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With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

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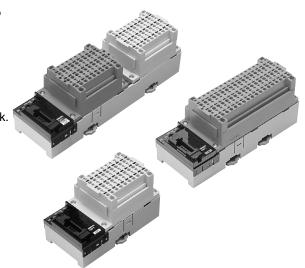


**Digital I/O Slaves Units with Clamp Terminals** 

# CRT1- $\square$ D08SL(-1)/ $\square$ D16SL(-1)

# Screw-less Terminal Wiring Further Reduces Wiring Work and Saves Labor at the Production Site.

- Screw-less (M3) design reduces the need for extra tightening.
- Removable terminal block gives powerful support to maintenance work.
- One-step wiring. Wire simply by inserting the ferrules.
- Applicable wire: AWG24 to AWG16 (cross-section: 0.2 to 1.25 mm²)



#### **Ordering Information**

Name		Specifications		Model
	Innuta	Q innute	NPN	CRT1-ID08SL
	Inputs	outs 8 inputs	PNP	CRT1-ID08SL-1
	Outputo	O outpute	NPN	CRT1-OD08SL
Clamp Terminals	Outputs	8 outputs	PNP	CRT1-OD08SL-1
	lanuta	16 inputs	NPN	CRT1-ID16SL
	Inputs	16 inputs	PNP	CRT1-ID16SL-1
	Outpute	16 autouta	NPN	CRT1-OD16SL
	Outputs	16 outputs	PNP	CRT1-OD16SL-1
	Inputs/	8 inputs/	NPN	CRT1-MD16SL
	Outputs		PNP	CRT1-MD16SL-1

Slave External I/O Connections in the appendix for applicable ferrules.

#### **Performance Specifications**

For Basic Performance Specifications of Slave Units, refer to page 32.

#### **Input Section Specifications**

#### ● Eight-point Input Units

Item	Specification		
Model	CRT1-ID08SL	CRT1-ID08SL-1	
I/O capacity	8 inputs		
Internal I/O common	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)	
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 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.		
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/input		
Communications power supply current consumption		C power supply voltage C power supply voltage	
I/O power supply current consumption	15 mA max. for 24-VDC power supply voltage		
Weight	170 g max.		

#### ● Sixteen-point Input Units

Item	Specification		
Model	CRT1-ID16SL	CRT1-ID16SL-1	
I/O capacity	16 inputs		
Internal I/O common	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)	
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 max./input		
ON delay	1.5 ms max.		
OFF delay	1.5 ms max.		
Number of circuits per common	16 inputs/common		
Isolation method	Photocoupler		
Input indicator	LED (yellow)		
Installation	DIN Track mounting		
Power supply type	Multi-power supply		
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		
Weight	250 g max.		

#### **Output Section Specifications**

#### ● Eight-point Output Units

Item	Specification	
Model	CRT1-OD08SL	CRT1-OD08SL-1
I/O capacity	8 outputs	
Internal I/O common	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)
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	
Isolation method	Photocoupler	
Output indicators	LED (yellow)	
Installation	DIN Track	
Power supply type	Multi-power supply	
Current supplied to output devices	100 mA/output	
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	25 mA max. for 24-VDC power supply voltage	
Output handling for communications errors	Select either hold or clear from CX-Integrator.	
Weight	170 g max.	

#### ● Sixteen-point Output Unit

Item	Specification		
Model	CRT1-OD16SL	CRT1-OD16SL-1	
I/O capacity	16 outputs		
Internal I/O common	NPN	PNP	
Rated output current	0.5 A/output, 4 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)	
Leakage current	0.1 mA max.		
ON delay	0.5 ms max.	0.5 ms max.	
OFF delay	1.5 ms max.		
Number of circuits per common	16 outputs/common		
Isolation method	Photocoupler		
Output indicators	LED (yellow)		
Installation	DIN Track mounting		
Power supply type	Multi-power supply		
Communications power supply current consumption	35 mA max. for 24-VDC power supply voltage 60 mA max. for 14-VDC power supply voltage		
I/O power supply current consumption	30 mA max. for 24-VDC power supply voltage		
Output handling for communications errors	Hold or clear can be selected. (CompoNet Support Software)		
Weight	250 g max.		

#### **Input and Output Section Specifications**

## ● Eight-point Input and Eight-point Output Units Common Specifications

Item	Specification	
Model	CRT1-MD16SL	CRT1-MD16SL-1
Installation	DIN Track	
Communications power supply current consumption	35 mA max. for 24-VDC power supply voltage 60 mA max. for 14-VDC power supply voltage	
Weight	290 g max.	

#### **Input Specifications**

Item	Specification	
Model	CRT1-MD16SL	CRT1-MD16SL-1
I/O capacity	8 inputs	
Internal I/O common	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)
OFF voltage	5 VDC min. (between each input terminal and the V terminal)	5 VDC min. (between each input terminal and the G terminal)
OFF current	1.0 mA max.	
Input current	At 24 VDC: 6.0 mA n At 11 VDC: 3.0 mA n	
ON delay	1.5 ms max.	
OFF delay	1.5 ms max.	
Number of circuits per common	8 inputs/common	
Isolation method	Photocoupler	
Input indicator	LED (yellow)	
Power supply type	Multi-power supply	
Current supplied to input devices	100 mA/input	
I/O power supply current consumption	15 mA max. for 24-VDC power supply voltage	

#### **Output Specifications**

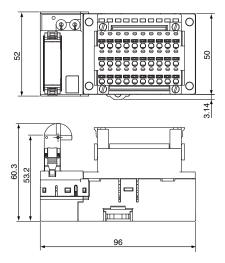
Item	Specification		
Model	CRT1-MD16SL	CRT1-MD16SL-1	
I/O capacity	8 outputs	8 outputs	
Internal I/O common	NPN	PNP	
Rated output current	0.5 A/output, 2 A/common		
Residual voltage	1.2 V max. (0.5 A DC, between each output terminal and the G terminal)	1.2 V max. (0.5 A DC, between each output terminal and the V terminal)	
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		
Isolation method	Photocoupler		
Output indicators	LED (yellow)		
Power supply type	Multi-power supply		
Current supplied to output devices	100 mA/output		
I/O power supply current consumption	25 mA max. for 24-VDC power supply voltage		
Output handling for communications errors	Select either hold or clear from CX-Integrator.		



Dimensions (Unit: mm)

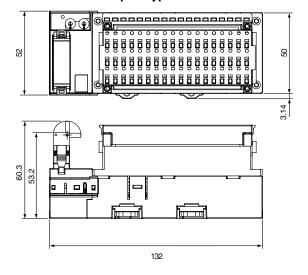
CRT1-ID08SL (-1) CRT1-OD08SL (-1)

#### When a DCN4-TB4 Open Type Connectors Is Mounted



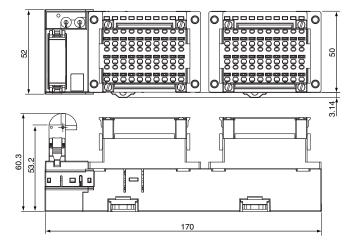
CRT1-ID16SL (-1) CRT1-OD16SL (-1)

#### When a DCN4-TB4 Open Type Connectors Is Mounted



CRT1-MD16SL (-1)

When a DCN4-TB4 Open Type Connectors Is Mounted



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