Pro-face

Digital
Human Machine Interface

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.

A   IDEC

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.)

■ PLCs

<FA Series>

Device	Max. No. of Consecutive Address
Input Relay XW	
Output Relay YW	
Internal Relay MW	
Shift Register RW	
Data Register D	
Control Register D	
Timer (setup value) TS	100 Words
Timer (current value) T	
Timer 10msec (current value) H	
Counter (setup value) CS	
Counter (current value) C	

<MICRO³>

Device	Max. No. of Consecutive Address
Input Relay X	2 Words
Output Relay Y	
Internal Relay M	13 Words
Shift Register R	4 Words
Timer (setup value) T	
Timer (calculated value) t	32 Words
Counter (setup value) C	
Counter (calculated value) c	
Data Register D	100 Words

<MICROSmart FC4A Series/OpenNet Controller FC3 Series>

Device	Max. No. of Consecutive Addresses
Input X	
Output Y	
Internal Relay M	120 words
Special Internal Relay M8	
Shift Register R	
Timer T	
Timer t	20 words
Counter C	
Counter c	
Data Register D	
Special Data Register D8	120 words
Link Register L	1 word

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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)

■ PLCs

\<FA Series\>

	Device	Word Address	Device code (HEX)	Address code
Bit Device	Input Relay	WX00~	8000	Save as word address value divided by 2.
	Output Relay	WY000~	8800	Save as word address value divided by 2.
	Internal Relay	WM000~	9000	Save as word address value divided by 2.
	Shift Register	WR000~	C000	Save as word address value divided by 16.
Word Device	Timer (set value)	TS000~	6800	Word Address
	Timer (current value)	T000~	6000	Word Address
	Timer 10msec (current value)	H000~	6400	Word Address
	Counter (set value)	CS000~	7800	Word Address
	Counter (current value)	C000~	7000	Word Address
	Data Register	D0000~	0000	Word Address
	Control Register	D3000~	0000	Word Address
	LS area	LS0000~	4000	Word Address

\<MICRO[3] (Micro Cube)\>

	Device	Word Address	Device code (HEX)	Address code
Bit Device	Input Relay	X0000~	8000	Save as word address value divided by 2.
	Output Relay	Y0000~	8800	Save as word address value divided by 2.
	Internal Relay	M0000~	9000	Save as word address value divided by 2.
	Shift Register	R0000~	C000	Save as word address value divided by 16.
Word Device	Timer (set value)	T0000~	6800	Word Address
	Timer (current value)	t0000~	6000	Word Address
	Counter (set value)	C0000~	7800	Word Address
	Counter (current value)	c0000~	7000	Word Address
	Data Register	D0000~	0000	Word Address
	LS area	LS0000~	4000	Word Address

<MICROSmart FC4A Series/OpenNet Controller FC3 Series>

	Device	Word Address	Device code (HEX)	Address code
Bit Device	Input	X000 ~	8000	Save as word address value divided by 2
	Output	Y000 ~	8800	Save as word address value divided by 2
	Internal Relay	M000 ~	9000	Save as word address value divided by 2
	Special Internal Relay	M800 ~	9800	Save as word address value divided by 2
	Shift Register	R0000 ~	C000	Save as word address value divided by 16
Word Device	Timer (setup value)	T0000 ~	6800	Word Address
	Timer (setup value)	t0000 ~	6000	Word Address
	Counter (elapsed value)	C0000 ~	7800	Word Address
	Counter (elapsed value)	c0000 ~	7000	Word Address
	Data Register	D0000 ~	0000	Word Address
	Special Data Register	D8000 ~	5000	Word Address
	Link Register	L0100 ~	2000	Word Address
	Enter Timer/Counter Setting Value	Q0	3000	Word Address
	LS Area	LS0000 ~	4000	Word Address

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