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Device/PLC Connection Manuals



About the Device/PLC Connection Manuals

Prior to reading these manuals and setting up your device, be sure to read the "Important: Prior to reading the Device/PLC Connection manual" information. Also, be sure to download the "Preface for Trademark Rights, List of Units Supported, How to Read Manuals and Documentation Conventions" PDF file. Furthermore, be sure to keep all manual-related data in a safe, easy-to-find location.

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A.1

Maximum Number of Consecutive Device Address

The following lists the maximum number of consecutive addresses that can be read by each PLC. Refer to these tables to utilize *Block Transfer*.



Note: When the device is setup using the methods below, the Data Communication Speed declines by the number of times the device is read.

- When consecutive addresses exceed the maximum data number range
- When an address is designated for *division*
- When device types are different

To speed up data communication, plan the tag layout in screen units, as consecutive devices. (Includes the Alarm and Trend screens.)

■ Controllers

<AL Series>

Device	Max. No. of Consecutive Address	Device	Max. No. of Consecutive Address
Input signal IN	1 Word	Temperature value before high-point correction for IR/c 2-point correction value IA	1 Word
Decimal place in linear input UN		Temperature value after high-point correction for IR/c 2-point correction value IB	
With or without IR/c 2-point correction IR		Temperature value after low-point correction for IR/c 2-point correction value IC	
Control mode CM		Temperature value after low-point correction for IR/c 2-point correction value ID	
Filter constant FS		Transmission output scaling H and L DS	2 Words
Control LED illumination direction OD		Selling value for heater breakage current CA	1 Word
Control output direction OA		Warning sensitivity AD	
Burnout direction BO		Main temperature setting S1	
Output limit method LT		Warning 1: 1 point SP	
Warning type AK		Warning 1: Bands H and L SB	2 Words
Warning 1: Alarm warning code HA		Warning 2: 1 point DP	1 Word
Warning 1: Temperature warning code A11		Warning 2: Bands H and L DB	2 Words
Warning 2: Temperature warning code A21		Warning 3: 1 point TP	1 Word
Warning 3: Temperature warning code A31		Warning 3: Bands H and L TB	2 Words
Warning LED illumination direction LE	Output method OU	1 Word	
CT type CT	Number of warnings AN		
Upper and lower limits of selling range HL	RUN/STOP RS		
Linear input scaling H and L L	Auto tuning AT		
Upper and lower output limits OL	Key locking KY		
Proportional time PT	Mode locking ML		
Proportional band PB	POWER ON/OFF ON		
Integral action time IT	Current temperature PV		
Derivative action time DT	Operation panel MV		
ARW AR	Temperature control GC		
ON/OFF sensitivity DI	Warning GA	8 Words	
Manual reset RT	Panel data GP		
Sensor error correction SA			

A.2

Device Codes and Address Codes

Device codes and address codes are used to specify indirect addresses for the E-tags or K-tags.

The word addresses of data to be displayed are coded and stored in the word address specified by the E-tags and K-tags. (Code storage is done either by the PLC, or with T-tag and K-tags)

■ Controllers

<AL Series>

	Device	Word Address	Device Code (HEX)	Address Code
Word Device	Input signal	IN1	0000	Word Address-1
	Decimal place in linear input UN	UN1	0200	Word Address-1
	With or without IRr/c2 point correction	IR1	0400	Word Address-1
	Control mode	CM1	0600	Word Address-1
	Filter constant	FS1	0800	Word Address-1
	Control LED illumination direction	OD1	0A00	Word Address-1
	Control output direction	OA1	0C00	Word Address-1
	Burnout direction	BO1	0E00	Word Address-1
	Output limit method	LT1	1000	Word Address-1
	Warning type	AK1	1200	Word Address-1
	Warning 1: Alarm warning code	HA1	1400	Word Address-1
	Warning 1: Temperature warning code	A11	1600	Word Address-1
	Warning 2: Temperature warning code	A21	1800	Word Address-1
	Warning 3: Temperature warning code	A31	1A00	Word Address-1
	Warning LED illumination direction	LE1	1C00	Word Address-1
	CT type	CT1	1E00	Word Address-1
	Upper and lower limits of setting range	HL1 ~	2000	Word Address-1
	Linear input scaling	L1 ~	2200	Word Address-1
	Upper and lower output limits	OL1 ~	2400	Word Address-1
	Proportional time	PT1	2600	Word Address-1
	Proportional band	PB1	2800	Word Address-1
	Integral action time	IT1	2A00	Word Address-1
	Derivative action time	DT1	2C00	Word Address-1
	ARW	AR1	2E00	Word Address-1
	ON/OFF sensitivity	DI1	3000	Word Address-1
	Manual resetting	RT1	3200	Word Address-1
	Sensor error correction	SA1	3400	Word Address-1
	Temperature value before high-point correction for IRr/c2 point correction value	IA1	3600	Word Address-1
	Temperature value after high-point correction for IRr/c2 point correction value	IB1	3800	Word Address-1
	Temperature value after low-point correction for IRr/c2 point correction value	IC1	3A00	Word Address-1
	Temperature value after low-point correction for IRr/c2 point correction value	ID1	3C00	Word Address-1
	Transmission output scaling H and L	DS1 ~	3E00	Word Address-1
Setting value for heater breakage current	CA1	4200	Word Address-1	