# MKS BY125 Low Cost Synchrocontroller

# **HMI Factory Setting:**

Baud rate: 9600, 7, Even, 1

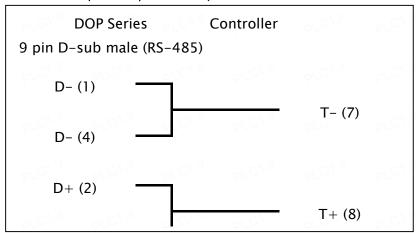
Controller Station Number: 11(Note1)
Control Area / Status Area: None/None

#### Connection

#### a. RS-232 (DOP-A/AE/AS, DOP-B Series)(Note2)

DOP Series	Controller		PLO
9 pin D-sub male (RS-232)			PLC1:
RXD (2)	PLC1.ii	TXD(3)	PLC1
TXD (3)	PLC1.ir	RXD(2)	PLC1:

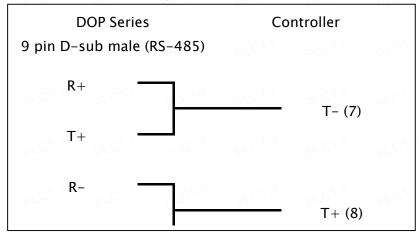
#### b. RS-485 (DOP-A/AE Series)



# c. RS-485 (DOP-AS57 Series)

DOP Series	Coi	ntroller	
9 pin D-sub male (RS-485)			Prc1.
R-	P/C///	T- (7)	PLC1
<b>P</b>		T_ (R)	

#### d. RS-485 (DOP-AS35/AS38 Series)



# e. RS-485 (DOP-B Series)

DOP Series	Controller	PLC1.
9 pin D-sub male (RS-485)		
D-(6)	T- (7)	P/C//
Provide Provide Provide		PLC1:
D+(1)	T+ (8)	

# **Definition of PLC Read/Write Address**

#### a. Registers

Туре	Format	Read/Write Range Data I	No. 1 of VI	Note
	Word No.(n)		Data Length	
Data In Register /	Cn	C0 - C17, C40 - C41, C45 -	Double Word	<u>3</u>
Setup Register	PLU. PLU.	C48, C50, C90 - C92	PLO	Pro.
Synchronizing	SYN_ERRn	SYN_ERR0	Double Word	~ 1 X
(Differential Counter)	bro., bro.	bro, bro, bro	PLO.	PLC.
Integration register	<b>IR</b> n	IR0	Double Word	- A W
Actual Master speed	MAS_SPDn	MAS_SPD0	Double Word	PLY

# b. Contacts

Type	Format	Read/Write Range	Note
PLC 1 PLC 1	Bit No.(n)	Prov. Prov. Pro	PLU
Reset	<b>RST</b> b	RST0	
Jog Trim+	JOGTRIM_INCb	JOGTRIM_INCO	Prc.J.,

Jog Trim-	JOGTRIM_DECb	JOGTRIM_DEC0	- A X
Activate Data	ACT_DATAb	ACT_DATA0	<u>4</u>

_ Format		2 100	PLO
Type	Bit No.(n)	Read/Write Range	Note
Store EEPROM	STR_EEPROMb	STR_EEPROM0	PL
Index Slave	IND_SLAb	IND_SLA0	. CAN
Index Master	IND_MASb	IND_MAS0	PL-

# NOTE

- 1) The valid station number is in the range of 11 to 99. The station number 20, 30, 40, 50, 60, 70, 80, 90 are broadcast station number.
  - 00 for all broadcast
  - 10 for broadcast range from 11 to 19
  - 20 for broadcast range from 21 to 29
  - ... and so on

The broadcast function is not yet available, therefore do not use broadcast station number.

- 2) Please be aware RS-232 can only be connected to pin2, pin3 and pin5. Pin 9 is for +5V. DO NOT use pin 9 or serious damage may occur.
- The effective addresses of Cn are not consecutive (5 blocks: C0~17, C40~41, C45~C48, C50, C90~C92). When setting the addresses, do not exceed the block range. For example, when using a Numeric Entry or Character Entry element, if the address is C15, the data length can only be 6 Words(for C15, C16, C17). A data length exceed 6 words would occupy other address setting except C0 ~ C17, in this case, an error may occur.
- 4) The received value of the device will not change even when all register address is written in. The user needs to press ACT\_DATA0 again for value be updated.