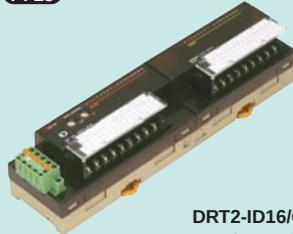


DRT2 Smart Slaves

■ Transistor Remote I/O Terminal

P. 18



DRT2-ID16/OD16(-1)
DRT2-MD16(-1)
DRT2-ID08/OD08(-1)
I/O Expansion Unit
XWT-ID16/OD16(-1)
XWT-ID08/OD08(-1)

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

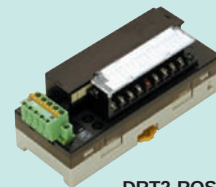
P. 28



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

■ Remote I/O Terminals with Relay Outputs

P. 26



DRT2-ROS16

■ MIL Connector Terminals with Transistor

P. 34



DRT2-ID32ML(-1)
DRT2-OD32ML(-1)
DRT2-MD32ML(-1)
DRT2-ID16ML(-1)
DRT2-ID16MLX(-1)
DRT2-OD16ML(-1)
DRT2-OD16MLX(-1)

■ e-CON connector Terminals

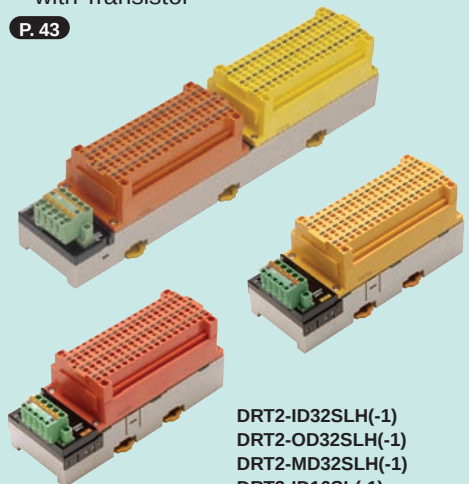
P. 31



DRT2-ID16S(-1)
DRT2-MD16S(-1)

■ Screw-less Clamp Terminals with Transistor

P. 43



DRT2-ID32SLH(-1)
DRT2-OD32SLH(-1)
DRT2-MD32SLH(-1)
DRT2-ID16SL(-1)
DRT2-ID16SLH(-1)
DRT2-OD16SL(-1)
DRT2-OD16SLH(-1)

■ Board Terminals with MIL connectors

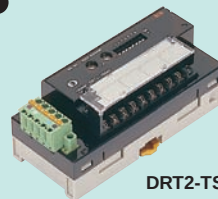
P. 39



DRT2-ID32B(-1)
DRT2-OD32B(-1)
DRT2-MD32B(-1)
DRT2-ID32BV(-1)
DRT2-OD32BV(-1)
DRT2-MD32BV(-1)

■ Temperature Input Terminals

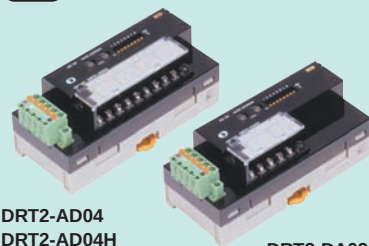
P. 60



DRT2-TS04T
DRT2-TS04P

■ Analog I/O Terminals

P. 57



DRT2-AD04
DRT2-AD04H

DRT2-DA02

■ Environment-resistive Terminals with Transistors (High-function Type)

P. 48



DRT2-ID08C(-1)
DRT2-OD08C(-1)
DRT2-HD16C(-1)

■ Environment-resistive Terminals with Transistors (Standard Type)

P. 51



DRT2-ID04CL(-1)
DRT2-OD04CL(-1)
DRT2-ID08CL(-1)
DRT2-OD08CL(-1)

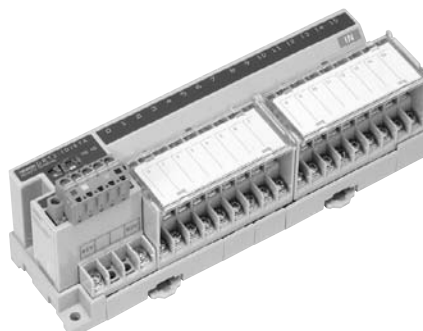
DRT2-MD16CL(-1)
DRT2-HD16CL(-1)
DRT2-WD16CL(-1)

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/s ² for 80 min each in the X, Y, and Z directions
Shock resistance	150 m/s ² (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	

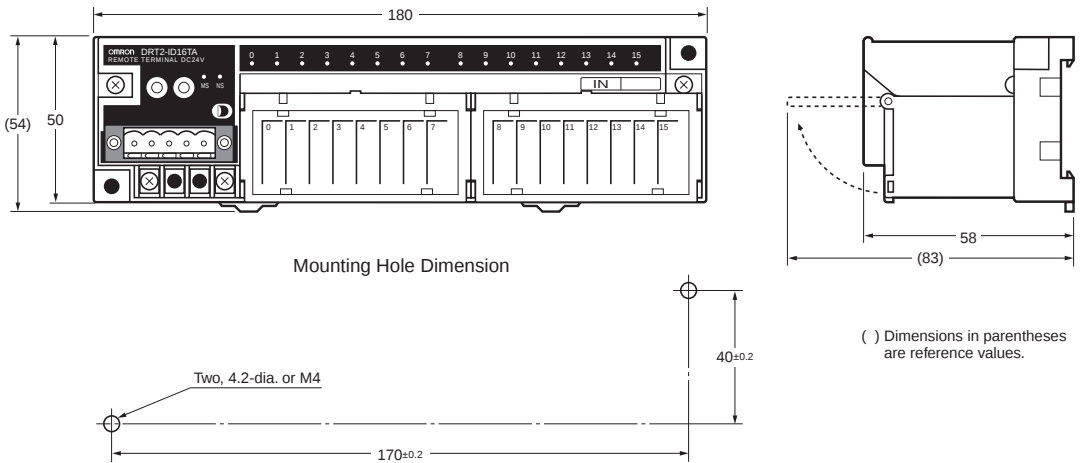
● 8-point Inputs/8-point Outputs Terminals with Transistors

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

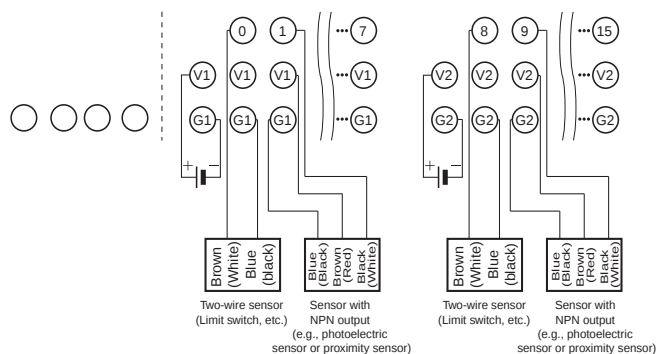
(Unit: mm)

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

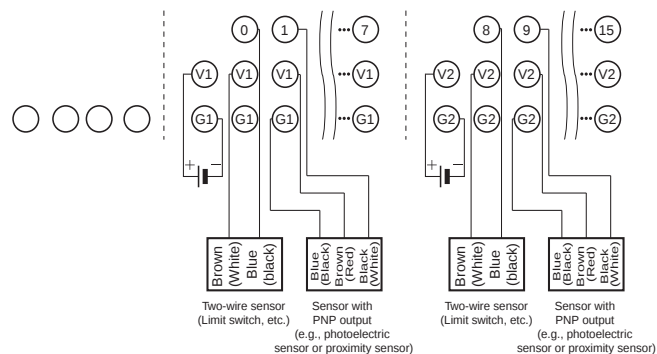


Wiring Diagrams

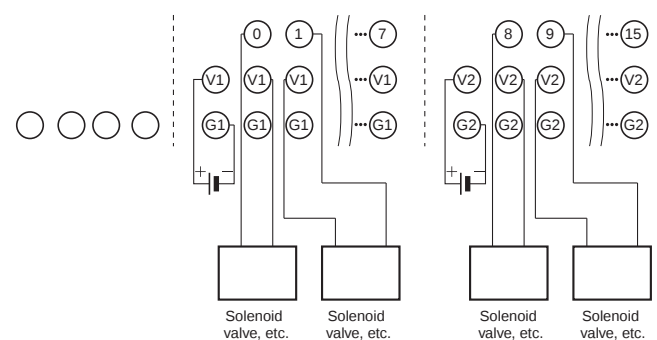
DRT2-ID16TA (NPN)



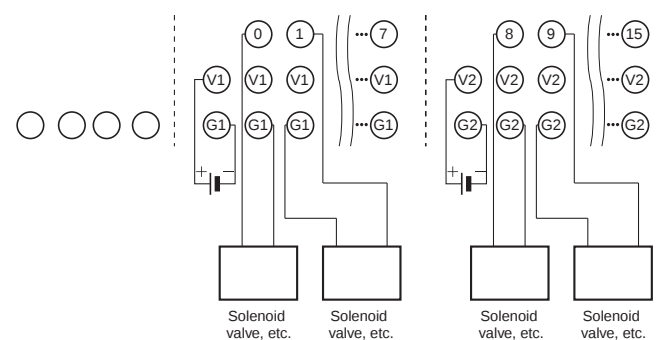
DRT2-ID16TA-1 (PNP)



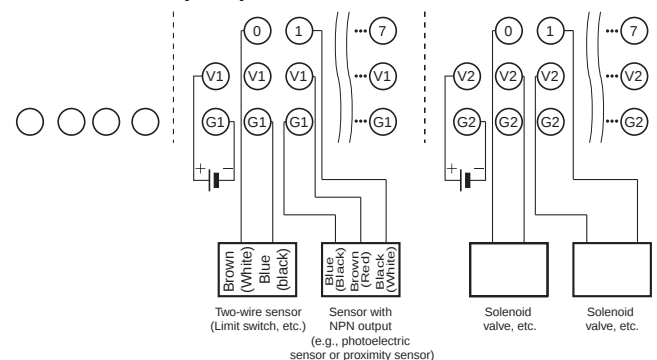
DRT2-OD16TA (NPN)



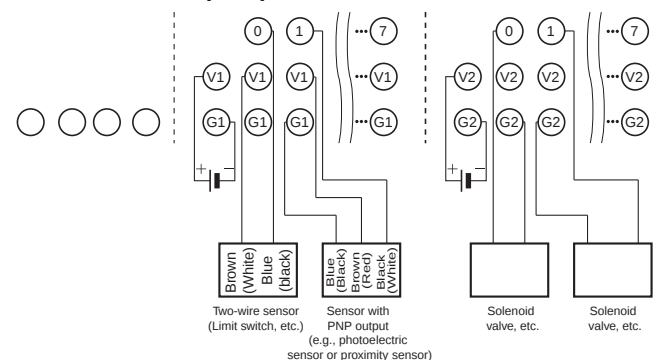
DRT2-OD16TA-1 (PNP)



DRT2-MD16TA (NPN)

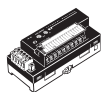
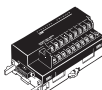
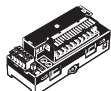
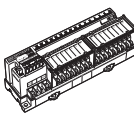


DRT2-MD16TA-1 (PNP)



Slaves

● Smart Slaves DRT2 Series

Product	Appearance	Specifications	Model	Standards
Remote I/O Terminals with Transistors		16 inputs NPN (+ common)	DRT2-ID16	UC1, N, CE
		16 inputs PNP (- common)	DRT2-ID16-1	
		16 outputs NPN (- common)	DRT2-OD16	
		16 outputs PNP (+ common)	DRT2-OD16-1	
		8 inputs NPN (+ common)	DRT2-ID08	UC1, CE
		8 inputs PNP (- common)	DRT2-ID08-1	
		8 outputs NPN (- common)	DRT2-OD08	
		8 outputs PNP (+ common)	DRT2-OD08-1	
		8 inputs/8 outputs NPN (+ common for inputs and - common for outputs)	DRT2-MD16	
		8 inputs/8 outputs PNP (- common for inputs and + common for outputs)	DRT2-MD16-1	
Remote I/O Terminal Expansion Units with Transistors		8 inputs NPN (+ common)	XWT-ID08	UC, UC1, N, CE
		8 inputs PNP (- common)	XWT-ID08-1	
		8 outputs NPN (- common)	XWT-OD08	
		8 outputs PNP (+ common)	XWT-OD08-1	
		16 inputs NPN (+ common)	XWT-ID16	
		16 inputs PNP (- common)	XWT-ID16-1	
		16 outputs NPN (- common)	XWT-OD16	
		16 outputs PNP (+ common)	XWT-OD16-1	
Remote I/O Terminal with Relays		16 outputs	DRT2-ROS16	UC1, N, CE
Remote I/O Terminals with 3-tier Terminal Blocks and Transistors		16 inputs NPN (+ common)	DRT2-ID16TA	UC1, CE
		16 inputs PNP (- common)	DRT2-ID16TA-1	
		16 outputs NPN (- common)	DRT2-OD16TA	
		16 outputs PNP (+ common)	DRT2-OD16TA-1	
		8 inputs/8 outputs NPN (+ common for inputs and - common for outputs)	DRT2-MD16TA	
		8 inputs/8 outputs PNP (- common for inputs and + common for outputs)	DRT2-MD16TA-1	
e-CON Connector Terminals		16 inputs NPN (+ common)	DRT2-ID16S	UC1, CE
		16 inputs PNP (- common)	DRT2-ID16S-1	CE
		8 inputs/8 outputs NPN (+ common for inputs and - common for outputs)	DRT2-MD16S	
		8 inputs/8 outputs PNP (- common for inputs and + common for outputs)	DRT2-MD16S-1	
MIL Connector Terminals (MIL Connector Terminals with Transistors)		32 inputs NPN (+ common)	DRT2-ID32ML	UC1, N, CE
		32 inputs PNP (- common)	DRT2-ID32ML-1	
		32 outputs NPN (- common)	DRT2-OD32ML	
		32 outputs PNP (+ common)	DRT2-OD32ML-1	
		16 inputs/16 outputs NPN (+ common for inputs and - common for outputs)	DRT2-MD32ML	UC1, CE
		16 inputs/16 outputs PNP (- common for inputs and + common for outputs)	DRT2-MD32ML-1	
		16 inputs NPN (+ common)	DRT2-ID16ML	
		16 inputs PNP (- common)	DRT2-ID16ML-1	
		16 outputs NPN (- common)	DRT2-OD16ML	
		16 outputs PNP (+ common)	DRT2-OD16ML-1	
		16 inputs NPN (+ common)	DRT2-ID16MLX	
		16 inputs PNP (- common)	DRT2-ID16MLX-1	
		16 outputs NPN (- common)	DRT2-OD16MLX	
		16 outputs PNP (+ common)	DRT2-OD16MLX-1	
Board Terminals with MIL Connectors (Parallel Mounting)		32 inputs NPN (+ common)	DRT2-ID32B	UC1, CE
		32 inputs PNP (- common)	DRT2-ID32B-1	
		32 outputs NPN (- common)	DRT2-OD32B	
		32 outputs PNP (+ common)	DRT2-OD32B-1	
		16 inputs/16 outputs NPN (+ common for inputs and - common for outputs)	DRT2-MD32B	
		16 inputs/16 outputs PNP (- common for inputs and + common for outputs)	DRT2-MD32B-1	
Board Terminals with MIL Connector (Perpendicular Mounting)		32 inputs NPN (+ common)	DRT2-ID32BV	UC1, CE
		32 inputs PNP (- common)	DRT2-ID32BV-1	
		32 outputs NPN (- common)	DRT2-OD32BV	
		32 outputs PNP (+ common)	DRT2-OD32BV-1	
		16 inputs/16 outputs NPN (+ common for inputs and - common for outputs)	DRT2-MD32BV	
		16 inputs/16 outputs PNP (- common for inputs and + common for outputs)	DRT2-MD32BV-1	