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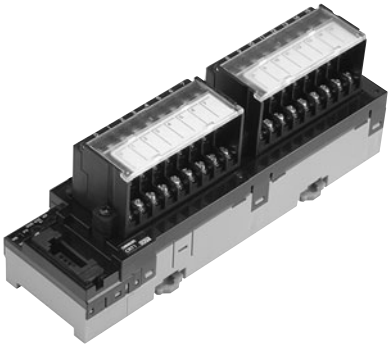
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Digital I/O Slave Units with Screw Terminal Blocks (3-tier Terminal Block)

CRT1-□D08TA(-1)/□D16TA(-1)/□D08TAH(-1)/□D16TAH(-1)

With the relay terminal blocks, doubling up wires on terminals is not necessary! Smart Slave Units with Easy-to-understand Wiring Locations with One Common for Every Point.



Doubling up wires on terminals is unnecessary and wiring locations are easy to understand with these Smart Slaves with 3-tier Terminal Blocks.

- Easy-to-understand wiring. No doubling up of wires. Easy-to-understand wiring locations.
- Simplify startup with the communications power supply monitor (Smart function).
- Collect various preventive maintenance data required to improve productivity, such as information on equipment deterioration due to aging and equipment operating time data (Smart function).
- The communications baud rate is set without using switches and addresses are set using rotary switches, so setting errors are reduced.
- Communications connector and removable I/O terminal block enable maintenance without disconnecting wiring.

Ordering Information

Name	Specifications				Model
Three-tier Screw Terminal Block	Inputs	8 inputs	NPN	Without Short-circuit and Disconnected Line Detection	CRT1-ID08TA
			PNP		CRT1-ID08TA-1
	Outputs	8 outputs	NPN		CRT1-OD08TA
			PNP		CRT1-OD08TA-1
	Inputs	16 inputs	NPN		CRT1-ID16TA
			PNP		CRT1-ID16TA-1
	Outputs	16 outputs	NPN		CRT1-OD16TA
			PNP		CRT1-OD16TA-1
	Inputs/ Outputs	8 inputs/ 8 outputs	NPN		CRT1-MD16TA
			PNP		CRT1-MD16TA-1
	Inputs	8 inputs	NPN	With Short-circuit and Disconnected Line Detection	CRT1-ID08TAH
			PNP		CRT1-ID08TAH-1
	Outputs	8 outputs	NPN		CRT1-OD08TAH
			PNP		CRT1-OD08TAH-1
	Inputs	16 inputs	NPN		CRT1-ID16TAH
			PNP		CRT1-ID16TAH-1
	Outputs	16 outputs	NPN		CRT1-OD16TAH
			PNP		CRT1-OD16TAH-1
	Inputs/ Outputs	8 inputs/ 8 outputs	NPN		CRT1-MD16TAH
			PNP		CRT1-MD16TAH-1

Performance Specifications

For Basic Performance Specifications of Slave Units, refer to page 26.

Input Section Specifications

● Eight-point Input Units (3-tier Terminal Block)

Item	Specification			
Model	CRT1-ID08TA	CRT1-ID08TA-1	CRT1-ID08TAH-1	CRT1-ID08TAH-1
I/O capacity	8 inputs			
Internal I/O common	NPN	PNP	NPN	PNP
ON voltage	15 VDC min. (between each input terminal and the V terminal)	15 VDC min. (between each input terminal and the G terminal)	10.5 VDC min. (between each input terminal and the V terminal)	10.5 VDC min. (between each input terminal and the G terminal)
OFF voltage	5 VDC max. (between each input terminal and the V terminal)	5 VDC max. (between each input terminal and the G terminal)	---	---
OFF current	1.0 mA max.			
Input current	At 24 VDC: 6.0 mA max./input At 17 VDC: 3.0 mA min./input			
ON delay	1.5 ms max.			
OFF delay	1.5 ms max.			
Power supply short-circuit detection	---		Operates at 50 mA/point min.	
Disconnection detection	---		Operates at 0.3 mA/point max.	
Number of circuits per common	8 inputs/common			
Isolation method	Photocoupler			
Input indicator	LED (yellow)			
Installation	DIN Track			
Power supply type	Multi-power supply			
Current supplied to input devices	100 mA/point		50 mA/point	
Communications power supply current consumption	30 mA max. for 24-VDC power supply voltage 50 mA max. for 14-VDC power supply voltage		35 mA max. for 24-VDC power supply voltage 60 mA max. for 14-VDC power supply voltage	
I/O power supply current consumption	5 mA max. for 24-VDC power supply voltage		25 mA max. for 24-VDC power supply voltage	
Weight	190 g max.		200 g max.	

● Sixteen-point Input Units (3-tier Terminal Block)

Item	Specification			
Model	CRT1-ID16TA	CRT1-ID16TA-1	CRT1-ID16TAH	CRT1-ID16TAH-1
I/O capacity	16 inputs			
Internal I/O common	NPN	PNP	NPN	PNP
ON voltage	15 VDC min. (between each input terminal and the V terminal)	15 VDC min. (between each input terminal and the G terminal)	10.5 VDC min. (between each input terminal and the V terminal)	10.5 VDC min. (between each input terminal and the G terminal)
OFF voltage	5 VDC max. (between each input terminal and the V terminal)	5 VDC max. (between each input terminal and the G terminal)	---	---
OFF current	1.0 mA max.			
Input current	At 24 VDC: 6.0 mA max./input At 17 VDC: 3.0 mA min./input			
ON delay	1.5 ms max.			
OFF delay	1.5 ms max.			
Power supply short-circuit detection	---		Operates at 50 mA/point min.	
Disconnection detection	---		Operates at 0.3 mA/point max.	
Number of circuits per common	8 inputs/common			
Isolation method	Photocoupler			
Input indicator	LED (yellow)			
Installation	DIN Track			
Power supply type	Multi-power supply			
Communications power supply current consumption	40 mA max. for 24-VDC power supply voltage 55 mA max. for 14-VDC power supply voltage		40 mA max. for 24-VDC power supply voltage 70 mA max. for 14-VDC power supply voltage	
I/O power supply current consumption	5 mA max. for 24-VDC power supply voltage		25 mA max. for 24-VDC power supply voltage	
Weight	330 g max.		340 g max.	

Output Section Specifications

● Eight-point Output Units (3-tier Terminal Block)

Item	Specification			
Model	CRT1-OD08TA	CRT1-OD08TA-1	CRT1-OD08TAH	CRT1-OD08TAH-1
I/O capacity	8 outputs			
Internal I/O common	NPN	PNP	NPN	PNP
Rated output current	0.5 A/output, 2 A/common			
Residual voltage	1.2 V max. (0.5 A DC, between each output terminal and the G terminal)	1.2 V max. (0.5 A DC, between each output terminal and the V terminal)	1.2 V max. (0.5 A DC, between each output terminal and the G terminal)	1.2 V max. (0.5 A DC, between each output terminal and the V terminal)
Leakage current	0.1 mA max.			
ON delay	0.5 ms max.			
OFF delay	1.5 ms max.			
Load short-circuit detection	---		Supported.	
Disconnection detection	---		Operates at 3 mA/point max. (Does not operate at over 3 mA.)	
Number of circuits per common	8 outputs/common			
Isolation method	Photocoupler			
Output indicators	LED (yellow)			
Installation	DIN Track			
Power supply type	Multi-power supply			
Current supplied to output devices	100 mA/point			
Communications power supply current consumption	35 mA max. for 24-VDC power supply voltage 55 mA max. for 14-VDC power supply voltage			
I/O power supply current consumption	15 mA max. for 24-VDC power supply voltage		15 mA max. for 24-VDC power supply voltage	35 mA max. for 24-VDC power supply voltage
Output handling for communications errors	Select either hold or clear from CX-Integrator.			
Weight	190 g max.			

● Sixteen-point Output Unit (3-tier Terminal Block)

Item	Specification			
Model	CRT1-OD16TA	CRT1-OD16TA-1	CRT1-OD16TAH	CRT1-OD16TAH-1
I/O capacity	16 outputs			
Internal I/O common	NPN	PNP	NPN	PNP
Rated output current	0.5 A/output, 2 A/common			
Residual voltage	1.2 V max. (0.5 A DC, between each output terminal and the G terminal)	1.2 V max. (0.5 A DC, between each output terminal and the V terminal)	1.2 V max. (0.5 A DC, between each output terminal and the G terminal)	1.2 V max. (0.5 A DC, between each output terminal and the V terminal)
Leakage current	0.1 mA max.			
ON delay	0.5 ms max.			
OFF delay	1.5 ms max.			
Number of circuits per common	8 outputs/common			
Load short-circuit detection	---		Supported.	
Disconnection detection	---		Operates at 3 mA/point max. (Does not operate at over 3 mA.)	
Isolation method	Photocoupler			
Output indicators	LED (yellow)			
Installation	DIN Track			
Power supply type	Multi-power supply			
Communications power supply current consumption	45 mA max. for 24-VDC power supply voltage 65 mA max. for 14-VDC power supply voltage		40 mA max. for 24-VDC power supply voltage 70 mA max. for 14-VDC power supply voltage	
I/O power supply current consumption	15 mA max. for 24-VDC power supply voltage			35 mA max. for 24-VDC power supply voltage
Output handling for communications errors	Select either hold or clear from CX-Integrator.			
Weight	330 g max.			

Input and Output Section Specifications

●8-point Input and 8-point Output Units (3-tier Terminal Block)

Common Specifications

Item	Specification			
Model	CRT1-MD16TA	CRT1-MD16TA-1	CRT1-MD16TAH	CRT1-MD16TAH-1
Installation	DIN Track			
Communications power supply current consumption	40 mA max. for 24-VDC power supply voltage 60 mA max. for 14-VDC power supply voltage		40 mA max. for 24-VDC power supply voltage 70 mA max. for 14-VDC power supply voltage	
Weight	330 g max.		340 g max.	

Input Section Specifications

Item	Specification			
Model	CRT1-MD16TA	CRT1-MD16TA-1	CRT1-MD16TAH	CRT1-MD16TAH-1
I/O capacity	8 inputs			
Internal I/O common	NPN	PNP	NPN	PNP
ON voltage	15 VDC min. (between each input terminal and the V terminal)	15 VDC min. (between each input terminal and the G terminal)	10.5 VDC min. (between each input terminal and the V terminal)	10.5 VDC min. (between each input terminal and the G terminal)
OFF voltage	5 VDC max. (between each input terminal and the V terminal)	5 VDC max. (between each input terminal and the G terminal)	---	---
OFF current	1.0 mA max.			
Input current	At 24 VDC: 6.0 mA max./input At 17 VDC: 3.0 mA min./input			
ON delay	1.5 ms max.			
OFF delay	1.5 ms max.			
Power supply short-circuit detection	---		Operates at 50 mA/point min.	
Disconnection detection	---		Operates at 0.3 mA/point max.	
Number of circuits per common	8 inputs/common			
Isolation method	Photocoupler			
Input indicator	LED (yellow)			
Power supply type	Multi-power supply			
I/O power supply current consumption	5 mA max. for 24-VDC power supply voltage		25 mA max. for 24-VDC power supply voltage	

Output Section Specifications

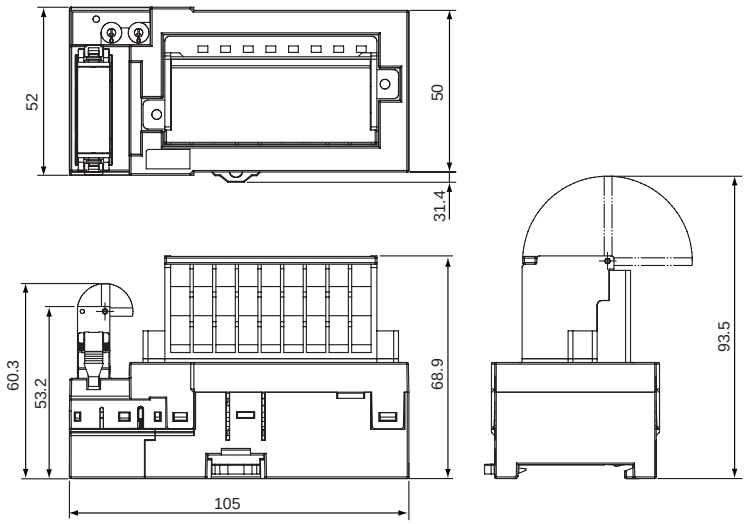
Item	Specification			
Model	CRT1-MD16TA	CRT1-MD16TA-1	CRT1-MD16TAH	CRT1-MD16TAH-1
I/O capacity	8 outputs			
Internal I/O common	NPN	PNP	NPN	PNP
Rated output current	0.5 A/output, 2 A/common			
Residual voltage	1.2 V max. (0.5 A DC, between each output terminal and the G terminal)	1.2 V max. (0.5 A DC, between each output terminal and the V terminal)	1.2 V max. (0.5 A DC, between each output terminal and the G terminal)	1.2 V max. (0.5 A DC, between each output terminal and the V terminal)
Leakage current	0.1 mA max.			
ON delay	0.5 ms max.			
OFF delay	1.5 ms max.			
Load short-circuit detection	---		Supported.	
Disconnection detection	---		Operates at 3 mA/point max. (Does not operate at over 3 mA.)	
Number of circuits per common	8 outputs/common			
Isolation method	Photocoupler			
Output indicators	LED (yellow)			
I/O power supply current consumption	15 mA max. for 24-VDC power supply voltage			35 mA max. for 24-VDC power supply voltage
Output handling for communications errors	Select either hold or clear from CX-Integrator.			

Dimensions

(Unit: mm)

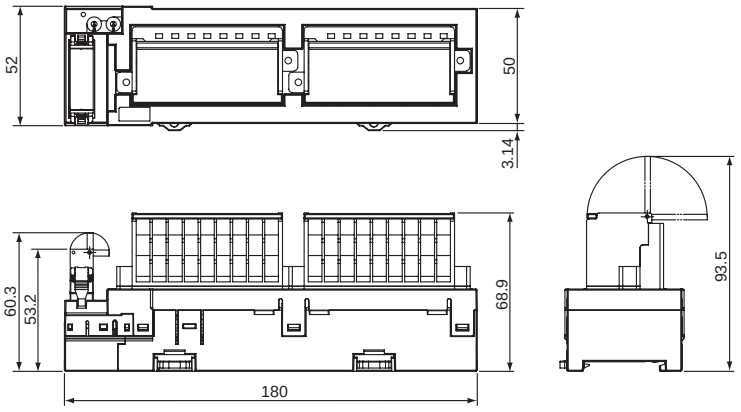
CRT1-ID08TA (-1)
CRT1-OD08TA(-1)

When a DCN4-TB4 Open Type Connectors Is Mounted



CRT1-ID16TA(-1)
CRT1-OD16TA(-1
CRT1-MD16TA(-1)

When a DCN4-TB4 Open Type Connectors Is Mounted



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