Transistor Remote I/O Terminals with 3-tier Terminal Blocks

DRT2-□D16TA(-1)

A Smart Slave with a 3-tier Terminal Block That Means Wiring Locations Are Easy to Understand with No Sharing of Terminals.

- Easy wiring with no sharing of terminals. Easy-to-understand wiring locations.
- No relay terminal block terminals required.
- Detachable cassette-type circuit sections.

Smart Slave Functions

- Operation time monitor
- Contact operation counter
- Unit conduction time monitor
- Total ON time monitor
- Unit comments
- Connected device comments
- Network power supply voltage monitor
- I/O power supply monitor function
- Communications error log function
- Input filter (input or I/O only)
- Power-ON inrush current protection (input or I/O only)
- Removable terminal block
- Communications speed auto-detection
- No need to wire Unit power supply
- Last maintenance date

Ordering Information

Specifications			I/O connections	Rated internal circuit power supply voltage	I/O power supply voltage	Model
Inputs	NPN (+ common)	16 points	M3 screw terminals	Supplied from Basic Unit.	24 VDC	DRT2-ID16TA
	PNP (- common)					DRT2-ID16TA-1
Outputs	NPN (- common)					DRT2-OD16TA
	PNP (+ common)					DRT2-OD16TA-1
I/O	NPN (input: + common, output: - common)	Input: 8 points/ Output: 8 points				DRT2-MD16TA
	PNP (input: - common, output: + common)					DRT2-MD16TA-1

General Specifications

Communications power supply voltage	11 to 25 VDC (Supplied from communications connector)
Unit power supply voltage	80 mA
Noise immunity	Conforms to IEC61000-4-4, 2 kV (power line)
Vibration resistance	10 to 60 Hz, 0.7-mm double amplitude, 60 to 150 Hz, 50 m/s² for 80 min each in the X, Y, and Z directions
Shock resistance	150 m/s² (3 times each in 6 directions on 3 axes)
Dielectric strength	500 VAC (between isolated circuits)
Insulation resistance	20 MΩ min. (between isolated circuits)
Ambient operating temperature	-10°C to 55°C
Ambient operating humidity	25% to 85% (with no condensation)
Ambient atmosphere	No corrosive gases
Ambient storage temperature	-25°C to 65°C
Mounting method	DIN 35 mm-track mounting, M4 screw mounting
Screw tightening torque	M2 (communications connector screws): 0.26 to 0.3 N·m M3 (screw terminals): 0.5 N·m M3 (screw terminals): 0.5 N·m M4 (unit mounting): 0.6 to 0.98 N·m
Weight	300 g max.

Input Specifications

● 16-point Inputs Terminals with Transistors

Item / Model	DRT2-ID16TA	DRT2-ID16TA-1
Internal I/O common	NPN	PNP
I/O points	16 inputs	
ON voltage	15 VDC min. (between input and V terminal)	15 VDC min. (between input and G terminal)
OFF voltage	5 VDC max. (between input and V terminal)	5 VDC max. (between input and G terminal)
OFF current	1.0 mA max.	
Input current	24 VDC: 6.0 mA max./point 17 VDC: 3.0 mA max./point	
ON delay time	1.5 ms max.	
OFF delay time	1.5 ms max.	
Number of circuits per common	8 per common	

● 8-point Inputs/8-point Outputs Terminals with Transistors

Item / Model	DRT2-MD16TA	DRT2-MD16TA-1
Internal I/O common	NPN	PNP
I/O points	8 inputs	
ON voltage	15 VDC min. (between input and V terminal)	15 VDC min. (between input and G terminal)
OFF voltage	5 VDC max. (between input and V terminal)	5 VDC max. (between input and G terminal)
OFF current	1.0 mA max.	
Input current	24 VDC: 6.0 mA max./point 17 VDC: 3.0 mA max./point	
ON delay time	1.5 ms max.	
OFF delay time	1.5 ms max.	
Number of circuits per common	8 per common	

Output Specifications

● 16-point Outputs Terminals with Transistors

Item / Model	DRT2-OD16TA	DRT2-OD16TA-1
Internal I/O common	NPN	PNP
I/O points	16 outputs	
Rated output current	0.5 A/point	
Residual voltage	1.2 VDC max. (0.5 A DC between output and G terminal)	1.2 VDC max. (0.5 A DC between output and V terminal)
Leakage current	0.1 mA max.	
ON delay time	0.5 ms max.	
OFF delay time	1.5 ms max.	
Number of circuits per common	8 per common	

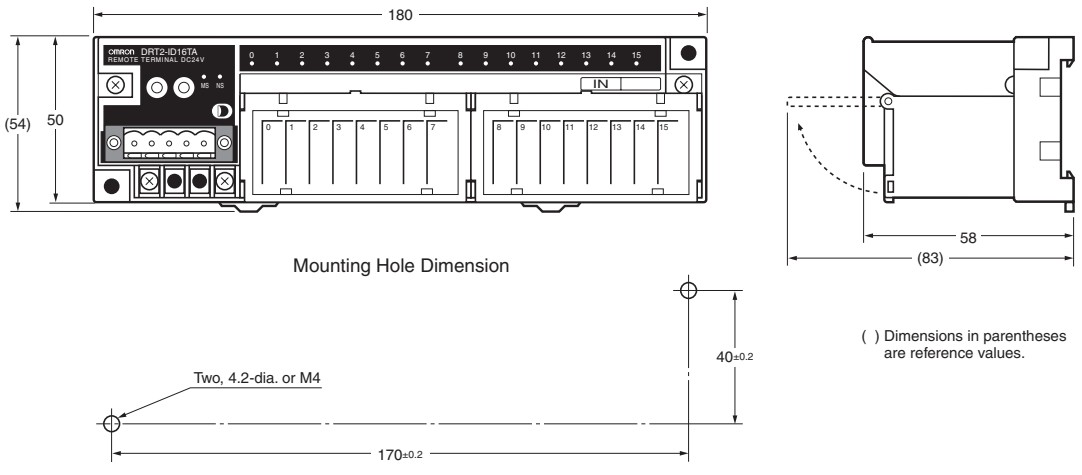
● 8-point Inputs/8-point Outputs Terminals with Transistors

Item / Model	DRT2-MD16TA	DRT2-MD16TA-1
Internal I/O common	NPN	PNP
I/O points	8 outputs	
Rated output current	0.5 A/point	
Residual voltage	1.2 VDC max. (0.5 A DC between output and G terminal)	1.2 VDC max. (0.5 A DC between output and V terminal)
Leakage current	0.1 mA max.	
ON delay time	0.5 ms max.	
OFF delay time	1.5 ms max.	
Number of circuits per common	8 per common	

Dimensions

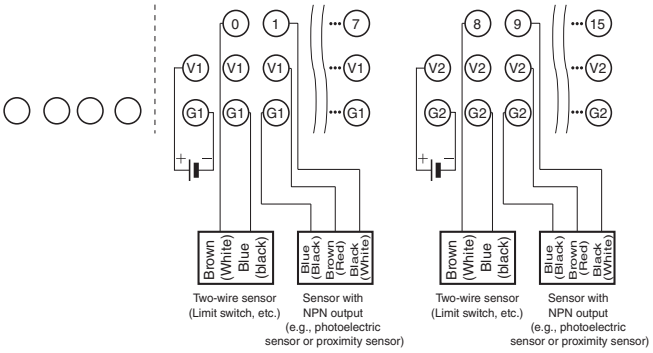
(Unit: mm)

DRT2-ID16TA(-1)
DRT2-OD16TA(-1)
DRT2-MD16TA(-1)

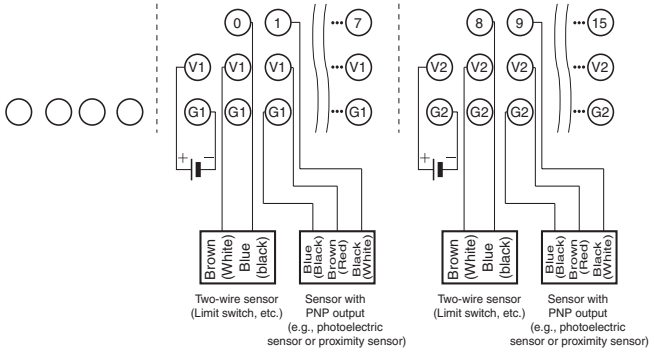


Wiring Diagrams

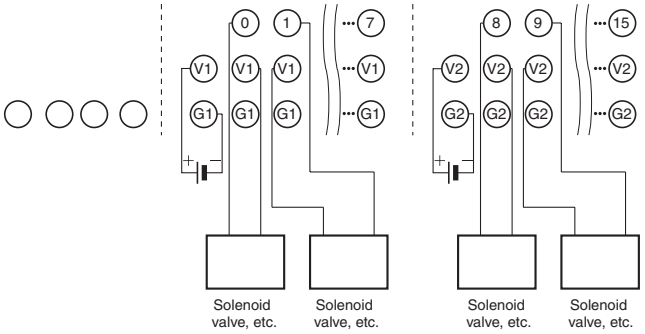
DRT2-ID16TA (NPN)



DRT2-ID16TA-1 (PNP)



DRT2-OD16TA (NPN)



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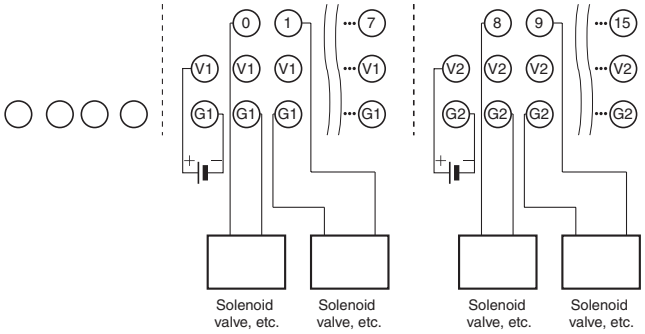
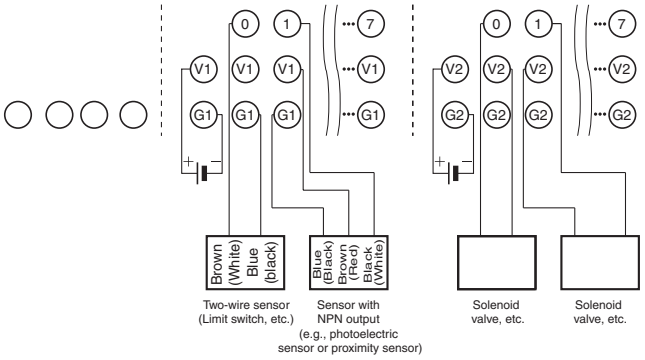
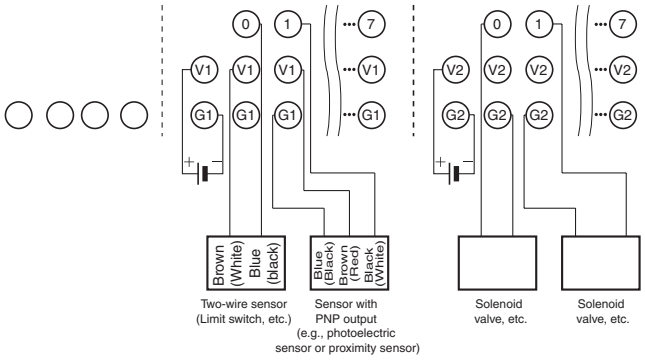


DRT2-MD16TA (NPN)



DRT2-MD16TA-1 (PNP)



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