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Rev: V2 4

: 2016 10 10

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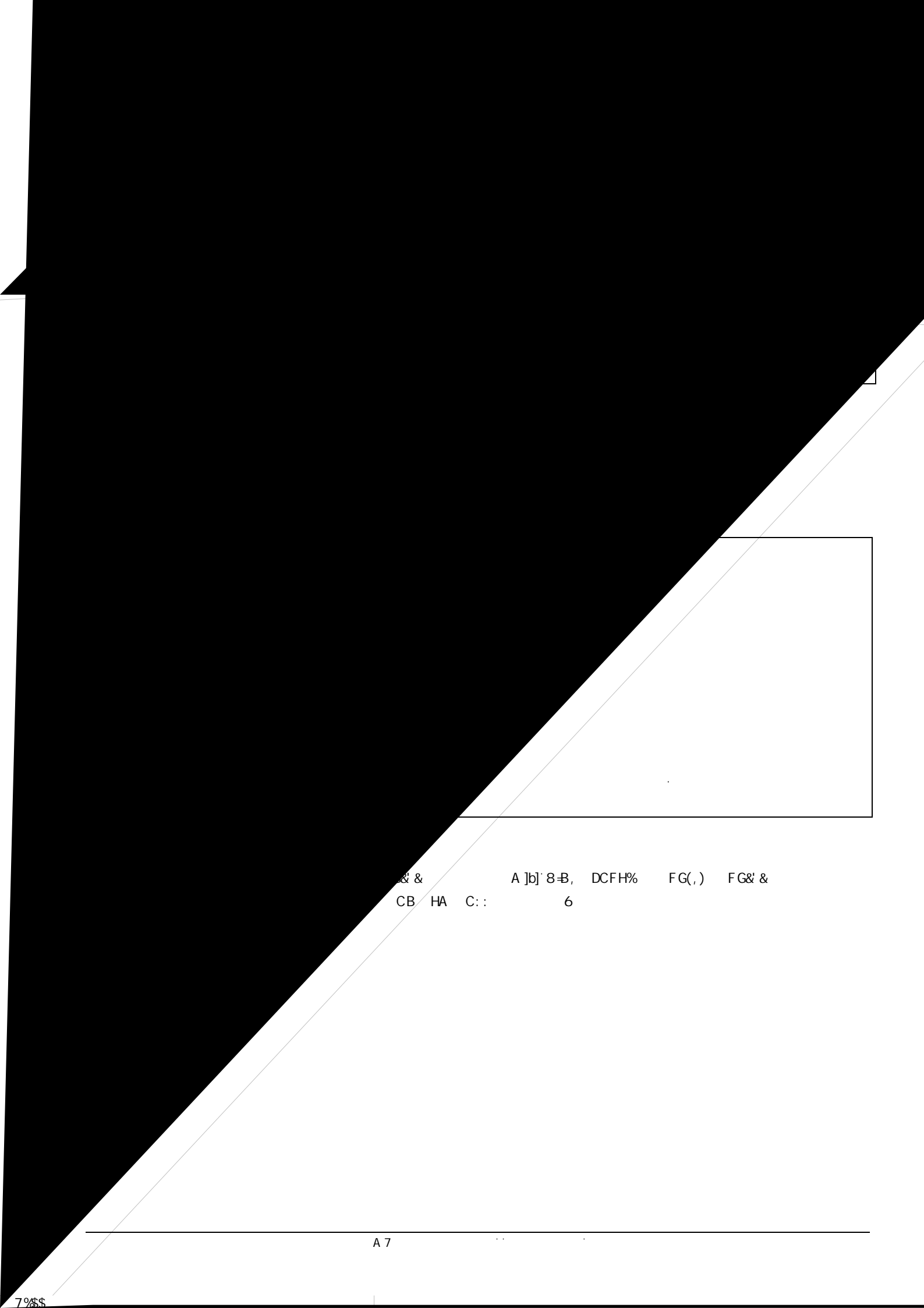
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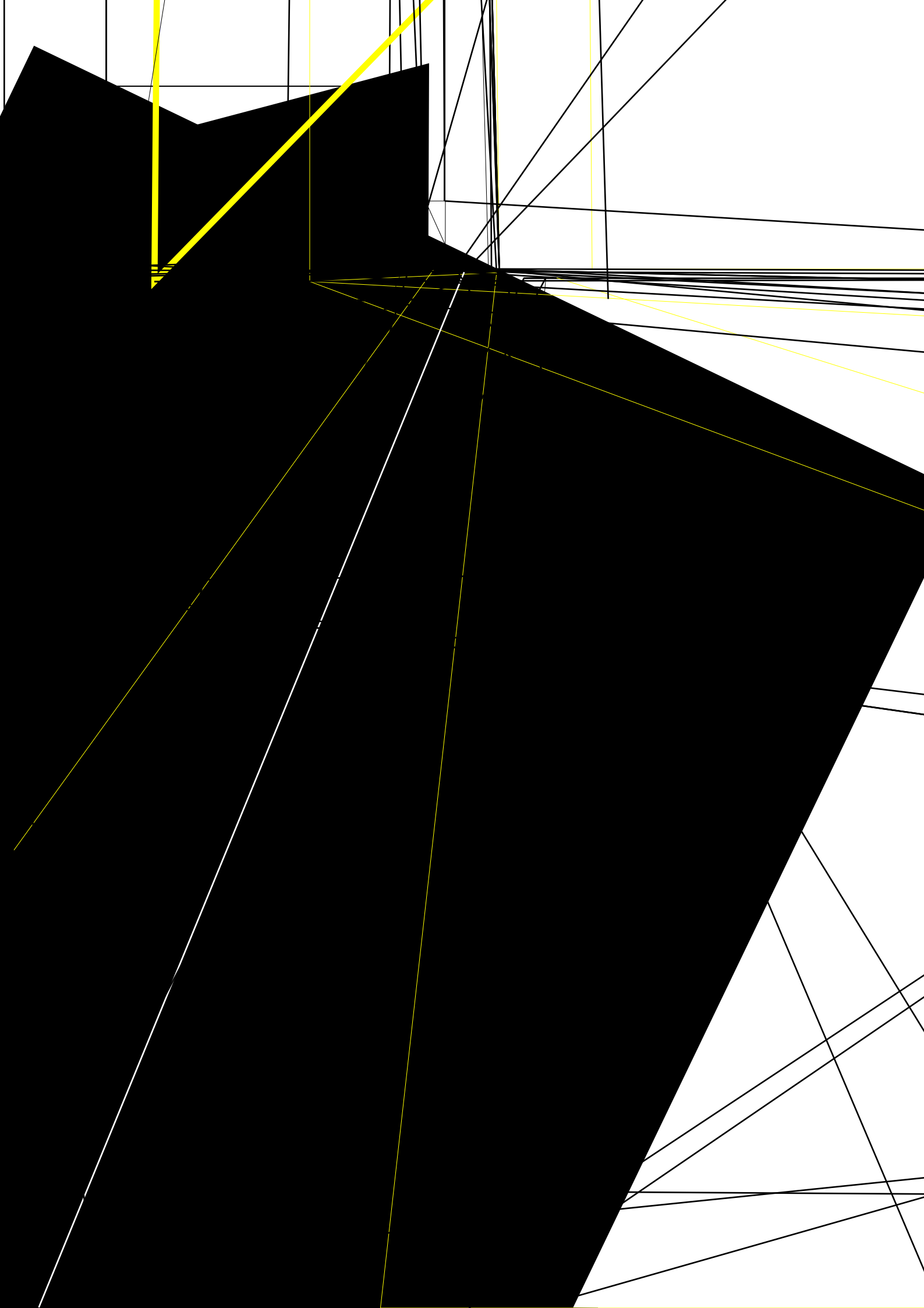
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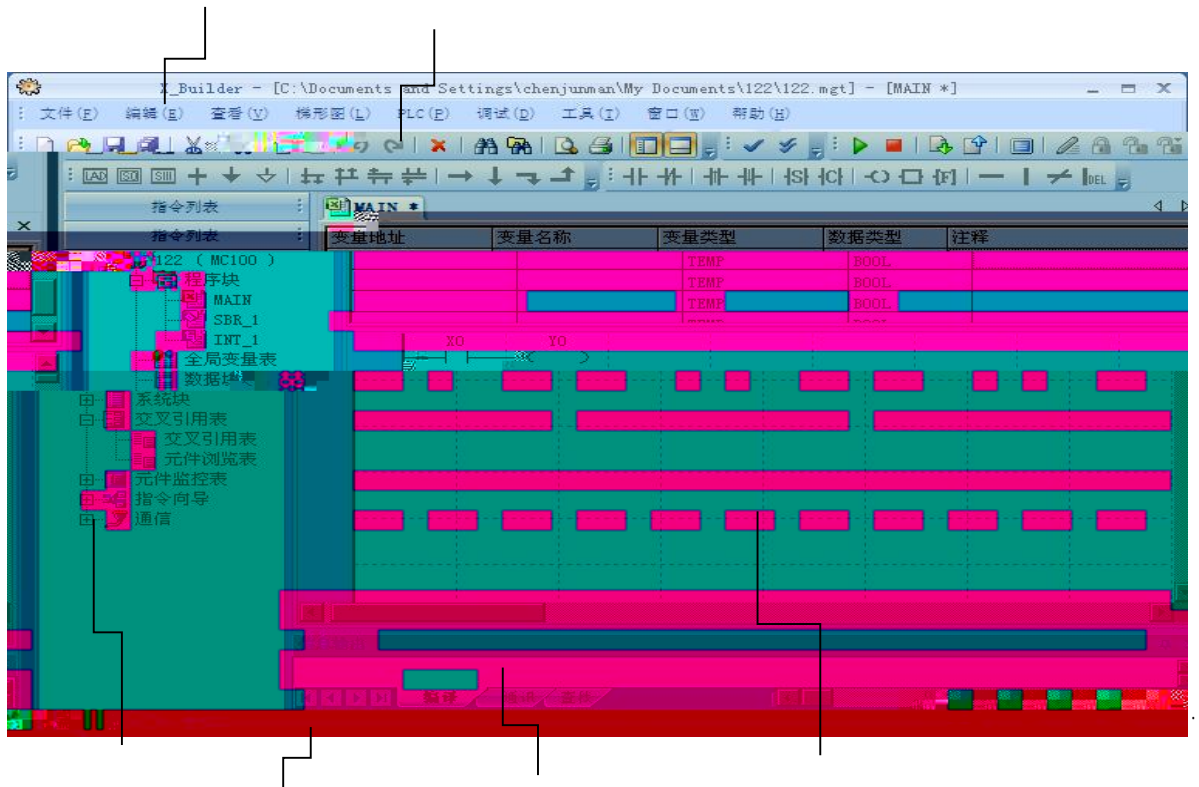
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M80			
MC80-1006BRA	10	6	
MC80-1006BTA	10	6	
MC80-1410BRA	14	10	
MC80-1410BTA	14	10	
MC80-1614BRA	16	14	
MC80-1614BTA	16	14	
MC80-2416BRA	24	16	
MC80-2416BTA	24	16	
MC80-3624BRA	36	24	
MC80-3624BTA	36	24	
MC100			
MC100-1006BRA	10	6	
MC100-1006BTA	10	6	
MC100-1410BRA	14	10	
MC100-1410BTA	14	10	
MC100-1614BRA	16	14	
MC100-1614BTA	16	14	
MC100-1614BRA1		AD DA	16 14
MC100-1614BTA1		AD DA	16 14
MC100-2416BRA	24	16	

MC100- 2416BTA	24	16	
MC100- 3624BRA	36	24	
MC100- 3624BTA	36	24	
MC200			
MC200- 2012BRA	20	12	
MC200- 2012BTA	20	12	
MC200- 3232BRA	32	32	
MC200- 3232BTA	32	32	
MC200- 4040BRA	40	40	
MC200- 4040BTA	40	40	
MC280			
MC280- 1616BTA8	16	16	8
MC280- 1616BTA6	16	16	6
MC280- 1616BTA4	16	16	4
MC200E- 1616BTA8	16	16	8
MC200E- 1616BTA6	16	16	6
MC200E- 1616BTA4	16	16	4
MC100 (AC)			
MC100- 1006BRA2	10	6	
MC100- 1006BTA2	10	6	
MC100- 1410BRA2	14	10	
MC100- 1410BTA2	14	10	
MC100- 1614BRA2	16	14	
MC100- 1614BTA2	16	14	
MC100- 2416BRA2	24	16	
MC100- 2416BTA2	24	16	
MC100- 3624BRA2	36	24	
MC100- 3624BTA2	36	24	
MC100- 3624BRA3	36	24	
MC100 (DC)			
MC100- 1006BRD	10	6	
MC100- 1006BTD	10	6	
MC100- 1410BRD	14	10	
MC100- 1410BTD	14	10	
MC100- 1614BRD	16	14	
MC100- 1614BTD	16	14	
MC100- 2416BRD	24	16	
MC100- 2416BTD	24	16	
MC100- 3624BRD	36	24	

MC100			
MC100- 0008ERN	0	8	10
MC100- 0008ETN	0	8	10
MC100- 0016ERN	0	16	10
MC100- 0016ETN	0	16	10
MC100- 0800ENN	8	0	10
MC100- 0808ERN	8	8	10
MC100- 0808ETN	8	8	10
MC100- 1600ENN	16	0	10
MC200			
MC200- 0008ERN	0	8	10
MC200- 0008ETN	0	8	10
MC200- 0016ERN	0	16	10
MC200- 0016ETN	0	16	10

MC200-0800ENN	8	0	10
MC200-0808ERN	8	8	10
MC200-0808ETN	8	8	
MC200-1600ENN	16	0	10
MC200-1616ERA	16	16	
MC200-1616ETA	16	16	
MC200-1616ERN	16	16	
MC200-1616ETN	16	16	

MC100		
MC100-2AD	2	
MC100-4AD	4	
MC100-2DA	2	
MC100-4DA	4	
MC100-5AM	4	1
MC100-2PT	2	
MC100-4PT	4	
MC100-2TC	2	
MC100-4TC	4	
MC200		
MC200-2AD	2	
MC200-4AD	4	
MC200-8AD	8	
MC200-2DA	2	
MC200-4DA	4	
MC200-4AM	2	2
MC200-5AM	4	1
MC200-2TC	2	
MC200-4TC	4	
MC200-8TC	8	
MC200-2PT	2	
MC200-4PT	4	
MC200-2HC	2	
MHA-04-NT	4	

MC100	
MC100-DPS	Profi bus DP (MC100-DPS)
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MC200-CPM	CANopen
MC200-RS485	
MC200-CPS	CANOPEN
MC200-CGP	

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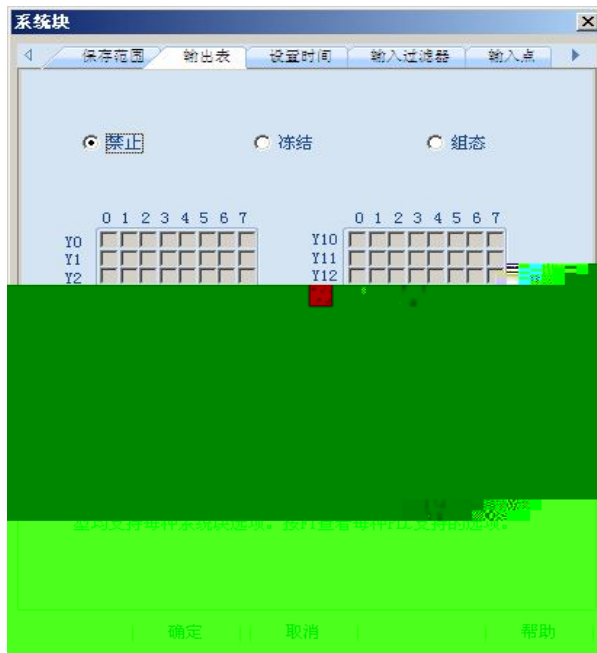
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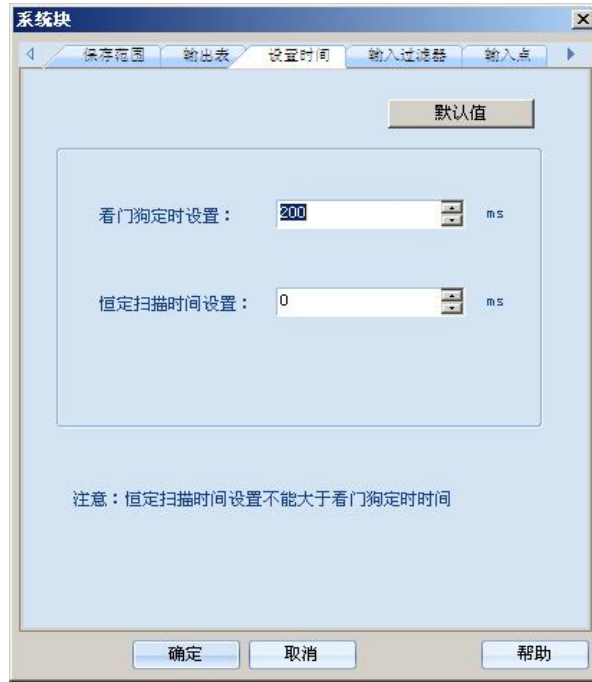
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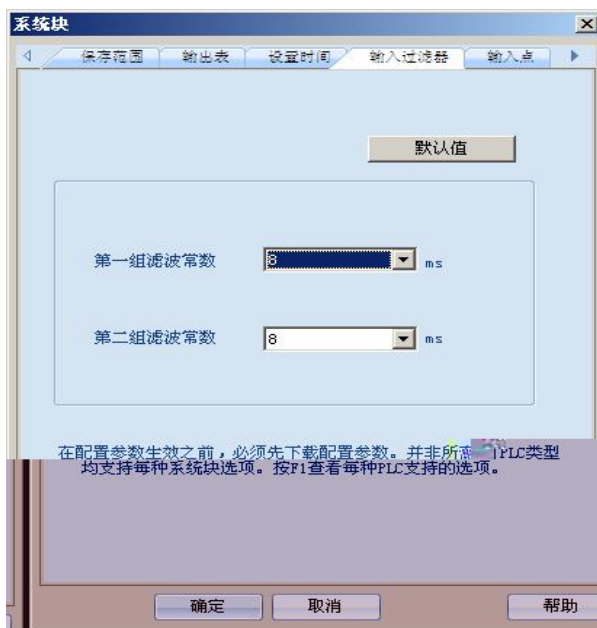
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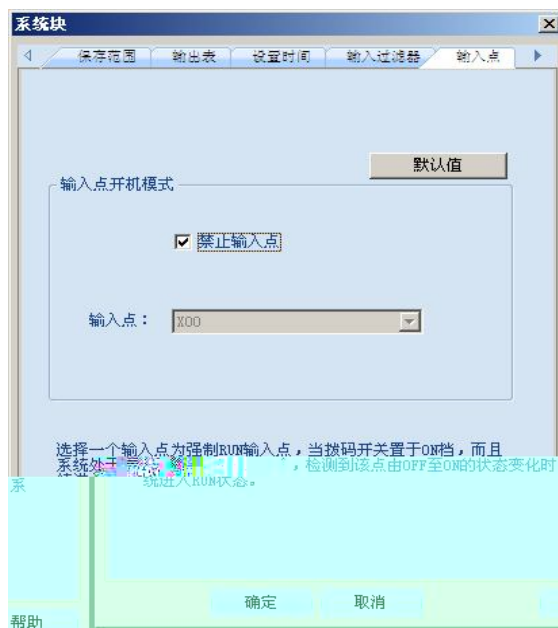
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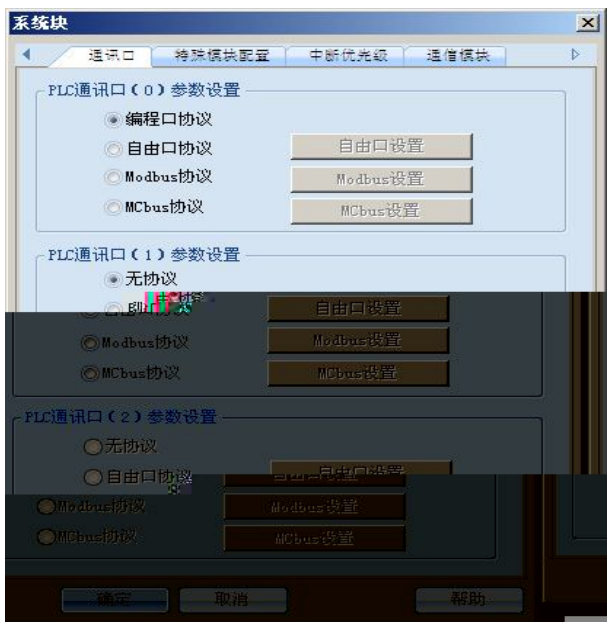


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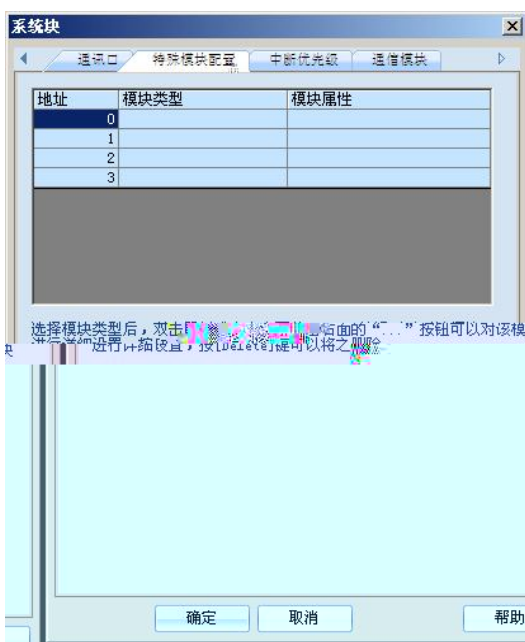
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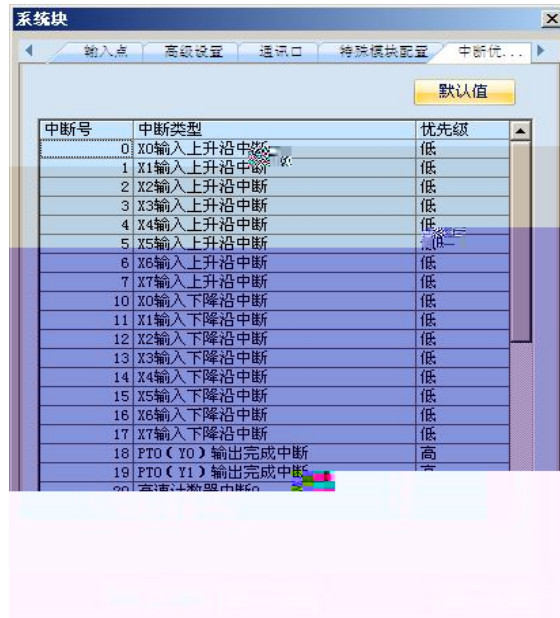
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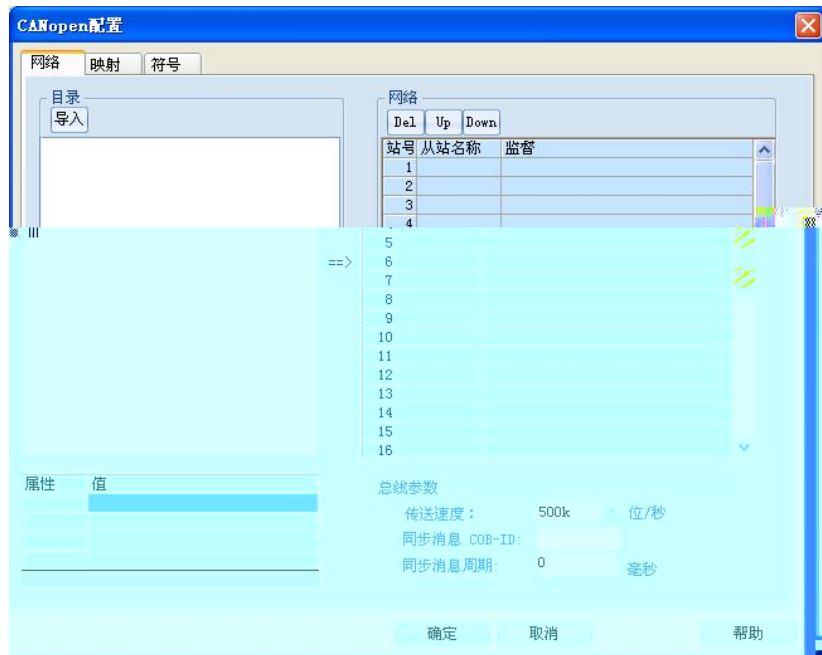
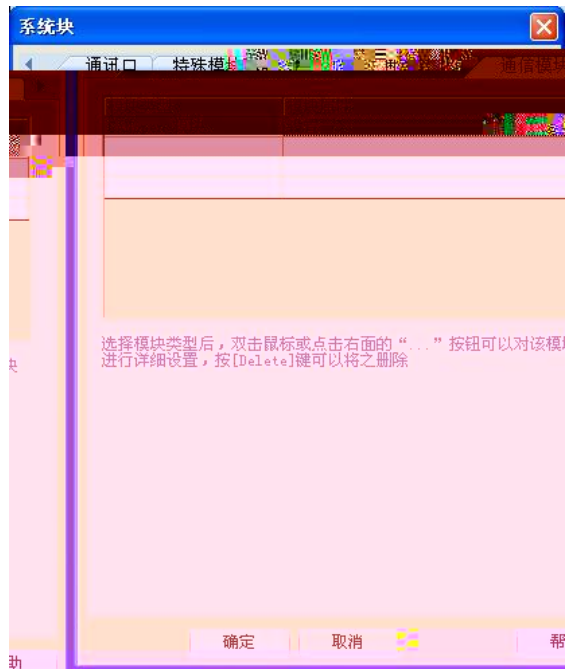


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2	反向点动	X3	反向点动
3	正向点动	X2	正向点动
4	原点回归	X1	原点回归
5	停止按钮	X0	停止按钮

信息输出

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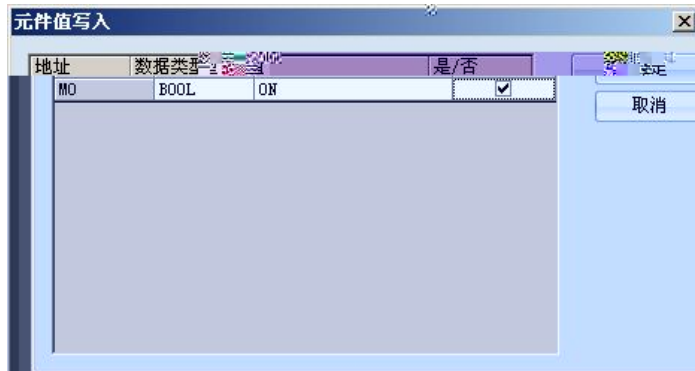
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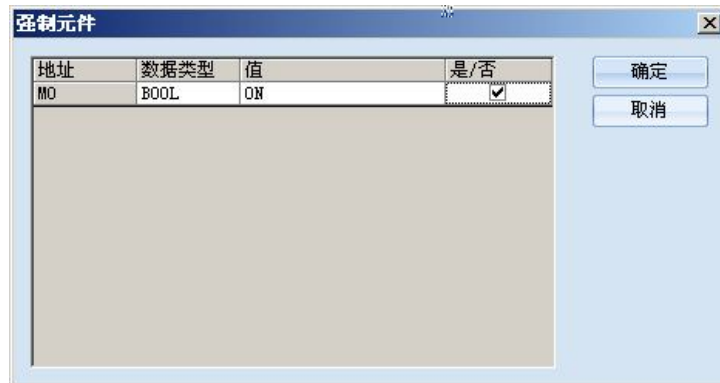
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变量地址	变量名称	变量类型	数据类型	注释
		TEMP	BOOL	
		TEMP	BOOL	
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		TEMP	BOOL	

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地址	数据类型	是/否
MO	BOOL	<input checked="" type="checkbox"/>

确定 取消

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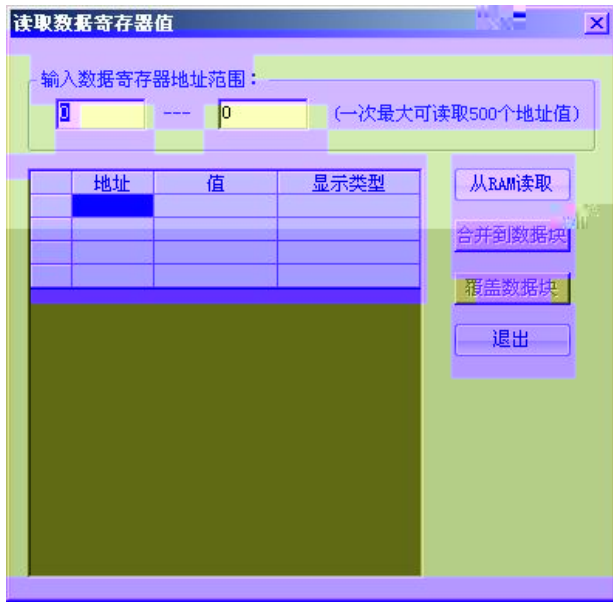
元件名称	数据类型	显示格式	当前值	新数值
1 X1	BOOL	二进制	OFF	
2 Y1	BOOL	二进制	OFF	
3 D1	WORD	十进制	0	
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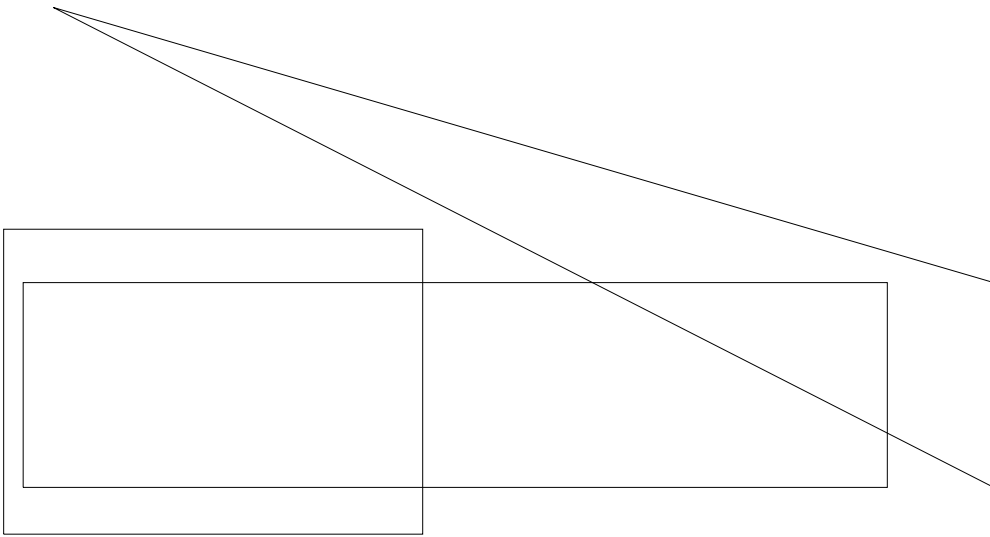
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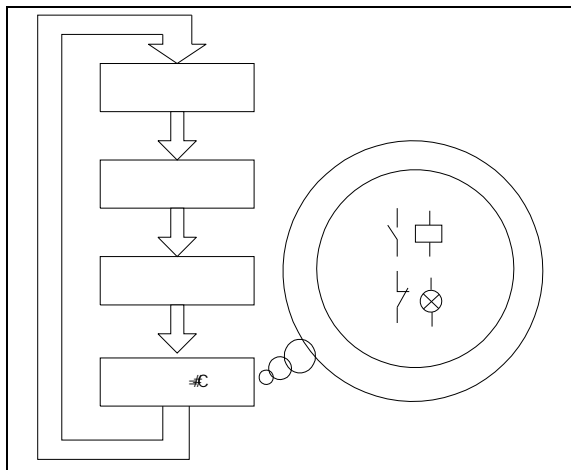
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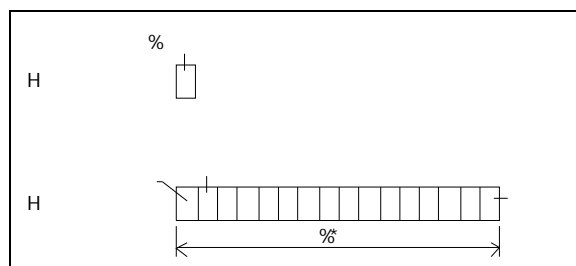
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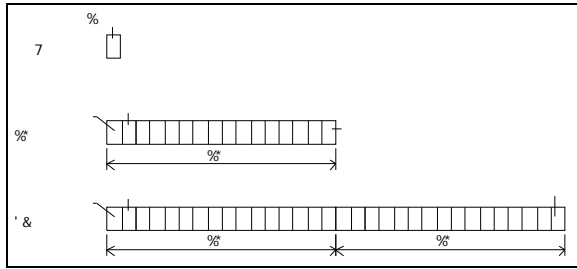
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<pre> /*用户程序运行第一个周期，激活S0步进状态*/ SM1 [SET S0] /*步进状态S0的处理*/ S0 [S] +--- Y0 [] +--- M0 [SET S20] /*步进状态S20的处理*/ S20 [S] +--- Y1 [] +--- M1 [S0] [RET] </pre>	
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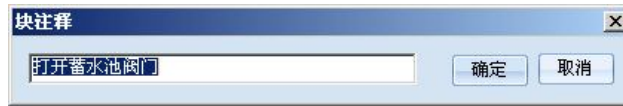
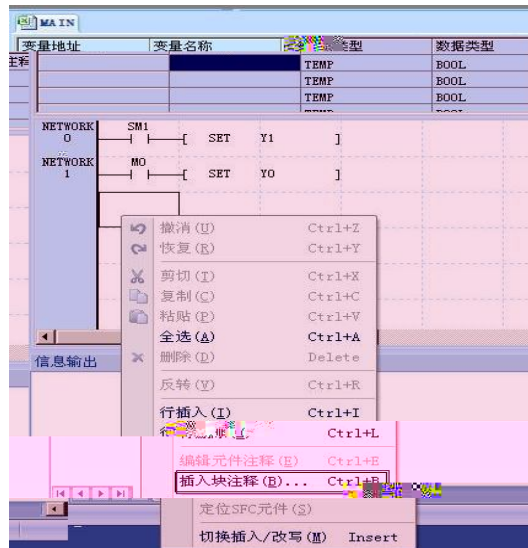
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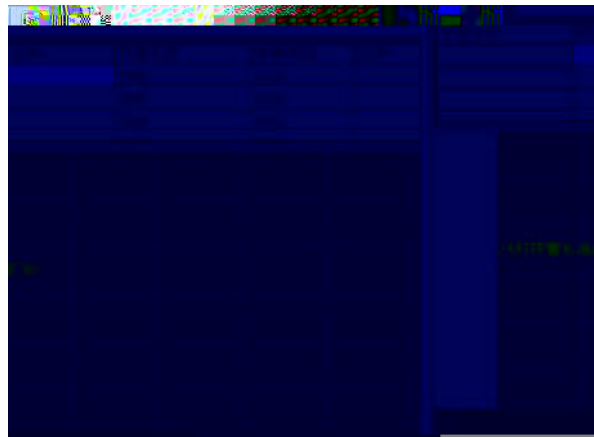
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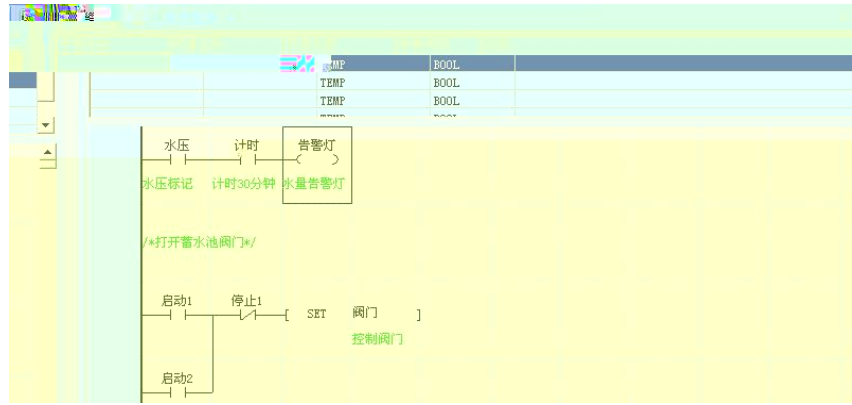
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	变量名	变量地址	注释
1	水压	X0	水压标志
2	计时	T0	
3	启动1	M0	
4	启动2	M1	
5	停止1	M2	
6	告警灯	T0	水量告警灯



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V0	IN1	IN	INT	
V1	IN2	IN_OUT	INT	
		OUT	BOOL	
V2	OUT1	TEMP	INT	
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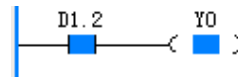
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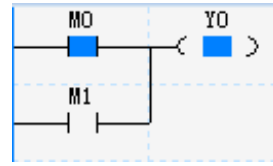
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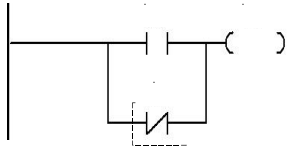
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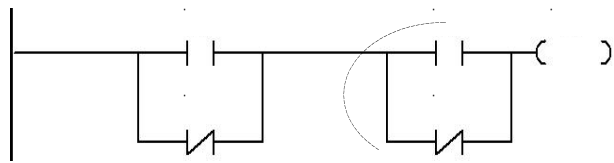
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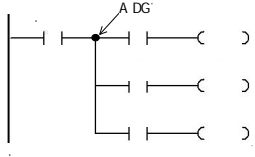


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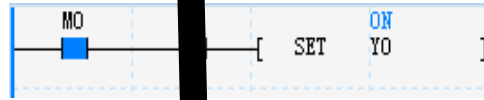


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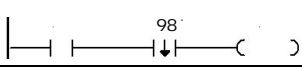
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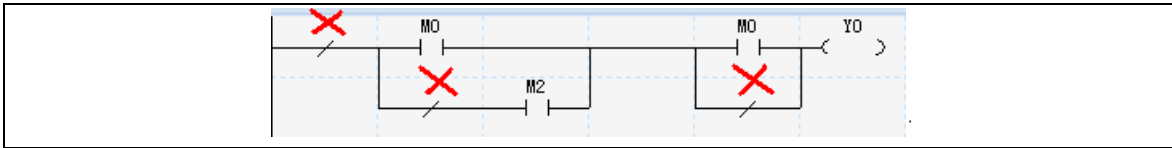


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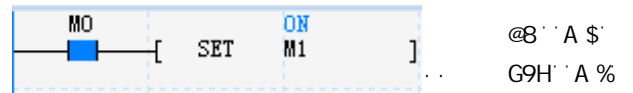
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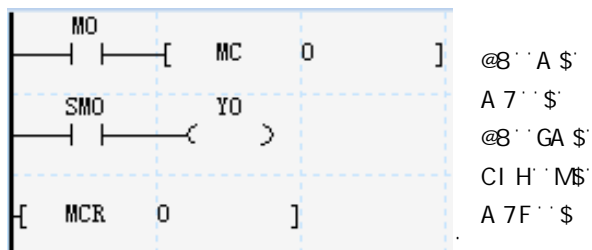
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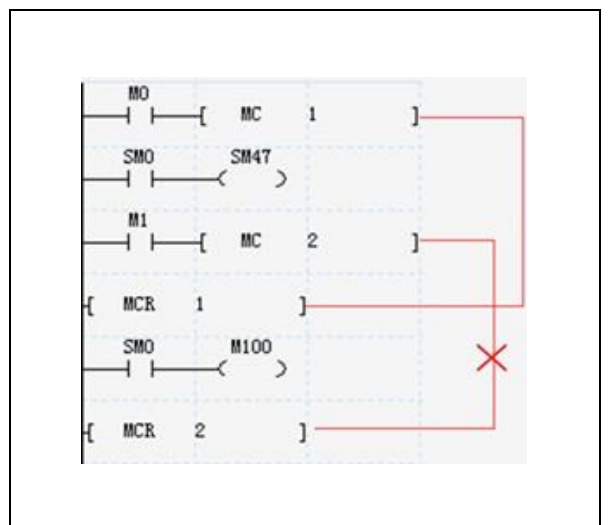
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* ! * ! ( 'K #BJ %& %&
* ! * ! ) '8K 5B8 %& %&
* ! * ! * '8K CF %& %&
* ! * ! + '8K LCF %& %&
* ! * ! , '8K #BJ %& %&
* ! . % $ % $
* ! + '%FCF % % $ % $
* ! + '&FC@ % % % %
* ! + ' F7F % % % %
* ! + ( ' F7@ % % & % &
* ! + ) '8FCF ' & % & % &
* ! + * '8FC@ ' & % ' % '
* ! + + '8F7F ' & % ' % '
* ! + , '8F7@ ' & % ( % (
* ! + - 'G<F % % % ( % (
* ! + %$'G<@ % % % ) % )
* ! + %%%8G<F ' & % ) % )
* ! + %&8G<@ ' & % * % *
* ! + % 'G: HF % * % *
* ! + % % 'G: H@ % + % +
* ! , % , % ,
* ! , '%: FCA % , % ,
* ! , '&8: FCA % - % -
* ! , ' HC % $ % $
* ! , ( '8HC % % % %
* ! , ) ' J FF8 % % % %
* ! , * ' F9: : % & % &
* ! , + ' F9: #C % & % &
* ! , , '9FCA K F 99DFCA % ' % '
* ! , - ' DF % ( % (
* ! , '%$H? M % * % *
* ! _ % + % +
* ! _ '%HF 8 % + % +

```

```

*"-&HK F .....%,
*"- " 'H588 .....%-
*"- (' HGI 6 .....%$
*"-)' <CI F .....% %
*"- "x' 87A D 1 0 2 02 21 01 .....% &
*"- "+H7A D 1 0 2 02 21 01 .....%'
*"- ", <HCG .....% (
*"- "- 'GHC < .....% (
*"%$ € .....% )
*"%$%<7BH .....% )
*"%$"&8<G7G .....% +
*"%$" '8<G7= .....%,
*"%$" ('8<GD= .....% -
*"%$" )'8<G7F .....% $
*"%$" *'8<GN .....% %
*"%$" +'8<GH .....% &
*"%$" , '8<GD .....% (
*"%$" - 'GD8 .....% *
*"%$"$ 'D@GM .....% +
*"%$"%%D@GF .....%,
*"%$"%&'D@G .....%+$
*"%$"% 'D@G6 .....%+%
*"%$"% 'DK A .....%+
*"%%% .....%+(
*"%%%D=8 .....%+(
*"%%%&F5A D .....%+
*"%%%" '<57? @9 .....%+,
*"%%%" ('HF =5B; @9 .....%+-
*"%%%" )'56G8 .....% $
*"%%%" *'856G8 .....% %
*"%%%" +'5@H .....% &
*"%&: .....% /
*"%&%"A cXVi g

```


*"%" 'GHFA CJ&&
*"&%&&-
*"&%"NF B&&-
*"&%"D@GJ&' \$
*"&%" '8FJ =&' %
*"&%"('8FJ 5&' &
*"&%" '56G&' '
"&%" '8GNF 8C;&' (
*"&%"+'GHCD8J&' *
*"&%" '@B&' +
*"&%"-'7K&' -
*"&%"%'77K&(\$
*"&%"%'A CJ 9@B?&(&
*"&%"%' ; 95F6CL&' .
*"&%"%' '8FJ 7&' .
*"&%"%' '75A H56@9&' (
*"&%"%' '75A 6CL&())
*"&%"&(+
*"&%"%'A 95B&(+
*"&%"%'&'K HC6&(+
*"&%"%' '6HCK&(-
*"&%"%'(' B= 16 4&)\$
*"&%"%' '8-€ 16 4 }

| | [ FOR (S)]										M200 M100 M80 M280					
S										3					
G	-BH		?bL	?bM	?bA	?bG	?b@A	?bGA	8	G8	7	H	J	N	F

S

[NEXT]										M200 M100 M80 M280			
										1			

% :CF B9LH :CF!B9LH

& :CF

:CF!B9LH

:CF!B9LH

:CF

:CF!B9LH

:CF!B9LH

% :CF!B9LH

DCI

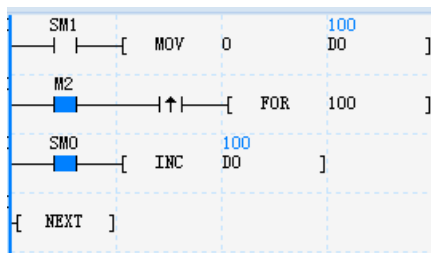
& :CF!B9LH

A 7&\$\$

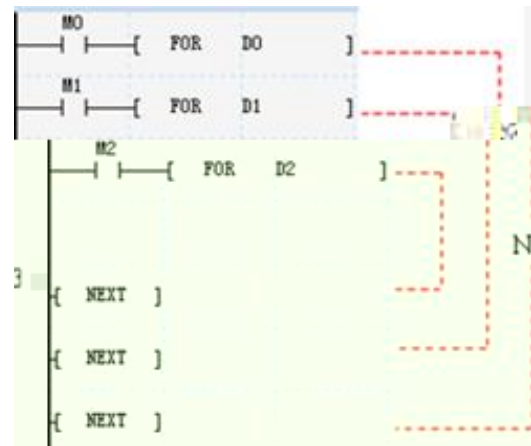
7DI

:CF!B9LH

:CF!B9LH



@B GA %
 A C J '\$ ' 8 \$
 @B A &
 9I
 :CF %\$\$
 @B GA \$
 -B7 ' 8 %\$\$
 B9LH'

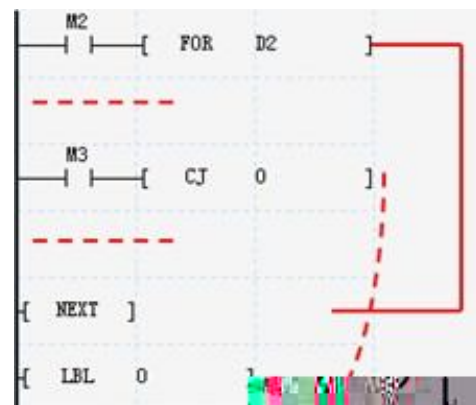


8\$1\$ A &1C:: A & C:: CB
 :CF!B9LH %\$ 8\$

%\$

8\$1%\$

7>



(7>

) A 7!A 7F :CF!B9LH

```

M3
| | | [ CJ 0 ]
-----
M2
| | | [ FOR D2 ]
-----
[ LBL 0 ]
-----
[ NEXT ]

```

```

MO
| | | [ FOR D1 ]
-----
SMO
| | | [ MC 0 ]
-----
[ NEXT ]
-----
[ MCR 0 ]

```



:CF!B9LH

K 8H

[LBL (S)]		M200 M100 M80 M280	
S		3	
G	=BH		

S

%

&

%

&

S

\$ %&+

7>

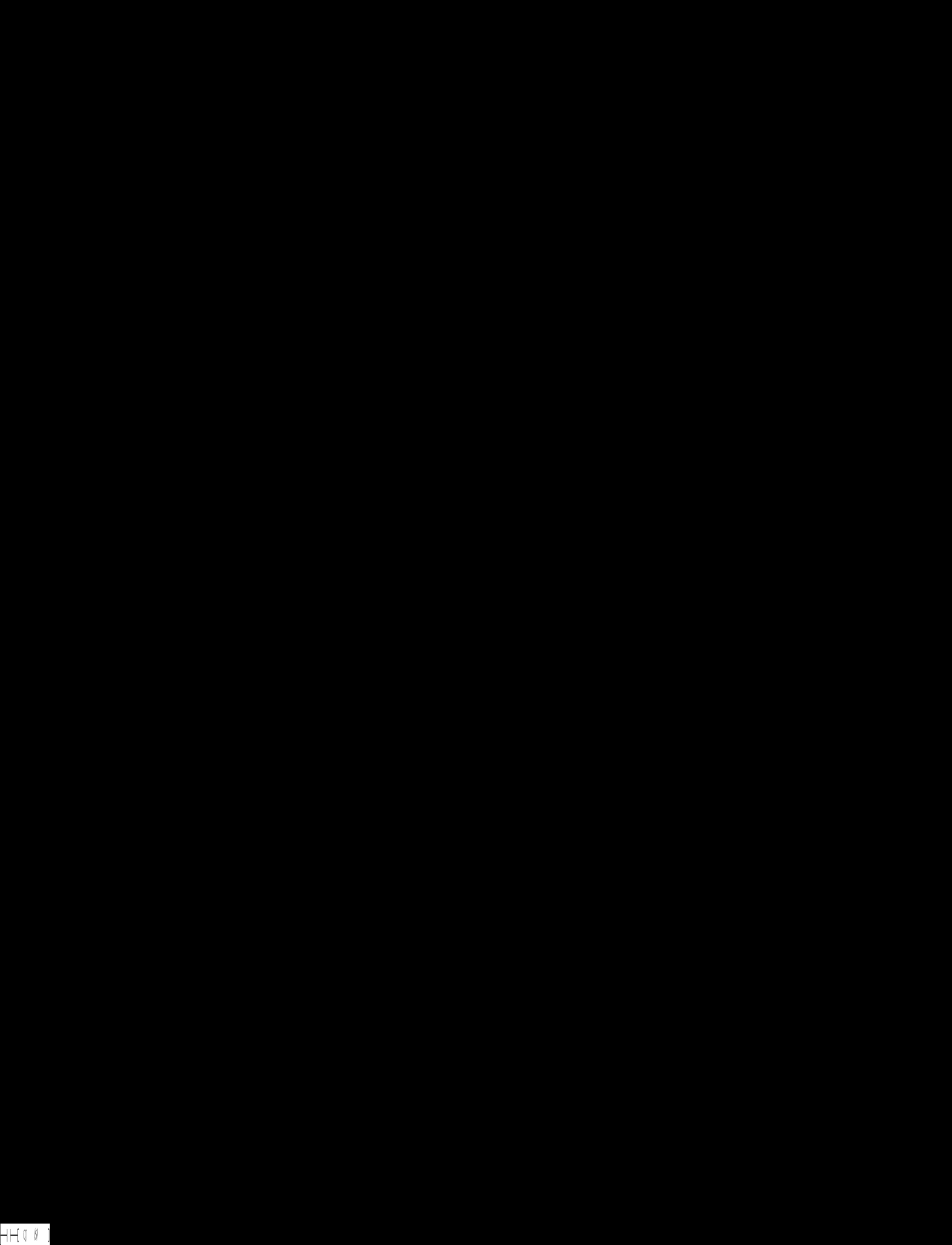
```

[ LBL 0 ]
-----
MO
| | | [ CJ 0 ]
-----
SMO
| | | [ MOV 100 D0 ]
-----
| | | [ CFEND ]
-----
[ LBL 0 ]
-----
M1
| | | [ MOV 200 D0 ]

```

重要的标号定义

|—| |—| CJ (S)]		M200 M100 M80 M280	
S		3	
G	BH		



|—| |—| [ WDT]		M200 M100 M80 M280
		1

|—| |—| [EI]

M200 M100 M80 M280

		M200	M100	M80	M280
CALL (子程序名) (参数1) (参数2) []					
	1 2 Å				

75@@

% 75@@

75@@

& 75@@

G6F%

8-BH#8K CF8

- 75@@G6F%N\$ N
- 75@@G6F%7%- 7\$ 7%-
- 75@@G6F%? &L\$?b % b
G6F%
- 75@@G6F%7&\$ 7&\$ 7&)
- 75@@G6F%? &L\$?b (b ,

- 8-BH#8K CF8
- 8-BH#8K CF8
- 8-BH#8K CF8
- BH#K CF8
- BH#K CF8
- BH#K CF8

75@@

G6F%

CI H BSCI H

- 75@@G6F%' &%
- 75@@G6F%?(L\$?(L\$
- 75@@G6F%G8\$ G8\$

- CI H BSCI H
- CI H BSCI H
- CI H BSCI H

(75@@

		M200	M100	M80	M280
[CSRET]					
CSRET					1

|—|—| [ MOV (S) (D)]										M200 M100 M80 M280					
S D										5					
G	=BH		?bL	?bM	?bA	?bG	?b@A	?bGA	8	G8	7	H	J	N	F
8	=BH			?bM	?bA	?bG	?b@A		8	G8	7	H	J	N	F

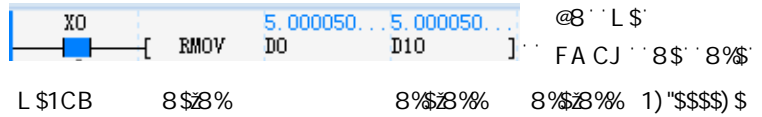
S % A C J
D %\$
%\$\$
%\$\$ ())'
S & 7 7\$ 7%-
D S

X0 [MOV 500 500] @8 L\$
DO D10 A C J 8\$ 8\$
L\$1CB 8\$ 8\$ 8\$1)\$

|—|—| [ DMOV (S) (D)]										M200 M100 M80 M280					
S D										7					
G	=BH		?bL	?bM	?bA	?bG	?b@A	?bGA	8	G8					

| | | RMOV (S) (D) |										M200 M100 M80 M280				
S D										7				
G	F95@								8			J		F
8	F95@								8			J		F

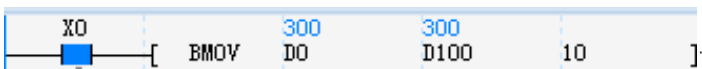
S
D



S
D S

| | | BMOV (S1) (D) (S2) |										M200 M100 M80 M280					
S1 D S2										7					
G%	-BH		? bL	? bM	? bA	? bG	? b@A		8	G8	7	H	J	F	
8	-BH		? bM	? bA	? bG	? b@A		8		7	H	J		F	
G&	-BH		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7	H	J	N	F

S
D



S2

@8 L\$
6A CJ 8\$
8\$8\$ 8\$

S2 S1 D
S2 S1
S2

										M200 M100 M80 M280					
S1 D S2										7					
G%	=BH		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7	H	J	N	F
8	=BH			? bM	? bA	? bG	? b@A		8		7	H	J		F
G&	=BH		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7	H	J	N	F

S1 % S1 D S2 7 7\$ 7%-

& S2 \$

D S1 D ?b ?b

S2

X0 [FMOV DO 300 D100 10] @8 L\$: A C J 8\$ 8\$ %

S1

D S2 L\$1CB 8\$ 8\$ % 8\$18\$1.....
S1 18\$-18\$1'\$ \$

										M200 M100 M80 M280					
S1 D S2										9					
G%	8=BH		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7		J		F
8	8=BH			? bM	? bA	? bG	? b@A		8		7		J		F
G&	=BH		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7	H	J	N	F

S1 % S1 D S2 7 7&\$ 7&))

D & S2 \$

S2 S1 D ?b ?b

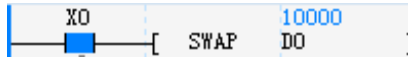
S2

X0 [FMOV DO 100000 D10 10] @8 L\$: A C J 8\$ 8\$ %

S1

D S2 L\$1CB 8\$8% 8\$ %x & 8\$8% 1
S1 8\$8% 1.....1 8& z&- 1 8\$8% 1\$\$\$\$\$

|---| |---| [ SWAP (D)]										M200 M100 M80 M280					
D										3					
8	=BH			?bM	?bA	?bG	?b@A		8		7	H	J	N	F



@8 L\$
GK 5D 8\$

L \$1CB 8 \$1\$1 %&+ (%)
%\$\$\$\$

8\$ 8\$1\$1 &+ %\$

D
D

|---| |---| [ XCH (D1) (D2)]										M200 M100 M80 M280					
D1 D2										5					
8%	=BH			?bM	?bA	?bG	?b@A		8		7	H	J	N	F
8&	=BH			?bM	?bA	?bG	?b@A		8		7	H	J	N	F

D1 %
D2 &

A 7 D@7

D1
D2
D1 D2

?b D1
D2 ?b "

%



@8
L 7<

L \$1CB 8\$ 8%
8\$1) \$\$\$

8\$1%\$\$\$

8\$1%\$\$\$ 8\$1) \$\$\$

&

/*用户人机界面访问DO D1，对用户来说是可见的*/

/*初始化时要记得交换数据位置，使它符合用户人机界面的规则*/

										M200 M100 M50 M250					
D1										7					
8%	-BH								8				J		F
8&	-BH		? bM	? bA	? bG	? b@A			8		7	H	J	N	F
G	-BH		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7	H	J	N	F

1

MO		FIFO	9	1000	10	@8 A \$
			D100	D0		: = C 8%\$ 8\$
						%\$

%

D1

D1 % **D1** **D2**

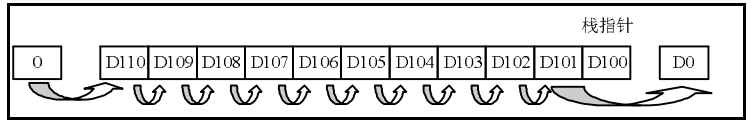
D1 \$

GA % \$ %

%

&

S



% A \$1CB 8%\$% 8\$ 8%\$% 8%\$

8%\$ \$

& 8\$1\$ 8%\$1\$ 8%\$1\$\$\$ 8%\$&1\$\$\$

8%\$-1-\$\$\$ 8%\$1\$\$\$\$

' 8\$1\$\$\$ 8%\$1- 8%\$&1\$\$\$ 8%\$&1' \$\$\$

8%\$-1\$\$\$\$ 8%\$1\$

|---|---| LIFO (D1) (D2) (S) |										M200 M100 M80 M280					
D1 D2 S										7					
8%	=BH								8				J		F
8&	=BH		? bM	? bA	? bG	? b@A			8		7	H	J	N	F
G	=BH		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7	H	J	N	F

%

MO |---|---| LIFO 9 1000 1000 10]									
------------------------------------	--	--	--	--	--	--	--	--	--

@8 A \$

@C 8%\$ 8\$ %

栈指针											
D0	D110	D109	D108	D107	D106	D105	D104	D103	D102	D101	D100

% A \$1CB 8%\$ 8\$ 8%\$ 8%\$

S

%

D1

D2

D1

%

& D1

\$

GA % \$

%

%

& 8\$1\$ 8%\$1\$ 8%\$1\$\$\$

8%\$1\$\$\$ 8%-1-\$\$\$ 8%\$1\$\$\$

8\$1\$\$\$ 8%\$1- 8%\$1\$\$\$

8%\$1\$\$\$ 8%-1-\$\$\$ 8%\$1\$\$\$

&

D1

S

\$

M200 M100 M80 M280

[| | | | WSFR (S1) (D) (S2) (S3)]

MC200

[[WSEL (S1) (n) (S2) (S3)]]

| | | [ ADD (S1) (S2) (D)]										M200 M100 M80 M280					
S1 S2 D										7					
G%	=BH		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7	H	J	N	F
G&	=BH		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7	H	J	N	F
8	=BH			? bM	? bA	? bG	? b@A		8		7	H	J	N	F

S1 %
 S2 &
 D

X0	[	ADD	1000	2000	3000]
			D0	D1	D10	

@8 L \$
 588 8\$ 8% 8%\$
 L \$1CB 8\$ %\$\$\$ 8% &\$\$\$
 8% 8%\$1' \$\$\$

% S1 S2 D
 & D '&+*+
 GA % % \$ GA % \$
 '&+*, GA % &

| | | [ SUB (S1) (S2) (D)]										M200 M100 M80 M280					
S1 S2 D										7					
G%	=BH		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7	H	J	N	F
G&	=BH		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7	H	J	N	F
8	=BH			? bM	? bA	? bG	? b@A		8		7	H	J	N	F

										M200 M100 M80 M280					
[MUL (S1) (S2) (D)]															
S1 S2 D										8					
G%	=BH		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7	H	J	N	F
G&	=BH		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7	H	J	N	F
8	8=BH			? bM	? bA	? bG	? b@A		8		7		J		F

S1 %
S2 &
D

A I @ ' &

X0	1000	2000	2000000
[MUL	D0	D1	D10]

S1 S2 D

@8 L\$

A I @ ' 8\$ ' 8% ' 8%

L \$1CB 8\$ %\$\$\$ 8% &\$\$\$

8%8% 8%8% 1&\$\$\$\$\$

										M200 M100 M80 M280					
[DIV (S1) (S2) (D)]															
S1 S2 D										7					
G%	=BH		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7	H	J	N	F
G&	=BH		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7	H	J	N	F
8	=BH			? bM	? bA	? bG	? b@A		8		7	H	J	N	F

S1 %
S2 &
D

S2 \$ \$

X0	2500	1000	2
[DIV	D0	D1	D10]

S1 S2 D 8

@8 L\$

8= 8\$ ' 8%8%

L \$1CB 8\$ &\$\$\$ 8% %\$\$\$

8%8% 8%1& 8%1)\$

| | | [ SQT (S) (D)]										M200 M100 M80 M280					
S D										5					
G	-BH		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7	H	J	N	F
8	-BH			? bM	? bA	? bG	? b@A		8		7	H	J	N	F

S

S \$

D

%

S

X0	1000	31	@8 L \$
[SQT	D0	D10	GEH 8\$ 8\$

D

&

D

\$

L\$1CB 8\$ %\$\$\$ 8\$ 8\$1' %

GA % \$

GA % &

| | | [ INC (D)]										M200 M100 M80 M280					
D										3					
8	-BH			? bM	? bA	? bG	? b@A		8		7	H	J	N	F

| | [ DEC (D)]										M200 M100 M80 M280					
D										3					
8	=BH			?bM	?bA	?bG	?b@A		8		7	H	J	N	F

D

!'&+*, '&+*

D %

X0		999
[	DEC	D0

@8 L \$

8A 7 8 \$

L \$1CB 8 \$ %\$\$\$ %

8 \$1---

| | [ VABS (S) (D)]										M200 M100 M80 M280					
S D										5					
G	=BH		?bL	?bM	?bA	?bG	?b@A	?bGA	8	G8	7	H	J	N	F
8	=BH			?bM	?bA	?bG	?b@A		8		7	H	J	N	F

S

S

!'&+*, '&+* S !'&+*,

D

S

D

X0		-1000	1000
[	VABS	D0	D10

@8 L \$

J56G 8 \$ 8 \$

L \$1CB 8 \$!\$\$\$

8 % 8 \$1\$\$\$

| | [ NEG (S) (D)]										M200 M100 M80 M280					
S D										5					
G	=BH		?bL	?bM	?bA	?bG	?b@A	?bGA	8	G8	7	H	J	N	F
8	=BH			?bM	?bA	?bG	?b@A		8		7	H	J	N	F

S

S

!'&+*, '&+* S !'&+*,

D

S

D

@8 L \$

B9 8 \$ 8 \$

X0		1000	-1000
[	NEG	D0	D10

L \$1CB 8 \$ %\$\$\$

8 % 8 \$1\$\$\$

										M200 M100 M80 M280					
[DADD (S1) (S2) (D)]															
S1 S2 D										10					
G%	8-BH		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7		J		F
G&	8-BH		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7		J		F
8	8-BH			? bM	? bA	? bG	? b@A		8		7		J		F

S1 %
S2 &
D

X0	100000	200000	300000
[DADD D0	D2	D10	

@8 L \$
8588 8\$ 8& 8%\$
L \$1CB 8\$8% %\$\$\$\$ 8&8'
&\$\$\$\$ 8%8% 8%8%
1' \$\$\$\$\$

% S1 S2 D
& D 8%(, '*(+
GA % % \$
GA % \$ 8%(, '*(
GA % &

										M200 M100 M80 M280					
[DSUB (S1) (S2) (D)]															
S1 S2 D										10					
G%	8-BH		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7		J		F
G&	8-BH		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7		J		F
8	8-BH			? bM	? bA	? bG	? b@A		8		7		J		F

S1 %
S2 &
D

X0	100000	200000	-100000
[DSUB D0	D2	D10	

@8 L \$
8G 6 8\$ 8& 8%\$
L \$1CB 8\$8% %\$\$\$\$ 8&8'
&\$\$\$\$ 8%8% 8%8%
%\$\$\$\$

% S1 S2 D
& D 8%(, '*(+
GA % % \$
GA % \$ 8%(, '*(
GA % &

										M200 M100 M80 M280				
|—| |—| [ DMUL (S1) (S2) (D)]														
S1 S2 D										10				
G%	8-BH		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7		J	F
G&	8-BH		? bL	? bM	? bA	? bG	? b@A	? bGA	8					

| | [ DSQT (S) (D)]										M200 M100 M80 M280			
S D										7			
G	8-BH		?bL	?bM	?bA	?bG	?b@A	?bGA	8	G8	7	J	F
8	8-BH			?bM	?bA	?bG	?b@A		8		7	J	F

S

S \$

D

%

S

D

&

D

\$

GA % \$

GA % &

X0	83000	288
[DSQT]	D0	D10

@8 L \$

8GEH 8\$ 8\$

L \$1CB

8 \$8 %

, '\$\$\$

Ä 8 \$8 %

8 \$8 %

1& ,

| | [ DINC (D)]										M200 M100 M80 M280			
D										4			
8													

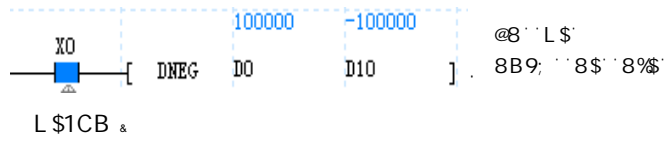
|—| —| [ DDEC (D)]		M200 M100 M80 M280
--------------------	--	--------------------

										M200 M100 M000 M200					
|---| |---| [ DNEG (S) (D)]															
S D										7					
										v					
G	8=BH		?bL	?bM	?bA	?bG	?b@A	?bGA	8	G8	7		J		F
8	8=BH			?bM	?bA	?bG	?b@A		8		7		J		F

S
D

S 8%+(,'*(+ 8%+(,'*(+ S 8%+(,'*(,

S
D



| | | [ DSUM (S1) (S2) (D)]										M200 M100 M80 M280					
S1 S2 D										9					
G%	8-BH		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7	J		F	
G&	-BH		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7	H	J	N	F
8	8-BH			? bM	? bA	? bG	? b@A		8		7	J		F	

S1
S2
D

S1 S2 &
D

SMD	[	DMOV	100000	100000	D0]	
		DMOV	200000	200000	D2]	
		DMOV	300000	300000	D4]	
		DMOV	400000	400000	D6]	
		DMOV	500000	500000	D8]	
XO	[DSUM	100000	5	1500000	D100]

@8 GA \$
8A CJ '\$\$\$\$\$' 8\$
8A CJ '&\$\$\$\$' 8&
8A CJ '\$\$\$\$\$' 8(
8A CJ '(\$\$\$\$\$' 8*
8A CJ ')\$\$\$\$\$' 8,
@8 L \$
8G A '8\$)' 8%\$

\$ S2 &))

L \$1CB 8\$) x &
8%\$8%\$%
8%\$8%\$% 1 8\$8% 8, 8- 1% \$\$\$\$

| | | [ RADD (S1) (S2) (D)]										M200 M100 M280				
S1 S2 D										10				
G%	F95@								8			J		F
G&	F95@								8			J		F
8	F95@								8			J		F

GA % % \$ GA % \$

S1 %
S2 &
D

XO	[RADD	-1000.20	2000.500	1000.300	D0 D2 D10]
----	---	------	----------	----------	----------	-----------	---

@8 L \$
F588 8\$8&8%

% S1 S2
D
& D

L \$1CB 8\$8% 1%\$\$\$8\$ 8&8' &\$\$\$)\$ \$
8%\$8% 8%\$8% 11%\$\$\$" \$ \$

%+\$%(%&Y \$,
%+\$%(%&Y \$,

RSUB (S1) (S2) (D)										M200 M100 M280						
S1 S2 D										10						
G%	F95@								8				J		F	
G&	F95@								8				J		F	
8	F95@								8				J		F	

S1 %
S2 &
D

% 3

| | [ RVABS (S) (D)]										M200 M100 M280		
S D										7		
G	F95@							8			J	F
8	F95@							8			J	F

S
D

XO		-10000.2	10000.20
[	RVABS	DO	D10

S D

@8 L\$
 FJ56G 8\$ 8%
 L\$1CB 8%8% 1%\$\$\$&
 8%8% 8%8% 1%\$\$\$&

| | [ RNEG (S) (D)]										M200 M100 M280		
S D										7		
G	F95@							8			J	F
8	F95@							8			J	F

S
D

XO		10000.20	-10000.2
[	RNEG	DO	D10

S D

@8 L\$
 FB9 8\$ 8%
 L\$1CB 8%8% 1%\$\$\$&
 8%8% 8%8% 1%\$\$\$&

| | [ SIN (S) (D)]										M200 M100 M280		
S D										7		
G	F95@							8			J	F
8	F95@							8			J	F

& D \$ GA % \$

S
D

XO		1.570000	1.000000
[	SIN	DO	D10

% S G-B
 D

@8 L\$
 G-B 8\$ 8%

L \$1CB 8% 1% + G-B

8% 8% 1%

										M200 M100 M280			
[ | | [ COS (S) (D)]]													
S D										7			
G	F95@							8			J		F
8	F95@							8			J		F

S
D

X0	[COS 3.140000 -1.00000]
	[DO D10]

@8 L\$
7CG 8% 8%

L \$1CB 8% 1% 7CG 8% 8%

%

S
7CG

1!\$\$\$\$\$

D

&

D \$
GA % \$

										M200 M100 M280			
[ | | [ TAN (S) (D)]]													
S D										7			
G	F95@							8			J		F
8	F95@							8			J		F

S
D

X0	[TAN 1.570000 1255.848]
	[DO D10]

@8 L\$
H5B 8% 8%

L \$1CB 8% 1% + H5B 8% 8%

%

S
H5B

1%))", (, '-,

D

&

+\$%&Y \$,
!+\$%&Y \$,
GA % %

\$

GA % \$

|—| |—| [ POWER (S1) (S2) (D)]										M200 M100 M280					
S1 S2 D										10					
G%	F95@								8				J		F
G&	F95@								8				J		F
8	F95@								8				J		F

										M200 M100 M280			
| | | [ EXP (S) (D)]													
S D										7			
G	F95@								8			J	F
8	F95@								8			J	F

S

D

X0	[EXP	10.00000	22026.46
	DO	D10	

@8 L\$
9LD 8\$ 8\$

L \$1CB 8\$ 1% \$ 9LD 8\$ 8\$

1&&\$*(.(

S 9LD

D

&

+\$%&Y \$,

+\$%&Y \$,

GA %%

\$ GA % \$

										M200 M100 M280			
| | | [ RSLM (S1) (S2) (D)]													
S1 S2 D										9			
G%	F95@								8			J	F
G&	=BH	? bL	? bM	? bA	? bG	? b@A	? bGA		8			J	F
8	F95@								8			J	F

S1

S2

D

S1 **S2** &

D

% \$ **S2** &))

/

| | [ ACOS (S) (D)]										MC280				
5H5B f8 fDL										7				
G	F95@								8				J	F
8	F95@								8				J	F

& D \$ GA % \$

S

D

SMD	[ATAN	3.140000	1.262481
	DO	D10	

@8 GA \$
5H5B 8\$ 8\$

%

S

H5B!

D

GA \$1CB f8\$ 8% ' % H5B! f8\$ 8% f8\$
8% 1% & % , %

| | [ LOG (S) (D)]										MC280				
@C; f8 fDL										7				
G	F95@								8				J	F
8	F95@								8				J	F

& D \$ GA % \$

S

D

SMD	[LOG	3.000000	0.477121
	DO	D10	

@8 GA \$
@C; 8\$ 8\$

%

S @C;

D @C; %

GA \$1CB 8\$f8% '\$ 8\$f8% 8\$f8% 1\$ (+%& %

| | [ RAD (S) (D)]										MC280				
F58 f8 fDL										7				
G	F95@								8				J	F
8	F95@								8				J	F

S


D

% S D
& \$ GA % \$

SMD	[RAD	180.0000	3.141593
	DO	D10	

@8 GA \$
F58 8\$ 8\$

GA \$1CB 8\$fB%L % \$\$ 8%\$fB%L 8%\$fB%L1' % (%) -'

	M280
89; fB fDL	7

G F95@ ■ 8

6CC@		%	CB C::	% @A
8BH		%	!'&+*, Z'&+*	% J
8BH		'&	!&%+(, '* (, Z&%+(, '* (+	& J
K CF8		%	\$ **)'	% J
8K CF8		'&	\$ (& (-*+&-)	& J
F 95@		'&	-%%+)(-(')%9!' , r-'('\$& & (**'9Z" ,	& J

678 !! 678 6]bUfm7cXYX'8YMa U
 678 , (&%678
 , (&%678

\$	\$\$\$\$	\$\$\$\$
%	\$\$\$%	\$\$\$%
&	\$\$%\$	\$\$%\$
'	\$\$%\$	\$\$%\$
(\$%\$	%\$
)	\$%\$%	%\$%
*	\$%\$	%\$%
+	\$%\$%	%\$%
,	%\$	%\$
-	%\$%	%\$

| | [ DTI (S) (D)]										M200 M100 M80 M280					
S D										6					
G	8BH		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7		J		F
8	8BH			? bM	? bA	? bG	? b@A		8		7	H	J	N	F

S S ' &+*+ S !' &+*, D

S D

X0	[DTI 10000 DO 10000 D10]	@8 L\$
		8H= 8\$ 8\$
L \$1CB	8 \$Z8% 1\$ \$\$\$	8% 8% 1\$ \$\$\$

										M200 M100 M280					
| | [ INT (S) (D)]															
S D										6					
G	F95@								8				J	F	
8	=BH			?bM	?bA	?bG	?b@A		8		7	H	J	N	F

S ' &+*+ **D1** ' &+*+ **S** !' &+*, **D1!** ' &+*,
D +*+ ↗

% **S** **D**

X0	10000.50	10000
[INT	D0	D10]

 @8 L\$
 & =BH 8\$ 8%

L\$1CB ~~8% 1%~~ 8%
 8%\$1\$\$\$\$

| | [DINT (S) (D)]

M200 M100 M280

|---|---| [ BCD (S) (D)]										M200 M100 M80 M280					
S D										5					
G	K CF8		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7	H	J	N	F
8	K CF8		? bM	? bA	? bG	? b@A			8		7	H	J	N	F

S H-- 2 H S ---- D H 2 H D A / =
 D 8

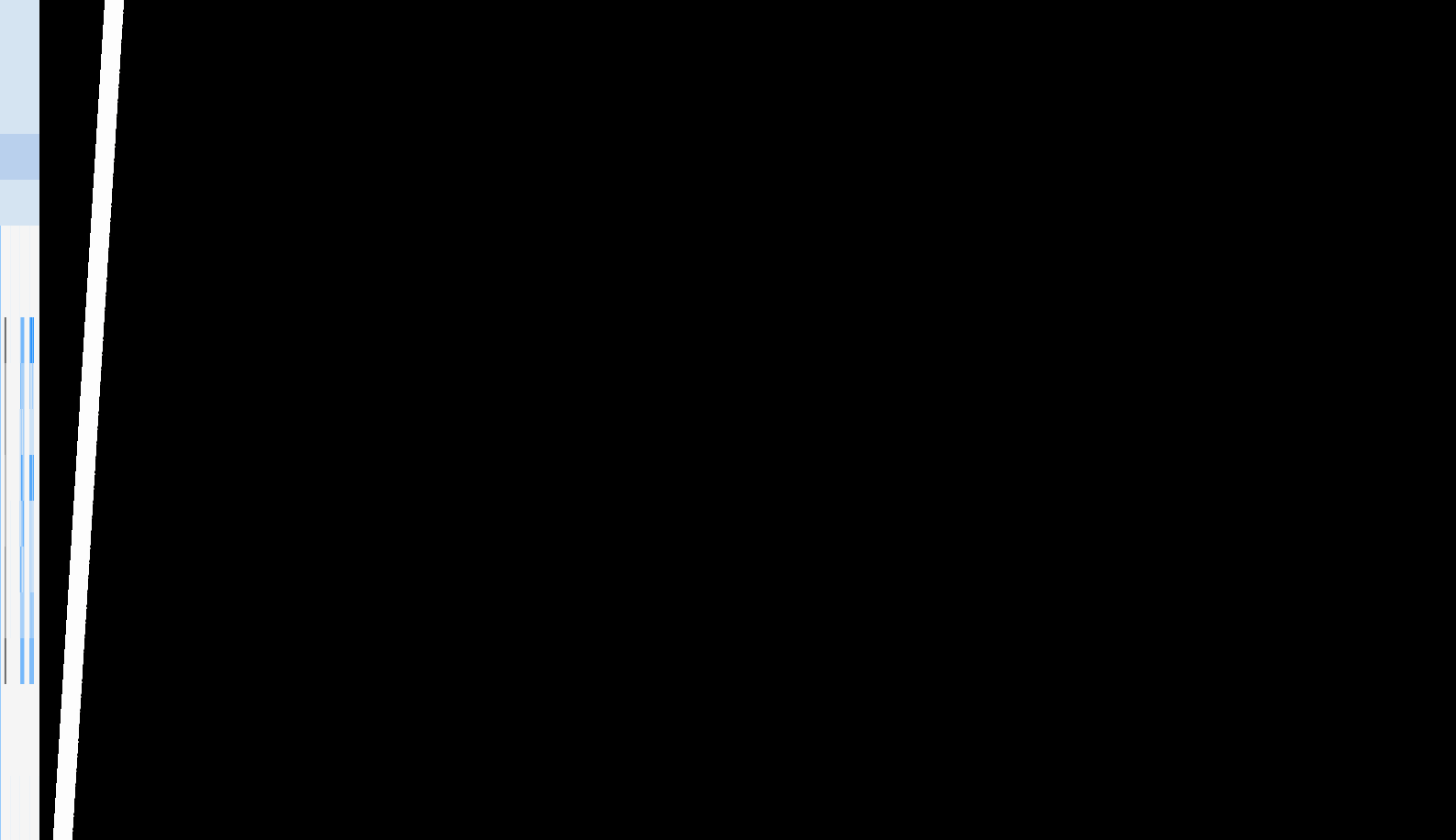
S (/ S

XD [BCD DO 3333 13107 D10]

% 678 D 0 L \$1CB 8 \$1 \$8 \$) ' ' ' ((1% D678 /8%
 8% \$1 \$ ' ' ' % 0 \$ + / < & +

| [ DBCD (S) (D)]										M200 M100 M80 M280												
S D										7												
8	G	8	8	K	CF8	8	?	8	8	bL	8	bM	?	bA	8	?	bG	?	b@A	8	8	GA

		M200 M100 M80 M280
[BIN (S) (D)]		



| | [ DGBIN (S) (D)]										M200 M100 M80 M280			
S D										7			
G	8K CF8		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7	J	F
8	8K CF8			? bM	? bA	? bG	? b@A		8		7	J	F

S
D

XO	3435973836 2290649224
[DGBIN DO D10]	

@B L\$
8; 6-B 8\$ 8\$

L \$1CB 8\$8% 1\$ 77777777 (')-+', '* '&
8\$8% 8\$8% 1\$ &&-\$*(-&&

S '&
D

| | [ SEG (S) (D)]										M200 M100 M80 M280			
-----------------	--	--	--	--	--	--	--	--	--	--------------------	--	--	--

		M200 M100 M80 M280																		
| | | [ ASC (S1~S8) (D)]																				
S1 S8 D		19																		
G%	K CF8																			
G&	K CF8																			
G'	K CF8																			
G(	K CF8																			
G)	K CF8																			
G*	K CF8																			
G+	K CF8																			
G.	K CF8																			
8	K CF8									8		7	H	V	X	F				

S1 S8

\$

5G7= \$! 8% \$! +9
\$L \$\$

D

D S1 S8 5G7=
GA % *1C: : D
5G7= GA % *1CB D
% 5G7=

MO	[ASC	12345678	12849	DO

@B A \$

5G7 %& () *+, ' 8\$

A \$1CB 5G7=

- GA % *1C: : 8\$1\$' & %
8%1\$' (' 8&1\$' *) 8' 1\$' , '+
- GA % *1CB 8\$1\$' % 8%1\$' &
8&1\$' ' 8' 1\$' (8(1\$') 8) 1\$' * 8*1\$' +
8+1\$' ,

M200 M100 M80 M280

| | | [ITA (S1) (D) (S2)]

● GA % *1C::
8&9d \$! ' * ' +

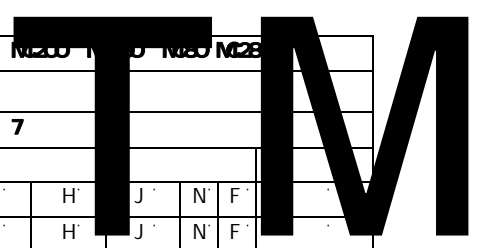
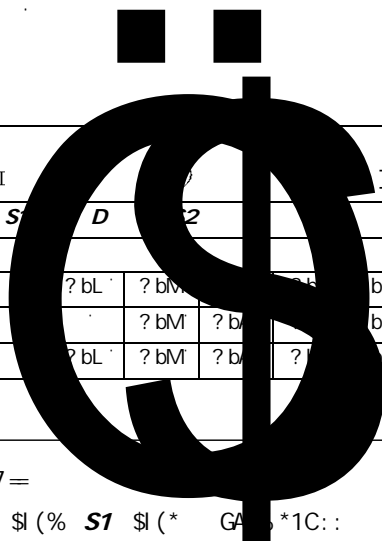
8&\$1\$! ' , ' -

● GA % *1CB

8&\$1\$! ' - 8&9d \$! ' ,

8&&1\$! ' + 8& 1\$! ' *

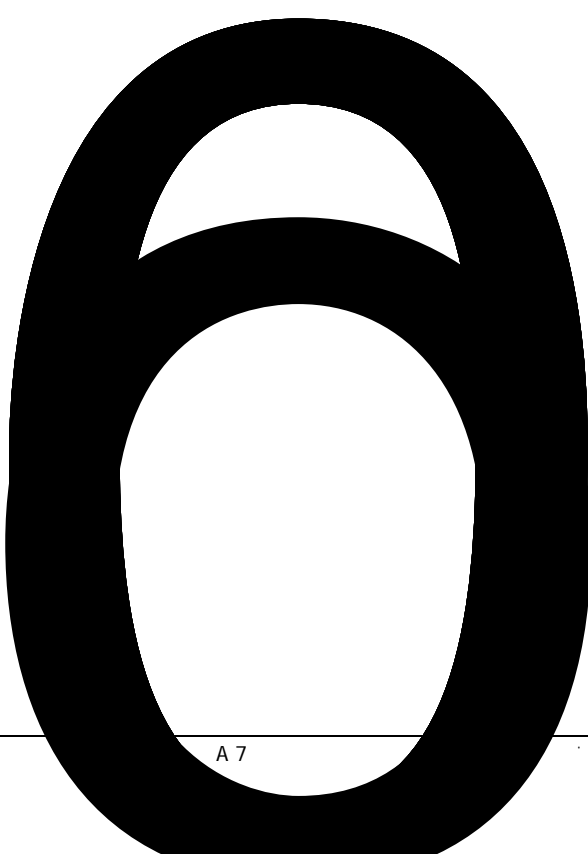
|—| |—| [ ATI												M200 M20 M28		
S		D										7		
G%	WORD	? bL	? bM	? bH	b@A	? bGA	8	G8	7	H	J	N	F	
8	WORD	? bL	? bM	? bH	b@A	? bGA	8	G8	7	H	J	N	F	
G&	WORD	? bL	? bM	? bH	b@A	? bGA	8	G8	7	H	J	N	F	



S1 5G7=

\$!\$ S1 \$! ' - \$! (% S1 \$! (* GA % *1C::

S1



V_{SL}

S_n

M200 M280

S3

% S3 *(

D@7

V_{MH}

V_{SL}

V_{ML}

V_{SH}

S_n

D_n

A fV_{SL} V_{SH} fV_{ML} V_{MH} fV_{SL} %\$\$\$\$

B V_{SL} fV_{ML} fA#%\$\$\$\$

D_n fV_{SL} fA#%\$\$\$\$ B

D_n

' &+*+

' &+*+

!' &+*,

!' &+*,

M1	[	MOV	282	282	D1000]	
	[	MOV	3530	3530	D1001]	
	[	MOV	260	260	D1002]	
	[	MOV	3650	3650	D1003]	
M4	[	MOV	282	282	D100]	
	[	MOV	3530	3530	D101]	
	[	MOV	1906	1906	D102]	
	[	MOV	0	0	D103]	
	[	MOV	5000	5000	D104]	
	[	MOV	-115	-115	D105]	
M2	[	LCNV	282	282	D1000	D200	6

@8 = A %

FA CJ ' & & ' 8%\$\$\$

FA CJ ' ') ' \$ ' 8%\$\$\$

FA CJ ' & * \$ ' 8%\$\$\$

FA CJ ' ' *) \$ ' 8%\$\$\$

@8 = A (

FA CJ ' & & ' 8%\$\$\$

FA CJ ' ') ' \$ ' 8%\$\$\$

FA CJ ' % * ' 8%\$\$\$

FA CJ ' \$ ' ' 8%\$\$\$

FA CJ ') \$\$\$ ' 8%\$\$\$

FA CJ ' ! %) ' 8%\$\$\$

@8 ' A &

F@7BJ : 8%\$\$\$ 8%\$\$\$ 8%\$\$\$ 8%\$\$\$ *

A &1CB @7BJ

8&\$\$fB&\$\$L'1' &*\$

8&\$\$fB&\$\$L'1' *)\$

8&\$(fB&\$\$L'1' %))

8&*\$fB&\$\$L'1' ! (" & ,

8&\$, fB&\$\$L'1')% ("&+*

8&\$\$fB&\$\$L'1' !% (") +

										M200 M700 M80 M280					
[WAND (S1) (S2) (D)]															
S1 S2 D										WAND					
G%	K CF 8		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7	H	J	N	F
G&	K CF 8		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7	H	J	N	F
8	K CF 8			? bM	? bA	? bG	? b@A		8		7	H	J	N	F

S1 %

S2 &

D

XO	46739	37678	37378	
[WAND	DO	D1	D10]

@8 L\$

K 5B8

8\$8%8%

L \$1CB 8 \$1& %\$% #

3

S1 S2 / 1

È D

[ROR (S1) (D) (S2)]															
S1 D S2															
G%	K CF8		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7	H	J	N	F
8	K CF8			? bM	? bA	? bG	? b@A		8		7	H	J	N	F
G&	-BH		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7	H	J	N	F

S1 %
D .
S2 &

S1
S2
D

GA % %

3

A %

\$
?b ?b (

| | | [ ROL		(S1)	(D)	(S2)											
		S1	D	S2											
G%	K CF 8		? bL	? bM	? bA	? bG	? bGA	8	G8	7	H		F		
8	K CF 8			? bM	? bA	? bG		8		7	H		F		
G&	=BH		? bL	? bM	? bA	? bG	? bGA	8	G8	7	H		F		

S1

%

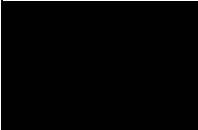
D

S2

8

S1 **+** **D**

S2

	(S1)	(D)	(S2)]		
	S1	D	S2			

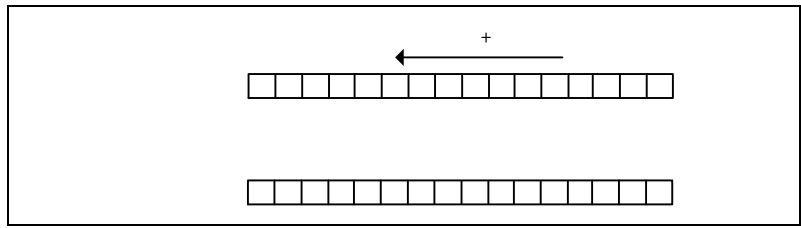
G% | K CF8' | ? bL' | ? bM' | ? bA' | ? bG' | ? b@A' | ? bGA' | 8' | G8' | 7' | H' | J' | N' | F'

| | | [ SHL (S1) (D) (S2)]															
S1 D S2															
G%	K CF 8		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7	H	J	N	F
8	K CF 8			? bM	? bA	? bG	? b@A		8		7	H	J	N	F
G&	=BH		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7	H	J	N	F

S1 %
D
S2 &

MO			31452	28160																	@8 A \$
|	|	|	[ SHL	DO	D10	7	]														G< @ 8 \$ 8 % +

S1
S2 D



S2 \$ S1
? b ? b (

A \$1CB 8 \$1 & \$9000\$9000\$9000\$ %(& + 8%
8%\$1 & \$90\$9000\$9000\$9000\$ & % \$

| | | [ DSHR (S1) (D) (S2)]															
S1 D S2															
G%	8K CF 8		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7		J		F
8	8K CF 8			? bM	? bA	? bG	? b@A		8		7		J		F
G&	=BH		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7	H	J	N	F

S1 % S2 \$ S1 ? b ? b
D
S2 &

MO			1939381420	1893927																	@8 A \$
|	|	|	[ DSHR	DO	D10	10	]														8G< F 8 \$ 8 % \$

S1
S2 D

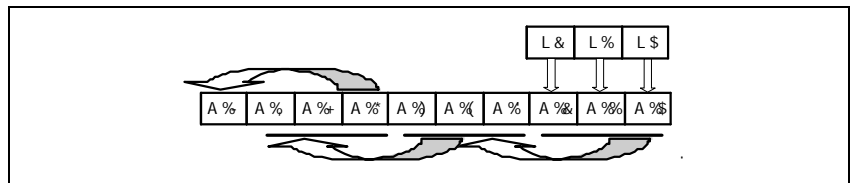
% A \$1CB 8 \$ 8 % 1 & \$9000\$9000\$9000\$9000\$9000\$9000\$9000\$9000\$
% ' - , % & \$ % 8% 8% 8% 8%
1 & \$\$\$\$\$\$\$\$\$\$9000\$9000\$9000\$9000\$9000\$9000\$9000\$ % ' - & +
& G< F

| | | [ DSHL (S1) (D) (S2)]		
------------------------	--	--

|---| |---| SFTL (S1) (D) (S2) (S3)														
S1 D S2 S3														
G%	6CC@	L	M	A	G	@A	GA			7	H			
8	6CC@		M	A	G	@A				7	H			
G&	=BH	?bL	?bM	?bA	?bG	?b@A	?bGA	8	G8	7	H	J	N	F
G	=BH	?bL	?bM	?bA	?bG	?b@A	?bGA	8	G8	7	H	J	N	F

S1 %
D .
S2 &
S3 ..

MO	SFTL	ON	ON	10	3	@8...A\$
	X0	M10				G:H@L\$A%\$%\$



%

% A \$1CB A %\$ %\$
 A %& A % L \$

& **S2** **S3**

& L \$1% L %1\$ L &1% A %1\$ A %&1% A %&1% A % 1\$ A % 1\$
 A % 1% A %*1\$ A %-1\$ A % 1\$ A % 1%
 ' L \$ L & A %1% A %&1\$ A %&1% A % 1\$ A % 1% A % 1%
 A %1\$ A %-1\$ A % 1% A % 1\$

S2 **D** **S3**
 S3
 S1
S3

										M280					
<i>S1 S2 D S3</i>															
G%	=BH'														
G&	=BH'														
8	=BH'								8				J	F	
G	=BH'														

S1

\$ +

S3

S1

6: A

S2

D

S3

S2

6: A

: FCA

S3

\$ ' & + * +
6: A

MO	[FROM	0	3	997	D100	2]
----	---	------	---	---	-----	------	---	---

@8''' A \$
: FCA \$' 8%\$\$ &

6: A

D

A \$ CB

\$

6: A

&

8%\$\$ 8%\$%

S3

6: A

% ' & + * +
6: A
6: A

[DFROM (S1) (S2) (D) (S3)]																
S1 S2 D S3																
G%	=BH'															
G&	=BH'															
8'	8=BH'								8'				J'		F'	
G'	=BH'															

6: A

S1

\$ +

S1 6: A
D S3

S2

S3

S2

6: A

8: FCA

S3

\$ '&+*+

6: A

6: A

MO	[DFROM	0	3	16580857	D200	1]
----	---------	---	---	----------	------	---	---

D

@8' A \$'

8: FCA '\$' ' ' ' 8&\$ \$' %

A \$ CB

\$

6: A

%

S3

6: A

8&\$ \$ 8&\$ %

% '&+*+

6: A

[TO (S1) (S2) (S3) (S4)]															
S1 S2 S3 S4															
G%	≠BH'														
G&	≠BH'														
G'	≠BH'							8'				J'		F'	
G'	≠BH'														

S1 \$ + **S3** **S4** **S1**

6: A 6: A **S2** **S4**

S2 6: A HC **S4**

\$ ' & + * +
6: A
6: A

S3

S4 6: A

% ' & + * +
6: A
6: A

SMD	[TO 0 8 1000 2]
-----	-------------------

@8 GA \$
HC \$ ' ' % \$\$\$ ' &
% \$\$\$

D@7 \$ 6: A , 6: A , -

[DIO (S1) (S2) (S3) (S4)]																
S1 S2 S3 S4																
G%	=BH'															
G&	=BH'															
G'	8=BH'								8				J		F	
G(	=BH'															

S1 \$ + S3 S4 S1
6: A S2 S4

S2 6: A 8HC S4
\$ '&+*+ SMO [DIO 0 8 16711935 1] @8 GA \$
6: A 8HC '\$, '%+%') %
6: A D@7 \$ 6: A , -
S3 % +%%)
S4 6: A
% '&+*+
6: A
6: A

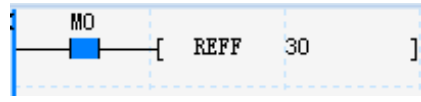
[VRRD (S) (D)]																
S D																
G'	K CF8'															
8'	K CF8'								8				J			

S \$ &))
D \$ &)) MO [VRRD 0 T8 D10]
@8 A \$
J FF8 '\$ 8%\$
A \$ CB \$ 8%\$

|---| |---| [ REFF (S)]															
S															
G	K	CF8	?bL	?bM	?bA	?bG	?b@A	?bGA	8	G8	7	H	J	N	F

S

● A 7&\$\$ \$ *(ag *(
 *(
 ● A 7%\$\$ \$, % ' & *(
 \$ % ,
 ' & % *(' &
 *(



@8... A \$
 F9: ... \$

L\$ CB

' \$ag

L\$ L%+

|---| |---| [ REF (D) (S)]														
D S														
8	6CC@	L	M											
G	-BH													

D

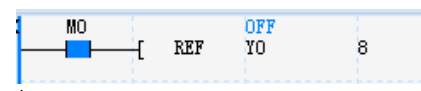
L#M
 L\$ L% L&\$
 M\$ M\$ M&\$ \$

% Lb Mb
 &
 :CFIB9LH 7>

S

, % &)* ,
 D@7

F9:
 (
 F9:
)



@8... A \$
 F9: ... M\$

A \$ CB M\$ M+

|—| |—| [ EROMWR (S1) (S2)]															
S1 S2												[REDACTED]			
G%	K CF8								8						F
G&	=BH		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7	H	J	N	F

| | [ RR]														
(S) (D)														
G	K CF8							8		7	H		F	
8	6CC@			M										

S

D M

% G GZ+

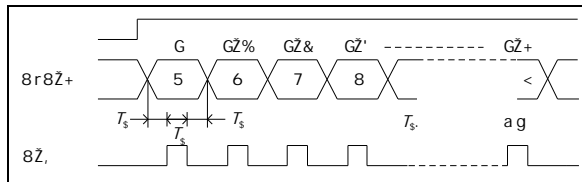
%

8 8Z+

M

& GA +%

GA +%

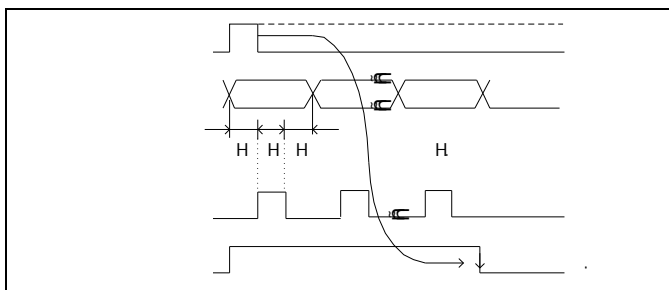


GA +\$ C: :

CB % %

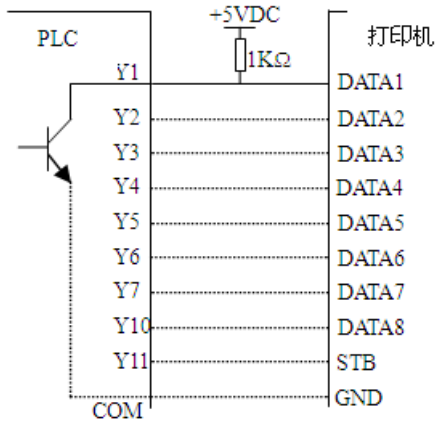
<\$ \$ BI @

GA +\$ CB



%

&



% Ω

" \$"

)J 87

" %

M0%

:: M\$!M+

8\$!8+

5G7=

```

/*打印前数据取反*/
SM1 [ MOV 0 Z0 ]
SM1 [ FOR 8 ]
SM0 [ WINV DOZO DOZO ]
[ INC Z0 ]
[ NEXT ]
/*由MO控制打印*/
MO [ PR DO Y1 ]

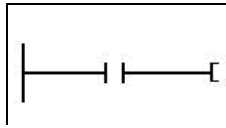
```

%

&

GA +%

"



H? M

(D2)]

--	--

|---| |---| [ TRD (D)]														
<i>D</i>														
8	K	C	F	8	J	F								

D

D

HF 8

+

8


MO	2000
[TRD D10]	

@8 A \$
HF 8 8 \$

A \$ CB

8 \$ +

	G8%\$\$		&\$\$\$ &\$-		8%\$
	G8%\$%		% %&		8%&
	G8%\$&		% ' %		8%('
	G8%\$'		\$ &'		8%('
	G8%\$(		\$ )-		8%('
	G8%\$)		\$)-		8%('
	G8%\$*		\$ *		8%('

 TWR (S)		
s		

TADD (S1) (S2) (D)													
S1 S2 D													
G%	K CF8									8	G8	J	F
G&	K CF8									8	G8	J	F
8	K CF8									8		J	F

8&)-		8&&),		8' &)+
----	----	--	-----	----	--	------	----

S1 %

S1

S2 &

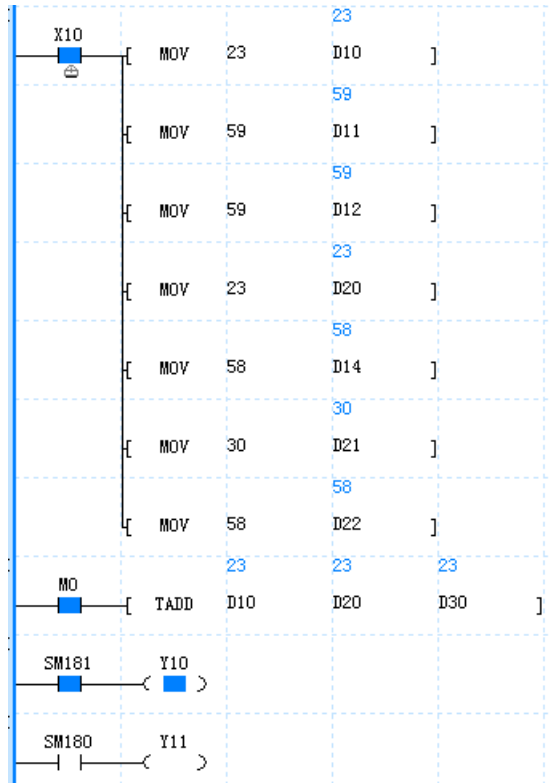
S2

D

D

GA % %

GA % \$



@8 L%
 ACJ & 8%
 ACJ)- 8%
 ACJ)- 8%
 ACJ & 8%
 ACJ)- 8%
 ACJ)- 8%
 @8 A \$
 H588 8 \$ 8%
 8 \$
 @8 GA % %
 CI H M%
 @8 GA % \$
 CI H M%
 C::

% L% CB 8% 8&&

& A \$ CB 8% 8&&

8' \$

GA % % CB GA % \$ C::

" " \$ &

" " \$)-

" " \$)-

G%		G&		8	
8%	&	8&\$	&	8' \$	&
8%	)-	8&%	),	8' %),

[TSUB (S1) (S2) (D)]										M280										
S1 S2 D																				
G%	K CF8									8	G8							J		F
G&	K CF8									8	G8							J		F
8	K CF8									8								J		F

S1 %
S1

G%		G&		8	
8%\$	&	8&\$	&	8'\$	&
8%&	)-	8&%	)-	8'%)-
8%&	)	8&&	)-	8'&)-

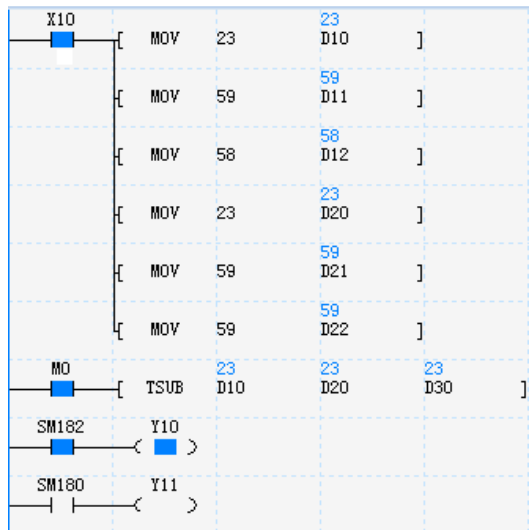
S2 &
S2

D

D

GA % &

GA % \$



@8' L%\$
 ACJ' &' 8%\$
 ACJ')- 8%&
 ACJ') 8%&
 ACJ' &' 8&\$
 ACJ')- 8&%
 ACJ')- 8&&
 @8' A \$
 HGI 6' 8%\$ 8&\$ 8'\$
 @8' GA % &
 CI H' M%\$
 @8' GA % \$
 CI H' M%&

% L%\$ CB 8%\$ 8&\$
 & A \$ CB 8%\$ 8&\$
 8'\$

" " \$ &
 " " \$)-
 " " \$)-

GA % & CB GA % \$ C::

| | [ HOUR (S) (D1) (D2)]								M280							
S D1 D2															
G	=BH		?bL	?bM	?bA	?bG	?b@A	?bGA	8	G8	7	H	J	N	F
8%	=BH								8				J		F
8&	6CC@			M	A	G	@A								

D1 **D@7**

S \$ FI B GHCD

'&+*' & **D2** CB

D1 % '&+*' \$

D1 **D1**

% **D1**

D2 **S**

D1 **CB**

MO	[MOV 1000 1000 D100]	@8 A \$
M1	[HOUR 1000 0 D200 M10]	A C J % \$\$\$ 8 % \$
M10	YO	< C I F 8 % \$\$\$ 8 & \$\$\$ A %
| | ( )		@8 A %
		C I H M \$

% A \$ CB < C I F

CB

& A % CB < C I F

A % CB % \$\$\$ A % CB

% **D@7**

.....

										M280				
[	[	DCMP=	(S1)	(S2)	(D)]								
[	[	DCMP<	(S1)	(S2)	(D)]								
[	[	DCMP>	(S1)	(S2)	(D)]								
[	[	DCMP<>	(S1)	(S2)	(D)]								
[	[	DCMP>=	(S1)	(S2)	(D)]								
[	[	DCMP<=	(S1)	(S2)	(D)]								
S1 S2 D S1 S2 D S1 S2 D S1 S2 D S1 S2 D S1 S2 D														
G%	-BH'							8	G8			J		F
G&	-BH'							8	G8			J		F
8	6CC@			M	A	G	@A			7	H			

S1 % **S1**

S2 & **S2**

D

8 CB

C: :

S1 S2

6-B

D

S1 S2

SMO	[	MOV	2004	2004	D0]
	[	MOV	10	10	D1]
	[	MOV	25	25	D2]
	[	MOV	2004	2004	D10]
	[	MOV	10	10	D11]
	[	MOV	24	24	D12]
X0	[	DCMP=	2004	2004	D10	OFF
	[	DCMP<	2004	2004	D10	OFF
	[	DCMP>	2004	2004	D10	ON
	[	DCMP<>	2004	2004	D10	ON
	[	DCMP>=	2004	2004	D10	ON
	[	DCMP<=	2004	2004	D10	OFF

@8 GA \$

A CJ &\$\$('8\$

A CJ %\$`8%

A CJ &`8&

A CJ &\$\$('8%\$

A CJ %\$`8%%

A CJ &(`8%&

@8 L\$

87A D1'8\$8%A \$

87A D0'8\$8%A %

87A D2'8\$8%A &

87A D02'8\$8%A '

87A D21'8\$8%A (

&\$\$(-

'% &\$\$' & &

										M280																																																																						
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┌───┐	┌───┐	TCMP<	(S1)	(S2)	(D)]																																																																										
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		S1	S2	D																																																																												
		S1	S2	D																																																																												
		S1	S2	D																																																																												
		S1	S2	D																																																																												
		S1	S2	D																																																																												
G%	=BH								8	G8			J		F																																																																	
G&	=BH0								8	G8			J		F																																																																	

8

----- ----- HTOS (S) (D)																			
S D																			
G	K CF8	? bL	? bM	? bA	? bG	H	7	8	G8										

[HCNT (D) (S)]												
D S												
8	8-BH									7		
G	8-BH	?bL	?bM	?bA	?bG	?b@A	?bGA	8	G8	7	J	F

D

7&* 7&-

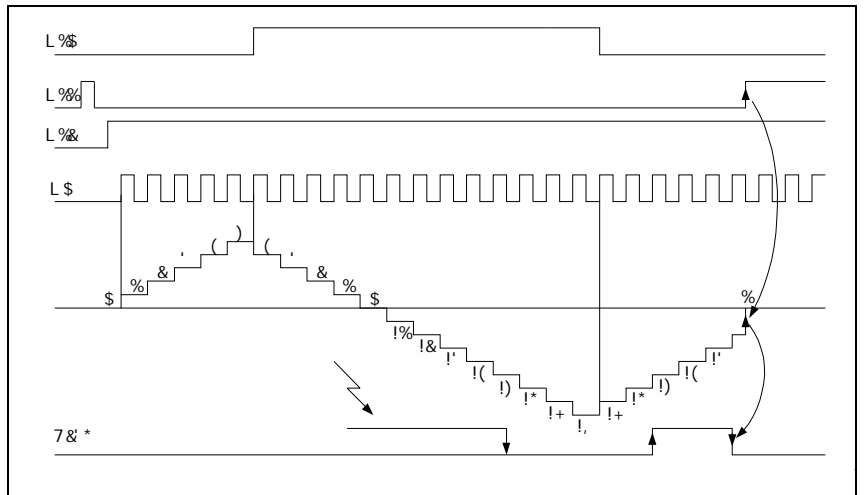
S

&%(, '* (, &%(, '* (+

X10	SM236		
X11	[RST C236]	OFF	
X12	[HCNT C236]	0	-5

@8'''' L%
 CI H'' GA &''
 @8'''' L%
 FGH'''' 7&''
 @8'''' L%
 <7BH'' 7&'' !)

S



<7BH
 <7BH GD8

€

€

% L%& C:: CB 7&* L\$ 7&*
 7&* L\$ L%& C:: L\$ 7&*
 L\$
 & 7&* 7&* *) 7&*
 7&*) * 7&*
 L%& CB FGH 7&* 7&*

DHSCS		(S1)	(S2)		
		S1	S2	D	
G%	8-BH		? bL	? bM	
G&					
8			M	G	

S1

' &

8%

8% (+

S2

7&)-

D

M A

G

% 8<G7

<7BH

<7BH

8<G7

& 8-

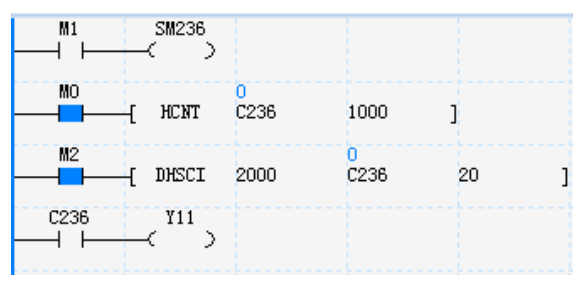
,C,2 £ - \$'0 & "V

|-----|-----| DHSCI (S1) (S2) (S3)]													
S1 S2 S3													
G%	8-BH		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7	J	F
G&	8-BH										7		
G	K CF8												

S1 (D@7 8<G7G 8<G7= 8<G7F 8<GN
 '& 8-BH 8<GD 8<GH €
 &%+(, '* (&%+(, '* (+

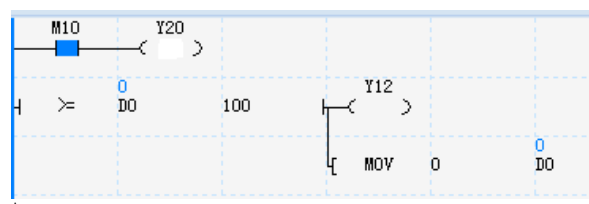
S2 7&* 7&)-

S3 &\$
 &)
 <7BH



@8 A %
 CI H GA & *
 @8 A \$
 8<G7= &\$\$\$ 7&* &\$
 @8 7&*
 CI H M%%

C:: CB
 8<G7=
S1 S3



@8 A %
 CI H M&\$
 @821 8\$ %\$\$
 CI H M%&
 A C J \$ 8\$

% 8<G7=
 <7BH
 <7BH
 8<G7=
 & 8<G7=
 8A C J A C J
 8<G7=
 ' 8<G7= 8<G7G 8<G7F
 8<GN 8<GD 8<GH
 *
 *

% A % CB 7&* L\$ C:: CB L\$
 € 7&* --- %\$\$\$ 7&* %\$\$\$
 %\$\$\$ 7&* 7&* M%% M%%
 & A & CB 8<G7=
 7&* &\$\$\$ &\$
 ' A \$ CB GA & * 7&* A \$ C:: GA & *
 7&*
 (7&* 7&* &\$\$\$ &\$
 A %\$ CB M&\$ M&\$
 8\$ %\$\$ M%& 8\$

[DHSPI (S1) (S2) (S3)]															
S1 S2 S3															
G%	8-BH		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7		J		F
G&	8-BH									G8					
G	K CF8														

S1 ' & 8-BH

&%(, ' *(, &%(, ' *(+

S2 ž

G8&\$ZG8' &\$ZG8' (\$ZG8') \$ZG8' *\$ZG8' +\$

S3)' ž (ž) ž *ž +ž, "

8 < GD1 * ...

r 8

DHSCR (S1) (S2) (D)																
S1 S2 D																
G%	8-BH		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7		J		F	
G&	8-BH										7					
8	6CC@			M	A	G					7					

& 8<G7F

8A CJ A CJ

8<G7F

S1

' & 8-BH

' 8<G7F 8<G7= 8<G7G 8<GN 8<GD 8<GH

8%+(,'*(, 8%+(,'*(+

*

*

S2

7&* 7&)-

(D@7

8<G7G

D

M A

G 0

7

S2

<7BH

C:: CB

8<G7F

S1 D

M

M

8<G7F

% 8<G7F

<7BH

<7BH

8<G7F

		DHSZ	(S2)	(S3)	(D)														
			S2	S3	D														
G%	8-BH	?bM	?bA	?bG	?b@A	?bGA	8	G8	7			J		F					
G&	8-BH		?bA	?bG	?b@A	?bGA	8	G8	7			J		F					
G	BH								7										
8	bCC@		M	A	G														

66

Z

S1

% '& 8: &%' '*('

&%(+'*('+

S2

& '& 8BH &%(+'*('

&%(+'*'+

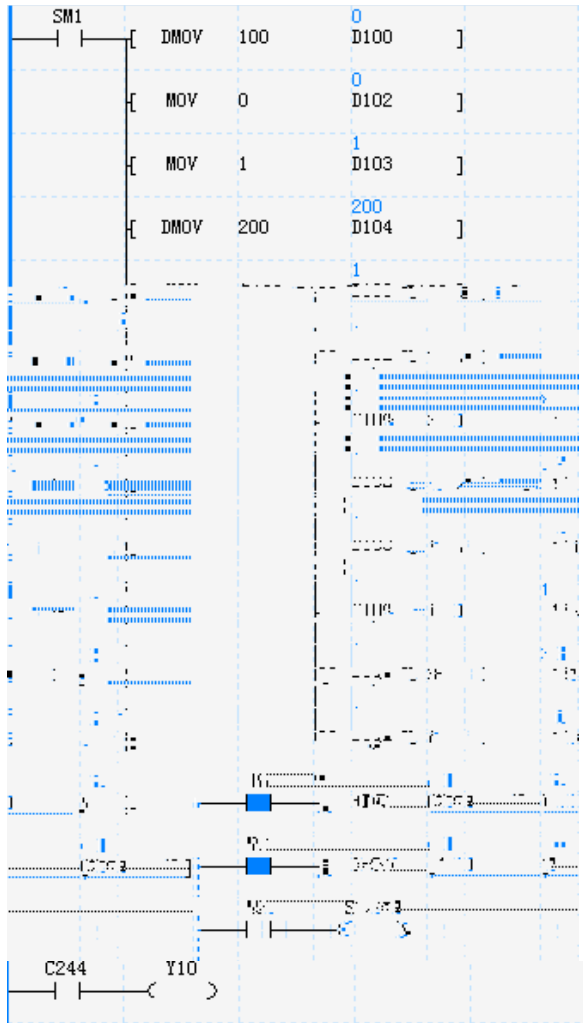
S3

7&* 7&)-'

D

' R S f 4 0

8%\$\$1\$	8%\$%1%\$\$	8%\$\$&1\$	8%\$' 1%	%
8%\$(1\$	8%\$) 1&\$\$	8%\$* 1%	8%\$+1\$	&
8%\$, 1\$	8%\$- 1' \$\$	8%\$\$&1&	8%\$\$%1%	
8%\$\$&1\$	8%\$' 1' \$\$	8%\$\$' 1'	8%\$\$) 1%	(%



```

@8'''' GA %
8A CJ '' '$$' 8%$$
A CJ '' '$' ' 8%$$
A CJ '' '% ' 8%$
8A CJ '' '&$$' 8%$(
A CJ '' '% ' 8%$*
A CJ '' '$' ' 8%$+
8A CJ '' '$$' 8%$,
A CJ '' '&' 8%$$
A CJ '' '% ' 8%$$
8A CJ '' '$$' 8%$$&
A CJ '' '' ' 8%$(
A CJ '' '% ' 8%$$
@8'''' A $
<7BH'' 7&(' '$$$
@8'''' A %
8<GH'' 8%$$'' (' 7&((
@8'''' A &
CI H'''' GA &((
@8'''' 7&((
CI H'''' M/$
    
```

% 8%\$\$ 8%\$\$

& A \$ L* CB 7&((L\$ C:: CB € 7&((--- %\$\$\$

7&((%\$\$\$ %\$\$\$ 7&((7&((M/\$ M/\$

' A % CB 8<GH % %

& %

GA %) G8%(G8%& G8%'

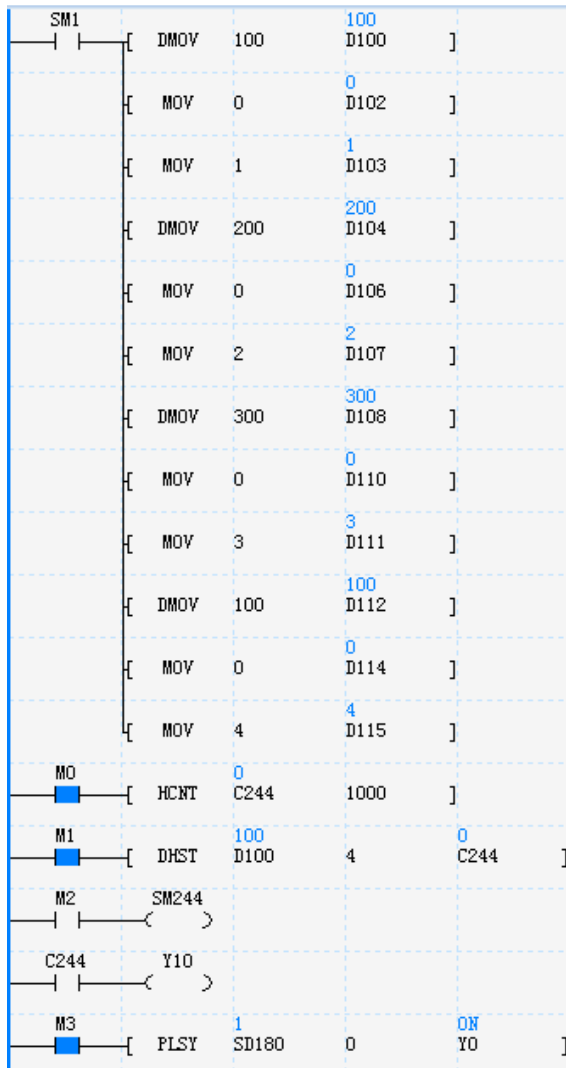
(A & CB GA &((CB 7&((A & C:: GA &((C:: 7&((

) L* C:: 7&((

* A \$ L* CB L& CB 7&((\$ 7&((

|—| |—| [ DHSP (S1) (S2) (S3)]			
S1 S2 S3			
G%	8-BH		
G&	-BH		

8%\$1\$	8%\$%1%\$	8%\$&1\$	8%\$' 1%	%
8%\$(1\$	8%\$) 1&\$	8%\$*1\$	8%\$+1&	&
8%\$, 1\$	8%\$- 1' \$\$	8%\$%1\$	8%\$%d'	'
8%\$&1\$	8%\$' 1' \$\$	8%\$(1\$	8%\$) 1((
				%



```

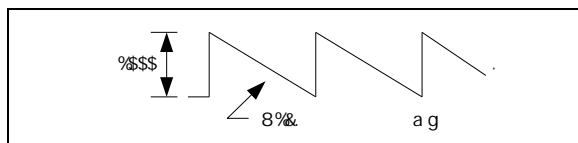
@8 ..... GA %
8A CJ ... %$ 8%$
A CJ ... $ 8%$&
A CJ ... % 8%$
8A CJ ... &$ 8%$(
A CJ ... $ 8%$*
A CJ ... & 8%$+
8A CJ ... $$ 8%$,
A CJ ... $ 8%$%
A CJ ... 8%$%
8A CJ ... %$ 8%$&
A CJ ... $ 8%$(
A CJ ... ( 8%$)
@8 ..... A $
<7BH ... 7&( ... %$
@8 ..... A %
8<GD ... 8%$ ( ... 7&(
@8 ..... A &
CI H ... GA &(
@8 ..... 7&(
CI H ... M$
@8 ..... A '
D@GM ... G8% $ ' M$
    
```

```

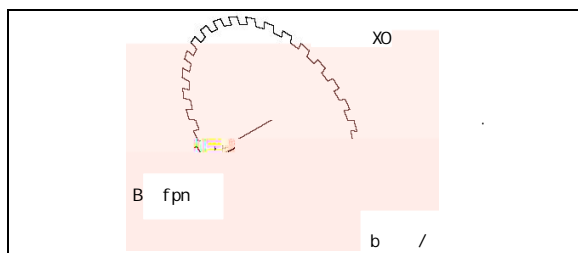
%                               8%$ 8%)
& A $ L*      CB  7&( L$ C:: CB      €              7&( --- %$$$
7&(          %$$$ %$$$ 7&(          7&(          M$ M$
'   A % CB    8<GD                                     %      %
&
      GA %)      G8% (          G8% &  G8%'
          G8% $  G8% %
      G8% $  G8% %      $
(   A & CB    GA &(  CB  7&(          A & C::  GA &(  C::  7&(
)   L* C::    7&(
*   A $ L*    CB      L& CB  7&(          $      7&(
    
```

| | | [ SPD (S1) (S2) (D)]			
S1 S2 D			
G%	6CC@	L	
G&	K CF8	? bL	? bM ? bA ? bG ? b@A ? bGA
8	K CF8		8 G8 7 H J N F

S1 L\$ L)
 S2 ag G&2\$
 D *)))



L\$ L) ag

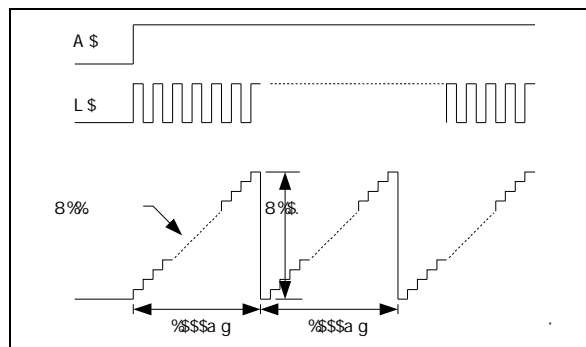


% GD8 <7BH
 610 IO
 & GD8 L\$ L)
 ' GD8 %<n %<n
 (GD8

% A \$ CB L\$ \$\$\$a g
 8% 8%
 \$\$\$a g 8% \$\$\$a g
 & 8%
 ' L\$ C:: CB \$\$\$a g
 8%

SMD	[PLSY	10000	0	ON YO
MO	[SPD	XO	1000	10000 D10

@8 ' ' GA \$
 D@GM ' '\$\$\$\$ ' \$ ' M\$
 @8 ' ' A \$
 GD8 ' ' L \$ ' '\$\$\$\$ ' 8%



* D@GM

DK A D@GF

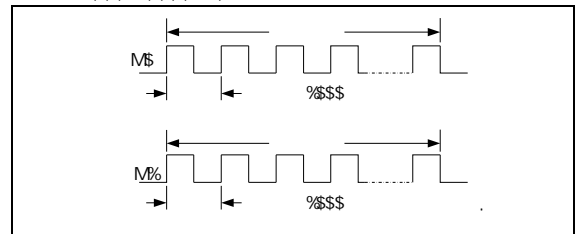
|---| |---| [ PLSY (S1) (S2) (D)] +										DK A D@GM D@GF					
S1 S2 D															
G%	8-BH'		?bL'	?bM'	?bA'	?bG'	?b@A'	?bGA''	8<G8'	G8<7B'H	7<D@GM	8<G7G	8<G7F	8<GN	8<GD
G&	8-BH'		?bL'	?bM'	?bA'	?bG'	?b@A'	?bGA''	8<G8'	G8<7B'H	7<D@GM	J		F	
8'	6CC@			M											

S1 <n
 A 7%\$\$ A 7&\$\$ % %\$\$\$\$ <n A 7&,\$
 % &\$\$\$\$ <n **S1** \$ %\$\$\$\$

M1	[PLSY 1000 10000 OFF Y1]
	[PLSY 1000 10000 OFF Y0]

S2 D@G
 \$ &%+(, '*(+

@B`A %
 D@GM%\$\$\$%\$\$\$M%
 D@GF %\$\$\$%\$\$\$M%

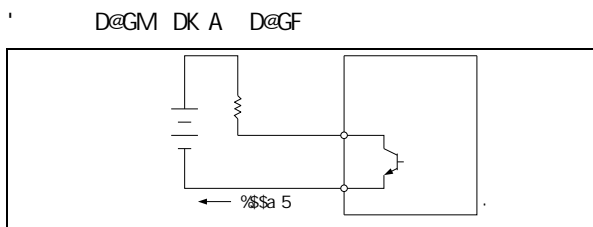


S2 \$
S2
D A 7%\$\$ A 7&\$\$ M\$
 M% A 7&,\$ M\$ M% M& M M(
 M) M* M+

% A % CB M\$ M% %\$\$\$
 %\$\$\$<n %\$\$\$
 A \$ C:: CB
 A \$ C:: C::
 &)\$ CB)\$ C::

D@7
 % D@7
 & D@7 D@7

M M\$
 DCFH\$ M% DCFH%



(C:: DK A D@GM
 D@GF

' GA , \$ M\$ GA , % M%
 %
 (GA , & GA , ' M\$ M%
 A \$ C::
) G8)\$ M\$ D@GM D@GF
 G8)% M\$ D@GM D@GF
 G8)& M% D@GM D@GF
 G8)' M% D@GM D@GF
 G8)(M\$ M% D@GM

%%\$a 5
)

D@GF
 G8)) M\$ M% D@GM D@GF

* G8)\$ G8)) " 8A CJ 'x x x ' G8)x "
 " A CJ 'x x x ' G8)x "
 + D@GM
 8<GD

		PLSR	(S1)	(S2)	(S3)	(D)									
		S1	S2	S3	D										
G%	K CF8		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7	H	J	N	F
G&	8-BH		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7		J		F
G	K CF8		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7	H	J	N	F
8%	6CC@			M											



S1 <n %\$ &\$\$\$\$ <n
 &\$\$\$\$ &\$\$\$\$
 %\$ %\$

A 7%\$)\$a g

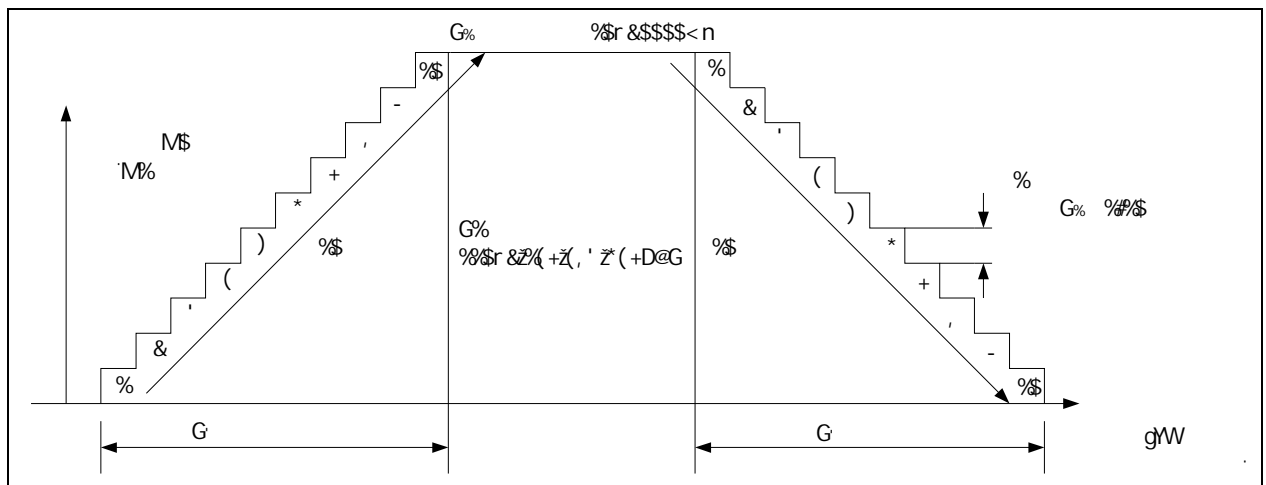
S1#%

S2 D@G %\$
 &%(, '*(+

D A 7%\$ A 7&\$\$
 M\$ M% A 7& \$Z M\$ M% M& M
 M(M) M* M+

S3 a g
S1x S3 %\$\$\$\$
 D@GF
S3 %\$\$\$\$#**S1**

S1x S3 G&x -\$-
 D@GF
S3 G&x -\$- #**S1**



% %\$ &\$\$\$<n

% A \$ CB

M\$ M%

%\$

A \$

C::

CB

A \$ C::

& D@7

C::

M\$ DCFH\$

&

M% DCFH%

A \$

CB C::

CB

' GA , \$ M\$

GA , %

M%

GA , \$ GA , % %

(& D@GF

(GA , & GA , '

M\$

M%

A \$ C::

GA , & GA , '

C::

DK A D@GM

GA , & GA , ' CB

) DK A D@GM D@GF

) G8)\$ G8))

* 8<G7G 8<G7F 8<GN 8<GD
8<GH <7BH D@GF

MO	PLSR	10	110	1000	OFF Y1
	PLSR	10	110	1000	OFF Y0

@8 ' A \$

D@GF ' %\$ ' %\$ ' %\$\$\$ ' M%

D@GF ' %\$ ' %\$ ' %\$\$\$ ' M\$

* G8)\$ G8))

8A CJ ' x x x ' G8) x

A CJ ' x x x ' G8) x

|---| |---| [ PLS (S1) (S2) (D1)]															
S1 S2 D1															
G%	K CF 8		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7	H	J	N	F
G&	8-BH		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7		J		F
8%	6CC@			M											

S1 8 & P F_N B
S2 \$ 8) F_{au} F_{ajb} T_{up}
D A 7%\$\$ A 7&\$\$ T_{down}
M\$ M% A 7& \$Z M\$ M% M& M
M(M) M* M+

$$P \frac{fF_N F_N \% \& fF_N F_N \% \& T_{up}}{\&\&\& fF_{au} F_{ajb} \&}$$

% D@G

$$P \frac{fF_N F_N \% \& fF_N F_N \% \& T_{down}}{\&\&\& fF_{au} F_{ajb} \&}$$

& \$
GA, \$ GA, %

F_{ajb}

(8 A D@GSG9H b

$$P \frac{fF_{\%} F_{ajb} \& fF_{\%} F_{ajb} \& fV_{up} T_{down} \&}{\&\&\& fF_{au} F_{ajb} \&}$$

$$P \frac{fF_M F_M \% \& fF_M F_M \% \& fV_{up} T_{down} \&}{\&\&\& fF_{au} F_{ajb} \&}$$

.....

(D@7

)

% DHC D@G
D@G

* D@GMD@GF D@G

[]			
(S1) (S2) (S3) (S4) (D)			
G%	K CF8	? bL	? bM
G&	K CF8	? bL	? bM
G'	8-BH	? bL	? bM
G(	K CF8	? bL	? bM
8%	6CC@	M	

fa GL'

\$ &\$\$\$\$<n

<N

% &\$\$\$\$ fkrL

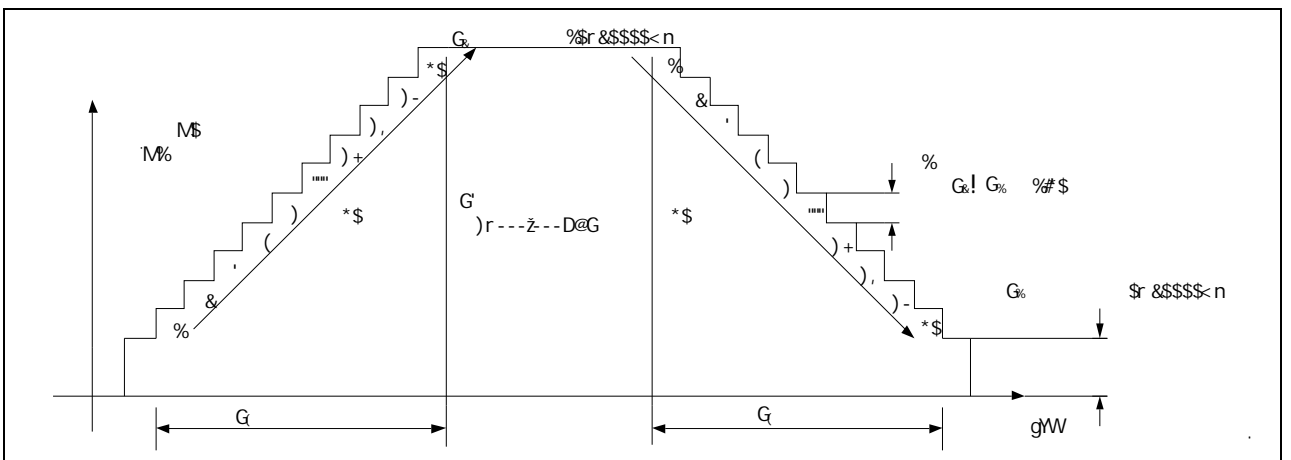
\$!%\$\$\$\$

A 7%\$\$ A 7&\$\$ M\$ M% A 7& \$z

M\$ M% M& M M(M) M* M+

fD@GL'

)!-----



% %!&\$\$\$\$<n

MO	[	PLSB	100	10000	10000	1000	OFF	Y1]
	[	PLSB	100	10000	10000	1000	OFF	Y0]

&

@8 ' ' ' A \$

D@GF ' '\$\$ ' '\$\$\$\$ ' '\$\$\$\$ ' '\$\$\$ ' M%

D@GF ' '\$\$ ' '\$\$\$\$ ' '\$\$\$\$ ' '\$\$\$ ' M\$

% A \$ CB M\$ M%

\$\$\$\$ A \$ C::

CB A \$ C::

C::

&

A \$ CB C:: CB

' GA , \$ M\$ GA , % M%

GA , \$ GA , % %

(GA , & GA , ' M\$ M%

A \$ C:: GA , & GA , ' C::

GA , & GA , ' CB

) G8)\$ G8))

' *\$

(

)

fl t

* & D@G6

M\$\$\$ M\$\$%

DK A D@GM

+ DK A D@GM D@G6

, 8<G7G 8<G7F 8<GN 8<GD

8<GH <7BH D@G6

-

M\$ M%

* G8)\$ G8)) 8A CJ ' ' x x x ' ' G8)x

A CJ ' ' x x x ' ' G8)x

[PWM (S1) (S2) (D)]															
S1 S2 D															
G%	=BH'		?bL'	?bM'	?bA'	?bG'	?b@A'	?bGA'	8'	G8'	7'	H'	J'	N'	F'
G&	=BH'		?bL'	?bM'	?bA'	?bG'	?b@A'	?bGA'	8'	G8'	7'	H'	J'	N'	F'
8'	6CC@			M											

S1 ag# g
\$ '&+*+ ag S1 '&+*+

S1
GA ,(\$ S1 ms GA ,(% S1
μ g
S2 P90 &
% '&+*+

S2
GA ,(\$ S1 ms GA ,(% S1
μ g
S2 S1

D A 7%\$\$ A 7&\$\$ M\$
M% A 7&,\$ M(M) M* M+

D S1 S2 DK A 7%\$\$

% S1 \$ 3 T C: : S1 S2 ö;0EÄ * 0-\$ j
CB o / 7%\$\$

		PID												
		(S1)	(S2)	(S3)	(D)									
		S1	S2	S3	D									
G%	-BH							8					F	
G&	-BH							8					F	
G	-BH							8					F	
8	-BH							8					F	

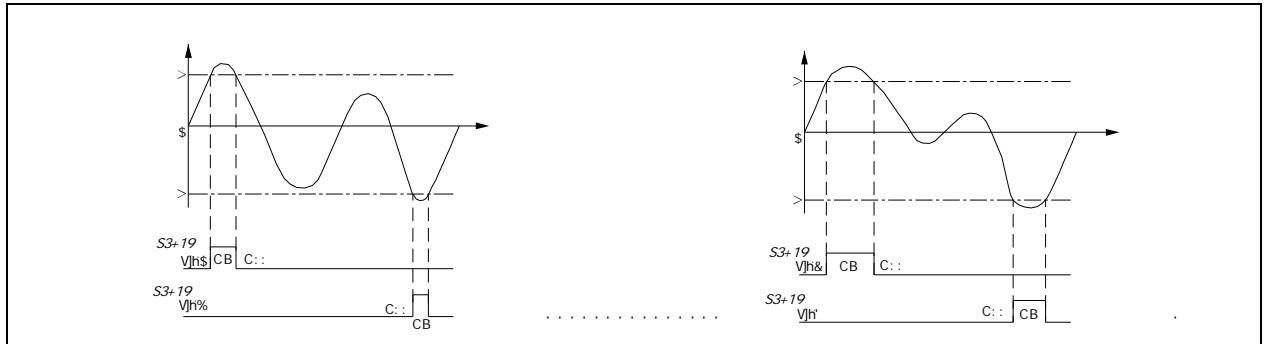
S3 1 6+H&1CB 6+H&1CB 6+H&1CB D-8

S3 15 S3 18

D-8

S3 19

D-8



- D-8

	$\Delta MV = KP \left\{ (EV_n - EV_{n-1}) + \frac{T_s}{T_i} EV_n + D_n \right\}$ $9J_b \quad DJ_{bz} \% \quad GJ$ $8_b \quad \frac{H_b}{H_c} \quad \frac{8}{s} \quad H_b \quad DJ_{bz} \quad DJ_{bz} \% \quad \&DJ_{bz} \% \quad \frac{8}{H_c} \quad \frac{8}{s} \quad H_b \quad 8_b \%$ $A J_b \quad A J$
	$\Delta MV = KP \left\{ (EV_n - EV_{n-1}) + \frac{T_s}{T_i} EV_n + D_n \right\}$ $9J_b \quad GJ \quad DJ_{bz} \%$ $8_b \quad \frac{H_b}{H_c} \quad \frac{8}{s} \quad H_b \quad \&DJ_{bz} \% \quad DJ_{bz} \quad DJ_{bz} \% \quad \frac{8}{H_c} \quad \frac{8}{s} \quad H_b \quad 8_b \%$ $A J_b \quad A J$

9J_b		8_b	
9J_b %	%	8_b %	%
GJ		? D	
DJ_bz		H_c	
DJ_bz %	%	H_	
DJ_bz &	&	H_b	
A J		8	
A J			

#D-8

@8 GA % #
 A C J %\$\$\$ 8)\$\$ #
 A C J)\$\$ 8)%\$ # Hg % '&+*+ ag
 #
 A C J + 8)%% #
 A C J +\$ 8)%& # \$ --O Q \$
 A C J %\$\$\$ 8)% # ?d % '&+*+O Q
 A C J &) 8)% # H= \$ '&+*+ x %\$\$\$ \$
 #

A CJ \$ 8)% # ? 8 \$ %\$O Q \$
 A CJ * 8)% # H8 \$ '&+*+ × %\$ag \$
 #
 : A CJ \$ 8)% # D-8
 A CJ &\$\$\$ 8) & # \$ '&+*+'
 A CJ &\$\$\$ 8) &* # \$ '&+*+'
 A CJ &\$\$\$ 8) &+ # \$ '&+*+'
 A CJ &\$\$\$ 8) & # \$ '&+*+'
 #D-8
 @8 A \$ # D-8
 : FCA \$) 8)% % #
 D-8 8) \$\$ 8) % 8) % 8) \$ & #D-8 D-8 G%G&G ' 8'
 HC \$ 8) \$ & % #D-8
 # D-8

SM1	[	MOV	1000	1000	D500]
	[	MOV	500	500	D510]
	[	MOV	16#7	7	D511]
	[	MOV	70	70	D512]
	[	MOV	100	100	D513]
	[	MOV	25	25	D514]
	[	MOV	0	0	D515]
	[	MOV	63	63	D516]
	[	FMOV	0	26	D517	8]
	[	MOV	2000	2000	D525]
	[	MOV	2000	2000	D526]
	[	MOV	2000	2000	D527]
	[	MOV	2000	2000	D528]
MO	[	FROM	0	5	631	D501 1]
	[	PID	1000	631	500	D500 D501 D510 24349 D502]
	[	TO	0	8	24349	D502 1]

% D
 \$ @8 GA \$ ' A CJ \$ 8) # #
 & D-8 S3 &\$
 ' HG % %ag
 % HG D-8
 D-8
 (D-8 D-8
) S3 15 S3
 18
 D-8
 * S3 1 6+H& 6+) CB
 6+H& 6+) C::
 + D-8 S3 S3 6
 D-8
 % D-8
 - D-8
 D-8

L & 1CB

5#8

D-8

D-8

D-8

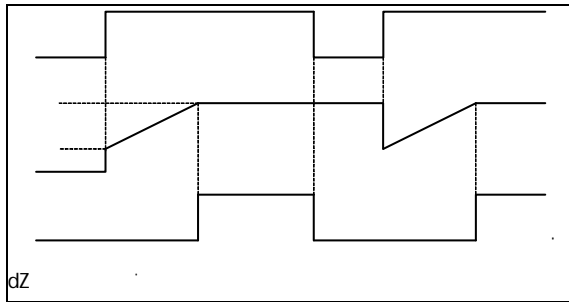
8#5

		RAMP	(S1)	(S2)	(D1)	(S3)	(D2)								
			S1	S2	D1	S3	D2								
G%	=BH		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7	H	J	N	F
G&	=BH		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7	H	J	N	F
8%	=BH								8				J		F
G	=BH		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7	H	J	N	F
8&	6CC@			M	A	G	@A				7	H			

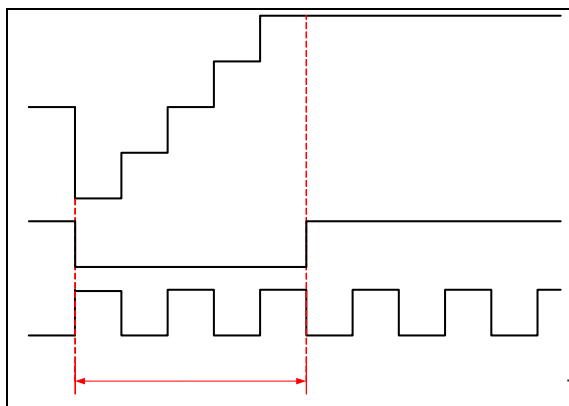
S1 % " "
S2 &
D1 ' G%G& 8%G& 8&1CB
S3 **S3** \$ (F5A D <57?@9 HF =5B; @9
D2 \$ %\$\$
)"F5A D <57?@9 HF =5B; @9

CB

S2 **D1**
 CB **D2** C::
D1
 S1



S3)



 @8 GA %
 A C J \$'8\$
 A C J \$\$\$8%
 #L \$1CB
 @8 L \$
 F5A D 8\$8%8%\$\$\$A \$
 #L %1CB 85
 @8 L %
 HC \$*8%\$%

SM1	[	MOV	0	0	DO]		
	[	MOV	2000	2000	D1]		
X0	[RAMP	0	2000	2000	1000	ON	MO]
X1	[TO	0	6	D10	1]		

% L \$1CB 8%\$
 8%\$18\$1\$ & \$\$\$#\$\$\$ 8%\$18%&\$\$\$
 8%\$ A \$1CB
D2 C::
D1
 8%\$18\$
 &

<i>S1 S2 D1 S3 D2</i>															
G%	-BH'		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7	H'	J	N'	F'
G&	-BH'		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7	H'	J	N'	F'
8%	-BH'								8				J		F'
G	-BH'		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7	H'	J	N'	F'
8&	6CC@			M	A	G	@A				7	H'			

S1

S2

D1

S3 S3 \$

D2

%

& **S1S2 D1S2 D2CB**

F5A D <57? @9 HF-5B; @9

%%\$

##

@8 GA %

A CJ \$8\$

A CJ &\$\$\$8%

##L \$1CB

@8 L \$

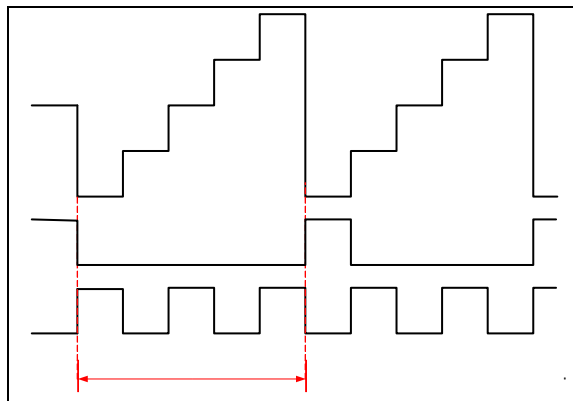
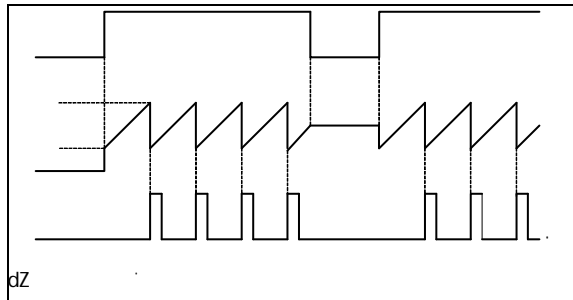
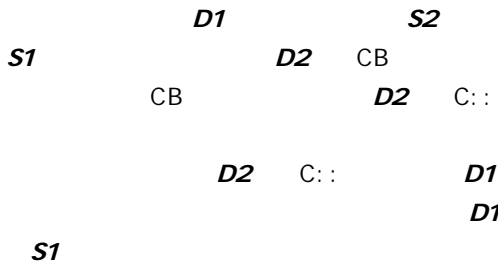
<57? @9 8\$8%8%\$%%\$A \$

##L %1CB

85

@8 L %

HC \$%8%\$%



SM1	[	MOV	0	DO]				
	[	MOV	2000	D1]				
X0	[	HACKLE	DO	D1	D10	1000	OFF	MO]
X1	[	TO	0	1	D10	1]

% L \$1CB

8%

8%18\$1\$

& &\$\$\$#&\$\$\$

8%18%&\$\$\$

A \$1CB

L \$ CB

8%18\$1\$

A \$1C::

D2

C::

D1

D1

S1

&

[TRIANGLE (S1) (S2) (D1) (S3) (D2)]															
S1					S2					D1					
S2					D1					S3					
D1					S3					D2					
G%	=BH		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7	H	J	N	F
G&	=BH		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7	H	J	N	F
8%	=BH								8				J		F
G	=BH		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7	H	J	N	F
8&	6CC@			M	A	G	@A				7	H			

S1

S2

D1

S3

D2

%

&

S1 S2 D1 S2 D2 CB

(1 **S3** % x &

) F5A D <57?@9 HF=5B; @9

%%

D1 **S2**

D1 **S1**

D2 CB

CB **D2** C::

D2 C:: **D1**

D1 **S1**

#

@8 GA %

A CJ \$8\$

A CJ &\$\$\$8%

#L \$1CB

@8 L \$

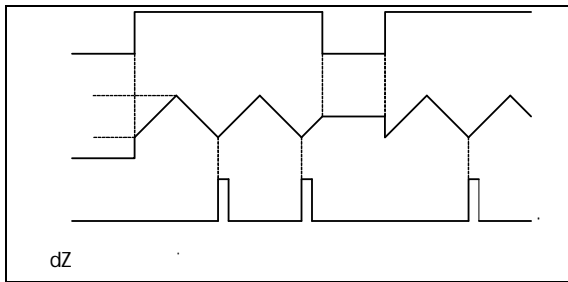
HF=5B; @9 8\$8%8%\$\$\$A \$

#L %1CB

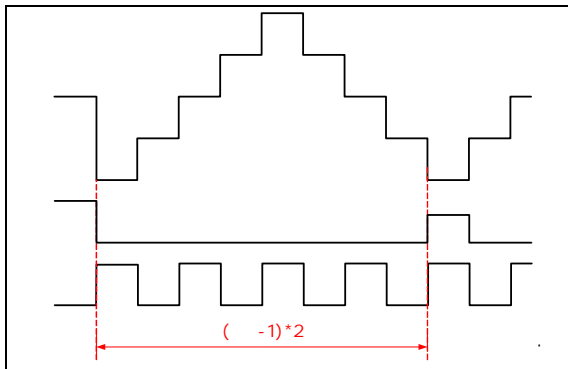
85

@8 L %

HC \$%8%\$%



S3)



SM1	[	MOV	0	0	DO]
	[	MOV	2000	2000	D1]
X0	[	TRIANGLE	DO	D1	D10	1000 OFF MO
X1	[	TO	0	1	D10	1

% L \$1CB

8%

8%\$18\$1\$ & &\$\$\$#\$\$\$ 8%\$18%&\$\$\$

8% &

8%\$18\$1\$

A \$1CB

L \$ CB A \$1C::

D2 C::

D1

D1

S1

&

| | [ ABSD]														
(S1) (S2) (D) (S3)														
G%	-BH		? bL	? bM	? bA	? bG			8		7	H		F
G&	-BH										7			
8	6CC@			M	A	G								
G	K CF8													

S1

b (

S2

D

S3

% **S3** *

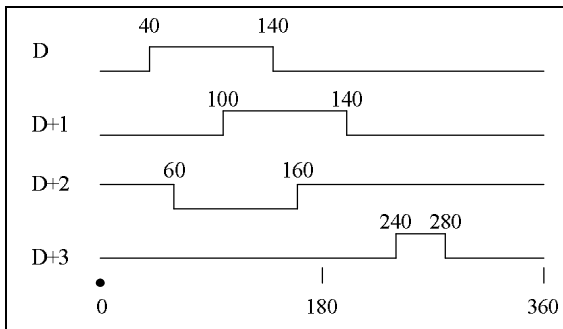
% **S1** b fl b x & t
S2 b **D** CB#C::

& # **S1 S1** bx &

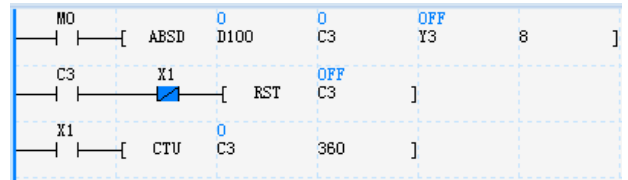
G% G% &b %

S1	(\$	S1 %	% \$	D
S1 &	%% \$	S1 '	&\$ \$	D Z%
S1(	% \$	S1)	* \$	D Z&
S1 *	&(\$	S1 +	& \$	D Z'
Ä	Ä	Ä	Ä	Ä
S1 &b	Ä	S1 &bZ%	Ä	D Z'b!%

(CB **D** b
 8Z% % \$ &\$ \$



\$ '*\$ CB#C:: f% %
 t



A \$ L%

% **S1** - (
 & **S2** G& 7\$ 7%-

MO												
[DABSD D100 C200 Y3												
(S1) (S2) (D) (S)												
G%	8-BH'		? bl			8'		7'	H'		F'	
G&	8-BH'							7'				
8'	6CC@					G'						
G'	K CF8											

S1

_1,

S2

7&\$\$ 7&)

D

S3

% S3 *(

% S1 b fl b x (t

S2 b 8 CB

x f

& # OS1% S1Q

x &Z' S1Zfbx &Z&Q

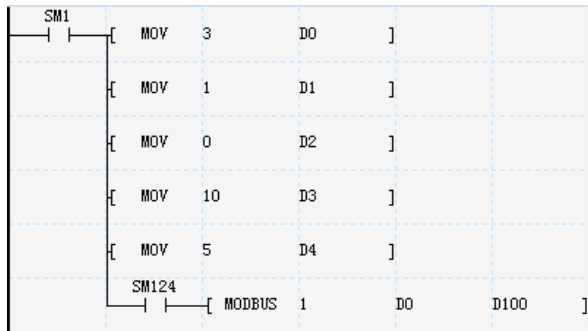
OS1 S1Z%Q OS1 S1Z%Q (bZ'

E

OS1% S1Q	(\$	OS1' S1Z&Q	%(\$	D
OS1) S1Z(Q	%%\$	OS1+ S1Z*Q	&\$\$	DZ%
OS1- S1Z, Q	% \$	OS1%% S1Z%Q* \$		DZ&
OS1% S1Z%Q&(\$		OS1%) S1Z%Q& \$		

|—|—| ALT |		
<i>D</i>		

(



@8 GA %

A CJ ' ' ' ' 8\$

A CJ ' ' % ' 8%

A CJ ' ' \$ ' 8&

A CJ ' ' %\$ ' 8'

A CJ ' ') ' ' 8(

5B8 GA %&(

A cXVi g%8\$'8%\$\$

% A cXVi g 8\$

& 8%\$\$

' A cXVi g 7F7

GA % *

G8% -

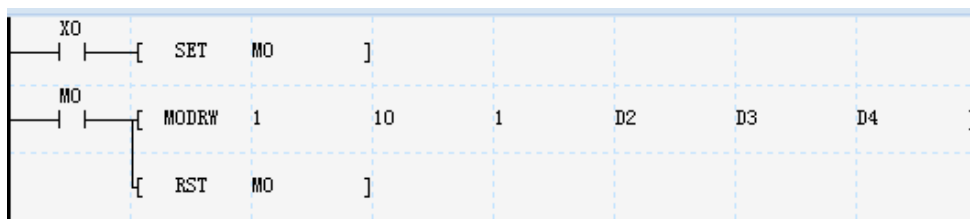
(GA %& GA %&

A C86I G A C86I G

A cXVi g

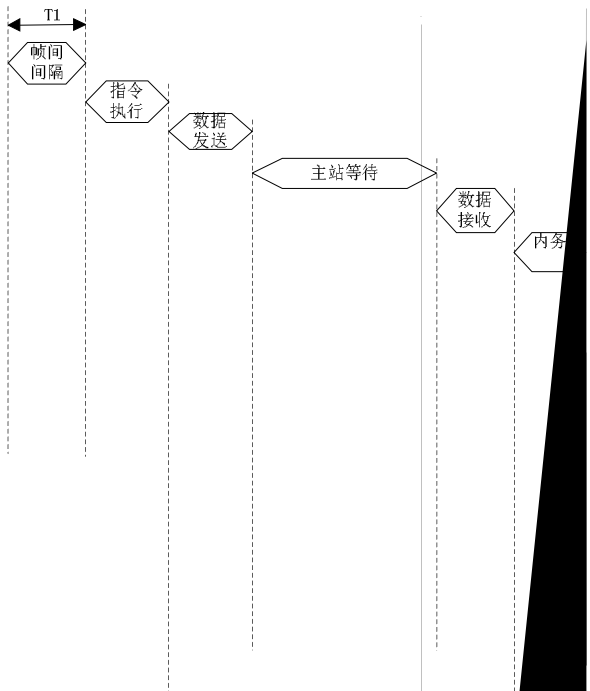
\$I \$%	
\$I \$&	
\$I \$'	
\$I %\$	
\$I %%	
\$I %&	#
\$I %'	

|—| —|



SM30

SM135



%*

T+ &\$ %\$ %\$\$\$ % %%(ms
% &\$ \$

T(T T %ms

T. ')ms

T. % *"& ') %%(% %))"*ms

%ag

T& fVNTf))"* % *\$ms
% %

A 7%\$ D@7

A' A C8FK

A % A &

A

A C8FK

A C8FK

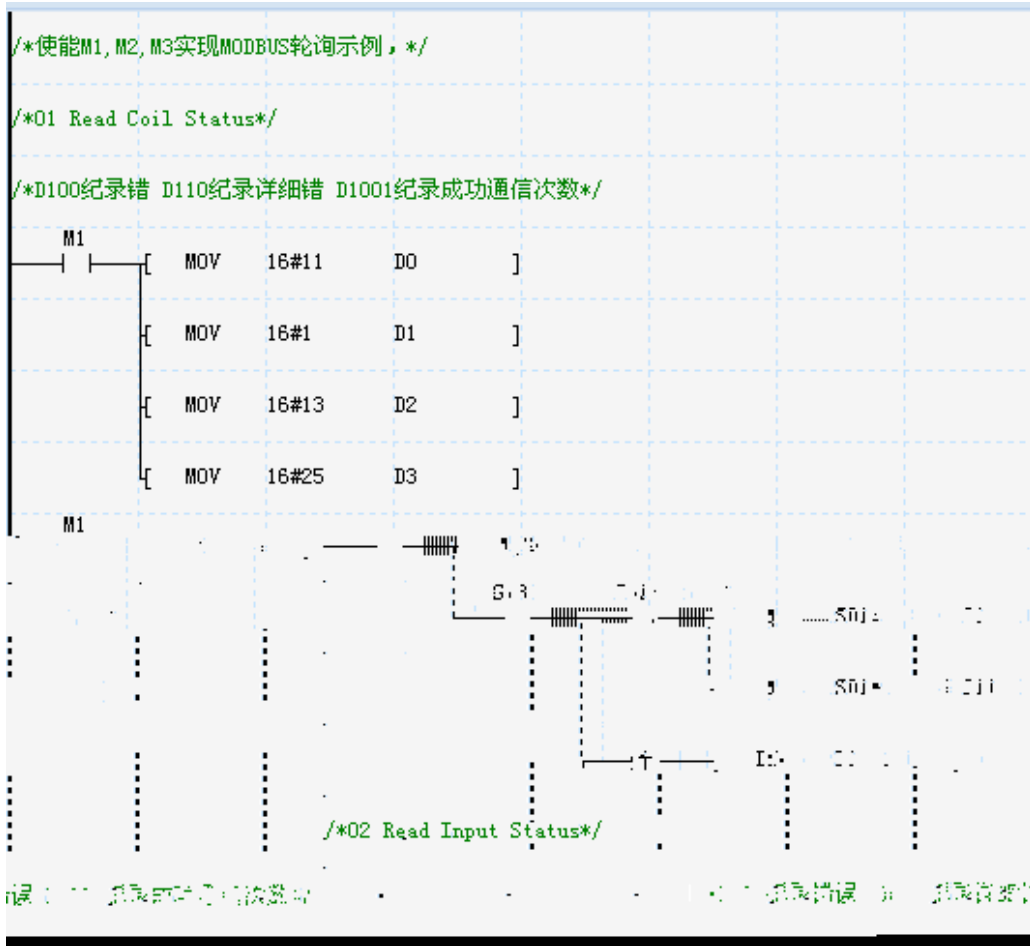
A & A % A' A C8FK

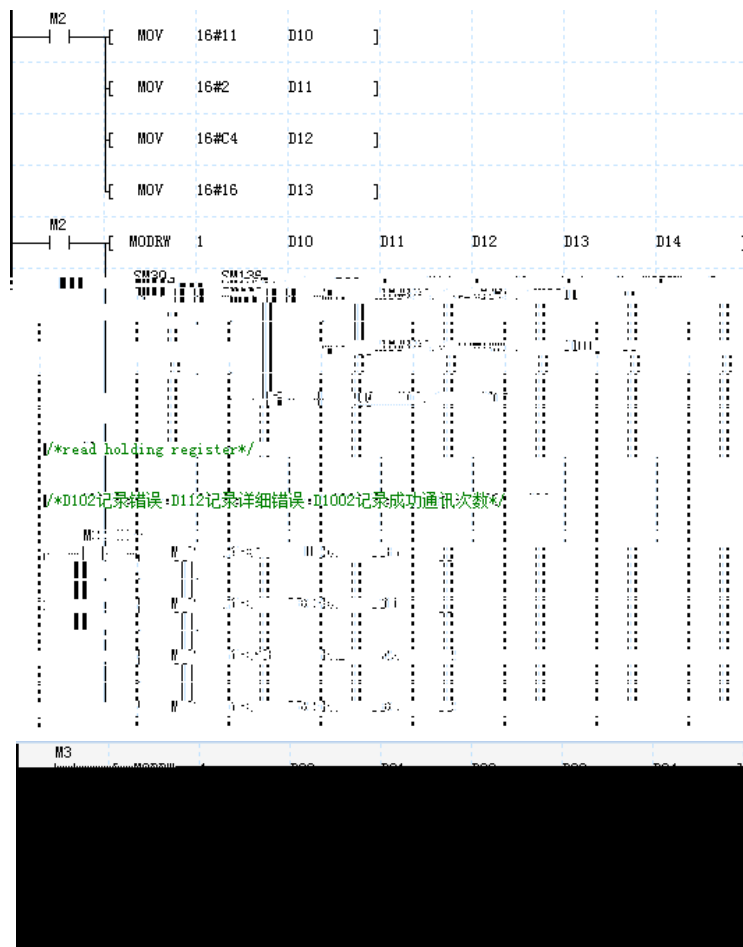
A C8FK

T%& % % %%(' '*ms

A &

A C8FK





GA '\$ A C8FK A C8FK GA %* G8% -
 A C8FK GA '\$ A C8FK G8% (GA %* G8% - G8% (
 GA '\$ & A C8FK
 GA '\$ GA %) A C8FK
 A C8FK GA '\$ A C8FK
 A C8FK
 GA '\$ A C8FK
 GA '\$

1		
2		
3		
4-15		
16		
17		
18		/
19	S2	

20	D	
21		
22		
23		

24		
25		
26	CRC/LRC	
27		
28	S3	

29	S4	
30	S5	
31		
32		
33		EV3000
34		

& A 7%\$\$ A J *\$\$

H\$

A 7%\$\$

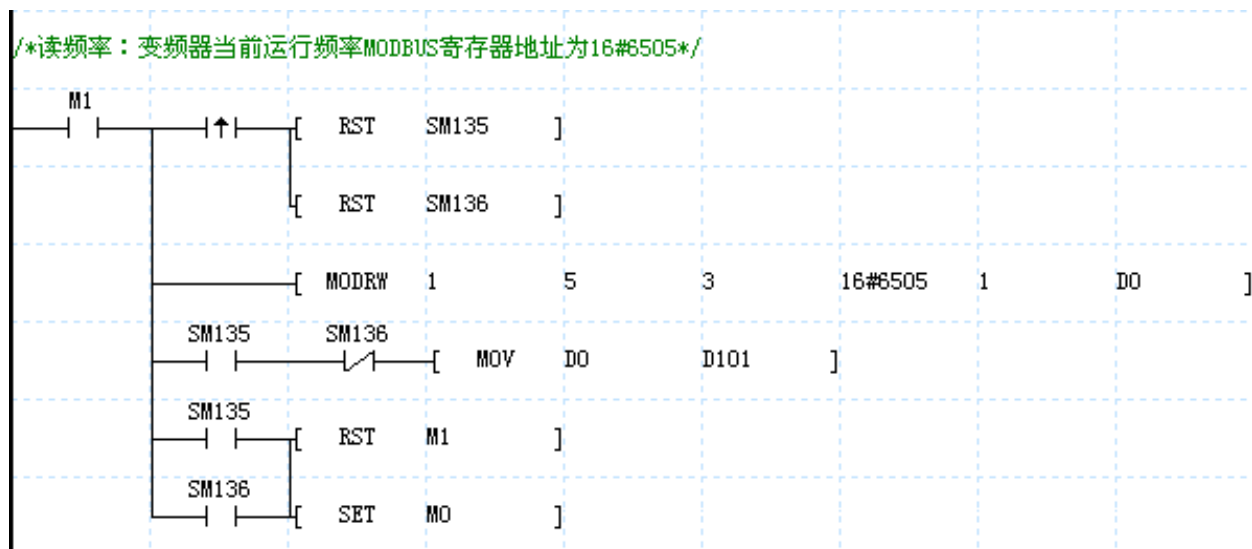
A J *\$\$

GA %)

H\$

GA % *





M90															
MODLINK 1		D200	D46	M114	M156										
		S1	S2	S3	S4	S5									
G%	-BH'														
G&	-BH'	8'													
G	-BH'	8'													
G(	6CC@		A	G						7	H				
G)	6CC@		A	G						7	H				

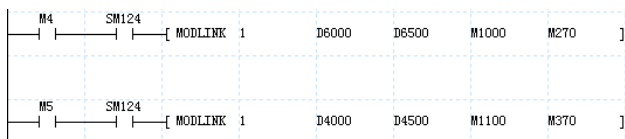
%

A C8@B? A C86I G
A C8@B? A C8@B?
A C8@B? A C8@B?
A C8@B? A C86I G
A C8@B?



8*\$\$\$

G&		
G&Z%	A	
G&Z&		\$
G&Z'		
G&Z(
G&Z)		
G&Z*		
G&Z+		
G&Z,		
G&Z-		%
G&Z%\$		
G&Z%%		
G&Z%&		
G&Z%'		
A		
A		



GA %&(

8			
\$%		% &\$\$\$	G) %) #%
\$&		% &\$\$\$	G) %) #%
\$'		% %&)	G)
\$(		% %&)	G)
\$)		\$fZl YXL	%
\$*		\$fZl YXL	%
%		% % *	G) %) #%
%'		% %&)	G)

A C8@B?

A C86I G

\$ B

G

G'	\$
G'Z%	%
G'Z&	&
A	
A	
G'ZB	B

G

A cXVi g

\$I \$%	
\$I \$&	
\$I \$'	
\$I %\$	
\$I %&	
\$I %&)	#
\$I %'	

G'	\$
G'Z%	%
G'Z&	&
A	
A	
G'ZB	B

|—| |—| [ XMT (S1) (S2) (S3)]			
S1 S2 S3			
G%	—BH		
G&	K CF8		

| | [ RCV (S1) (D) (S2)]					
S1 D S2					
G%	=BH				
8	K CF8	8	J		F
G&	=BH	? bL	? bM	? bA	? bG ? b@A 8 G8 7 H J N F

&

S1

\$ %

D

GA %% GA %&%

F7J

S2

%

8

J

8+---

J**

&

3

\$ %

SM1	| | [ RCV 1 D20 5]
SM123	| | [ INC D100]

@8 GA %

F7J % 8&\$)

@8 GA %&

=B7 8%\$\$

%

F7J

GA %

|---|---| CCITT (S1) (S2) (D)]														
S1 S2 D														
G%	K CF8								8				J	F
G&	=BH	? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7	H	J	N	F
8	K CF8							8				J	F	

S1
S2 \$
D
 % **S1** **S2**
 77=HH **D**
 & 77=HH LR%
 LR%& LR) %
 %
D
D
 2

SM1	[	MOV	16#0	0	D0]		
	[	MOV	16#11	17	D1]		
	[	MOV	16#22	34	D2	]	@8' GA %
	[	MOV	16#33	51	D3	]	A C J ' % ' %8%
	[	MOV	16#44	68	D4	]	A C J ' % ' &&8&
	[	MOV	16#55	85	D5	]	A C J ' % ' ((8('
	[	MOV	16#66	102	D6	]	A C J ' % ' .)) '8)
	[	MOV	16#77	119	D7	]	A C J ' % ' **8*
X0	[	MOV	0	28097	D100	]	A C J ' % ' ++8+
	[CCITT	D0	8	28097	D100]	@8' L \$

L\$1CB 8\$, 77=HH
 8%\$

CRC16 (S1) (S2) (D)															
S1 S2 D															
G%	K CF8								8				J		F
G&	=BH		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7	H	J	N	F
8	K CF8								8				J		F

S1
S2 **S2 \$**

D

% **S1** **S2**
7F7% **D**
& 7F7% LR% LR%
LR& %

% **D**

& A cXVI g7F7
8 % : : : :

3

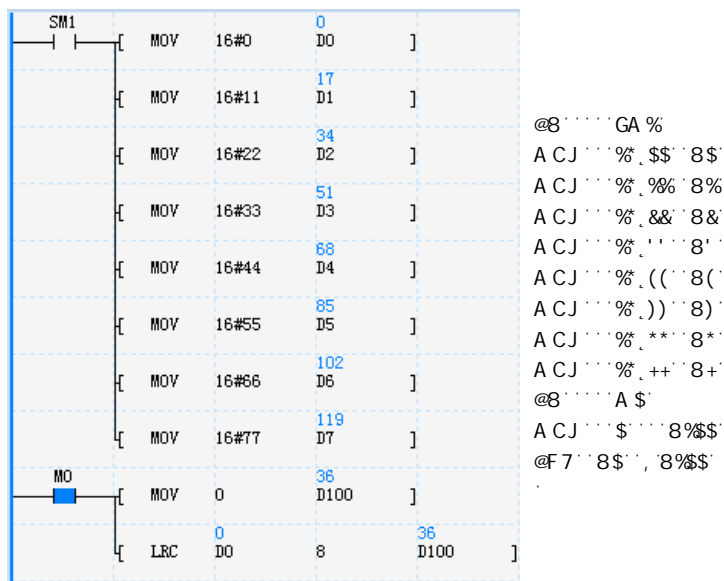
16

SM1	[	MOV	16#0	0	D0]	
	[	MOV	16#11	17	D1]	
	[	MOV	16#22	34	D2	]	@8 GA %
	[	MOV	16#33	51	D3	]	A CJ % \$ \$ 8%
	[	MOV	16#44	68	D4	]	A CJ % % 8%
	[	MOV	16#55	85	D5	]	A CJ % & & 8%
	[	MOV	16#66	102	D6	]	A CJ % ' ' 8'
	[	MOV	16#77	119	D7	]	A CJ % (((8 (
	[	MOV	0	57708	D100	]	A CJ %)) 8)
	[	MOV	0	57708	D100	]	A CJ % * * * 8 *
	[	CRC16	D0	8	D100	]	A CJ % + + 8 +

L \$1CB 8\$ 7F7%
8%\$

|---| |---| [ LRC (S1) (S2) (D)]														
S1 S2 D														
G%	K CF8								8			J		F
G&	BH	? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7	H	J	N	F
8	K CF8							8				J		F

S1
 S2 S2 \$
 D
 S1 S2
 @F7 D
 % D
 &
 8

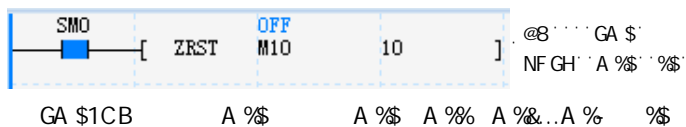


L \$1CB 8\$, @F7
 8\$\$

|---| |---| [ ZRST (D) (S)]														
D S														
8	6CC@		M	A	G	@A			7	H				
G	BH	? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7	H	J	N	F

D % 7 7
 S & H H

D S



| | [ ZSET (D) (S)]															
D S															
8	6CC@			M	A	G	@A				7	H			
G	=BH		?bL	?bM	?bA	?bG	?b@A	?bGA	8	G8	7	H	J	N	F

D
S

SMD	[	ZSET	ON	10]
M10					

@8 GA \$
NG9H A % \$

GA \$1CB A %\$ A %\$ A %% A %&...A % %\$
%

D S

%

| | [ DECO (S) (D)]															
S D															
G	K CF8		?bL	?bM	?bA	?bG	?b@A	?bGA	8	G8	7	H	J	N	F
8	=BH		?bL	?bM	?bA	?bG	?b@A	?bGA	8	G8	7	H	J	N	F

S
D

1 \$ %
2 % \$

D

S % \$

SMD	[	DECO	2	4	D9]
M10						

@8 GA \$
8A 7C & 8-

8- & %

[ENCO (S) (D)]										[REDACTED]				
SA DA														
-BH		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7	H	J	N	F
-BH		? bM	? bA	? bG	? b@A			8	G8	7	H	J	N	F

|-----|-----| [ BON (S1) (D) (S2)]															
S1 D S2															
G%	=BH		?bL	?bM	?bA	?bG	?b@A	?bGA	8	G8	7		J		
8	6CC@		M	A	G										
G&	=BH								8				J		F

S D

M1	[BON	32	DO	ON	YO	5]	@8	A %
----	---	-----	----	----	----	----	---	---	----	-----

6CB S1 8\$) fCB L 8 fM\$

S1 G&

D

|-----|-----| BLD (S1) (S2) |-----| )															
S1 S2															
G%	K CF8		?bL	?bM	?bA	?bG	?b@A	?bGA	8	G8	7	H	J	N	F
G&	=BH		?bL	?bM	?bA	?bG	?b@A	?bGA	8	G8	7	H	J	N	F

S1

S2 \$ S2 %

[BLD	1000	DO	5	YO]	6@8	8\$)
---	-----	------	----	---	----	---	-----	------

CI H M\$

8\$ %\$\$\$ & \$\$\$\$\$%0000%\$\$\$\$ 6+) CB

S1 S2

M\$

|-----| BLDI (S1) (S2) |-----| )															
S1 S2															
G%	K CF8		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7	H	J	N	F
G&	=BH		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7	H	J	N	F

S1 1000
S2 \$ **S2** % | BLDI DO 5 |-----| Y0 6@8= 8\$)
CI H ' M\$
8\$ %\$\$\$ & \$\$\$\$\$%0000\$%\$\$\$ 6+) CB
C:: M\$
S1 **S2**

|-----| BLD (S1) (S2) |-----| )															
S1 S2															
G%	K CF8		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7	H	J	N	F
G&	=BH		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7	H	J	N	F

S1 1000
S2 \$ **S2** % | BLDI DO 5 |-----| Y0
@8 ' L\$
65B8 ' 8\$)
CI H ' M\$
DO %\$\$\$ & \$\$\$\$\$%0000\$%\$\$\$ 6+) CB L \$1CB
M\$
S1 **S2**

6@8=															
S1 S2															
G%	K CF 8		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7	H	J	N	F
G&	=BH		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7	H	J	N	F

S1

S2 \$ **S2** %)



@8 L\$
65B= 8\$)
CI H M\$

8\$ %\$\$\$ & \$\$\$\$\$%0000\$%\$\$\$ 6+) CB
L\$1CB M\$

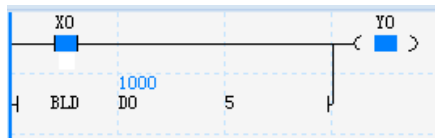
S1

S2

6@8															
S1 S2															
G%	K CF 8		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7	H	J	N	F
G&	=BH		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7	H	J	N	F

S1

S2 \$ **S2** %)



@8 L\$
6CF 8\$)
CI H M\$

8\$ %\$\$\$ & \$\$\$\$\$%0000\$%\$\$\$ 6+) CB
L\$1CB M\$

S1

S2

BLDI (S1) (S2)															
6@8=															
S1 S2															
G%	K CF 8		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7	H	J	N	F
G&	=BH		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7	H	J	N	F

S1

S2 \$ S2 %



@8 L\$
6CF= 8\$)
CI H M\$

8\$ %\$\$\$ & \$\$\$\$\$%\$\$\$ 6+)

CB

C: :

S1

S2

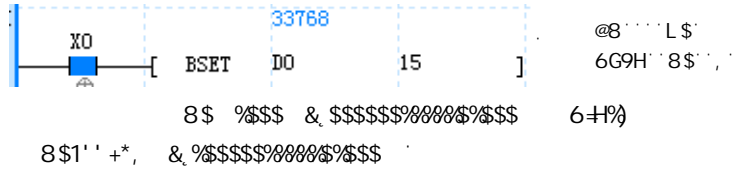
L \$1CB

M\$

BOUT (D) (S)															
D S															
8	K CF 8			? bM	? bA	? bG	? b@A		8		7	H	J	N	F
G	=BH		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7	H	J	N	F

| | [ BSET (D) (S)]															
D S															
8	K CF8			? bM	? bA	? bG	? b@A		8		7	H	J	N	F
G	=BH		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7	H	J	N	F

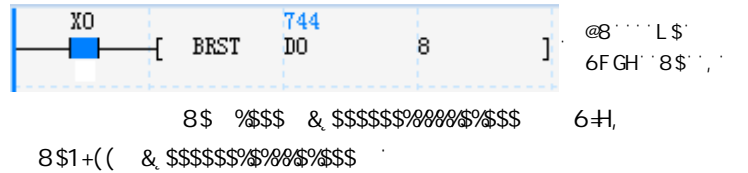
D
S2 \$ **S2** %)



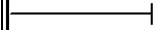

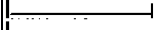

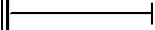

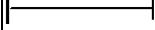

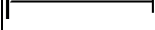

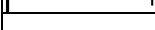

D S

| | [ BRST (D) (S)]															
D S															
8	K CF8			? bM	? bA	? bG	? b@A		8		7	H	J	N	F
G	=BH		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7	H	J	N	F

D
S2 \$ **S2** %)









D S

	=	(S1)	(S2)	)											
	<	(S1)	(S2)	)											
	>	(S1)	(S2)	)											
	◇	(S1)	(S2)	)											
	>=	(S1)	(S2)	)											
	<=	(S1)	(S2)	)											
G%	¬BH		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7	H	J	N	F	
G&	¬BH		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7	H	J	N	F	

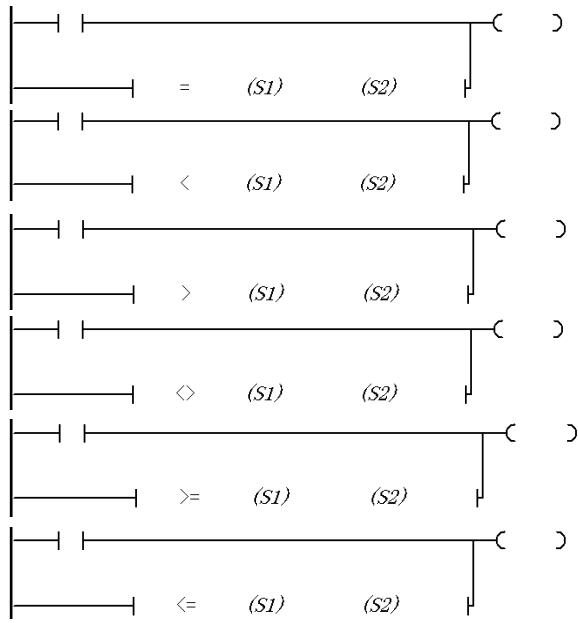
S1 %
S2 &

S1 S2 6-B

H	=	1000	-2000	Y0
		D0	D1	
H	<	1000	-2000	Y1
		D0	D1	
H	>	1000	-2000	Y2
		D0	D1	
H	◇	1000	-2000	Y3
		D0	D1	
H	>=	1000	-2000	Y4
		D0	D1	
H	<=	1000	-2000	Y5
		D0	D1	

@81 8\$8%
CI H M\$
@80 8\$8%
CI H M%
@82 8\$8%
CI H &
@802 8\$8%
CI H M
@821 8\$8%
CI H M(
@801 8\$8%
CI H M)

8\$ 8% 6-B



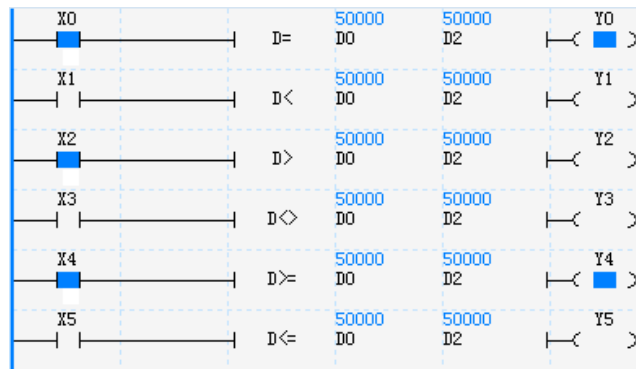
$D =$	$(S1)$	$(S2)$	$\{$	$\}$		
$D <$	$(S1)$	$(S2)$	$\{$	$\}$		
$D >$	$(S1)$	$(S2)$	$\{$	$\}$		
$D <>$	$(S1)$	$(S2)$	$\{$	$\}$		
$D >=$	$(S1)$	$(S2)$	$\{$	$\}$		
$D <=$	$(S1)$	$(S2)$	$\{$	$\}$		

	D=	(S1)	(S2)		D<	(S1)	(S2)		D>	(S1)	(S2)		D<>	(S1)	(S2)		D>=	(S1)	(S2)		D<=	(S1)	(S2)

G%	8-BH		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7		J		F
G&	8-BH		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7		J		F

S1 %
S2 &

S1 S2



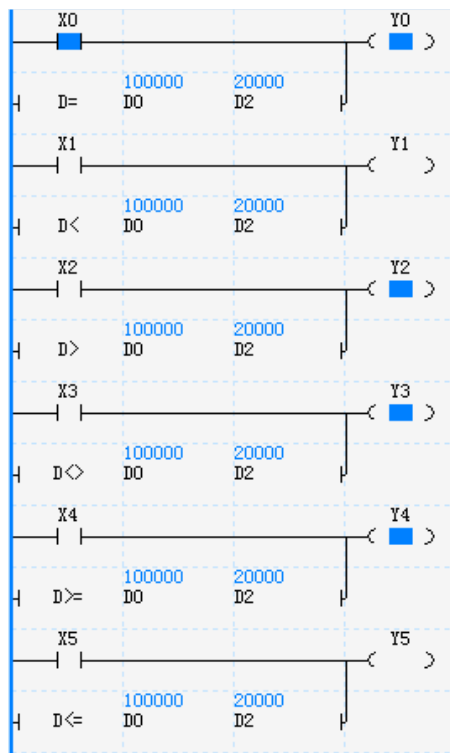
@8L\$
 @8818\$8&
 CI HMS
 @8L%
 @8808\$8&
 CI HM%
 @8L &
 @88028\$8&
 CI HM&
 @8L
 @88028\$8&
 CI HM
 @8L(
 @88218\$8&
 CI HM(
 @8L)
 @88018\$8&
 CI HM)

8\$8% 8&8'

G%	8-BH		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7		J		F
G&	8-BH		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7		J		F

S1 %
S2 &

S1 S2



```

@8 ..... L$
CF81 ..... 8$8&
CI H ..... M$
@8 ..... L%
CF80 ..... 8$8&
CI H ..... M%
@8 ..... L&
CF802 ..... 8$8&
CI H ..... M&
@8 ..... L'
CF821 ..... 8$8&
CI H ..... M'
@8 ..... L(
CF821 ..... 8$8&
CI H ..... M(
@8 ..... L)
CF801 ..... 8$8&
CI H ..... M)
    
```

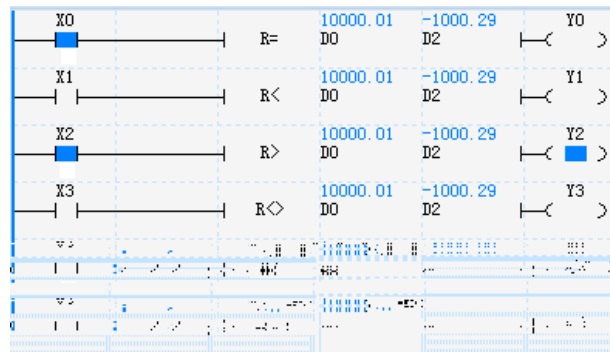
8\$8% 8&8'

|-----|	R=	(S1)	(S2)	|-----|	)
|-----|	R<	(S1)	(S2)	|-----|	)
|-----|	R>	(S1)	(S2)	|-----|	)
|-----|	R<>	(S1)	(S2)	|-----|	)
|-----|	R>=	(S1)	(S2)	|-----|	)
|-----|	R<=	(S1)	(S2)	|-----|	)

		R=	(S1)	(S2)	HC)		
		R<	(S1)	(S2)	HC)		
		R>	(S1)	(S2)	HC)		
		R<>	(S1)	(S2)	HC)		
		R>=	(S1)	(S2)	HC)		
		R<=	(S1)	(S2)	HC)		
G%	F95@						8	J F
G&	F95@						8	J F

S1 %
S2 &

S1 S2



@8 L\$
5B8F1 8\$8&
CI H M\$
@8 L%
5B8F0 8\$8&
CI H M%
@8 L&
5B8F02 8\$8&
CI H M&
@8 M
5B8F02 L(
@8 L(
5B8F21 8\$8&
CI H M
@8 L)
5B8F01 8\$8&
CI H M)

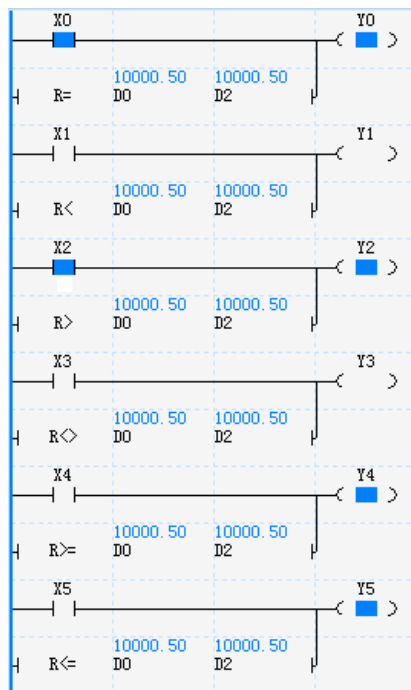
8\$8% 8&8'

G%	F 95@							8			J		F
G&	F 95@							8			J		F

S1 %

S2 &

S1 S2



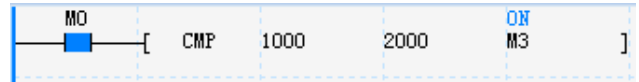
```

@8 ..... L$
CFF1 ..... 8$8&
CI H ..... M$
@8 ..... L%
CFF0 ..... 8$8&
CI H ..... M%
@8 ..... L&
CFF2 ..... 8$8&
CI H ..... M&
@8 ..... L'
CFF02 ..... 8$8&
CI H ..... M'
@8 ..... L(
CFF21 ..... 8$8&
CI H ..... M(
@8 ..... L)
CFF01 ..... 8$8&
CI H ..... M)
    
```

8\$8% 8&8'

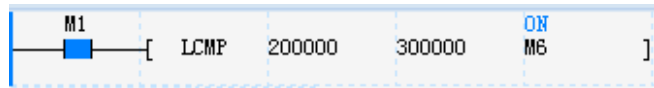
| | [ CMP]															
S1 S2 D															
G%	8-BH		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7	H	J	N	F
G&	8-BH		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7	H	J	N	F
8	6CC@			M	A	G									

S1 **S2**
D **DŽ%** **DŽ&** CB



[]															
S1 S2 D															
G%	8-BH		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7		J	N	F
G&	8-BH		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7		J	N	F
8	6CC@			M	A	G									

S1 %
S2 &
D



S1 S2



| | [ ROP]												.70 s...h tFr\$									
S1 S2 D																					
G%	F95@													8						F	
G&	F95@													8						F	
8	6CC@					M	A														

TM~

S



|-----|-----| [ BKSUB (S1) (S2) (D) (S3)]																
BKSUB																
G%	=BH'	.	.	.	.	.	.	.	.	8'	G8'	7'	H'	J'	F'	.
G&	=BH'	.	.	.	.	.	.	.	.	8'	G8'	7'	H'	J'	F'	.
8'	=BH'	.	.	.	.	.	.	.	.	8'	G8'	7'	H'	J'	F'	.
G'	=BH'	.	.	.	.	.	.	.	.	8'	.	.	.	J'	F'	.

S1

ON

S2

D

S3

M1	[	BKSUB	1	30	-29	5]
			D10	D100	D1000		

% S2 S3 16 S1 s3 16
 (BIN)
 D S3
 & S2 16 , S2
 S1 s3 16 S2
 D S3

A %CB 8%\$) 8%\$\$
)
 8%\$\$\$) 8%\$\$\$18%18%\$\$
 8%\$\$\$18%18%\$% 8%\$\$ (18%18%\$ (

[BKCMP= (S1) (S2) (D) (S3)] [BKCMP< (S1) (S2) (D) (S3)] [BKCMP> (S1) (S2) (D) (S3)] [BKCMP<= (S1) (S2) (D) (S3)] [BKCMP>= (S1) (S2) (D) (S3)] [BKCMP>= (S1)> (S2) (D) (S3)]															
BKMP (S1) (S2) (D) (S3)															
G%	-BH'									8'	G8'	7'	H'	J'	F'
G&	-BH'									8'	G8'	7'	H'	J'	F'
8'	6CC@		M	A'	G'	@A'	GA'								
G'	-BH'									8'				J'	F'

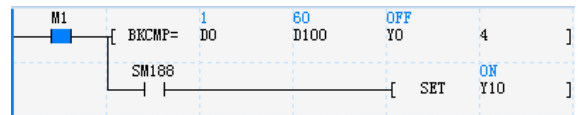
S1

ON

S2

D

S3

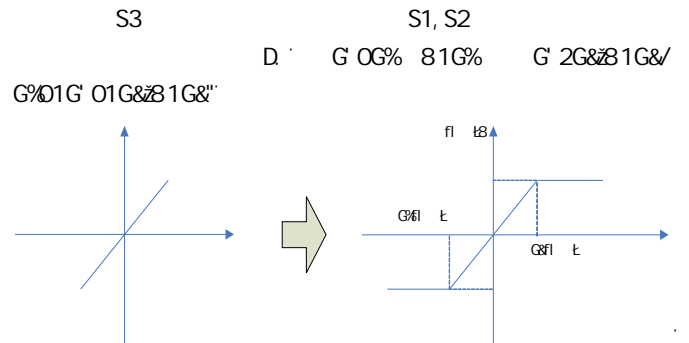


% S1 S3 16 S2 S3
 16 (BIN) D
 S3
 & G% % ZG%
 G% G& g %
 8 G
 8 G CB
 GA %,

@8' A %
 6? 7A D1' 8%\$ 8%\$\$ M\$ ('
 @8' GA %, '
 G9HM/\$
 A %CB 8%\$ (8%\$\$
 (M\$
 (CB M\$
 CB

LIMIT (S1) (S2) (S3) (D)															
(S1) (S2) (S3) (D)															
G%	BH		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7	H	J	F	
G&	BH		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7	H	J	F	
G	BH		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7	H	J	F	
8	BH			? bM	? bA	? bG	? b@A		8	G8	7	H	J	F	

S1
S2
S3
D:



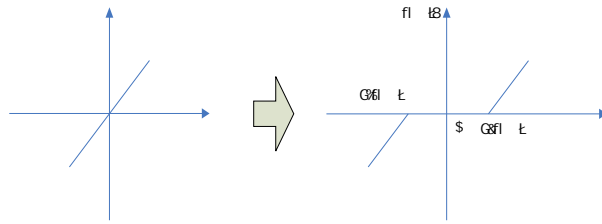
M1	[	LIMIT	10	100	30	30]
			D0	D10	D100	D1000	

M=CN D100 DO-D10

D1000 D0(10) <=D100(30) <=D10(100), D1000=30

|-----|-----| [ DBAND (S1) (S2) (S3) (D)]														
(S1) (S2) (S3) (D)														
G%	-BH'		? bL'	? bM'	? bA'	? bG'	? b@A'	? bGA'	8'	G8'	7'	H'	J'	F'
G&	-BH'		? bL'	? bM'	? bA'	? bG'	? b@A'	? bGA'	8'	G8'	7'	H'	J'	F'
G'	-BH'		? bL'	? bM'	? bA'	? bG'	? b@A'	? bGA'	8'	G8'	7'	H'	J'	F'
8'	-BH'			? bM'	? bA'	? bG'	? b@A'		8'	G8'	7'	H'	J'	F'

S1
S2
S3
D:



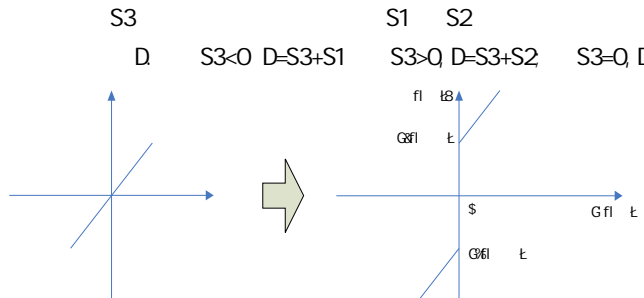
M1				
	[DBAND	-100	100	30
	D0	D10	D100	D1000

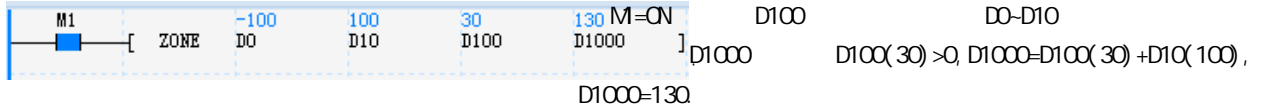
S3
S1, S2
D' G OG% 81G' IG%
G 2G&81G' !G&/ G%01G' 01G&81G''

M=CN D100 D0-D10
D1000 DD (-100) <D100(30) <D10(100), D1000=0

|-----|-----| [ ZONE (S1) (S2) (S3) (D)]														
(S1) (S2) (S3) (D)														
G%	-BH'		? bL'	? bM'	? bA'	? bG'	? b@A'	? bGA'	8'	G8'	7'	H'	J'	F'
G&	-BH'		? bL'	? bM'	? bA'	? bG'	? b@A'	? bGA'	8'	G8'	7'	H'	J'	F'
G'	-BH'		? bL'	? bM'	? bA'	? bG'	? b@A'	? bGA'	8'	G8'	7'	H'	J'	F'
8'	-BH'			? bM'	? bA'	? bG'	? b@A'		8'	G8'	7'	H'	J'	F'

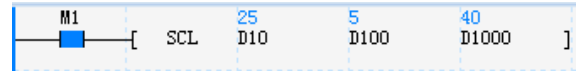
S1
S2
S3
D:





[SCL (S1) (S2) (D)]															
(S1) (S2) (S3) (D)															
G%	=BH'		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7	H	J	F	
G&	=BH'								8				J	F	
8	=BH'			? bM	? bA	? bG	? b@A		8	G8	7	H	J	F	

S1



S2

D:

A %CB 8%
8%\$\$\$

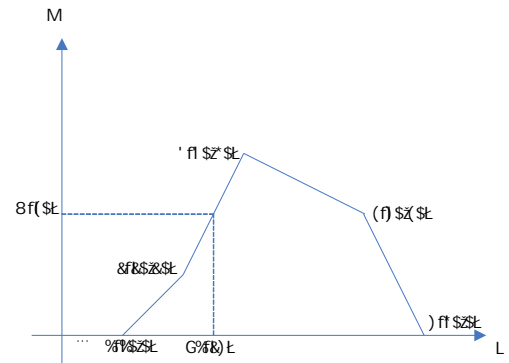
% G%
8
& G&
%

%	L	8%\$\$	%'
	M	8%\$\$	\$
&	L	8%\$	&\$
	M	8%(\$	&\$
...	L	8%\$)	' \$
	m	8%\$*	*\$
(	L	8%\$+)\$
	m	8%\$,	(\$
)	L	8%\$-	*\$
	m	8%\$\$	\$

%	L	G&Z%
	M	G&Z&
&	L	G&Z'
	M	G&Z(
A	A	A
bfl t	L	G&Z &b1%
	m	G&Z &b

% L

& G%



SER		(S1)	(S2)	(D)	(S3)										
		(S1)	(S2)	(S3)	(D)										
G%	-BH		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7	H	J	F	
G&	-BH		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7	H	J	F	
8	-BH			? bM	? bA	? bG	? b@A		8	G8	7	H	J	F	
G	-BH								8				J	F	

S1

% G% G ž G&

S2

ž

D

S3


(% **S3**

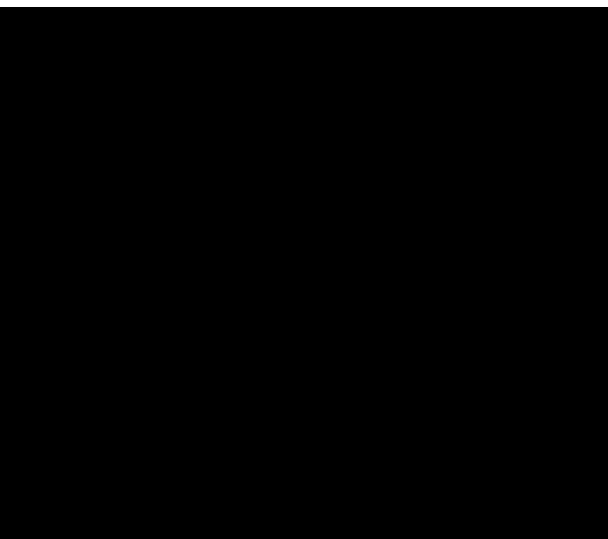
&*)

| | [ STRADD (S1) (D) (S2)]															
(S1) S2 D															
G%	=BH'		? bL'	? bM'	? bA'	? bG'	? b@A'	? bGA'	8'	G8'	7'	H'	J'	F'	
G&	=BH'		? bL'	? bM'	? bA'	? bG'	? b@A'	? bGA'	8'	G8'	7'	H'	J'	F'	
8'	=BH'			? bM'	? bA'	? bG'	? b@A'		8'	G8'	7'	H'	J'	F'	

S1 **Ö**
 S2
 D:

% G% G& ! ! %
 8

 STRLEN (S) (D)]		
	S	D



STRIGHT (S1) (D) (S2) ()															
S1 D S2															
G%	=BH'		? bL'	? bM'	? bA'	? bG'	? b@A'	? bGA'	8'	G8'	7'	H'	J'	F'	
8'	=BH'			? bM'	? bA'	? bG'	? b@A'		8'	G8'	7'	H'	J'	F'	
G&	=BH'								8'				J'	F'	

S1
D
S2

% G% '\$\$<'
"
& G& \$
' G& G%

% G% '\$\$<'
G& 8
& G& 8
" '\$\$<'"

M1	12849	13363	
[STRIGHT D10	D100	3]

' '\$\$<'
6%!!!V, V+!!!V\$
' '\$\$\$<'
(
' '\$\$<'

A %!CB 8%\$
8%\$\$

8%\$	\$' &	\$' %
8%\$	\$' (\$' ''
8%\$	\$' *	\$')
8%	\$' \$\$	\$' \$\$

➔

8%\$	\$')	\$' (
8%\$	\$' \$\$	\$' *

|-----|-----| [ STRLEFT (S1) (D) (S2)]															
S1 D S2															
G%	-BH		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7	H	J	F	
8	-BH			? bM	? bA	? bG	? b@A		8	G8	7	H	J	F	
G&	-BH								8				J	F	

S1

D

S2

%

S

|-----|-----| [ STRMIDR (S1) (D) (S2)]															
S1 D S2															
G%	-BH'		? bL'	? bM'	? bA'	? bG'	? b@A'	? bGA'	8'	G8'	7'	H'	J'	F'	
8'	-BH'			? bM'	? bA'	? bG'	? b@A'		8'	G8'	Z'	H'	J'	F'	

|-----|-----| [ STRMIDW (S1) (D) (S2)]														
S1 D S2														
G%	-BH'		? bL'	? bM'	? bA'	? bG'	? b@A'	? bGA'	8'	G8'	7'	H'	J'	F'
8'	-BH'			? bM'	? bA'	? bG'	? b@A'		8'	G8'	7'	H'	J'	F'
G&	-BH'		? bL'	? bM'	? bA'	? bG'	? b@A'	? bGA'	8'	G8'	7'	H'	J'	F'

S1

D

S2

S2+1

%

8

b

&

' \$\$<'

' b \$

(b !%

G%

8

% G& G%

& b !&'

' G& %

(8

) G%8

"

"

' \$\$<'

M1	12849	12596	2
[STRMIDW	D10	D100	D0]

A %!CB

8%\$

8% 8%!

8%\$\$

8\$ 8\$!&

8% 8%!'

6%!!!V, V!!!VS

8%\$	\$' &	\$' %
8%\$	\$' (\$' '
8%\$	\$' \$	\$')

6%!!!V, V!!!VS

8%\$	\$')	\$' (
8%\$	\$' +	\$' *
8%\$	\$' -	\$' ,
8%\$	\$' \$	\$' %



6%!!!V, V!!!VS

8%\$	\$' %	\$' (
8%\$	\$' '	\$' &
8%\$	\$' -	\$' ,
8%\$	\$' \$	\$' %

[STRINSTR (S1) (S2) (D) (S3)]														
S1 S2 D S3														
G%	=BH'								8	G8	7	H	J	F
G&	=BH'								8	G8	7	H	J	F
8	=BH'								8	G8	7	H	J	F
G	=BH'								8				J	F

& G G&
' G% ' & z

S1
S2
D
S3

(G% '\$\$<' G&
' '\$\$<' G&
' '\$\$<'

% G& G
G%

M1	[STRINSTR "45"	12849	4
		D10	D100
			2

& 8 " \$"
' G " \$"

A %CB 8%\$ &
" ()" 8%\$\$

('\$\$<'

I()I

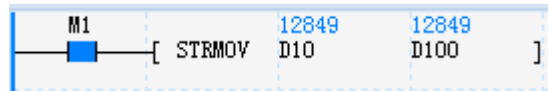
% G% G&
' '\$\$<' "

5G7	6%!!!V, V!!!S
	\$' & \$' %
	\$' (\$' "
	\$' * \$')
	\$ \$ \$ \$' +

8%\$1(

|-----|-----| [ STRMOV (S) (D)]														
(S) (D)														
G	-BH		?bL	?bM	?bA	?bG	?b@A	?bGA	8	G8	7	H	J	F
8	-BH			?bM	?bA	?bG	?b@A		8	G8	7	H	J	F

S
D:



% G ' \$\$<' /
&

A %CB 8\$ 8\$\$

' \$\$<' "
% G " "
& G ' \$\$<' 8
' \$\$<'
' G% ' & z

6%!!!V, V!!!V\$		
8% \$' &	\$' %	
8% \$' (\$' '	
8% \$' *	\$')	
8% \$ \$ \$	\$ \$ \$	

➔

6%!!!V, V!!!V\$		
8%\$ \$' &	\$' %	
8%\$ \$' (\$' '	
8%\$ \$' *	\$')	
8%\$ \$ \$ \$	\$ \$ \$	

S1 S2 S3 D															
G%	8-BH		?bL	?bM	?bA	?bG	?b@A	?bGA	8	G8	7		J		F
G&	8-BH		?bL	?bM	?bA	?bG	?b@A	?bGA	8	G8	7		J		F
G	6CC@		L	M	A	G									
8%	6CC@			M											

$F_{a|bSacc}$

S1

' & A 7%\$\$ A 7&\$\$ % \$\$\$\$\$ <n (A 7& \$ % &\$\$\$\$ <n

S2

8C; CB

S3

L

L

D@7

D

A 7%\$\$ A 7&\$\$z

M\$ M% A 7& \$z M\$ M%) M& M M(M) M* M+

GA ,)

M\$

M%

M& M GA ,)

M& M

*

(A 7&\$\$ A 7& \$ G8 A 7%\$\$ z

)

NFB

+

&

8

3

$$F_{a|bSacc} \sqrt{\frac{F_{au}}{T}} \text{) } \$\$$$

9

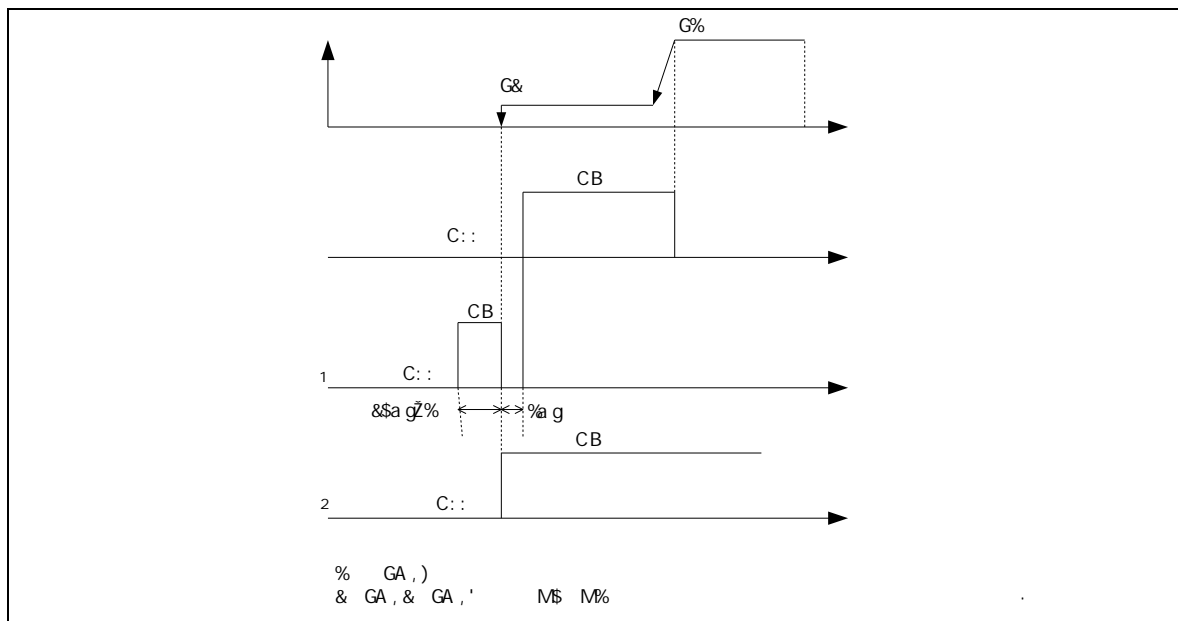
F_{au}

G8 ,) G8 , *

10

T

G8 , +



| | [ PLSV (S) (D1) (D2)]			
S D1 D2			
G	8-BH	?bL ?bM ?bA ?bG ?b@A ?bGA	8 G8 7 J F

[DRVI (S1) (S2) (D1) (D2)]														
S1 S2 D1 D2														
G%	8-BH		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7		J	F
G&	8-BH		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7		J	F
8%	6CC@			M										
8&	6CC@			M	A	G								

S1

' &

S2

' &

%

D1

M\$

M M(M) M* M+

D2

● **S1**

● **S1**

%

● M\$

● M%

&

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+

M*#M+

1

2

$$F_{a|bSacc} \sqrt{\frac{F_{au}}{T}}$$

F_{au}

T

G8,) G8,*

G8,+

$F_{a|bSacc}$

3

(

)

C::

GA

*

C::

GA, \$GA, %

CB

+ GA ((\$ GA ((% GA ((

M\$M% M#M

M*#M+ 56

CB

56

C::

+

8

9

|---|---| DRVA (S1) (S2) (D1) (D2)]														
S1 S2 D1 D2														
G%	8-BH'		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7		J	F
G&	8-BH'		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7		J	F
8%	6CC@			M										
8&	6CC@			M	A	G								

2

S1

' & -----

S2

' & A 7%\$\$ A 7&\$\$ %\$ %\$\$\$\$\$ <n A 7& \$
%\$ &\$\$\$\$\$ <n

D1

M\$ M% A 7& \$Z M\$ M% M&
M M(M) M* M+

D@7

D2

D2 CB **D2** C: :

$$F_{a|bSacc} \sqrt{\frac{F_{au}}{T}} \cdot$$

$$\frac{F_{au}}{T}$$

G8,) G8, *
G8, +

$$F_{a|bSacc}$$

3

%

S1

- M\$ G8, \$ G8, % ' &
- M% G8, & G8, ' ' &

&

S1

()

) C: :

GA

* C: :

GA, \$ GA, % CB

*

+'' GA ((\$ GA ((% GA ((' M\$M% M&M

M*#M+ 56 CB 56 C: :

C: :

+

1 A 7&\$\$ A 7& \$ G8 A 7%\$\$ ž

8

9

[ABS (S) (D1) (D2)]														
S D1 D2														
G	6CC@	L	M	A	G									
8%	6CC@		M	A	G									
8&	8-BH		?bM	?bA	?bG				8	G8	7			F

S) 56G CB 56G
 G%G %G & L
 *

D1 ' & * 56G
 8% 8% % 8% & M + 56GV]H\$ V]H% &
 , +

D2 ' & , \$
 8& 8& % &
 56G
 G8, \$ G8, & ' &
 G8, \$ G8, &

% D@7
 D@7

& 56G 8&
 G8, \$
 G8, &
 ' 56G 56G
 56G
 CB C::

(GA, & GA, ' M\$ M%

)" A 7&\$ A 7& \$ G8 A 7%\$ ž

G%	6CC@	.	L	M	A	G	.	.	.	.
G&	6CC@	.	L	.	.	.	.	.	.	.
8%	6CC@	.	.	M	.	.	.	.	.	.
8&	6CC@	.	.	M	A	G	.	.	.	.



8C; ,EY s ?ù)_ μ™€ F96+a 74 u, @ 01 C

L\$ L+

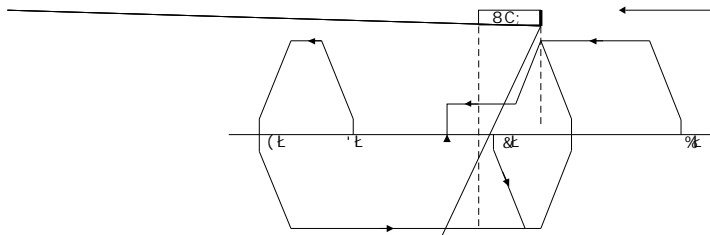
A 7%\$\$ A 7&\$\$z

M\$ M% A 7& \$z

M\$ M%

M& M M(M) M* M+

D2



5
6

SMD	[	DMOV	100000	100000	SD202]
	[	MOV	100	100	SD204]
	[	MOV	5000	5000	SD205]
	[	MOV	2000	2000	SD207]
	[	MOV	8000	8000	SD208]

8C;

M8	[	DSZR	OFF	OFF	OFF	OFF]
			M100	X0	Y0	Y4	

[STOPDV]															
S1 S2 S3 D															
G%	8-BH'		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7		J		
G&	8-BH'		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7		J		
G	8-BH'		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7		J		
8	6CC@			M											

%
&

M\$

gefñ ÷ &x

M% M& M M(M) M* M+

S2

%

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CB
\$
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(

)

D

M\$ M%

M& M M(M) M* M+ M% M
M\$ M&

*

@B 7K

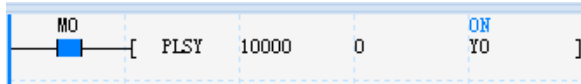
77K

(

D@GM M\$

CB#C::

A \$



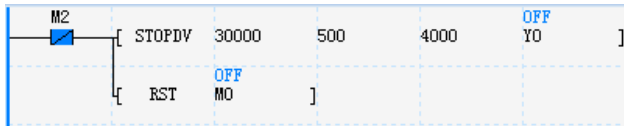
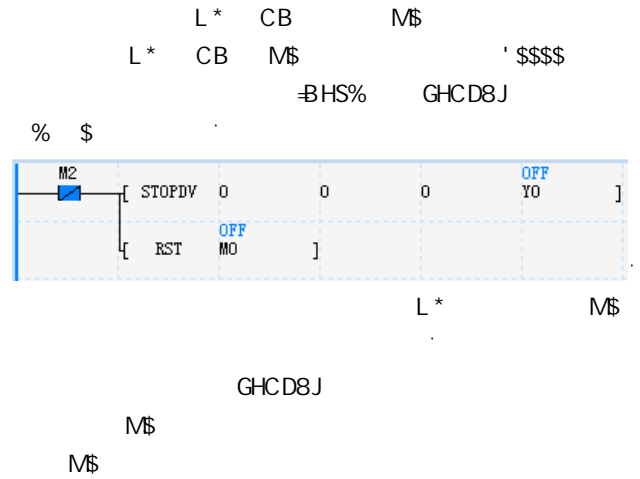
INT_1

程序名称: INT_1 作者: _____

中断事件: X6输入上升沿中断(中断号=6) ...

程序说明:

确定 取消



| | | | [ LUN]							
	S	D1	D2	D3	D4		
G	8-BH						8
8%	6CC@		M				
8&	6CC@		M				
8'	6CC@		M				
8(	6CC@		M				

8		
	%	
GZ%	CB#	C::
	Z	
%	5) I, é A	

X
Y0 Y4 Y5 Y6 Y7

X

Y
Y2 Y4 Y5 Y6 Y7

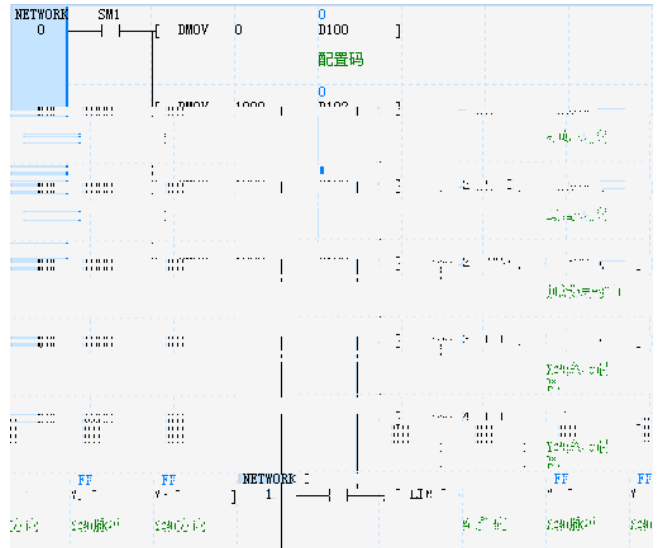
Y

%

&

8	
G	

%
M\$ M& M% M D1 D3 M\$ M&
8% 8' M(M) M* M+ &
& M\$ M& " Z "
" Z " %\$_ M(M)
M* M+ " Z "
&\$_
' %* Z++Z&%)
(



[OW]																
<i>S D1 D2 D3 D4</i>																
G	8-BH									8						
8%	6CC@			M												
8&	6CC@			M												
8'	6CC@			M												
8(	6CC@			M												

X
 YO Y4 Y5 Y6 Y7
 X
 Y
 Y2 Y4 Y5 Y6 Y7
 Y

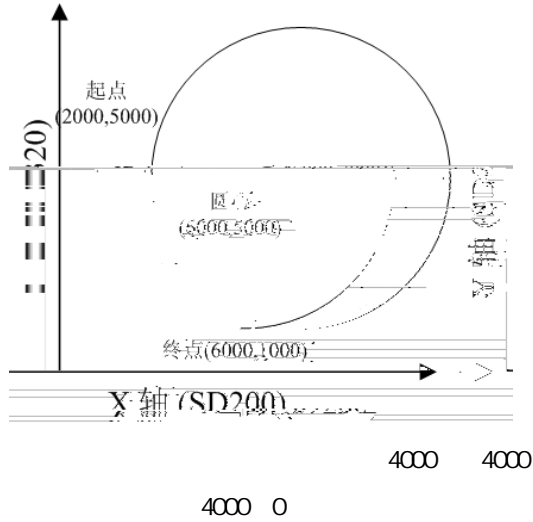
%

&

&

8											
G											
	\$										
	%										
GZ%	%\$										
	\$\$					CB#	C::				
	\$%					Z					
	\$\$					CB#	C::				
	%%					Z					
GZ&											
GZ'											
GZ(
GZ)											
GZ*											
GZ+											
GZ,	L										
GZ-	L										
GZ%\$	M										
GZ%%	M										
GZ%#	L	#								L	
GZ%'	L	#								L	
GZ%&	M	#									

&(\$



NETWORK 0	SM1	[	DMOV	0	0	D100]							
						配置码								
		[	DMOV	1000	0	D104]							
						配置码								
		[	DMOV	4000	0	D108]							
						X轴移动距离								
		[	DMOV	-4000	0	D110]							
						Y轴移动距离								
		[	DMOV	4000	0	D112]							
						圆心X轴相对位置								
		[	DMOV	0	0	D114]							
						圆心Y轴相对位置								
NETWORK 1	MO	[	CW	0	OFF	Y0	OFF	Y1	OFF	Y2	OFF	Y3	OFF	Y3
						配置码	X轴脉冲	X轴方向	Y轴脉冲	Y轴方向				

| | | [ CW]														
S D1 D2 D3 D4														
G	8-BH									8				
8%	6CC@			M										
8&	6CC@			M										
8'	6CC@			M										
8(	6CC@			M										

X
Y0 Y4 Y5 Y6 Y7
X
Y
Y2 Y4 Y5 Y6 Y7
Y

%

&

8	
G	
	\$
	%

8			
GZ%	%S		
	\$S		CB# C::
	\$%		Z
	%S		CB# C::
	%		Z
GZ&			
GZ'			
GZ(
GZ)			
GZ*			
GZ+			
GZ,	L		
GZ-	L		
GZ%S	M		
GZ%%	M		
GZ%&	L	#	L
GZ%'	L	#	L
GZ%(	M	#	M
GZ)%	M	#	M

%

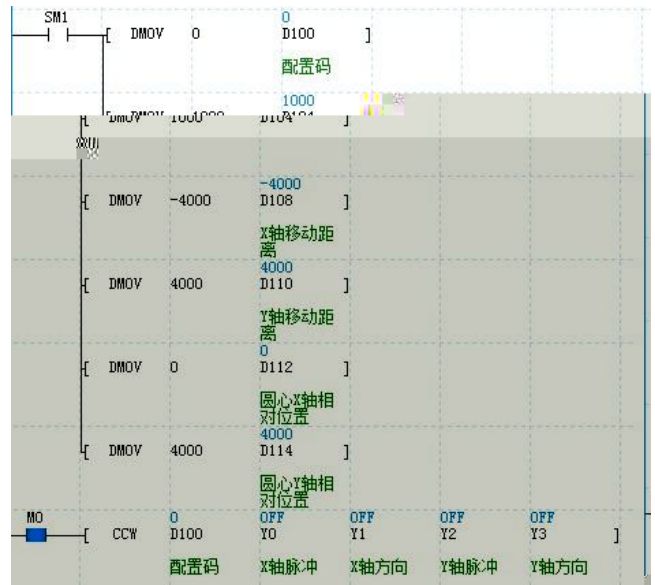
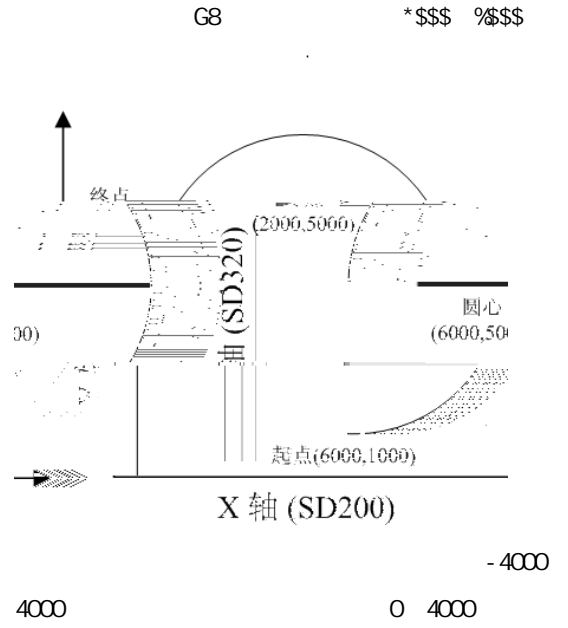
L M

&

L M

```

%
      D1 D3
M$ M& M% M M$ M&
8% 8' M( M) M+ M+ &
& M$ M& " Z "
" Z " %$_ M( M)
M+ M+ " Z "
    &$_
    % Z++ Z%
(
)
    
```



[NOVELINK]															
<i>S1 S2 S3 S4 S5 S6</i>															
G%	8-BH		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7		J		
G&	8-BH		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7		J		
G	8-BH		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7		J		
G(	8-BH		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7		J		
G)	6CC@			M											
G*	6CC@			M							7				

| | | [ GEARBOX]		
<i>D1 S1 D2 S2</i>		

[DRVC (S1) (D1) (S2) (D2)]												
G%	6CC@									7		
8%	8-BH							8				
G&	6CC@			M								
8&	8-BH							8				

h1 G8&\$) f7 g&\$ (L f G8&\$& G8&\$ (L
 : C236-C400 &'' g f#&\$&\$L f fZ G8&\$ (L

AB
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M\$ GA , \$
 M GA

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)

*'' M\$ GA , & CB

C: :

+'' M\$ r M\$

%'' M
 L
 &'' 8fj]

%'' G8&\$) G8&\$) G8&\$&f1 &
 L G8&\$ (% Z

SM1	[DMOV	100000	100000	D0		
	[DMOV	100000	100000	D2		
	[	DMOV	150000	141072	D4		
SMD	[	HCNT	0	100000	D0		
M10	[	DRVC	OFF C236	100000	D0	OFF Y0	OFF Y4

[CAMTABLE (S1) (S2) (S3) (S4) (S5)]																
										8	G8	7		J		
G%	-BH'									8	G8	7		J		
G&	8-BH'									8	G8	7		J		
G'	-BH'									8	G8	7		J		
G(	-BH'									8	G8	7		J		
G)	-BH'									8	G8	7		J		

0° -360°

1.

CAMTABLE

360

2

4

S1

32

1~4

4

M1		↑	[CAMTABLE	R10	D12	D14	D16	D18]
M3			[CAMBOX	D0	X0	Y2	Y3	X10]

360

[CAMBOX (S1) (D1) (D2) (D3) (D4)]														
G%	=BH			M					8	G8	7		J	
8%	6CC@	L	M								7			
8&	6CC@		M											
8'	6CC@		M	A										
8('	6CC@		L											

75A H56@9

%

L \$rL + M\$rM+

&

7

\Wdh

7& *r7' \$+

M\$rM+

M\$rM+

L \$rL +

M1	[	↑	[	CAMTABLE	R10	D12	D14	D16	D18]
M3	[		[	CAMBOX	D0	X0	Y2	Y3	X10]

%

HUYS

| | | [ MEAN (S1) (D) (S2)]										MC280				
G%	=BH		? bL	? bM	? bA	? bG	? b@A	? bGA	8	G8	7	H		F
8	=BH			? bM	? bA	? bG	? b@A		8	G8	7			F
G&	=BH								8					F

S1 %
S2 &
D .

M1	[	MEAN	32	10	4]
			D0	D10		

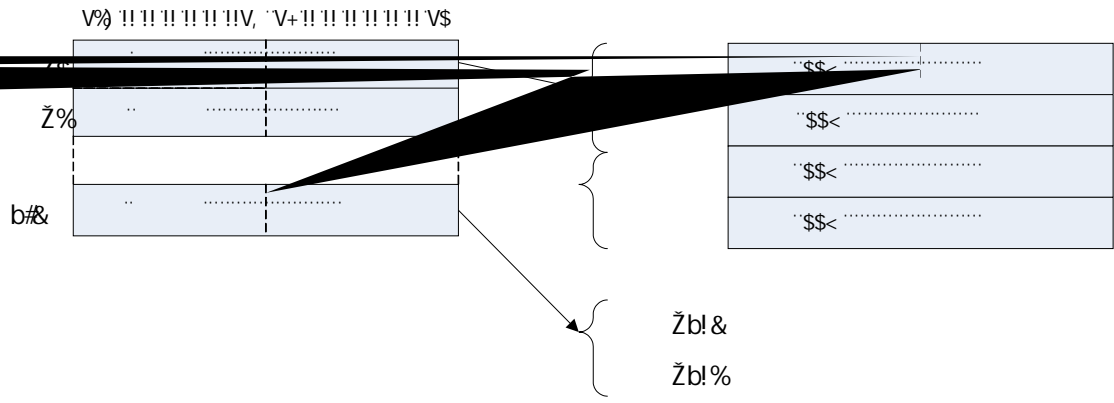
@8 A %
 A 95B 8\$ 8\$ (z
 A %CB 8\$ (z
 8\$ 8\$1' & 8%1\$ 8&1% 8' 1!%
 8%1\$

% S1 S2 16 D

| | | [ WTOB (S1) (D) (S2)]										MC280				
										7				
G%	=BH								8	G8	7	H		F
G&	=BH								8	G8	7	H		F
8	=BH								8					F

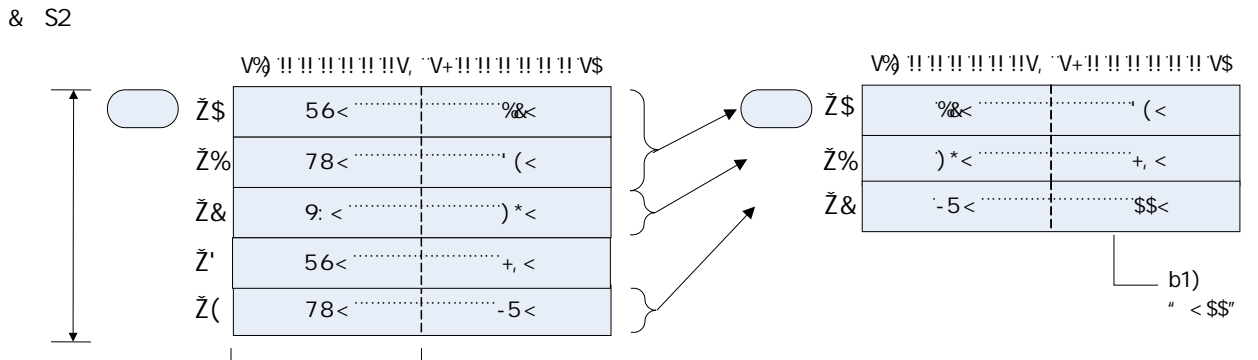
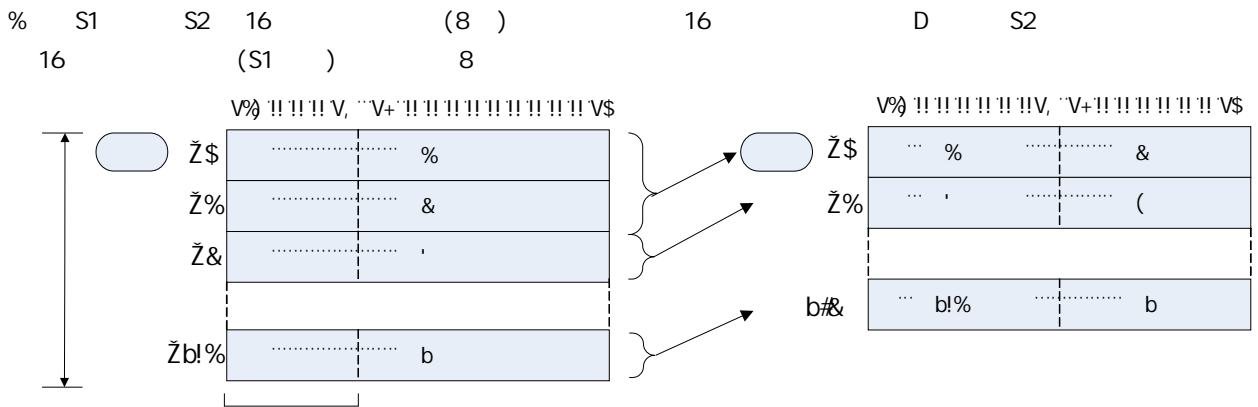
S1 %
S2 &
D .

% S1 S2/2 16 S2 D S2

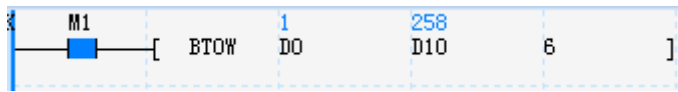


BTOW (S1) (D) (S2)												
G%	-BH							8	G8	7	H	F
G&	-BH							8	G8	7	H	F
8	-BH							8				F

S1 %
S2 &
D .



S2 0
 (



@8 A %
 6HCK 8\$ 8%
 A %CB 8\$ * 8% 8\$1\$ %8%1\$ \$&Z
 8&1\$ \$ Z8' 1\$ \$(Z8(1\$ \$) Z8) 1\$ \$* 8%1\$1\$ %8Z8%1\$ '\$(Z8&1\$) \$*

16

4

|—| — [**UNI** (*S1*) (*D*) (*S2*)]

16

4

| | | [ DIS (S1) (D) (S2)]															
G%	=BH									8	G8	7	H		F
G&	=BH									8	G8	7	H		F
8	=BH									8					F

2' -€ ta'1- •TM€

|—| |—| [ ANS (<i>S1</i>) (<i>S2</i>) (<i>D</i>)]		
ANS S1 S2 D		



|-----|-----| [ RND (D)]			
<i>D</i>			
8	K CF8	? bL	? bM
		? bA	? bC
		7 @ A 6	0 bGA
		8	G8
		&	H
			N
			F

D

M1	26406
----- ----- [RND DO]	

% \$ ' &+*+
8
GA % \$

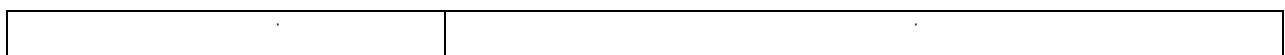
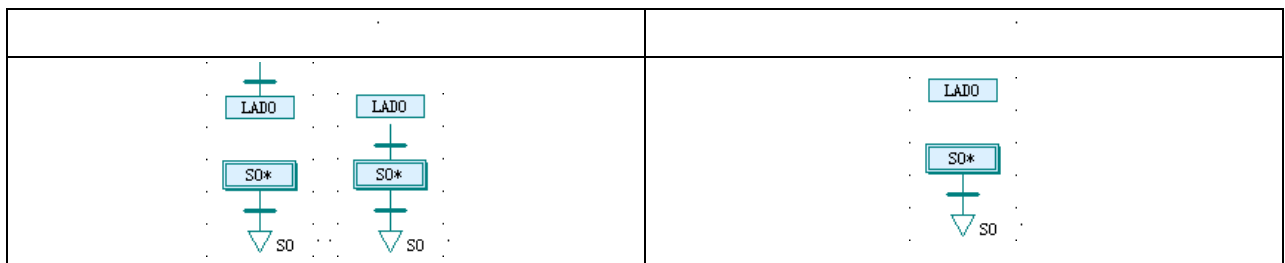
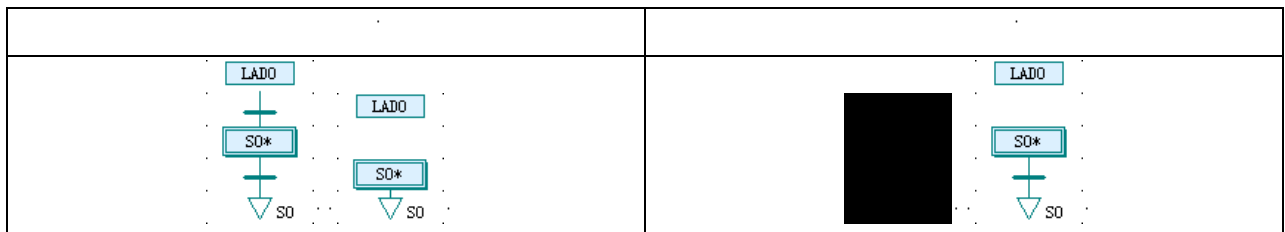
@8 ' L \$
FB8 '8 \$
A % CB

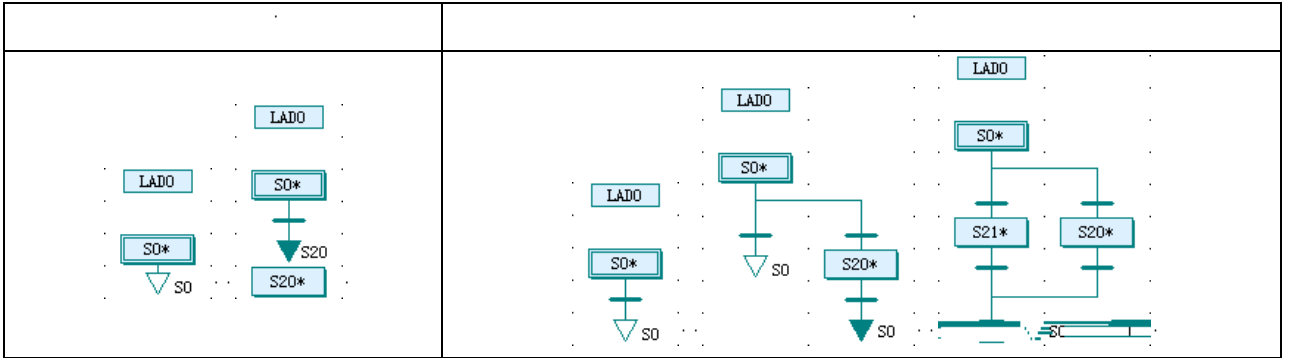
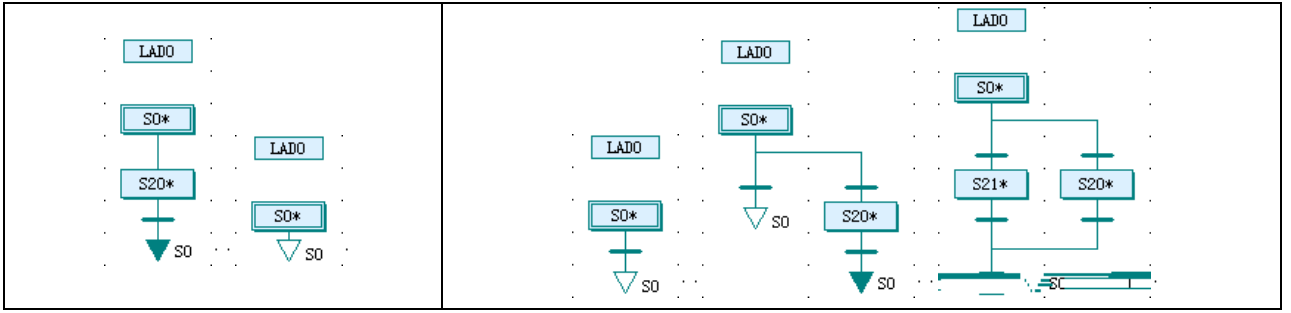
8\$ 8\$1&*(\$*

----- ----- [DUTY (S1) (S2) (D)]			
<i>S1 S2 D</i>			

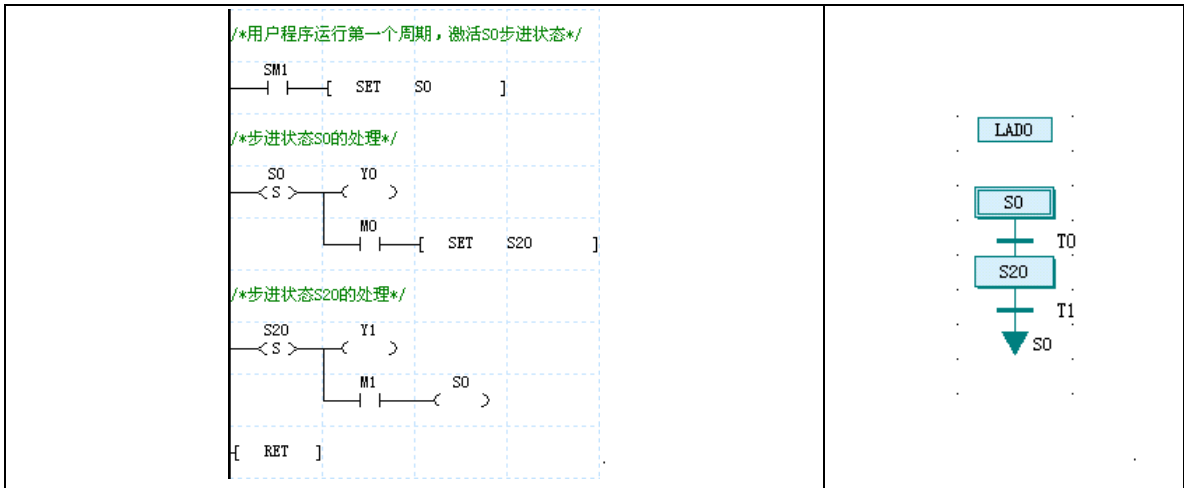
+!%&)
+!%%&)
+!%& A 7 D@7&)
+!%#&)

		G
		G CB
		G C::
	LAD1*	





G. 7



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G CB

&

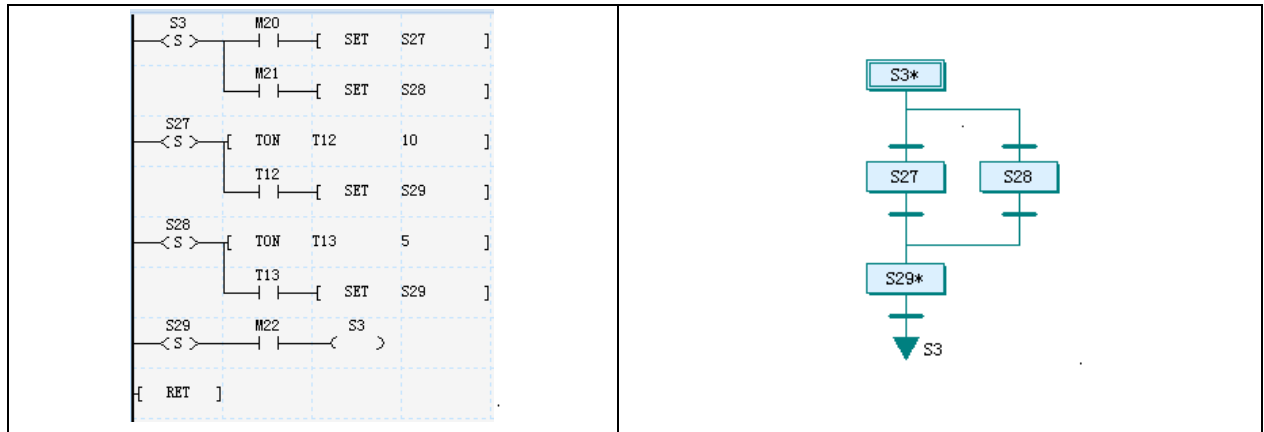
G \$ %

&)

G &\$ --% A 7&\$

&\$ %&' A 7%&\$

("



%"

A &\$ A &%

A &\$ A &%

B\$ G&+ G&
G&+ G&

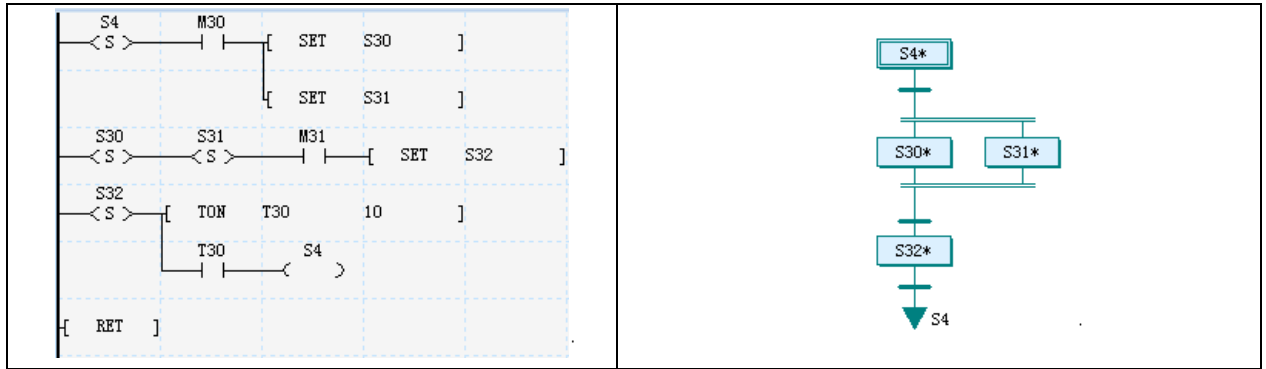
&"

H%&
G&-

B& G&

H%

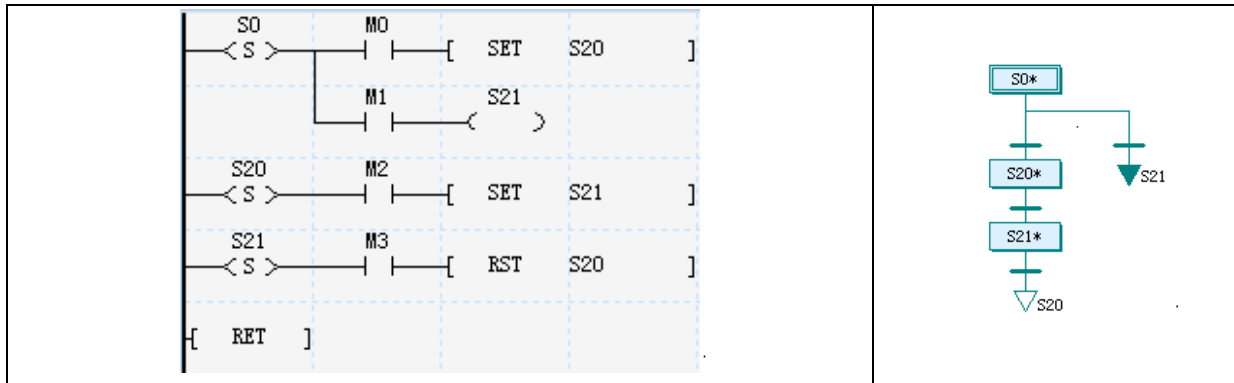
B% G&+



B\$ A '\$ A '\$ G \$ G %

G \$ G % A ' % G & G \$ G % B *

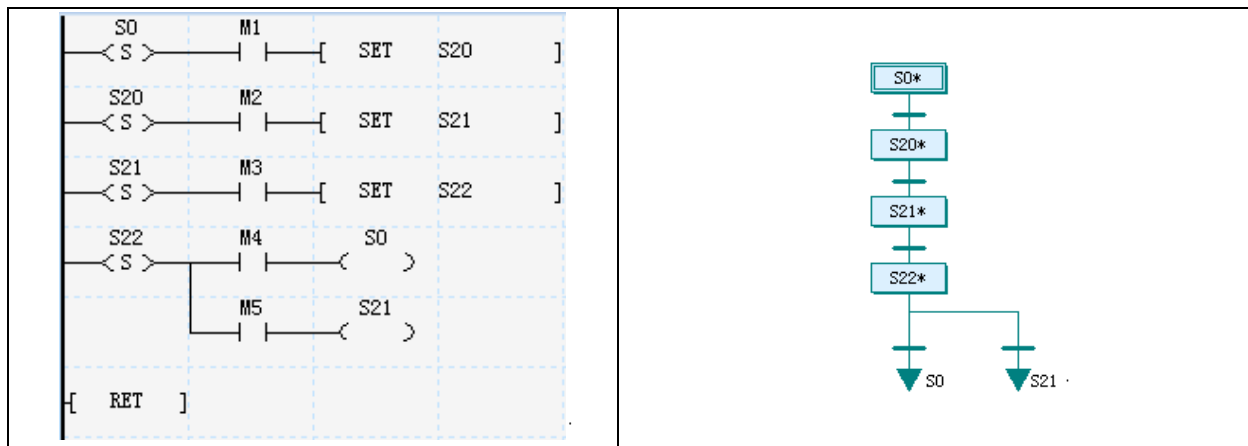
%



G&% G&\$ B\$ CI H G9H

G\$ A % CB G&%

&''



G&&
G\$

B'

G&% G&%

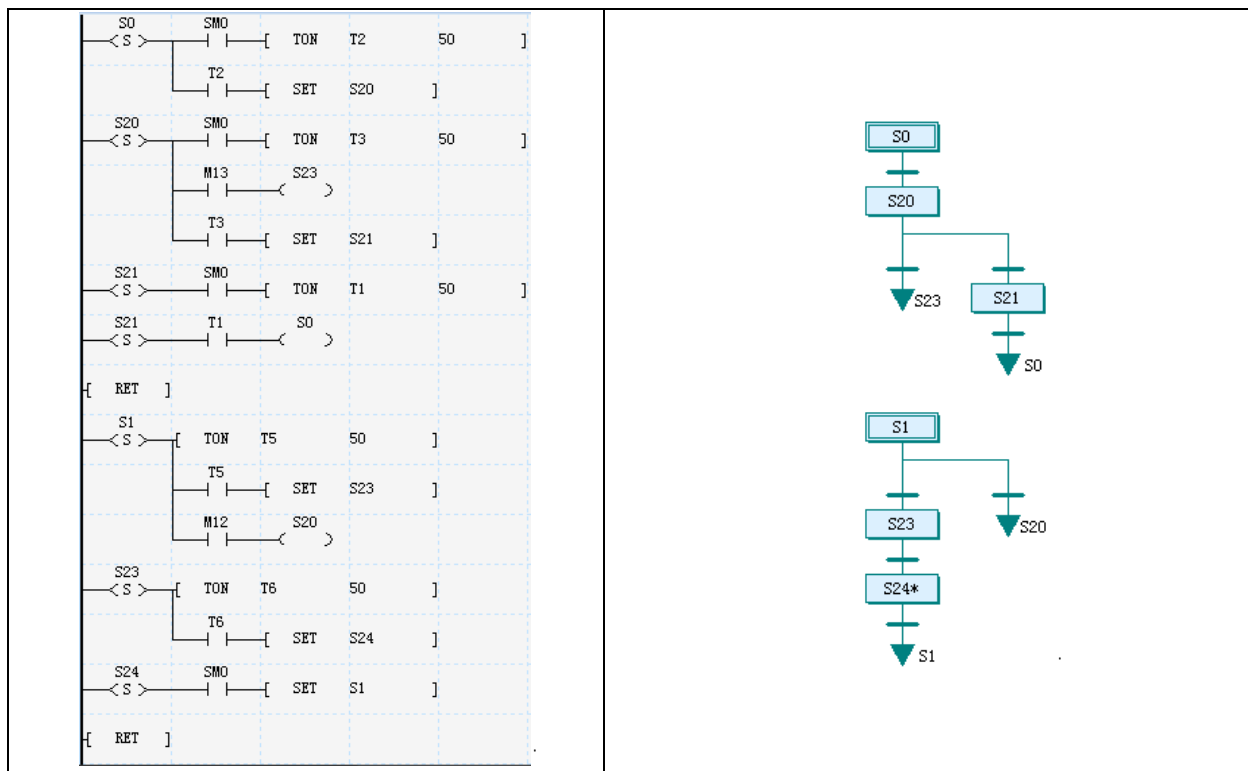
CI H

...

A 7 D@7



D@7



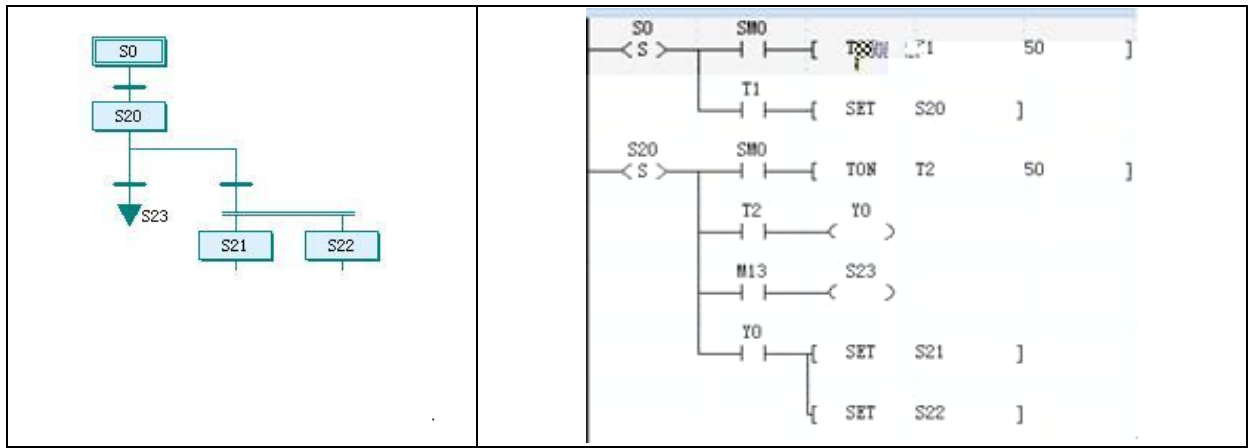
G&\$
G&\$

G&

G%

C:: G&\$ G& G&\$ G&% C:: G& G&\$

H& G&% G&& A % C:: G& G& H&



G CB C:: CB#C:: 5.31 STL SFC G



A 7 D@7

G

D@7

G

7.4

G: 7

G: 7

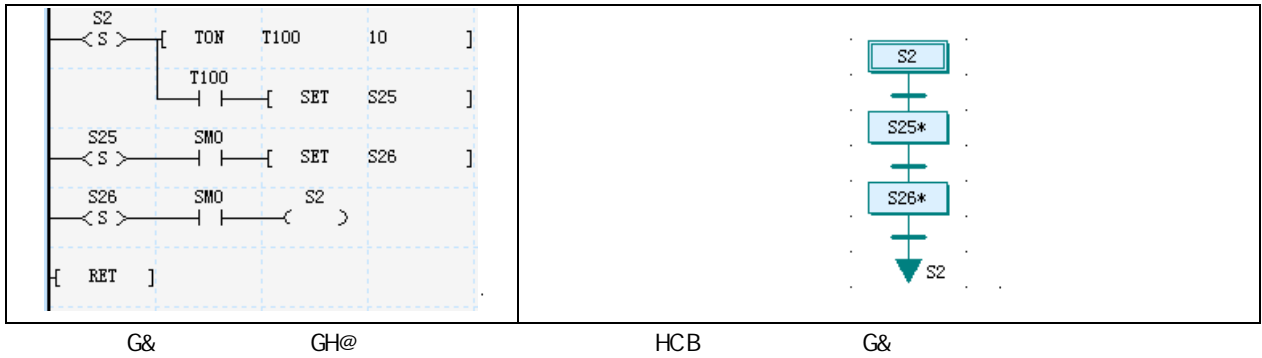
G: 7

G: 7

GH@

G

G: 7



G

GH@ 5.31 STL SFC CB C::

CI H HCB HC: DK A <7BH D@GM D@GF 8<G7G GD8 8<G7= 8<G7F 8<GN 8<GH

8<GD 6CI H



D@7

CB C:: 7.41

G 7

G9H

G: 7

G: 7 G& & G& G 7

F 9H

F 9H

G& B' CI H

G&* B' FGH G&*

7.15

7.15

%"

G: 7

&"

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L S6i]XYf G: 7 G: 7 G: 7 D@7

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G: 7 G: 7

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G: 7

GH@ D@7 G: 7

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D@7

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G: 7

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F 9H'

F 9H

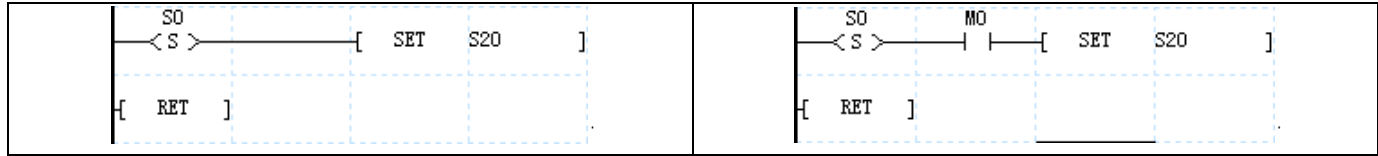
G&\$

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(" CB C: :

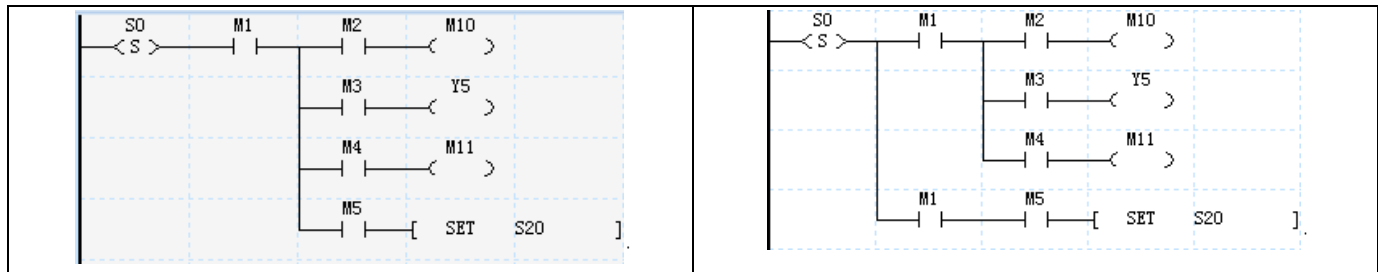
CI H HCB HC: DK A <7BH D@GM D@GF 8<G7G GD8 8<G7=
8<G7F 8<GN 8<GH 8<GD 6CI H

)"

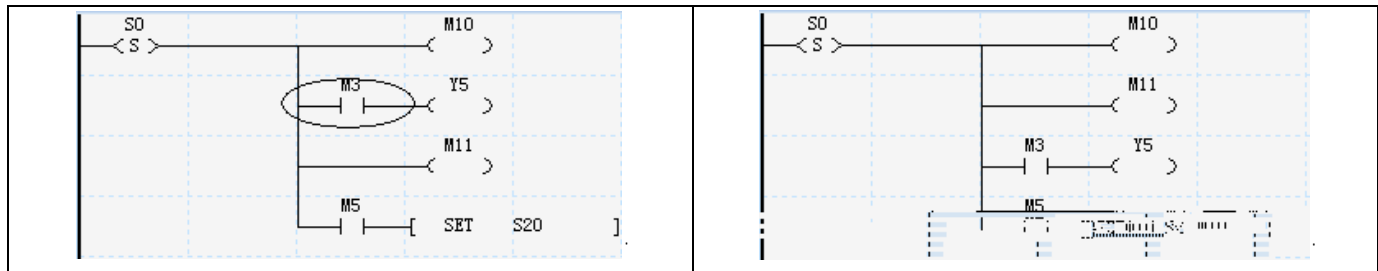


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A %



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D@7

GH@ CB C: :

5.31 STL SFC

G&\$

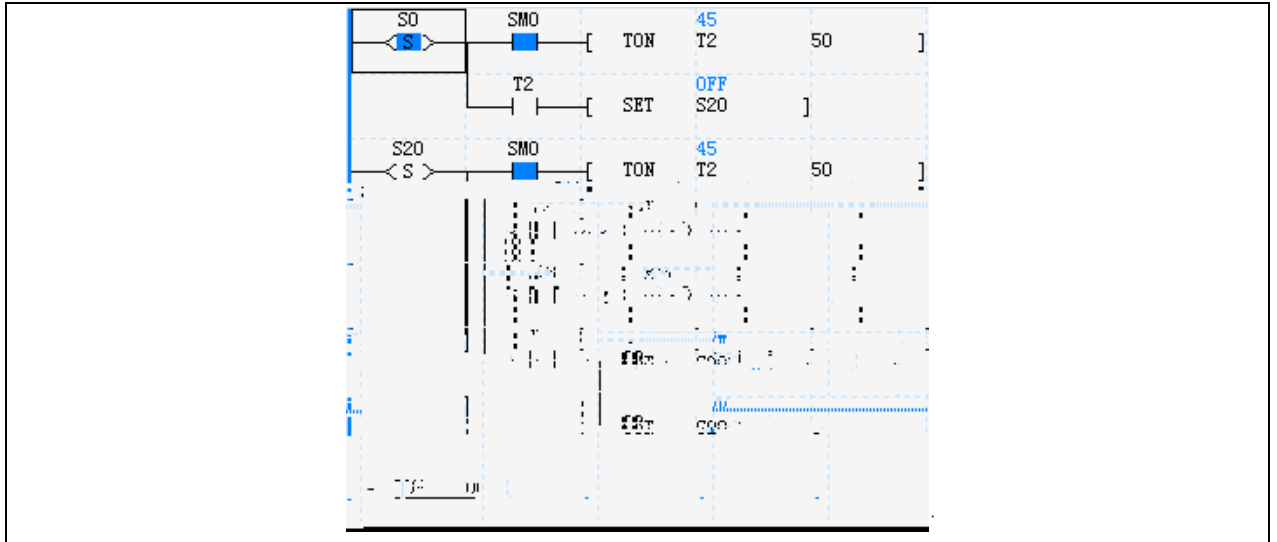
H&

G\$

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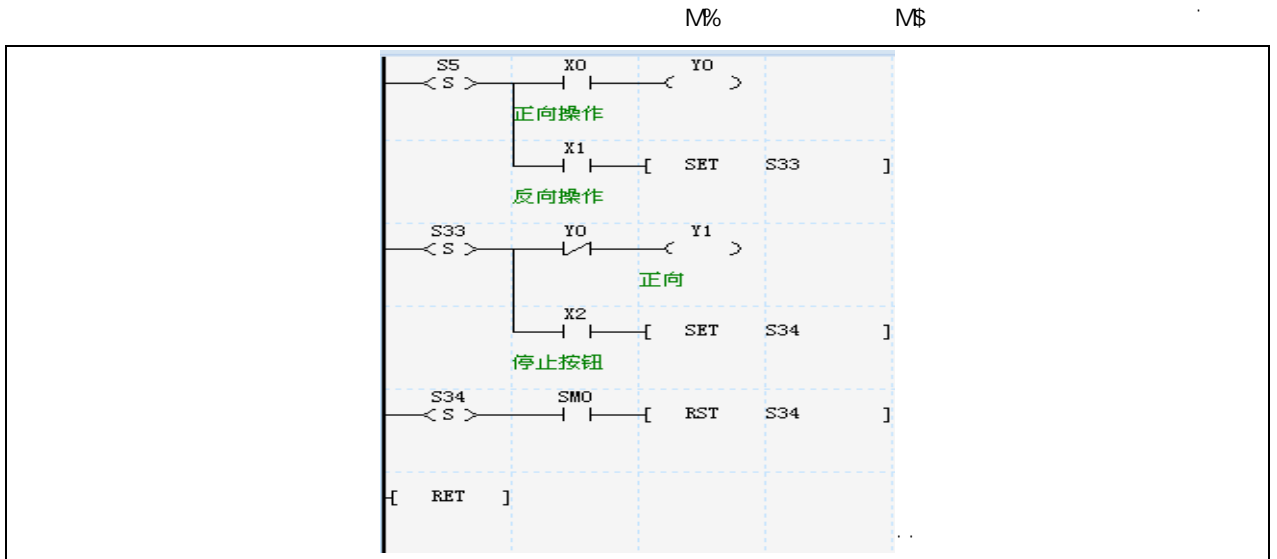
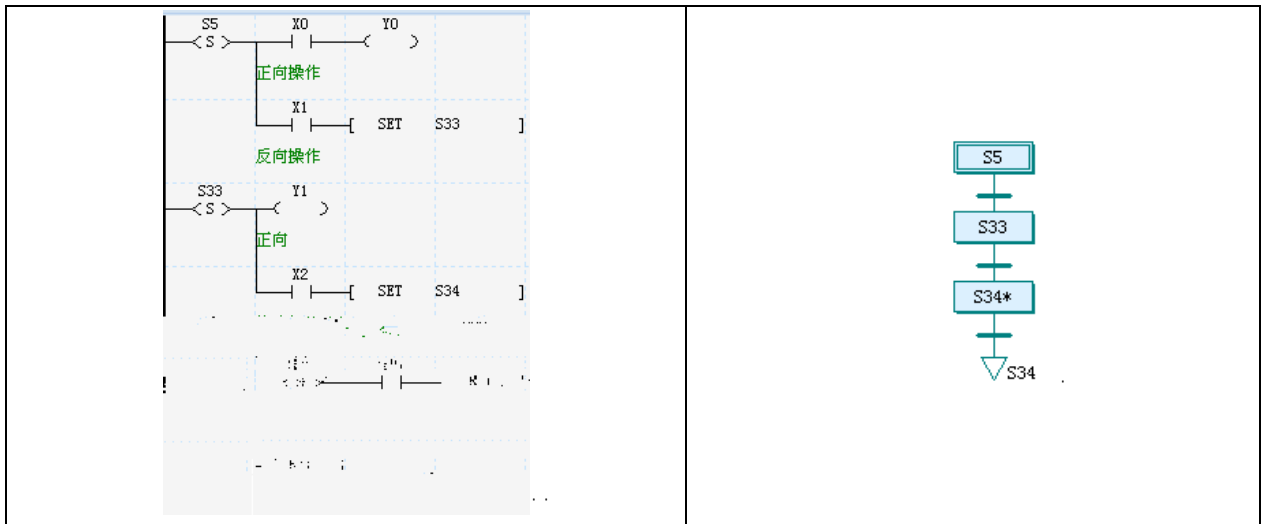
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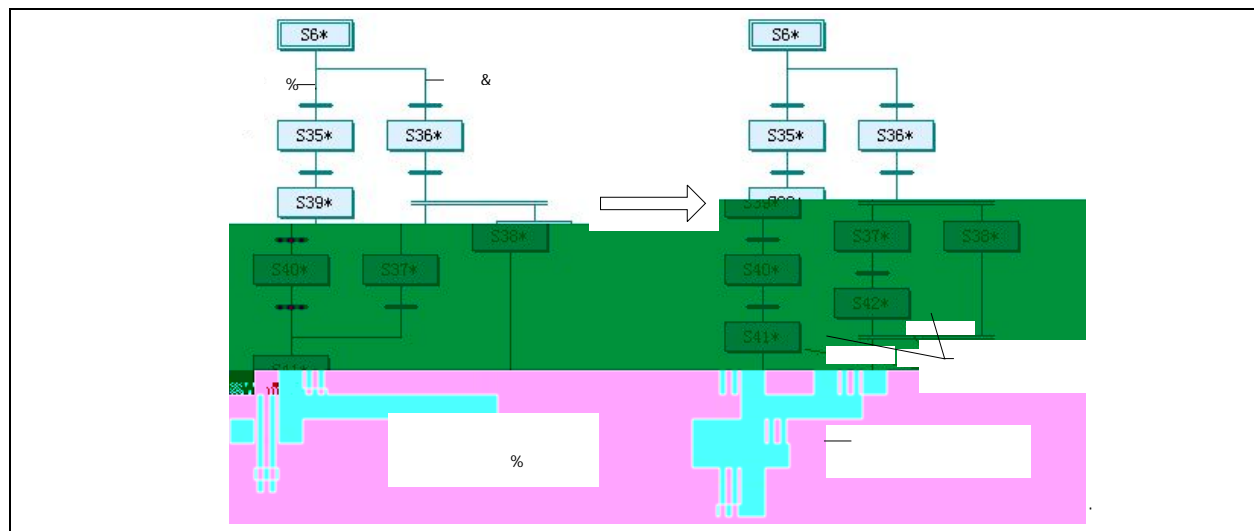
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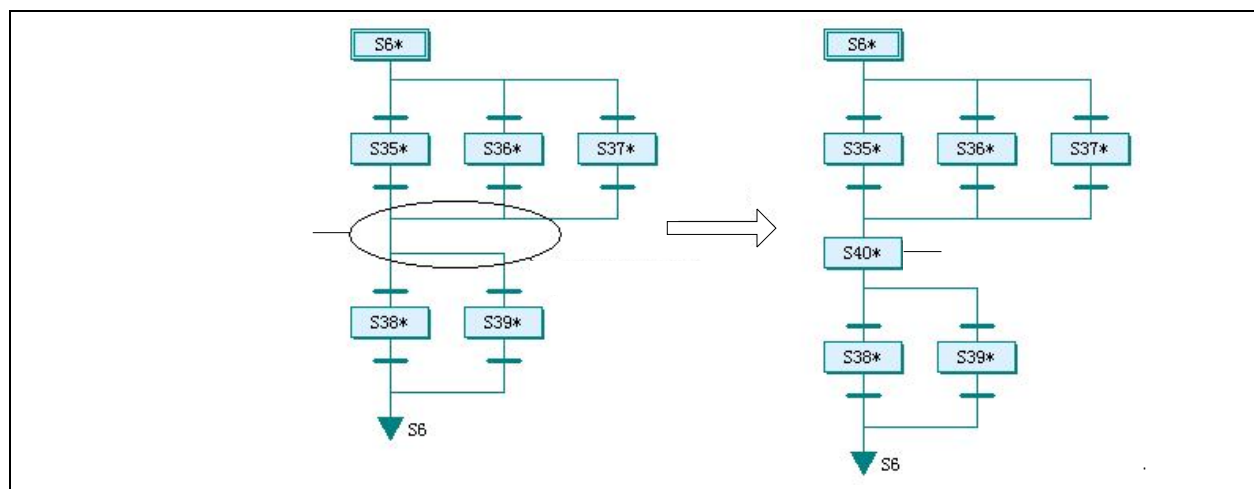
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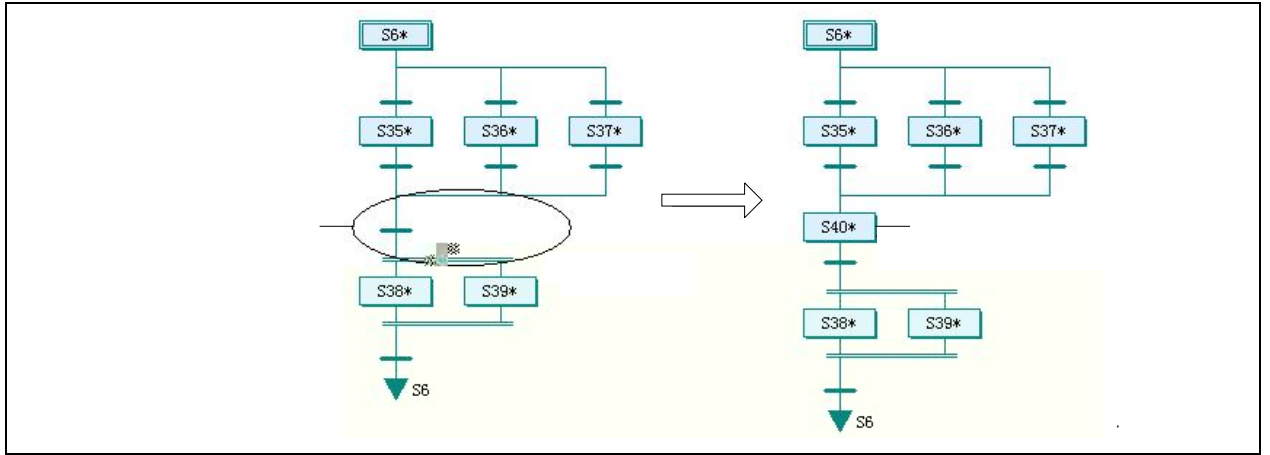
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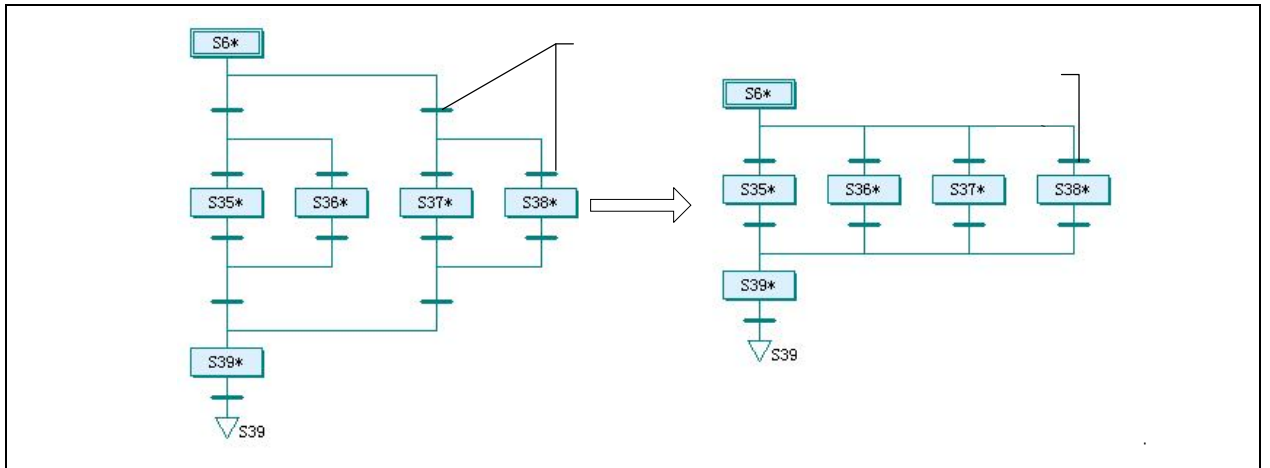
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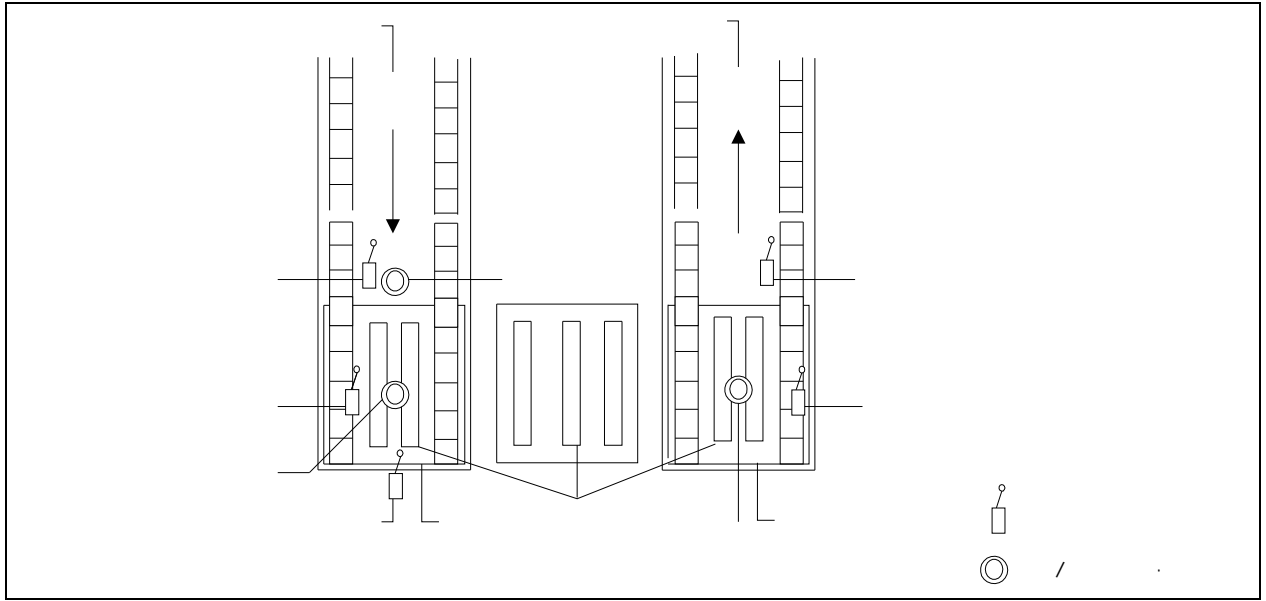


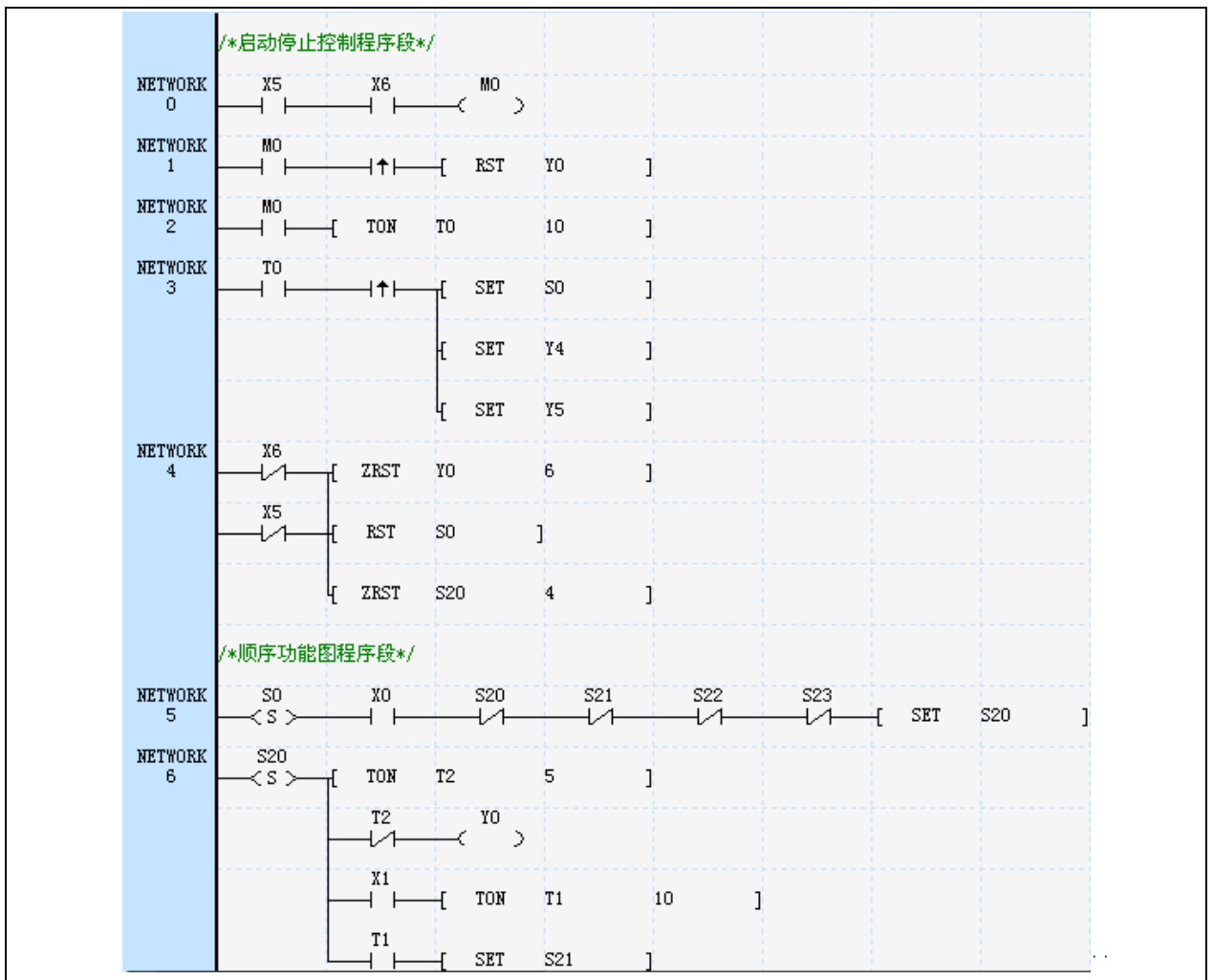
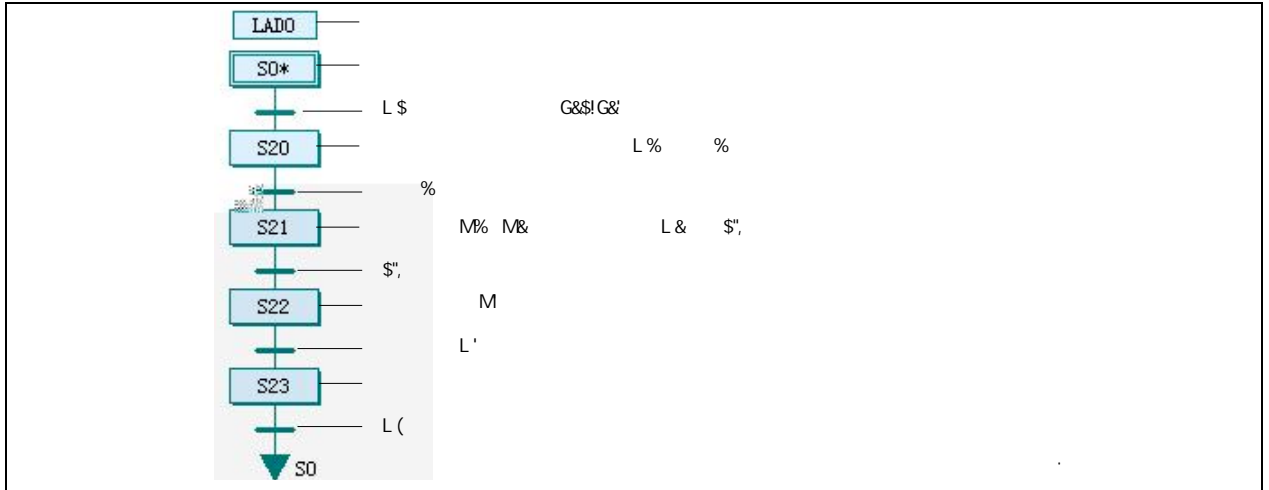


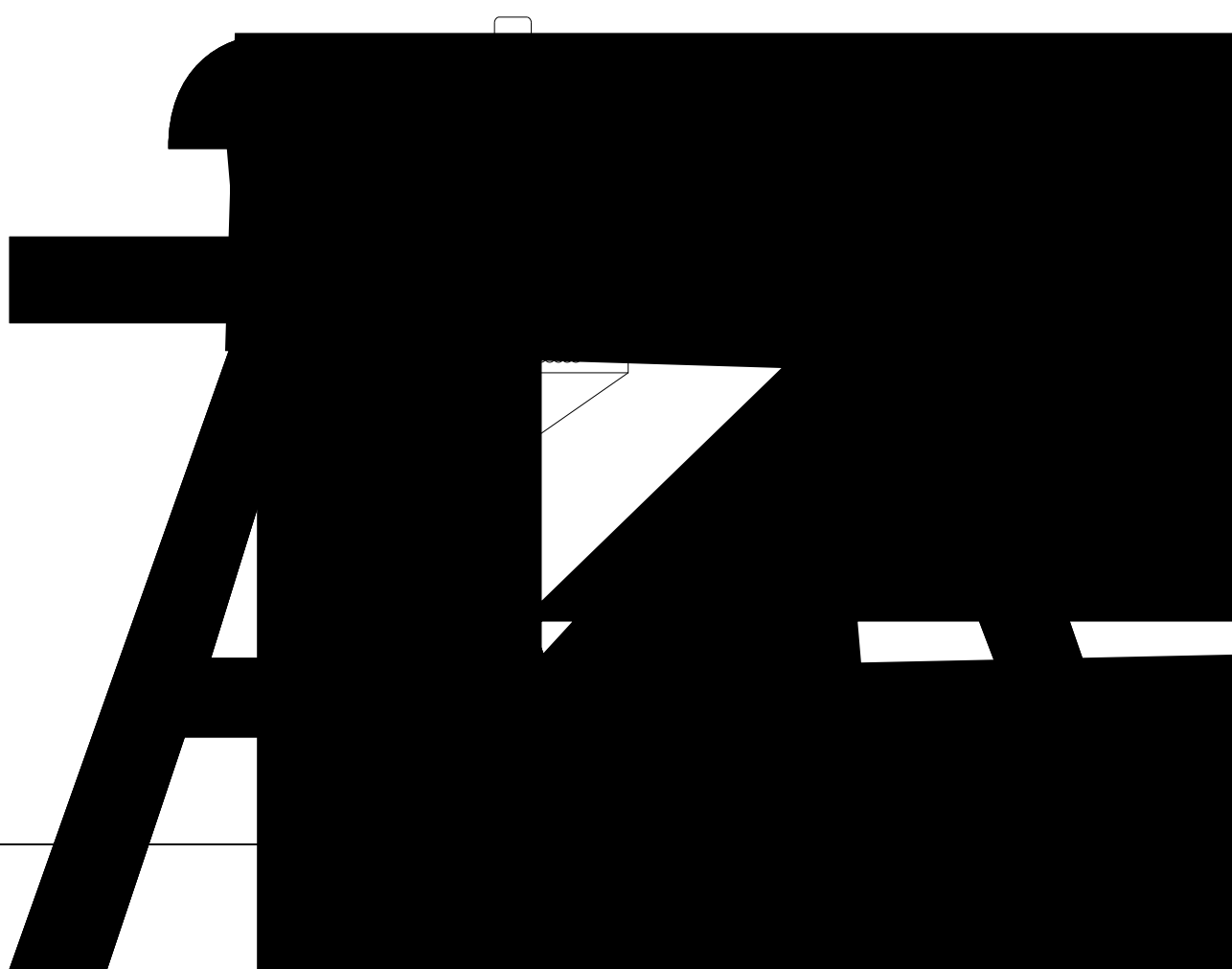
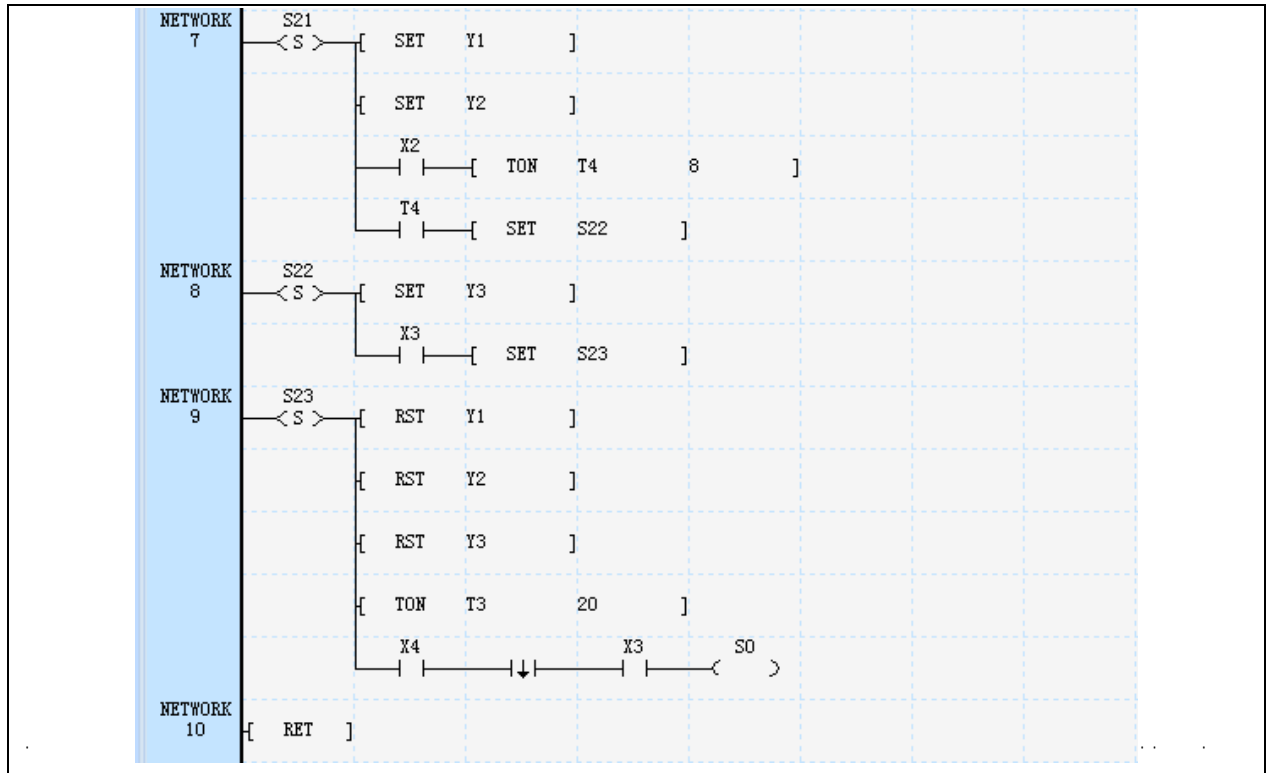
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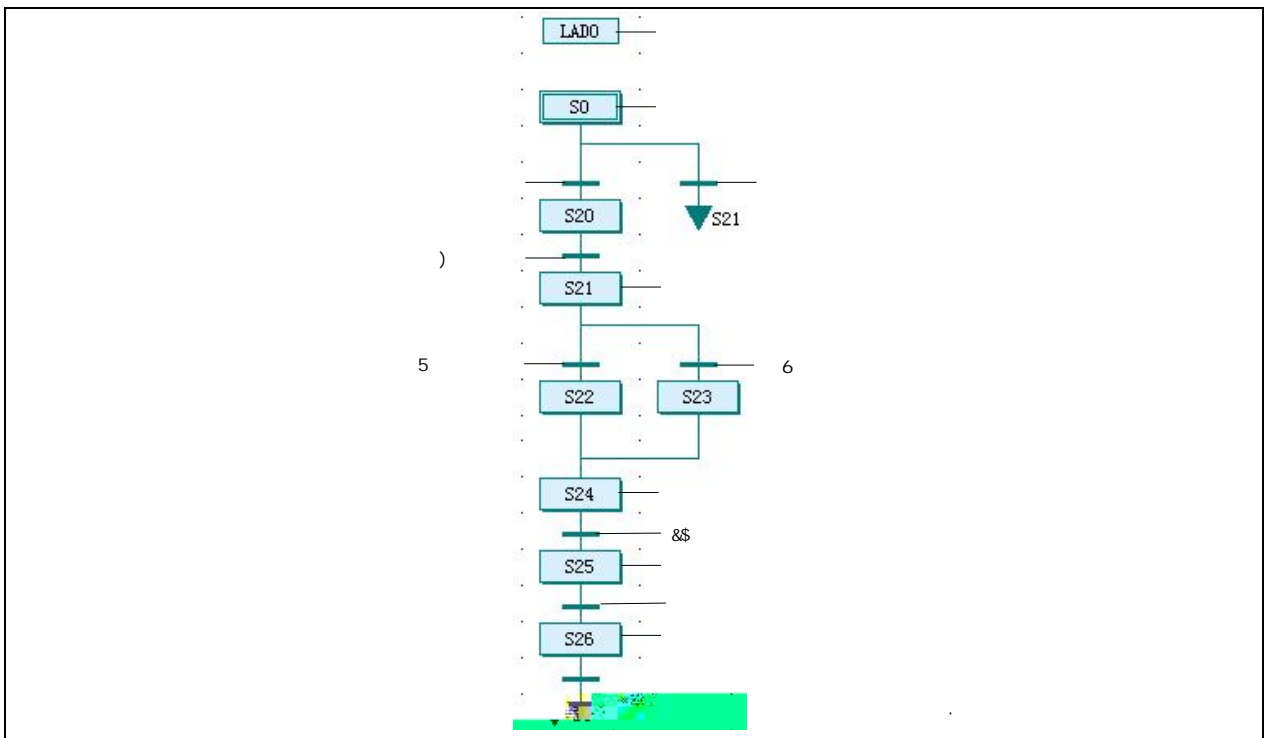


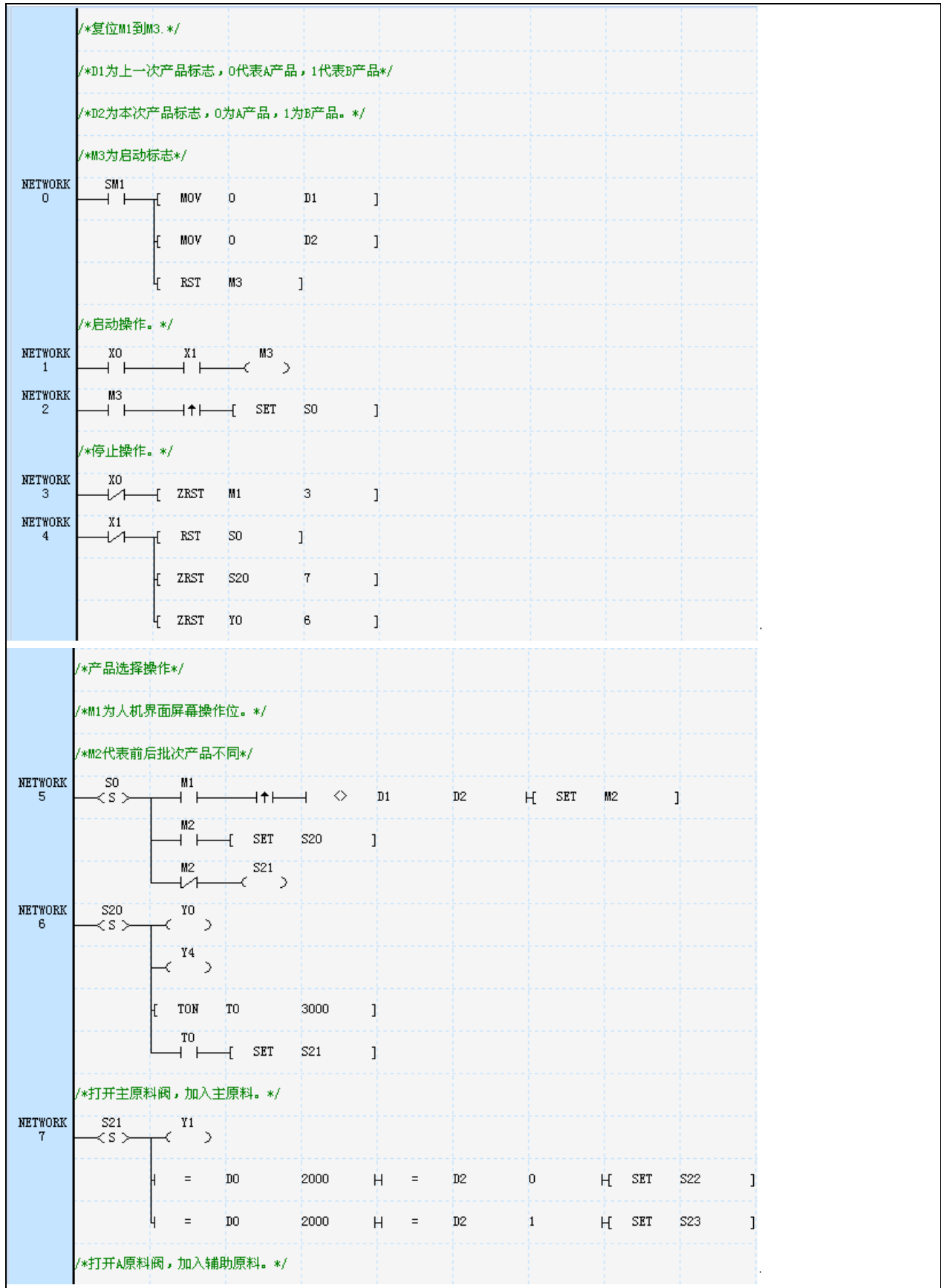


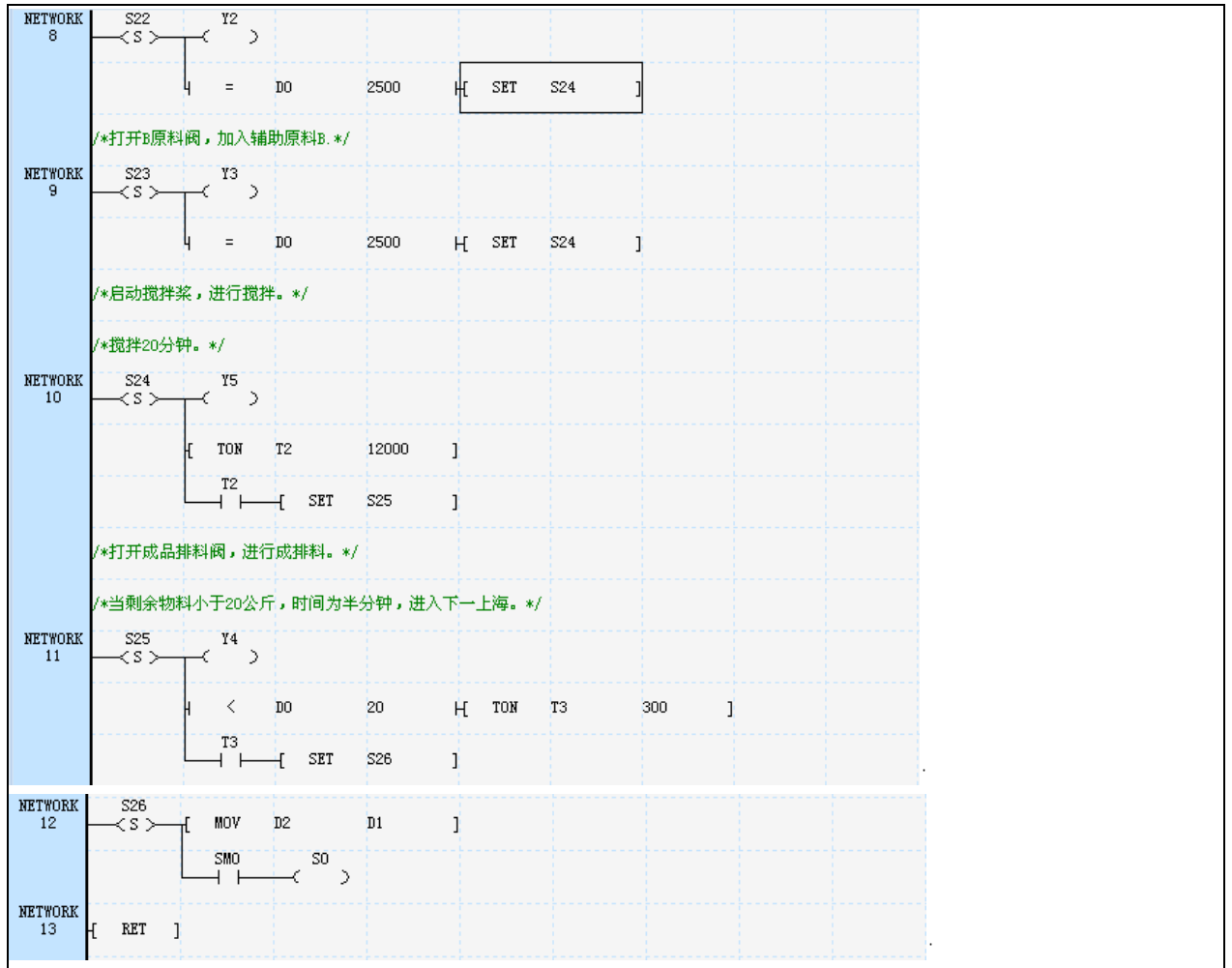


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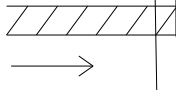
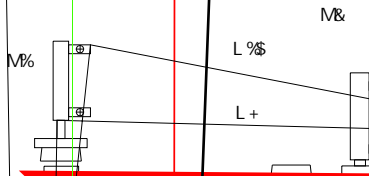
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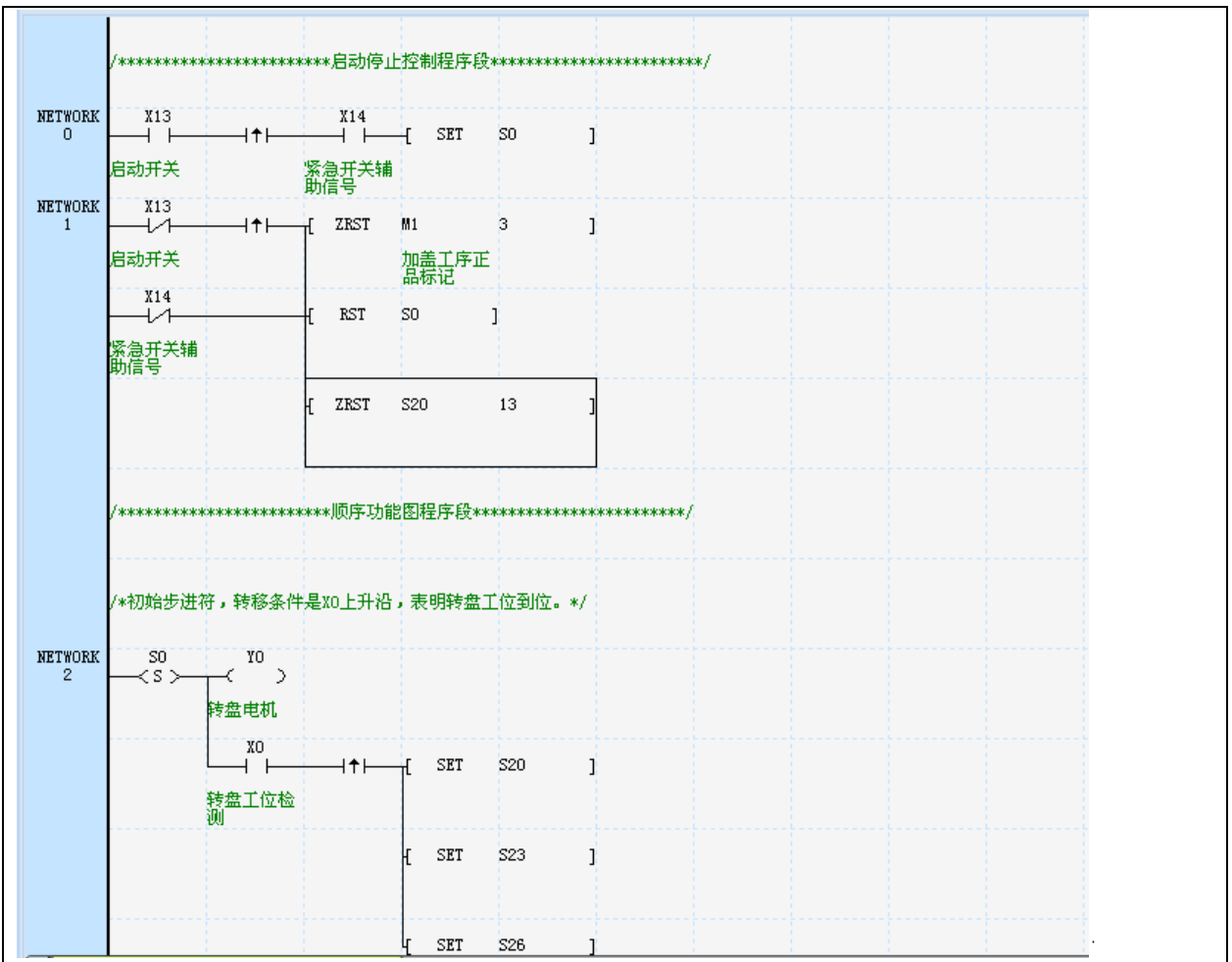
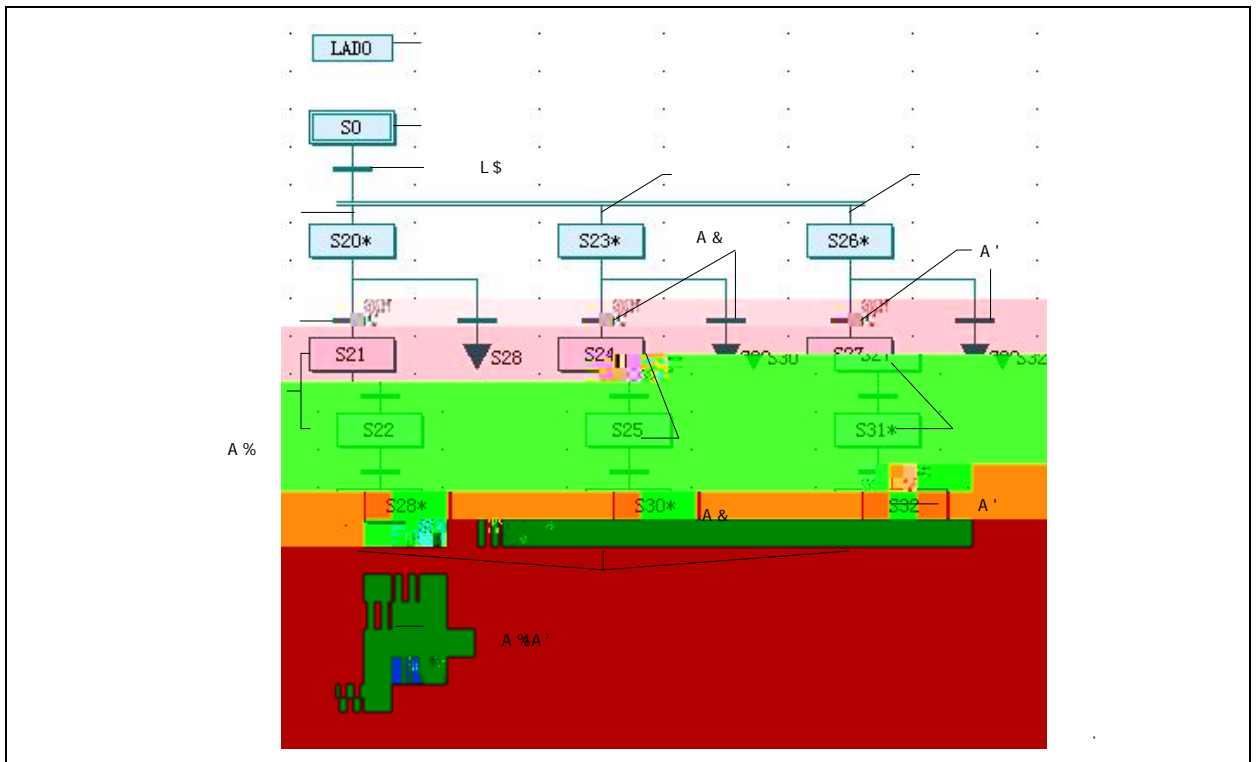




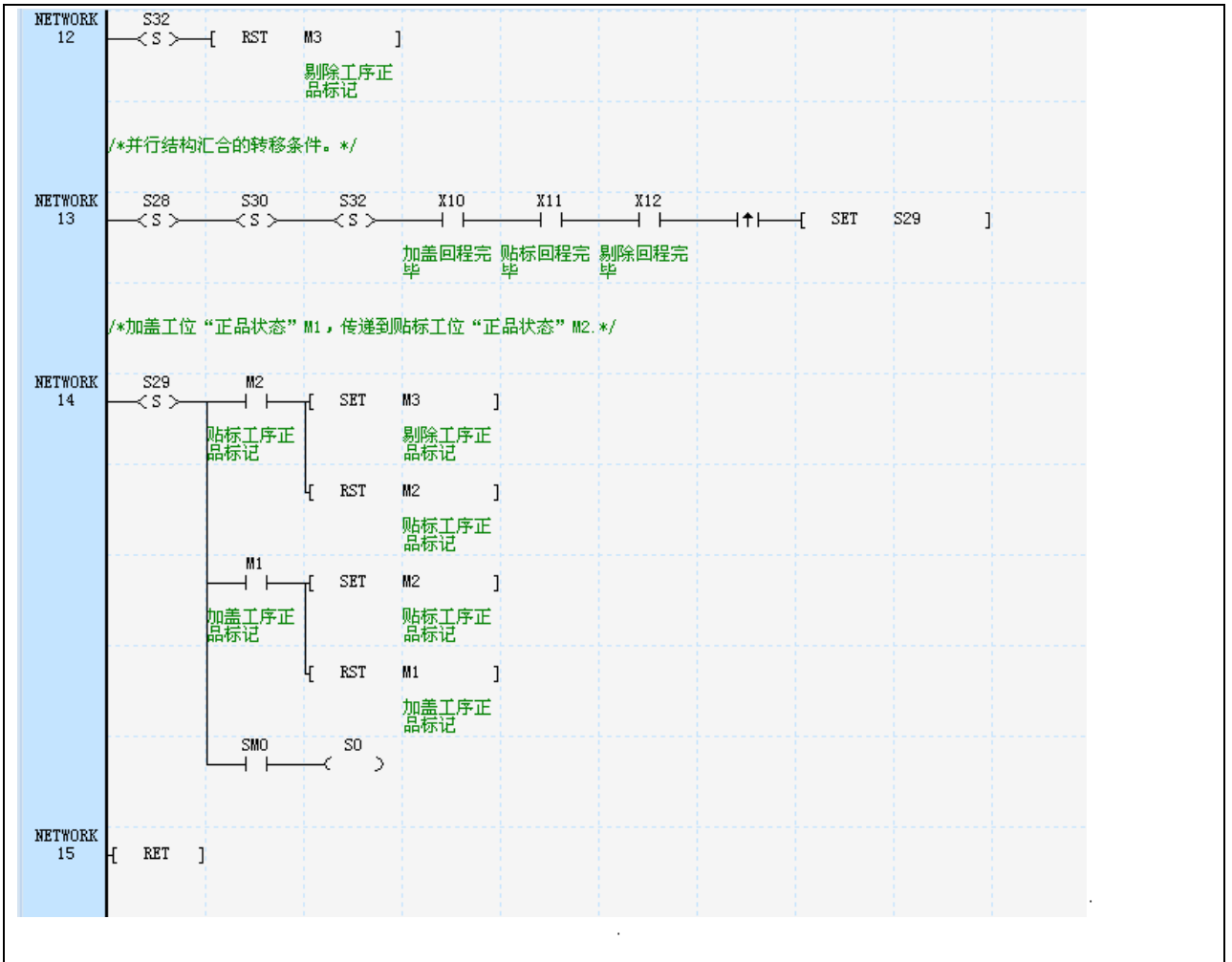
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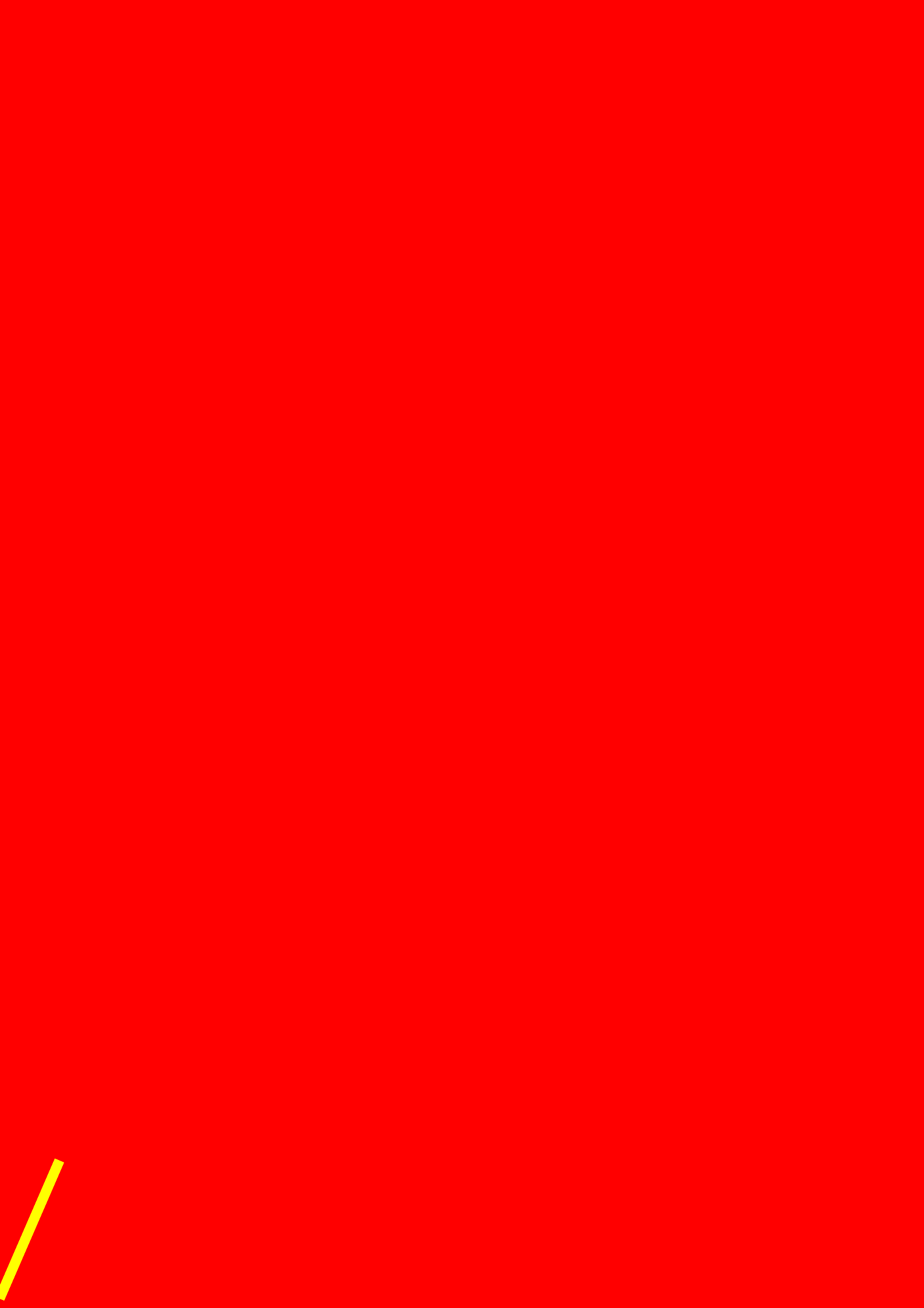
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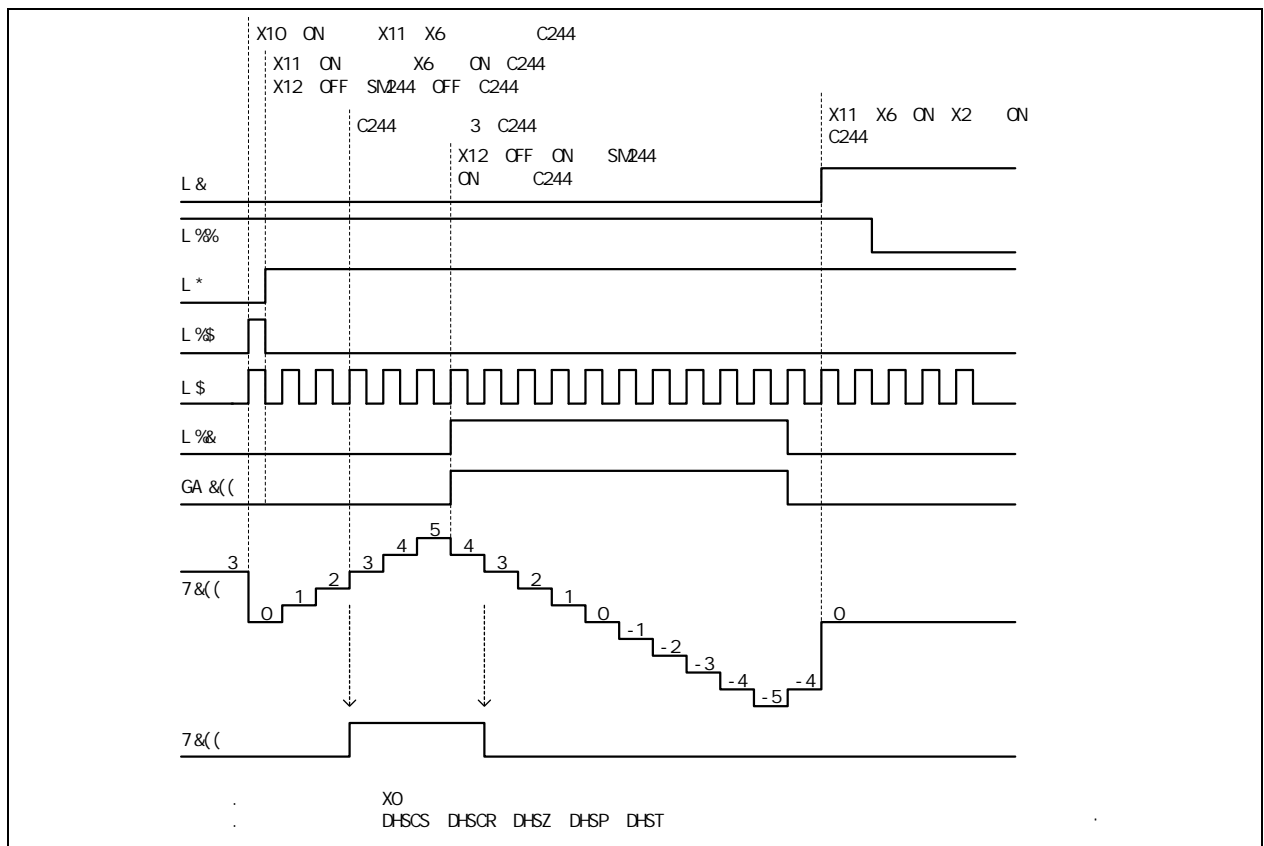
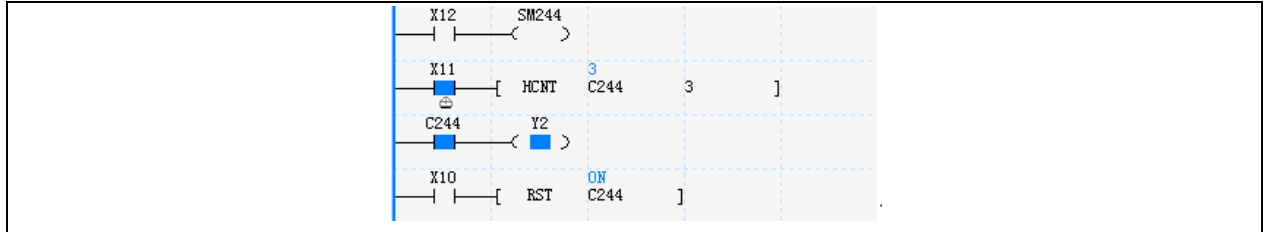


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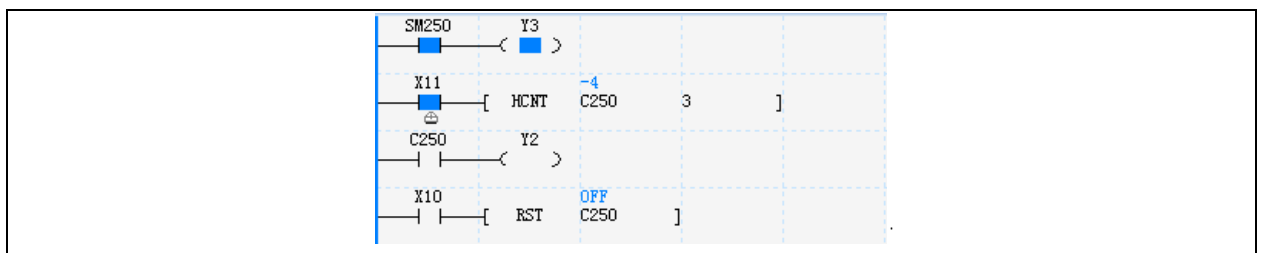
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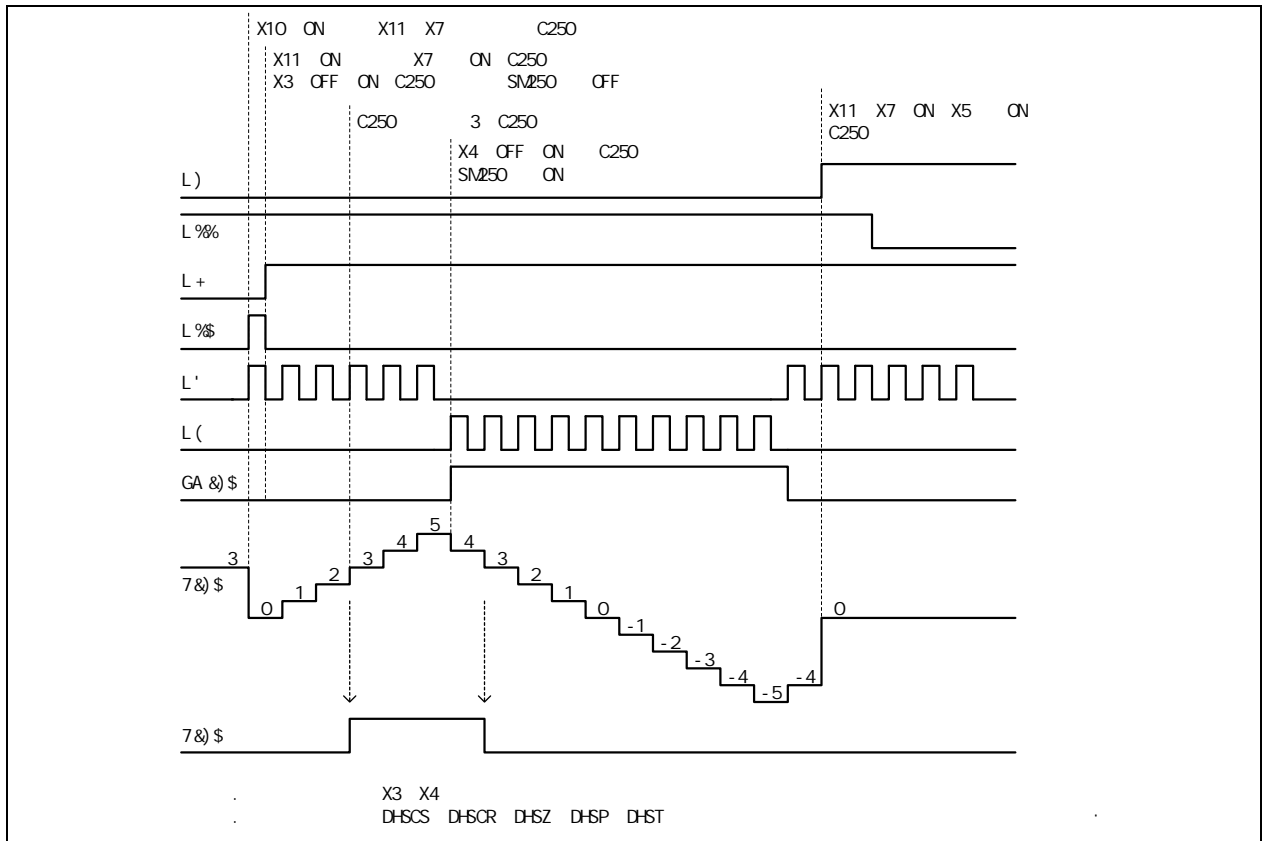
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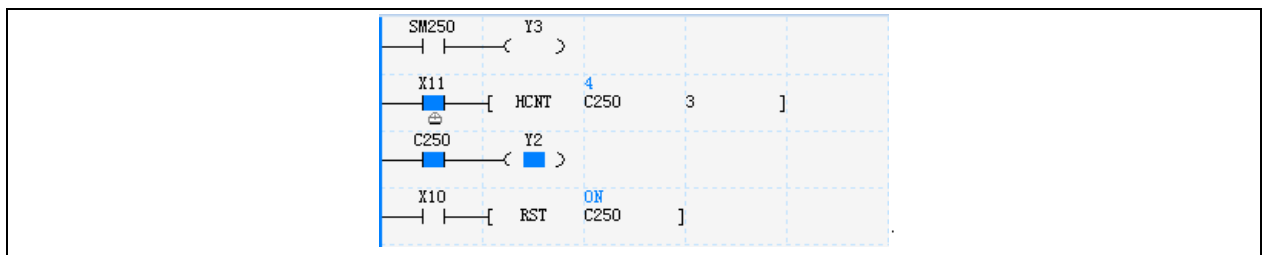
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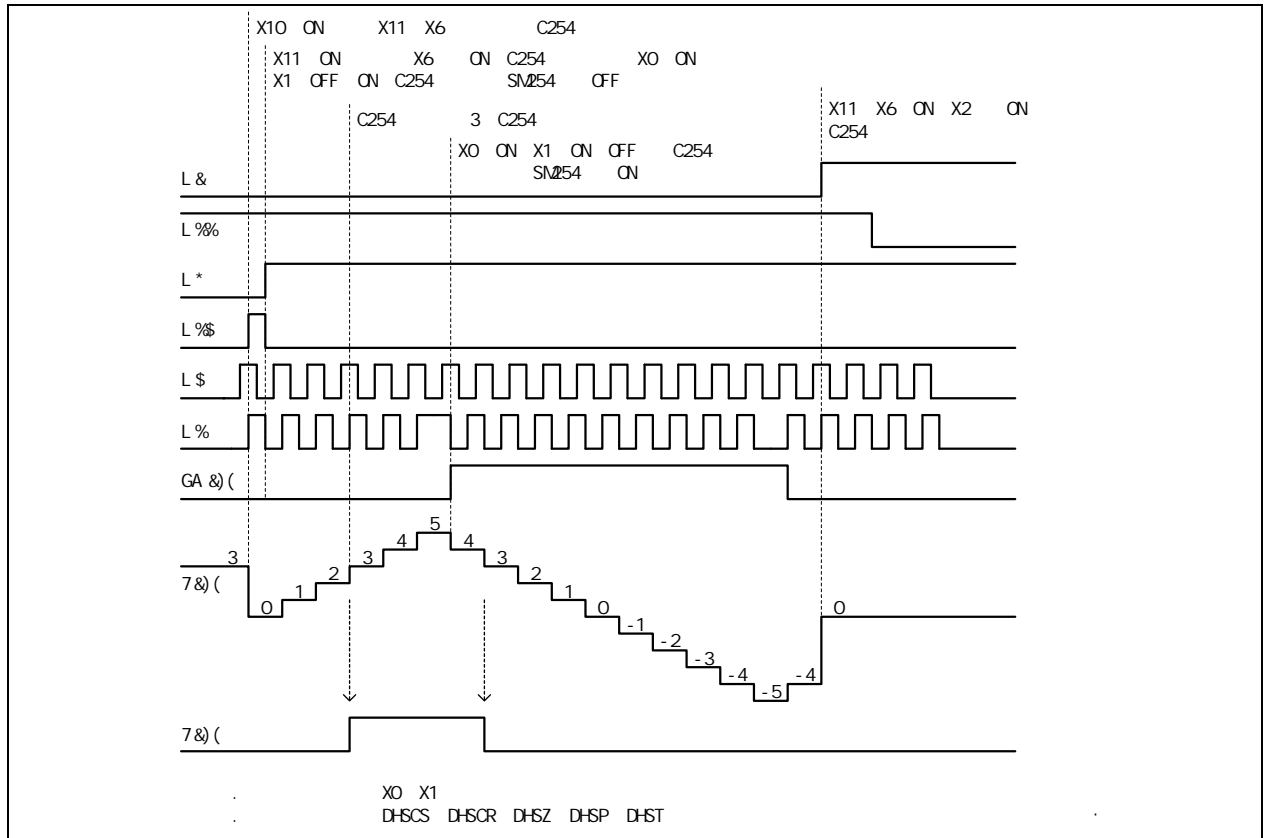




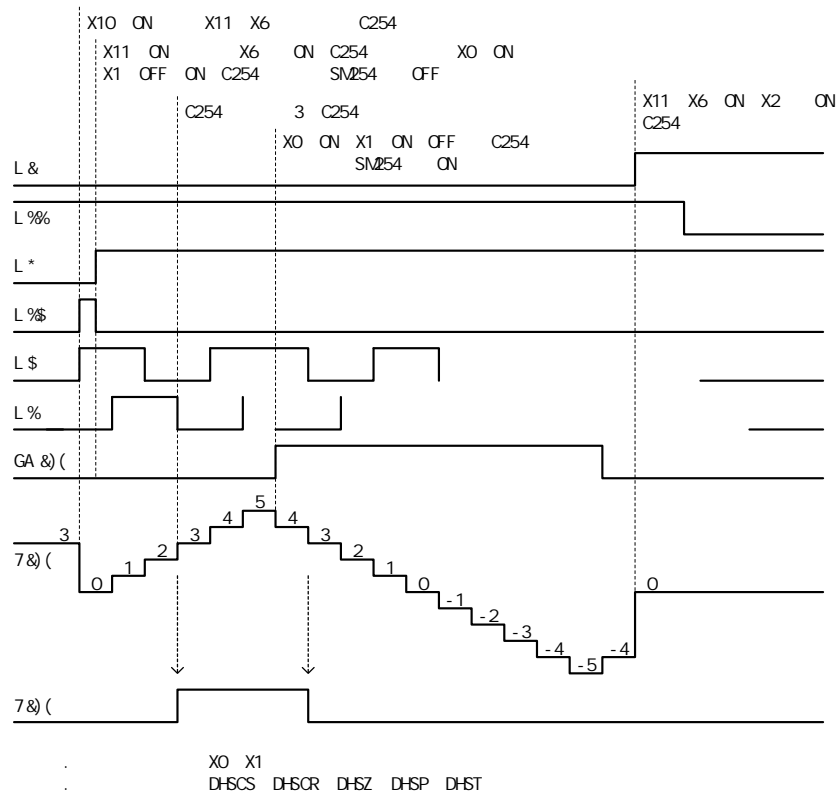
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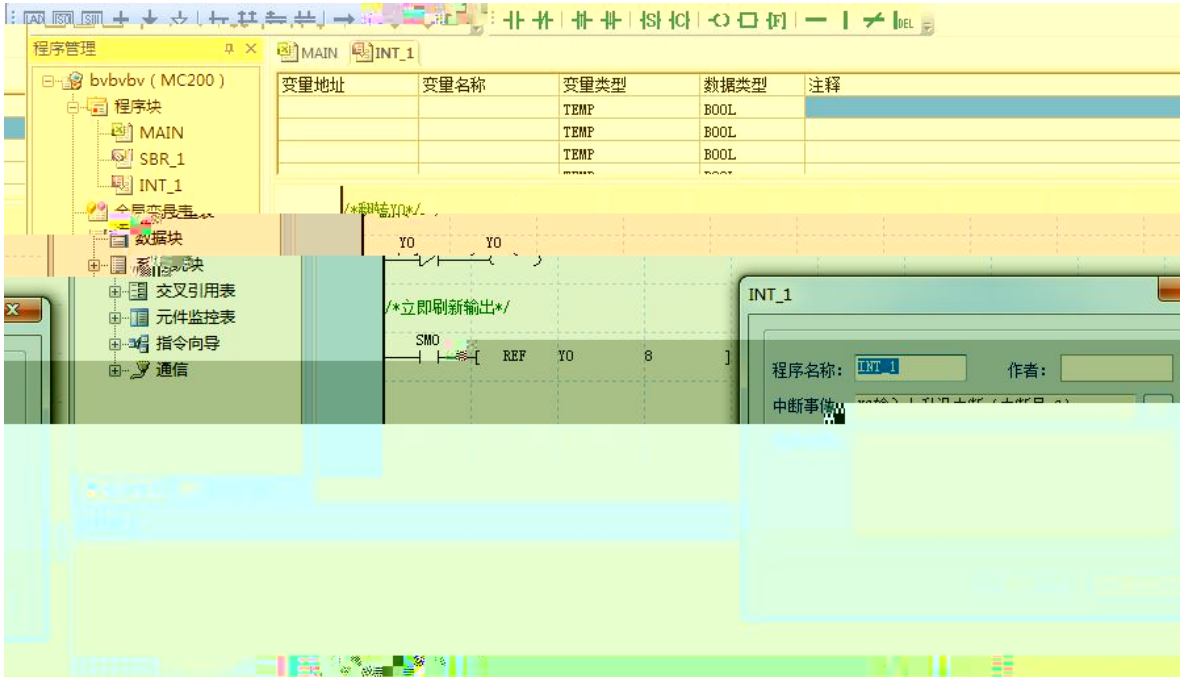
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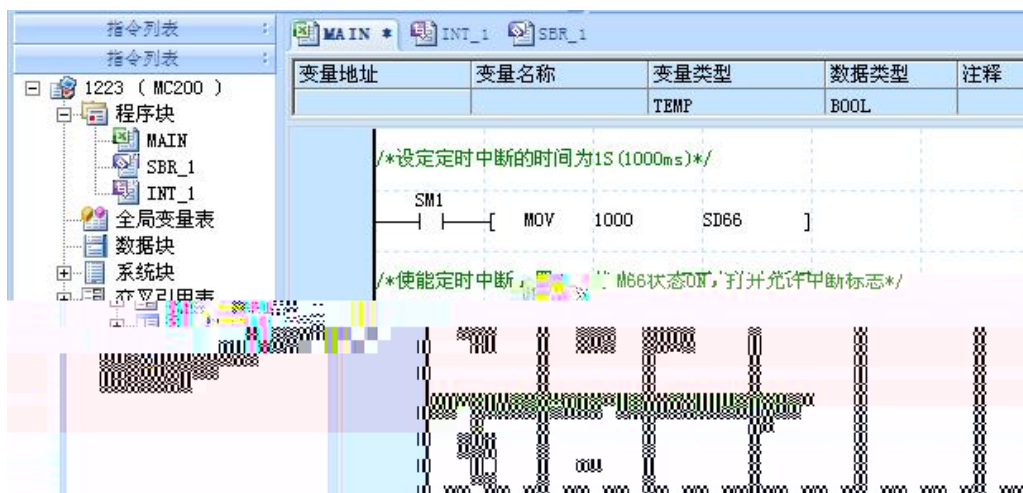
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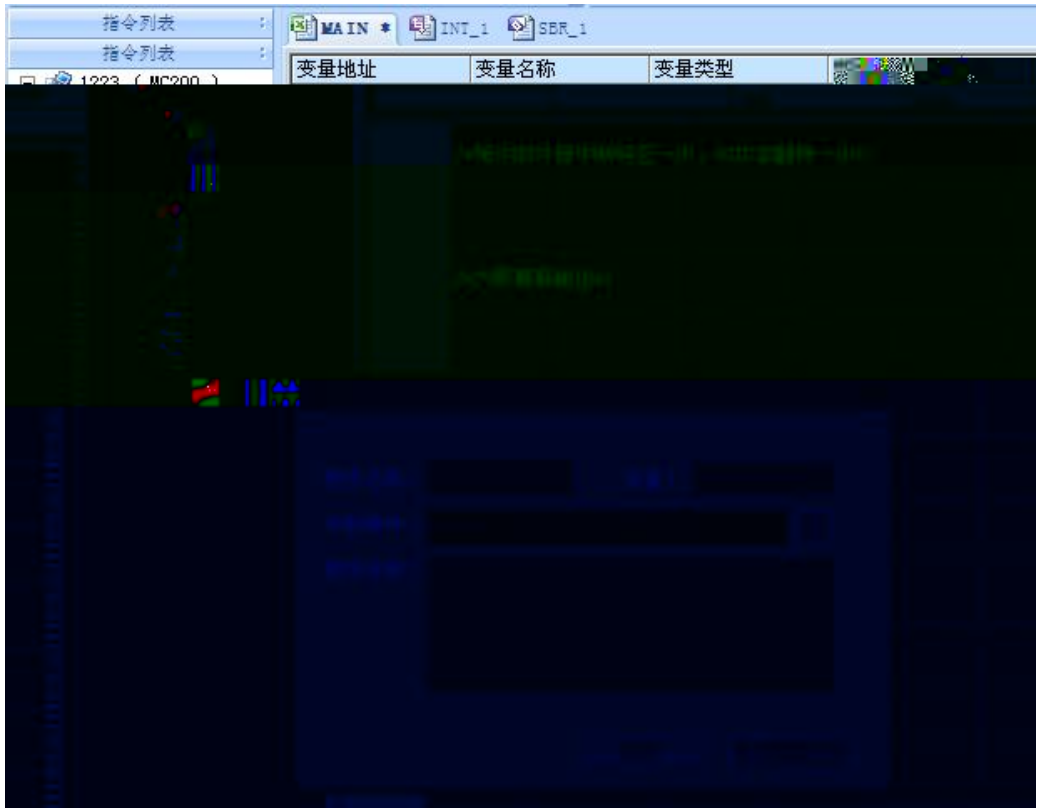
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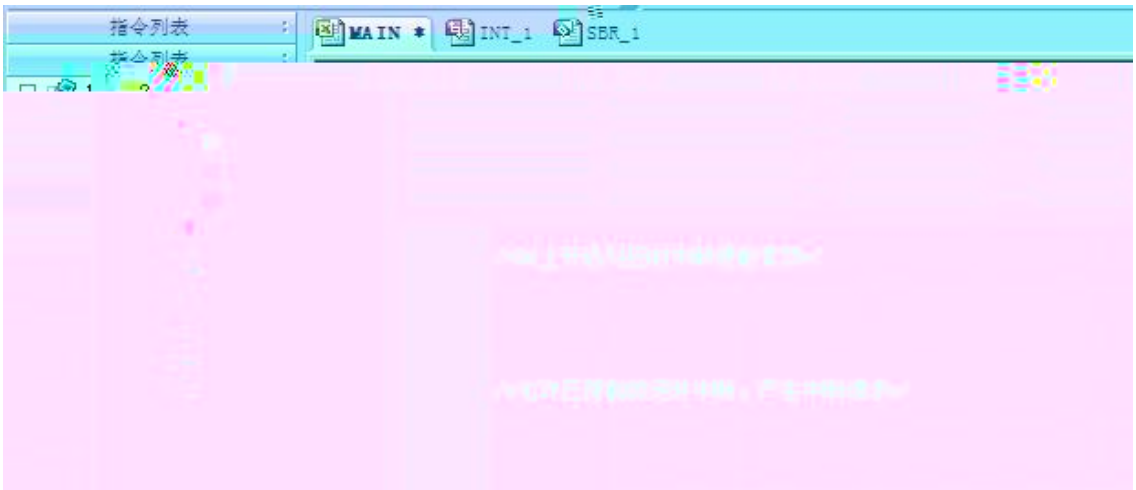
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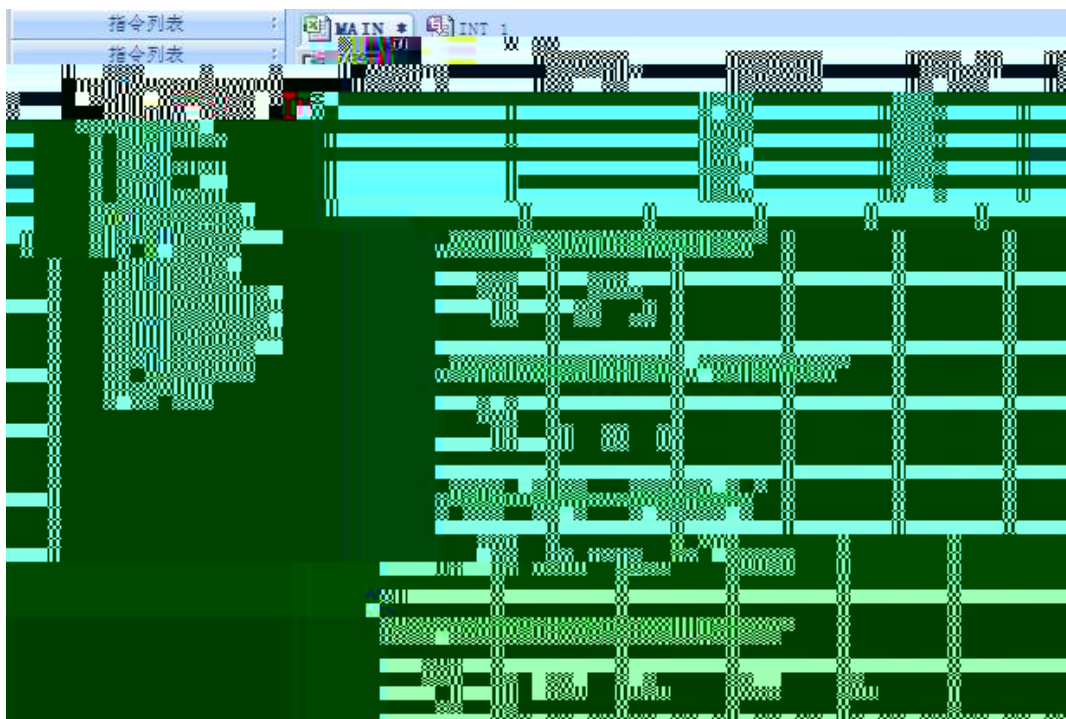


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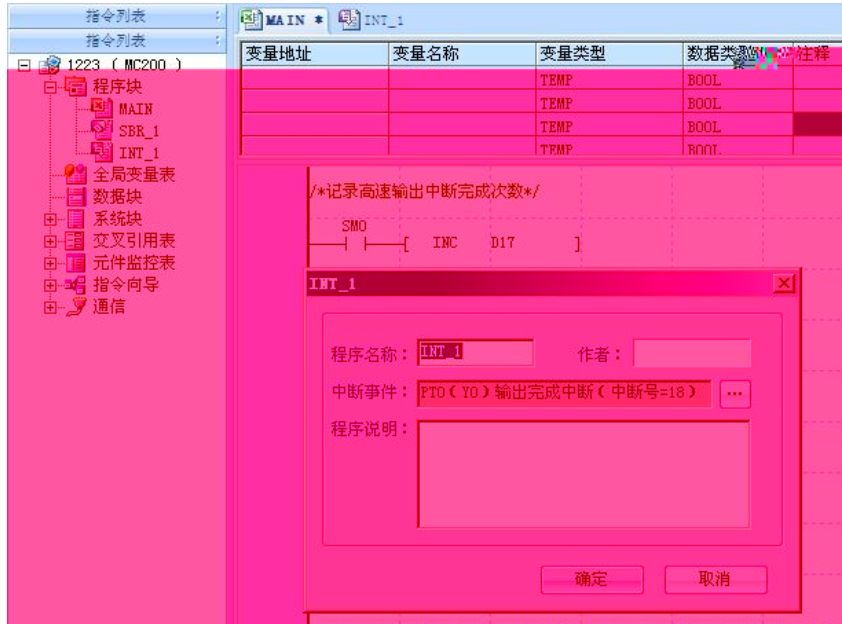


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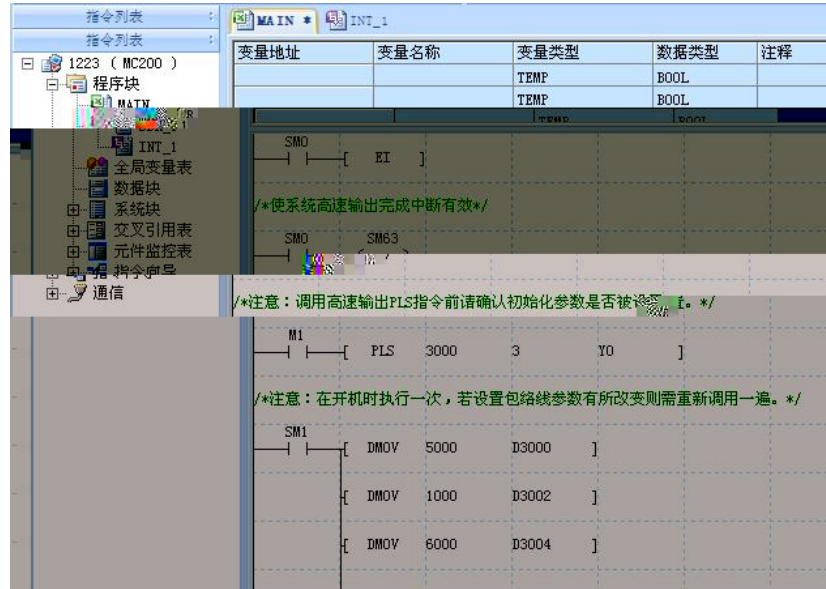
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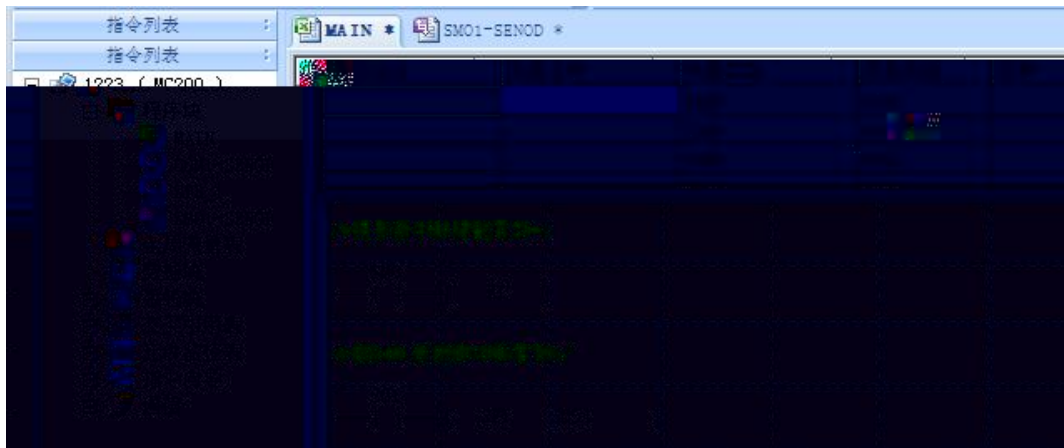
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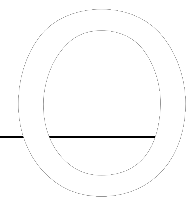
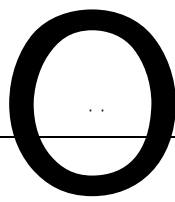
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自由口协议

PLC串口设置

波特率: 9600 奇偶校验: 不校验

数据位: 8 停止位: 1

允许起始字符检测: 10

允许结束字符检测: 30

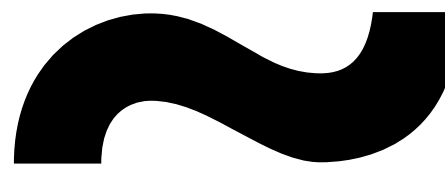
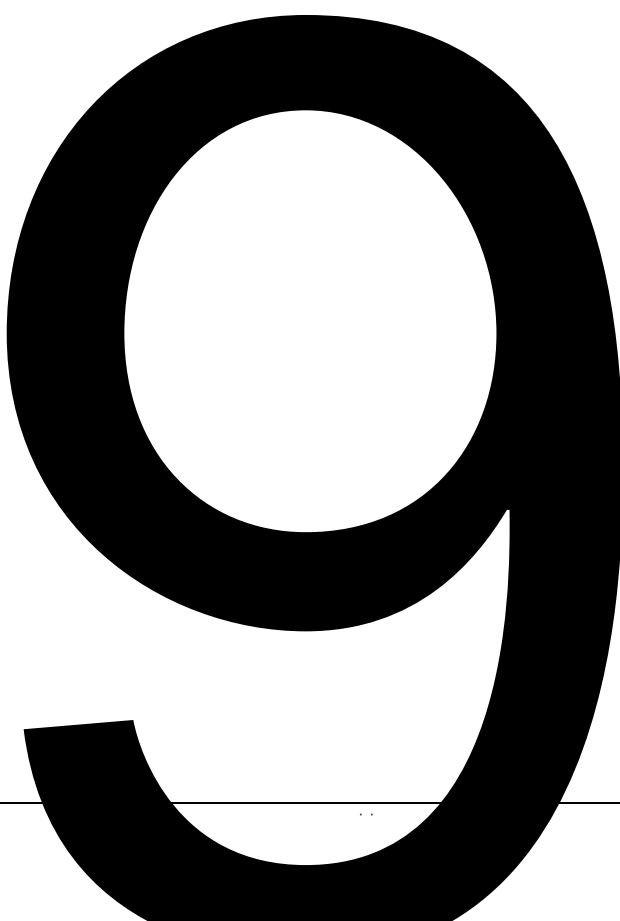
字符间超时: 100 ms

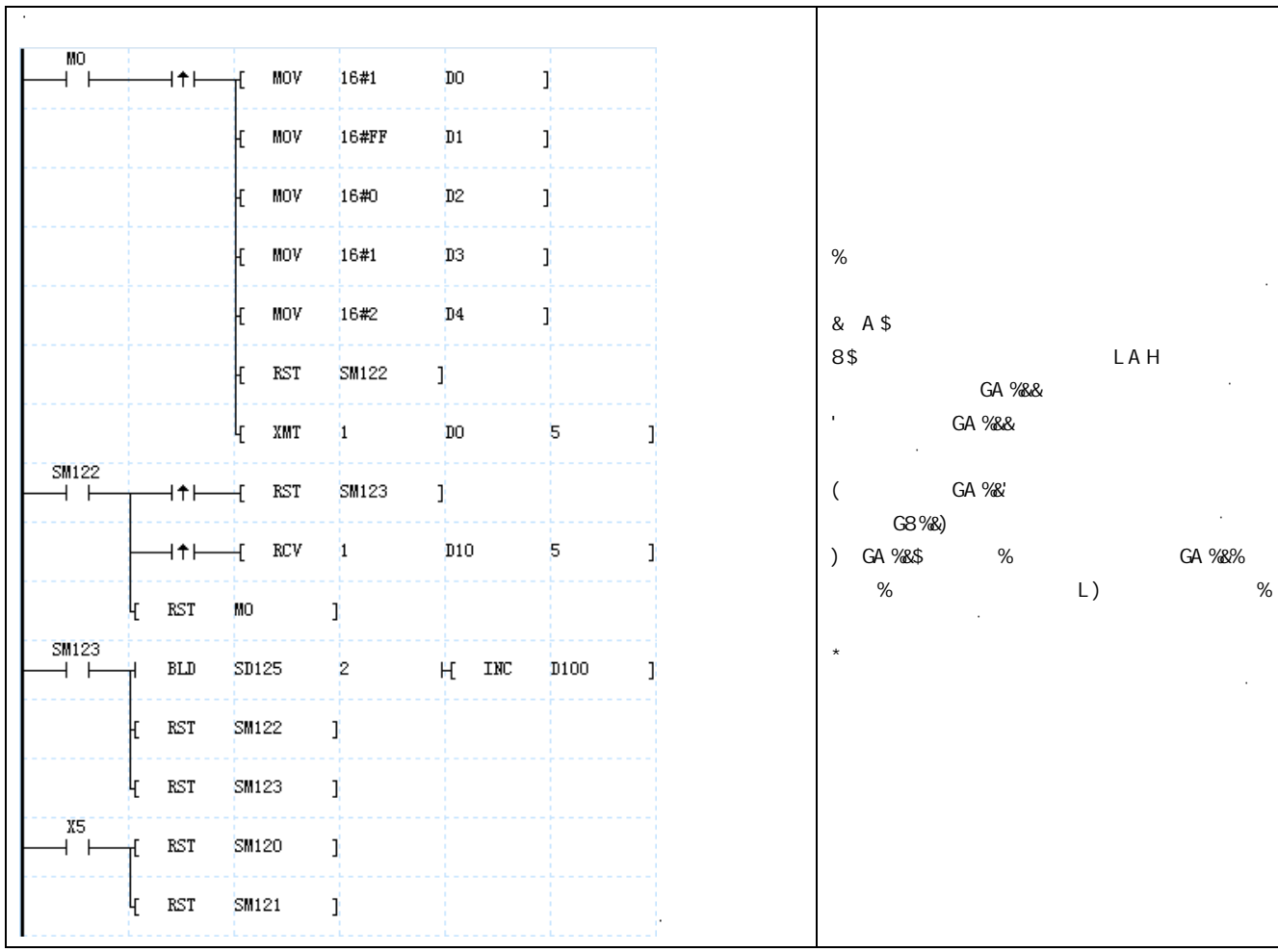
帧间超时: 1000 ms

默认值

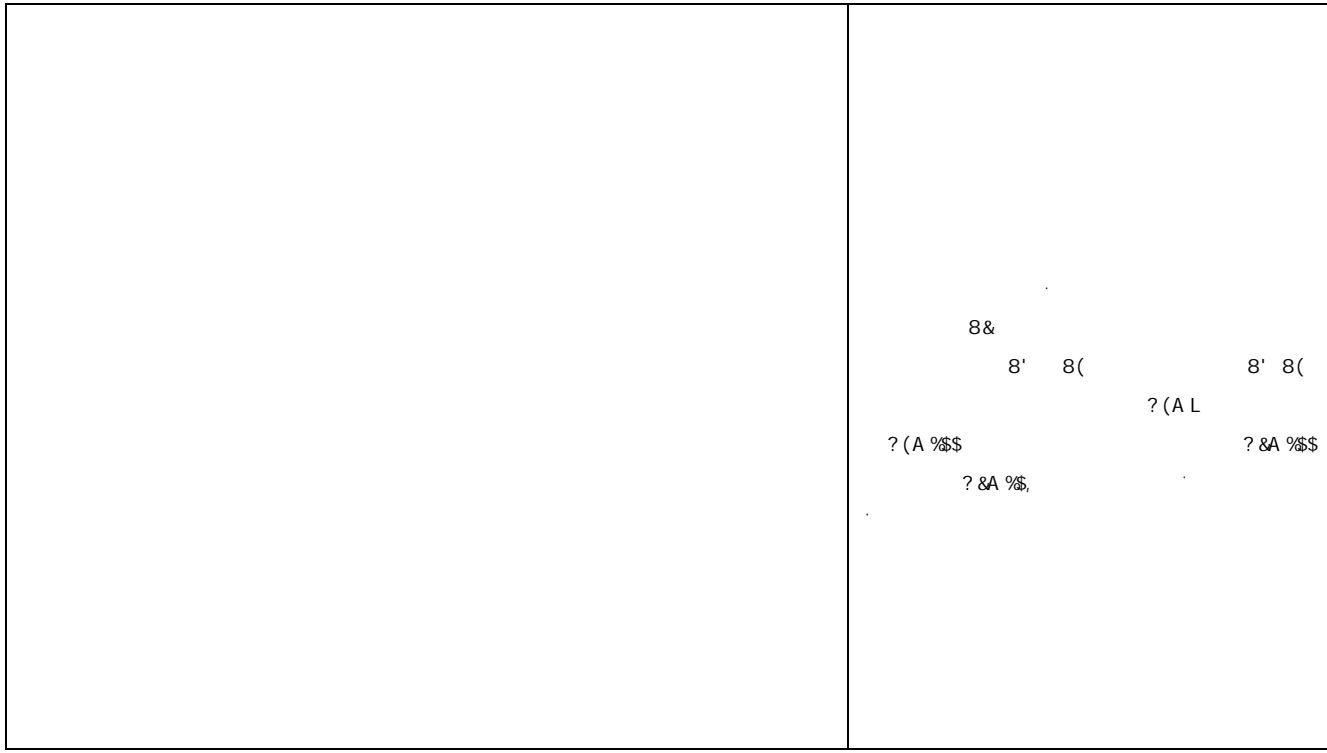
确定 取消

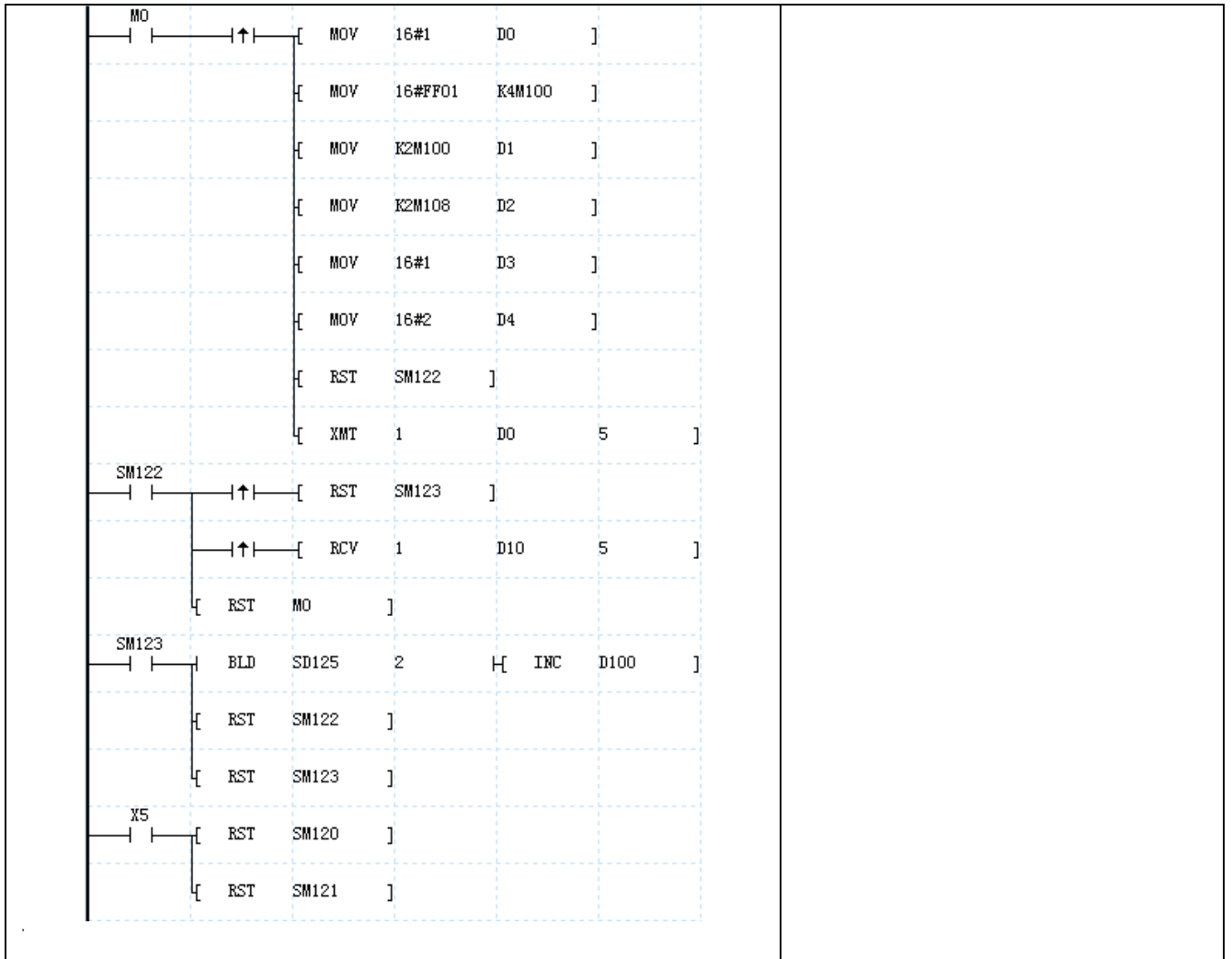
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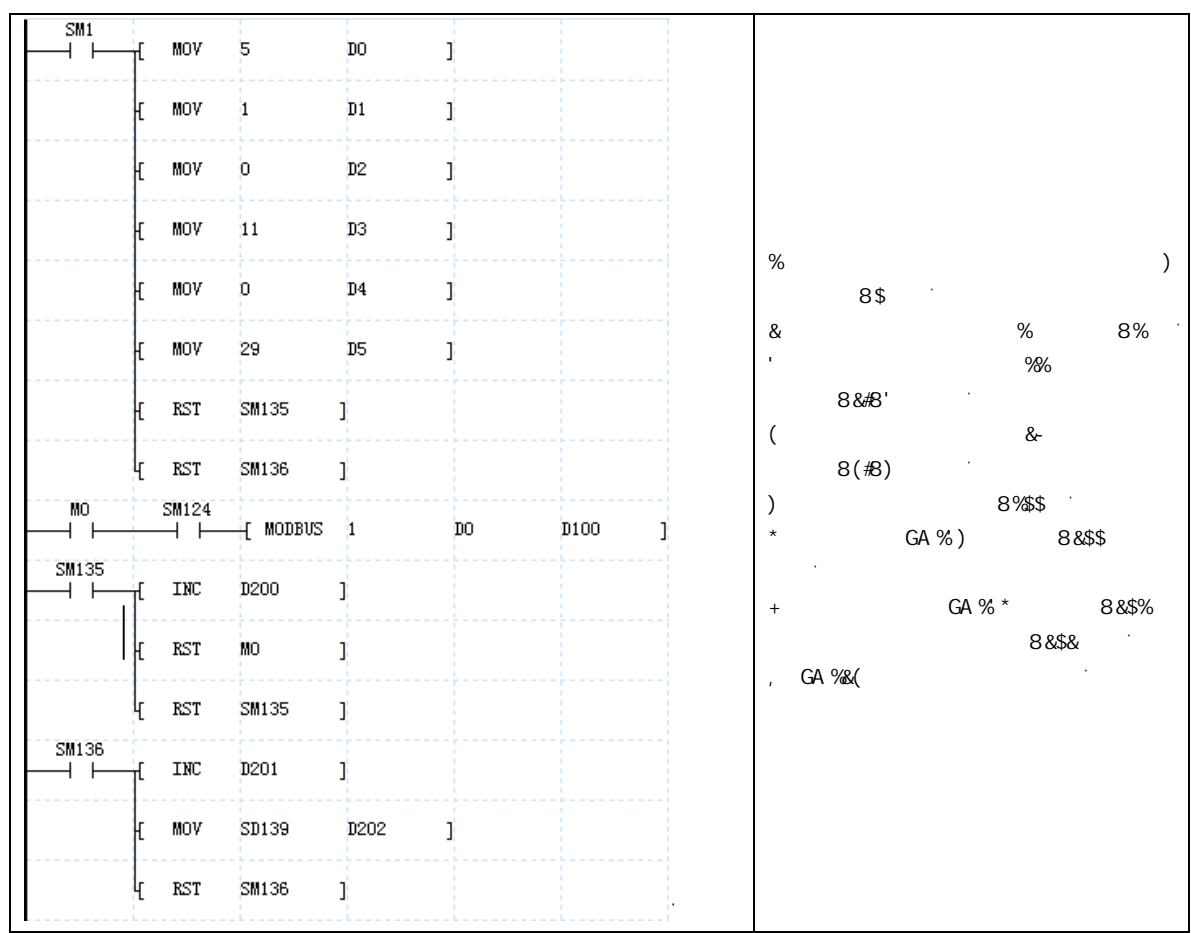
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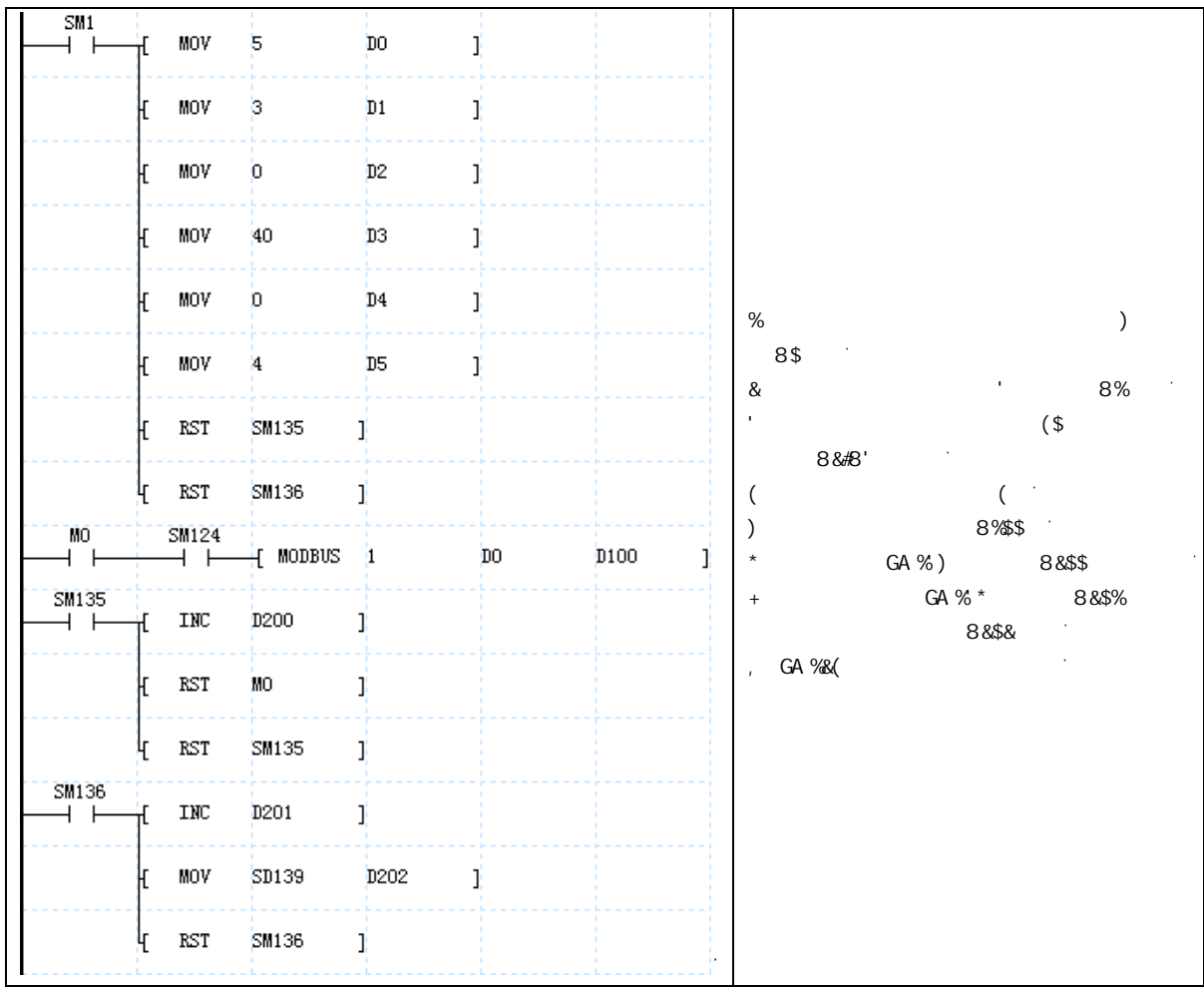
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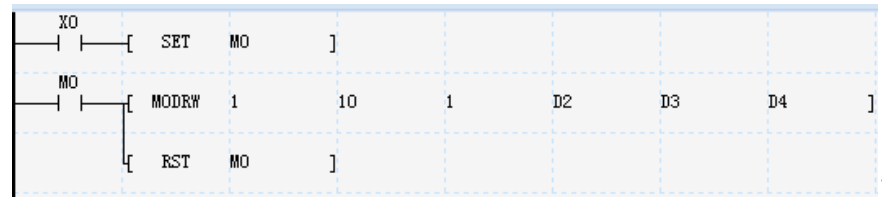


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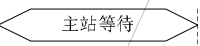




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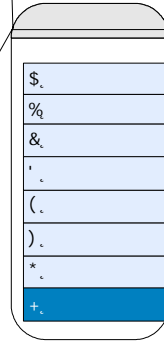
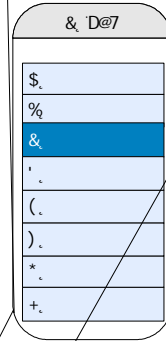
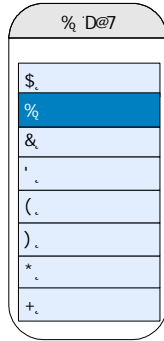
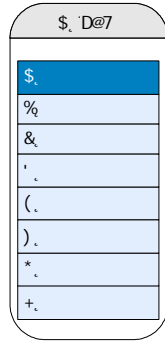
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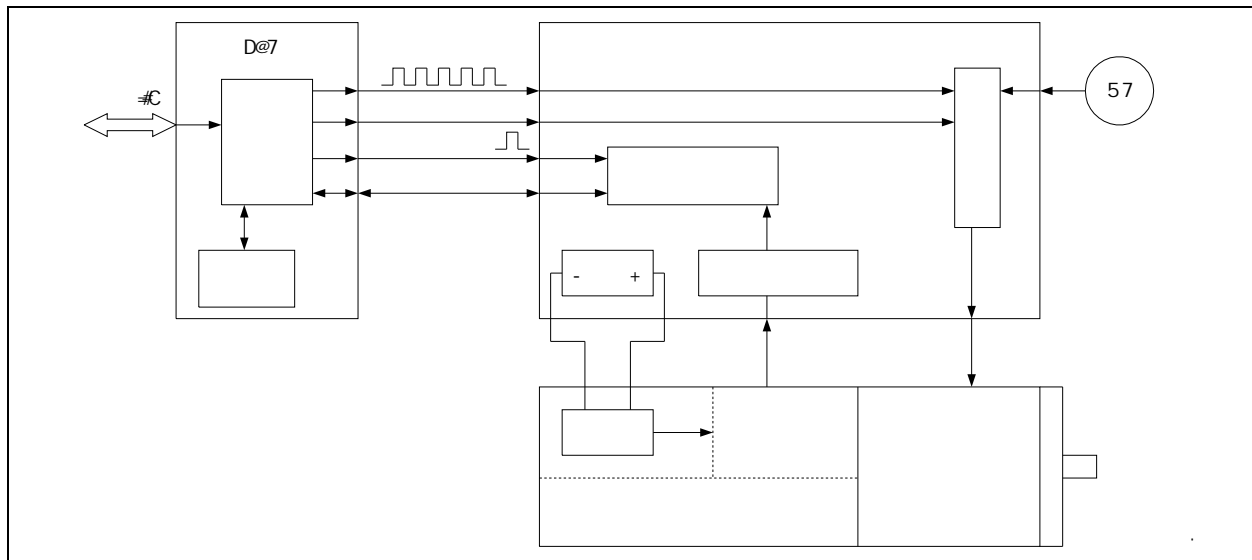
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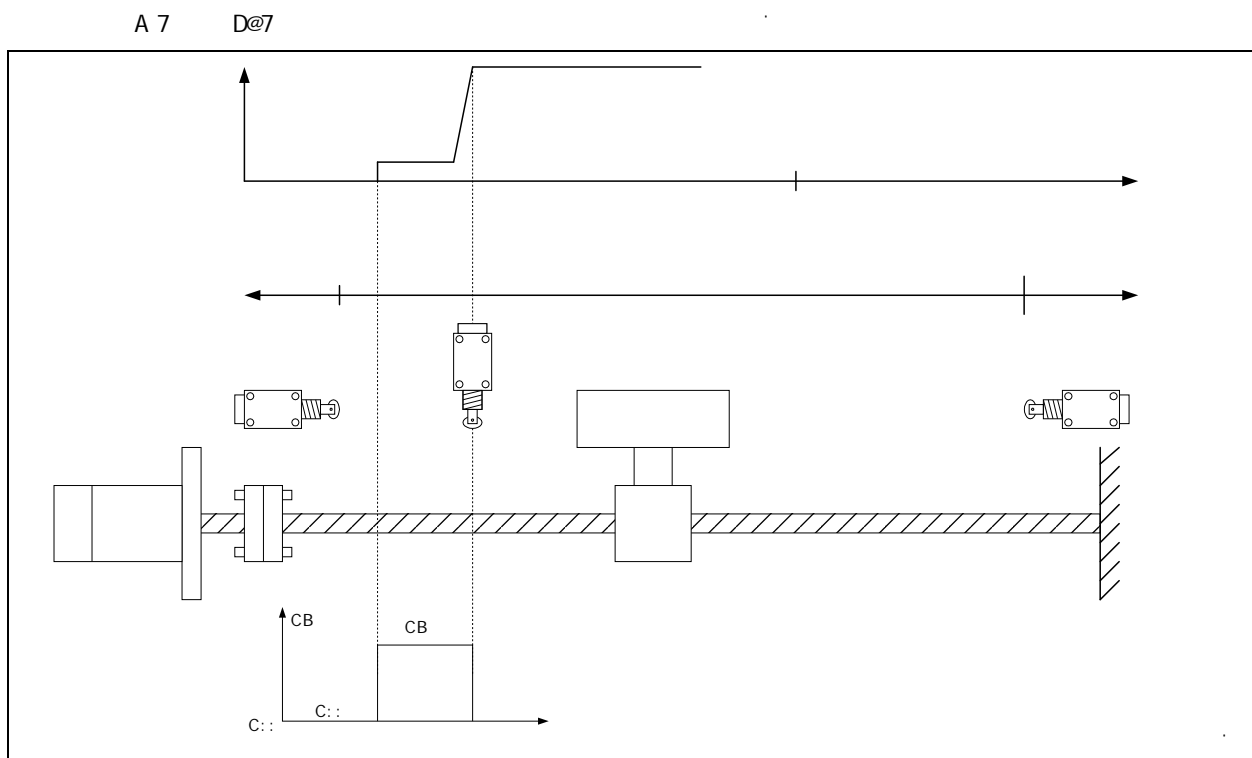
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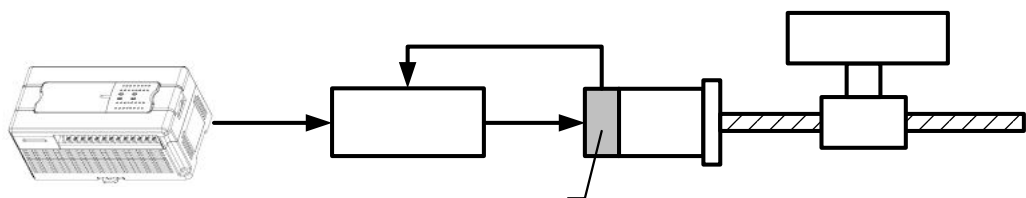
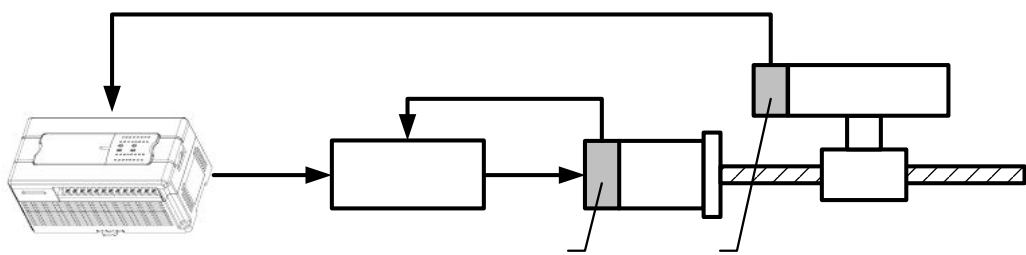
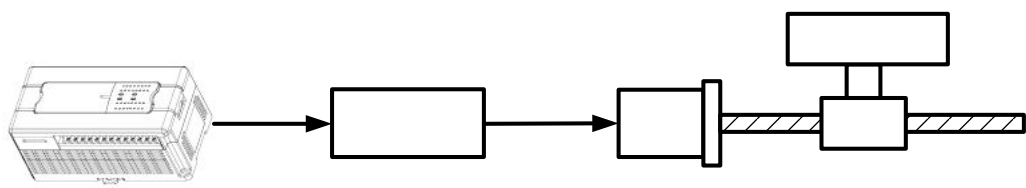
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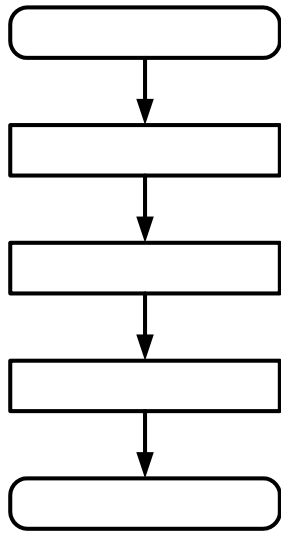
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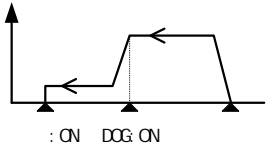
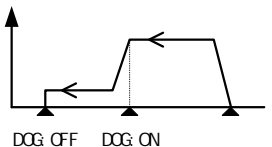
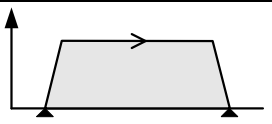
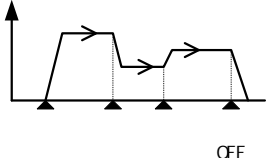
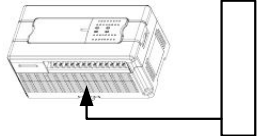
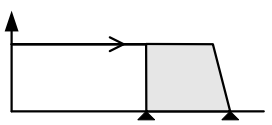
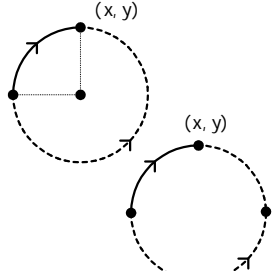
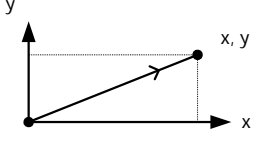
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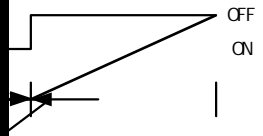
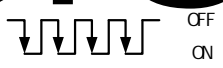
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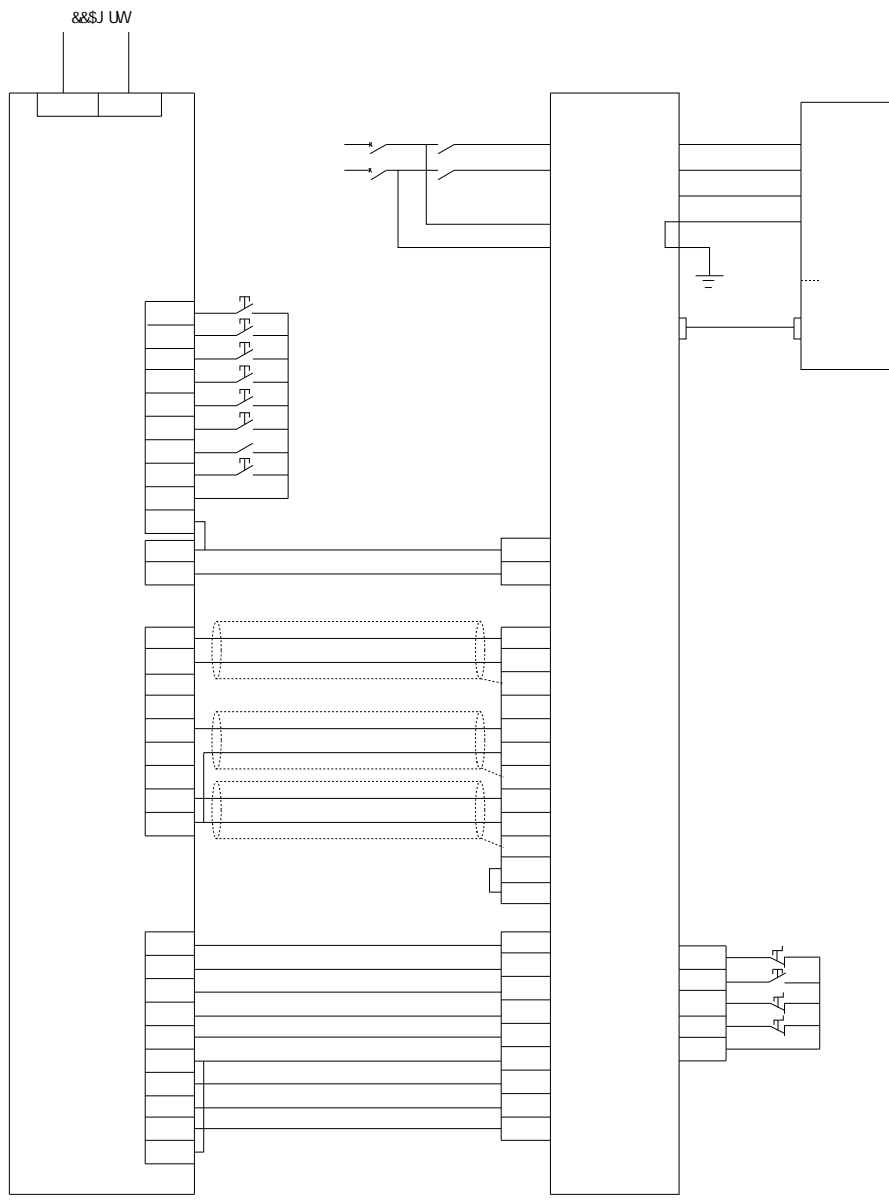
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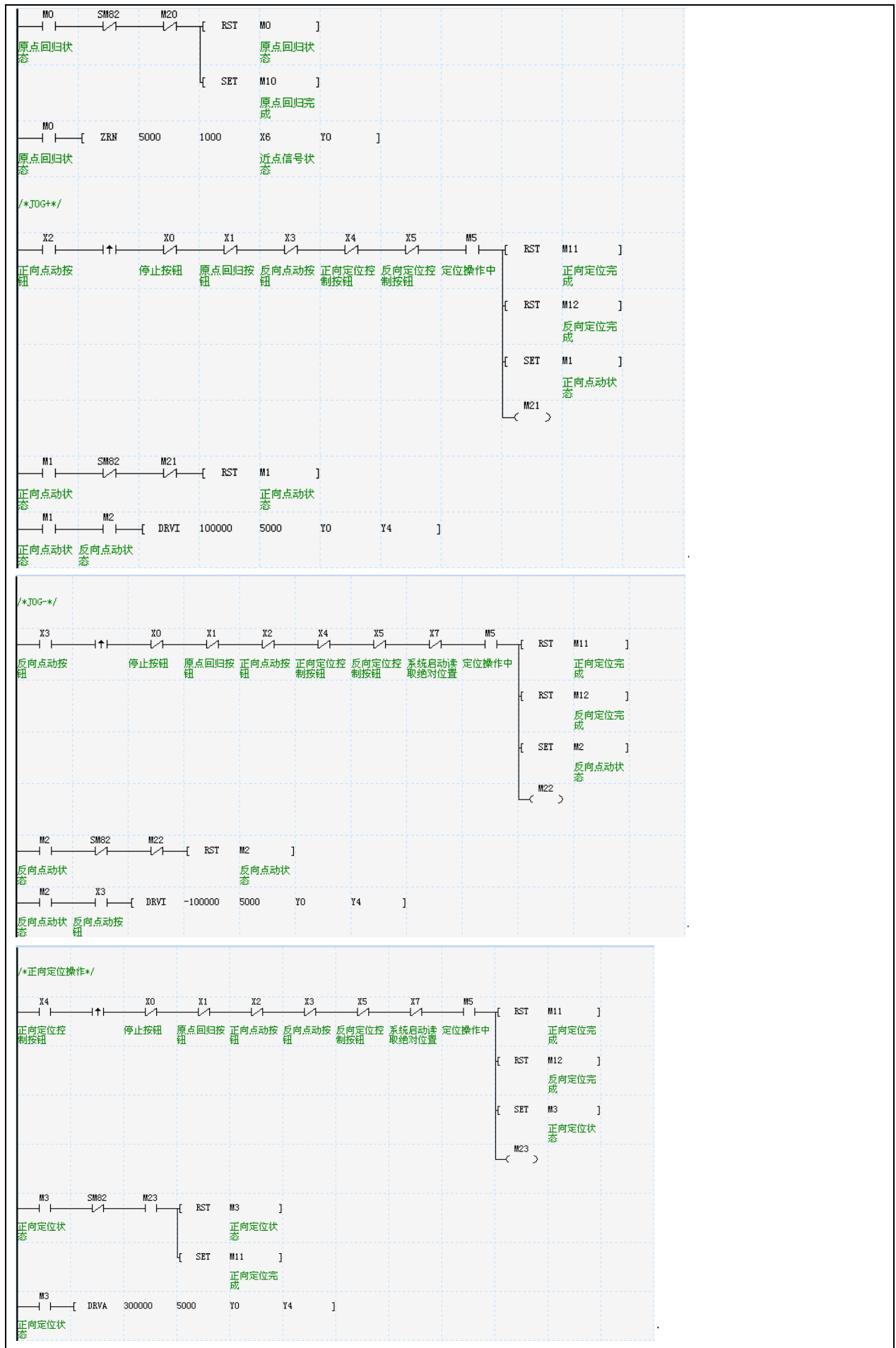
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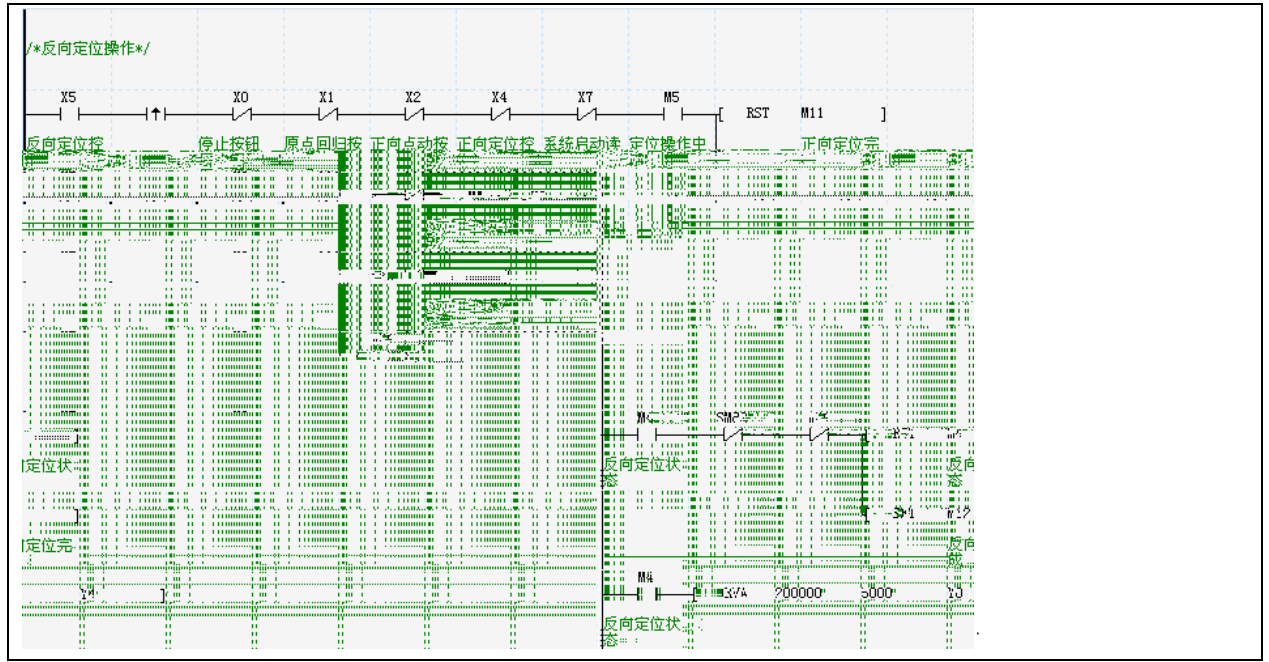
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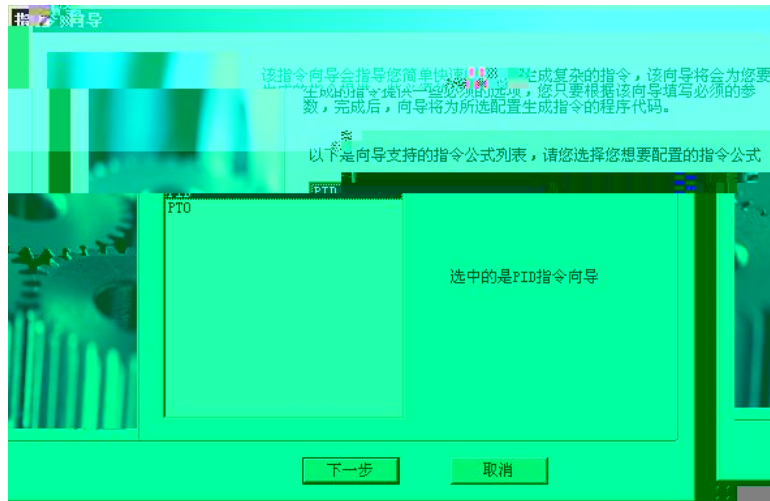
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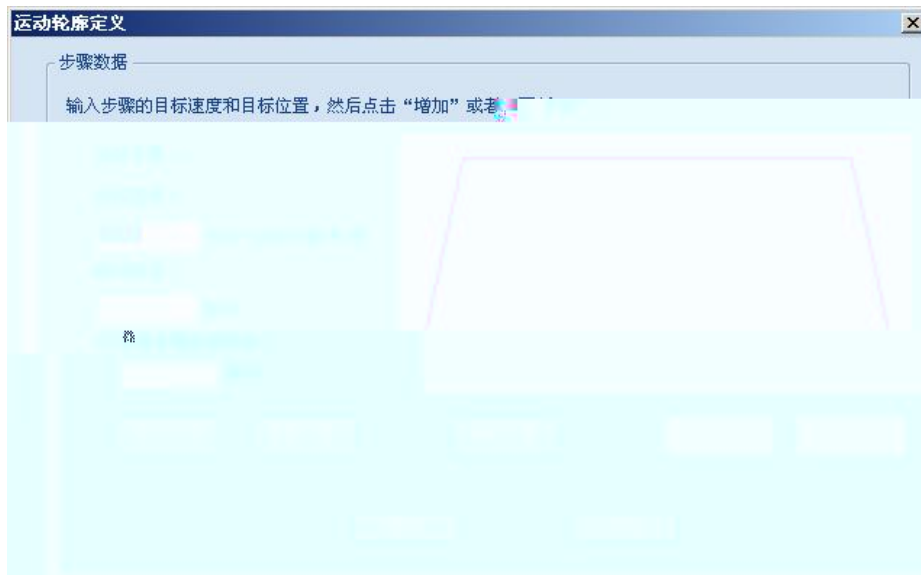
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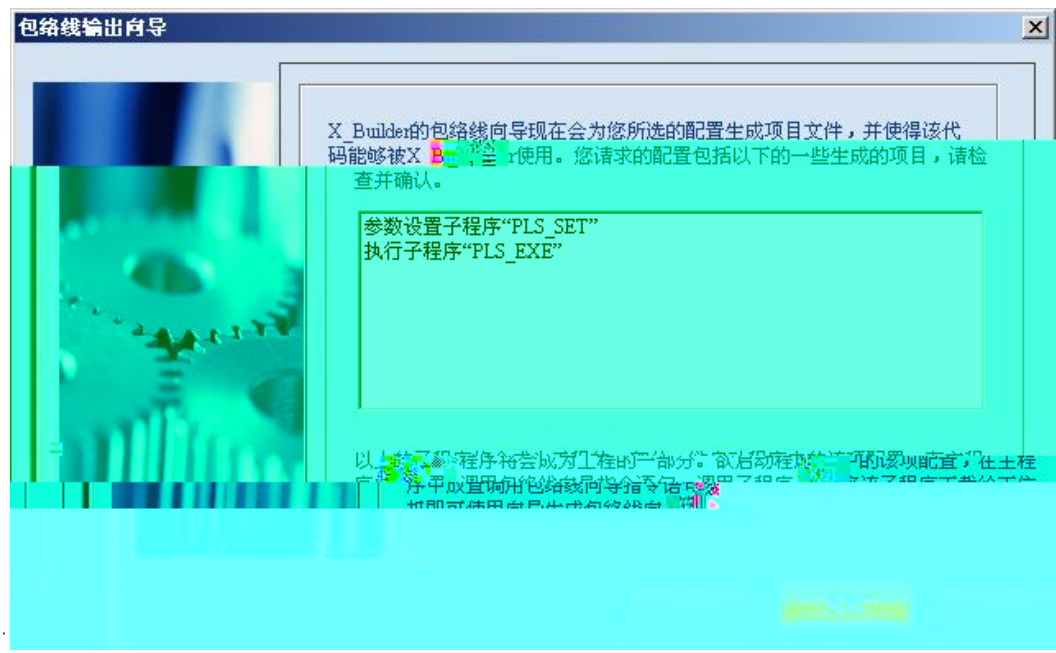


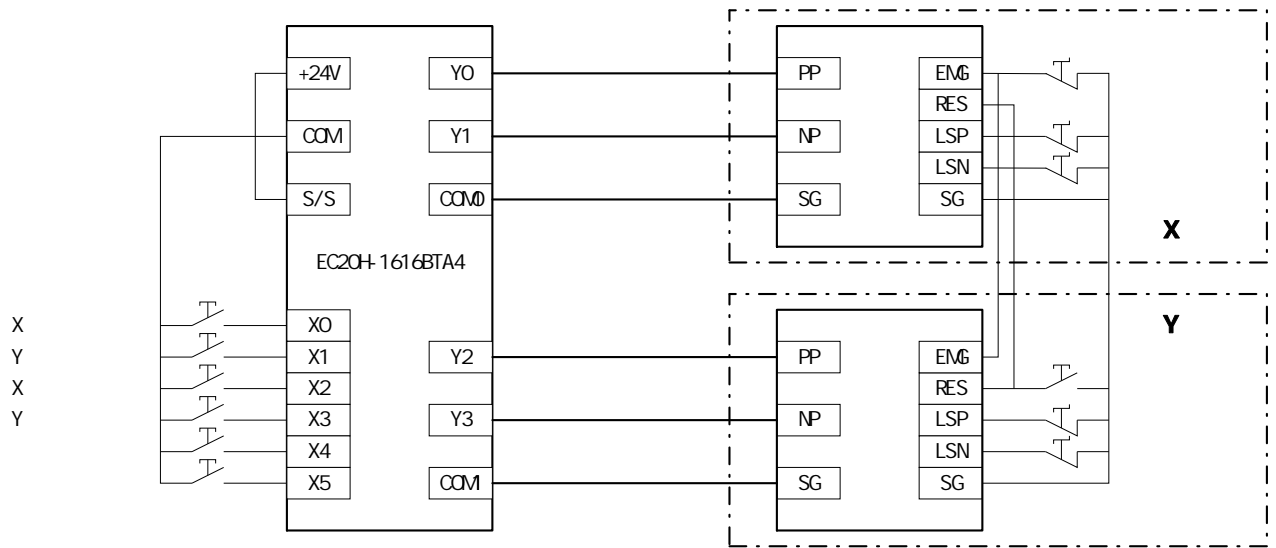
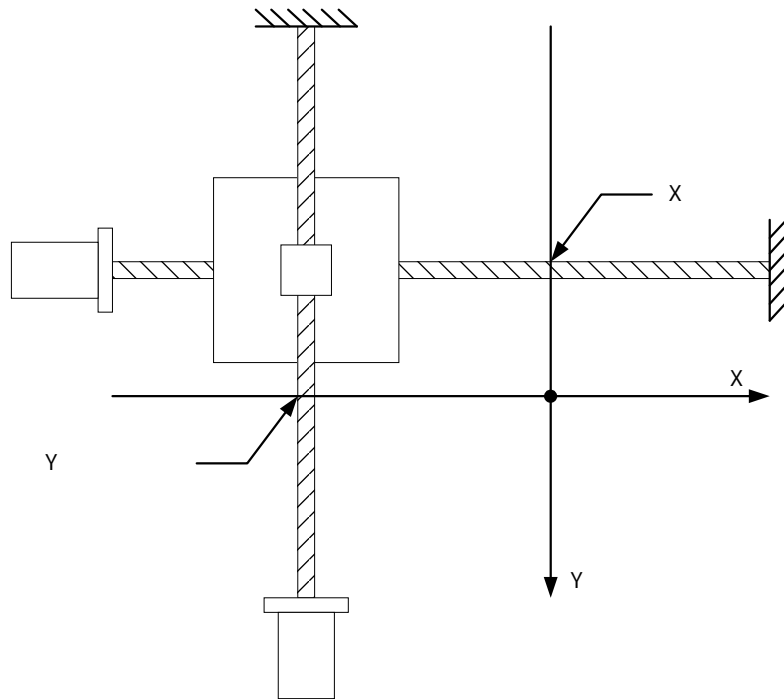
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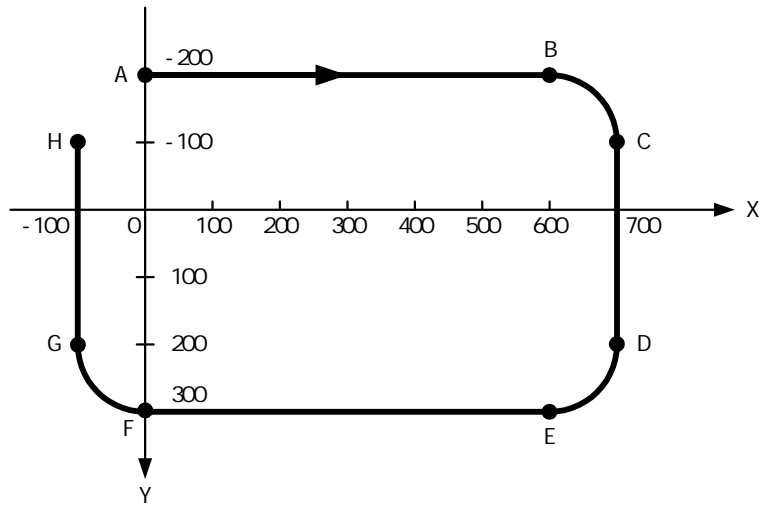
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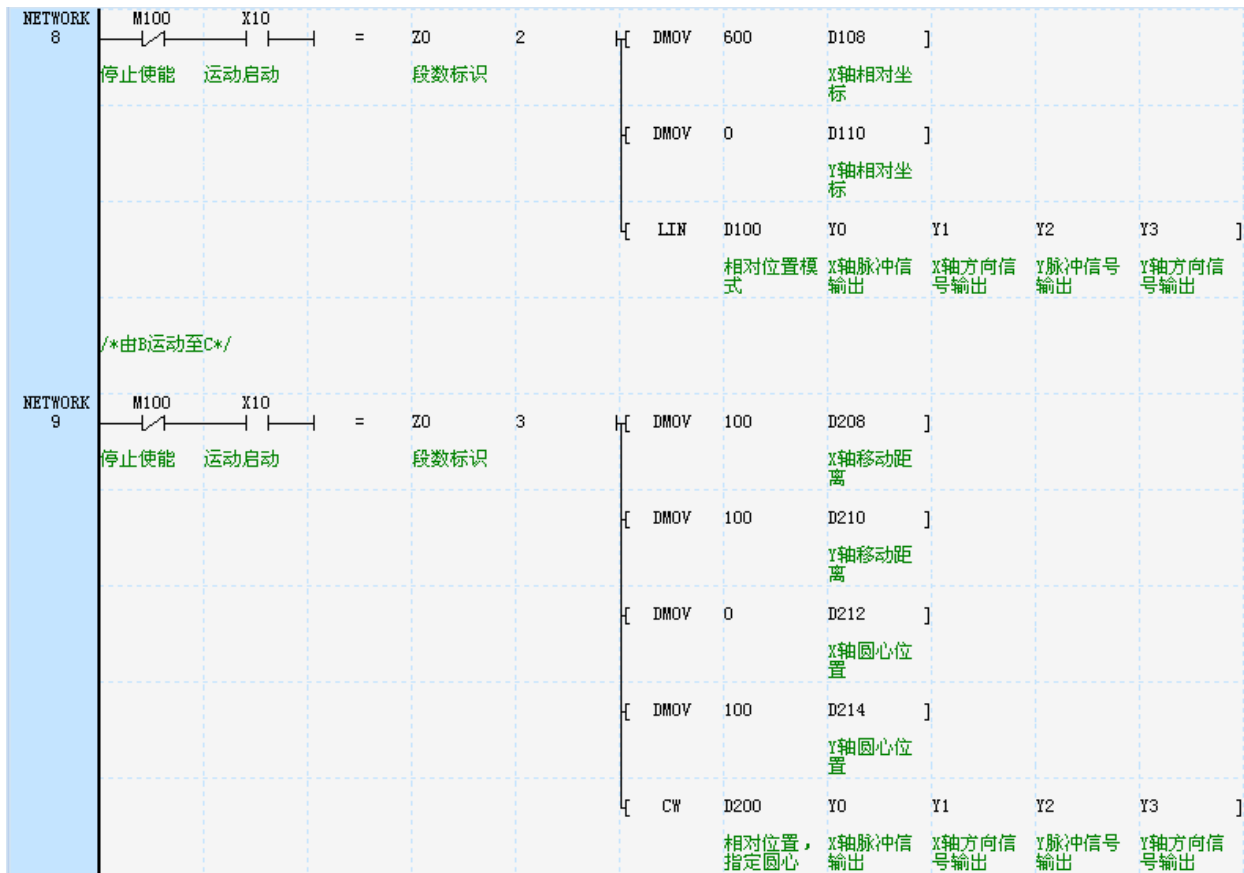
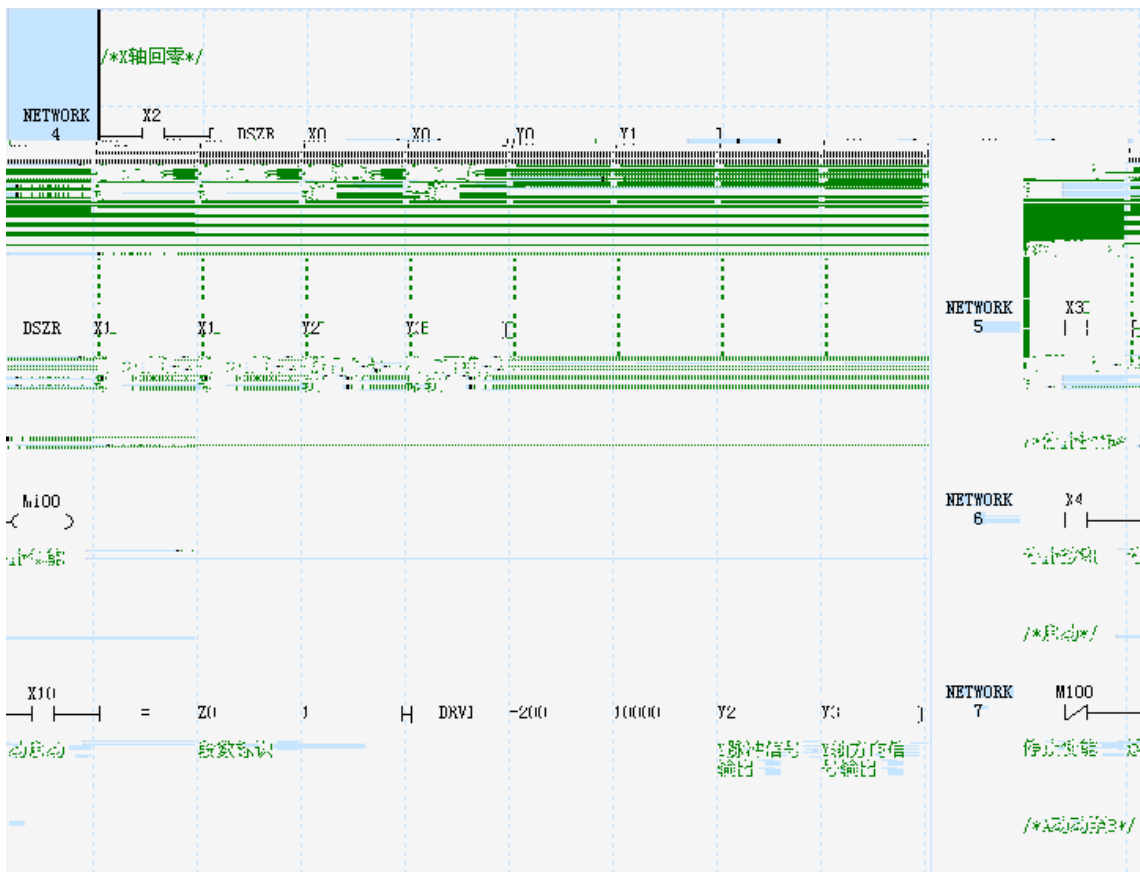
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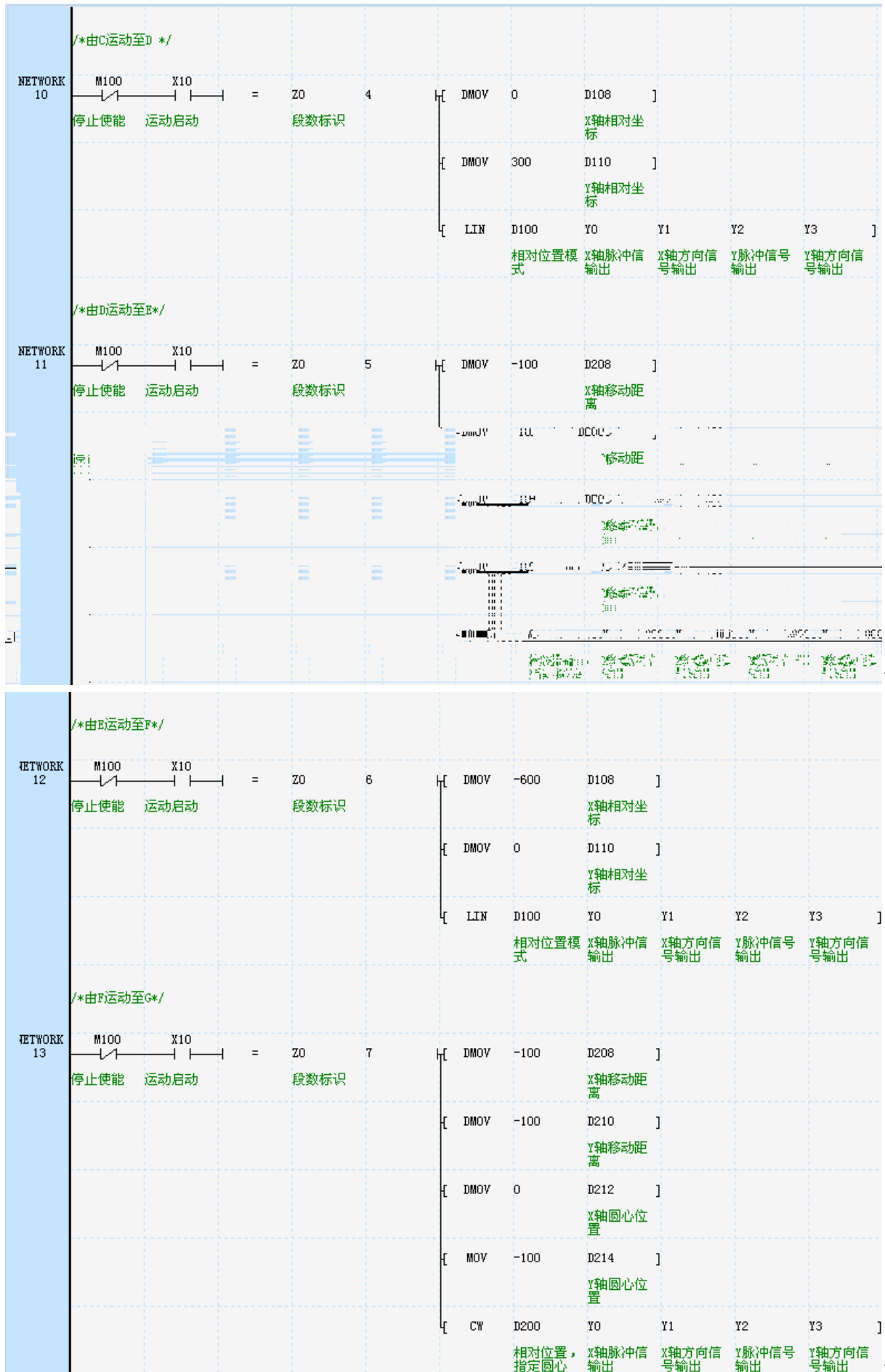


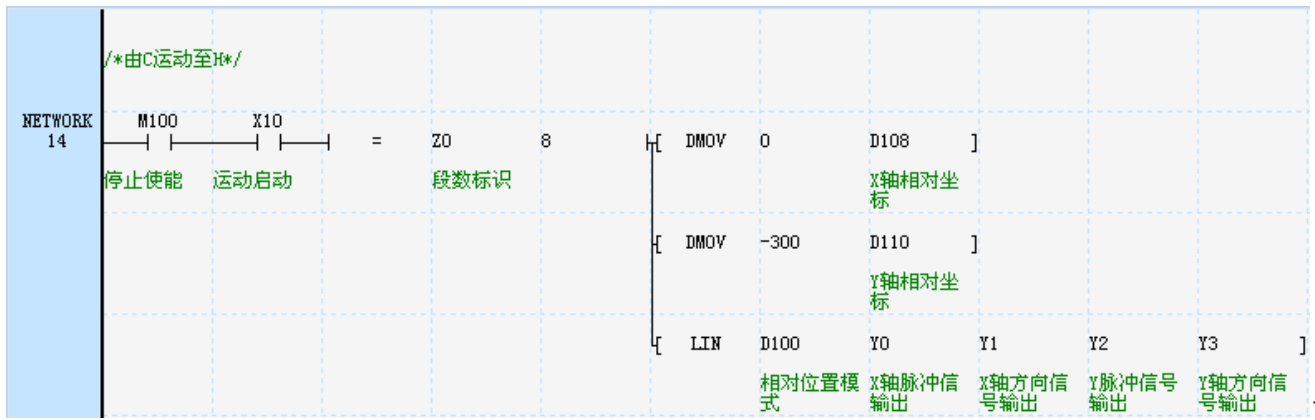
		/*初始化运动控制指令相关软元件*/			
NETWORK 0	SM1	[DMOV	0	D100]
					相对位置模式
		[DMOV	10000	D102]
					直线插补初始速度
		[	DMOV	10000	D104]
					直线插补合成速度
		[	DMOV	100	D106]
					直线插补减速时间
		[	DMOV	0	D108]
					X轴相对坐标
		[	DMOV	0	D110]
					Y轴相对坐标
NETWORK 1	SM1	[	DMOV	0	D200]
					相对位置, 指定圆心
		[	DMOV	10000	D202]
					圆弧插补保留

[	DMOV	10000	D204	]	圆弧插补合成速度
[	DMOV	100	D206	]	保留
[	DMOV	0	D208	]	X轴移动距离
[	DMOV	0	D210	]	Y轴移动距离
[	DMOV	0	D212	]	X轴圆心位置
[	DMOV	0	D214	]	Y轴圆心位置
[	MOV	1	Z0	]	段数标识
[	SET	SM72		]	Y2脉冲输出完成中断
[	SET	SM69		]	中断使能控制
[	EI]	

NETWORK 2	SNO	[	DMOV	200000	SD202	]	Y0最高速度
		[	MOV	10	SD204	]	Y0基度速度
		[	MOV	100	SD205	]	Y0加减速时间
		[	MOV	10	SD207	]	Y0爬行速度
		[	DMOV	2000	SD208	]	Y0回归速度
NETWORK 3	SNO	[	DMOV	200000	SD322	]	Y2最高速度
		[MOV	10	SD324]	Y2基度速度
		[MOV	100	SD325]	Y2加减速时间
		[MOV	10	SD327]	Y2爬行速度
		[DMOV	2000	SD328]	Y2回归速度







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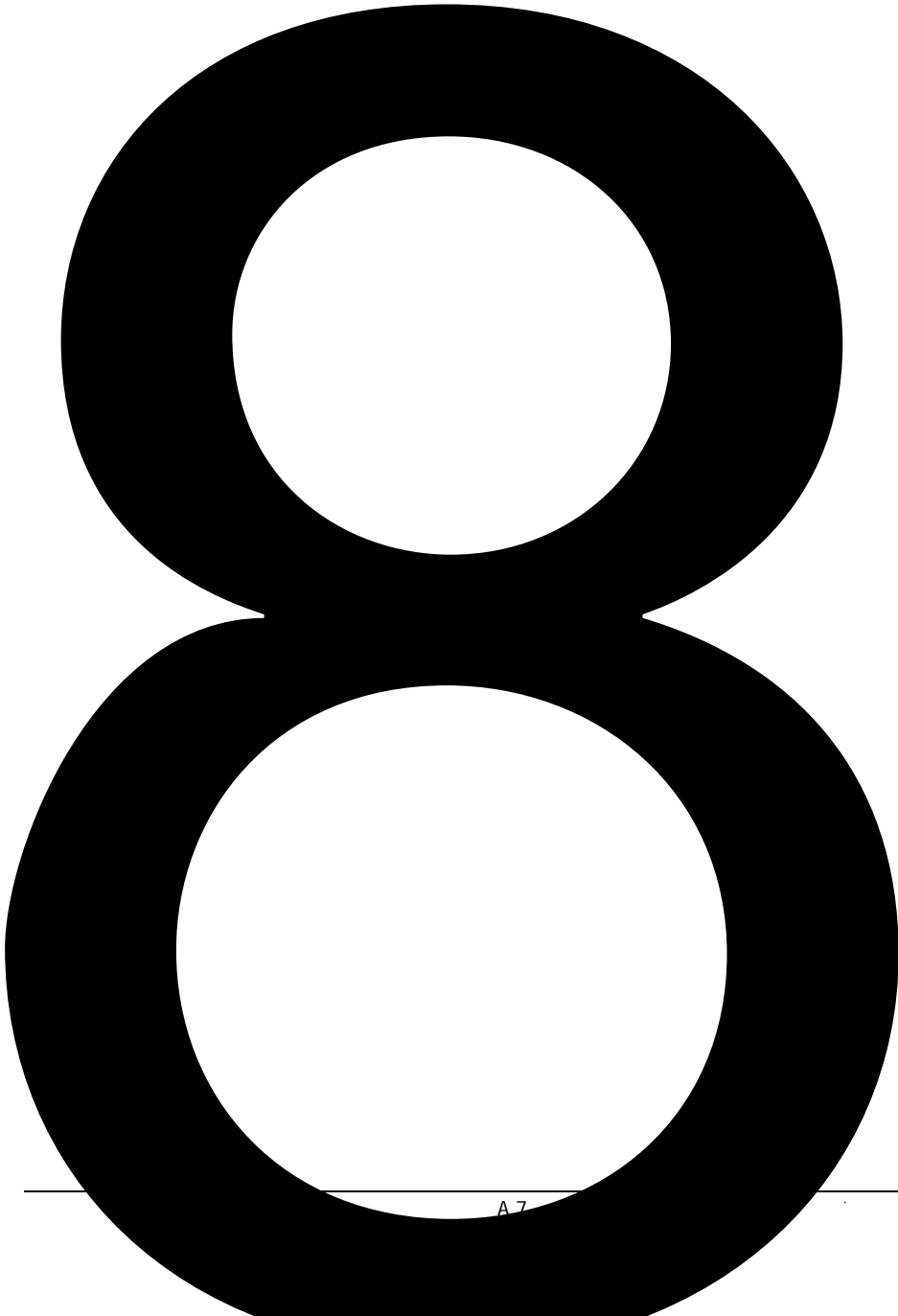
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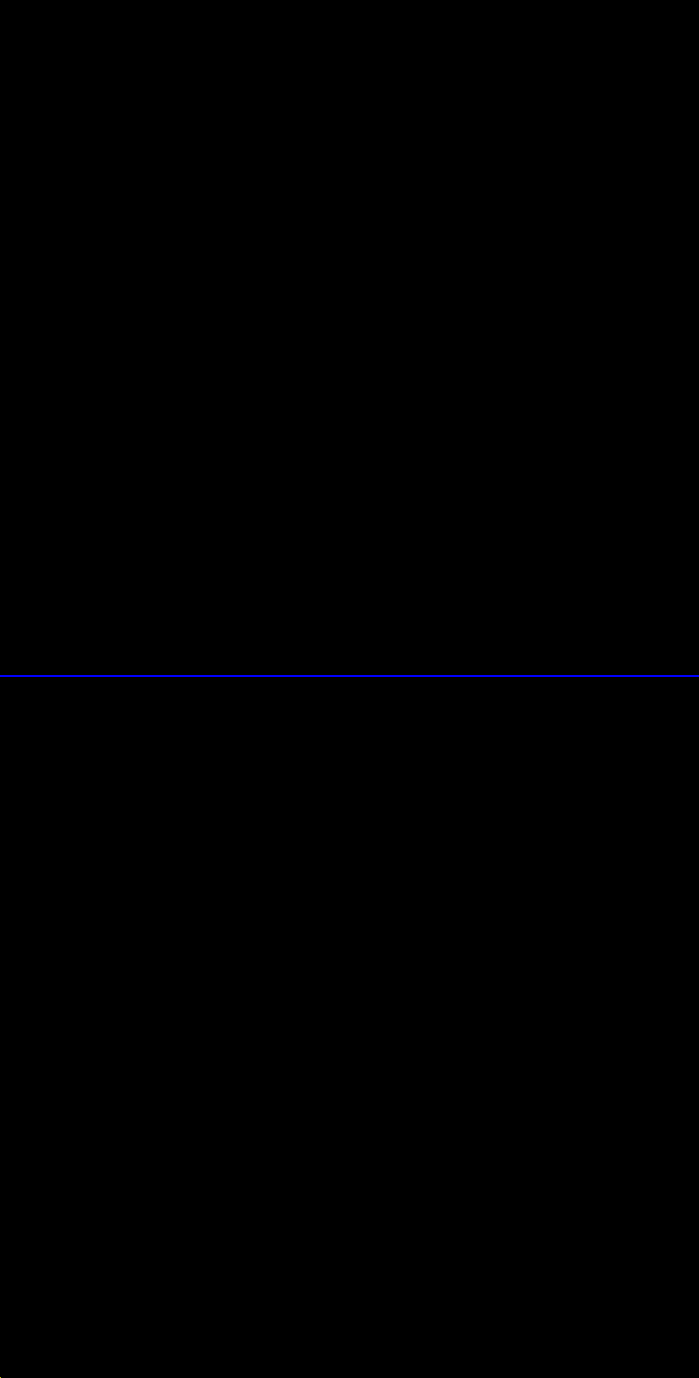
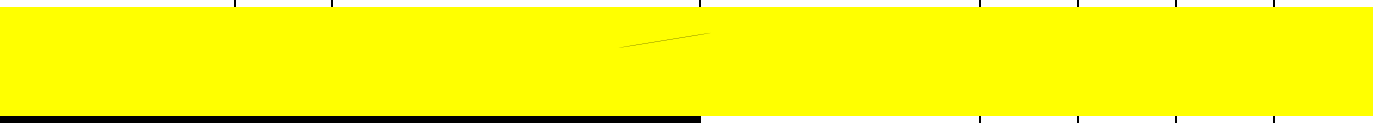
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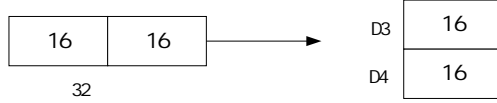
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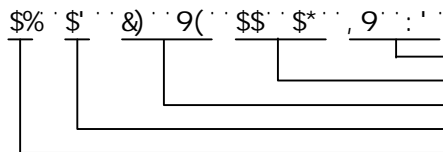
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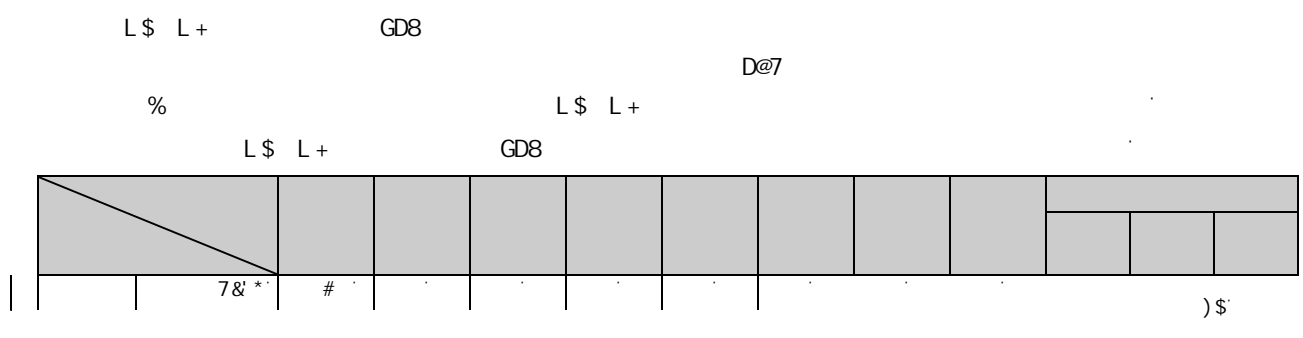
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G<@	%								%)
G<F	%								% (
G-B	G-B								%\$
GD8	GD8								%**
GE H									--
GH@	G: 7								+%
GHC<	[]								% (

, *

K	K 5B8		+						%&+
	K 8H		%						*
	K -BJ)						%&
	K CF		+						%&+
	K G: @		-						- *
	K G: F		-						-)
	K HC6		+						&(+
	K LCF		+						%&+
L	L7<)						-%
	LAH	LAH	+						% &
N	NCB9		-						&/%
	NFB		%%						&&-
	NFGH)						% *
	NG9H)						% +
A 7&\$\$									

	@8		%						*+
	@8=		%						*+
	5B8		%						* (
	5B=		%						* (
	CF		%						* (
	CF=		%						*)
	CI H		%						*)
	G9H		%						*_
	FGH		%						*_
	5B6		%						**
	CF6		%						**
	-BJ		%						*,
	BCD		%						*_
	A DG		%						*+
	A F8		%						*+
	A DD		%						*+
	A 7								+\$
	A 7F		%						+\$
	9I		&						*,
	98		&						*,
	HCB)						+
	HC:)						+(
	HA CB)						+(
	HCBF)						+
	7HI	%)						+
	7HF	%)						+
	87BH	' &	+						+*
	@6@		''						, (
	7>		''						,)
	75@@								, +
	7GF 9H		%						, +
	7: 9B8		%						,)
	7 F 9H		%						, *
	: CF		''						, ''
	B9LH		%						, ''
	K 8H		%						, *
	GHCD		%						, *
	9=		%						, *
	8=		%						, *

(\$\$)

G 7	GH@	G 7							+%
	G9HGI	G 7							+%
	CI HGI	G 7							+%
	FGHGI	G 7							+%
	F9H	G 7	%						+&
	ACJ)						
	8ACJ		+						
	FACJ		+						
	6ACJ		+						
	GK 5D								-%
	X7< U M)						-%
	8L7<		+						-&
	:ACJ		+						-\$

F588		%\$							%\$*
FGI 6		%\$							%\$+
FAI @		%\$							%\$+
F8-J		%\$							%\$
FJ 56G		+							%\$-
FB9;		+							%\$-
FGEH		+							%\$
G-B	G-B	+							%\$-
7CG	7CG	+							%%\$
H5B	H5B	+							%%\$
@B	@B	+							%%%
9LD	9LD	+							%%&
DCK 9F		%\$							%%%
FGI A		-							%%&
5G-B	G-B ^{1%}	+							%%
57CG	7CG ^{1%}	+							%%
5H5B	H5B ^{1%}	+							%%(
F58	!2	+							%%(
89;	!2	+							%%)
@C;		+							%%P
K 5B8		+							%%+
8K 5B8		%\$							%%

TM n o TM

#

#C	<7BH		+						%)
	8<G7G		%\$						%)
	8<G7F		%\$						%)
	8<G7=		%\$						%)
	8<GN		%						%%
	8<GH		%\$						%&
	8<GD		%\$						%('
	GD8	GD8		+					%%*
	D@GM			-					%+
	D@GF			%%	& . '				%,
	D@G6			%&	6 /				+%%
	DK A	DK A		+					%+
	D@G			+					%+
	D-8	D-8		-		3			%(
F5A D			%&	6 /		3	A	%(+	
HF-5B; @9			%&					%+	
<57? @9			%&	/ 3	/ #		A	%,	

56G8

6 /3

-6

/ A3 / 3

3

/

3



HF 8									% +
HK F		% 3		5	\$			Z	%
H588T	/	T		H					

(\$)

5B802	5B802)							&\$)
5B8802	5B802	+							&\$,
5B8F02	5B802	+							&%%
CF1	CF1)							&\$*
CF81	CF1	+							&\$-
CFF1	CF1	+							&/%
CF2	CF2	)							ffit@&\$

6@8	@8)							% -
6@8=	@8=)							&\$
65B8	5B8)							&\$
65B=	5B=)							&\$%
6CF	CF)							&\$%
6CF=	CF=)							&\$&
6G9H)							&\$
6FGH)							&\$
6CI H)							&\$&
A cXV g	A cXV g								% &
LA H	LA H	+							% &
F7J	F7J	+							%
A C8FK	A C86I G	%							% (
	A cXV g	%&							% \$
77 #H	77 #H								% (
7F 7%	7F 7%								%)
@F 7	@F 7								% *
87A D1									% &
87A D2									% &
87A D0		+							% &
87A D21		+							% &
87A D01		+							% &

(\$)

	GHFA CJ)						&&
	FB8								&)
	8I HM		+						&)
A 7&&&									