

	.....	6
1.1	.....	6
1.2	.....	6
1.3	.....	7
CPU	.....	8
2.1	.....	8
2.2	.....	11
2.3	.....	17
2.4	.....	21
2.5	.....	22
	.....	23
3.1	.....	23

36

36

37

3

“ ”

4.4

45

#b

4.5.7.3.1 CAN_INIT	CAN	.....	94
4.5.7.3.2 CAN_TX	CAN	.....	95
4.5.7.3.3 CAN_WRITE	CAN	.....	97
4.5.7.3.4 CAN_RX	ID CAN	.....	98
4.5.7.3.5 CAN_READ	CAN	.....	100
4.5.7.4.1 EX_ADDR		.....	101

Kinco-KS

KS

CPU

PLC

PLC

PLC

K5/K2

CAN

/

CPU101	KS101M-04DX	DC24V DI 4*DC24V 1*MicroUSB 1 1*RS232 1*RS485 2*CAN CAN1 -- 14 CAN2 Kinco CANOpen
CPU105	KS105-16DT	DC24V DI 8*DC24V DO 8*DC24V 1*RS232 1*RS485 14
	KS105C1-16DT	DC24V DI 8*DC24V DO 8*DC24V 1*RS232 1*RS485 1*CANA Kinco CANOpen CANopen CAN
	KS105C2-16DT	DC24V DI 8*DC24V DO 8*DC24V 1*RS232 1*RS485 2*CAN CAN1 -- 14 CAN2 Kinco CANOpen

PM121	KS121-16DX	DC24V	DI 16*DC24V
PM122	KS122-12XR	DC24V	DO 12*
PM122	KS122-14DT	DC24V	DO 14*
PM123	KS123-14DR	DC24V	DI 8*DC24V DO 6*
PM131	KS131-04RD	4	PT100 PT1000 Cu50 R
PM133	KS133-06IV	DC24V 4 /2 4-20mA/1-5V/0-20mA/0-10V	

Kinco-KS

GB/T 15969.3-2007 idt IEC61131-2 2007

Kinco-KS

PLC

		-40 +70
		10% 95%
		0 3000
		1 5
		-10 55
		10% 95%
		2000
		2
		5<f<8.4Hz : 3.5mm : 1.75mm 8.4<f<150 : 1.0g : 0.5g
		15g 11ms 6
		8KV 4KV B

(EMC)		2KV CM 1KV DM IO 1KVCM A	0.5KV CM 0.5KV DM
		2KV 5KHz IO A	1KV 5KHz
		50Hz 0% 1 40% 10 75% 20 A	
		IP20	

CPU



Kinco-KS

CPU

	256
	1ms 4
	10ms 16
	100ms 236
	2 0.1ms
	256
	25 5 /

	DC24V USB CPU
	DC20.4V 28.8V
	5W
	4*DI
	14
	USB2.0 micro USB
	1 Modbus TCP Server
CAN	2 CAN CAN1 CAN CAN2 CANOpen Kinco CAN
	1 RS232 1 RS485 PORT0 PORT1 115.2Kbps PORT0 Modbus RTU PORT1 Modbus RTU
	2 200KHz 200KHz
	8K



2 PLC /

a. PLC

b. PLC PLC

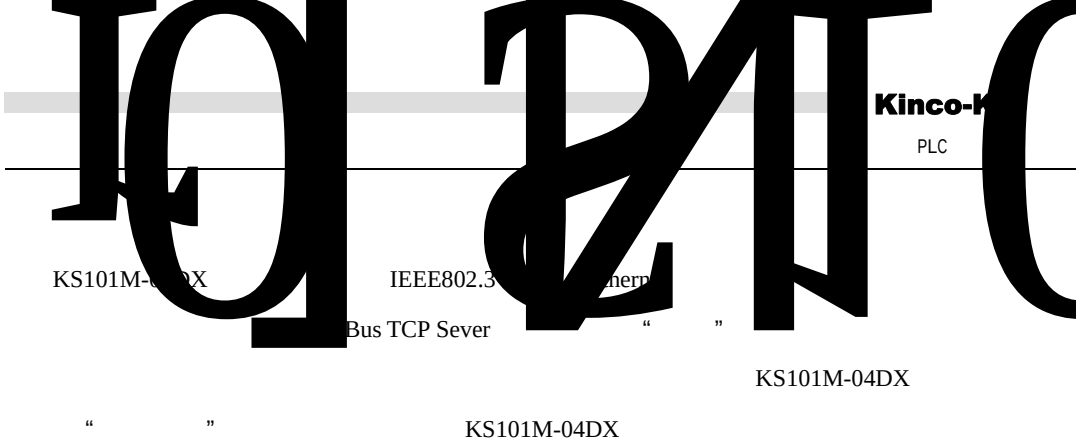
c. RUN PLC STOP

PLC RUN STOP PLC STOP

d. PLC /

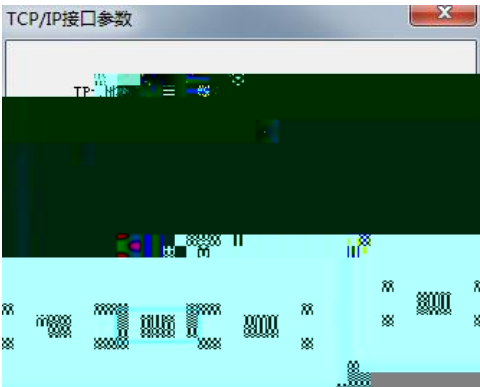
CPU

Run Err 2



USB KincoBuilder

-- TCP/IP



IP PLC PC

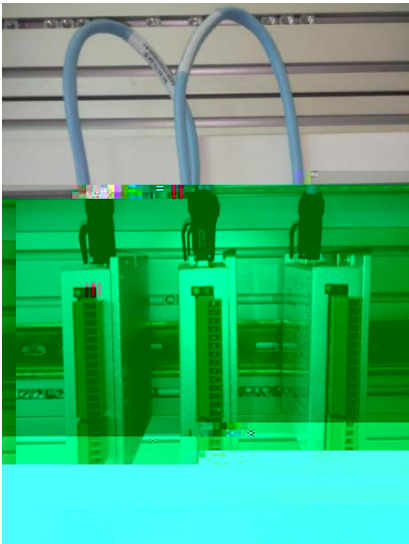
KS105C1-16DT 1 CAN CAN Kinco CAN ξ

KS105-16DTKS

KS105C2-16DT/KS101M-04DXCAN1KS

CANPLC

CPU



KincoBulider

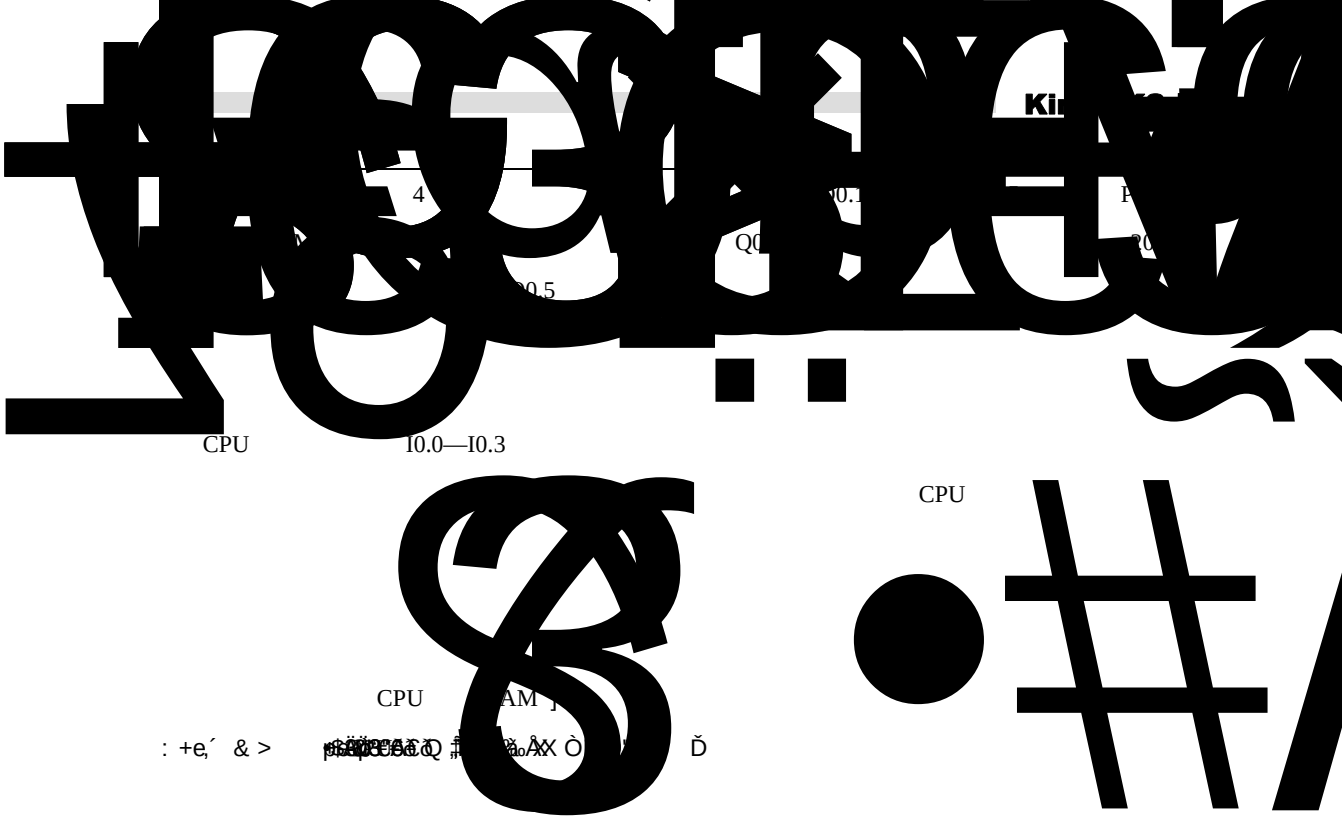
KS123-14DRCPUKS133-06IV

CPUKS123-14DR

硬件配置						
	模块名称	输入区地址	输出区地址	扩展 +5V	扩展 +24V	备注
1	KS105-16DT	0...0	0...0	---	---	CPU模块, DC24V供电, DI 8*DC24V, DO 8*DC24V
2	KS123-14DR	1...1	1...1	---	---	KS123, DI 8*DC24V, DO 6*继电器
3	KS133-06IV	0...7	0...7	---	---	KS133, AI*4, AD*2, 4-20mA/0-20mA/1-5V/0-10V

KS4HSC0HSC3

Up/DownAB14,200KHzAB



CPU

10.0—10.3

CPU

CPU

AM J

: +e, & >

10.0—10.3

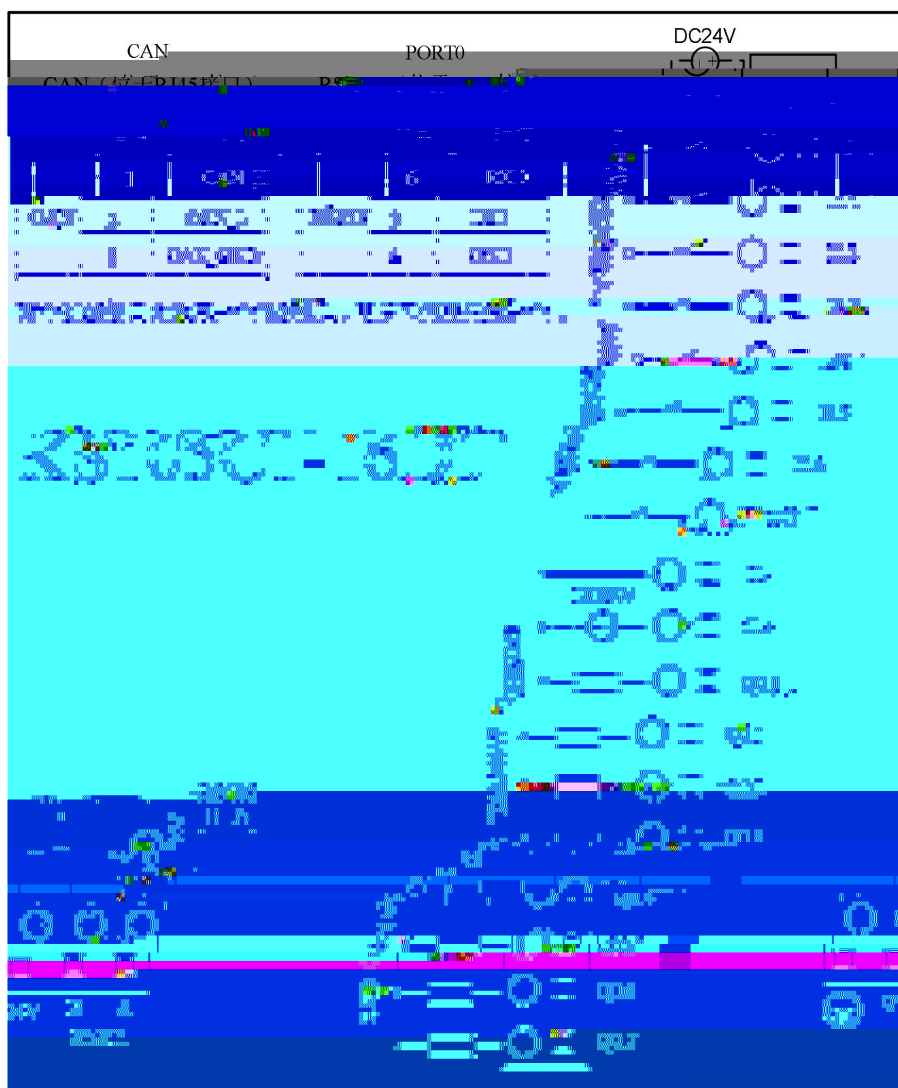
10.0—10.3

Đ

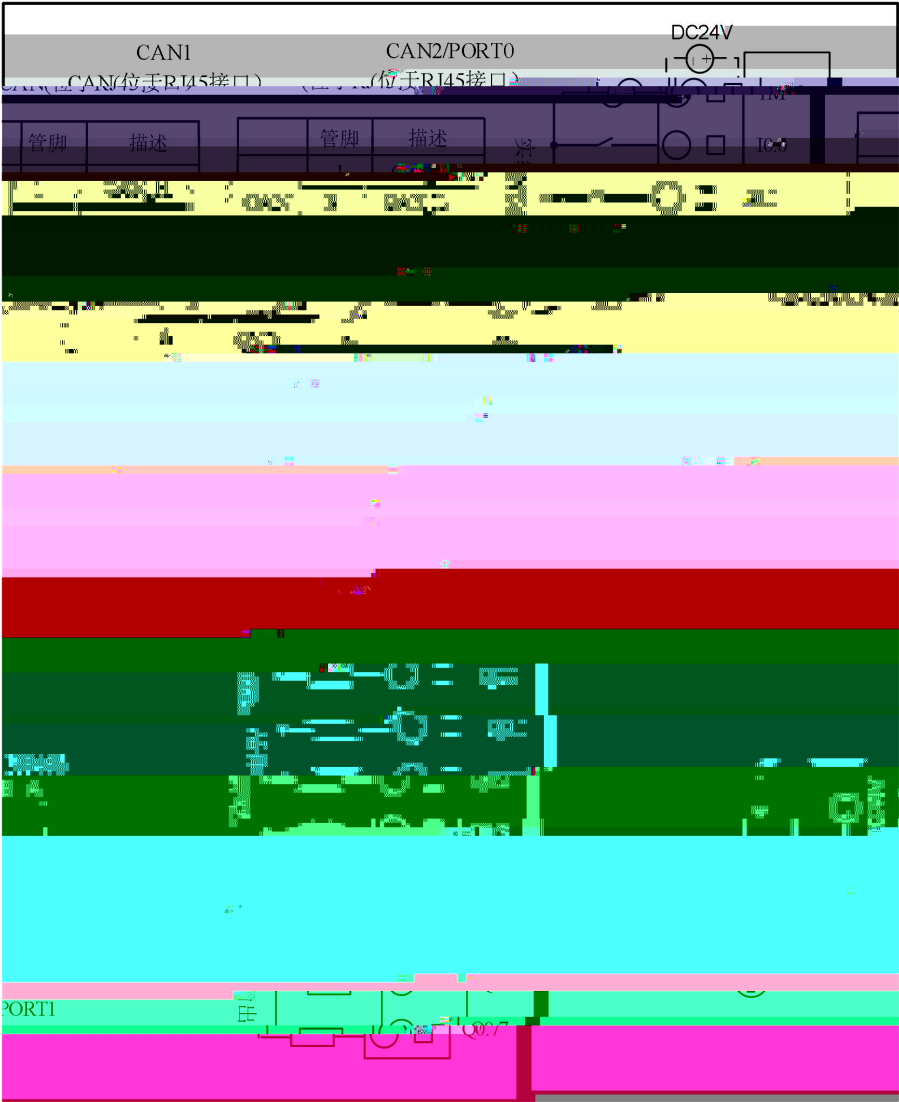
CPU	(RTC)	/	RTC
KincoBuilder	PLC ->	CPU ...	
	READ_RTC	SET_RTC	RTC_W RTC_R
CPU			5 ,
	3		
KS			
	RAM		
CR2032	3V		



2-1 KS101M-04DX



19



2-4 KS105C2-16DT



DI

	/
	DC24V DC30V
	3.5mA@24VDC
“ 0 ”	5V@0.7mA
“ 1 ”	11V@2.0mA
·	1.2 μ s
·	0.5 μ S
·	
·	500VAC/1

DO

	DC24V : DC20.4V—DC28.8V
	200mA 300mA @24VDC
	1A, 1S
	0.5 μ A
	0.2 Ω
·	12 μ s 0.5 μ s
·	35 μ S 1 μ S
·	
·	



PLC

. .	10s
. .	500VAC/1

KS

KS

KS

KS

DC24V

RS485

CPU

2.2.4

Modbus

Λ

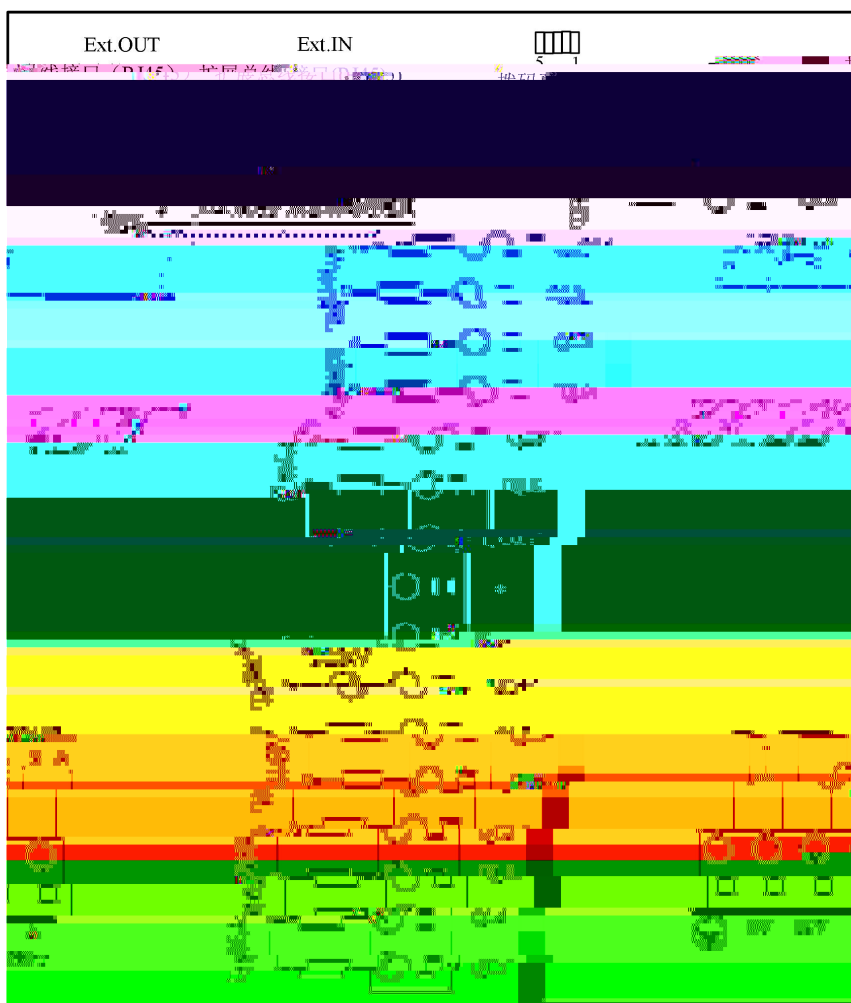
×

Kinco-KS122-14DT

14

DO

DO 14 ×



	DC 24V	≥ 100mA

14 8 /

DC24V : DC20.4V—DC28.8V

500mA@24VDC

0.5 μA

0.2Ω

· 0.3--5 μs

· 5 μs

·

·

·

·

10s φ



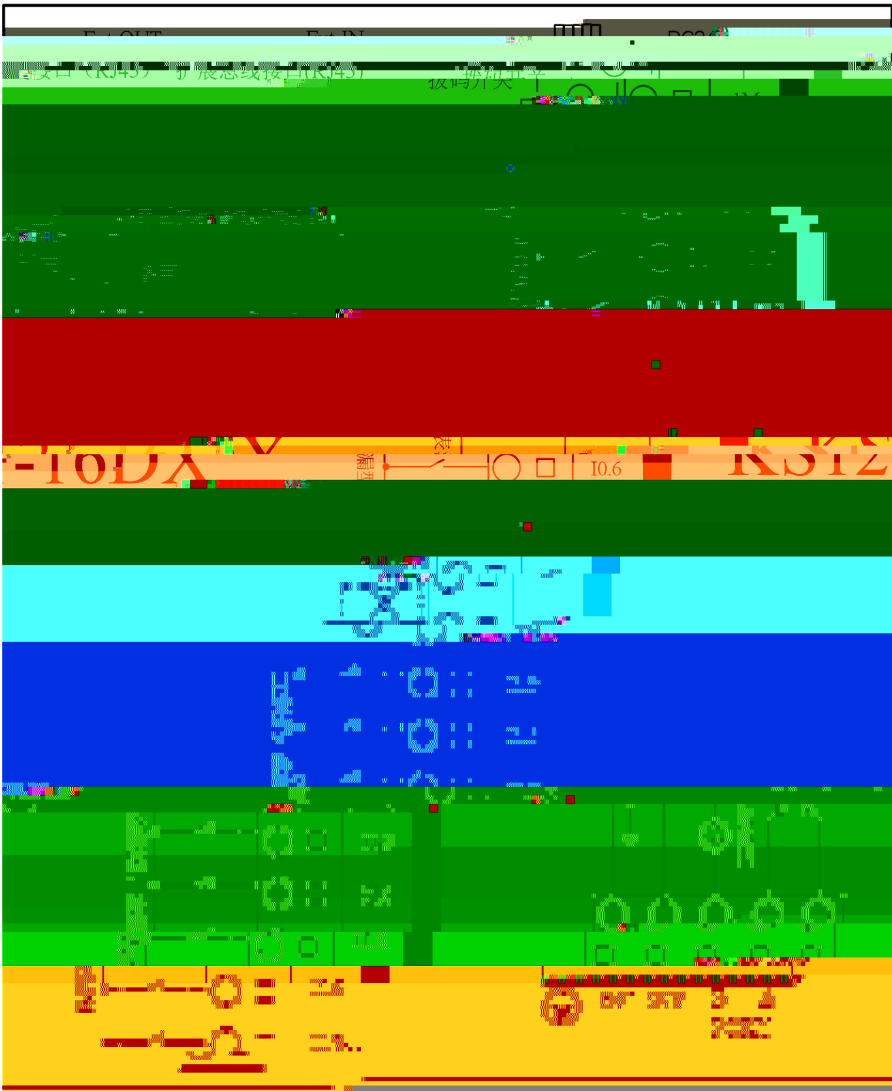
	DC 24V ≥ 100mA
12 4 /	
	DC 30V/AC250V

	2A DC 30V/AC250V
	10A
	10ms
	5ms
·	20 000 000 1200 /
·	100 000 6 /
·	2000Vrms
·	
(× ×)	100 × 84.5 × 25.4mm
	200g

×

Kinco-KS121-16DX

16 DI DI 16 × DC24V



	DC 24V ≥ 100mA
	16 8 /

	/
	DC 24V
	3.5mA@24VDC
“ 0 ”	5V
“ 1 ”	11V@2.0mA
· ·	12 μ s 40 μ S
· ·	500VAC/1
(× ×)	100 × 84.5 × 25.4mm
	200g

×

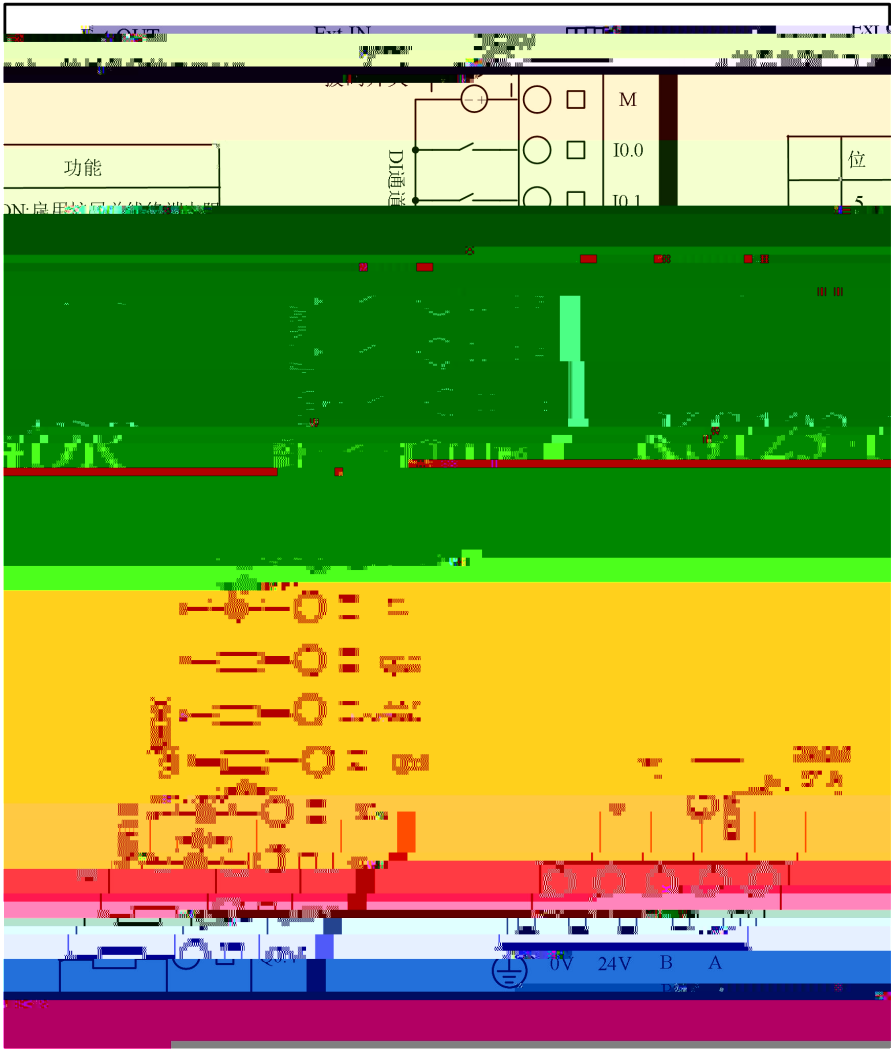
×

Kinco-KS123-14DR

14

IO

DI 8 × DC24V DO 6 ×



	DC 24V	≥ 100mA
8	8	/
		/

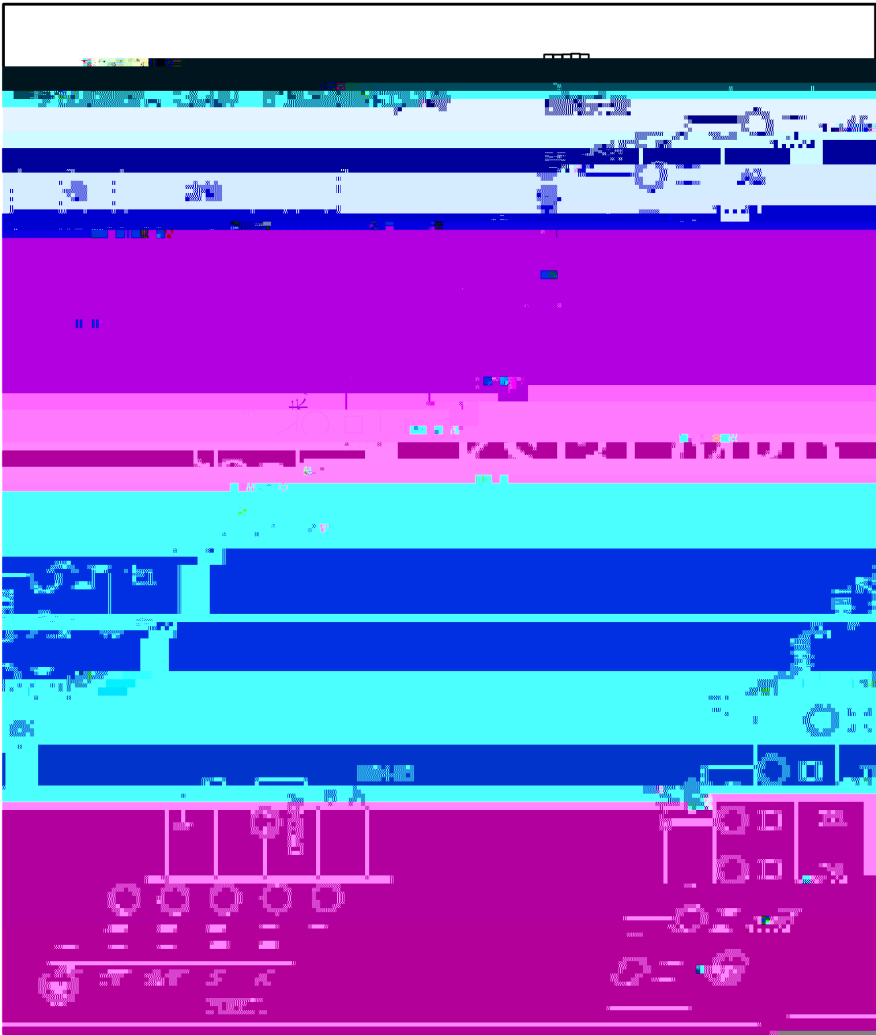
	DC 24V
	3.5mA@24VDC
“ 0 ”	5V
“ 1 ”	11V@2.0mA
. .	500VAC/1
	6 3 /
	DC 30V/AC250V
	2A DC 30V/AC250V
	10A
	10ms
	5ms
. .	20 000 000 1200 / 100 000 6 /
. .	2000Vrms
(× ×)	100 × 84.5 × 25.4mm
	200g

×

Kinco-KS131-04RD

4

Pt100 Pt1000 Cu50 R



ADC

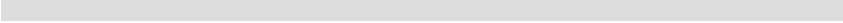
-

CPU

AI

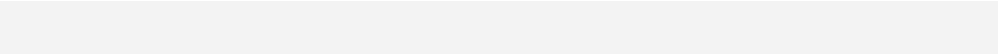
AI

CPU



T

R



Б

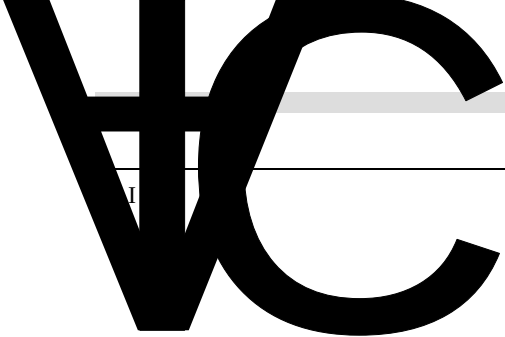
Kinco-KS

PLC

>4MΩ

AO 2

2





Kinco-KS

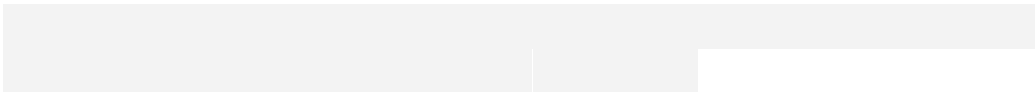
PLC

PV

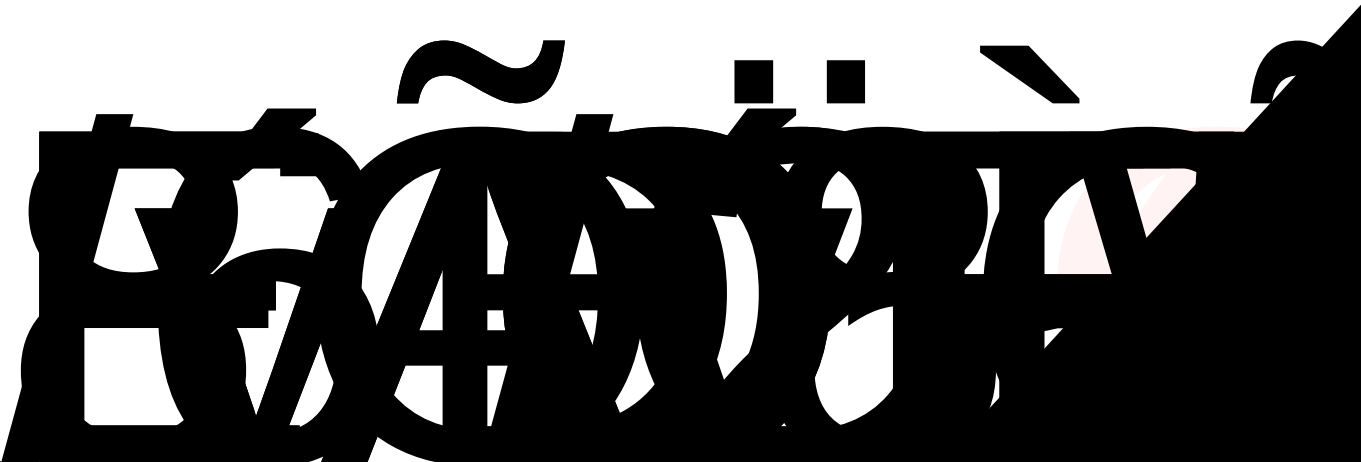
“

=

”



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	SM57.3		
9	A/B	B	A

0	/		
	SM127.3		
9	A/B	B	A

SM

SM37.0	SM47.0	SM57.0	SM127.0	0= 1=
SM37.1	SM47.1	SM57.1	SM127.1	0= 1=
SM37.2	SM47.2	SM57.2	SM127.2	0=1x 1=4x
SM37.3	SM47.3	SM57.3	SM127.3	0= 1=
SM37.4	SM47.4	SM57.4	SM127.4	HSC 0= 1=
SM37.5	SM47.5	SM57.5	SM127.5	HSC 0= 1=
SM37.6	SM47.6	SM57.6	SM127.6	HSC 0= 1=
SM37.7	SM47.7	SM57.7	SM127.7	0= 1=
SMD38	SMD48	SMD58	SMD128	
SMD42	SMD52	SMD62	SMD132	

SM141.0	SM151.0	SM161.0	SM171.0	0= 1=
SM141.1	SM151.1	SM161.1	SM171.1	0 = 1=
SM141.2	SM151.2	SM161.2	SM171.2	0= 1=

SM141.3	SM151.3	SM161.3	SM171.3	
SM141.4	SM151.4	SM161.4	SM171.4	0= 1=
SM141.5	SM151.5	SM161.5	SM171.5	0= 1=
SM141.6	SM151.6	SM161.6	SM171.6	
SM141.7	SM151.7	SM161.7	SM171.7	
SMW142	SMW152	SMW162	SMW172	VB0

HSC

0 1 2

/

THESE

SM

SM36.0	SM46.0	SM56.0	SM126.0
SM36.1	SM46.1	SM56.1	SM126.1
SM36.2	SM46.2	SM56.2	SM126.2
SM36.3	SM46.3		

HSC0		SM141.0					
SM141.0	0		PV	K5	SMD42	PV	SM37.5
		PV					
SM141.0	1		PV	SM37.5	SMD42	PV	PV
SMW142			SM141.4	PV			

PV

HSC0 SM141.1

SM141.1 0 PV PV “ CV=PV ”

3 PV 1000 2000 3000 1000 1

“ CV=PV ” 2000 2 “ CV=PV ”

SM141.1 1 PV

PV “ CV=PV ” 3 PV 10 1000

1000 100 110 1110 2110

“ CV=PV ”

“ ”

PV

SM141.0 0 “ CV=PV” PV

HSC

SM141.0 1 “ CV=PV” PV

PLC PV

“ CV=PV”

3 PV 10 1000 1000 100

100	1	110	1110	2110
2110	2	2120	3120	4120
4120	3	4130	5130	6130
...	n	...	...	...

“

HSC0	64	1	PV	“ CV=PV”
	65	2	PV	“ CV=PV”
	...	...	1	
	95	32	PV	“ CV=PV”
HSC1	96	1	PV	“ CV=PV”
	97	2	PV	“ CV=PV”
	...	...	1	
	127	32	PV	“ CV=PV”

=No



3 PFLO_F
()

PLS PTO PWM
PTO Pulse Train Output
PWM Pulse-Width Modulation



1

CR

4 PTO/PWM

PTO/PWM

PWM0

PTO0

Q0.1

PWM1

Q0.4

PWM2

PTO2

Q0.5

PWM3

PTO3

DO

Q0.0

Q0.1

Q0.4

Q0.5

PTO/PWM

DO

Ö Ö

PWM

 μs

ms

65535

100%

0

0%

PTO

50%

 μs

ms

65535

2 4,294,967,295

2 KS1

PTO

PLS

ă

Я

333

SMW168		PTO0	SMW178	PTO1	SMW218	PTO2
SMW248	PTO3	SM67.3	PTO0	SM77.3	PTO1	SM97.3
PTO2	SM67.3	PTO3				

0	8		1 64
1	16	1	2 6535
	16		
5	32		1 4,294,96
9	16	2	2 6553
11	16		
13	32		9 95
...		...	



SM

SMW68	SMW78	SMW108	SMW118	PTO	2~65535
SMW80	SMW80	SMW110	SMW110	PWM	0~65535
SMD72	SMD82	SMD102	SMD112	PTO	1~4,294,967,295
SMW168	SMW178	SMW218	SMW248	PTO	VB0

SM66.0	SM76.0	SM2 2 200	SM2 2 200	SM2 2 200	SM2 2 200
--------	--------	-----------	-----------	-----------	-----------

SMB67 = B#16#84

PTO/PWM

PTO

1μs

2) SMD72

3) PLS PTO0

1) SMB67

SMB67 = B#16#A0

PTO/PWM

PTO

1μs

2) VB0 SMW168

3)

4) “ PTO0 ” 27

5) PLS PTO0

PWM0

PWM

PWM

PLS

SM0.1

CPU

CPU

1) SMB67

SMB67 = B#16#D3

PTO/PWM

PWM

1μs

- 2) SMW68
- 3) SMW70
- 4) PLS PWM0

PWM0

- 1) SMB67

SMB67 = B#16#D2

PTO/PWM

PWM

1μs

- 2) SMW70
- 3) PLS PWM0

KS1 SM

DINT

SMD212	SMD242	SMD262	SMD226	
SMD208	SMD238	SDM258	SMD222	
SM201.7	SM231.7	SM251.7	SM221.7	1 PSTOP 0 1
SM201.6	SM231.6	SM251.6	SM221.6	1 - 0 -
SM201.5	SM231.5	SM251.5	SM221.5	
SM201.4	SM231.4	SM251.4	SM221.4	1 - 0 -
SM201.3	SM231.3	SM251.3	SM221.3	1- 0 - D0
SM201.0 ~ SM201.2	SM231.0 ~ SM231.2	SM251.0 ~ SM251.2	SM221.0 ~ SM221.2	

4 SMD212 SMD242 SMD262 SMD226

0
4 SM201.6 SM231.6 SM251.6 SM221.6
1 PLC 0
1

PHOME PREL PABS PJOG PFLO_F

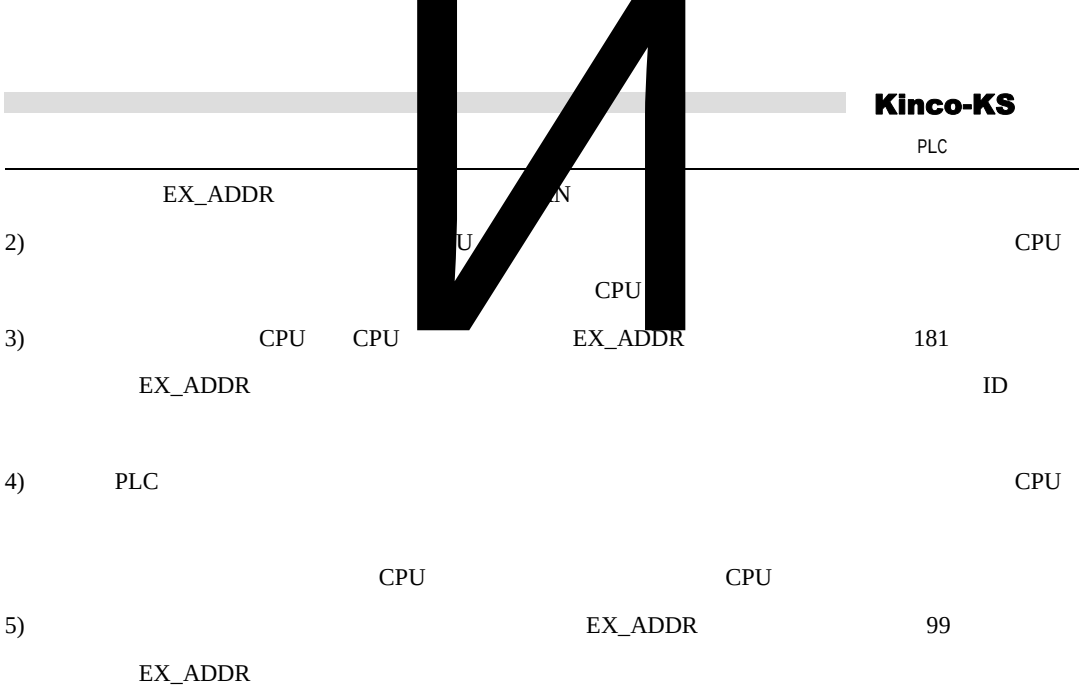
```
0
(* Network 0 *)
(*                                0.*)
LD      %SM0.0
PHOME
0, %M0.0, %M0.1, %M0.2, %VW0, %VW2, %VW4, %VD6, %VW10, %M0.4, %M0.5, %MB1
(* Network 1 *)
(*PHOME          DONE          0  *)
LD      %M0.4
R_TRIG
ST      %SM201.6
```

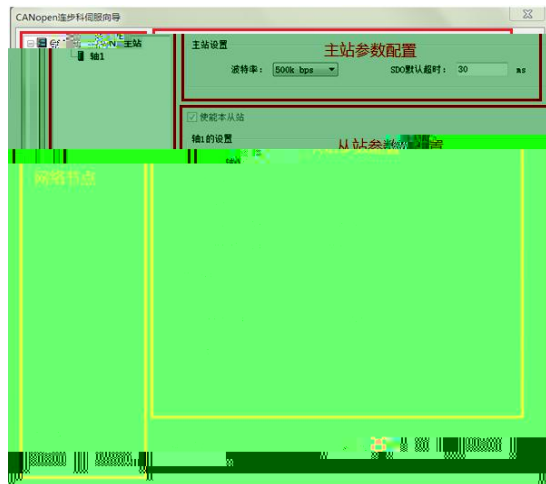
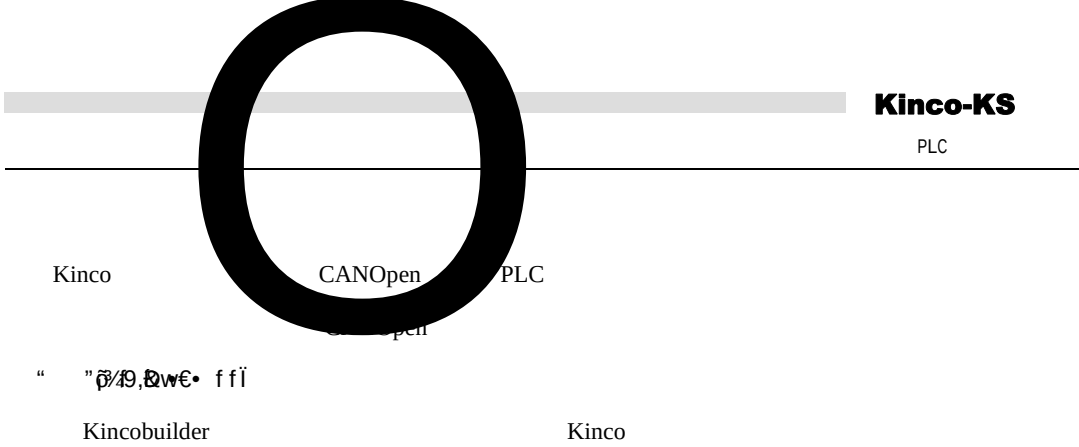
SMD208	SMD23 8	SDM25 8	SMD22 2	
SM201.4	SM231. 4	SM251. 4	SM221. 4	1 - 0 -

```
0                                SM201.4  0                                SMD212          SM201.4  1
SMD208                                SMD212                                PHOME PREL PABS
PJOG  PFLO_F
```

```
0
(* Network 0 *)
(*                                100.*)
LD      %SM0.0
PHOME
0, %M0.0, %M0.1, %M0.2, %VW0, %VW2, %VW4, %VD6, %VW10, %M0.4, %M0.5, %MB1
(* Network 1 *)
(*PHOME          DONE          *)
LD      %M0.4
R_TRIG
```





:

CANOpen

Ctrl+C

Ctrl+P

DELETE

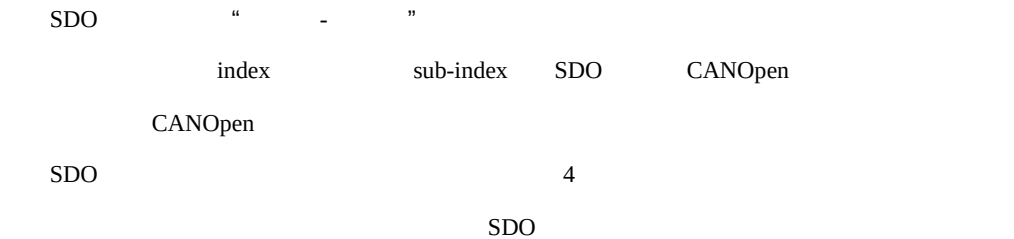
CANOpen

SDO

PLC

SDO

Kin



Client -> Server

COB-ID	Byte 0	Byte 1-2	Byte 3	Byte 4-7
0x600 + Node ID	SDO	isove9 Ó(E\ C6e λD b		L0ve pCv€)

Server -> Client

COB-ID	Byte 0	Byte 1-2	Byte 3	Byte 4-7
0x580 + Node ID	SDO			



PDO

8

SYNC

0

“

”

1-240

“

”

RTR-Only

TPDO

RTR

PDO

252

SYNC

RTR

PDO

253

RTR

PDO

CANOpen

PDO

254

255

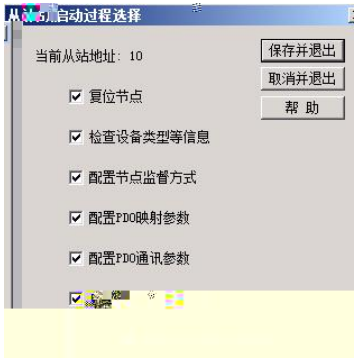
PDO

PDO

PDO

16

mr



“ ”

PDO

PDO

PDO

PDO

“ ”

PDO

RPDO

0



PDO

PDO

PDO

Ψ π Z Ď TPDO



PDO

PDO

PDO

PLC

PDO

PLC

KS CANOpen

CAN CAN2.0A

DS301 V4.2.0 DS405 V2.0

NMT

SDO Server

16 TPDO 16 RPDO PDO

PDO

TPDO1 TPDO2 TPDO3

TPDO1 TPDO3 TPDO4

PLC

CPU

CANOpen



CANOPEN

000%

Kinco-KS

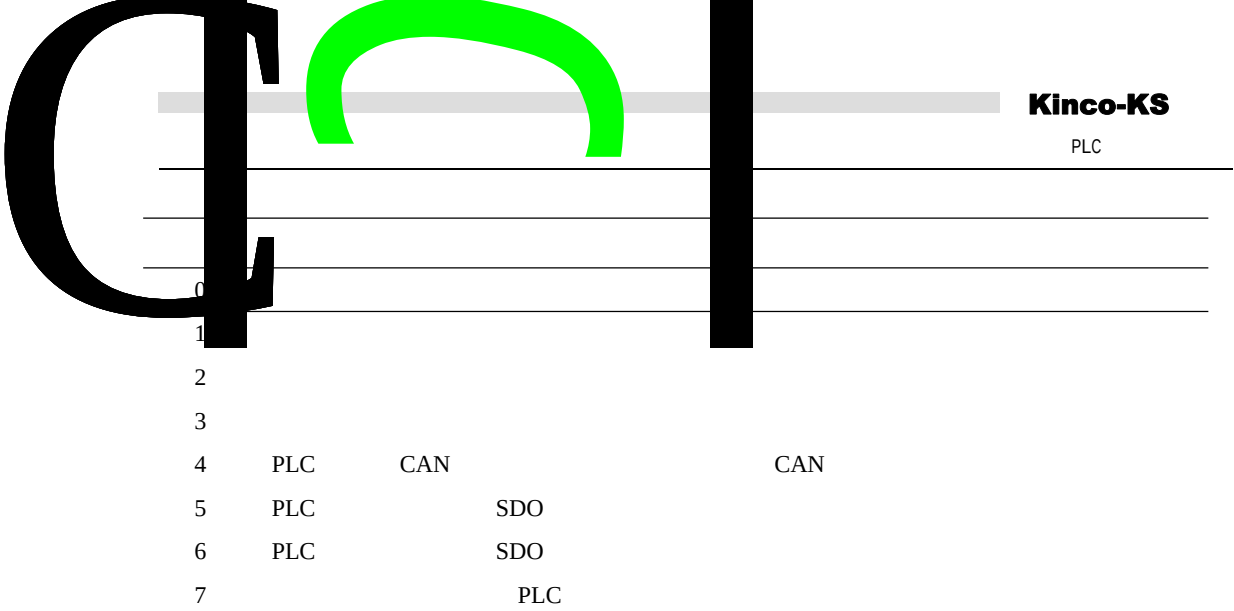
PLC

0xA54	INT16	AQW0	AQW18	10
0xA550	INT16	VW0	VW18	10
0xA641	INT32	VD1016	VD1052	10
0xA642	FLC			

BA€F

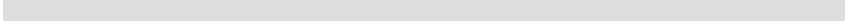
Kinco-KS

PLC



		0x60F90110	UINT16	DEC	[0,32767]
		0x60F90210	UINT16	DEC	[0,32767]
		0x60FB0110	REAL	HZ	[0,32767]
		0x60FB0210	REAL	%	[0,1024]
		0x23400410	UINT16	DEC	[0,32767]
		0x23400510	UINT16	DEC	[0,32767]
		0x23400610	REAL	HZ	[0,32767]
		0x60730010	UINT16	DEC	[0,2048]
		0x607F0020	REAL	mm/min /min	[-2147483648, 2147483647]
		0x60990508	UINT8		[0,255]
		0x607E0008	UINT8		0 1
		0x64100110	UINT16		[0,65535]
		0x607D0120	REAL	mm	[-2147483648, 2147483647]
		0x607D0220			
		0x60FB0510	UINT8		[0,255]
		0x60650020	UINT32	DEC	[0,268435455]
		0x60670020	UINT32	DEC	[0,268435455]
		0x60680010	UINT16	DEC	[0,32767]
		0x60F90508	REAL	HZ	[0,45]
		0x60F90608	UINT8		[0,85]
		0x20100110	UINT8		[0,255]
		0x20100310	UINT16		[0,65535]
		0x20100410	UINT16		[0,65535]
		0x20100510	UINT16		[0,65535]
		0x20100610	UINT16		[0,65535]
		0x20100710	UINT16		[0,65535]

		0x20100810	UINT16		
		0x20100910	UINT16		[0,65535]
		0x20101D10	UINT16		[0,65535]
		0x20100D10	UINT8		[0,255]
		0x20100F10	UINT16		[0,65535]
		0x20101010	UINT16		[0,65535]
		0x20101110	UINT16		[0,65535]
		0x20101210	UINT16		[0,65535]
		0x20101310	UINT16		[0,65535]
		0x20101E10	UINT16		[0,65535]
		0x20101F10	UINT16		[0,65535]
		0x25080420	INT32	DEC	[-2147483648, 2147483647]
		0x25080308	UINT8		[0,255]
		0x10100120	UINT32		16#65766173
		0x10110120	UINT32		16#64616f6C



	ERRID				
	bit0	1	bit1	2	
	1				





	4					VB100
VD1200		3	VB100	VB101	VB102	3
		3				

```
LD      %SM0.0
MOVE    B#0, %VB100
MOVE    B#3, %VB101
MOVE    B#8, %VB102
(* Network 1 *)
(*      AXIS  NUM      *)
LD      %M0.0
MC_RPARAS %M1.1, 1, %VB100, 3, %M1.2, %M1.3, %MD8, %VD1200
(* Network 2 *)
(*      PARAS      1      1
0      REAL      *)
LD      %SM0.0
MOVE    %VR1200, %VR300
(* Network 3 *)
(*      2      2      0      8      PLC
*)

LD      %SM0.0
DI_TO_I %VD1204, %VW304
(* Network 4 *)
(*      3      3      8      16      32767
INT      WORD      *)
LD      %SM0.0
DI_TO_I %VD1208, %VW308
```



	/			
EXEC		BOOL	M V L SM	
AXIS		INT	V M L	CANOpen
ID		BYTE	V M L	
PARAS		DWORD	V M L	
NUM		INT	V M L	
DONE		BOOL	M V L	0 1
ERR		BOOL	M V L	1
ERRID		DWORD	V M L	



3

“ ” 1

4

```
LD
    1
        PARAS          SDO
    0          SDO          1
        DONE    1  ERR  ERRID

    EN    0          EN    0          ,
    DONE    1  ERR  ERRID
        PLC
    DONE  ERR    1  ERRID

    IL          Kincobuilder          IL
        LD          LD
(* Network 0 *)
(*          0  3  8.*)
LD    %SM0.0
MOVE    B#0, %VB100
MOVE    B#3, %VB101
MOVE    B#8, %VB102
(* Network 1 *)
(*          *)
LD    %SM0.0
MOVE    1200.0, %VR1000
MOVE    DI#8, %VD1004
MOVE    DI#2000, %VD1008
(* Network 2 *)
(*          *)
LD    %SM0.0
MC_WPARAS %M0.1, 1, %VB100, %VD1000, 8, %M0.2, %M0.3, %MD4
```

LD	MC_POWER	MC_POWER EN ENO EXEC DONE - AXIS ERR ERRID	KS KW103 KW203

	/			
EXEC		BOOL	M V L SM	
AXIS		INT	V M L	CANOpen
DONE		BOOL	M V L	0 1
ERR		BOOL	M V L	1
ERRID		BYTE	V M L	

LD	MC_RESE T	MC_RESET EN ENO EXEC DONE AXIS ERR ERRID	KS KW103 KW203

	/			
EXEC		BOOL	M V L SM	
AXIS		INT	V M L	CANOpen
DONE		BOOL	M V L	0 1
ERR		BOOL	M V L	1
ERRID		BYTE	V M L	

MC_POWER

LD

1

PLC

2

DONE 1 ERR 0 ERRID 0

DONE 1 ERR 1 ERRID

0

LD	MC_HOM E		KS KW103 KW203

	/			
EXEC		BOOL	M V L SM	
AXIS		INT	V M L	CANOpen
POS		REAL	V M L	mm °
TIME		DWORD	V M L	
DONE		BOOL	M V L	0 1
ERR		BOOL	M V L	1
ERRID		BYTE	V M L	

LD

1

PLC

ms

DONE 1 ERR 0 ERRID 0

DONE

1 ERR 1 ERRID

0

0

LD	MC_MAB S	MC_MABS EN ENO EXEC DONE AXIS ERR POS ERRID VEL ACT DIR MODE	KS KW103 KW203

	/			
EXEC		BOOL	M V L SM	
AXIS		INT	V M L	CANOpen
POS		REAL	V M L	mm °
VEL		REAL	V M L	>0 mm/min °/min
DIR		INT	V M L	0
MOD E		INT	V M L	0 1
DON E		BOOL	M V L	0 1
ERR		BOOL	M V L	1
ERRI D		BYTE	V M L	

ACT		BOOL	M V L	MODE=0, 1 MODE=1, 1 0	ACT 0 ACT
-----	--	------	-------	-----------------------------------	-----------------

LD

1

PLC

0

PLC

DONE 1 ERR 0 ERRID 0

DONE 1 ERR 1 ERRID

0

0

LC

POS		REAL	V M L	mm °
VEL		REAL	V M L	>0 mm/min ° /min
DONE		BOOL	M V L	0 1
ERR		BOOL	M V L	1
ERRID		BYTE	V M L	
ACT		BOOL	M V L	1 0

LD	MC_JOG	MC_JOG EN ENO EXEC DONE AXIS ERR VEL ERRID DIR ACT	KS
			KW103
			KW203

/

EXEC	BOOL	M	V	L	SM	
AXIS	INT	V	M	L		CANOpen
VEL	REAL	V	M	L		mm/min °/min
DIR	INT	V	M	L		0
DONE	BOOL	M	V	L		0 1
ERR	BOOL	M	V	L		, ~

BOOE

LD

E

MO

EN
AXIS
HOME
CW
CCW
RUN
FAULT
INPUT
LIMIT
APC
AVE
ONLIN

KS

KW103

KW203

PLC

Bit 7	01
Bit 6	01

2

PLC

S

0

IIT	0x2FF010	UINT8	1	0
	0x60F70B	UINT16	2	1
	0x2FF700	UINT32	4	3

PLC

Bit 5	01
Bit 4	01

PDO

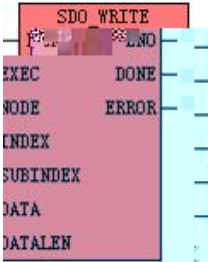
	0x60410	NT16	2	0
	0x2607	NT16	2	2
1	0x260200	INT	2	4
	0x607800	NT16	2	
	0x606C00	NT32	4	
	0x606300	INT	4	

RES

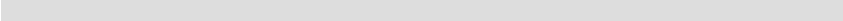
1 $\overline{A_{17}}$

Bit 7

CE

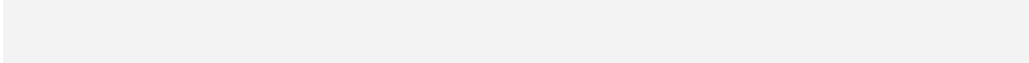
LD	SDO_WRITE		KS KW103 KW203

/						
EXEC	BOOL	I	Q	V	M	SM
NODE	BYTE	I	Q	V	M	SM
INDEX	WORD	I	Q	V	M	SM
SUBINDEX	BYTE	I	Q	V	M	SM
DATA	BYTE	I	Q	V	M	SM
DATALEN	BYTE	I	Q	V	M	SM
DONE	BOOL	Q	M	V	L	SM
ERROR	DWORD	Q	M	V	L	SM



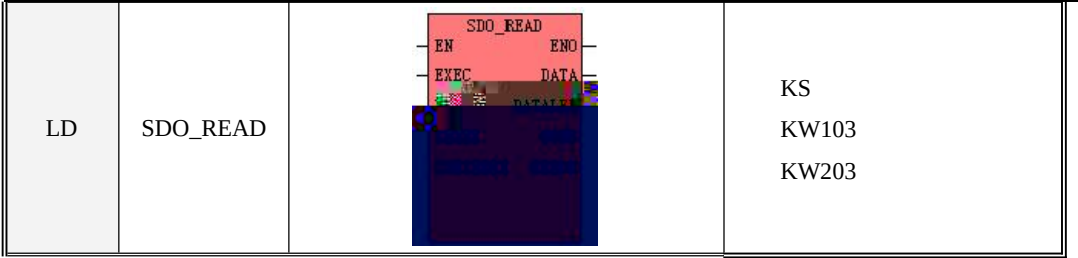
SubIndex	OD
Data	
DataLen	
DONE	SDO DONE 0 SDO DONE 1
ERROR	

SDO



- 0
- 1
- 2
- 3
- 4
- 5
- 6

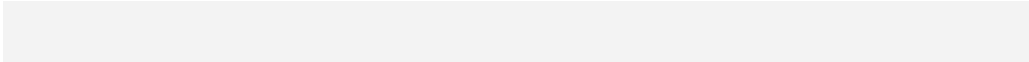
PLC



/							
EXEC		BOOL		I	Q	V	M L SM
NODE		BYTE		I	Q	V	M L SM

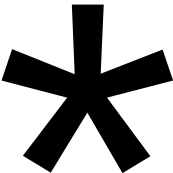
DataLen	
DONE	SDO DONE 0 SDO DONE 1
ERROR	

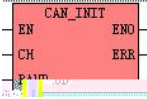
SDO



- 0
- 1
- 2
- 3
- 4
- 5
- 6

PLC



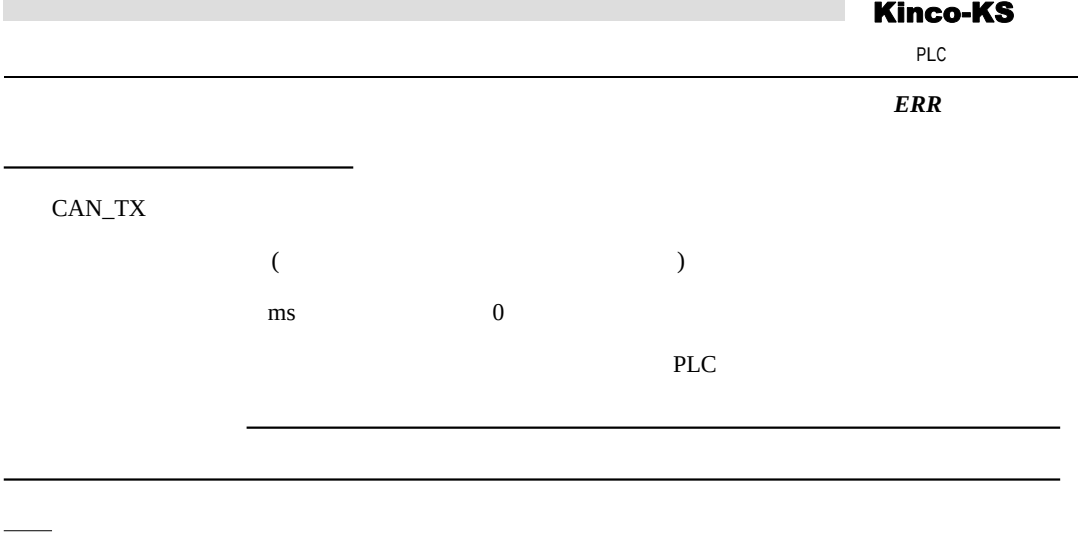
LD	CAN_INIT		KS KW103 KW203
----	----------	---	----------------------

LD	CAN_TX	CAN_TX EN CH TIMER ID FMT DATA LEN ENO DONE ERR	KS KW203
----	--------	---	-------------

	/		
CH		INT	
TIMER		INT	L M V
ID		DWORD	L M V
FMT		INT	L M V
DATA		BYTE	M V
LEN		BYTE	L M V
DONE		BOOL	L M V
ERR		BOOL	L M V

EN							
CH	CAN	0	CAN1	1	CAN2	2	K541
TIMER	ms 0						
ID	ID						
FMT	0		1				
DATA							
LEN							
DONE	DONE					1	
ERR	1						

DONE



LD	CAN_WRITE	CAN_WRITE EN CH ID FMT DATA LEN ENO DONE ERR	KS KW103 KW203

	/		
CH		INT	
ID		DWORD	L M V
FMT		BYTE	L M V
DATA		BYTE	L M V
LEN		BYTE	L M V
DONE		BOOL	L M V
ERR		BOOL	L M V

EN	
CH	CAN 0 CAN1 1 CAN2 2 K541
ID	ID

FMT	0	1
DATA		
LEN		
DONE	DONE	DONE
ERR	ERR	ERR

CAN ()

PLC

PLC CAN

1 0

1

LD	CAN_RX	CAN_RX EN CH ID FMT MODE TIME EMO DONE ERR DATA LEN	KS KW103 KW203

	/		
CH		INT	
ID		DWORD	L M V
FMT		INT	L M V
MODE		INT	L M V
TIME		INT	L M V
DONE		BOOL	L M V
ERR		BOOL	L M V
DATA		BYTE	M V

		BYTE	L	M	V
--	--	------	---	---	---

EN					
CH	CAN	0	CAN1	1	CAN2 2 K541
ID	ID				
FMT	0		1		
MODE	0		1		
TIME	ms				
DONE	DONE				
ERR					
DATA					
LEN					

ID

1

0

PLC

0

1

1

CAN

	/		
EXEC		BOOL	M V L SM
OP		INT	M V L



	99	---	ID
--	----	-----	----

181

ID

CPU

CPU

99

ID

CPU

ID

EN 1

EXEC

EN 0