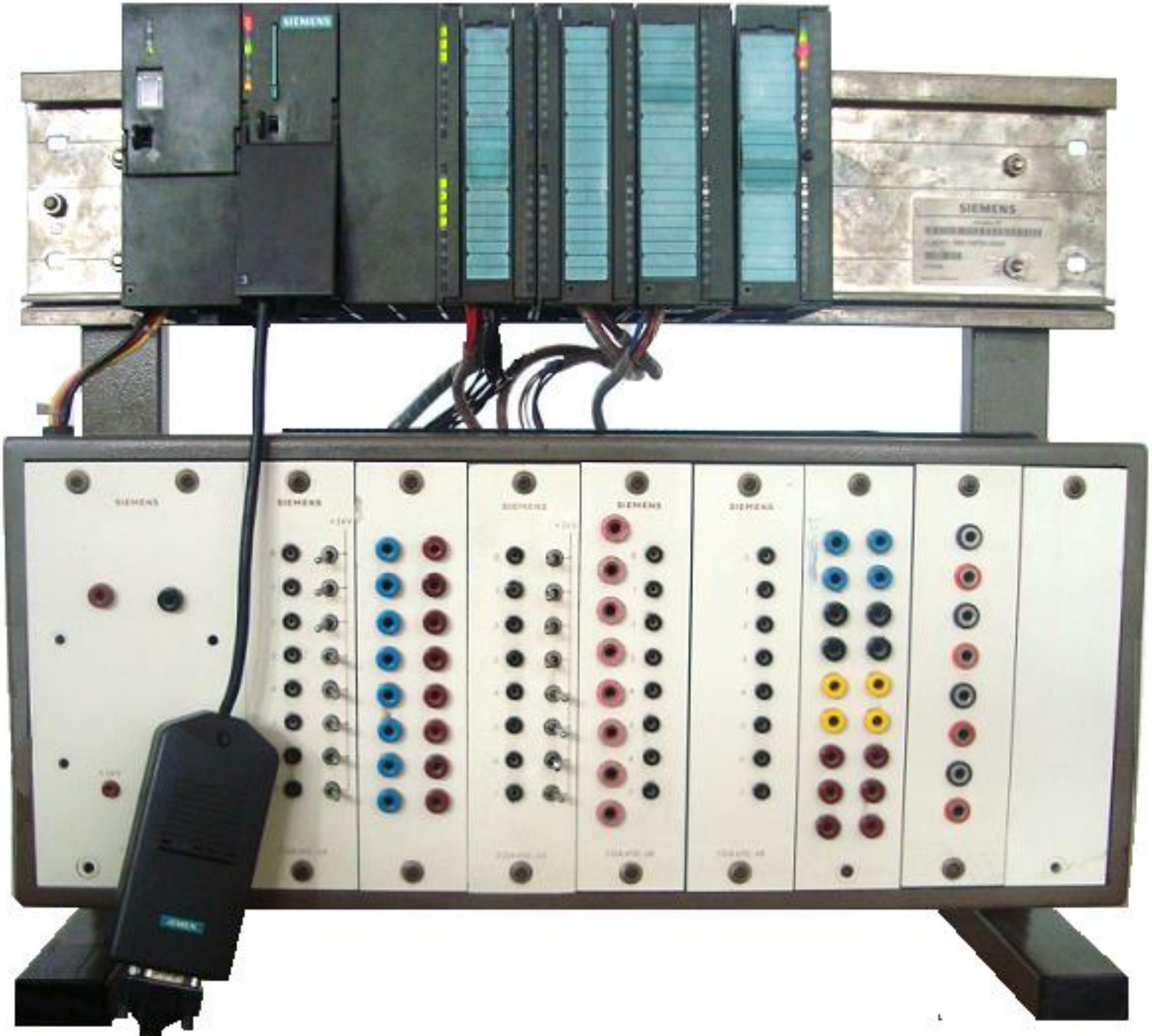
PLC I

MODULO SIMULADOR y CABLEADO

Ing. Denis Chávarry Hernández

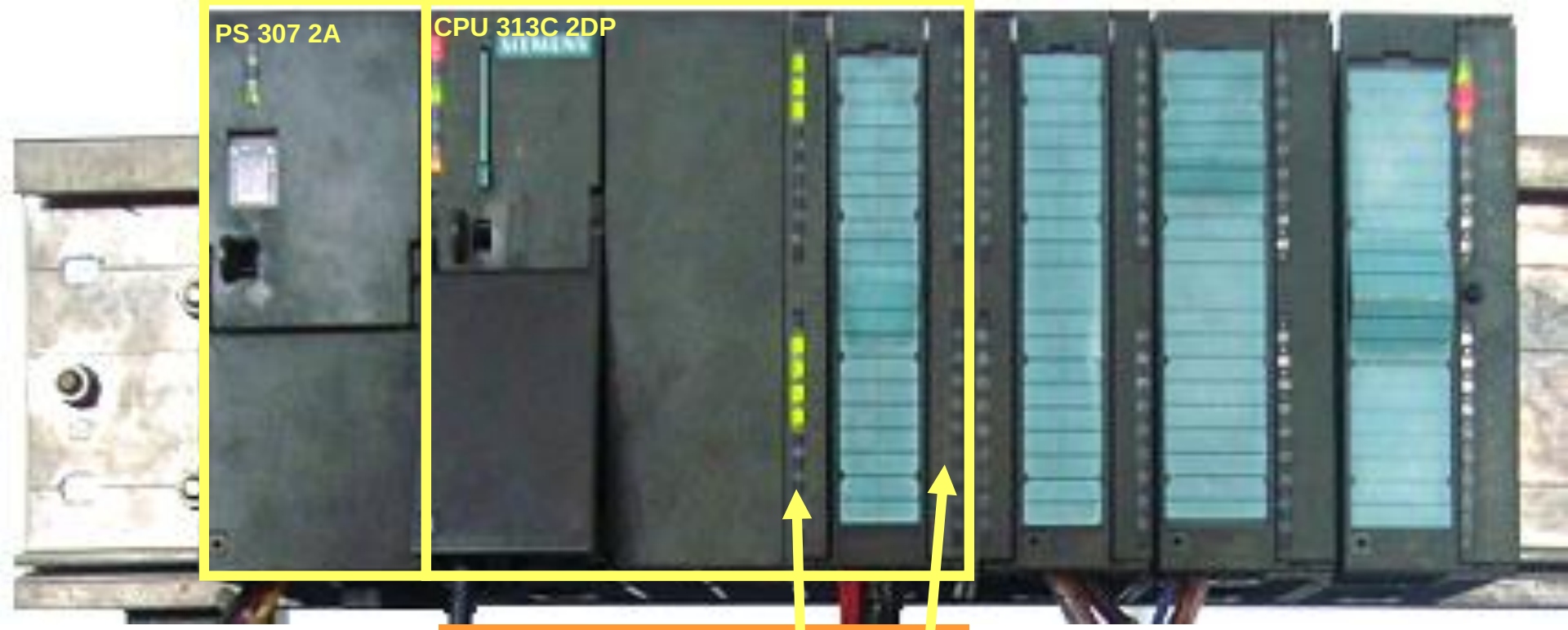

SIEMENS
SIEMENS

	MODULO	CODIGO		
1				
2				
3				
4				
5				
6				

PS 307

2A

FUENTE



PS 307

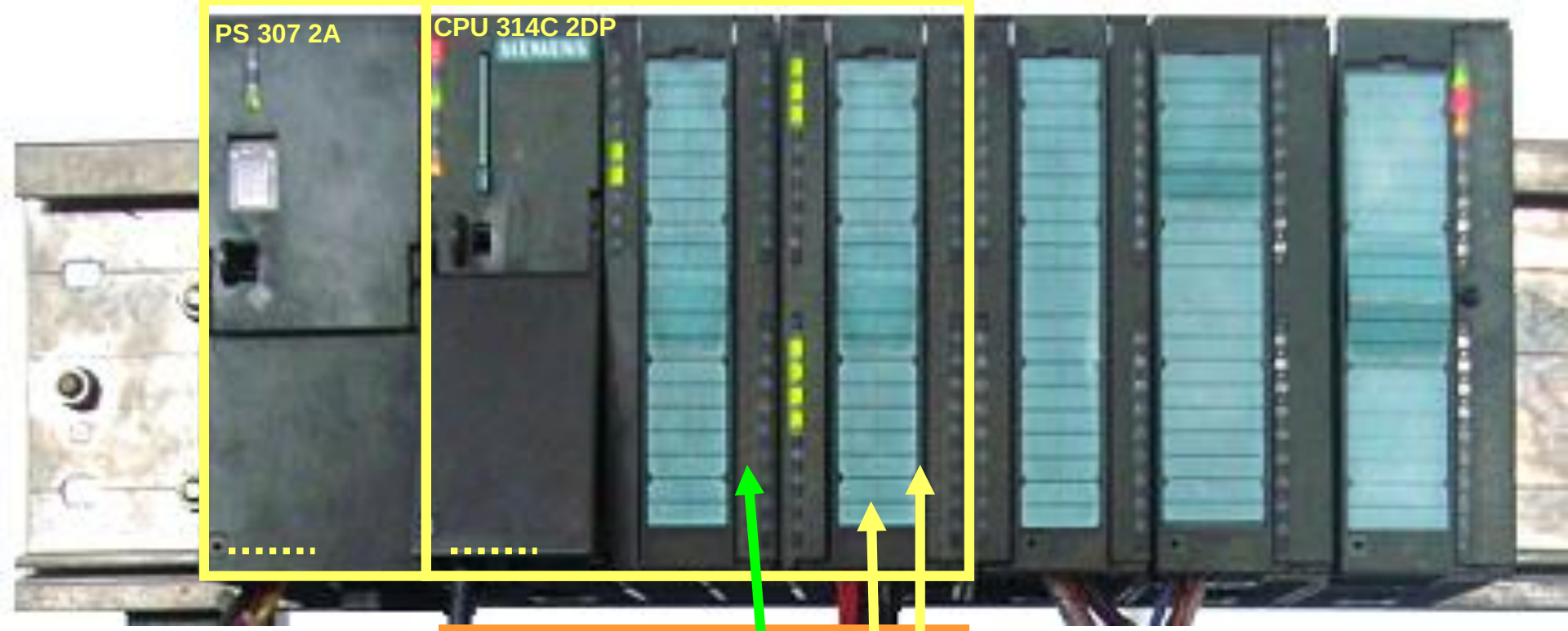
2A

FUENTE

CPU 313C 2DP

DI 16

DO 16



PS 307

2A

FUENTE

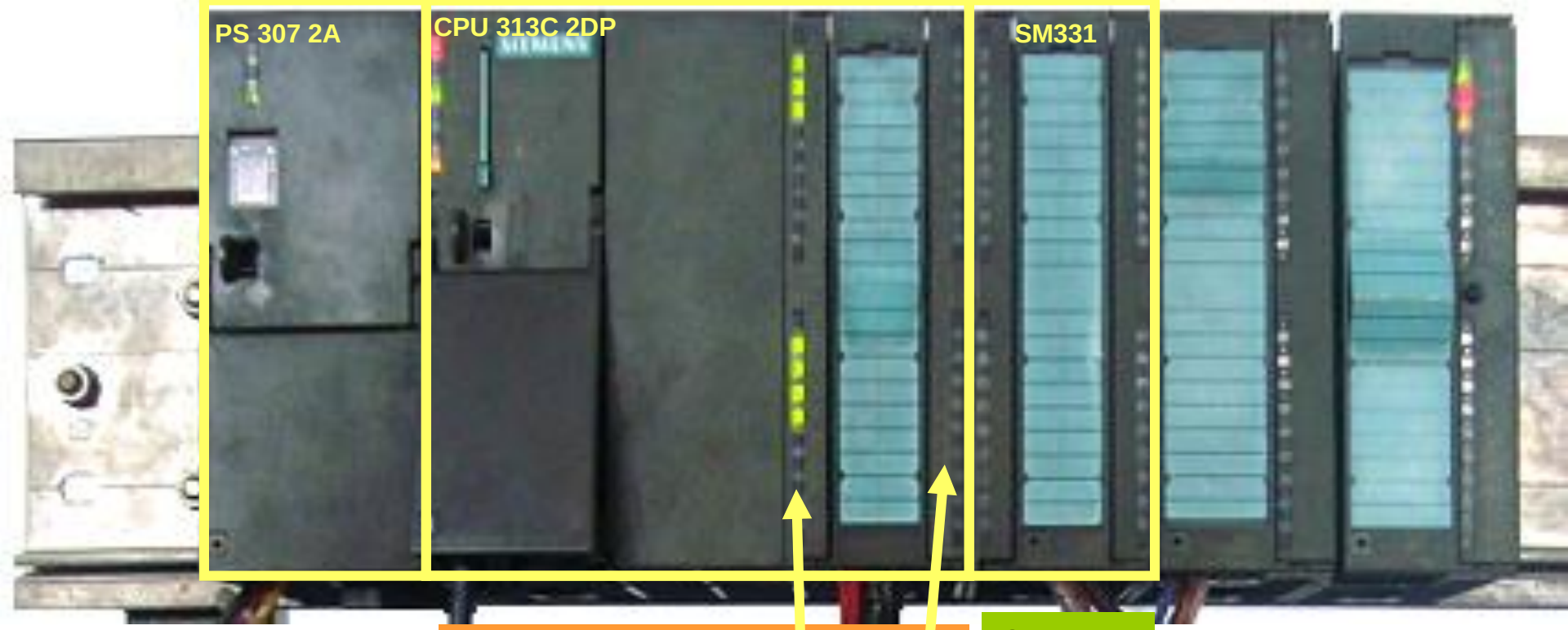
CPU 314C 2DP

CPU 315C 2DP

AI8/AO4

DI 16 +8

DO 16



PS 307

2A

FUENTE

CPU 313C

CPU 313C 2DP

CPU 314C 2DP

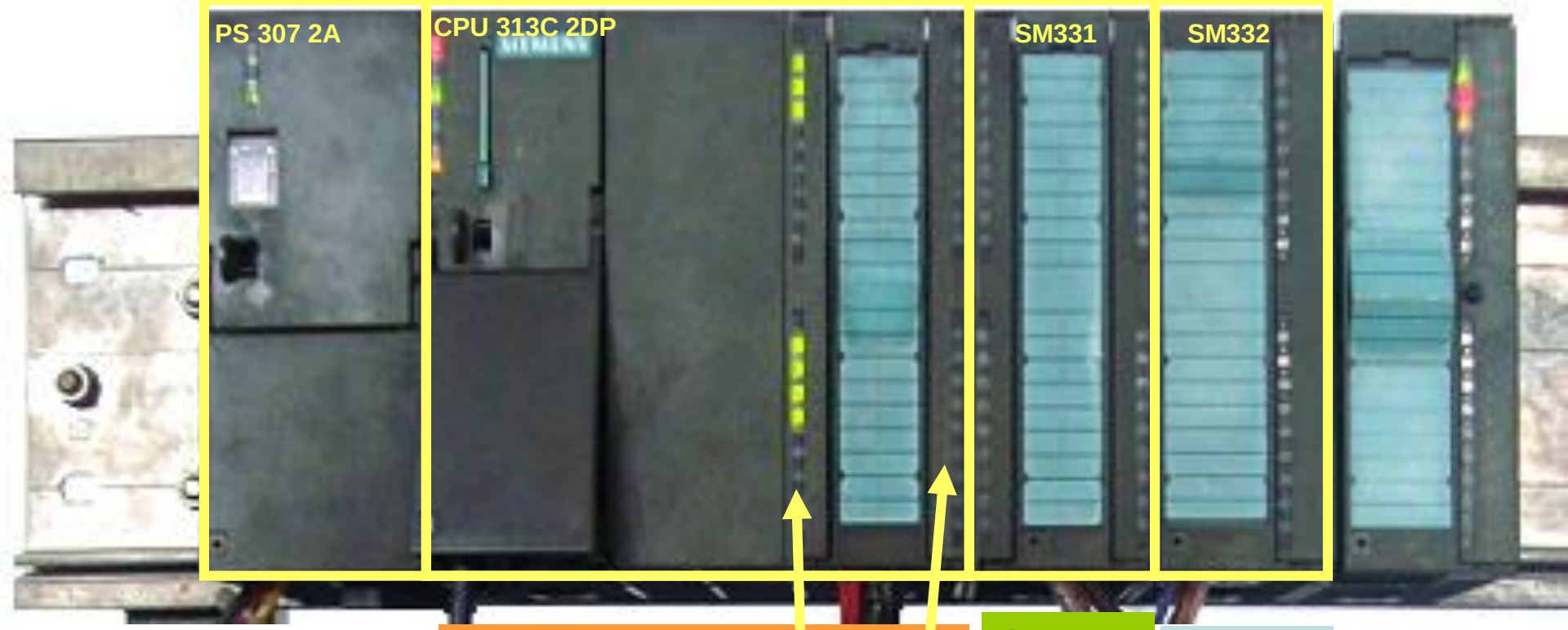
CPU 315C 2DP

DI 16

DO 16

SM……

AI 8



PS 307

2A

FUENTE

CPU 313C

CPU 313C 2DP

CPU 314C 2DP

CPU 315C 2DP

DI 16

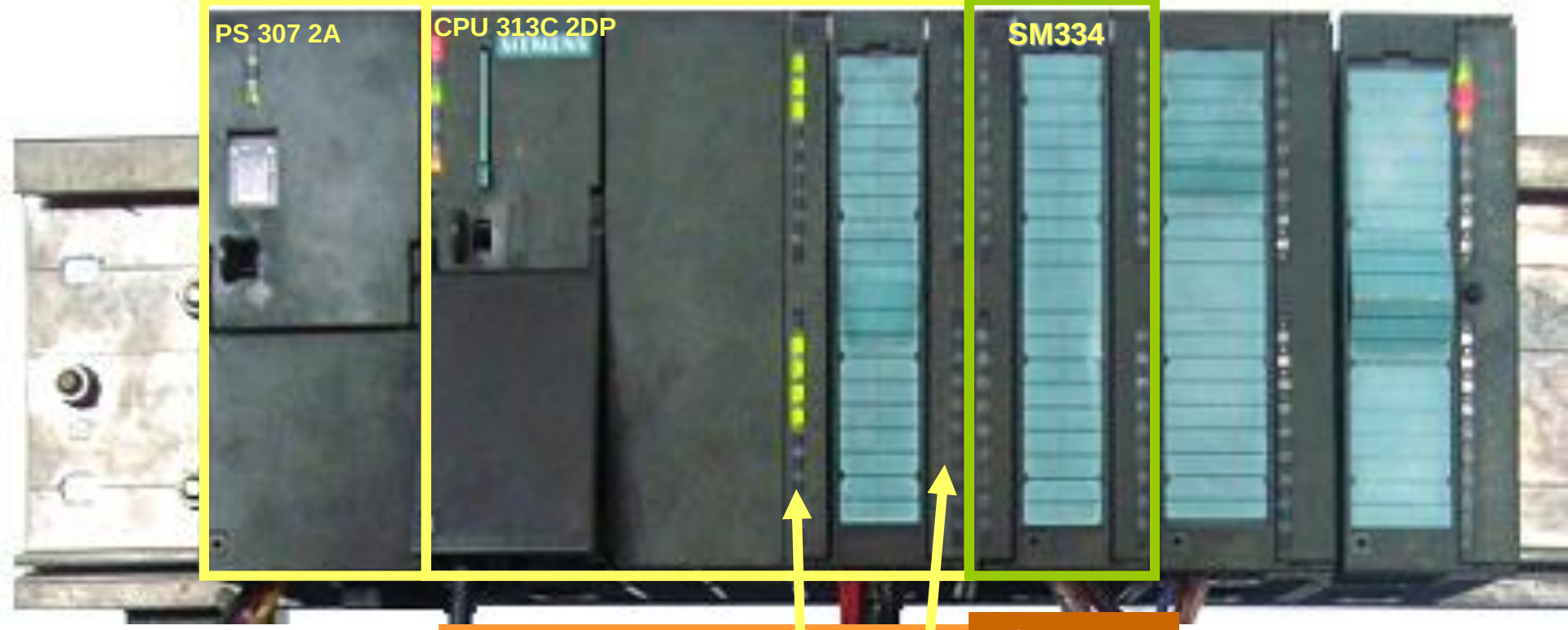
DO 16

SM……

AI 8

SM…..

AO 4



PS 307

2A

FUENTE

CPU 313C

CPU 313C 2DP

CPU 314C 2DP

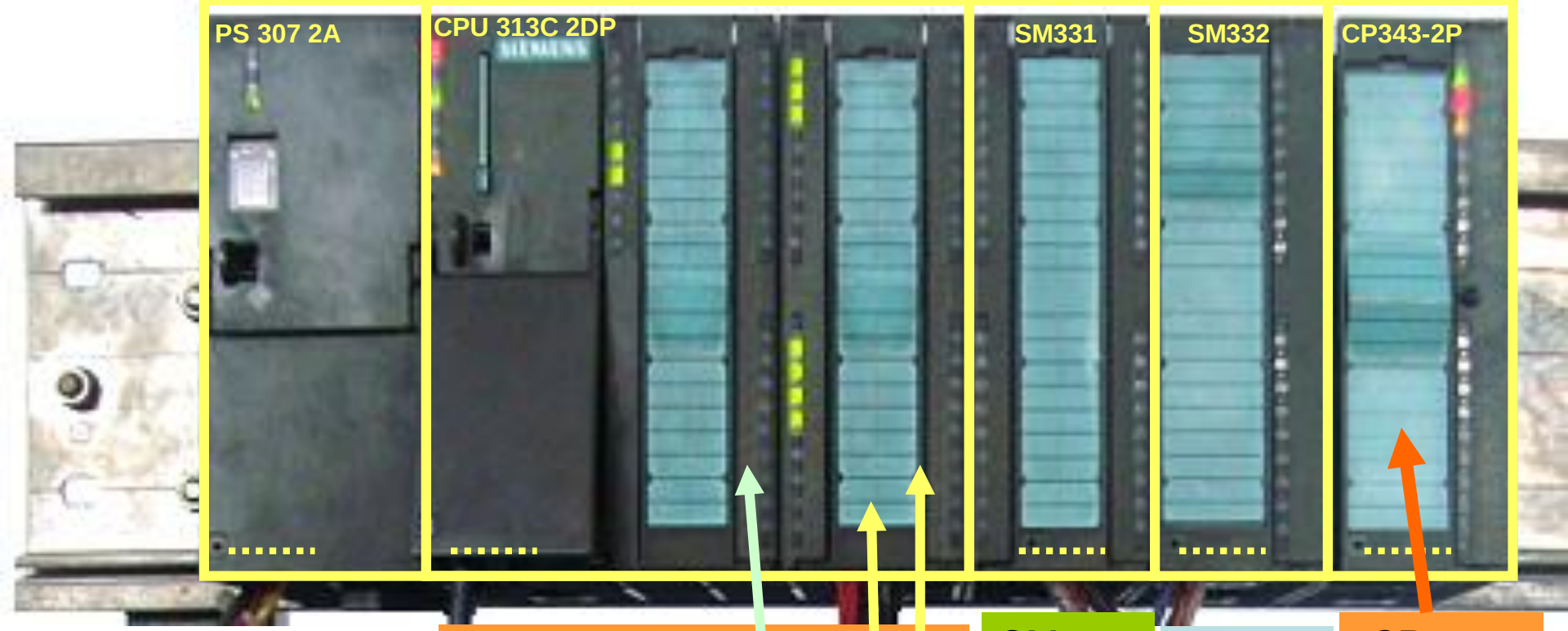
CPU 315C 2DP

DI 16

DO 16

SM……

AI 4/AO 2



PS 307

2A

FUENTE

CPU 313C

CPU 313C 2DP

CPU 314C 2DP

CPU 315C 2DP

AI8/AO4

DI 16 +8

DO 16

SM……

AI 8

SM…..

AO 4

CP…….

MODUL O ASI

HW Config - [SIMATIC 300(1) (Configuración) -- clase_HMI]

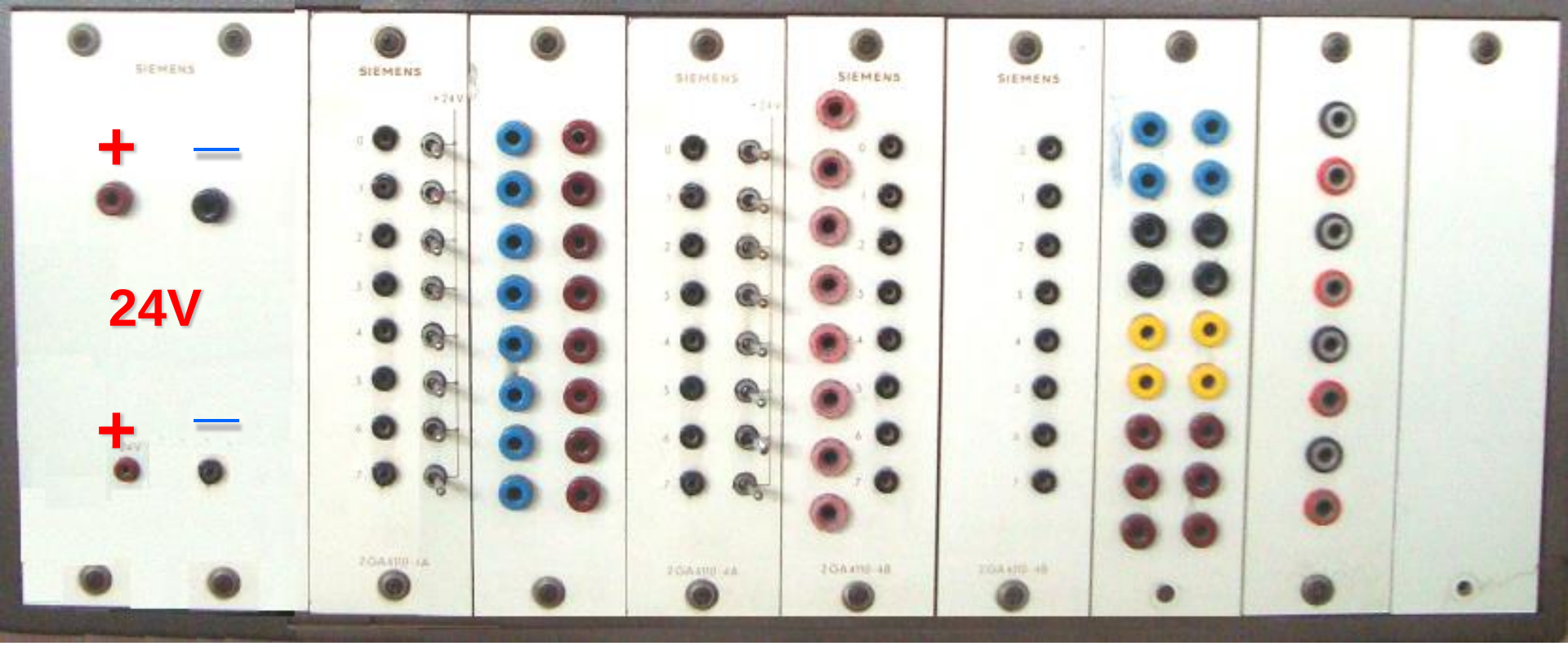
Equipo Edición Insertar Sistema de destino Ver Herramientas Ventana Ayuda

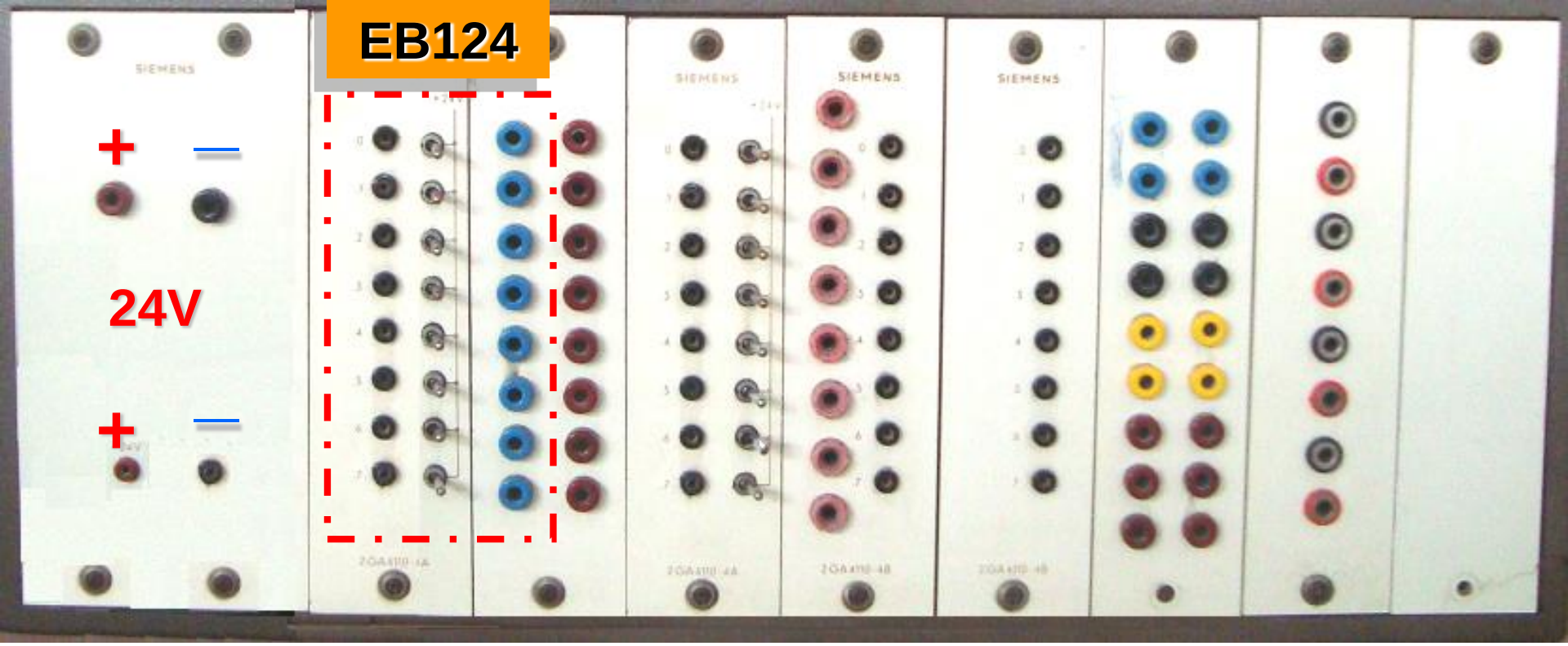
(0) UR

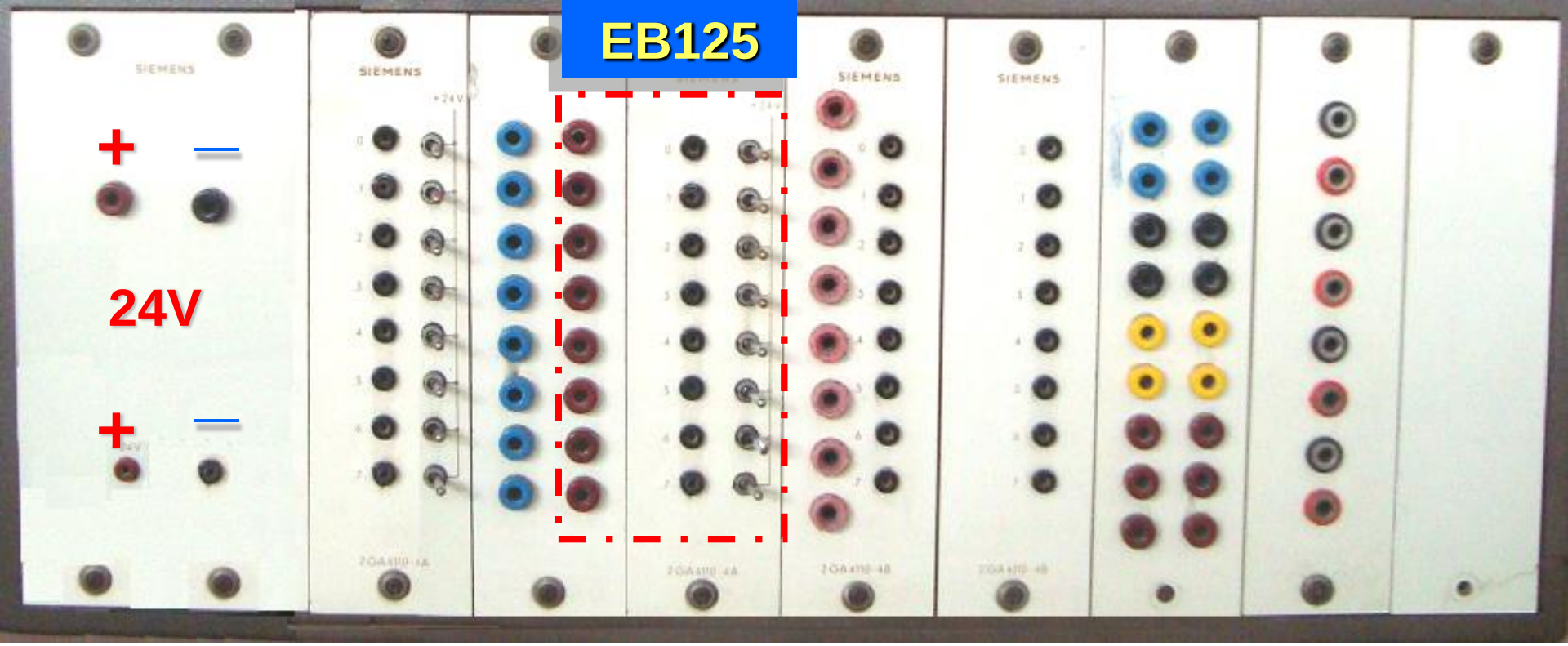
1	PS 307 2A
2	**CPU 313C-2 DP**
X2	*DP*
2.2	*DI16/DO16*
2.4	*Count*
3	
4	AI8x13Bit
5	AO4x12Bit

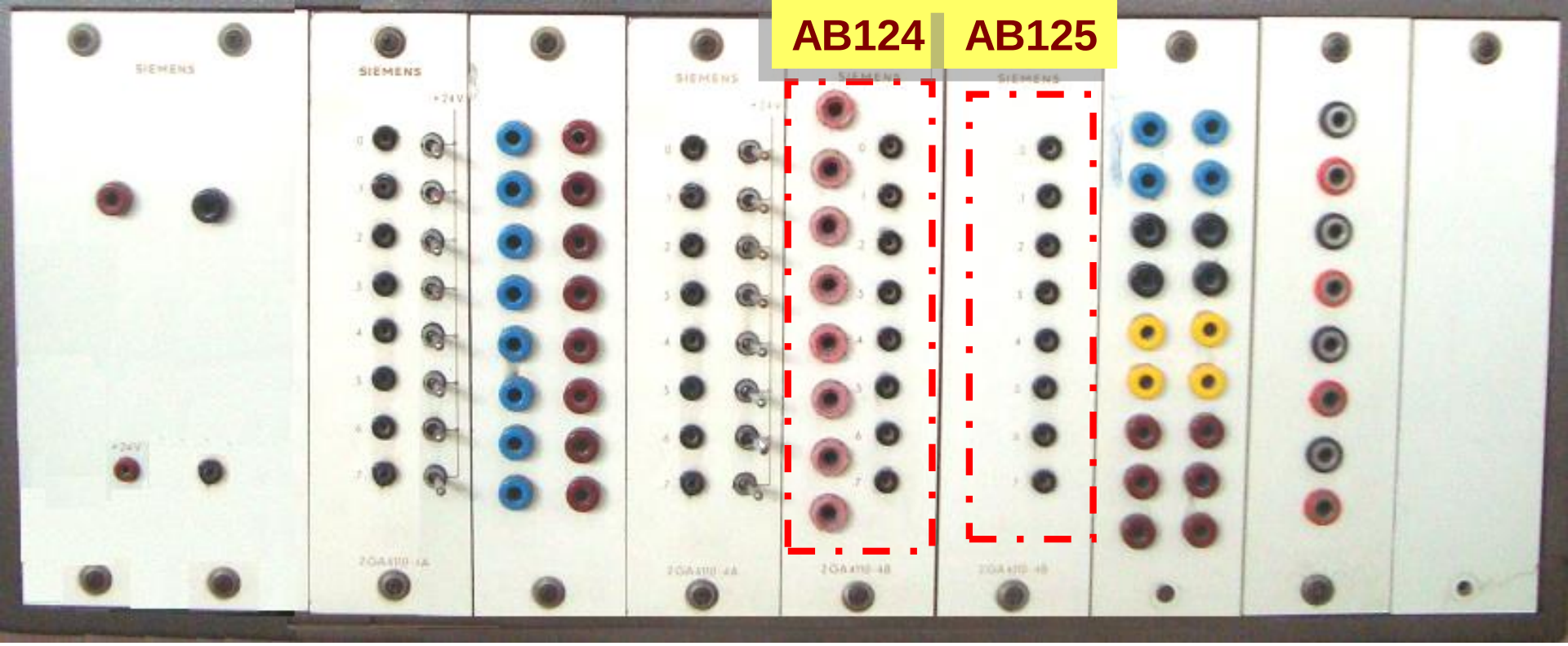
(0) UR

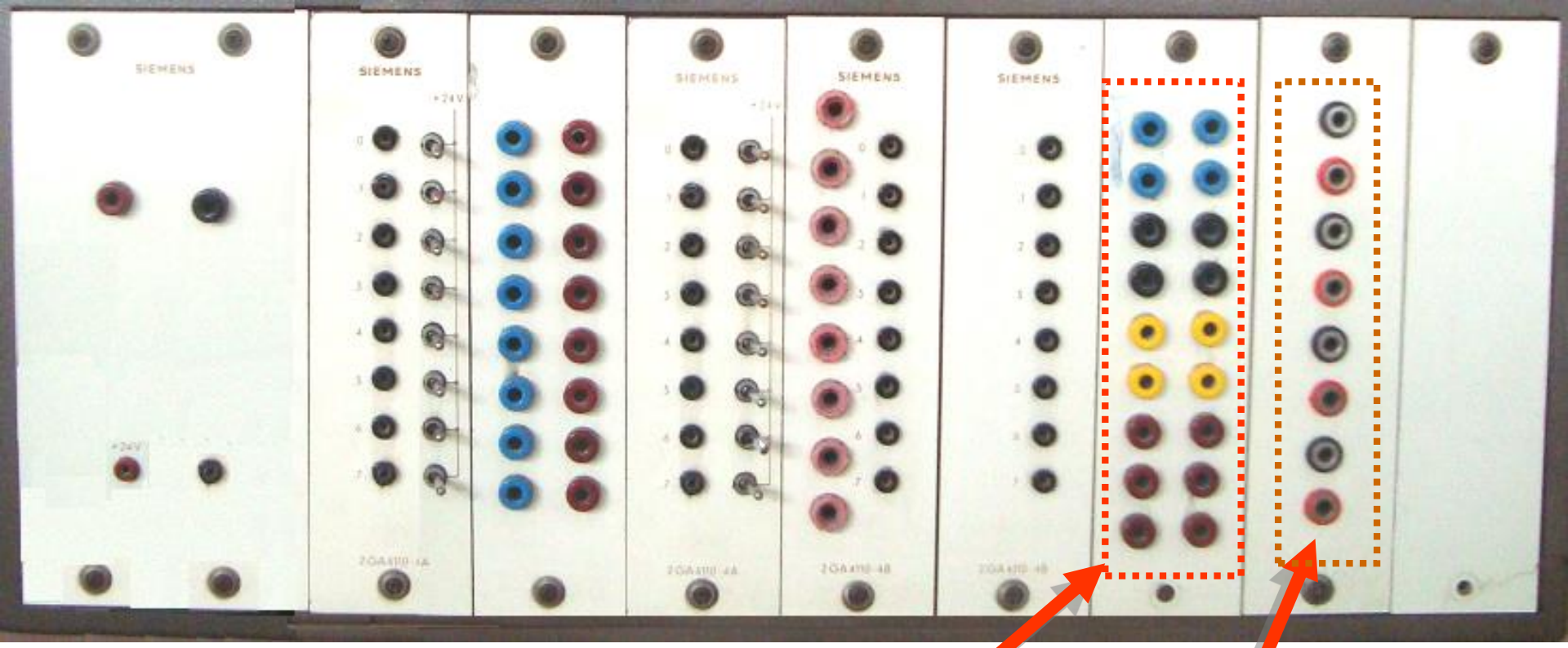
Slot	Módulo ...	Referencia	Fir...	Dirección M...	Dirección E	Dirección S	Comentario
1	PS 307 2A	6ES7 307-1BA00-0AA0					
2	**CPU 313C-2 DP**	**6ES7 313-6CE01-0AB0**	**V2.0**	**2**			
X2	*DP*				*1023**		
2.2	*DI16/DO16*				*124...125*	*124...125*	
2.4	*Count*				*768...783*	*768...783*	
3							
4	AI8x13Bit	6ES7 331-1KF01-0AB0			256...271		
5	AO4x12Bit	6ES7 332-5HD01-0AB0				272...279	
6							


SIEMENS
+
—
24V
+
—
SIEMENS
SIEMENS
SIEMENS
SIEMENS


EB124
SIEMENS
+
—
24V
+
—
SIEMENS
SIEMENS
SIEMENS

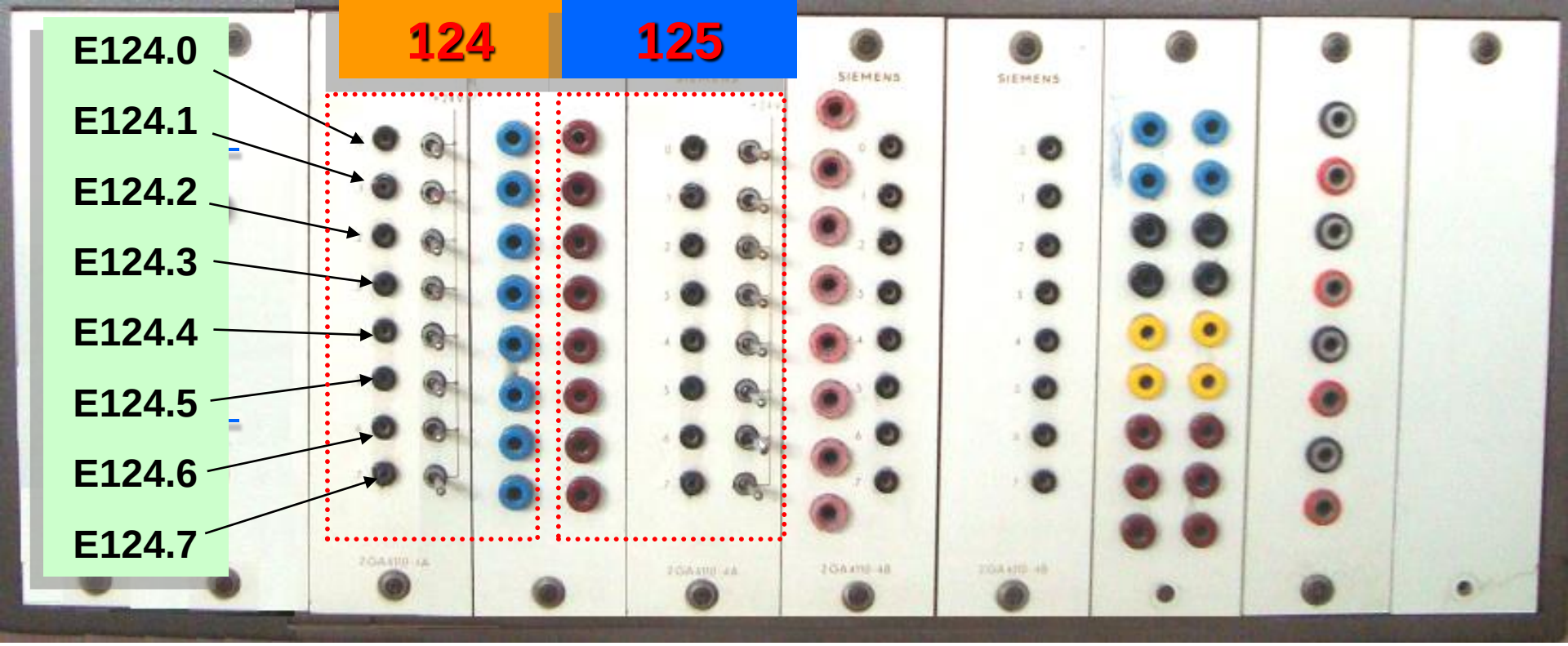

EB125
SIEMENS
+
—
24V
+
—
SIEMENS
SIEMENS
SIEMENS


AB124
AB125
SIEMENS
SIEMENS
SIEMENS
SIEMENS
SIEMENS
+24V
+24V
2GA410-4A
2GA410-4A
2GA410-4B
2GA410-4B



MODULO DE ENTRADAS ANALOGICAS

MODULO DE SALIDAS ANALOGICAS


124
125
E124.0
E124.1
E124.2
E124.3
E124.4
E124.5
E124.6
E124.7
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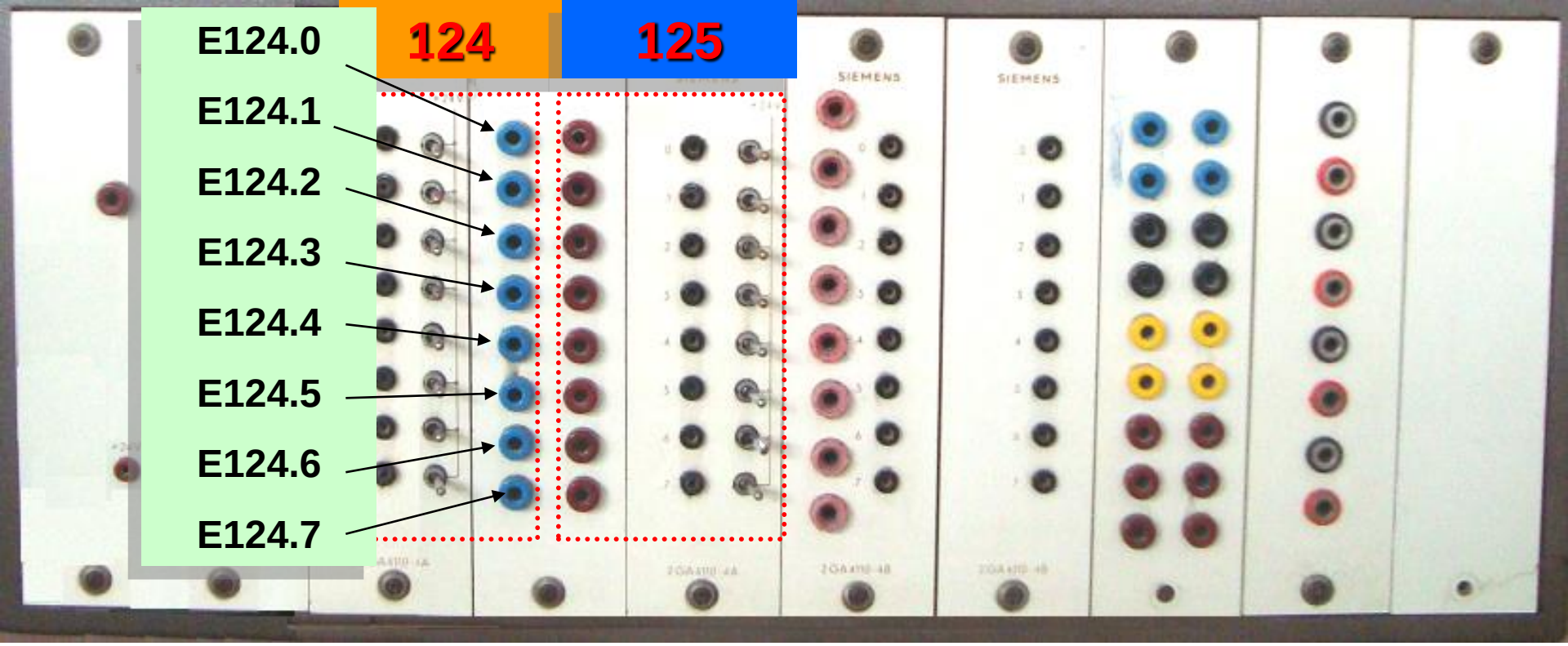
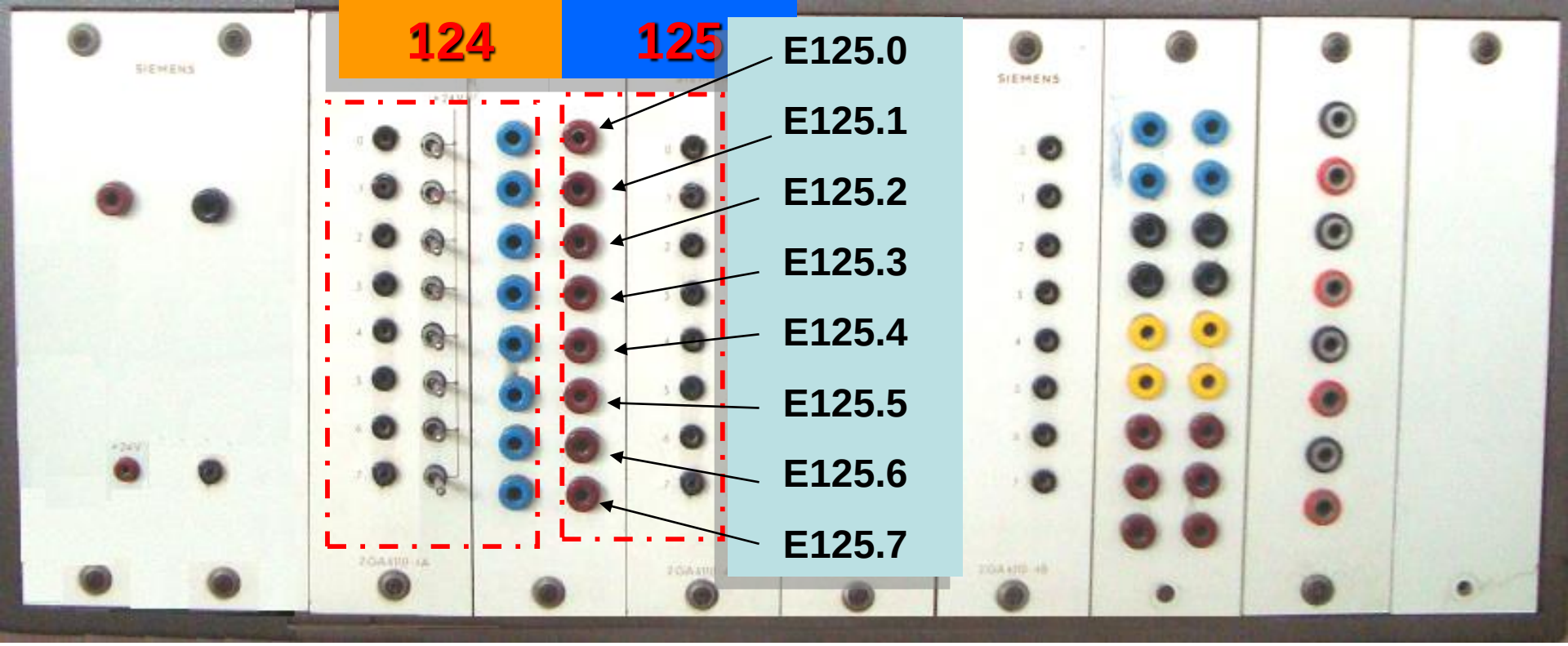
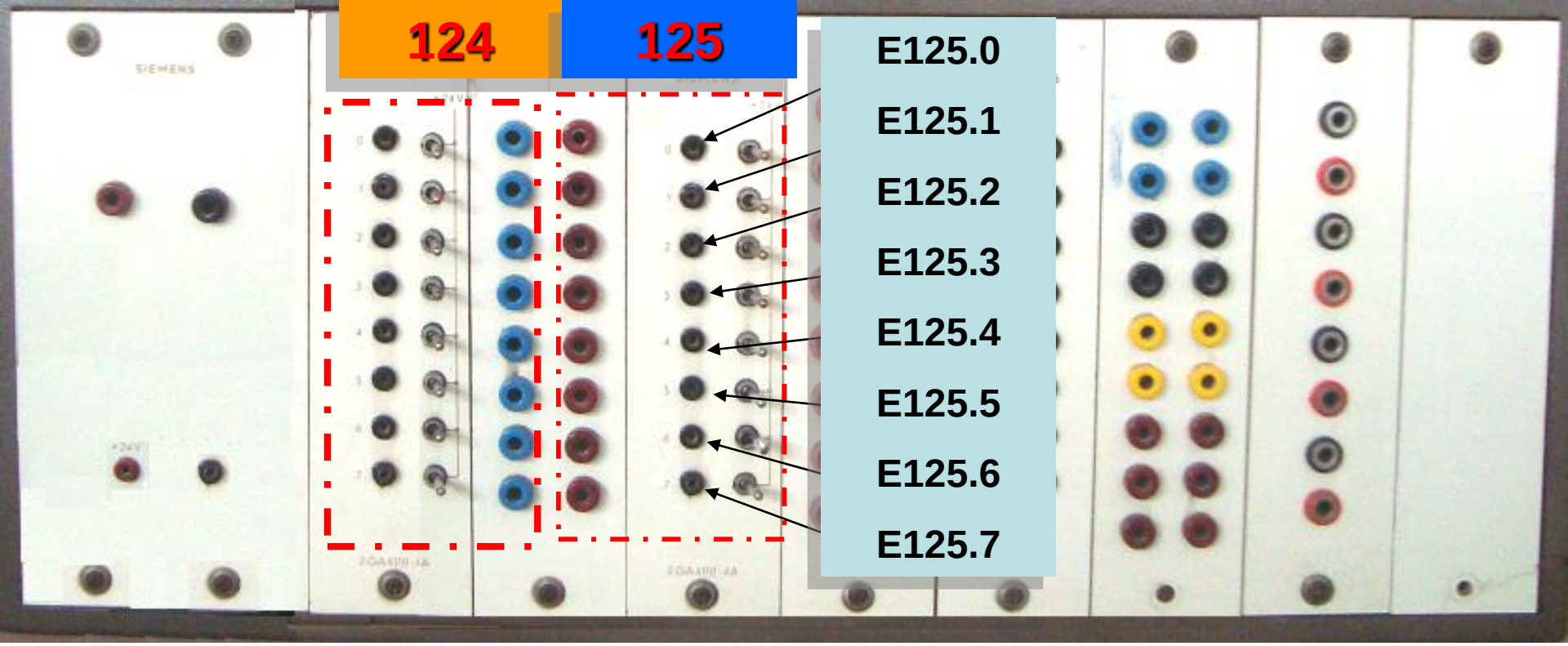
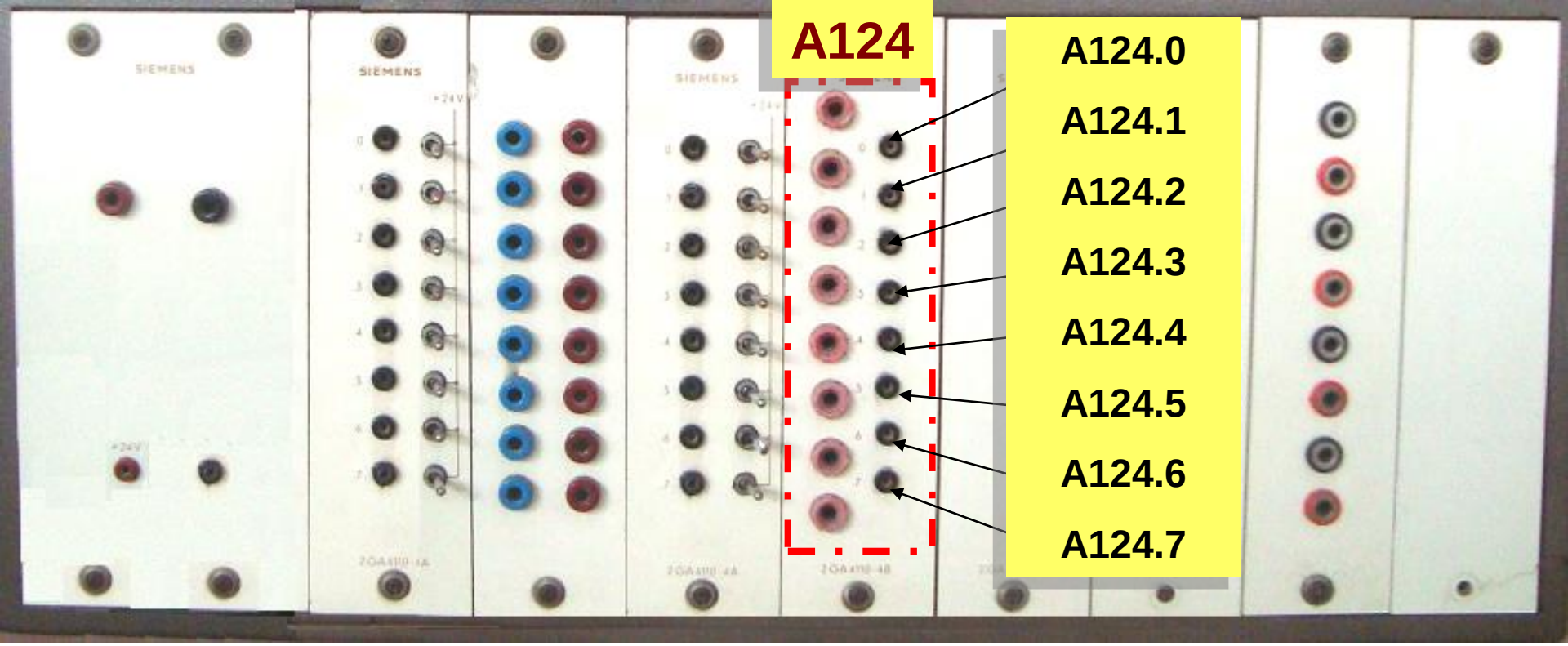
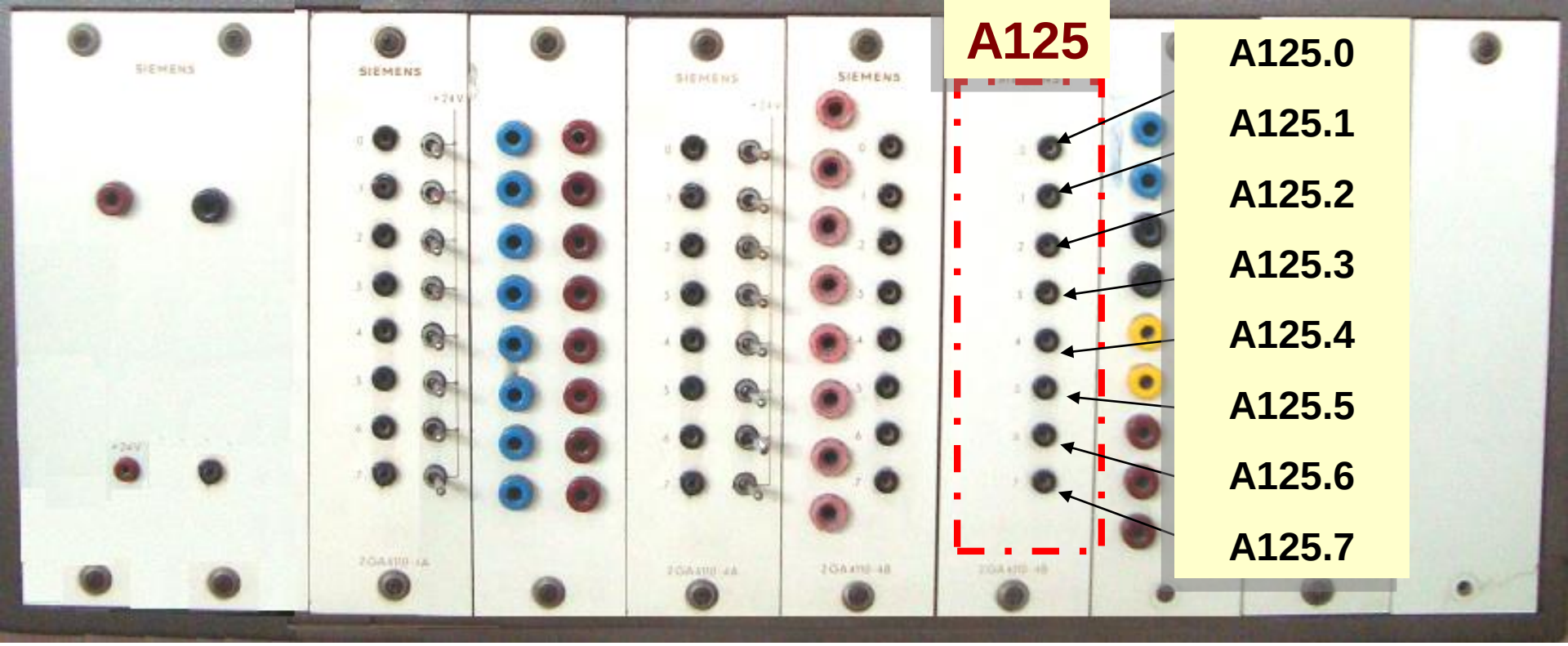
SIEMENS

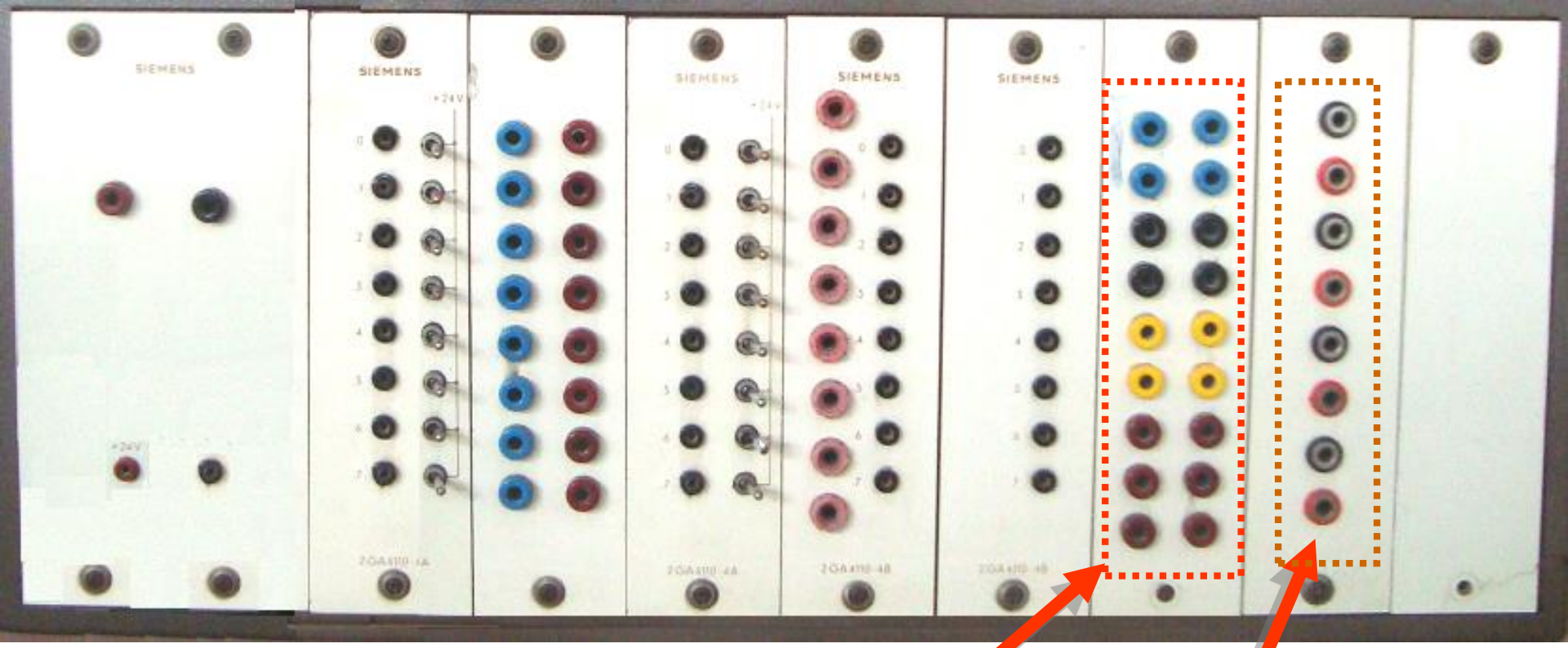

E124.0
E124.1
E124.2
E124.3
E124.4
E124.5
E124.6
E124.7
124
125
SIEMENS
SIEMENS


124
125
E125.0
E125.1
E125.2
E125.3
E125.4
E125.5
E125.6
E125.7
SIEMENS
SIEMENS


124
125
E125.0
E125.1
E125.2
E125.3
E125.4
E125.5
E125.6
E125.7

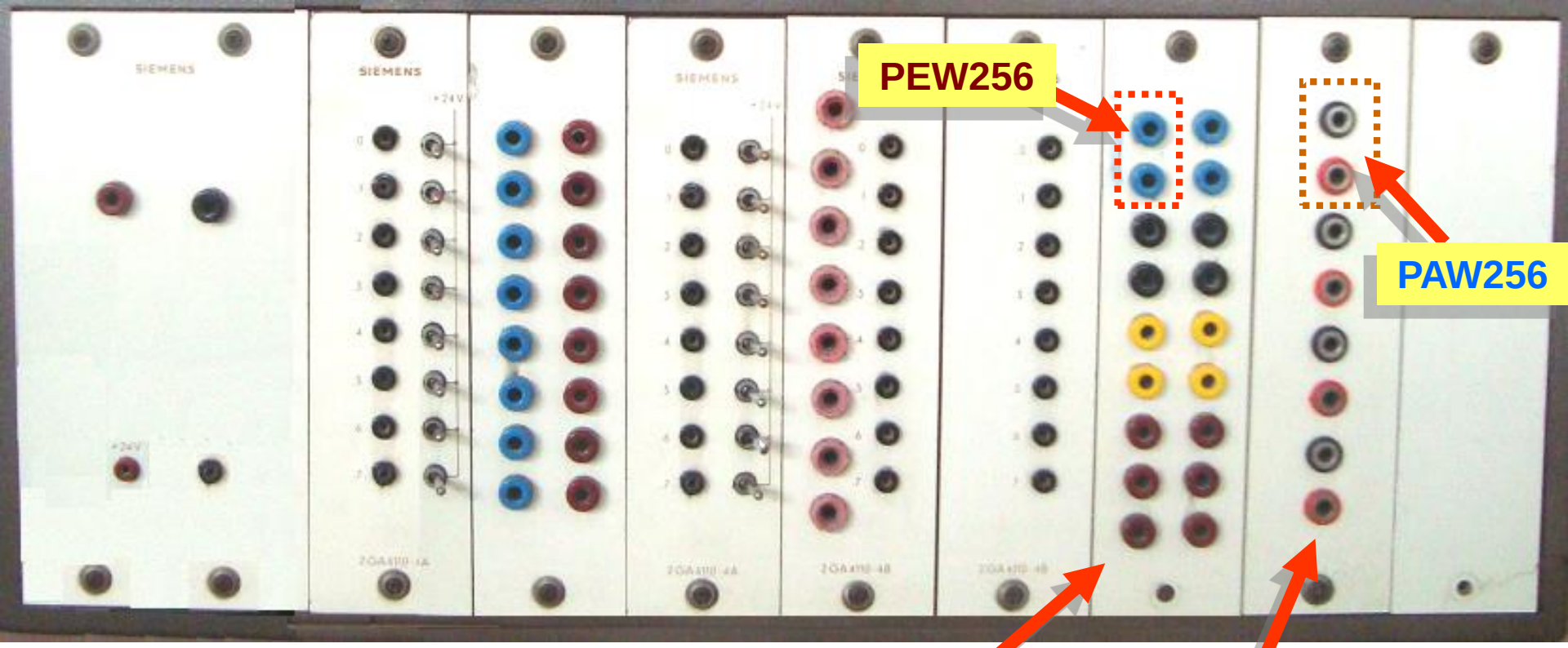

A124
A124.0
A124.1
A124.2
A124.3
A124.4
A124.5
A124.6
A124.7
SIEMENS
SIEMENS
SIEMENS


A125
A125.0
A125.1
A125.2
A125.3
A125.4
A125.5
A125.6
A125.7
SIEMENS
SIEMENS
SIEMENS
SIEMENS



MODULO DE ENTRADAS ANALOGICAS

MODULO DE SALIDAS ANALOGICAS



MODULO DE ENTRADAS ANALOGICAS

MODULO DE SALIDAS ANALOGICAS

HW Config - [SIMATIC 300(1) (Configuration) -- PLC_2014_B]

Station Edit Insert PLC View Options Window Help

(0) UR

1	PS 307 2A
2	CPU 313C-2 DP
X2	DP
2.2	DI16/DO16
2.4	Count

(0) UR

Slot	Module ...	Order number	Fir...	MPI address	I addre...	Q add...	Com...
1	PS 307 2A	6ES7 307-1BA00-0AA0					
2	CPU 313C-2 DP	6ES7 313-6CE01-0AB0	V2.0	2			
X2	DP				1023*		
2.2	DI16/DO16				124...125	124...125	
2.4	Count				768...783	768...783	
3							
4	DI16xDC24V	6ES7 321-1BH01-0AA0			0...1		
5	DO16xDC24V/0.5A	6ES7 322-1BH01-0AA0				4...5	
6	AI8x13Bit	6ES7 331-1KF01-0AB0			288...303		
7	AO4x12Bit	6ES7 332-5HD01-0AB0				304...311	
8	CP 343-2 P	6GK7 343-2AH10-0XA0			320...335	320...335	
9	CP 343-1 IT	6GK7 343-1GX20-0XE0	V1.0	3	336...351	336...351	
10							
11							

Find:

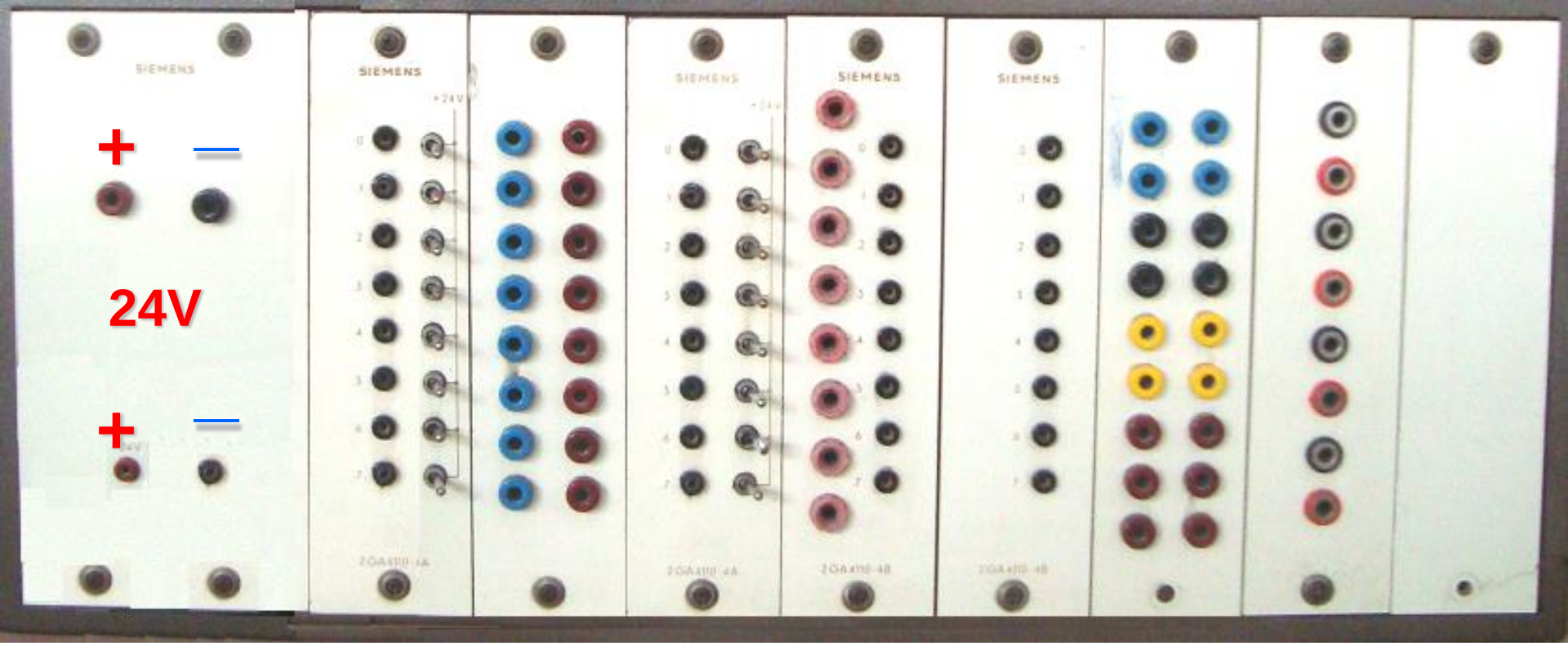
Profile: Standard

- PROFINET IO
- SIMATIC 300
  - C7
  - CP-300
    - AS-Interface
    - Industrial Ethernet
      - CP 343-1
      - CP 343-1 Advanced-IT
        - 6GK7 343-1GX00-0XE
        - 6GK7 343-1GX11-0XE
        - 6GK7 343-1GX20-0XE
          - V1.0
        - 6GK7 343-1GX21-0XE
        - 6GK7 343-1GX30-0XE
        - 6GK7 343-1GX31-0XE
      - CP 343-1 ERPC
      - CP 343-1 Lean
    - PROFIBUS
    - Point-to-Point
  - CPU-300
  - FM-300
  - Gateway
  - IM-300

6GK7 343-1GX20-0XE0
S7 CP for Industrial Ethernet TCP/IP with SEND/RECEIVE and FETCH/WRITE interface, long data, UDP, TCP, S7

Insertion possible

Chg


SIEMENS
+
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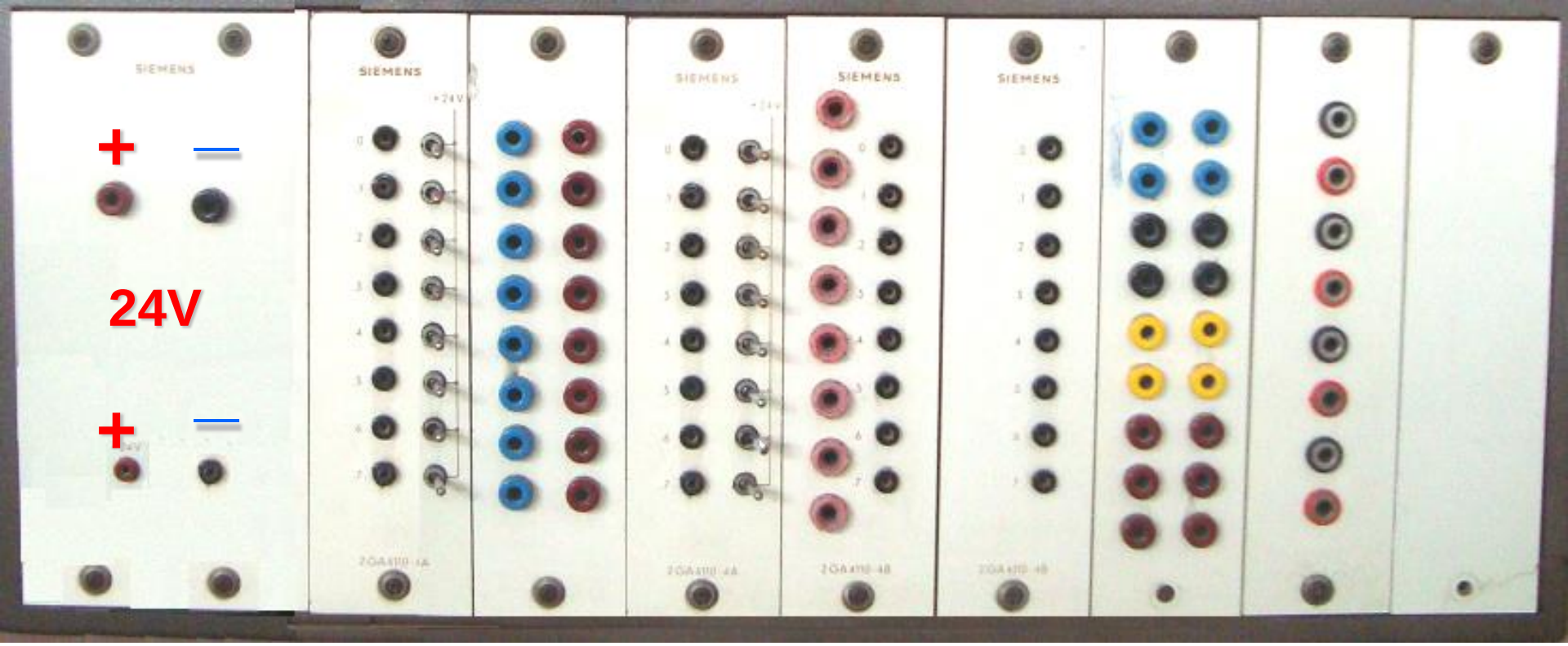
24V
+
—

MARCHA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—
24V
+
—
SIEMENS
SIEMENS
SIEMENS
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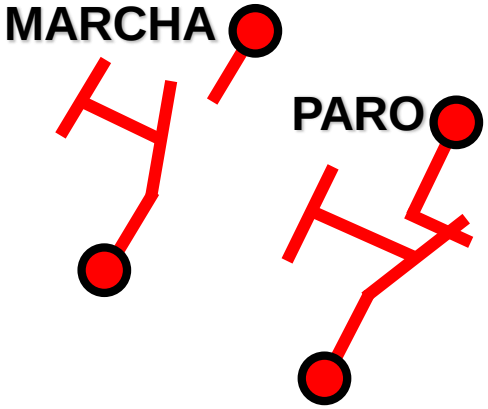
SIEMENS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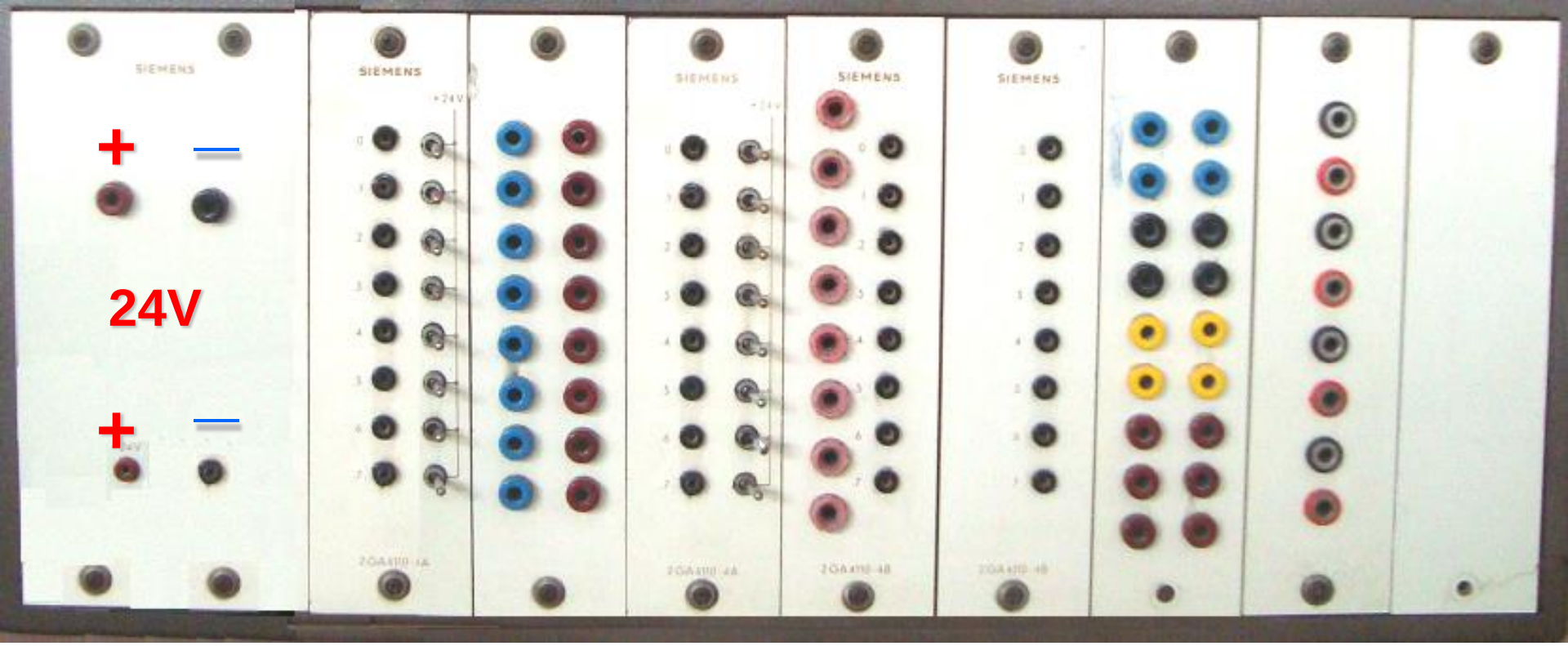
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24V
+
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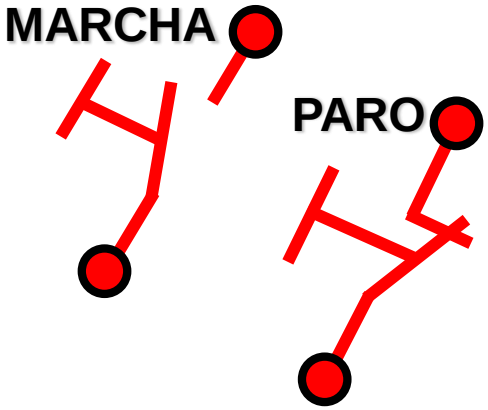
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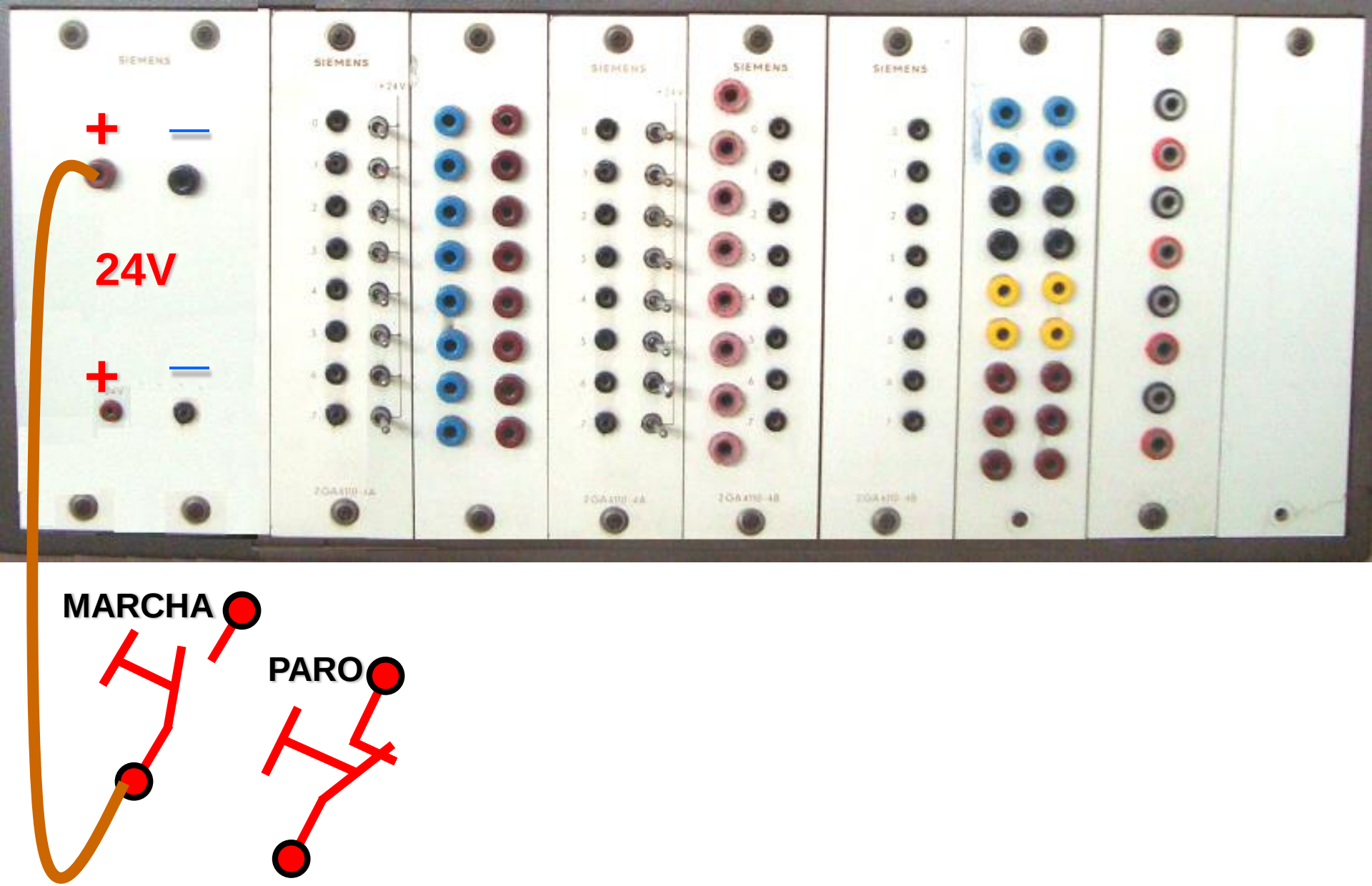
SIEMENS
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24V
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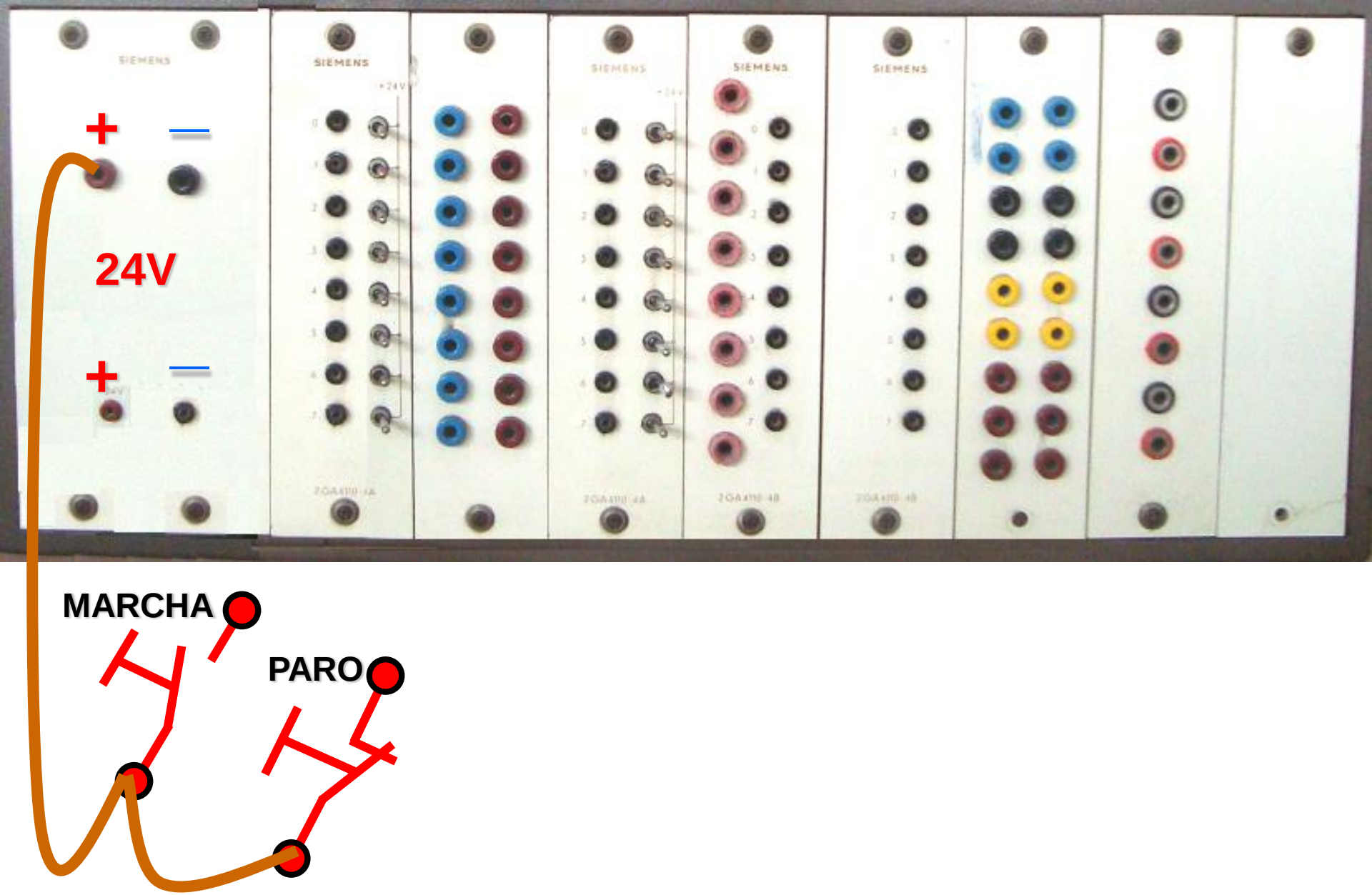
MARCHA
PARO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24V
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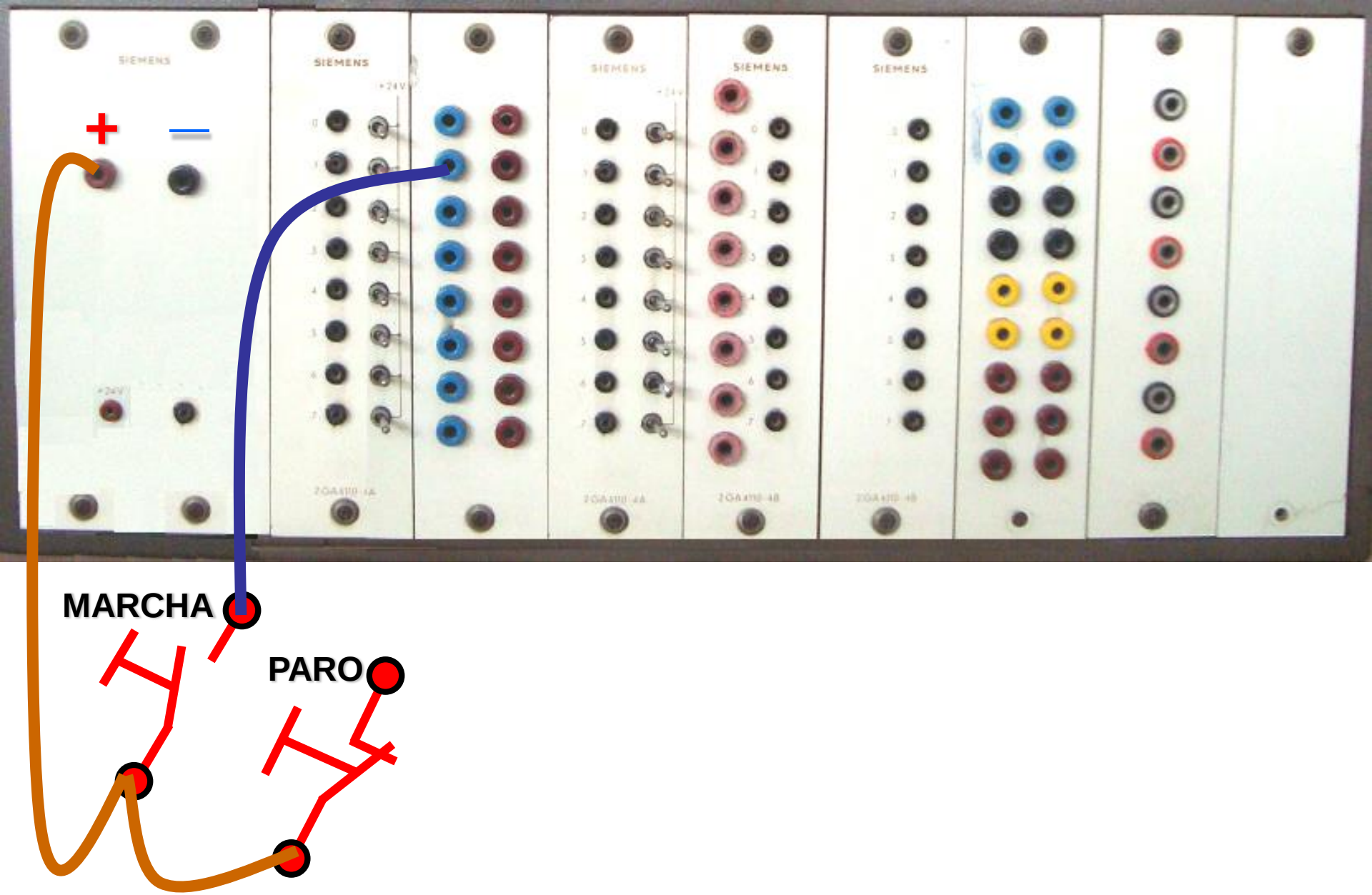
MARCHA
PARO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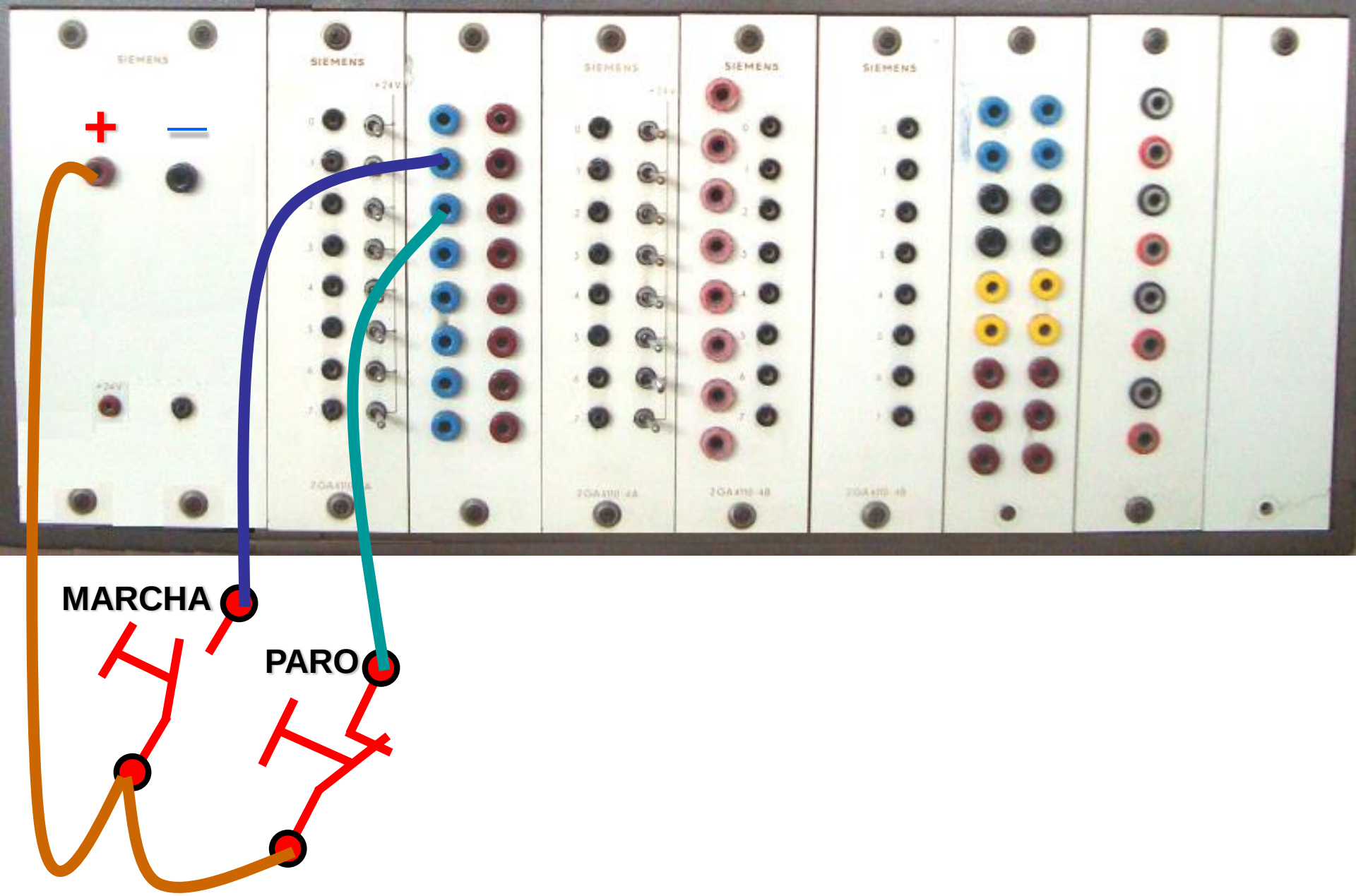
MARCHA
PARO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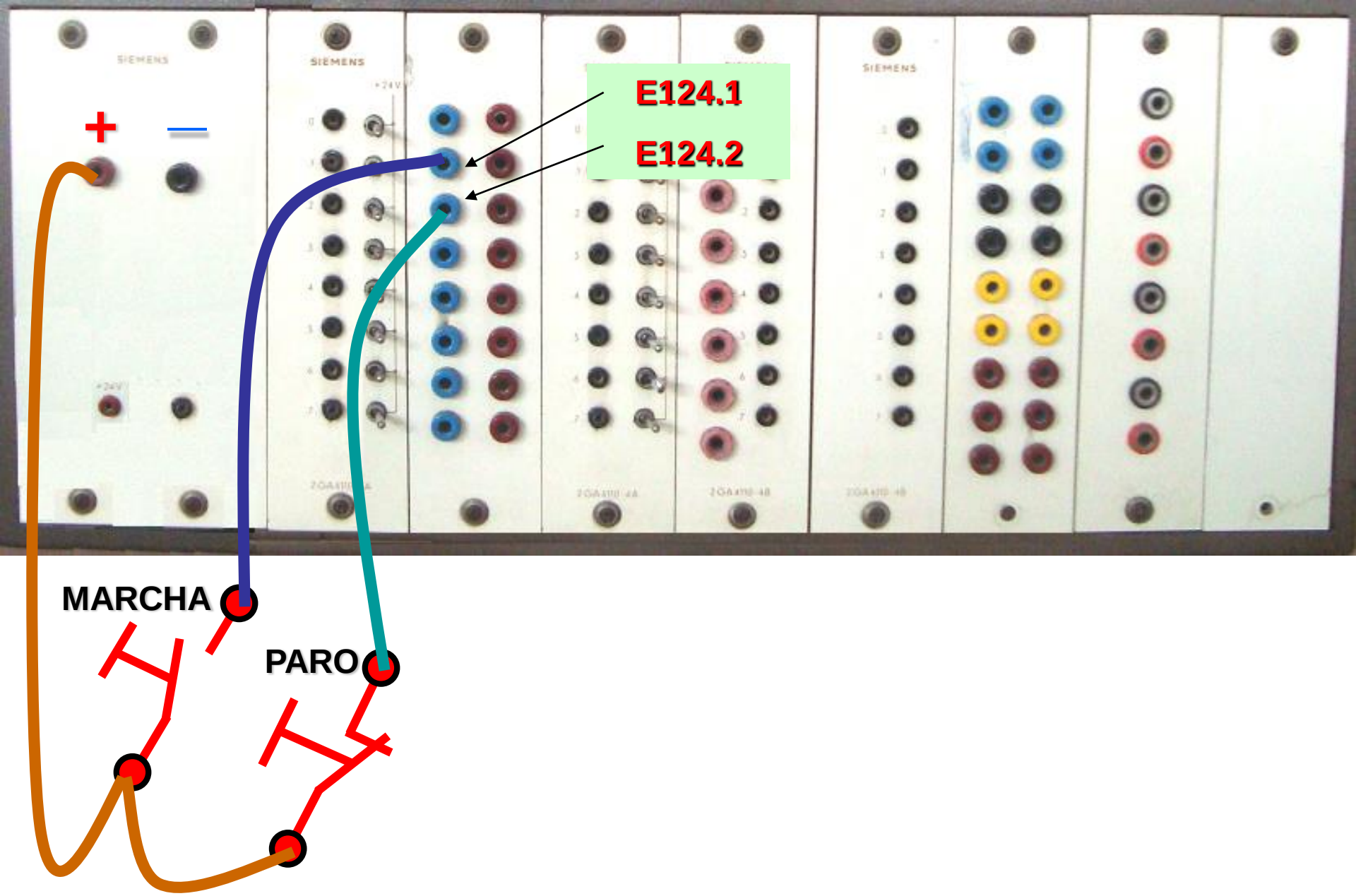
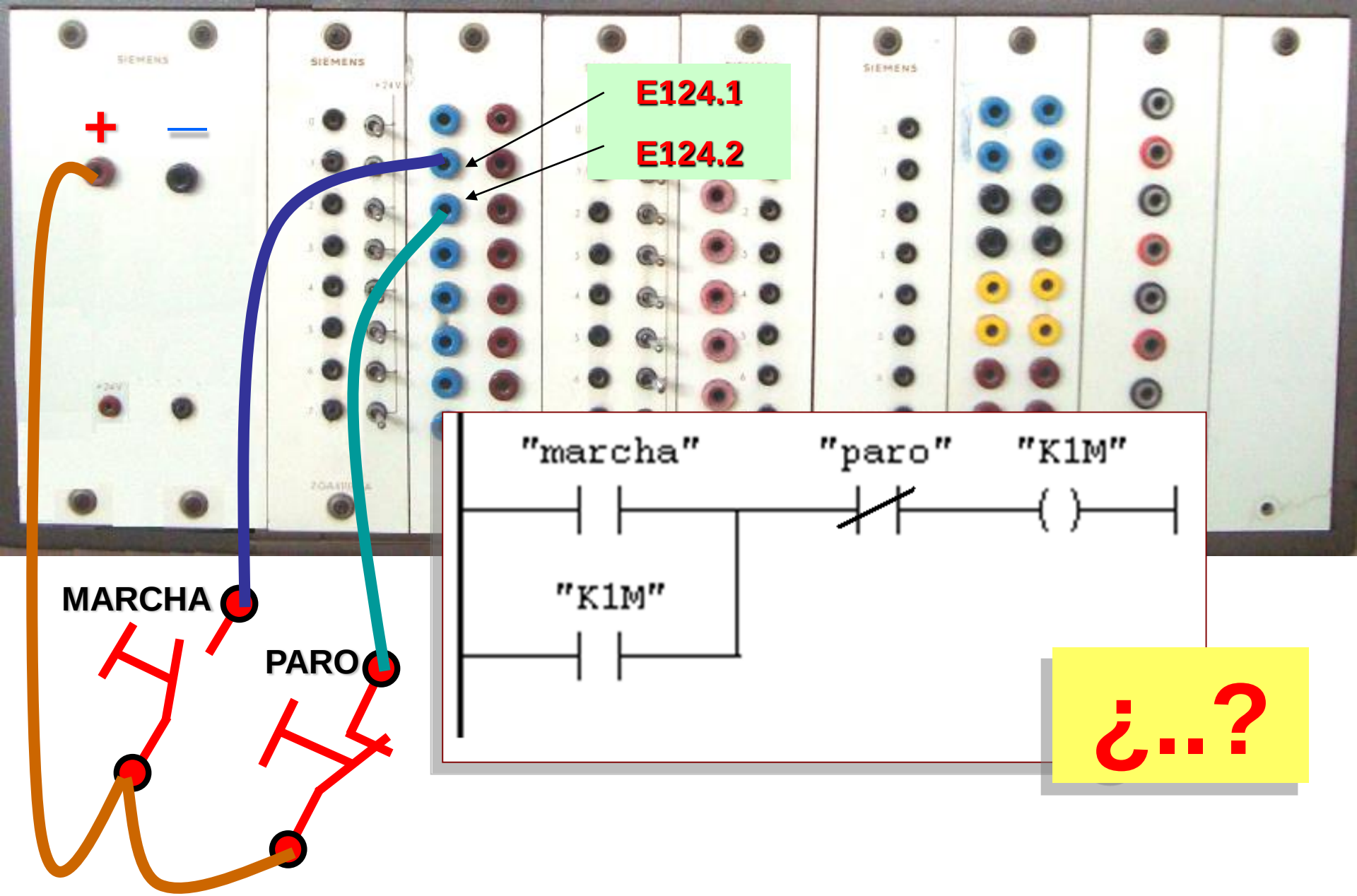
MARCHA
PARO


+
—
E124.1
E124.2
MARCHA
PARO


E124.1
E124.2
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—
MARCHA
PARO
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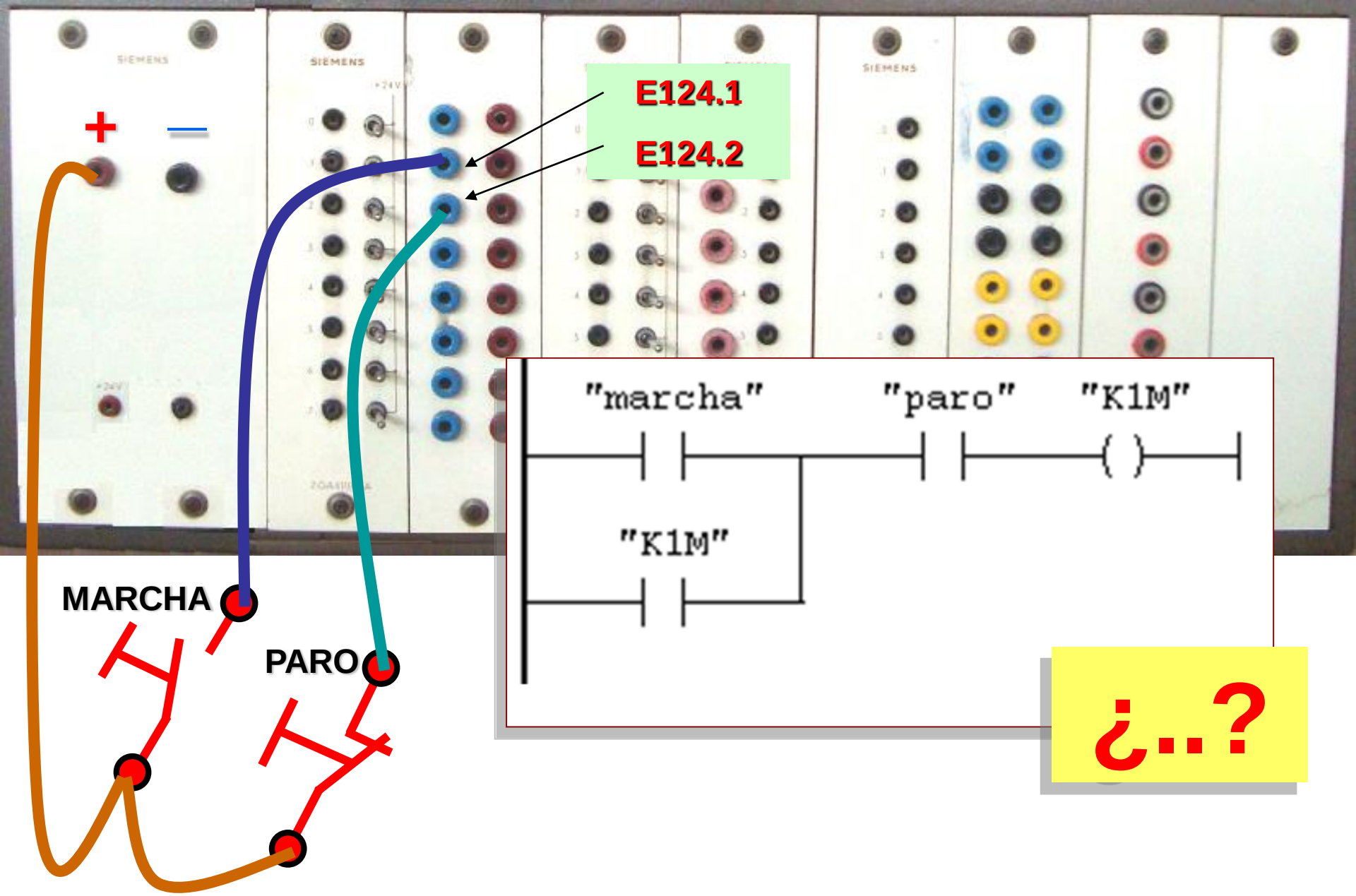
"paro"
"K1M"
"K1M"
¿..?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E124.2
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MARCHA
PARO
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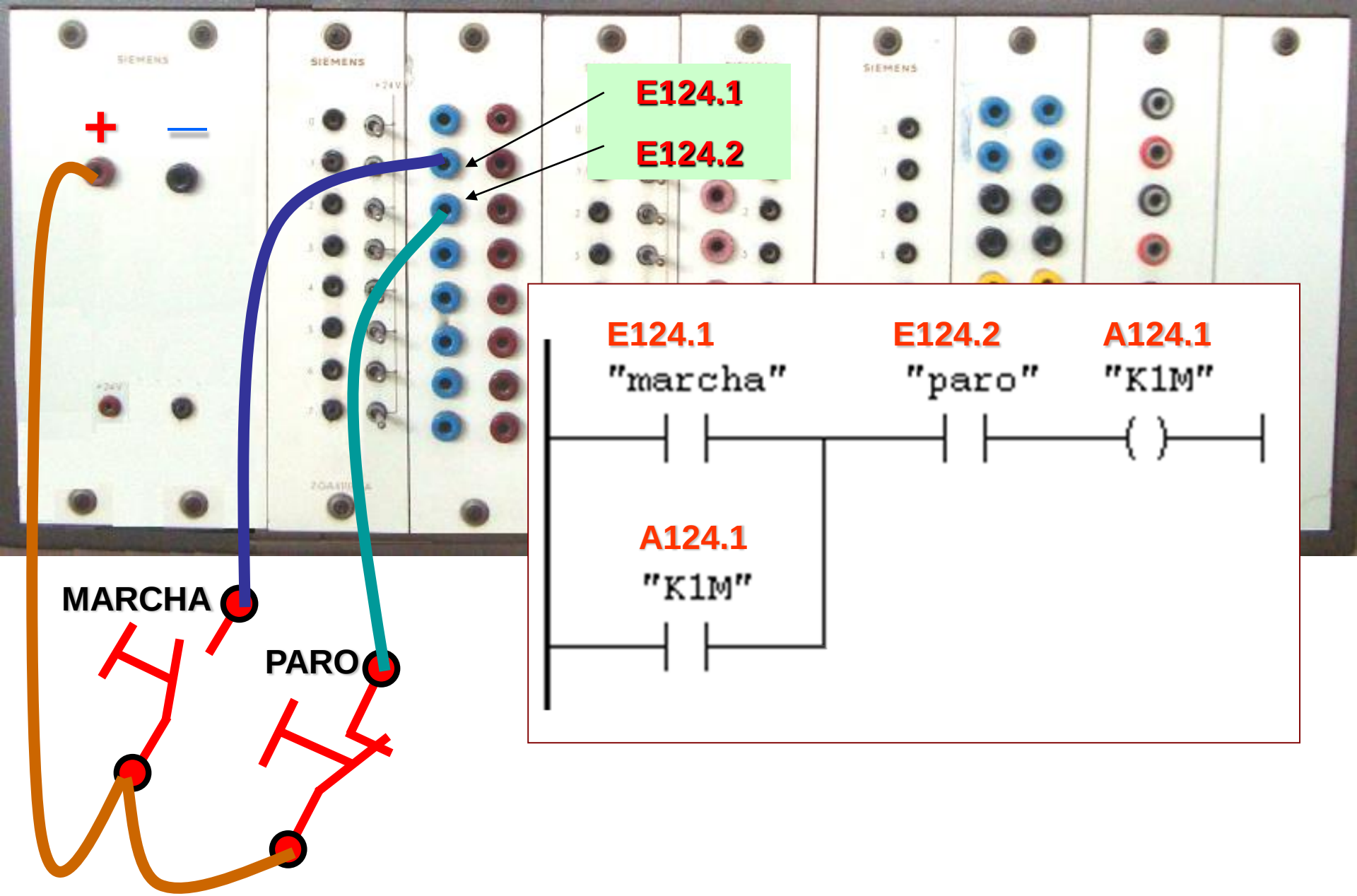
"paro"
"K1M"
"K1M"
¿..?


E124.1
E124.2
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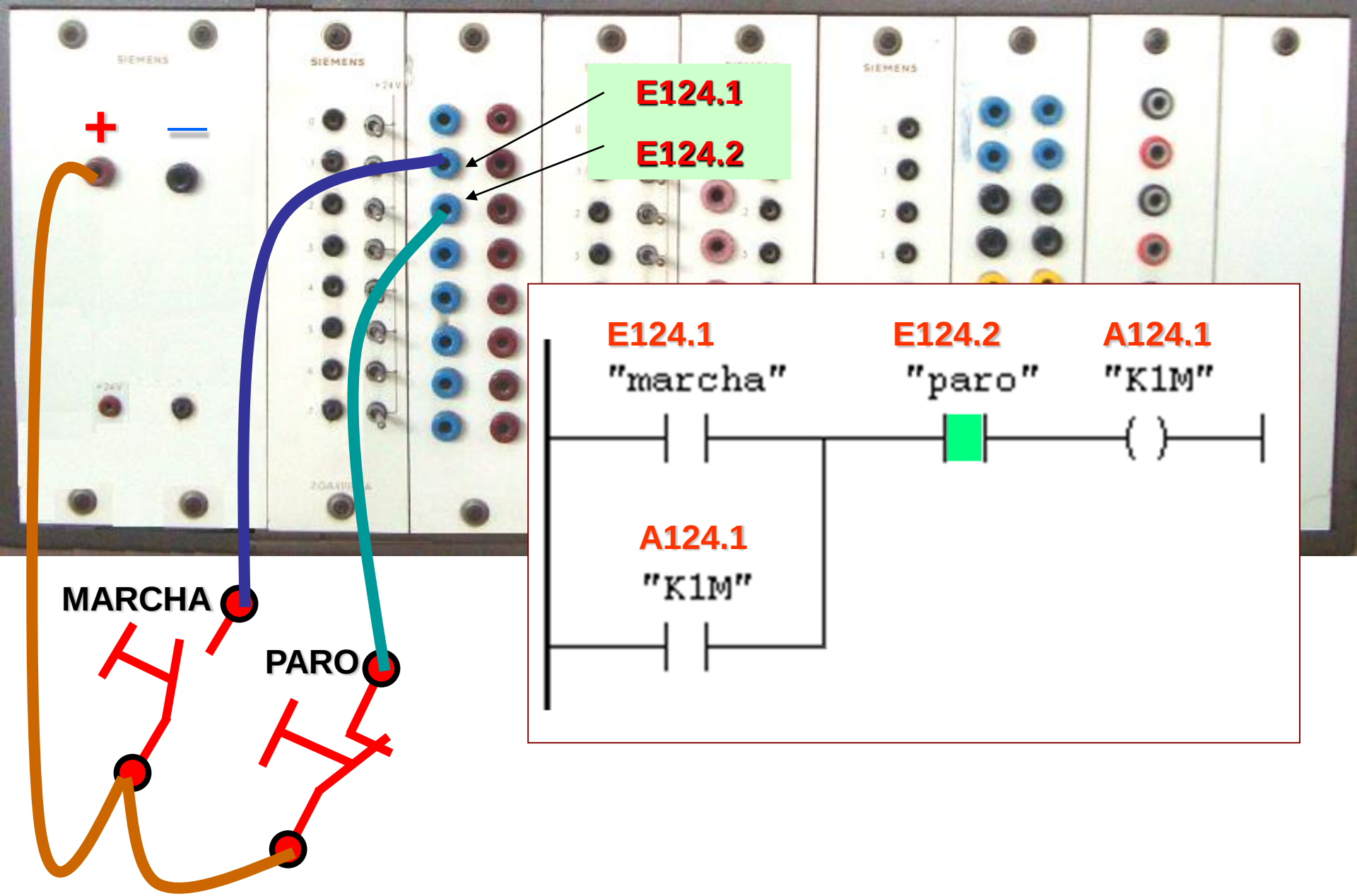
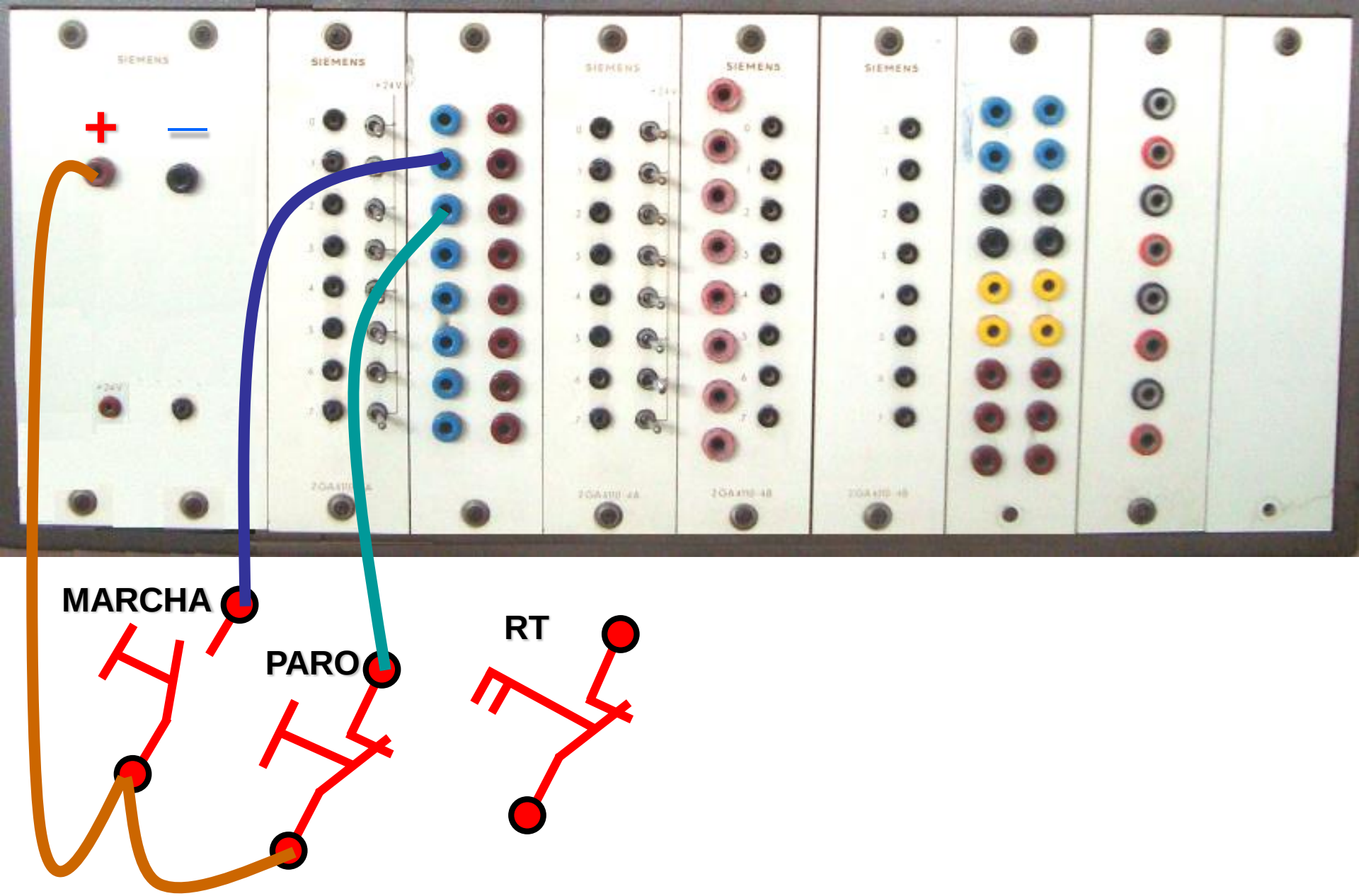
—
MARCHA
PARO
E124.1
"marcha"
E124.2
"paro"
A124.1
"K1M"
A124.1
"K1M"


+
—
E124.1
E124.2
MARCHA
PARO
E124.1
"marcha"
E124.2
"paro"
A124.1
"K1M"
A124.1
"K1M"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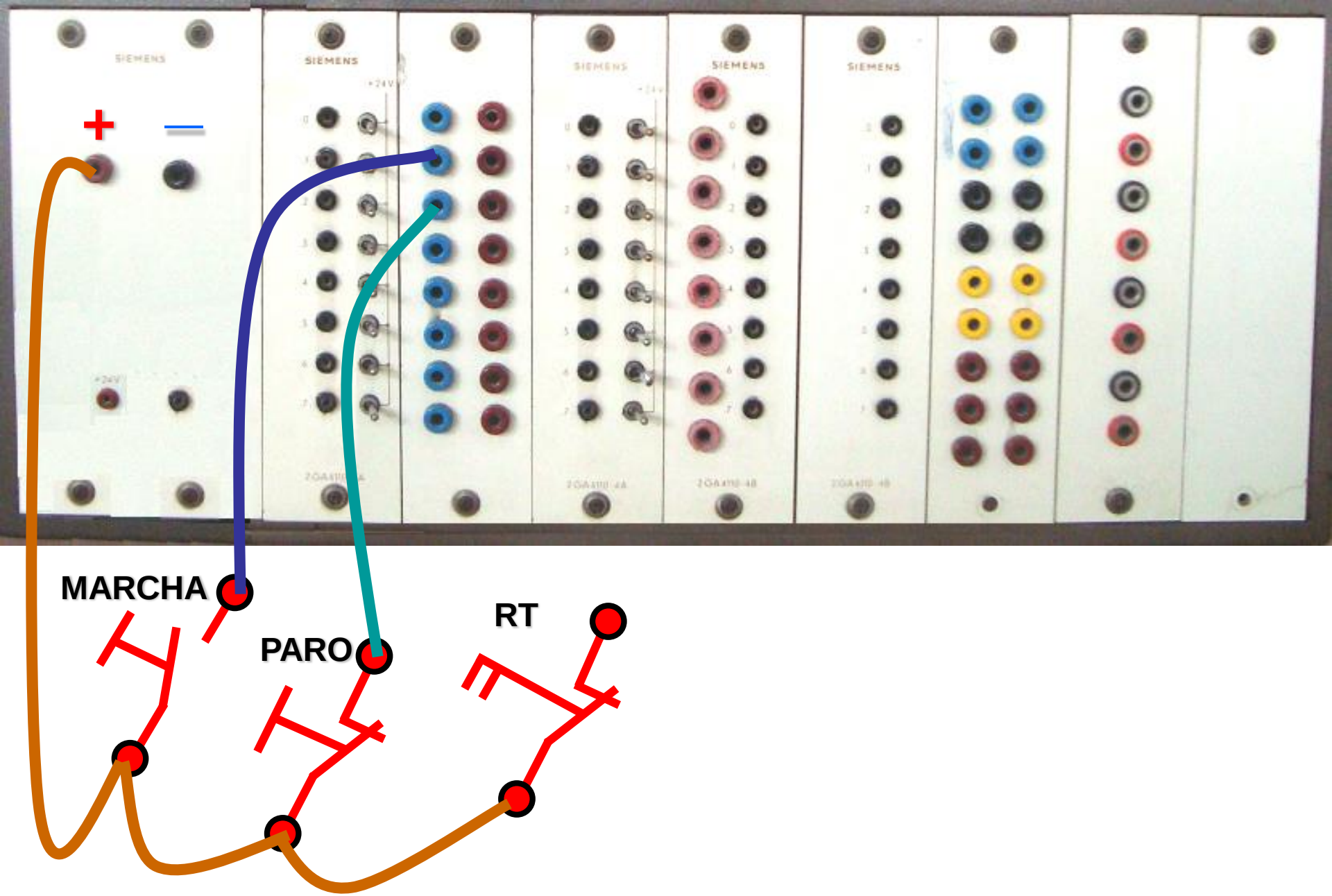
MARCHA
PARO
RT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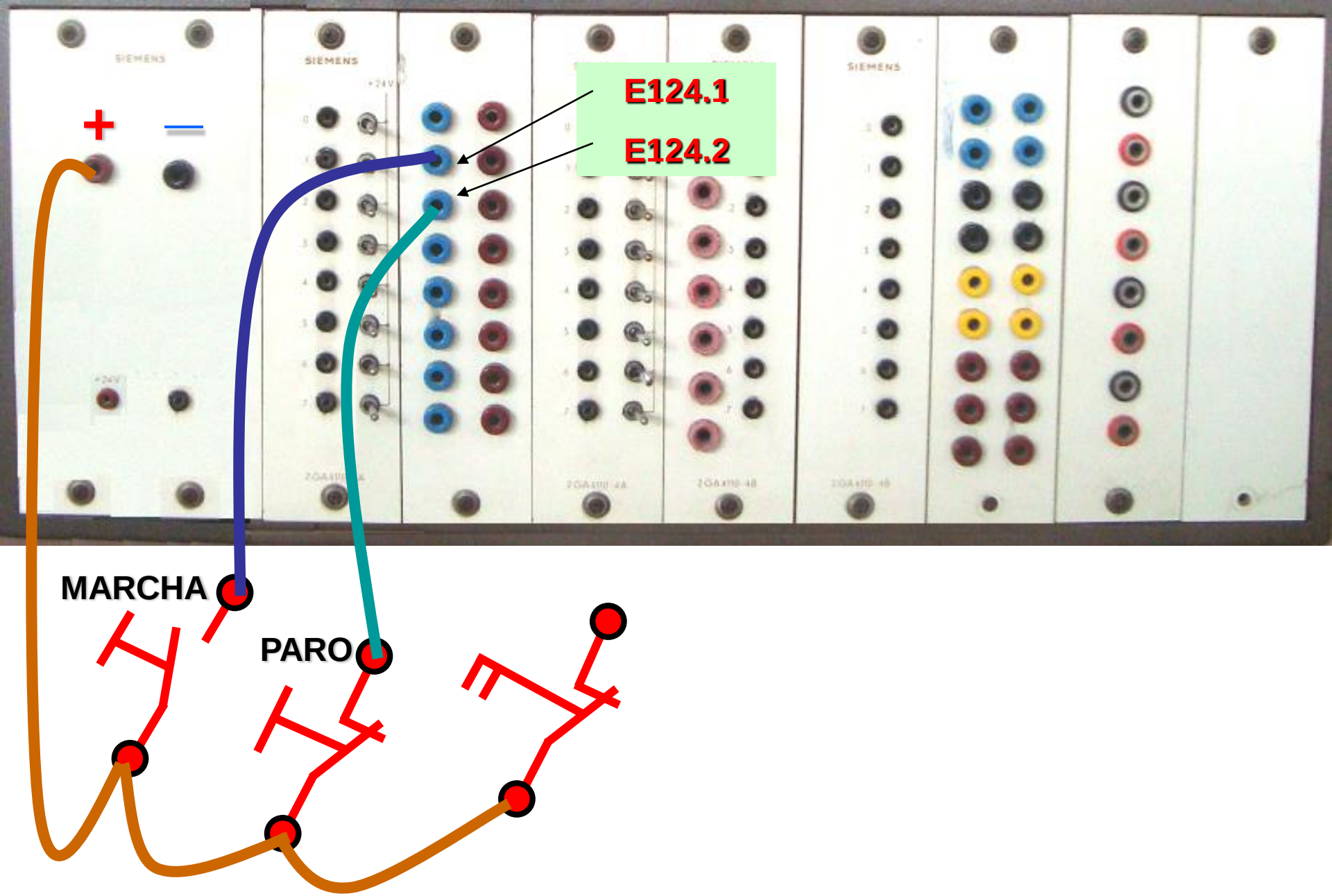
MARCHA
PARO
RT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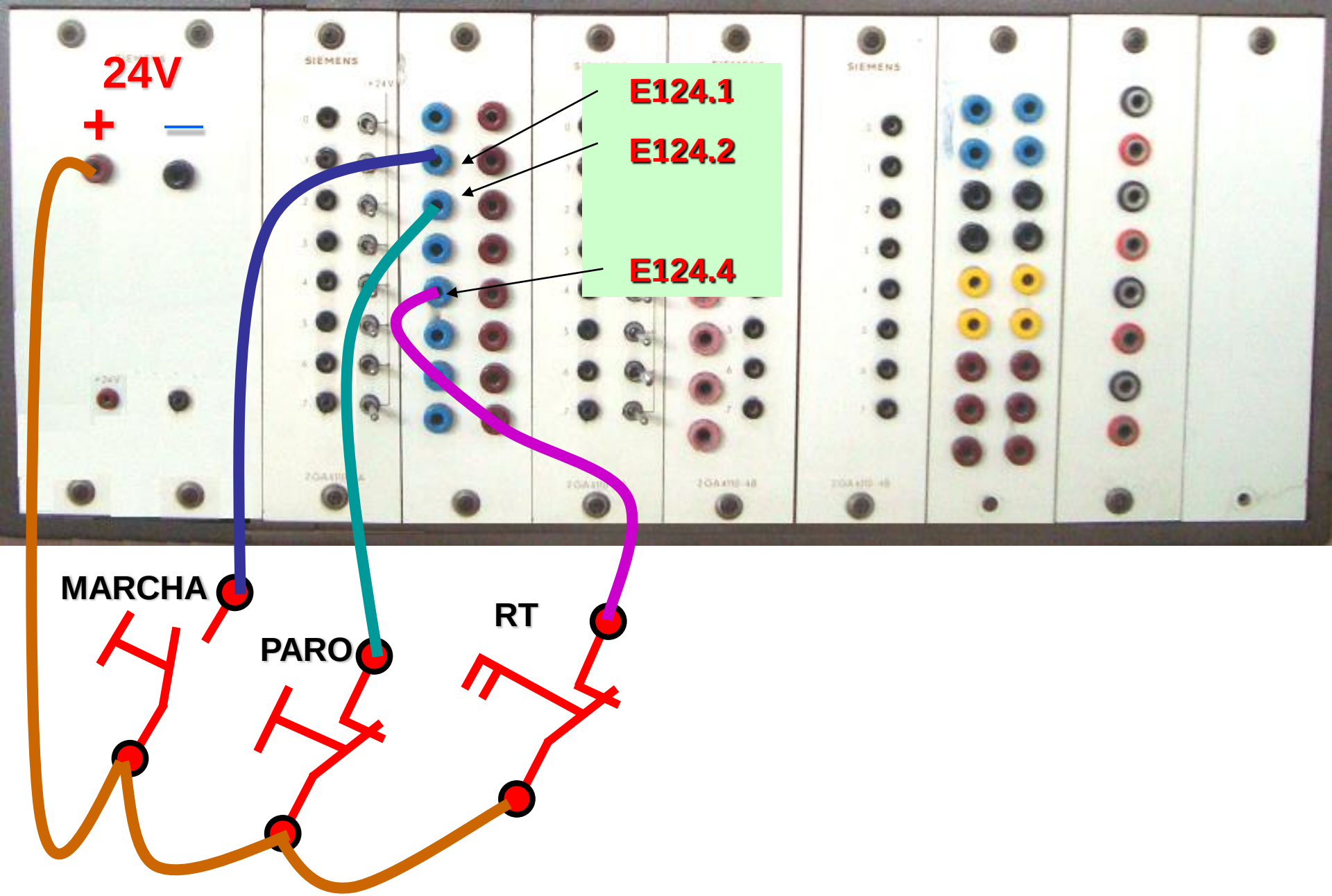
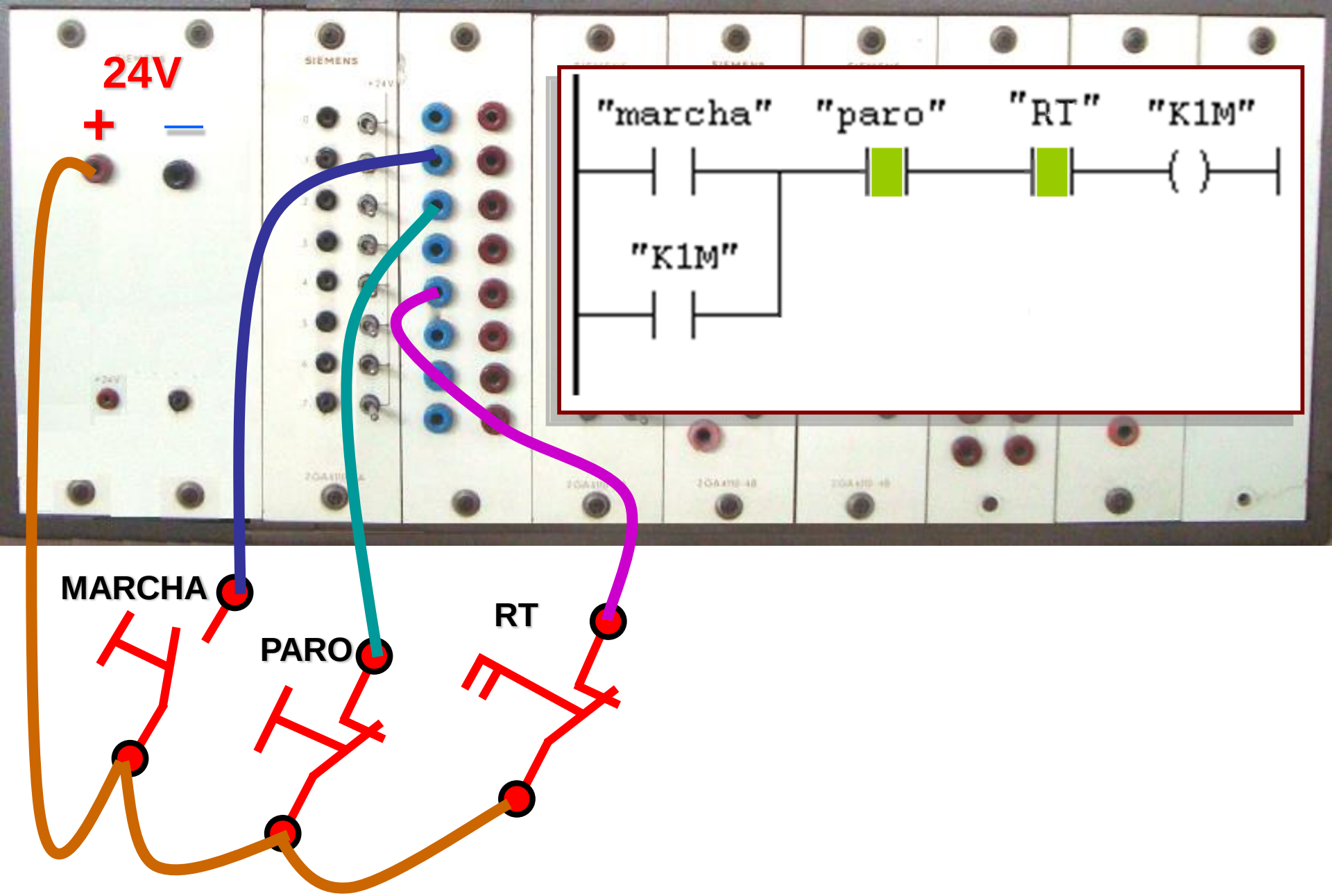
E124.1
E124.2
MARCHA
PARO


24V
+
—
E124.1
E124.2
E124.4
MARCHA
PARO
RT


24V
+
—
SIEMENS
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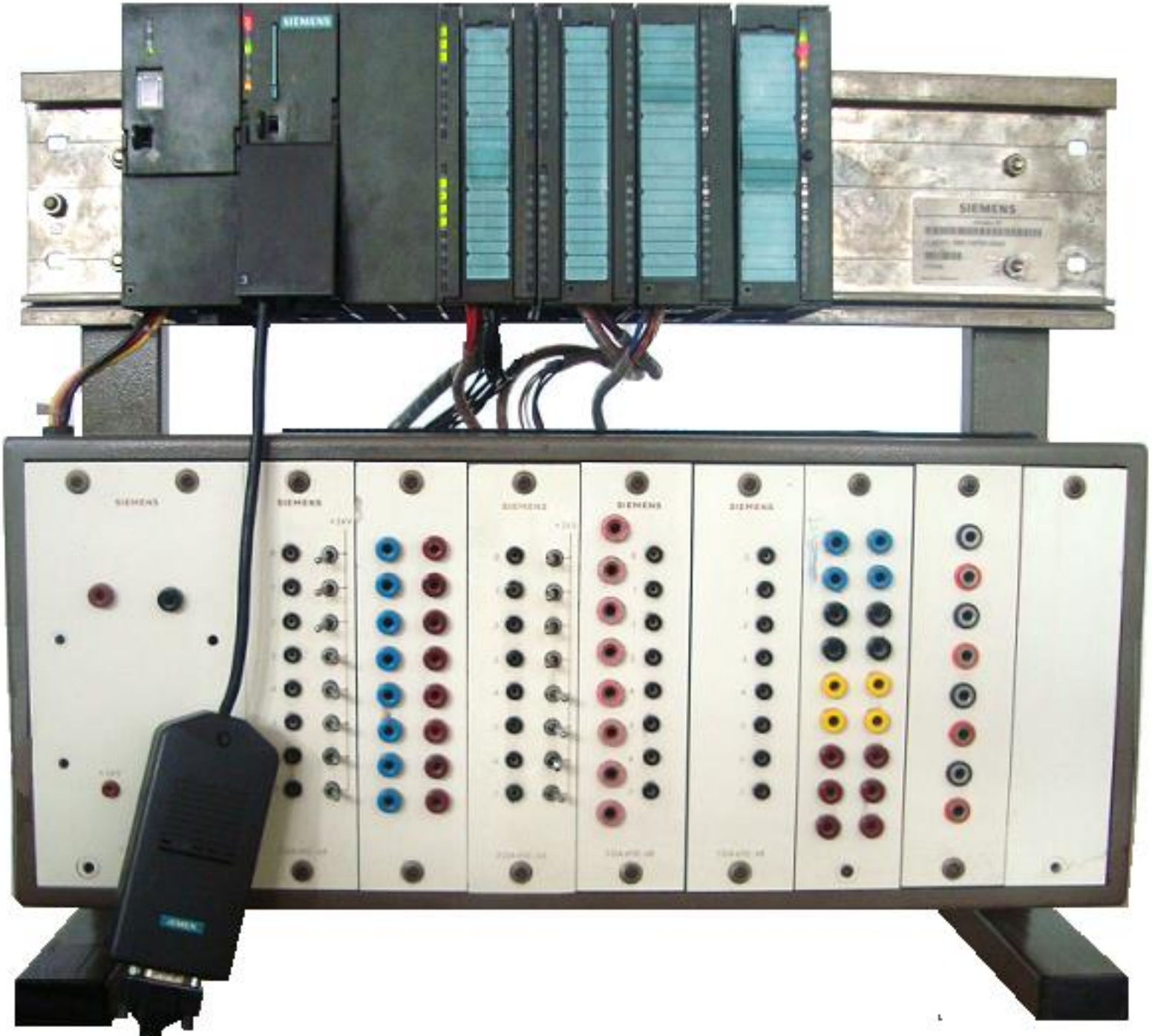
"paro"
"RT"
"K1M"
"K1M"
MARCHA
PARO
RT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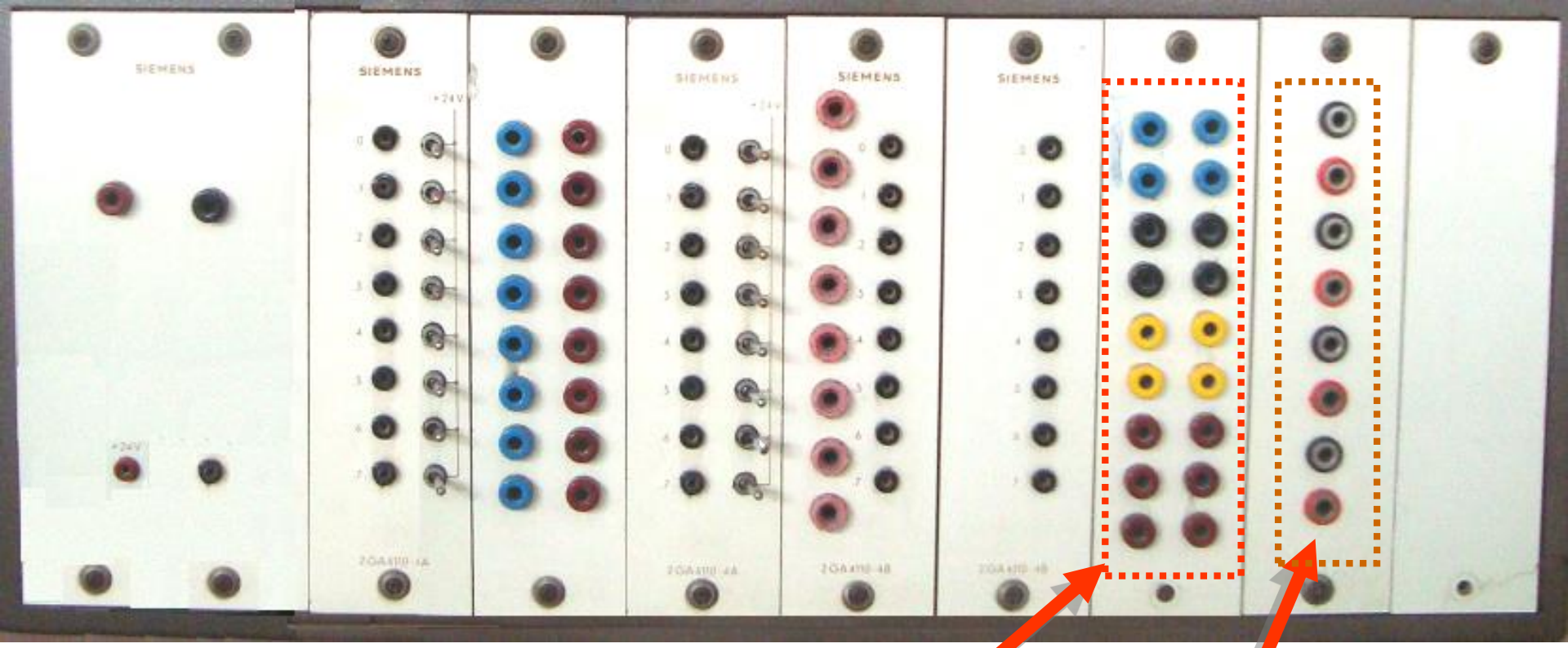
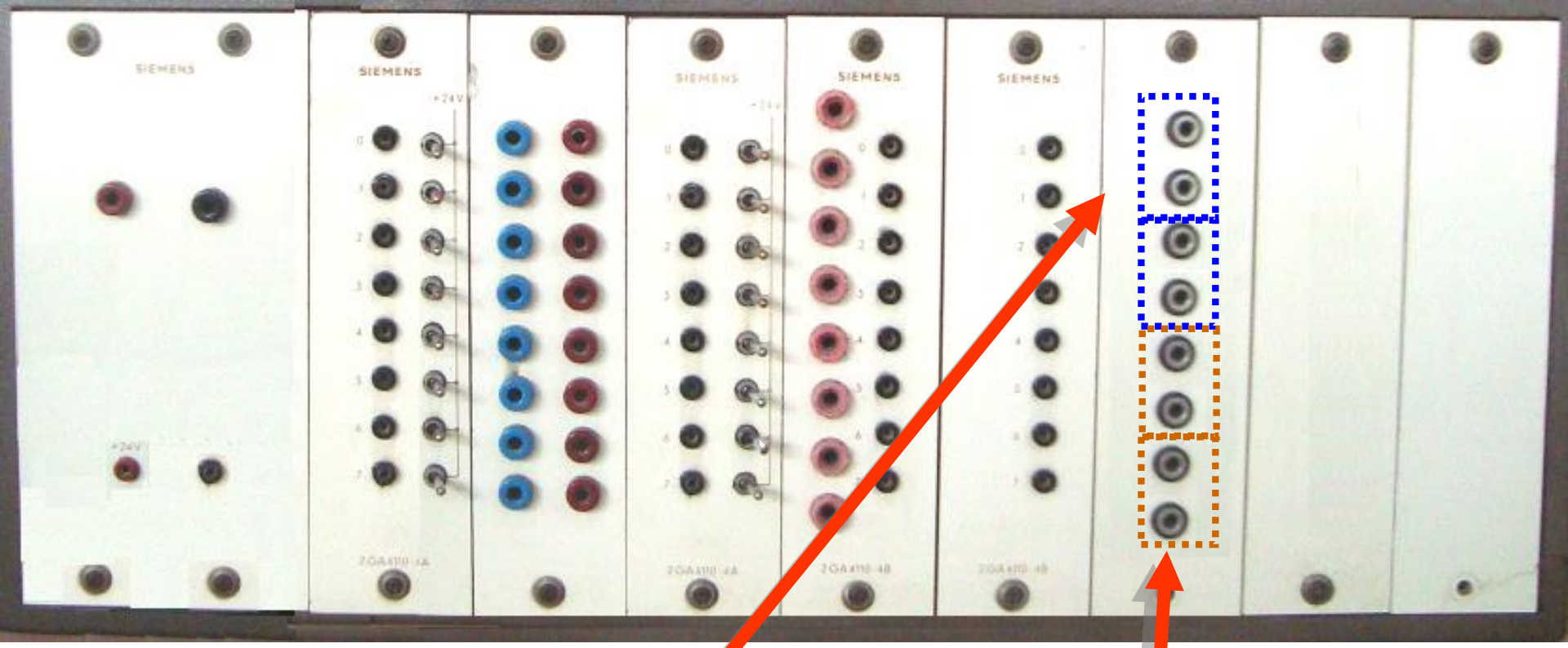
SIEMENS



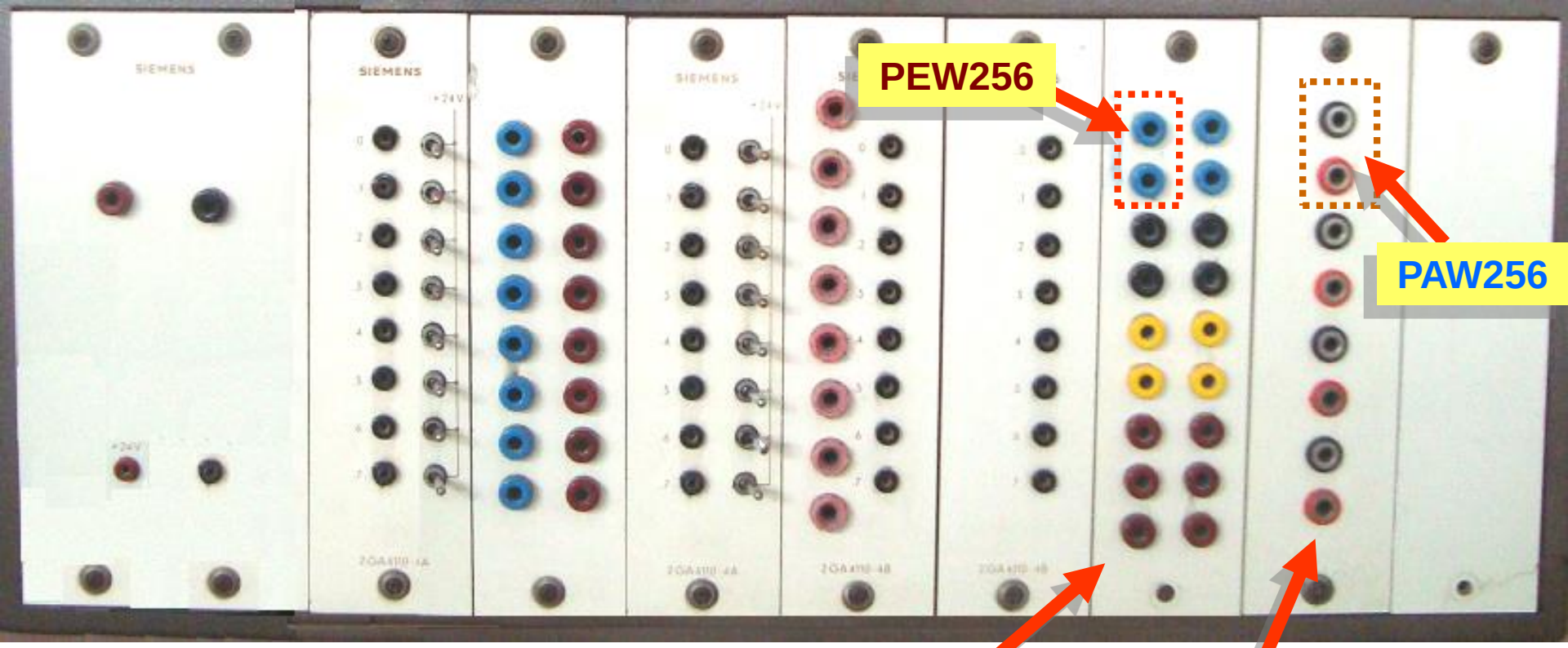
MODULO DE ENTRADAS ANALOGICAS

MODULO DE SALIDAS ANALOGICAS



MODULO DE ENTRADAS ANALOGICAS

MODULO DE SALIDAS ANALOGICAS



MODULO DE ENTRADAS ANALOGICAS

MODULO DE SALIDAS ANALOGICAS

HW Config - [SIMATIC 300(1) (Configuración) -- clase_HMI]

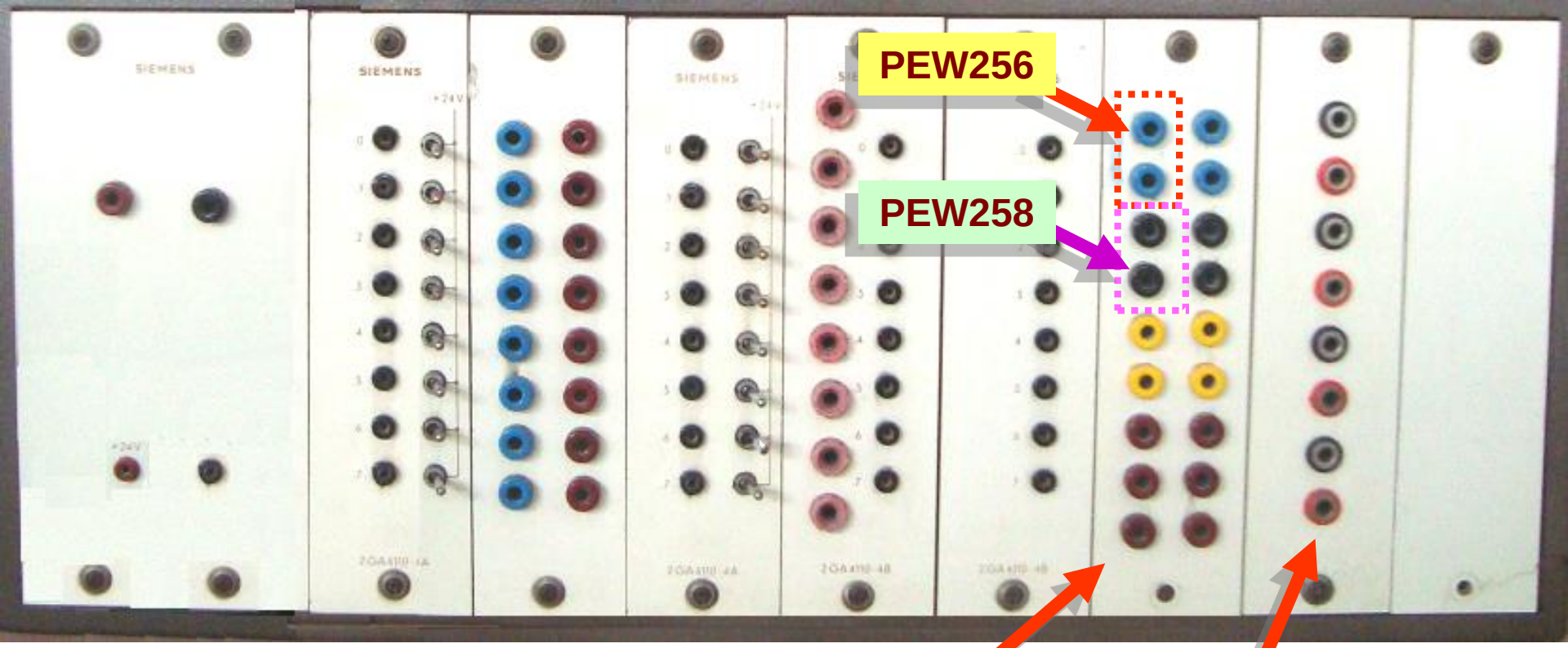
Equipo Edición Insertar Sistema de destino Ver Herramientas Ventana Ayuda

(0) UR

1	PS 307 2A
2	**CPU 313C-2 DP**
X2	*DP*
2.2	*DI16/DO16*
2.4	*Count*
3	
4	AI8x13Bit
5	AO4x12Bit

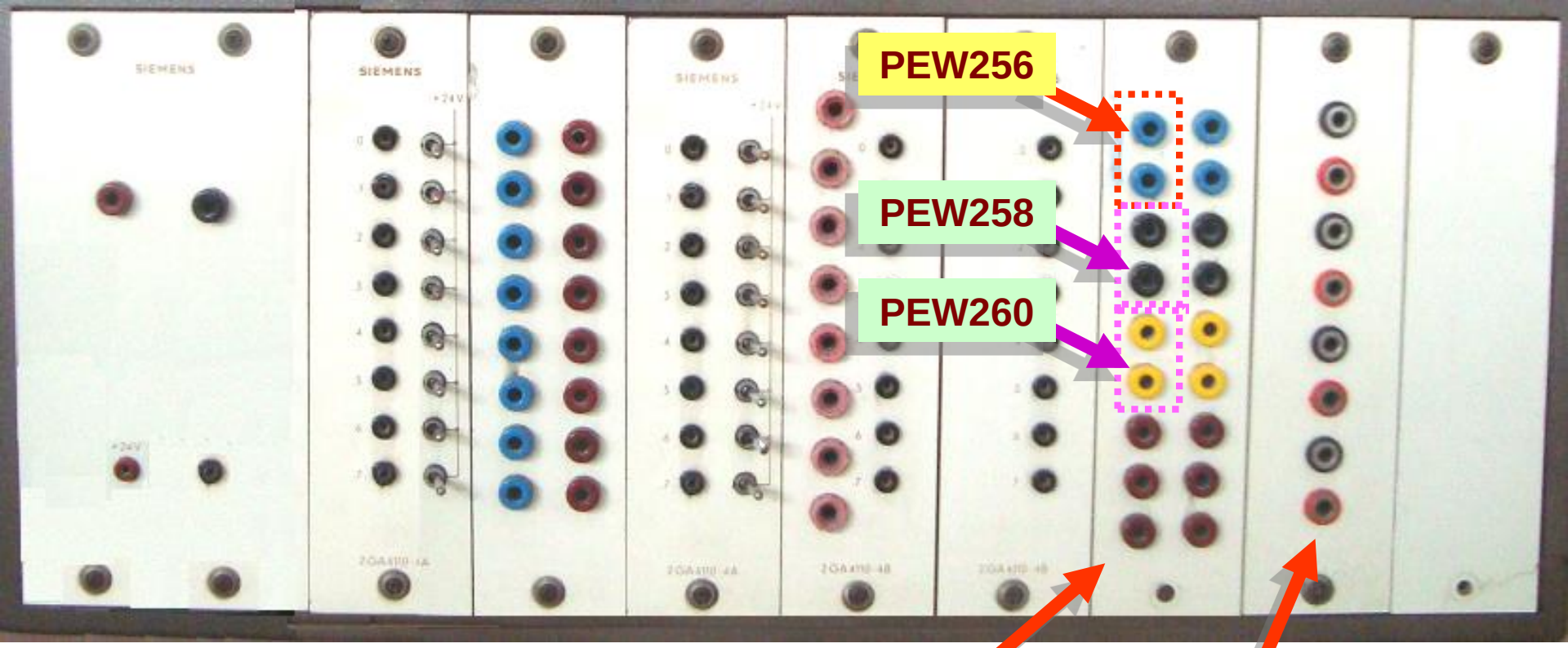
(0) UR

Slot	Módulo ...	Referencia	Fir...	Dirección M...	Dirección E	Dirección S
1	PS 307 2A	6ES7 307-1BA00-0AA0				
2	**CPU 313C-2 DP**	**6ES7 313-6CE01-0AB0**	**V2.0**	**2**		
X2	*DP*				*1023**	
2.2	*DI16/DO16*				*124...125*	*124...125*
2.4	*Count*				*768...783*	*768...783*
3						
4	AI8x13Bit	6ES7 331-1KF01-0AB0			256...271	
5	AO4x12Bit	6ES7 332-5HD01-0AB0				272...279
6						



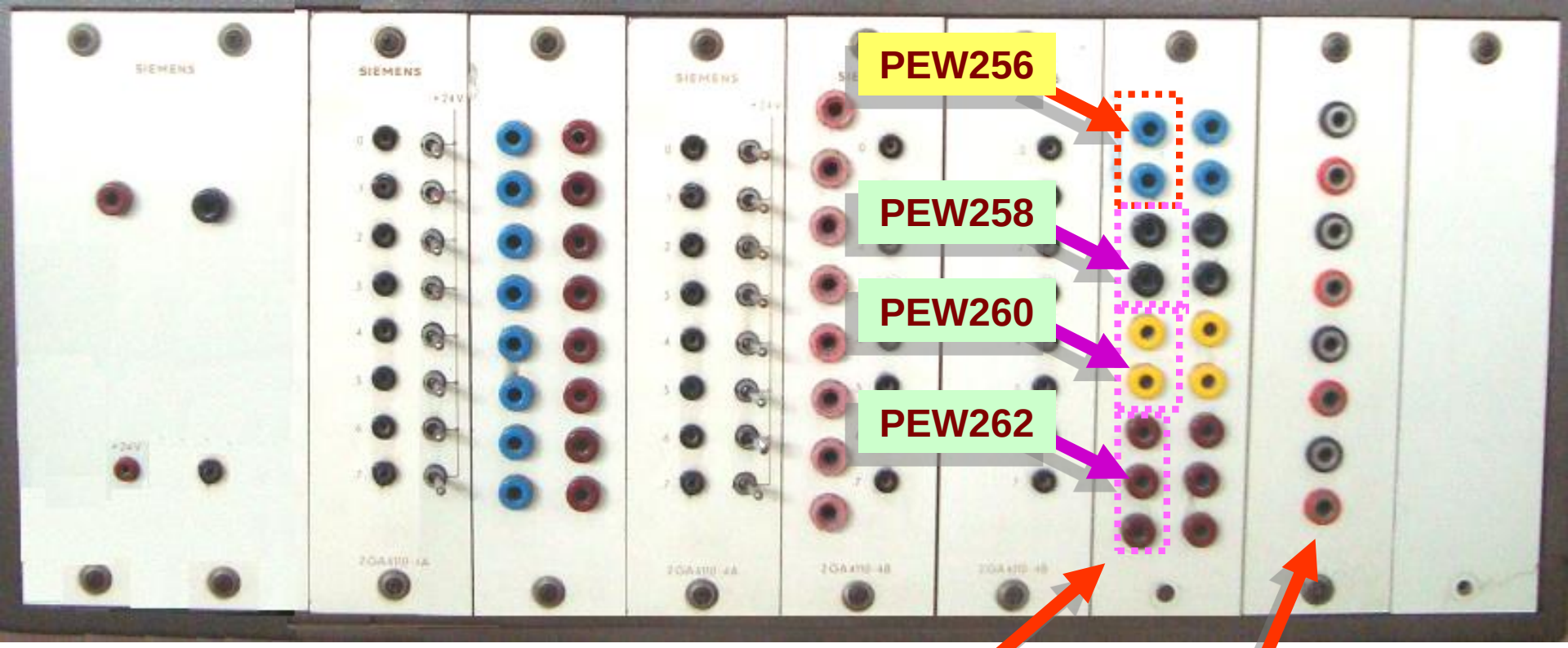
MODULO DE ENTRADAS ANALOGICAS

MODULO DE SALIDAS ANALOGICAS



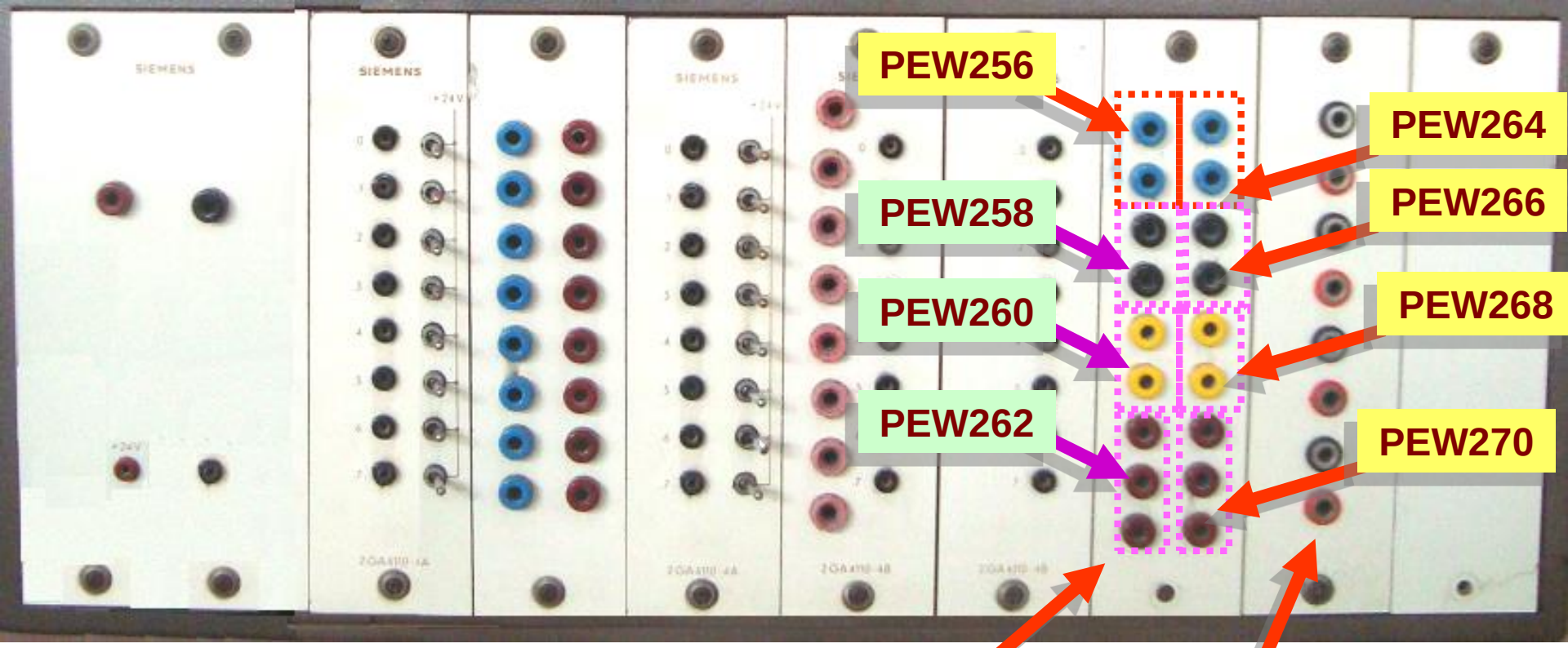
MODULO DE ENTRADAS ANALOGICAS

MODULO DE SALIDAS ANALOGICAS



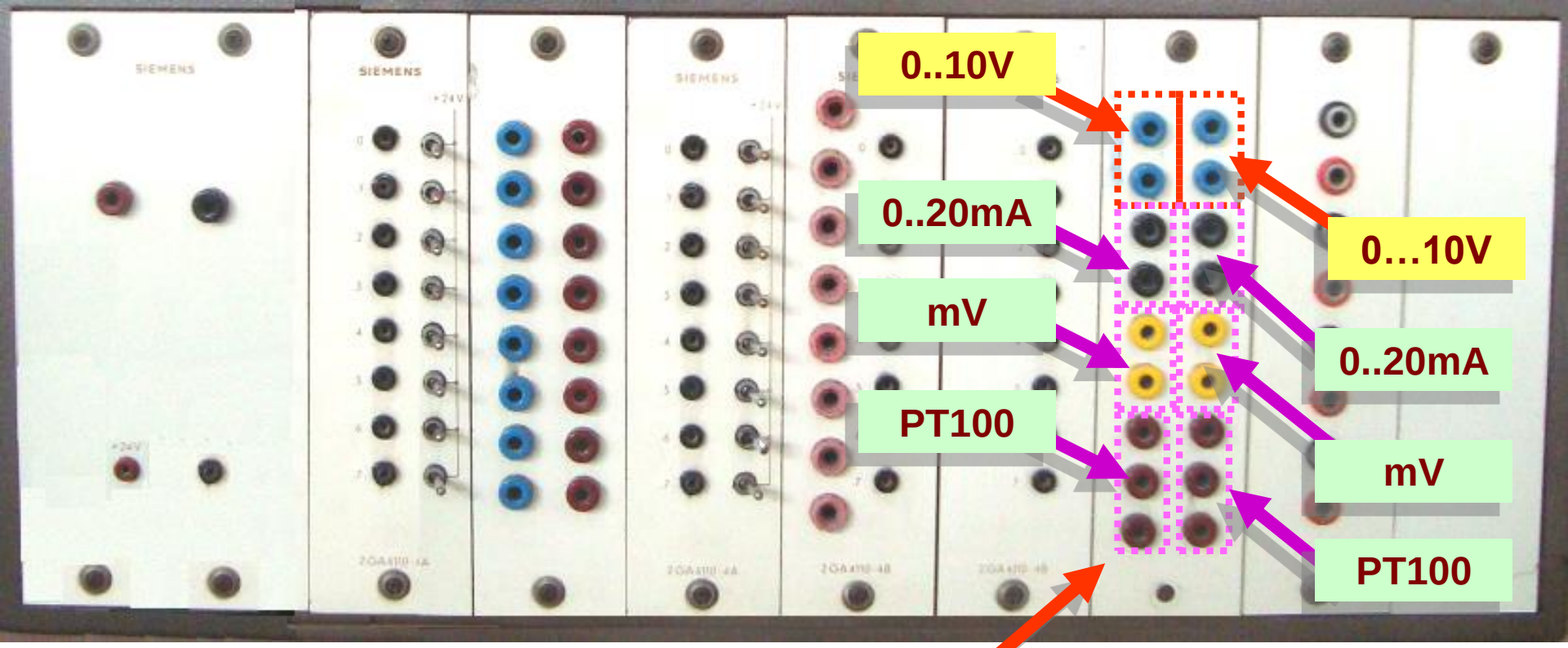
MODULO DE ENTRADAS ANALOGICAS

MODULO DE SALIDAS ANALOGICAS

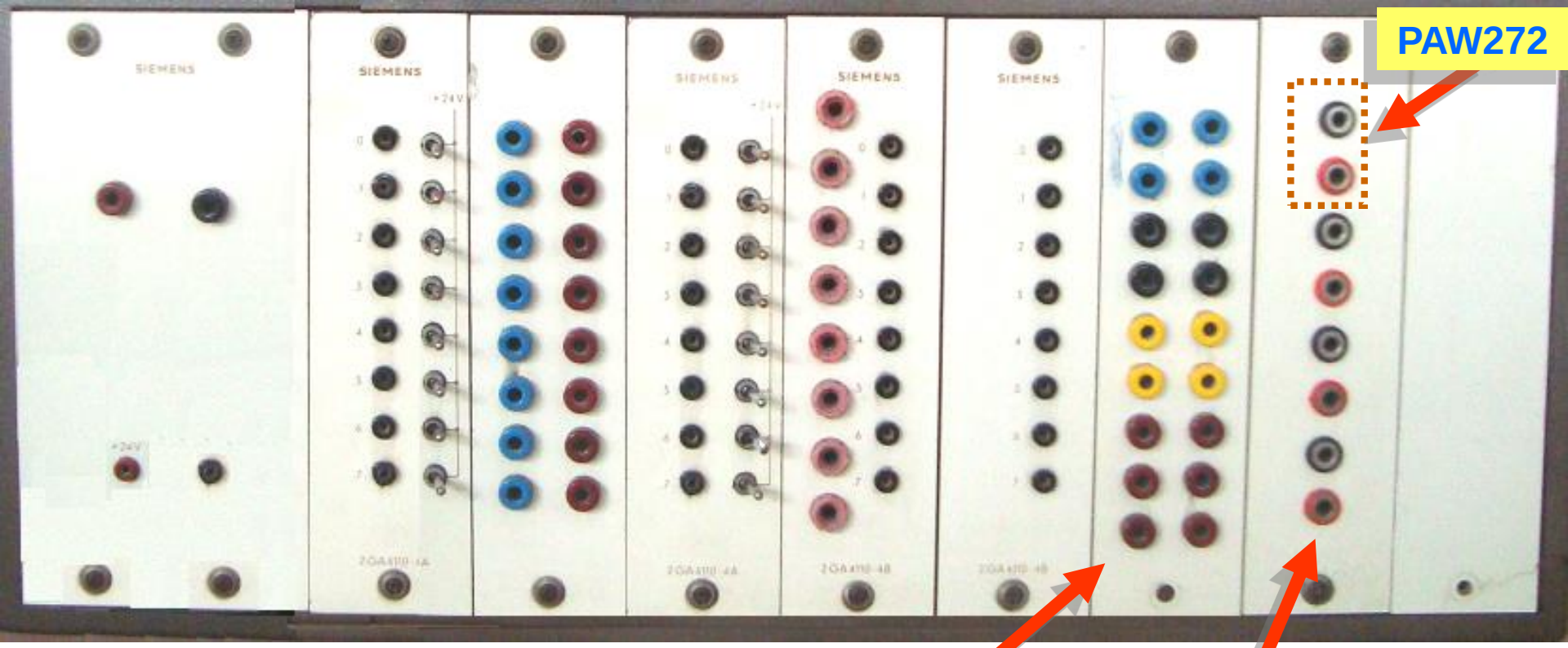


MODULO DE ENTRADAS ANALOGICAS

MODULO DE SALIDAS ANALOGICAS

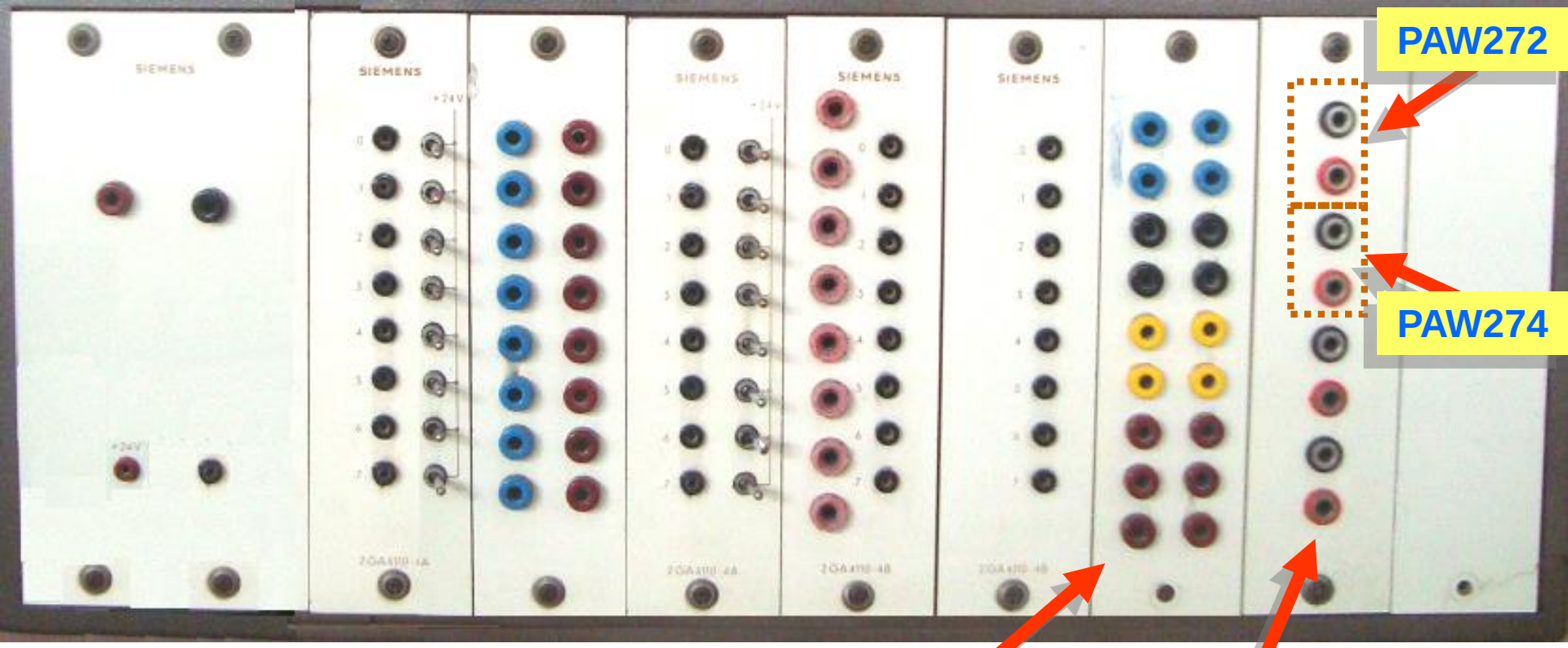


MODULO DE ENTRADAS ANALOGICAS



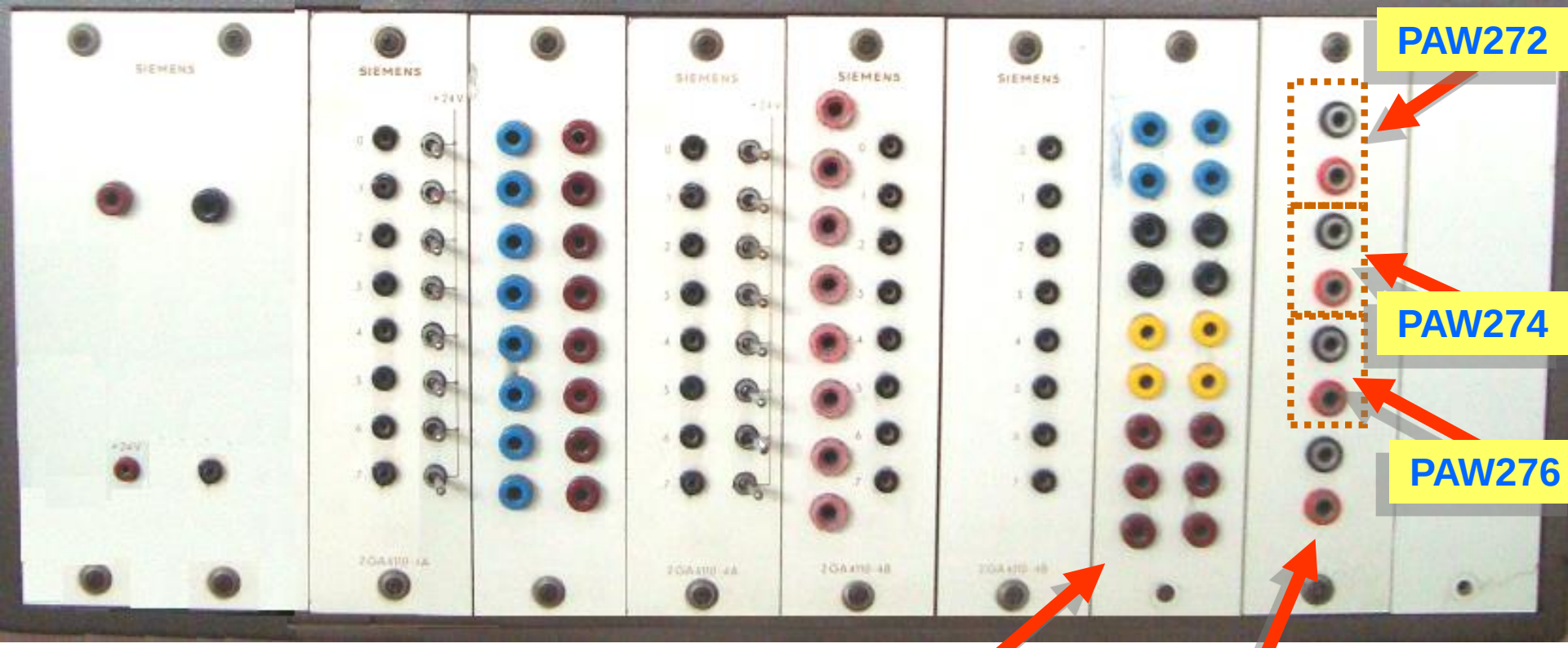
MODULO DE ENTRADAS ANALOGICAS

MODULO DE SALIDAS ANALOGICAS



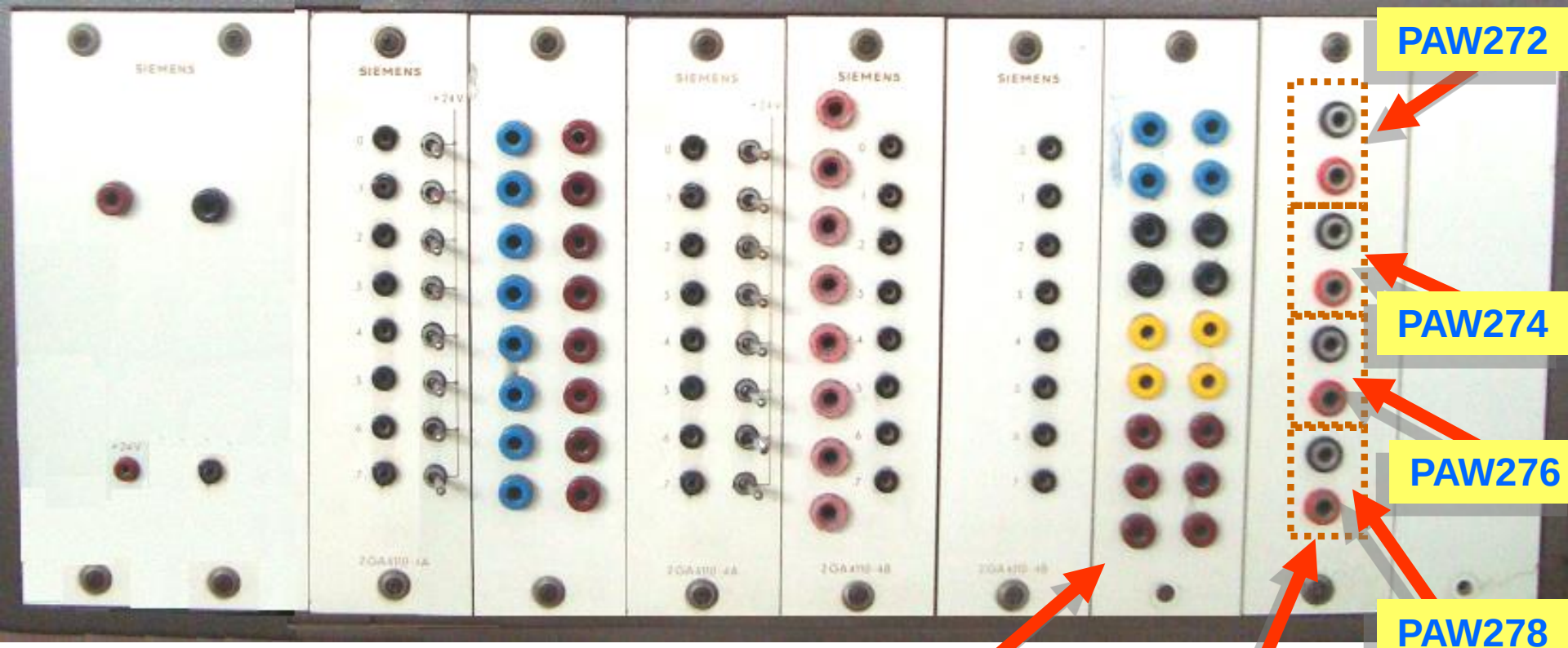
MODULO DE ENTRADAS ANALOGICAS

MODULO DE SALIDAS ANALOGICAS



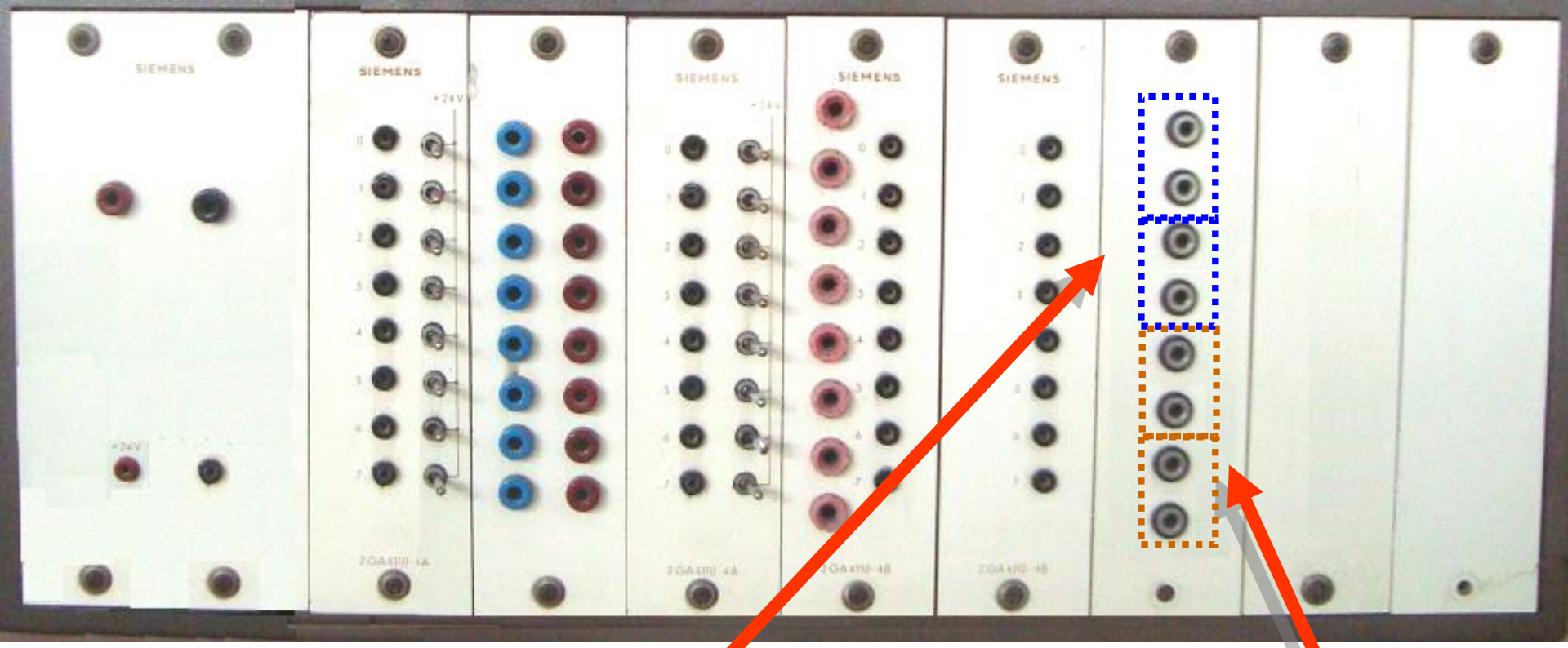
MODULO DE ENTRADAS ANALOGICAS

MODULO DE SALIDAS ANALOGICAS



MODULO DE ENTRADAS ANALOGICAS

MODULO DE SALIDAS ANALOGICAS



MODULO DE ENTRADAS ANALOGICAS

MODULO DE SALIDAS ANALOGICAS

HW Config - [SIMATIC 300(1) (Configuración) -- clase_HMI]

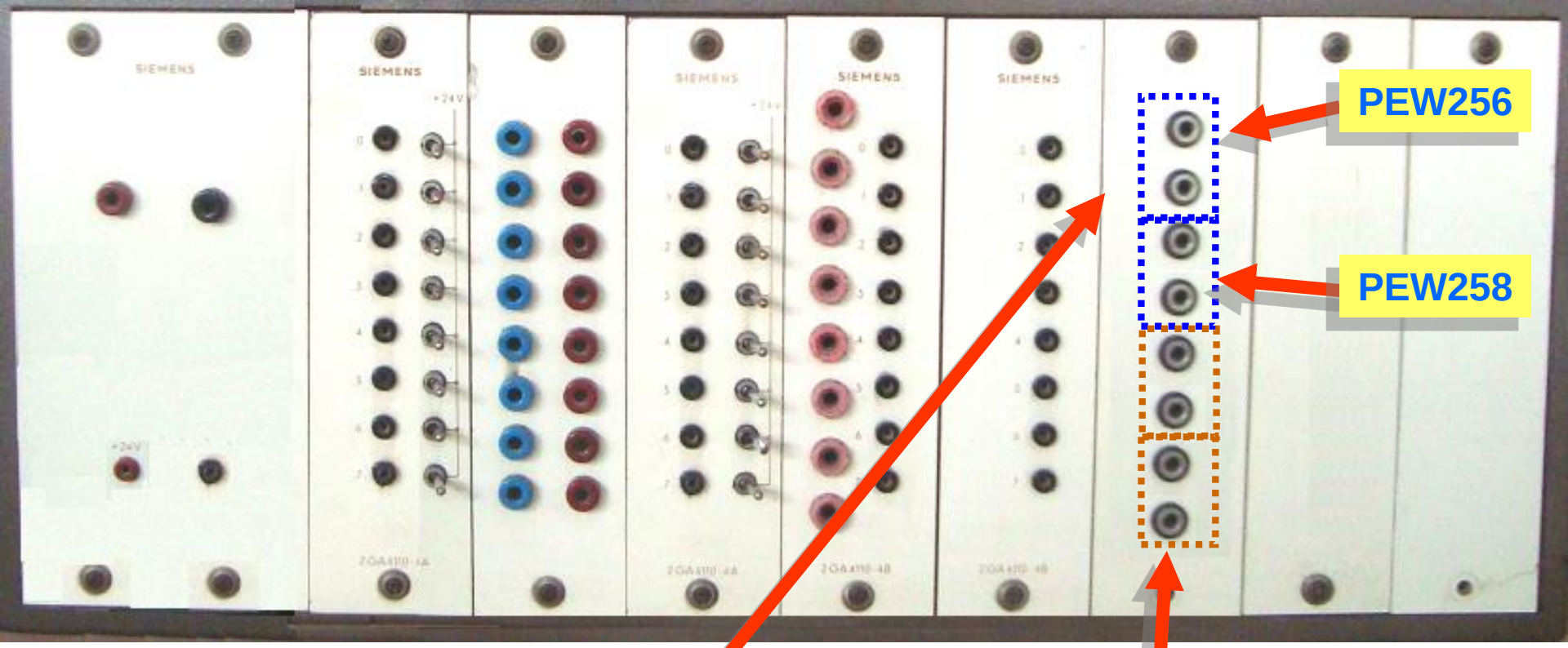
Equipo Edición Insertar Sistema de destino Ver Herramientas Ventana Ayuda

(0) UR

1	PS 307 2A
2	CPU 313C-2 DP
X2	DP
2.2	DI16/DO16
2.4	Count
3	
4	AI4/AO2x8/8Bit
5	

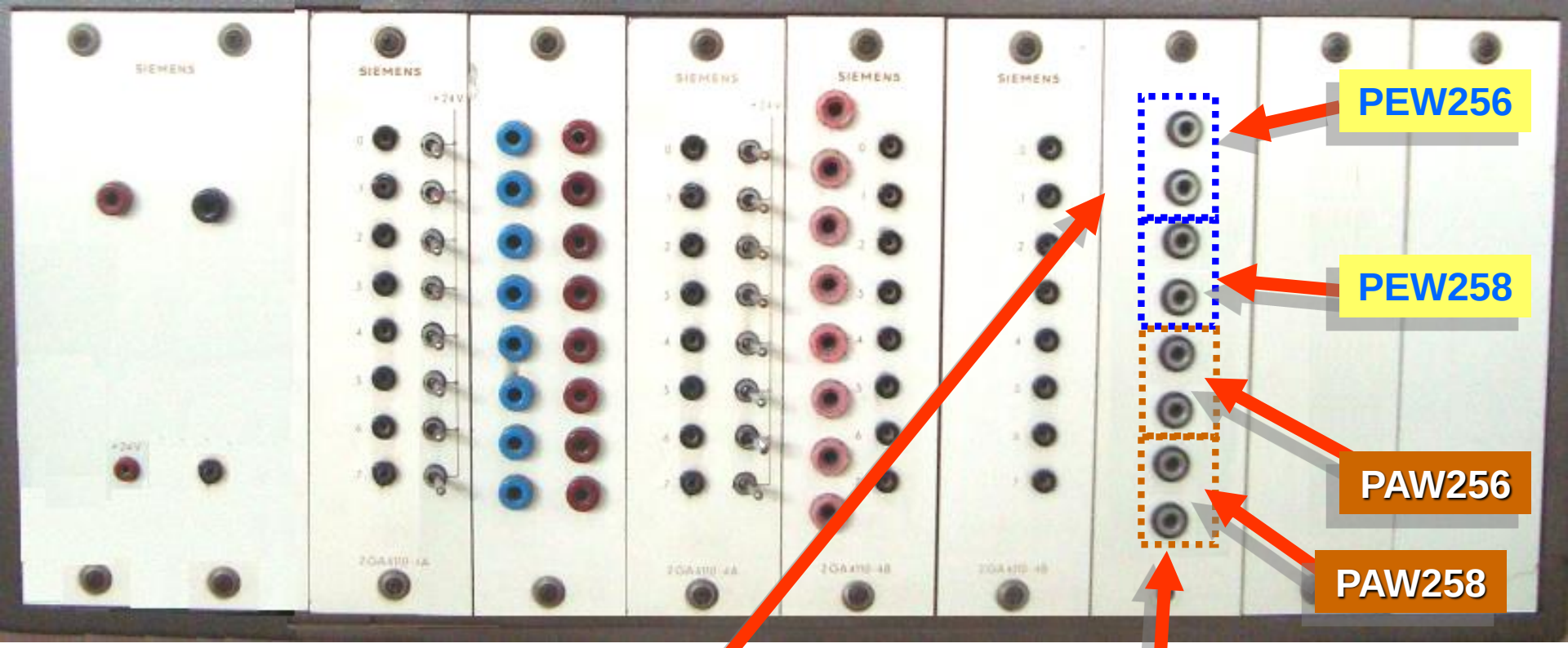
(0) UR

Slot	Módulo ...	Referencia	Fir...	Dirección M...	Dirección E	Dirección S
1	PS 307 2A	6ES7 307-1BA00-0AA0				
2	CPU 313C-2 DP	6ES7 313-6CE01-0AB0	V2.0	2		
X2	DP				1023*	
2.2	DI16/DO16				124...125	124...125
2.4	Count				768...783	768...783
3						
4	AI4/AO2x8/8Bit	6ES7 334-0CE01-0AA0			256...263	256...259
5						



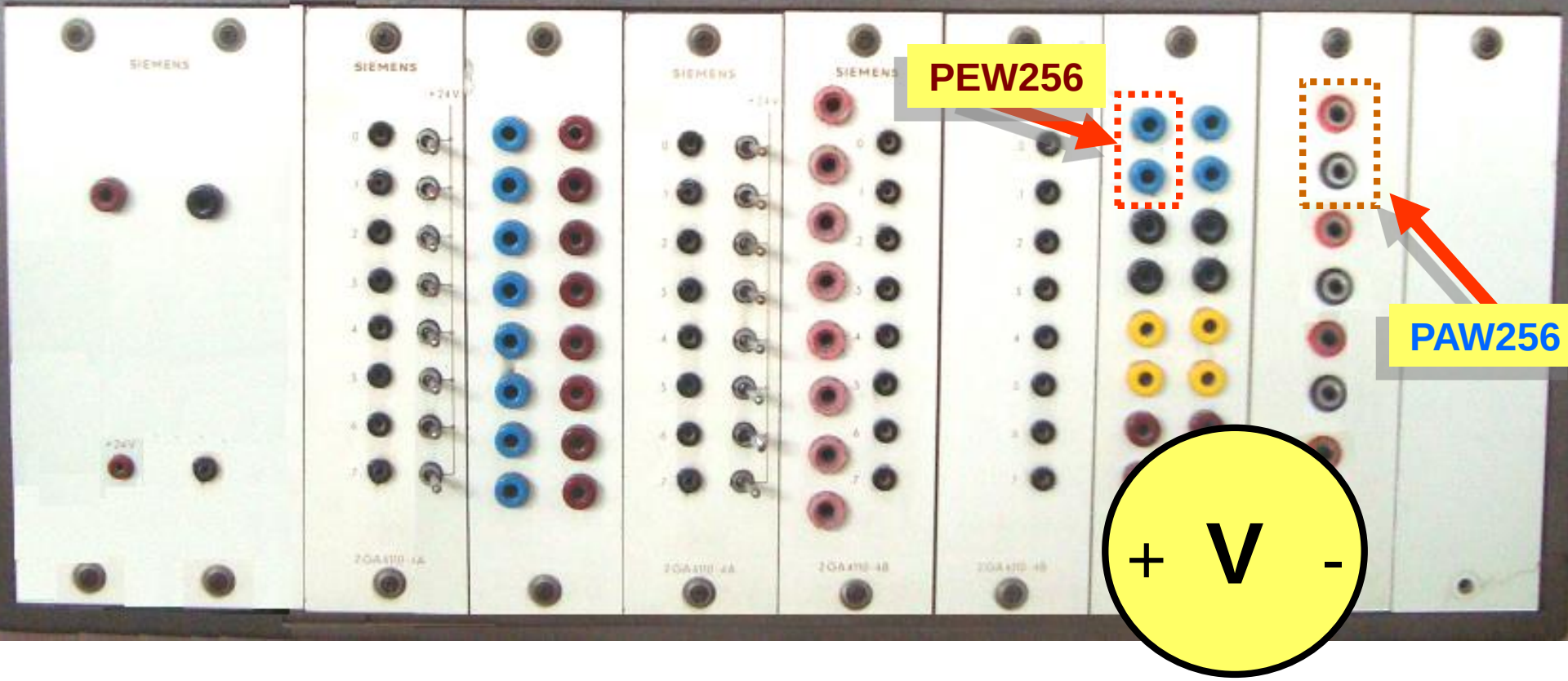
MODULO DE ENTRADAS ANALOGICAS

MODULO DE SALIDAS ANALOGICAS



MODULO DE ENTRADAS ANALOGICAS

MODULO DE SALIDAS ANALOGICAS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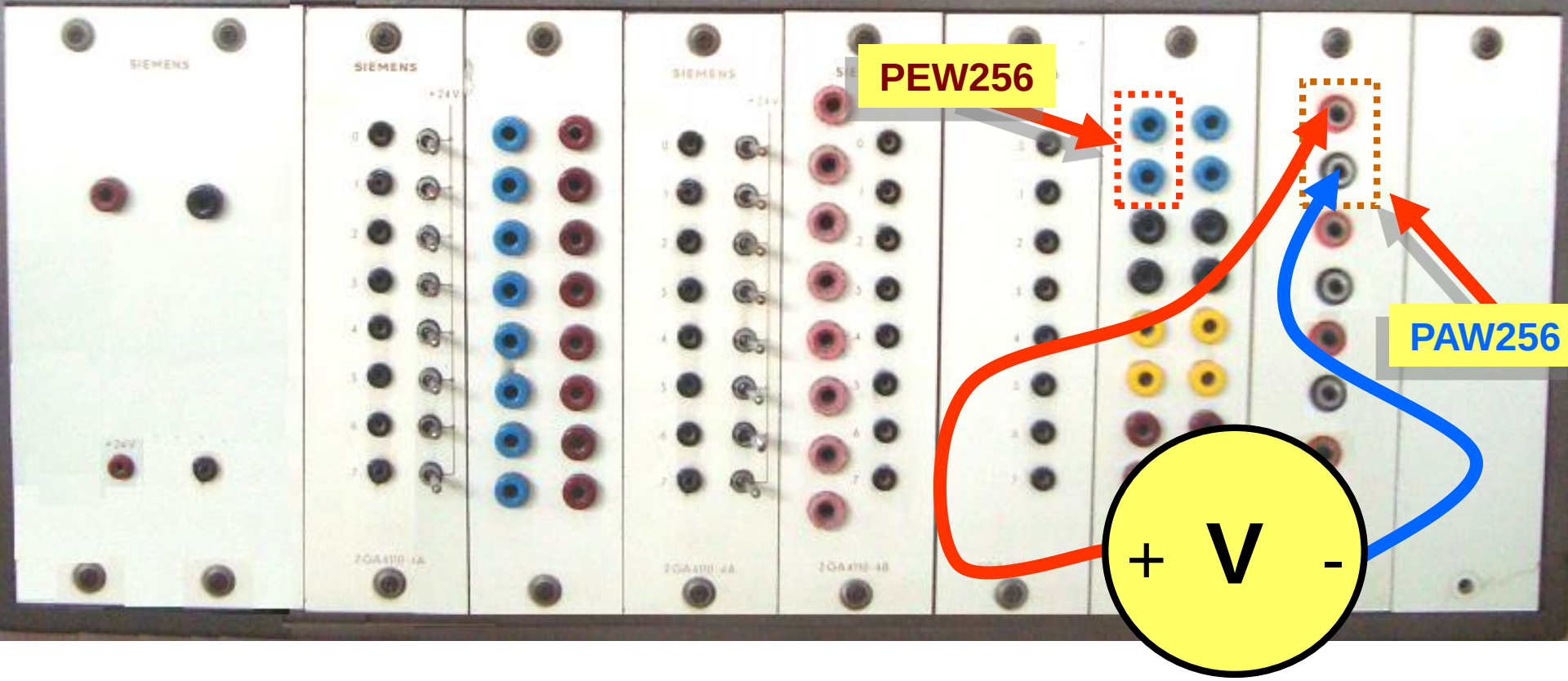
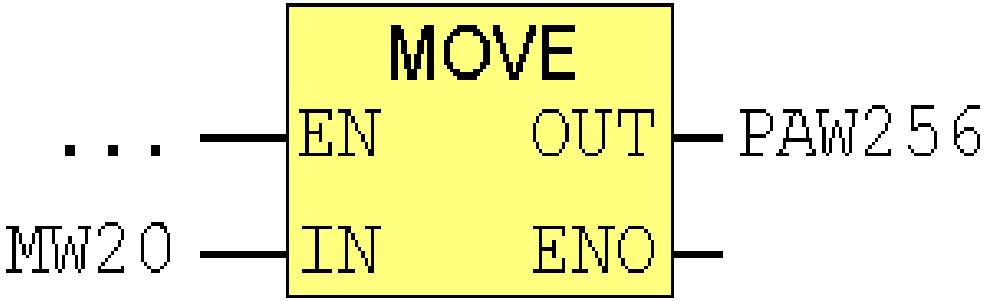
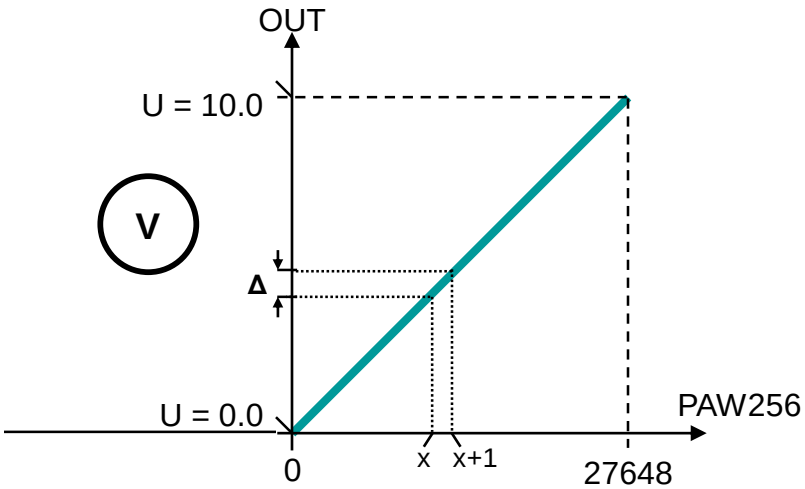
PAW256
+ V -


PEW256
PAW256
+ V -


MOVE
...
EN
OUT
PAW256
MW20
IN
ENO


OUT
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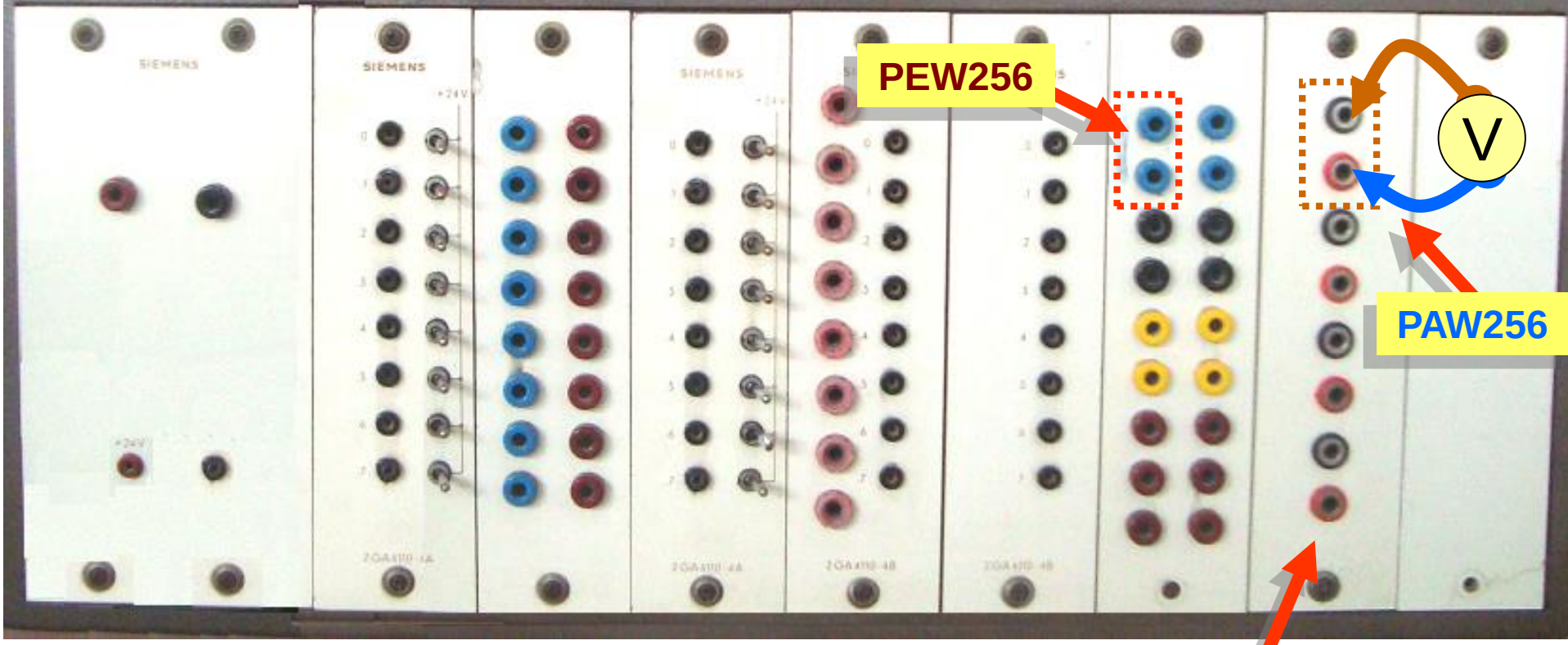
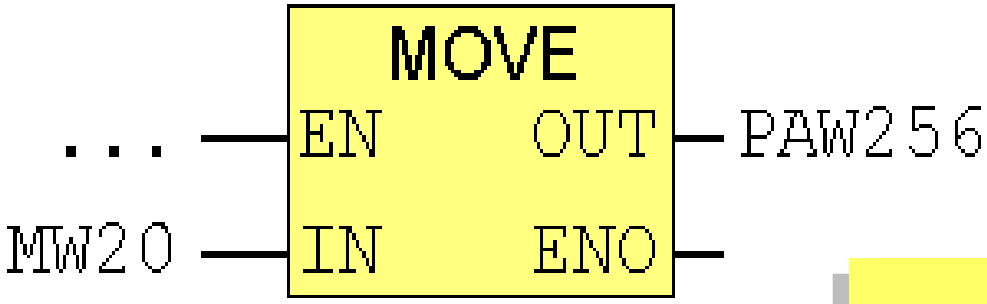
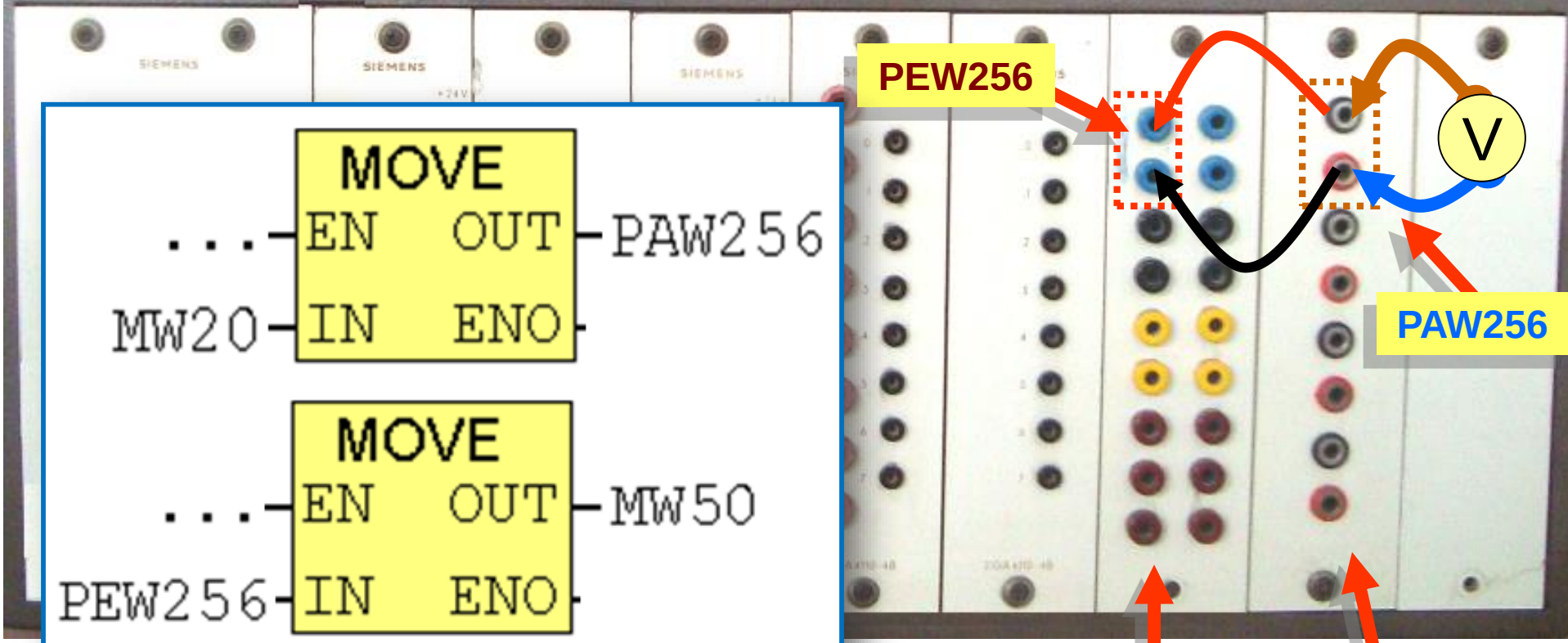
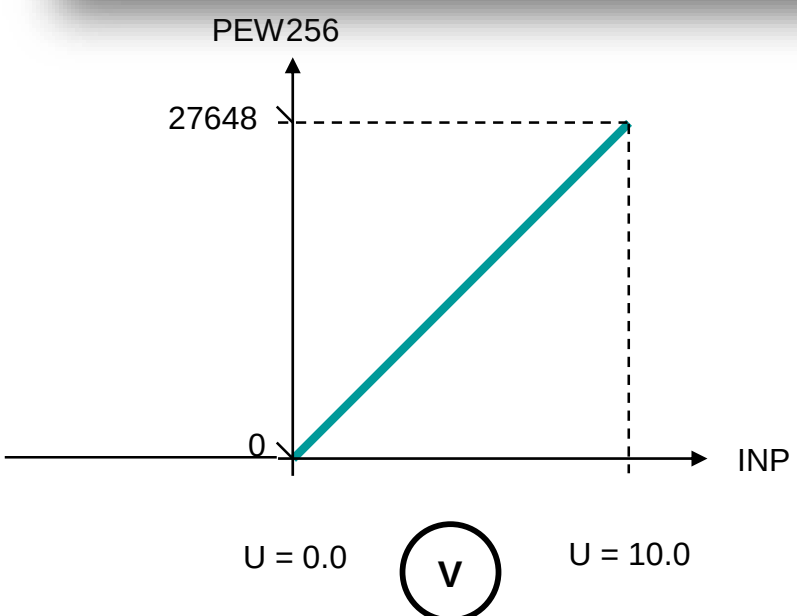
V
Δ
U = 0.0
PAW256
0
x
x+1
27648





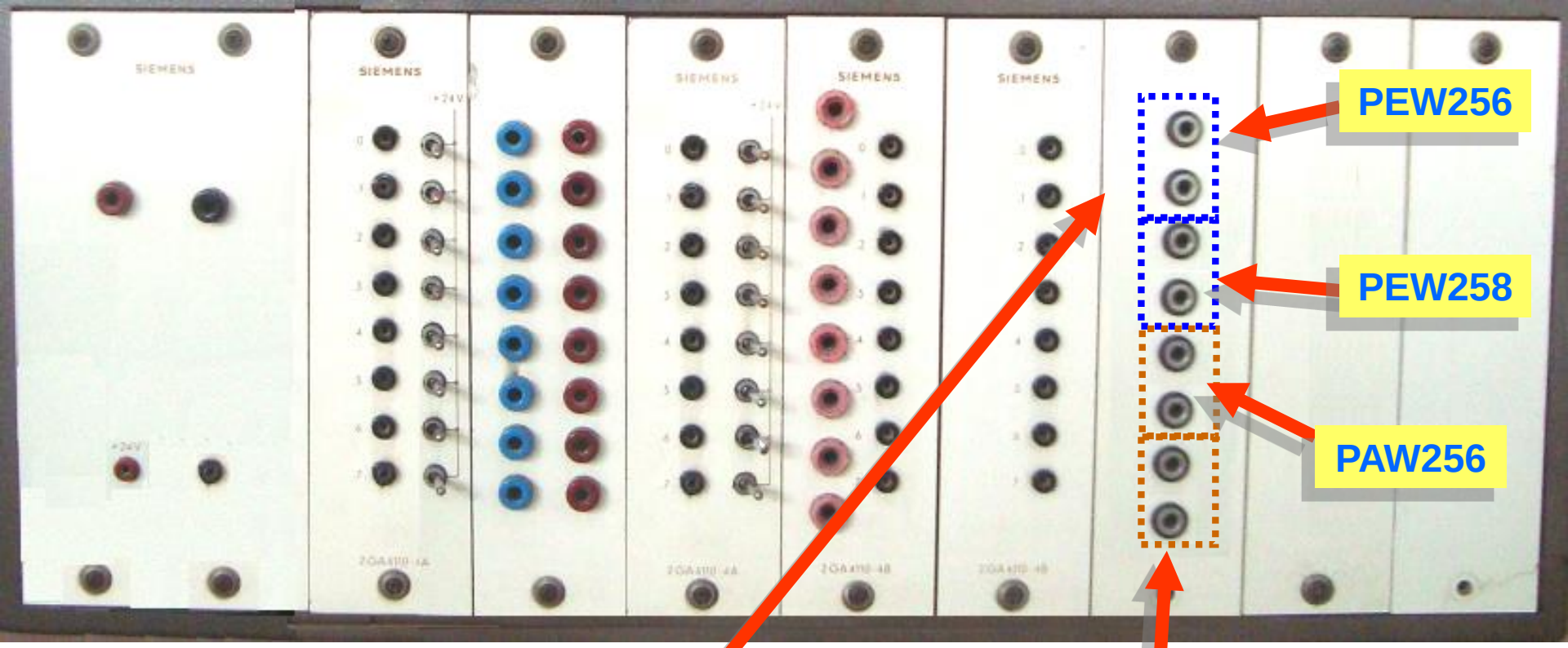
MODULO DE SALIDAS ANALOGICAS





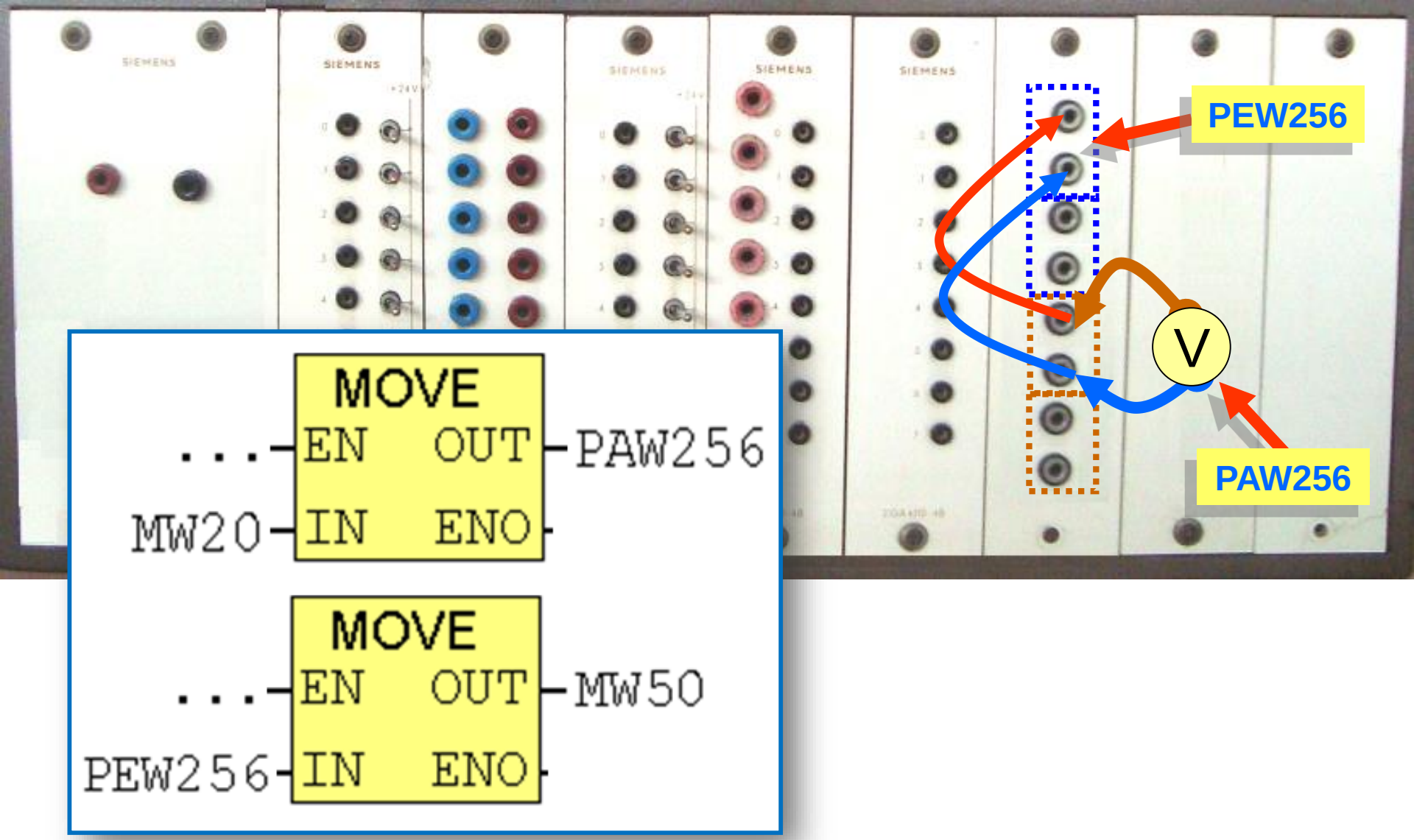
MODULO DE ENTRADAS ANALOGICAS

MODULO DE SALIDAS ANALOGICAS



MODULO DE ENTRADAS ANALOGICAS

MODULO DE SALIDAS ANALOGICAS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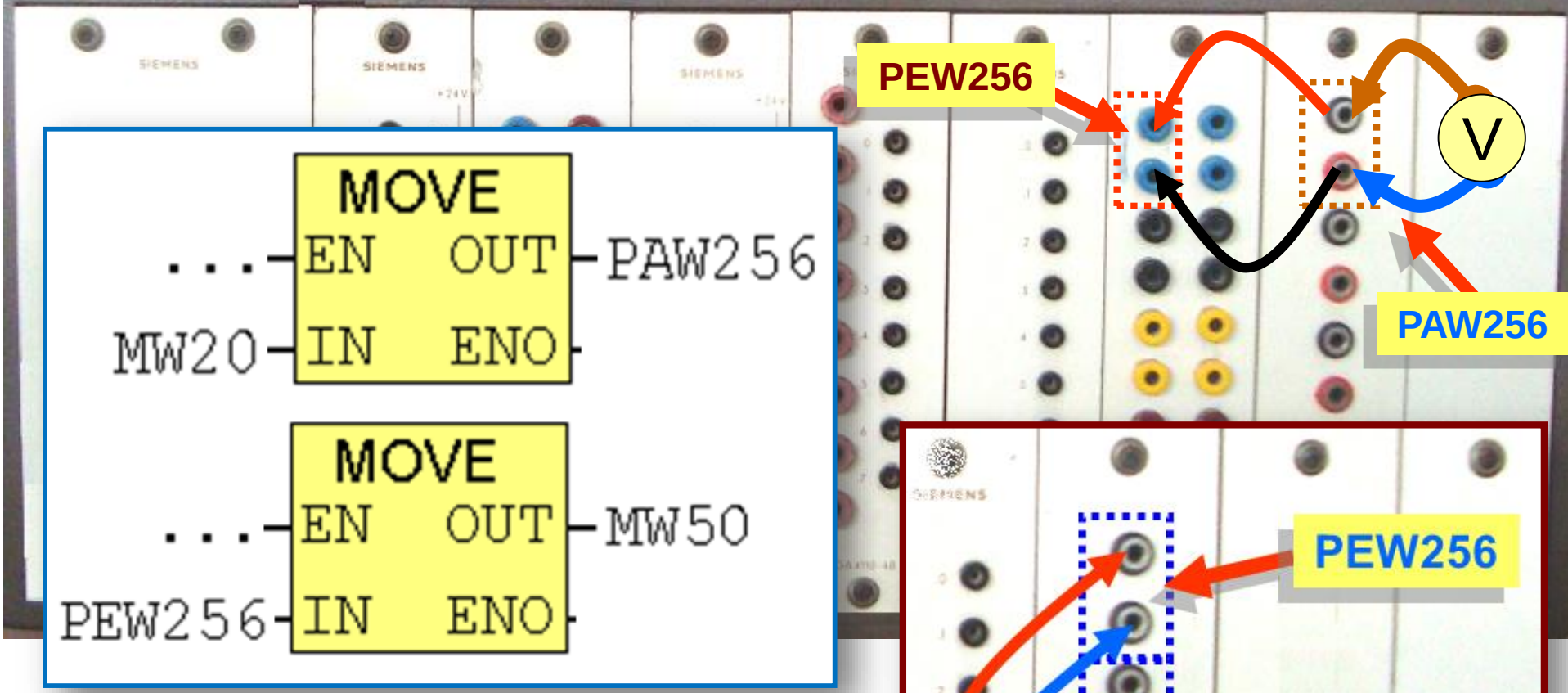
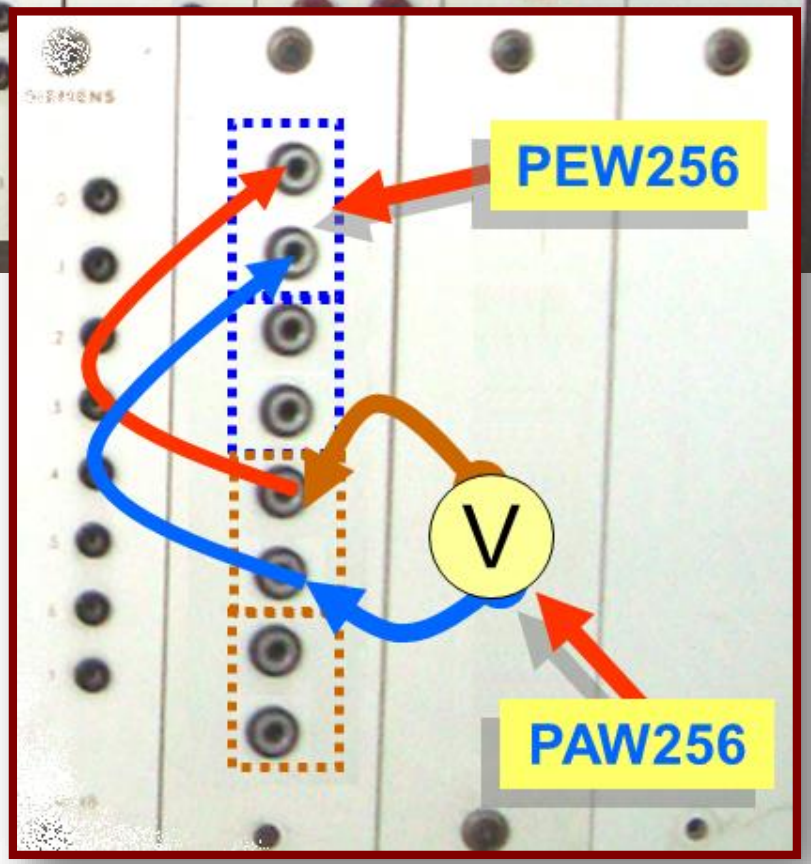
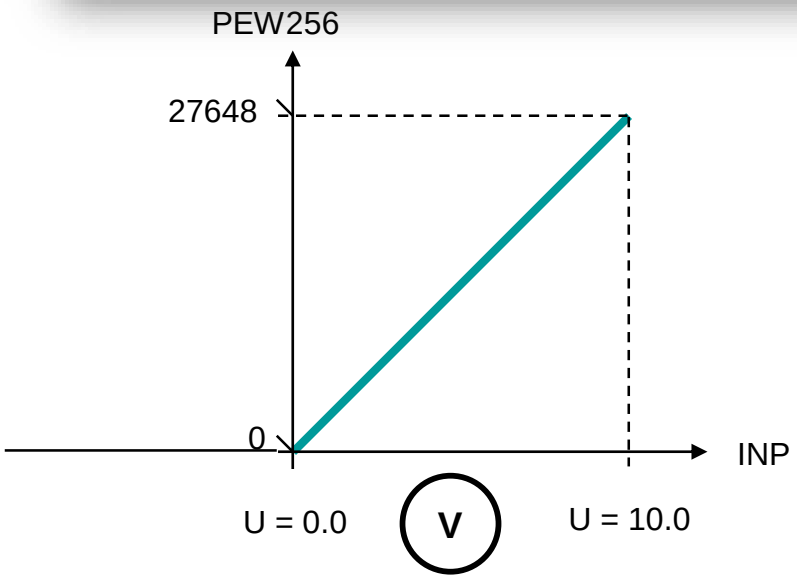
V
PAW256
MOVE
...
EN
OUT
PAW256
MW20
IN
ENO
MOVE
...
EN
OUT
MW50
PEW256
IN
ENO


PEW256
V
PAW256
MOVE
...
EN
OUT
PAW256
MW20
IN
ENO
MOVE
...
EN
OUT
MW50
PEW256
IN
ENO


PEW256
V
PAW256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27648
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INP
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V
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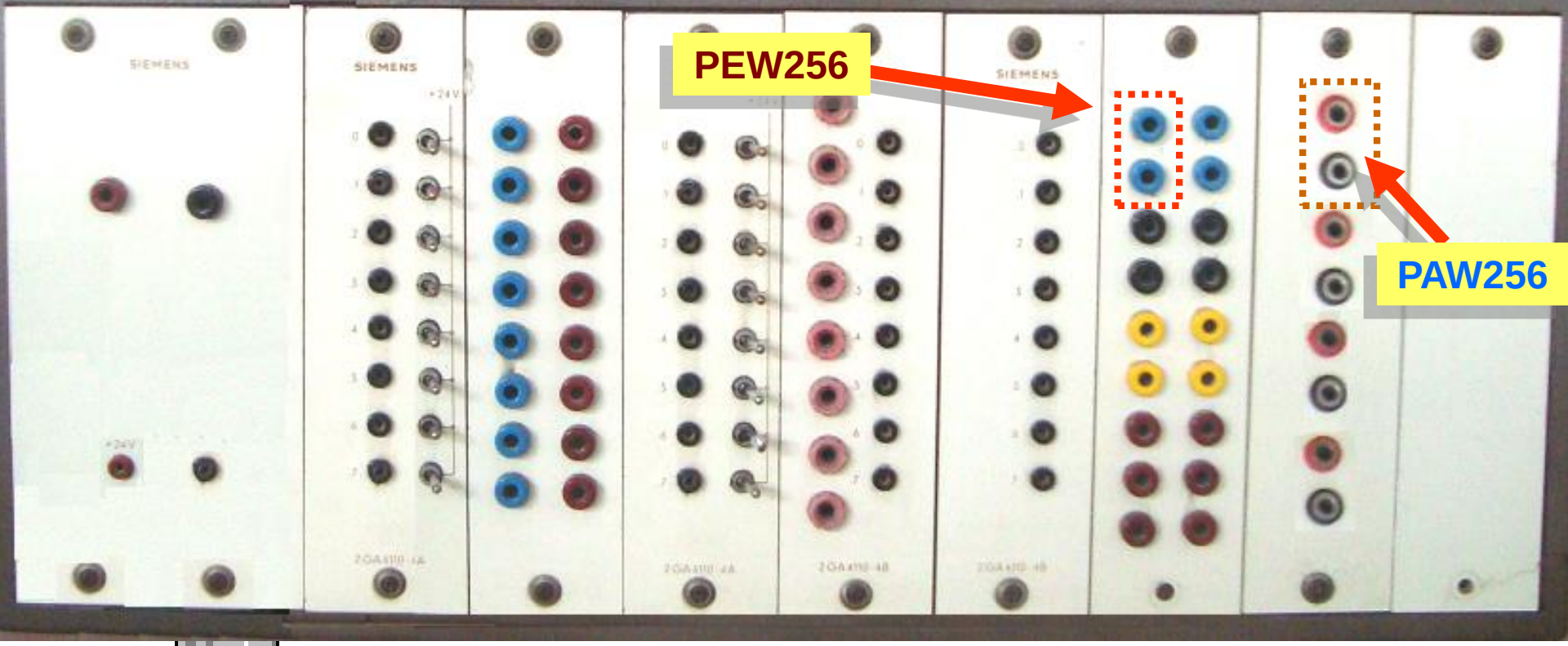
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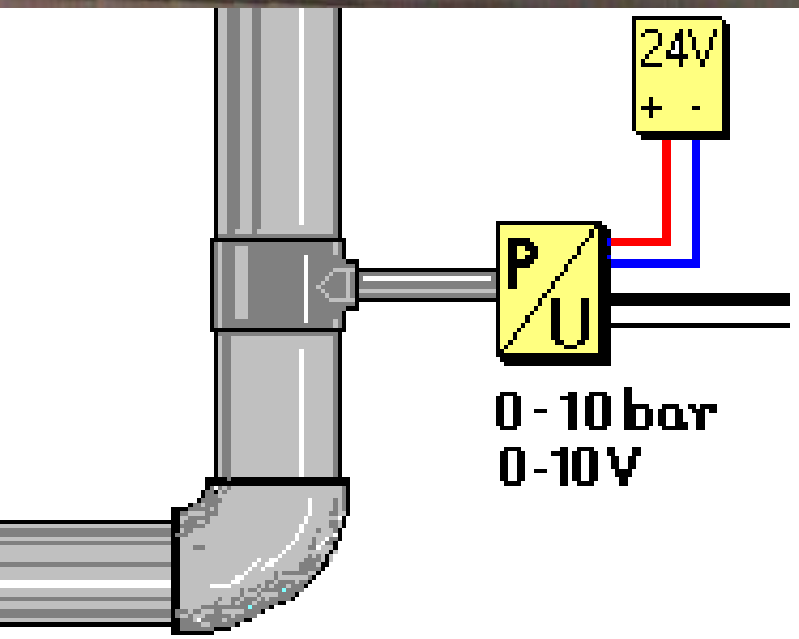
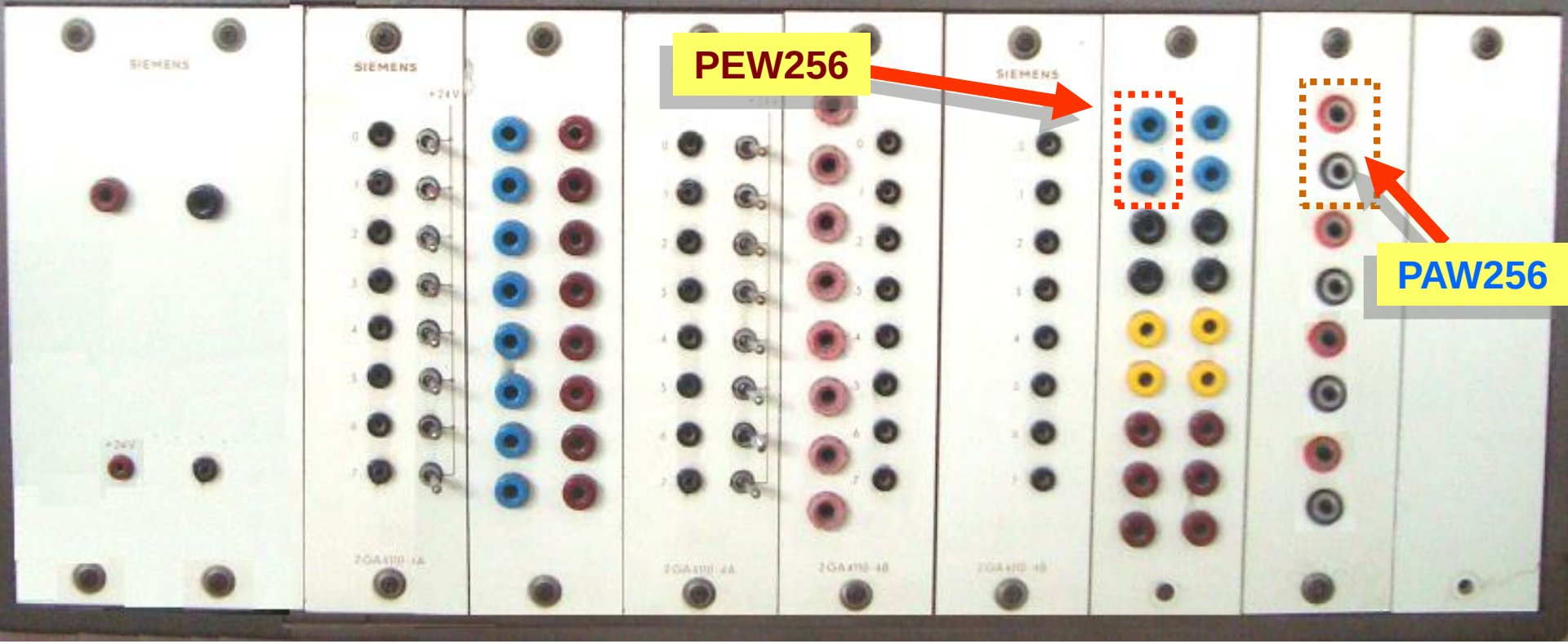

24V
+ -
P
U
0 - 10 bar
0-10 V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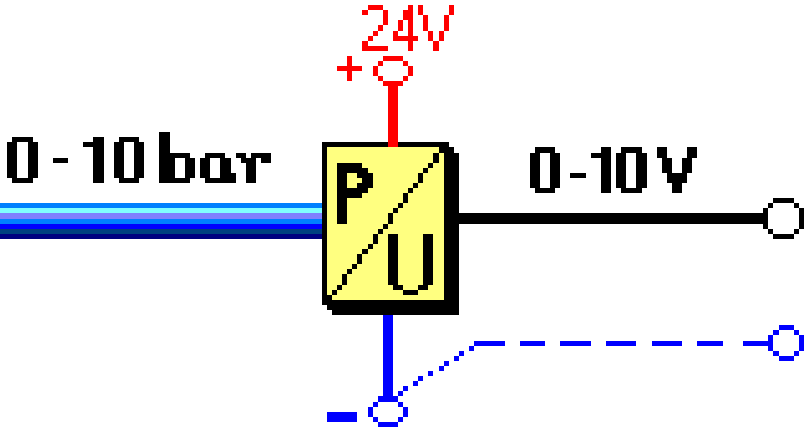
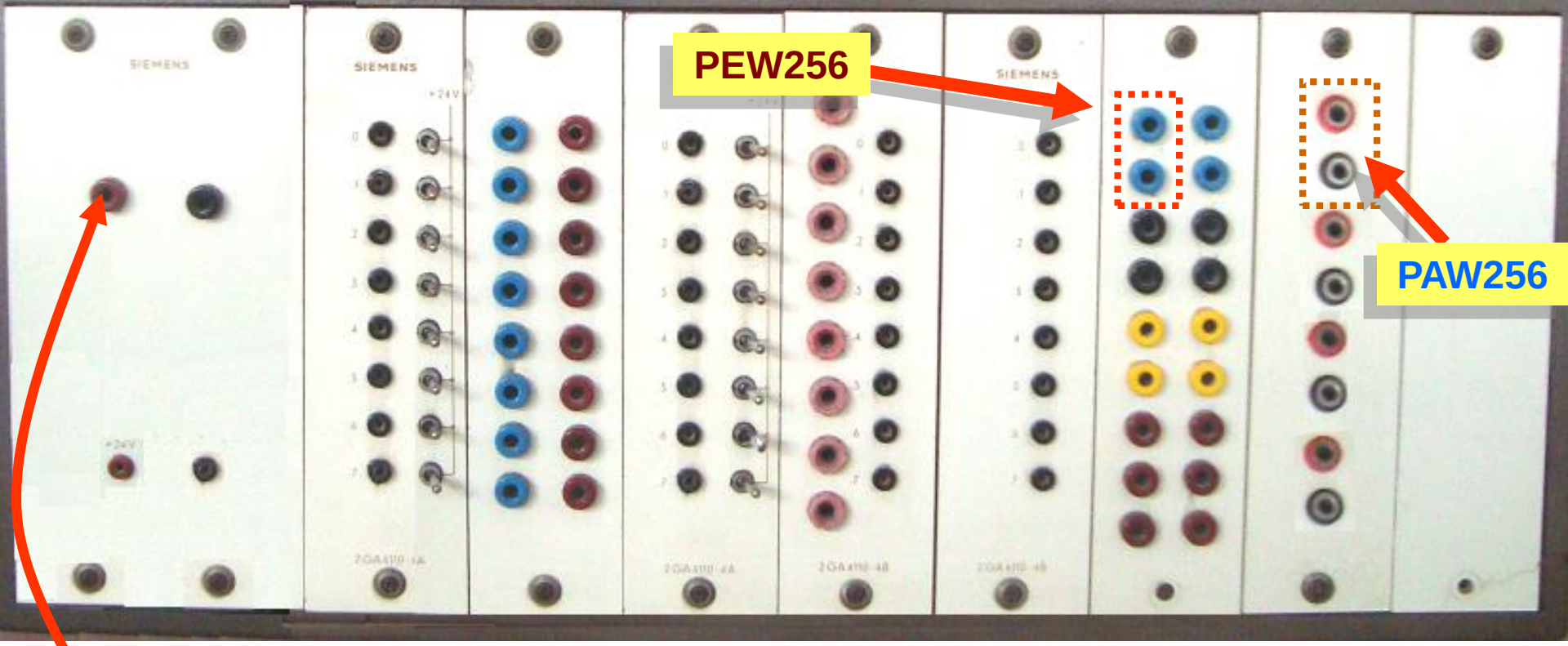

24V
+
0 - 10 bar
P
U
0-10V
-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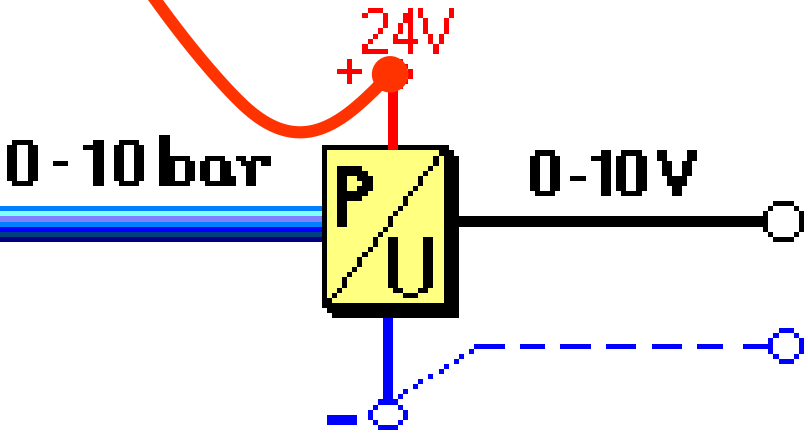
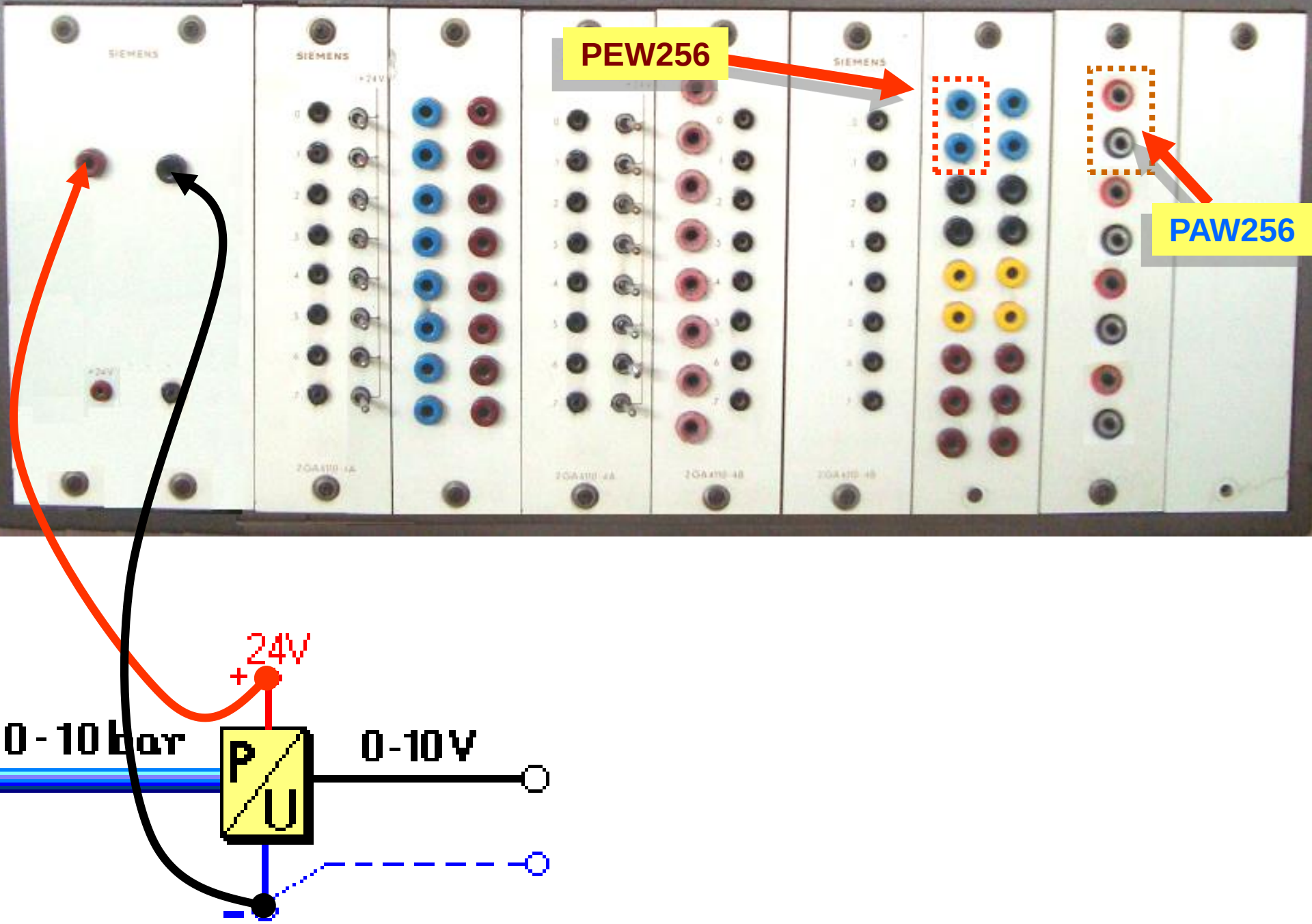
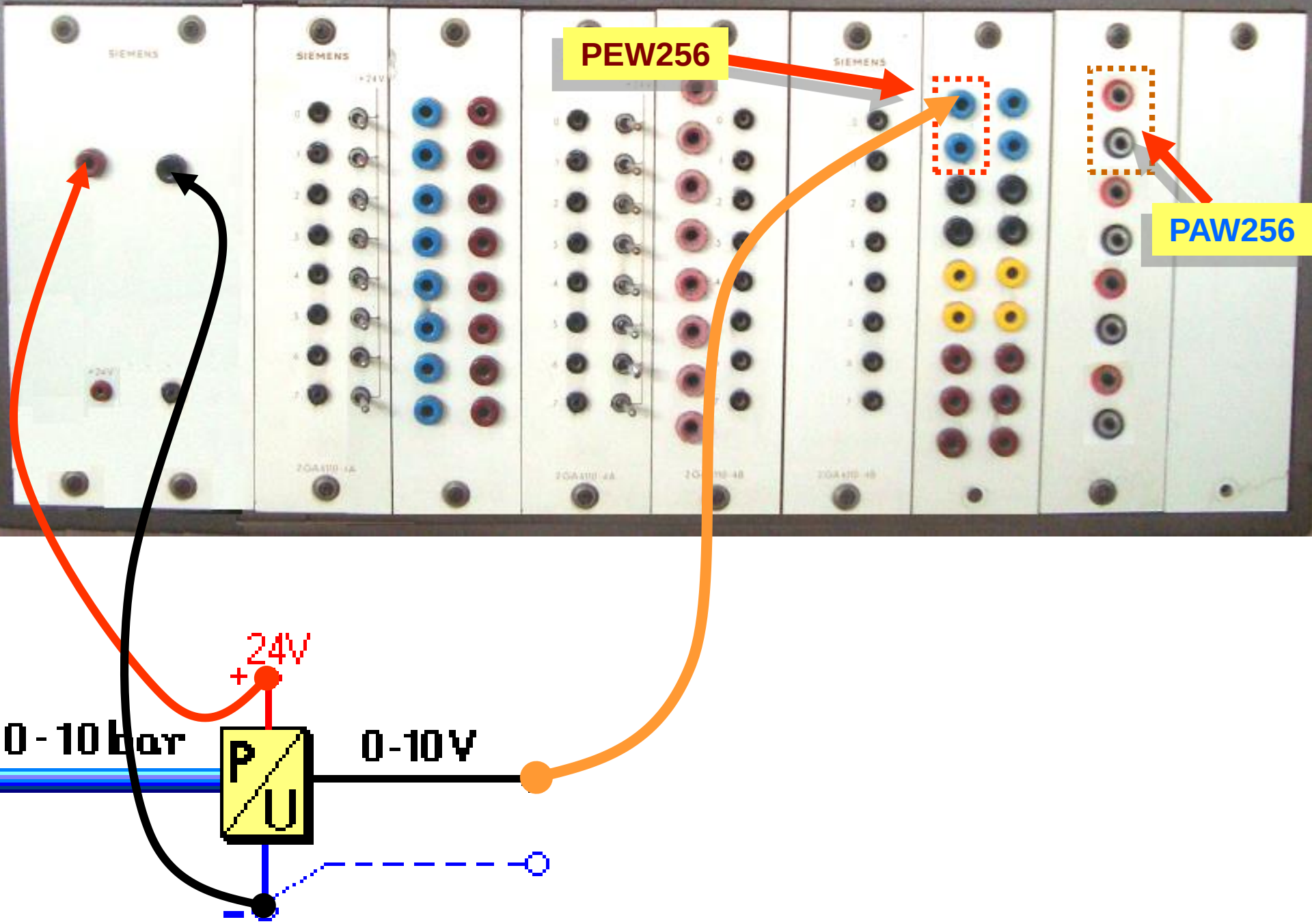
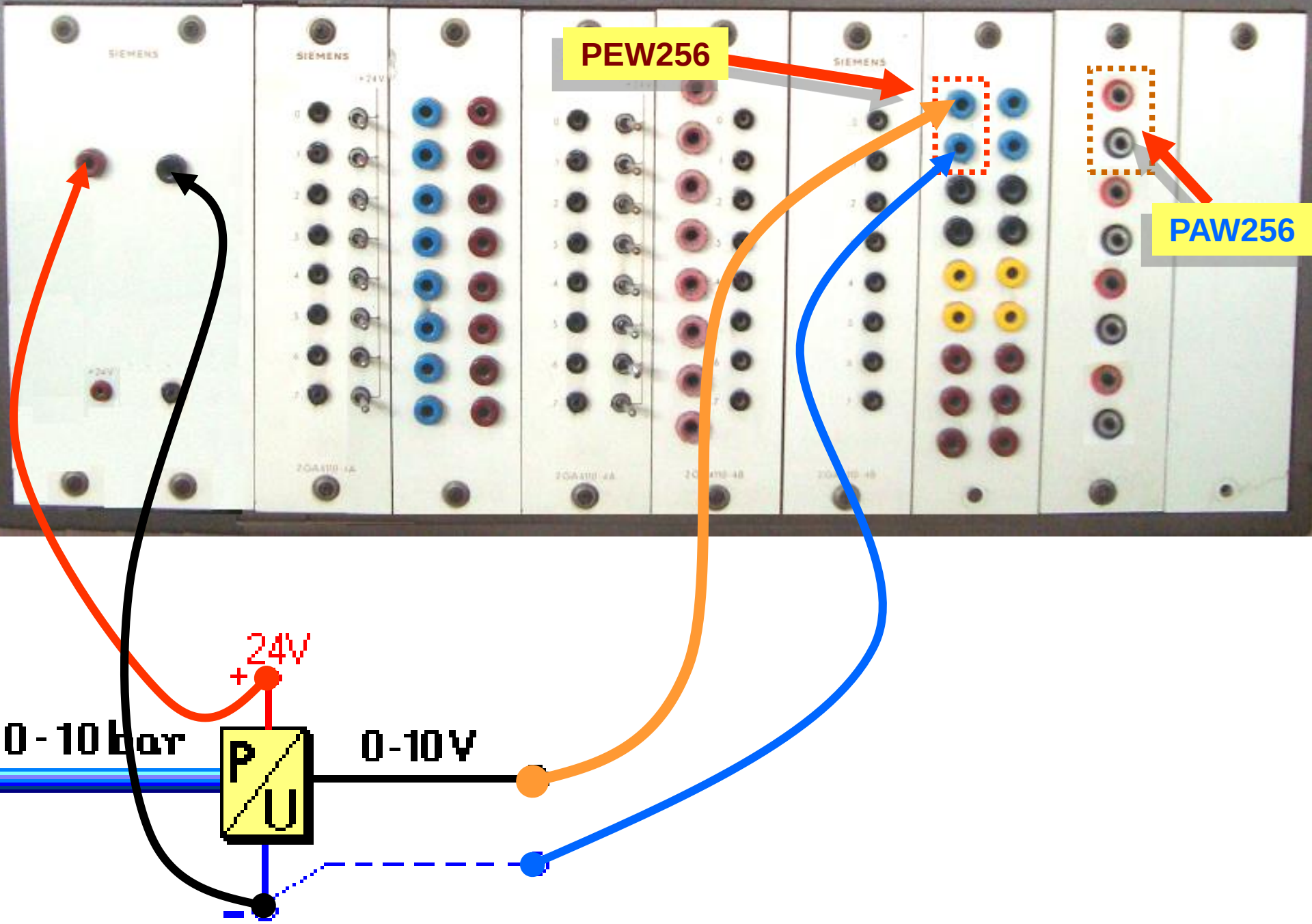
SIEMENS


24V
+
0 - 10 bar
P
U
0-10V
-


PEW256
PAW256
SIEMENS
24V
+
0 - 10 bar
P
U
0-10V
-


PEW256
PAW256
24V
+
0 - 10 bar
P
U
0-10V
-


PEW256
PAW256
24V
+
0 - 10 bar
P
U
0-10V
-

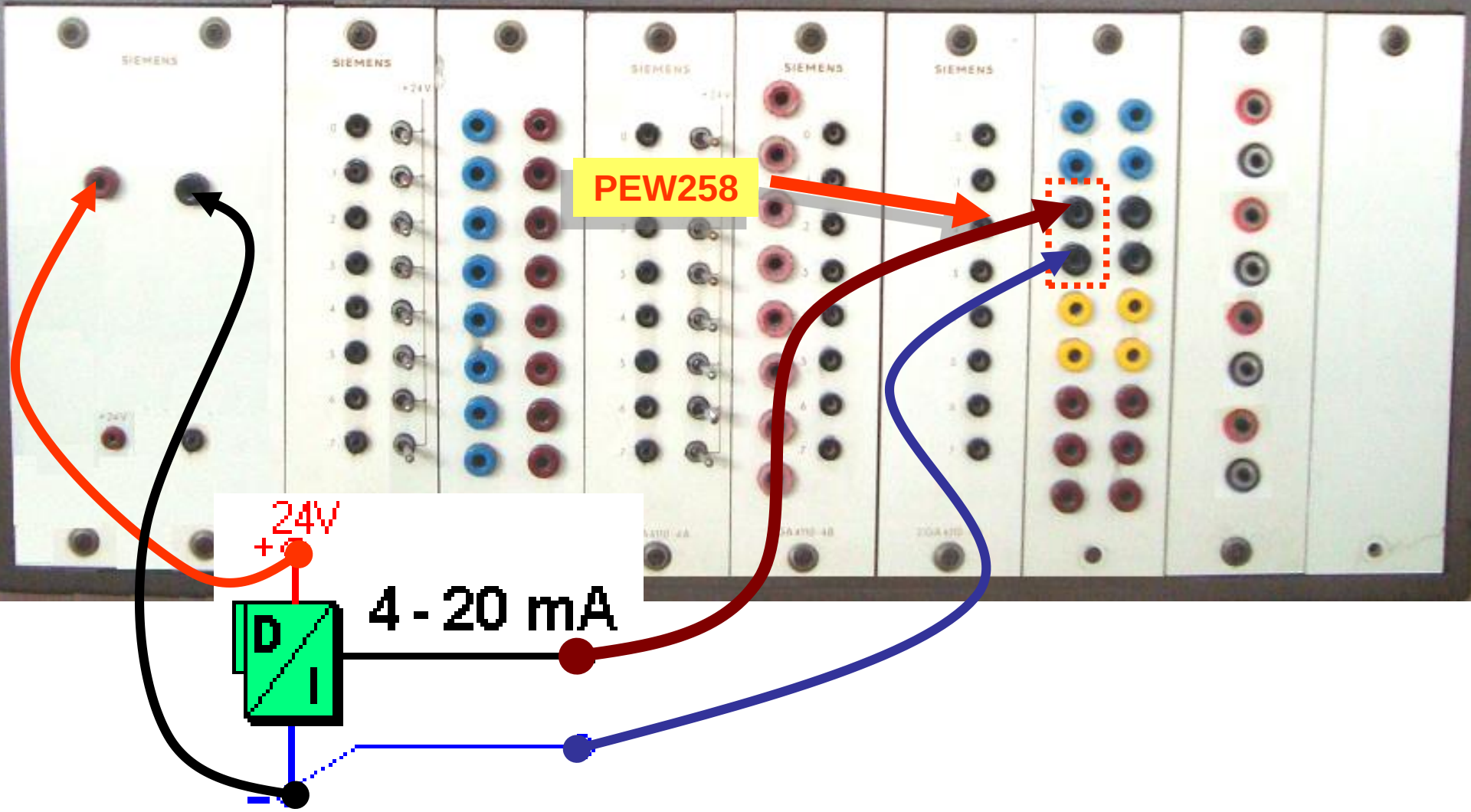

PEW258
24V
+
4 - 20 mA
D
I
-

DIAGRAMA DE CONEXIONES DEL CONTROLADOR LÓGICO PROGRAMABLEÆJEMPLO

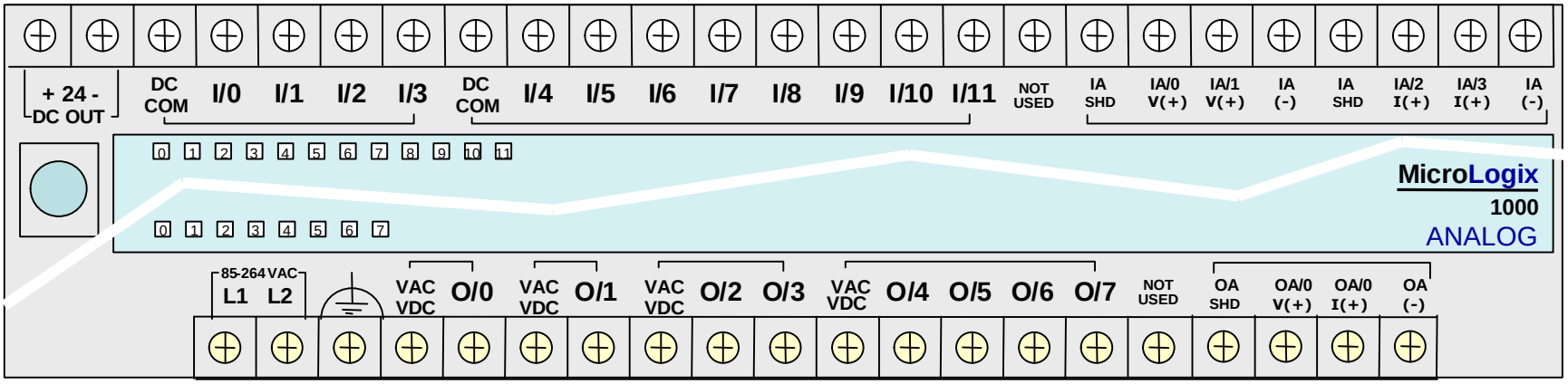


DIAGRAMA DE CONEXIONES DEL CONTROLADOR LÓGICO PROGRAMABLEÆJEMPLO

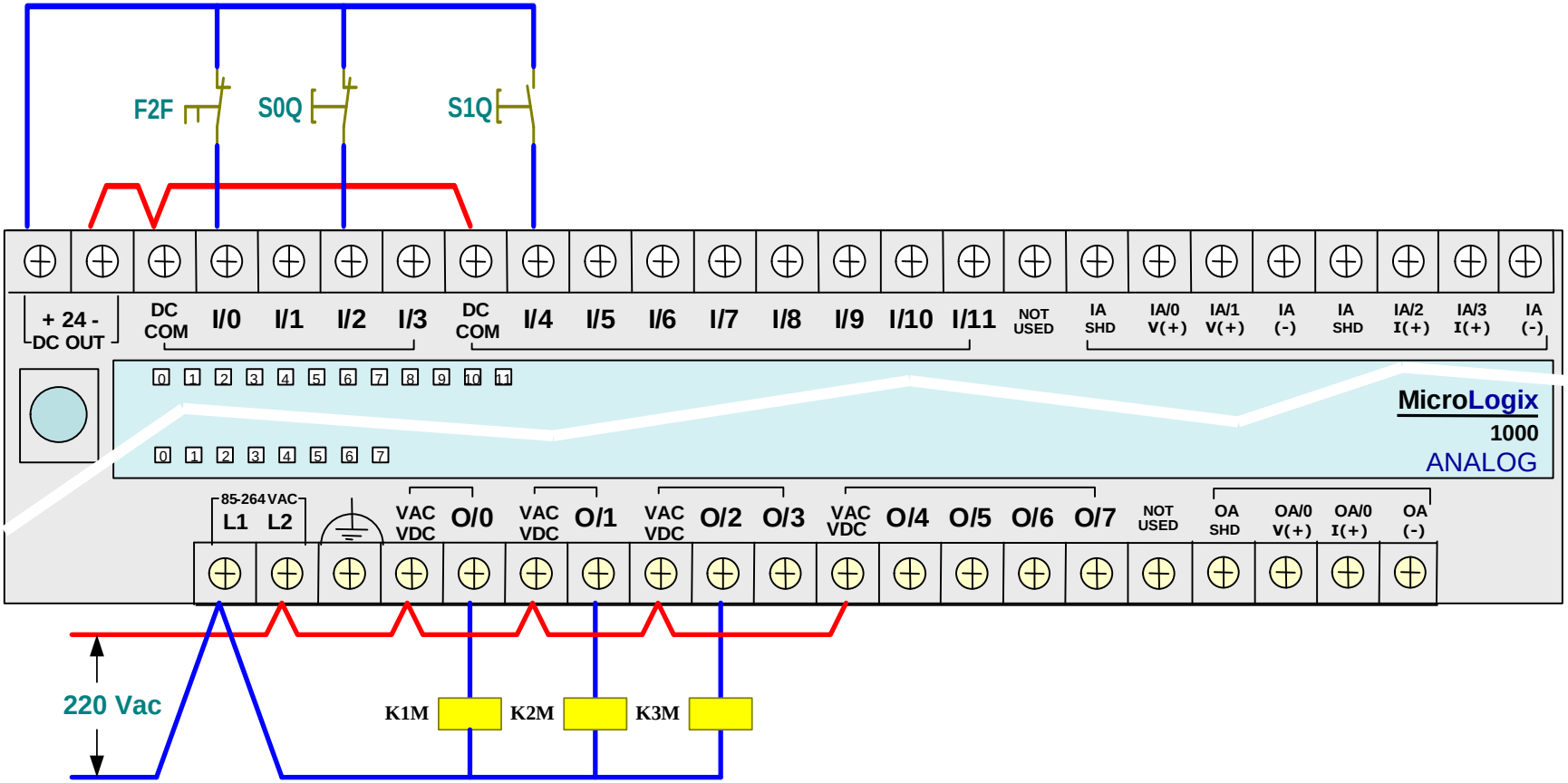


DIAGRAMA DE CONEXIONES DEL CONTROLADOR LÓGICO PROGRAMABLE EJEMPLO

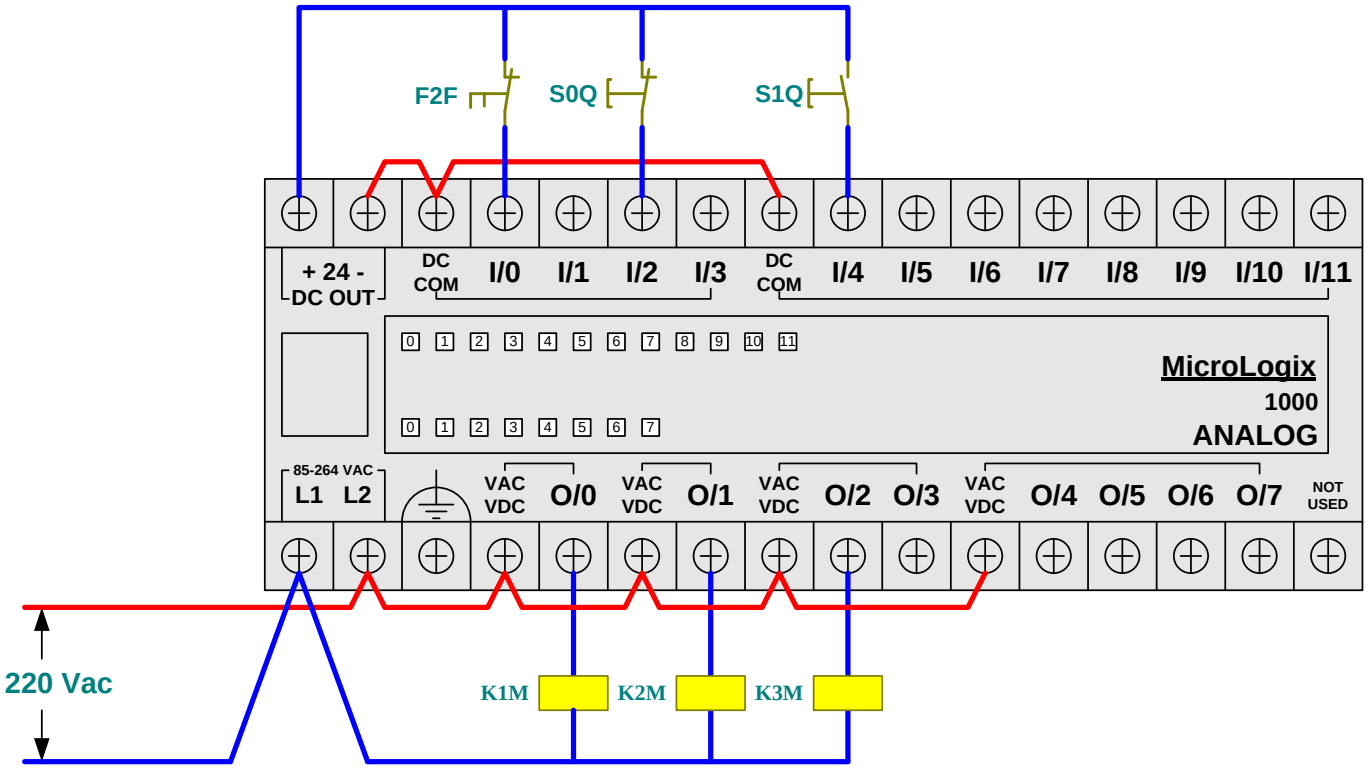


DIAGRAMA DE CONEXIONES PARA PROBAR LAS ENTRADAS Y SALIDAS ANALOGAS

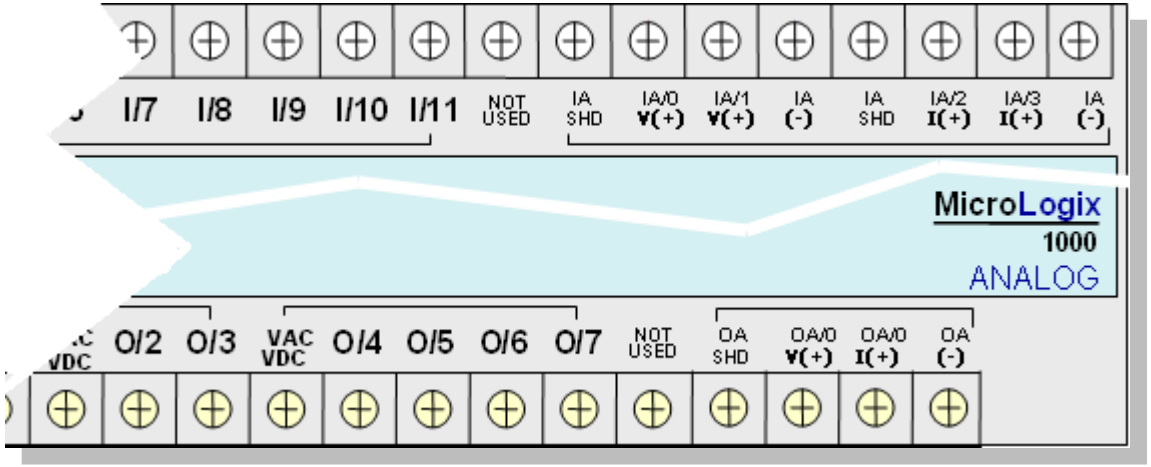
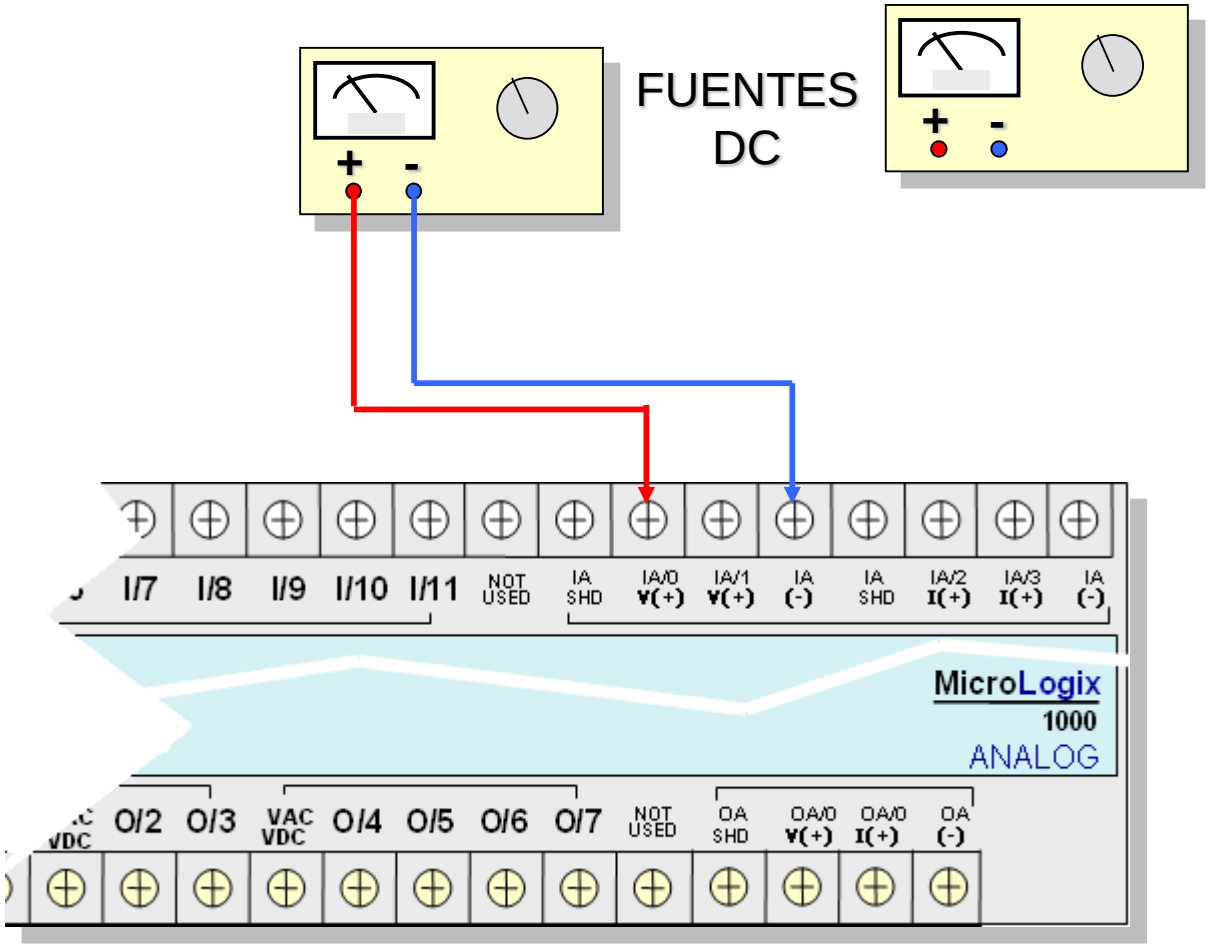


DIAGRAMA DE CONEXIONES PARA PROBAR LAS ENTRADAS Y SALIDAS ANALOGAS



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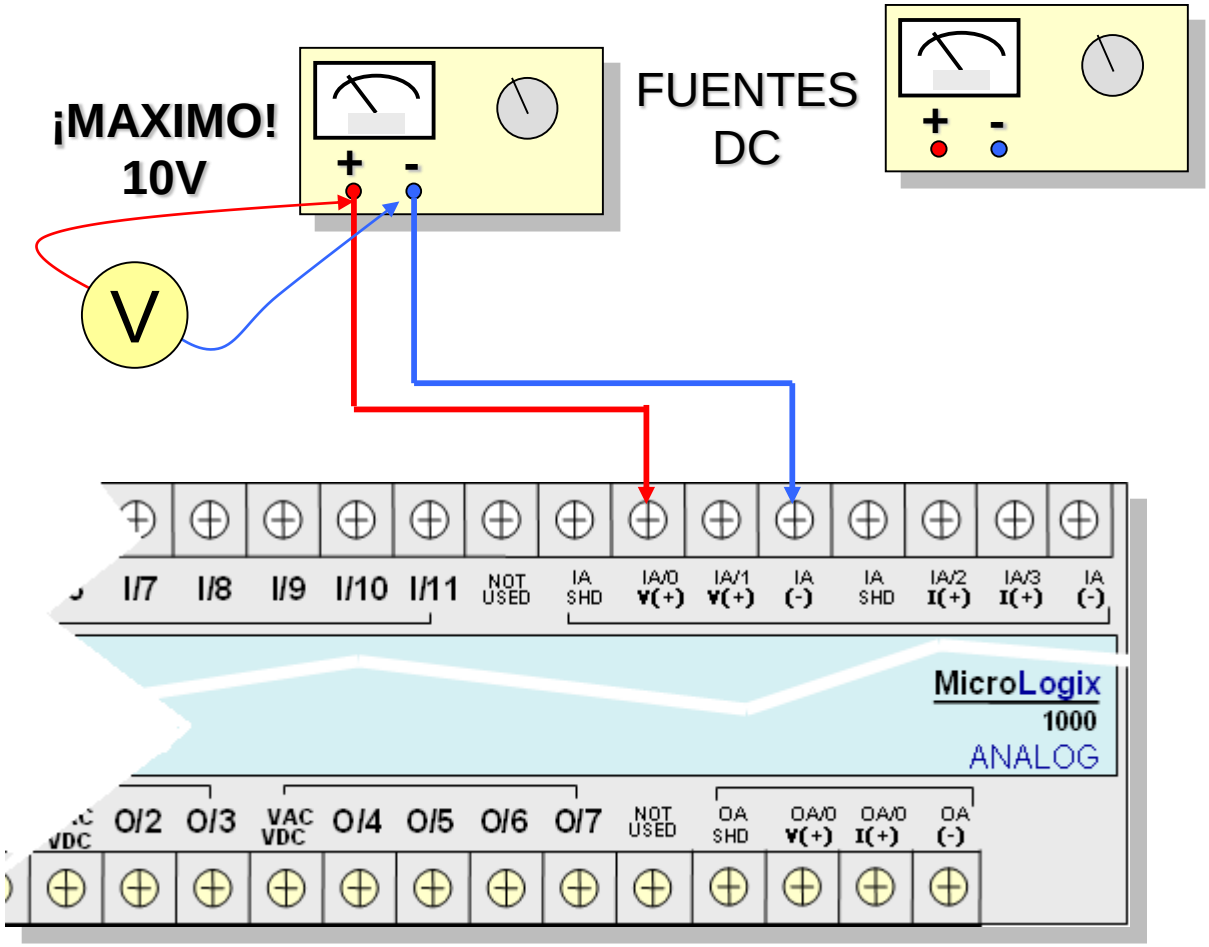

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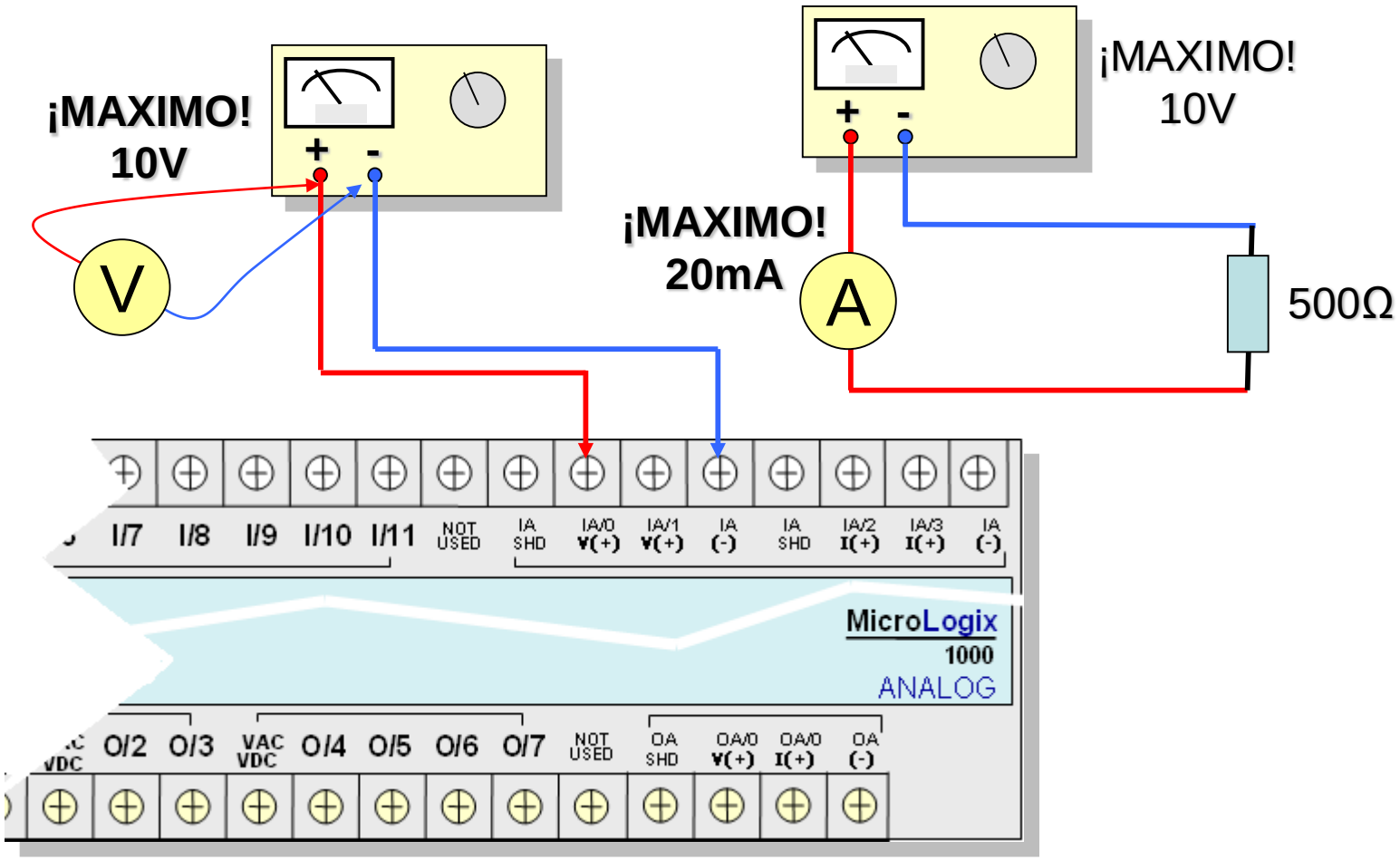

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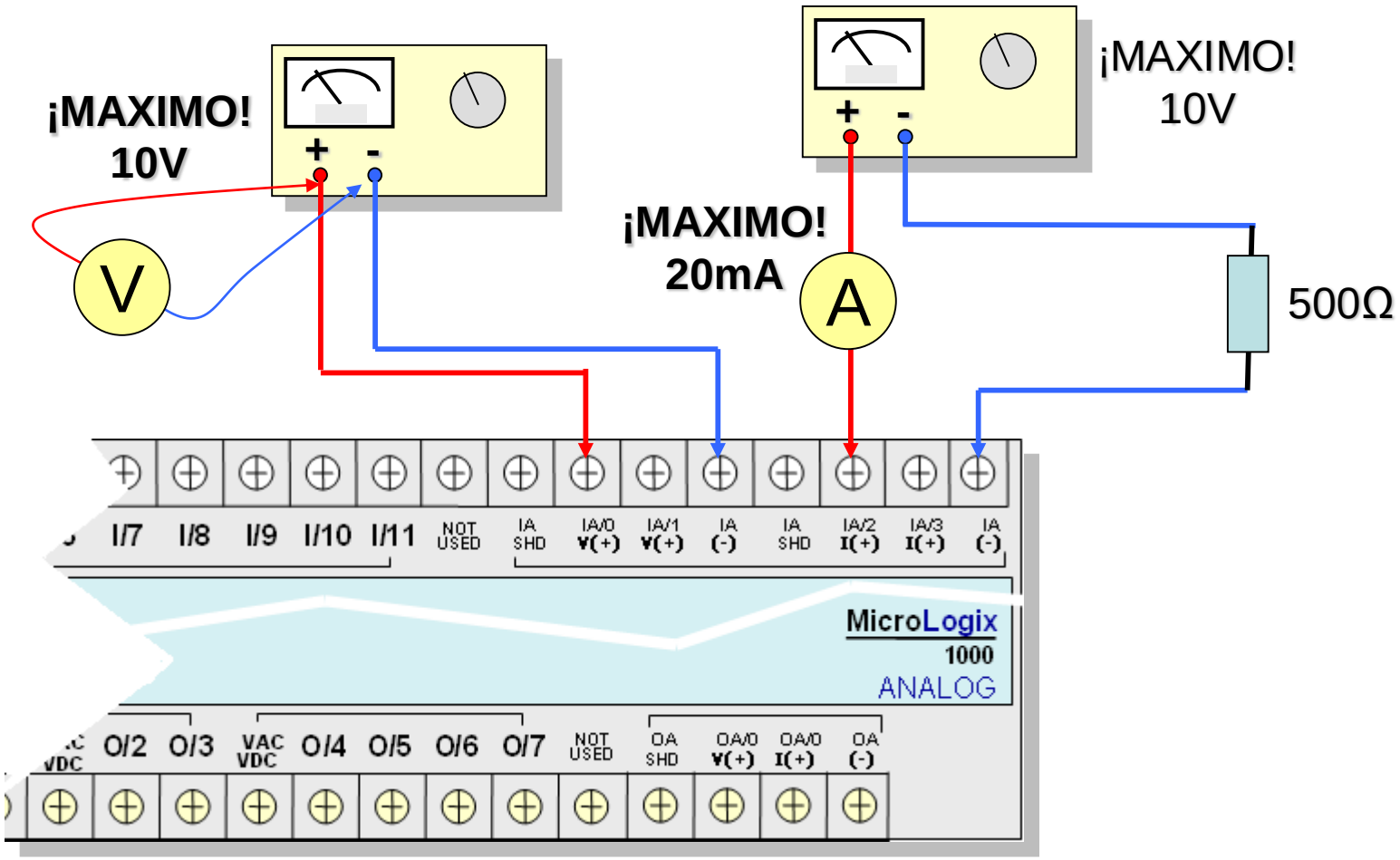

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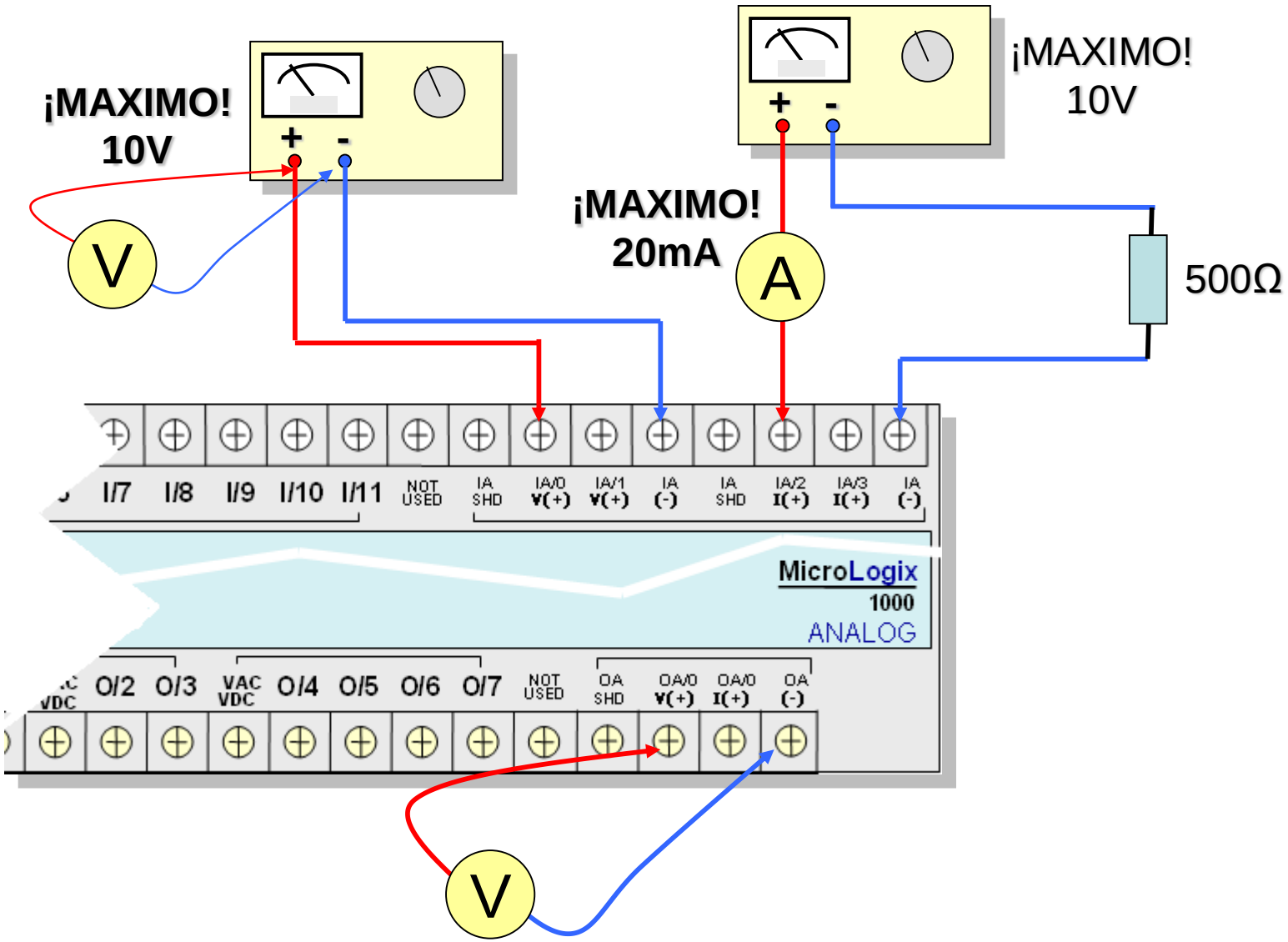
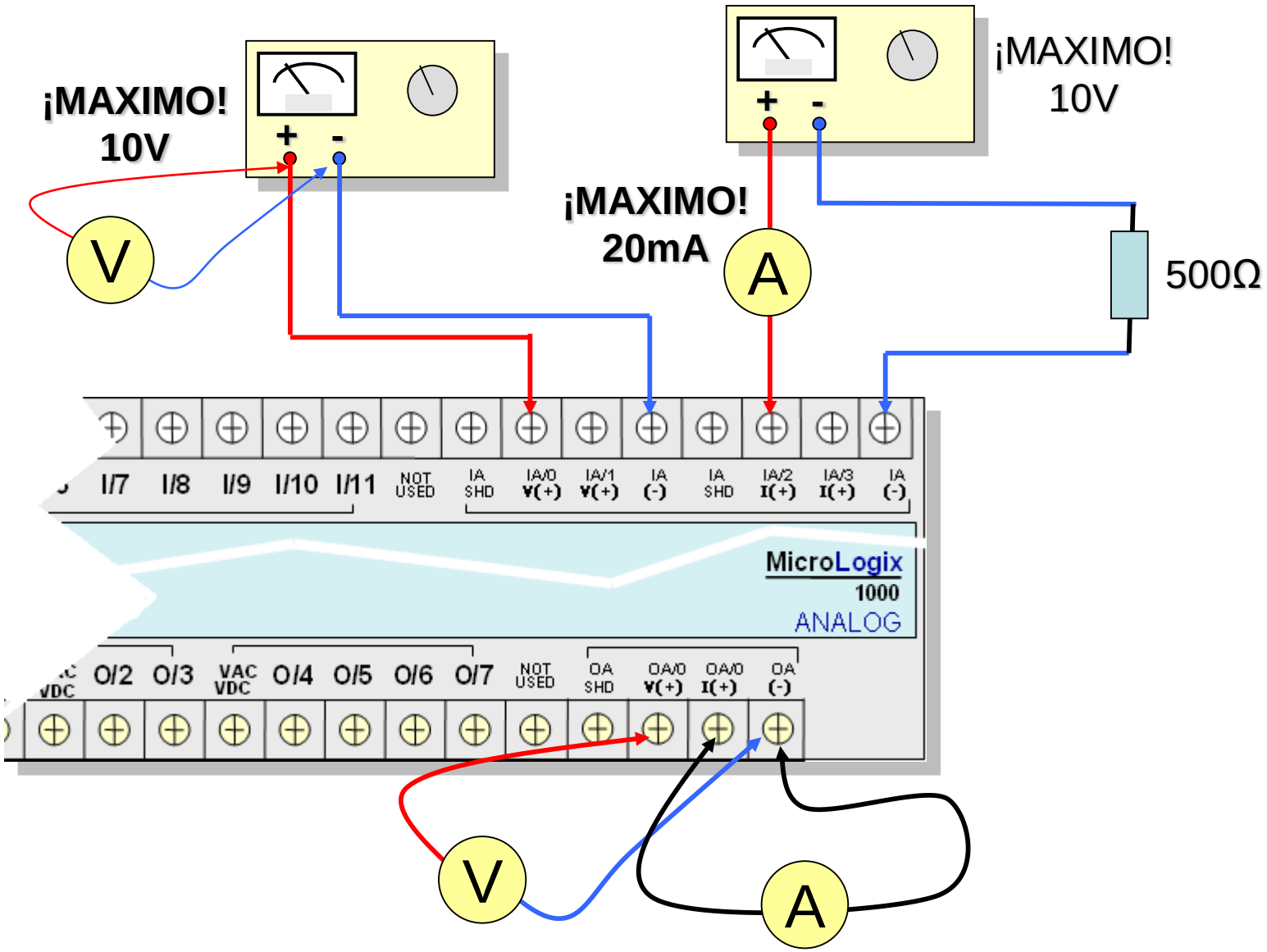
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