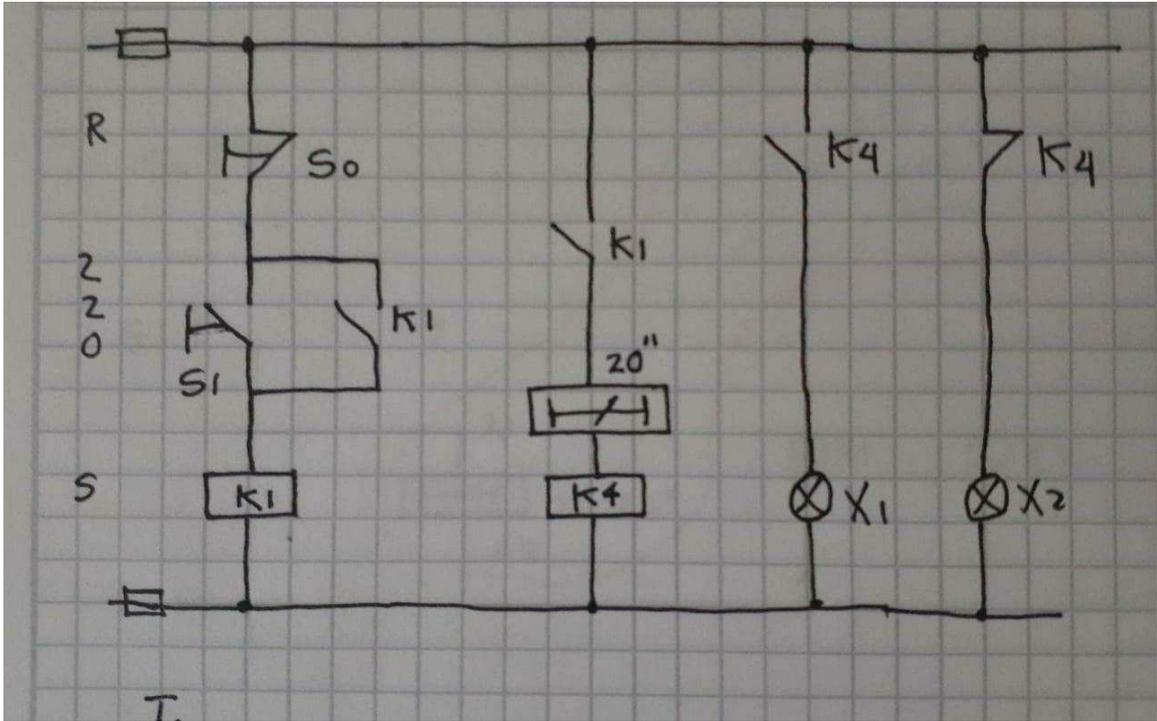
TEMA 3 TEMPORIZADORES ELECTRONICOS SALIDA A TRIAC Y SALIDA A RELE COMBINACIONES

EJERCICIO 1



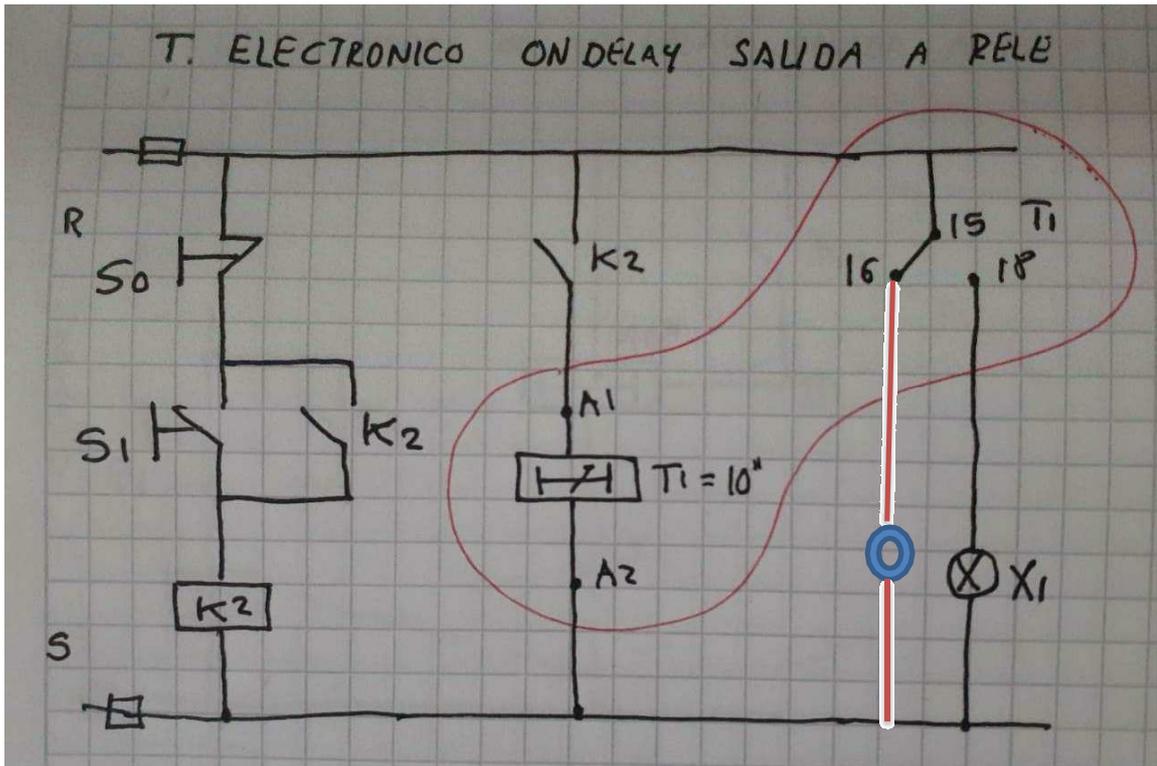
S1	S0	X1
0	0	
1	0	
0	1	

EJERCICIO 2



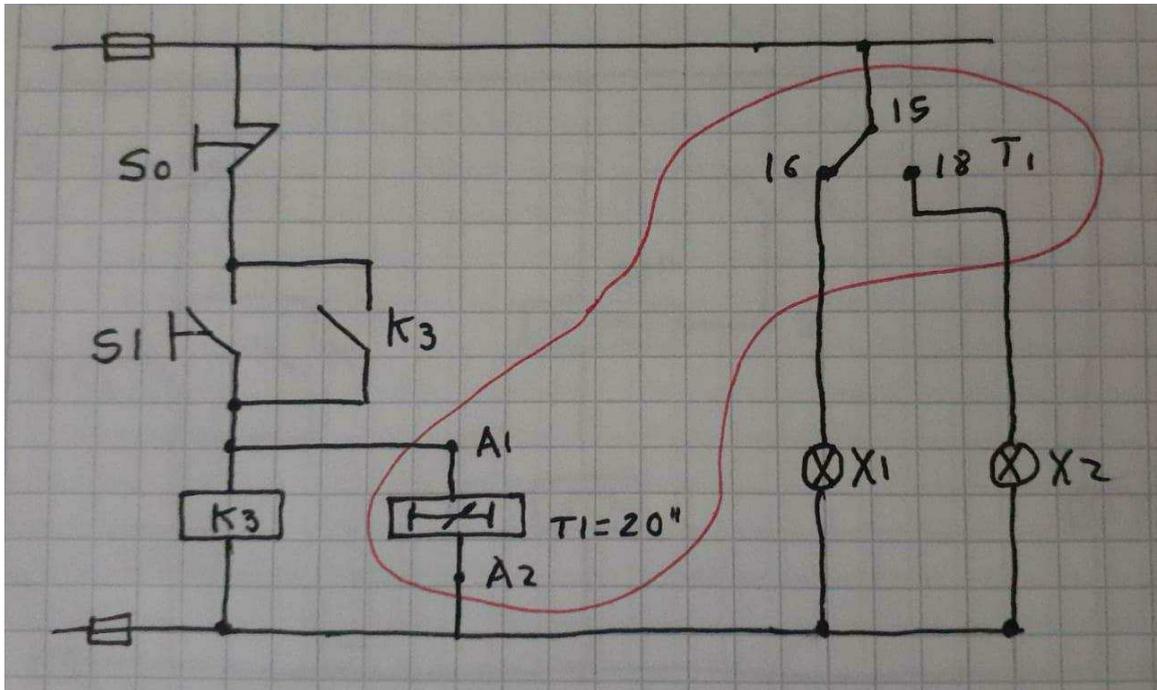
S1	S0	X1	X2
0	0		
1	0		
0	1		

EJERCICIO 3



S1	S0	X1	X2
0	0		
1	0		
0	1		

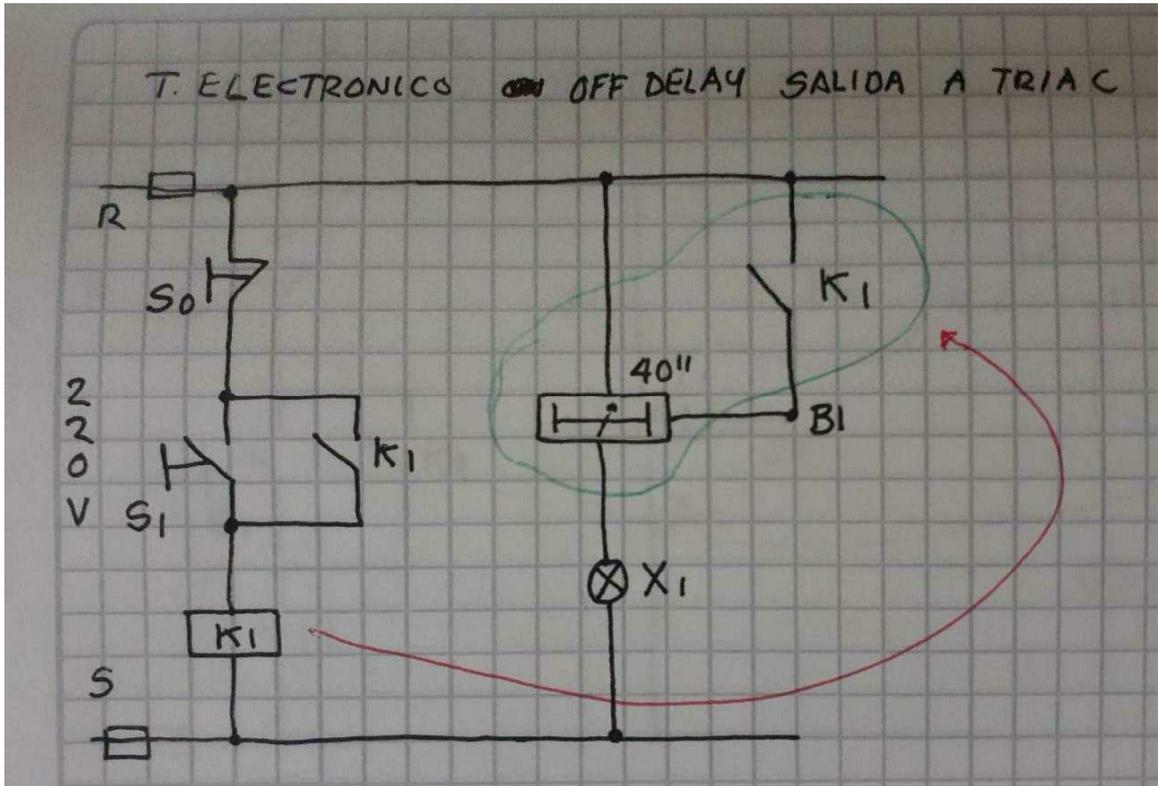
EJERCICIO 4



S1	S0	X1	X2
0	0		
1	0		
0	1		

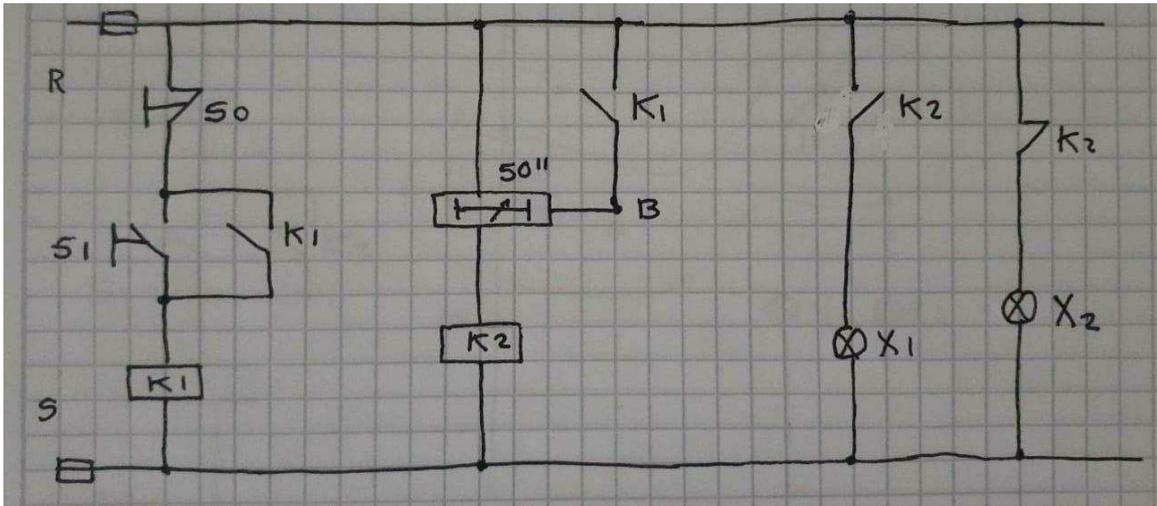
EJERCICIO 5

T. ELECTRONICO OFF DELAY SALIDA A TRIAC



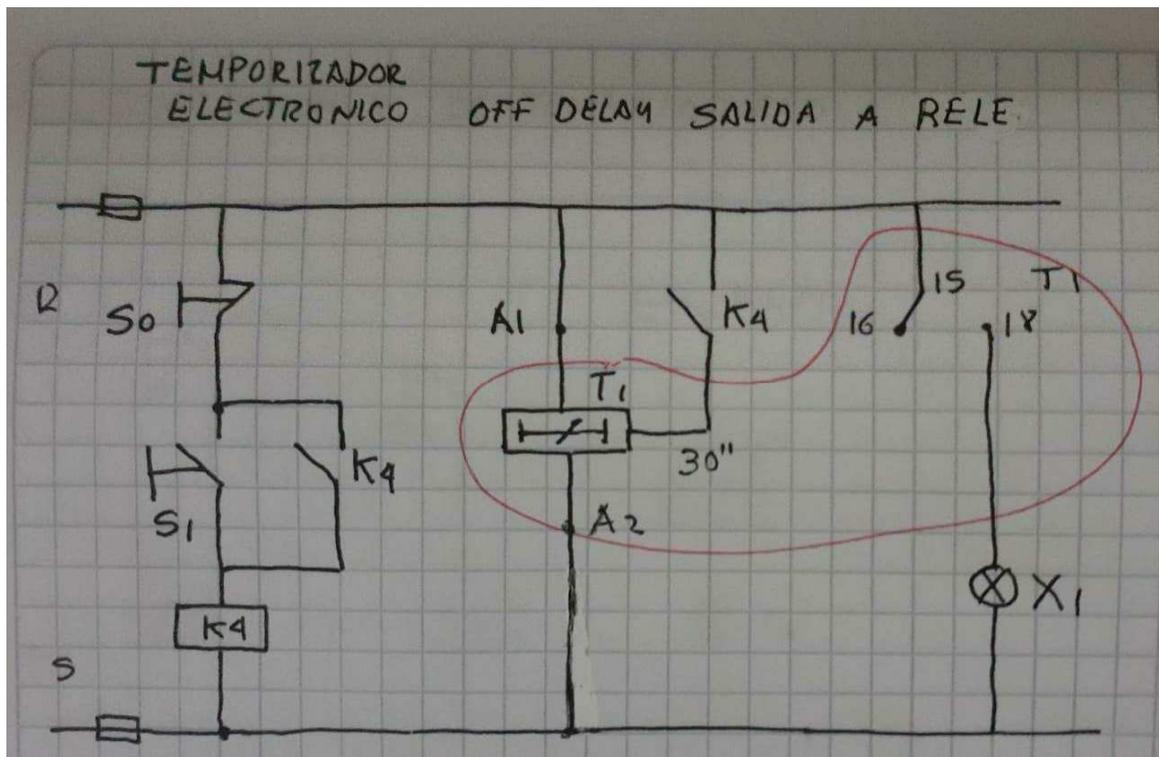
S1	S0	X1
0	0	
1	0	
0	1	

EJERCICIO 6



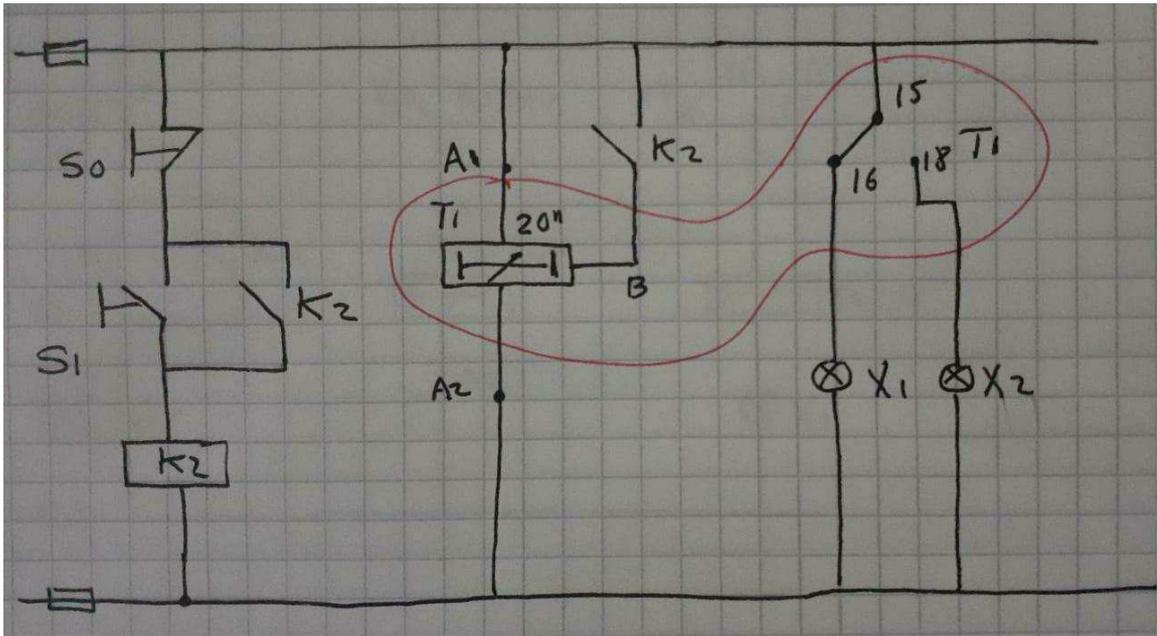
S1	S0	X1	X2
0	0		
1	0		
0	1		

EJERCICIO 7



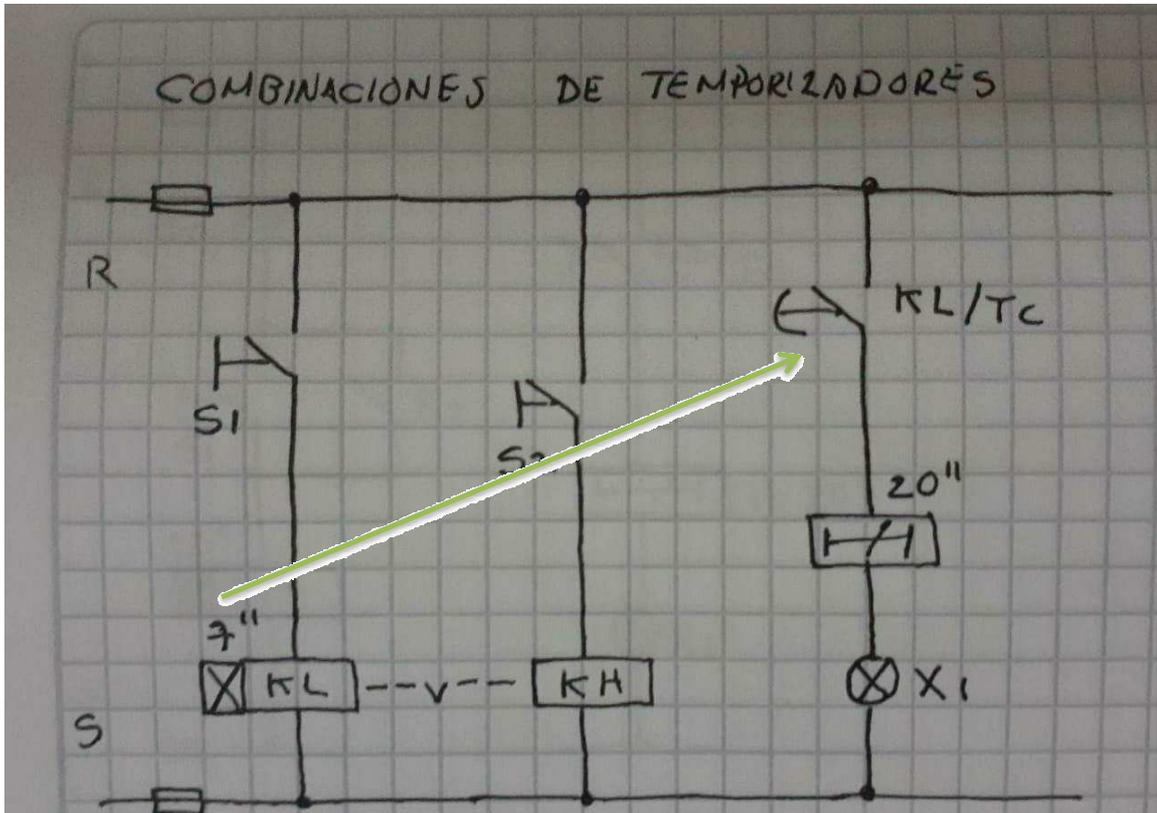
S1	S0	X1
0	0	
1	0	
0	1	

EJERCICIO 8



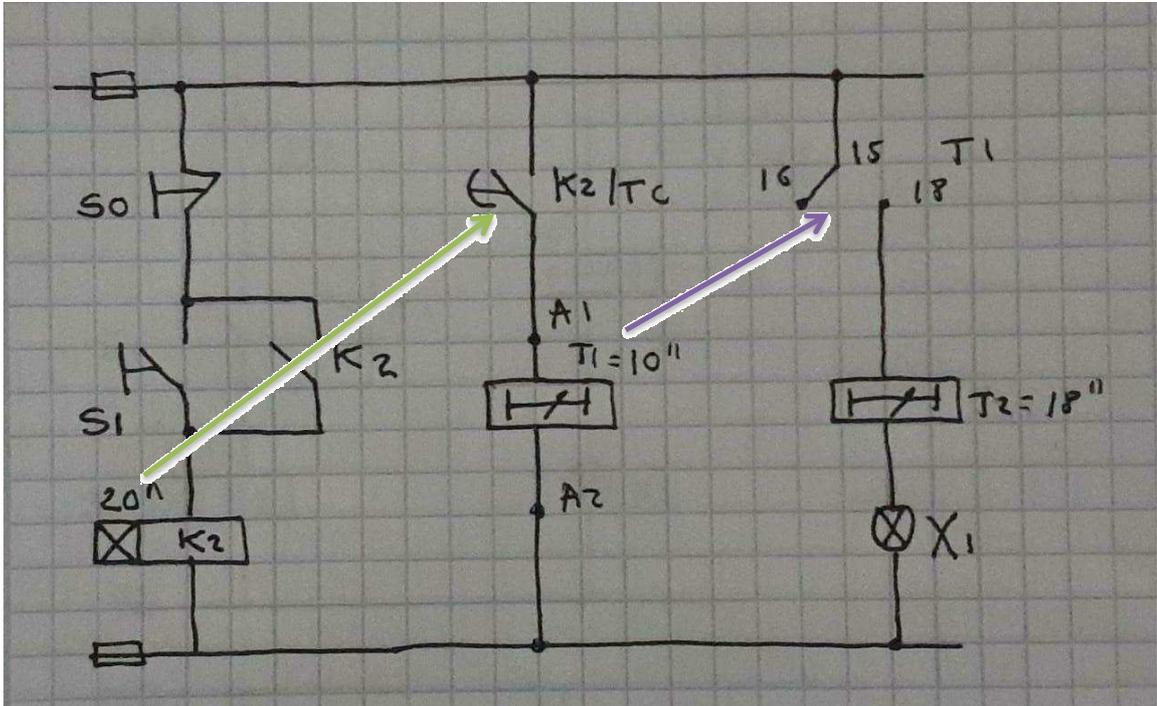
S1	S0	X1	X2
0	0		
1	0		
0	1		

EJERCICIO 9



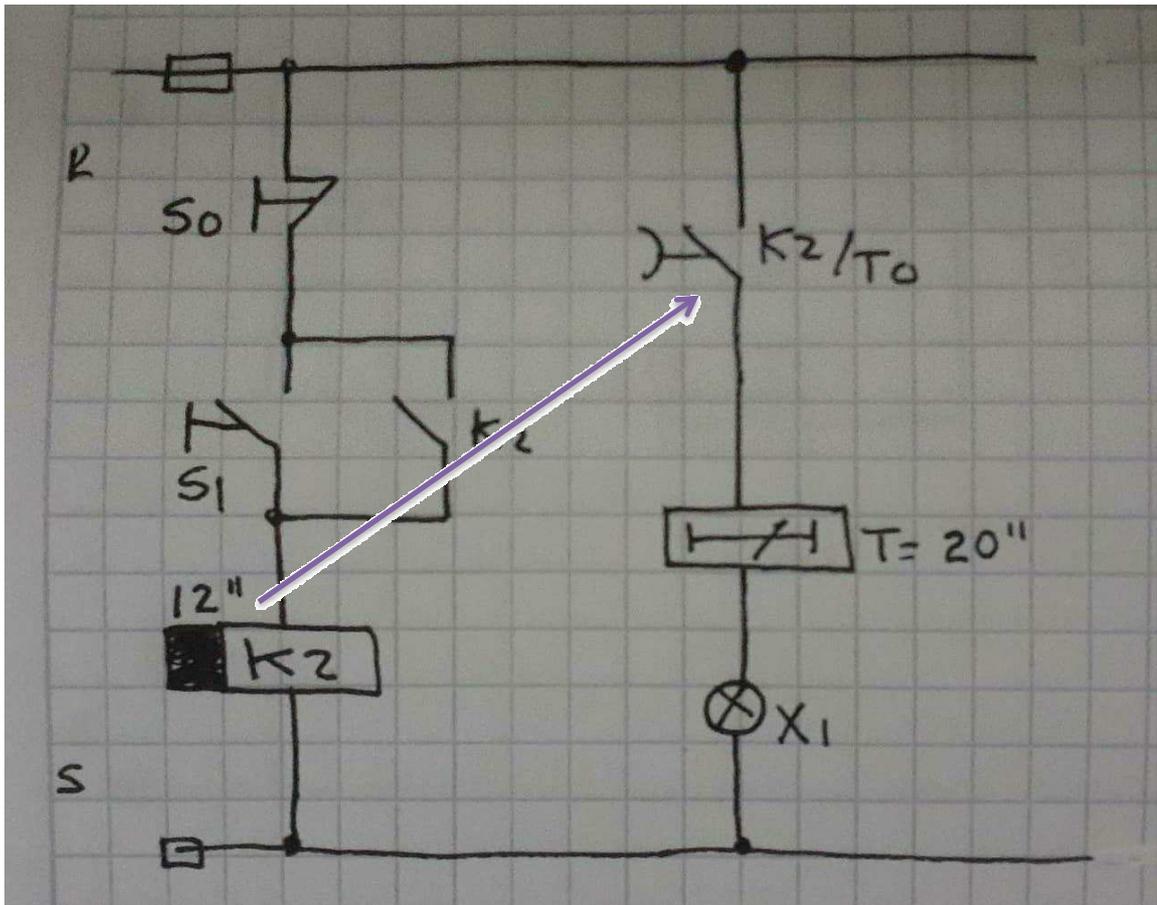
S1	S2	X1
0	0	
1	0	
0	1	

EJERCICIO 10



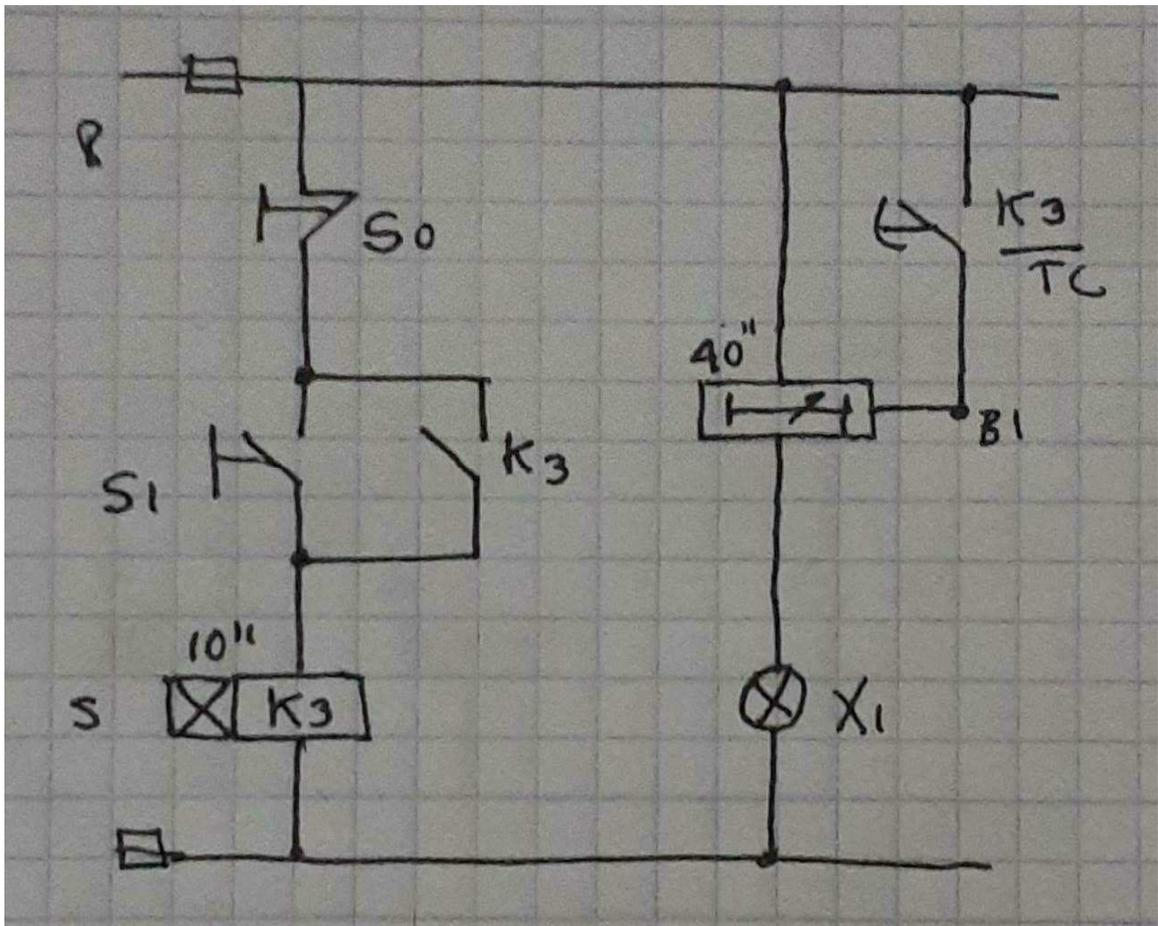
S1	S0	X1
0	0	
1	0	
0	1	

EJERCICIO 11



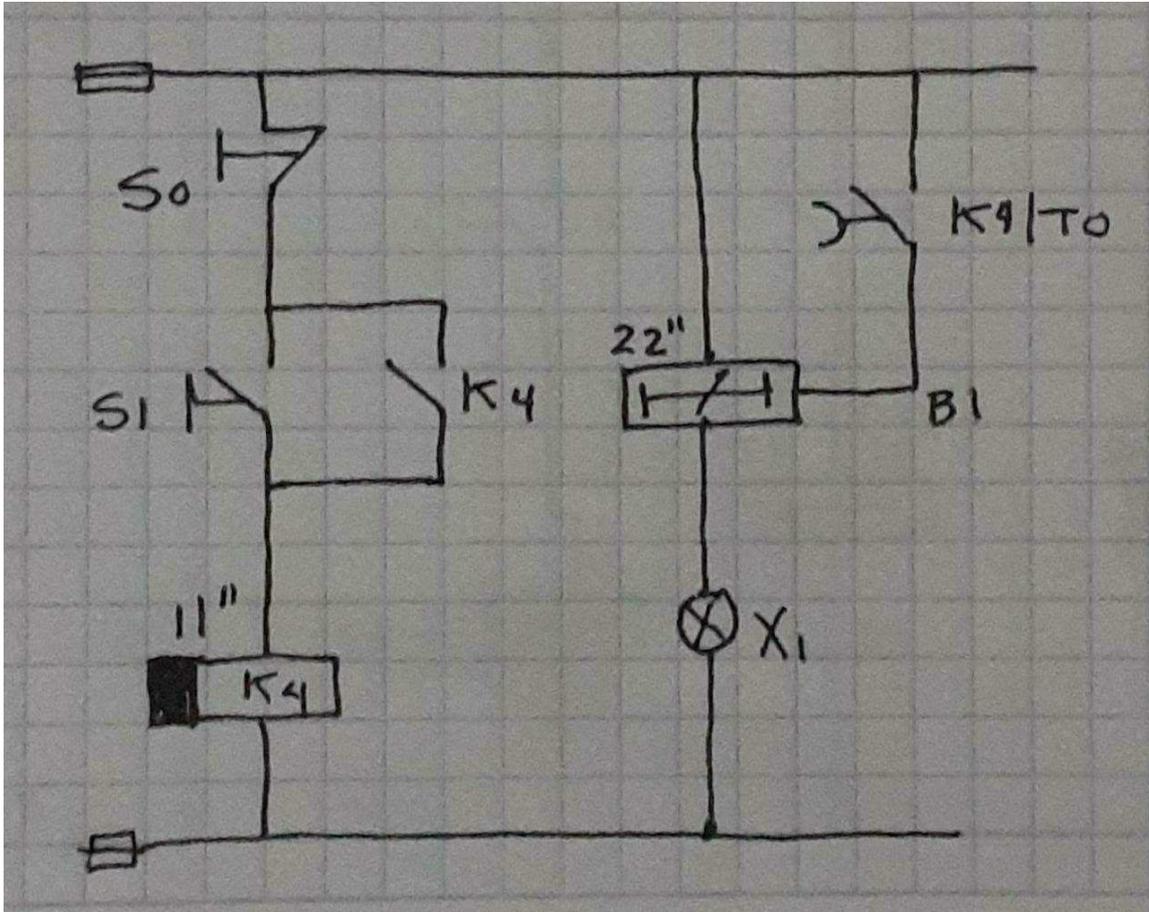
S1	S0	X1
0	0	
1	0	
0	1	

EJERCICIO 12



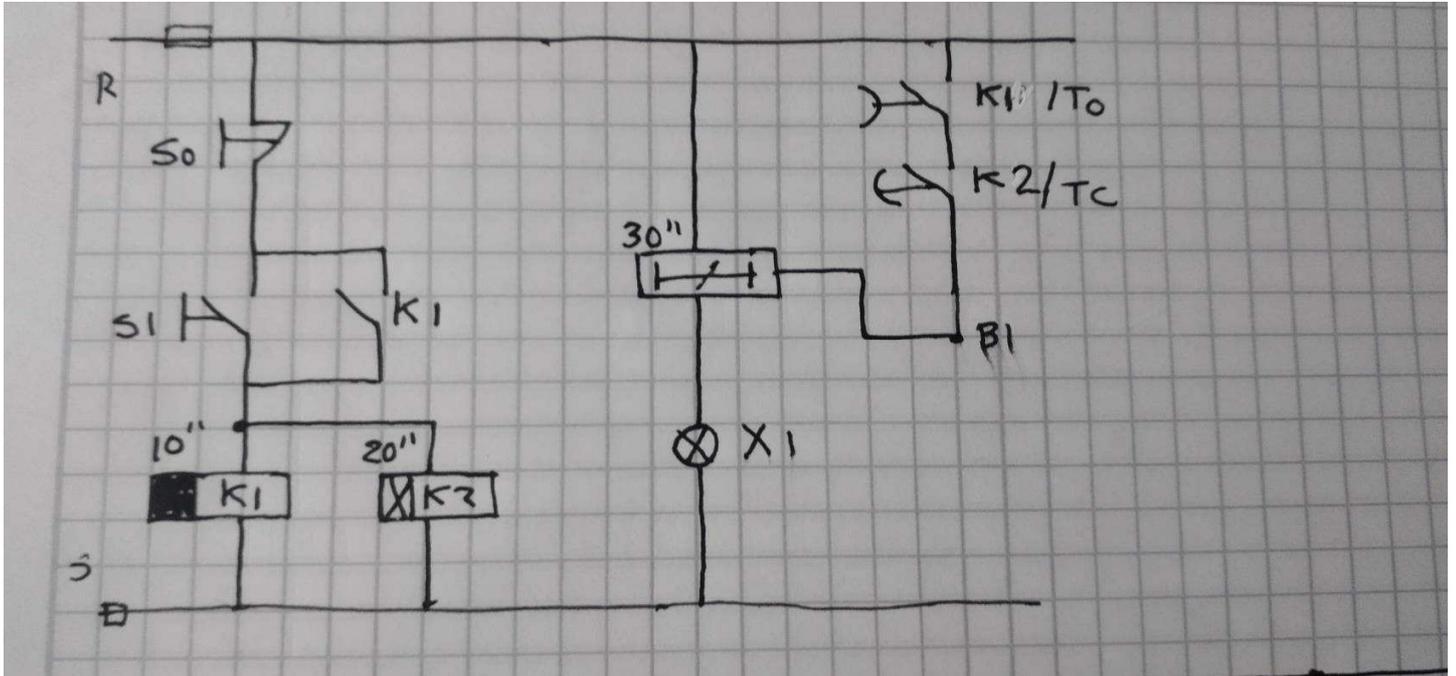
S1	S0	X1
0	0	
1	0	
0	1	

EJERCICIO 13



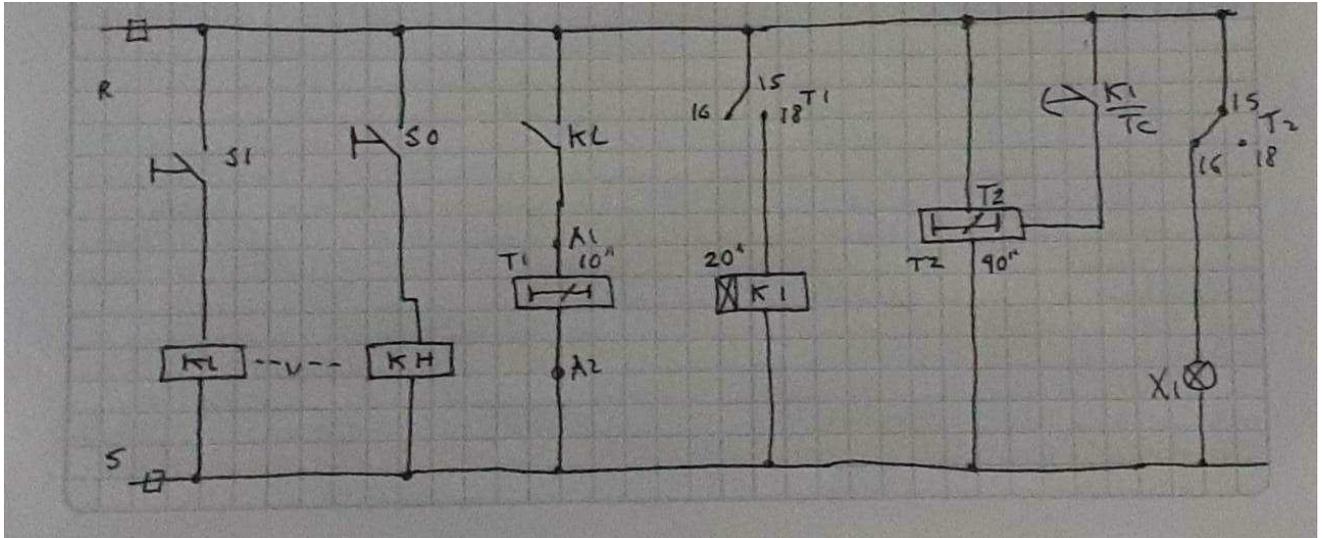
S1	S0	X1
0	0	
1	0	
0	1	

EJERCICIO 15



S1	S0	X1
0	0	
1	0	
0	1	

EJERCICO 16



S1	S0	X1
0	0	
1	0	
0	1	



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