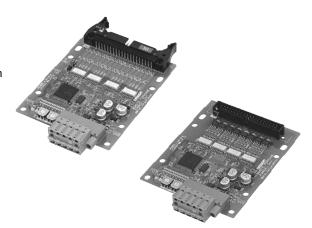
Board Terminals with MIL Connector

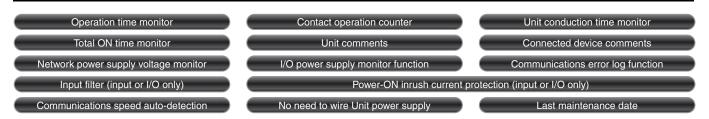
DRT2-\(\Box\) D32B(-1)/\(\Box\) D32BV(-1)

First Board-type Terminals for Smart Slaves!

- Easily modified to handle an array of I/O interfaces and eliminates much
- User boards attach easily to the DRT2- D32BV(-1) using screws.



Smart Slave Functions



Ordering Information

● Parallel Mounting MIL Connector

	Specifications		I/O connections	Rated internal circuit power supply voltage	Rated I/O power supply voltage	Model		
Inputs	NPN (+ common)	32 inputs						DRT2-ID32B
inputs	PNP (- common)	32 iriputs		Supplied from communications	24 VDC	DRT2-ID32B-1		
Outputs	NPN (- common)	- 32 outputs	MIL			DRT2-OD32B		
	PNP (+ common)		connector	connector.	24 VDC	DRT2-OD32B-1		
I/O	NPN (input: + common, output: - common)	16 inputs/ 16 outputs			1	DRT2-MD32B		
	PNP (input: - common, output: + common)				İ	DRT2-MD32B-1		

Perpendicular Mounting MIL Connector

	Specifications		I/O connections	Rated internal circuit power supply voltage	Rated I/O power supply voltage	Model
Inputs	NPN (+ common)	- 32 inputs	20 inputs	Supplied from communications		DRT2-ID32BV
iliputs	PNP (- common)				24 VDC	DRT2-ID32BV-1
Outouto	NPN (- common)	- 32 outputs	MIL			DRT2-OD32BV
Outputs	PNP (+ common)		connector	connector.	24 VDC	DRT2-OD32BV-1
1/0	NPN (input: + common, output: - common)	16 inputs/ 16 outputs	16 inputs/			DRT2-MD32BV
	PNP (input: - common, output: + common)					DRT2-MD32BV-1

General Specifications

Communications power supply voltage	11 to 25 VDC (Supplied from the communications connector.)		
Communications power supply current consumption	DRT2-ID32B(V)(-1) : 100 mA DRT2-OD32B(V)(-1) : 120 mA DRT2-MD32B(V)(-1) : 110 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	150m/s², 6 directions, 3 times each		
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 operating atmosphere	No corrosive gases		
Ambient storage temperature	-25°C to 65°C		
Mounting method	M4 screw mounting		
Weight	50 g max.		

Input Specifications

● 32-point Inputs Terminals with Connectors

Model Item	DRT2-ID32B DRT2-ID32BV	DRT2-ID32B-1 DRT2-ID32BV-1		
Internal I/O common	NPN	PNP		
I/O points	32 inputs			
ON voltage	17 VDC min. (between each input terminal and V)	17 VDC min. (between each input terminal and G)		
OFF voltage	5 VDC max. (between each input terminal and V)	5 VDC max. (between each input terminal and G)		
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	32 per common			

● 16-point Inputs/16-point Outputs Terminals with Connectors

Model Item	DRT2-MD32B DRT2-MD32BV	DRT2-MD32B-1 DRT2-MD32BV-1		
Internal I/O common	NPN	PNP		
I/O points	16 inputs			
ON voltage	17 VDC min. (between each input terminal and V)	17 VDC min. (between each input terminal and G)		
OFF voltage	5 VDC max. (between each input terminal and V)	5 VDC max. (between each input terminal and G)		
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.	nax.		
OFF delay time	1.5 ms max.			
Number of simultaneously inputs	16			
Number of circuits per common	16 per common			

Output Specifications

● 32-point Outputs Terminals with Connectors

Model Item	DRT2-OD32B DRT2-OD32BV	DRT2-OD32B-1 DRT2-OD32BV-1	
Internal I/O common	NPN	PNP	
I/O points	32 outputs		
Rated output current	0.3 A/point, 4 A/common *		
Residual voltage	1.2 VDC max. (0.3 A DC between output and G terminal)	1.2 VDC max. (0.3 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	32 per common		

The maximum total load current is 4 A.
The maximum current for the V and G terminals is 1 A per terminal. Do not exceed

these values.

● 16-point Inputs/16-point Outputs Terminals with Connectors

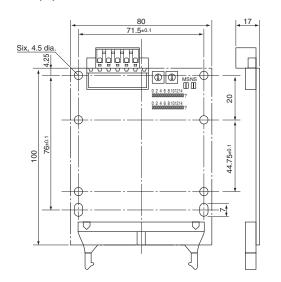
Model Item	DRT2-MD32B DRT2-MD32BV	DRT2-MD32B-1 DRT2-MD32BV-1	
Internal I/O common	NPN	PNP	
I/O points	16 outputs		
Rated output current	0.3 A/point, 2 A/common *		
Residual voltage	1.2 VDC max. (0.3 A DC between output and G terminal)	1.2 VDC max. (0.3 A DC between output and V terminal)	
Leakage current	0.1 mA max.		
ON delay time	0.5 ms max.		
OFF delay time	1.5 ms max.		
Number of circuits per common	16 per common		

The maximum total load current is 2 A.
The maximum current for the V and G terminals is 1 A per terminal. Do not exceed

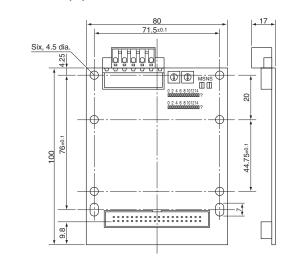


Dimensions (Unit: mm)

DRT2-ID32B(-1) DRT2-OD32B(-1) DRT2-MD32B(-1)

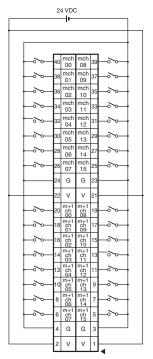


DRT2-ID32BV(-1) DRT2-OD32BV(-1) DRT2-MD32BV(-1)

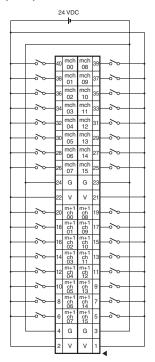


Wiring Diagrams

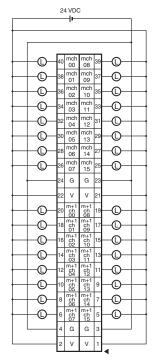
DRT2-ID32B DRT2-ID32BV (NPN)



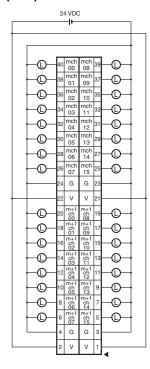
DRT2-ID32B-1 DRT2-ID32BV-1 (PNP)



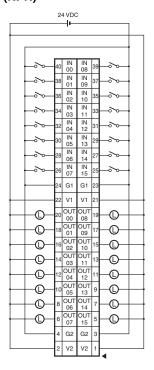
DRT2-OD32B DRT2-OD32BV (NPN)



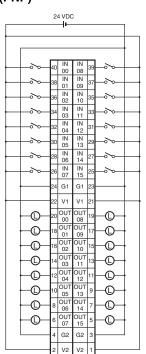
DRT2-OD32B-1 DRT2-OD32BV-1 (PNP)



DRT2-MD32B DRT2-MD32BV (NPN)



DRT2-MD32B-1 DRT2-MD32BV-1 (PNP)



Read and Understand This Catalog

Please read and understand this catalog before purchasing the products. Please consult your OMRON representative if you have any questions or comments.

Warranty and Limitations of Liability

WARRANTY

OMRON's exclusive warranty is that the products are free from defects in materials and workmanship for a period of one year (or other period if specified) from date of sale by OMRON.

OMRON MAKES NO WARRANTY OR REPRESENTATION, EXPRESS OR IMPLIED, REGARDING NON-INFRINGEMENT, MERCHANTABILITY, OR FITNESS FOR PARTICULAR PURPOSE OF THE PRODUCTS. ANY BUYER OR USER ACKNOWLEDGES THAT THE BUYER OR USER ALONE HAS DETERMINED THAT THE PRODUCTS WILL SUITABLY MEET THE REQUIREMENTS OF THEIR INTENDED USE. OMRON DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED.

LIMITATIONS OF LIABILITY

OMRON SHALL NOT BE RESPONSIBLE FOR SPECIAL, INDIRECT, OR CONSEQUENTIAL DAMAGES, LOSS OF PROFITS OR COMMERCIAL LOSS IN ANY WAY CONNECTED WITH THE PRODUCTS, WHETHER SUCH CLAIM IS BASED ON CONTRACT, WARRANTY, NEGLIGENCE, OR STRICT LIABILITY

In no event shall the responsibility of OMRON for any act exceed the individual price of the product on which liability is asserted.

IN NO EVENT SHALL OMRON BE RESPONSIBLE FOR WARRANTY, REPAIR, OR OTHER CLAIMS REGARDING THE PRODUCTS UNLESS OMRON'S ANALYSIS CONFIRMS THAT THE PRODUCTS WERE PROPERLY HANDLED, STORED, INSTALLED, AND MAINTAINED AND NOT SUBJECT TO CONTAMINATION, ABUSE, MISUSE, OR INAPPROPRIATE MODIFICATION OR REPAIR.

Application Considerations

SUITABILITY FOR USE

OMRON shall not be responsible for conformity with any standards, codes, or regulations that apply to the combination of products in the customer's application or use of the products.

At the customer's request, OMRON will provide applicable third party certification documents identifying ratings and limitations of use that apply to the products. This information by itself is not sufficient for a complete determination of the suitability of the products in combination with the end product, machine, system, or other application or use.

The following are some examples of applications for which particular attention must be given. This is not intended to be an exhaustive list of all possible uses of the products, nor is it intended to imply that the uses listed may be suitable for the products:

- · Outdoor use, uses involving potential chemical contamination or electrical interference, or conditions or uses not described in this catalog.
- Nuclear energy control systems, combustion systems, railroad systems, aviation systems, medical equipment, amusement machines, vehicles, safety equipment, and installations subject to separate industry or government regulations.
- Systems, machines, and equipment that could present a risk to life or property.

Please know and observe all prohibitions of use applicable to the products.

NEVER USE THE PRODUCTS FOR AN APPLICATION INVOLVING SERIOUS RISK TO LIFE OR PROPERTY WITHOUT ENSURING THAT THE SYSTEM AS A WHOLE HAS BEEN DESIGNED TO ADDRESS THE RISKS, AND THAT THE OMRON PRODUCTS ARE PROPERLY RATED AND INSTALLED FOR THE INTENDED USE WITHIN THE OVERALL EQUIPMENT OR SYSTEM.

PROGRAMMABLE PRODUCTS

OMRON shall not be responsible for the user's programming of a programmable product, or any consequence thereof.

Disclaimers

CHANGE IN SPECIFICATIONS

Product specifications and accessories may be changed at any time based on improvements and other reasons.

It is our practice to change model numbers when published ratings or features are changed, or when significant construction changes are made. However, some specifications of the products may be changed without any notice. When in doubt, special model numbers may be assigned to fix or establish key specifications for your application on your request. Please consult with your OMRON representative at any time to confirm actual specifications of purchased products.

DIMENSIONS AND WEIGHTS

Dimensions and weights are nominal and are not to be used for manufacturing purposes, even when tolerances are shown.

PERFORMANCE DATA

Performance data given in this catalog is provided as a guide for the user in determining suitability and does not constitute a warranty. It may represent the result of OMRON's test conditions, and the users must correlate it to actual application requirements. Actual performance is subject to the OMRON Warranty and Limitations of Liability.

ERRORS AND OMISSIONS

The information in this document has been carefully checked and is believed to be accurate; however, no responsibility is assumed for clerical, typographical, or proofreading errors, or omissions.

2009.8

In the interest of product improvement, specifications are subject to change without notice.

