Bit Slave Units with e-CON Connectors

CRT1B-□D02S(-1)

Simple and Intelligent Bit Slaves with Industry-standard e-CON connectors.

Slave Units capable of 2-point bit-level distribution.
The I/O power supply is supplied from the communications power in the previously connected flat cable, and has a short-circuit detection function for protection.

- Industry-standard e-CON connectors
- Short-circuit protection safeguards the network from I/O short circuits.
- Simple communications connections with flat cable and connectors.
- Bit-level distribution to support essentially any application.

Ordering Information

Name	Specifications			Model
Bit Slave Units with e-CON Connectors	Inputs	2 inputs	NPN	CRT1B-ID02S
			PNP	CRT1B-ID02S-1
	Outputs	2 outputs	NPN	CRT1B-OD02S
			PNP	CRT1B-OD02S-1

Performance Specifications

For Basic Performance Specifications of Slave Units, refer to page 30.

Input Section Specifications

Item	Specification	
Model	CRT1B-ID02S	CRT1B-ID02S-1
I/O capacity	2 inputs	
Internal I/O common	NPN	PNP
ON voltage	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	3.0 mA max./input (at 10.5 VDC)	
Sensor power supply voltage	Communications power supply voltage + 0 V (max.) Communications power supply voltage – 1 V (min.)	
ON delay	1.5 ms max.	
OFF delay	1.5 ms max.	
Number of circuits per common	2 inputs/common	
Power short-circuit detection	Supported	
Isolation method	No isolation	
Input indicators	LEDs (yellow)	
Degree of protection	IEC standard IP20	
Installation	Screw installation (M4)	
Power supply type	Network power supply	
Communications power supply current consumption *	65 mA max. for 24-VDC power supply voltage 80 mA max. for 14-VDC power supply voltage	45 mA max. for 24-VDC power supply voltage 65 mA max. for 14-VDC power supply voltage
Weight	70 g max.	

* The current consumption is for Bit Slave Unit communications current when all inputs are OFF, i.e., it does not include input device current consumption. The communications power supply is also used for the I/O power supply for sensors. Be sure to consider the sensor current consumption and the number of sensors connected in addition to the communications power.
The power supply current consumption is expressed by the following formula.
Communications power supply current consumption = Bit Slave Unit communications current consumption + (Bit Slave Unit input current x number of inputs used) + (sensor current consumption x number of sensors used)

Output Section Specifications

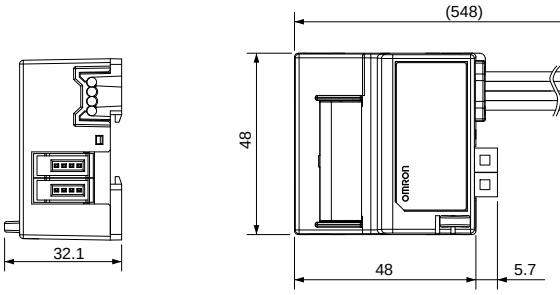
Item	Specification	
Model	CRT1B-OD02S	CRT1B-OD02S-1
I/O capacity	2 outputs	
Internal I/O common	NPN	PNP
Rated output current	0.2 A/output	
Load power supply voltage	Communications power supply voltage + 0 V (max.) Communications power supply voltage – 1.2 V (min.)	
Residual voltage	1.2 V max. (0.2 A DC, between each output terminal and the BS-	1.2 V max. (0.2 A DC, between each output terminal and the BS+
Leakage current	0.1 mA max.	
ON delay	0.5 ms max. 1.5 ms max.	
OFF delay		
Number of circuits per common	2 outputs/common	
Load power short-circuit detection	Supported	
Isolation method	No isolation	
Output indicators	LEDs (yellow)	
Degree of protection	IEC standard IP20	
Installation	Screw installation (M4)	
Power supply type	Network power supply	
Communications power supply current consumption *	55 mA max. for 24-VDC power supply voltage 75 mA max. for 14-VDC power supply voltage	55 mA max. for 24-VDC power supply voltage 70 mA max. for 14-VDC power supply voltage
Weight	59 g max.	

* The current consumption is for Bit Slave Unit communications current when all outputs are OFF, i.e., it does not include output device load current consumption. The communications power supply is also used for the I/O power supply for actuators. Be sure to consider the actuator load current consumption and the number of actuators connected in addition to the communications power.
The power supply current consumption is expressed by the following formula.
Communications power supply current consumption = Bit Slave Unit communications current consumption + (Bit Slave Unit input current x number of inputs used) + (actuator load current x number of actuators used)

Dimensions

(Unit: mm)

CRT1B-ID02S(-1)
CRT1B-OD02S(-1)



Figures in parentheses are reference dimensions.