6-4-3 Environment-resistive Terminals with 16 Transistor Inputs (IP67): DRT2-HD16C (NPN) and DRT2-HD16C-1 (PNP)

Input Specifications

Item	Specifications	
Model	DRT2-HD16C	DRT2-HD16C-1
Internal I/O common	NPN	PNP
Input points	16 points	
ON voltage	9 V DC min. (between each input terminal and V)	9 V DC min. (between each input terminal and G)
OFF voltage	5 V DC max. (between each input terminal and V)	5 V DC max. (between each input terminal and G)
OFF current	1 mA max.	
Input current	3 mA min./point (at 11 V DC) 11 mA max./point (at 24 V DC)	
Sensor power supply voltage	Maximum communications power supply voltage: +0 V Minimum communications power supply voltage: −1.5 V	
ON delay time	1.5 ms max.	
OFF delay time	1.5 ms max.	
Number of circuits	16 points with one common	

I/O Status Indicators

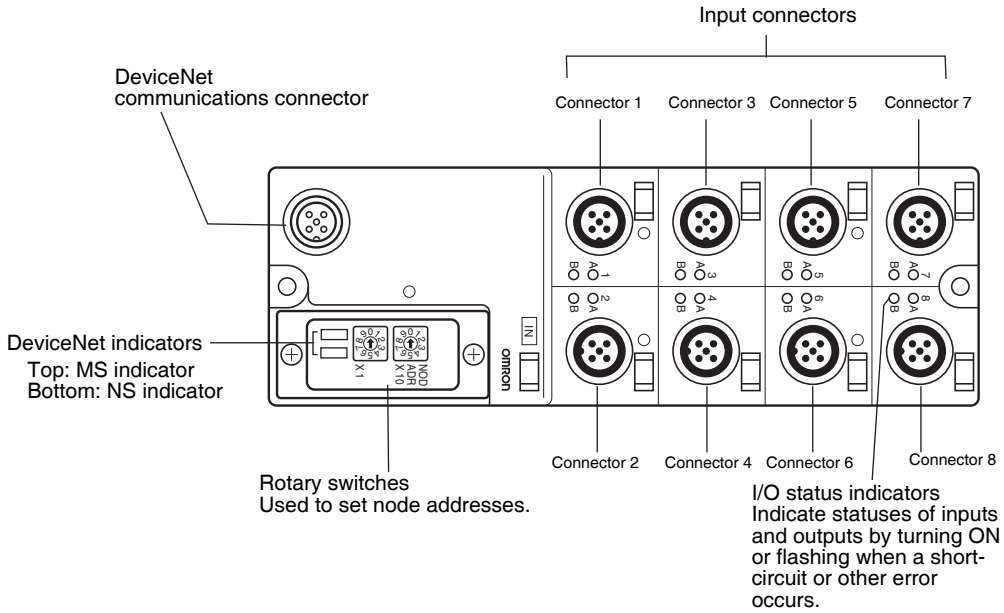
The I/O status indicator displays and their meanings are shown in the following table. Refer to the section following on names of parts and functions for details on the location of the I/O status indicators. In the indicator name “1-A,” the “1” indicates the connector number, and the “A” indicates that it is an I/O status indicator.

Indicator	Color	Status	Meaning
1-A	Yellow	ON	Input 0 is ON.
	Red	ON	The sensor power of connector 1 has shorted.
	Red	Flashing	The sensor of connector 1 is disconnected.
1-B	Yellow	ON	Input 1 is ON.
2-A	Yellow	ON	Input 2 is ON.
	Red	ON	The sensor power of connector 2 has shorted.
	Red	Flashing	The sensor of connector 2 is disconnected.
2-B	Yellow	ON	Input 3 is ON.
3-A	Yellow	ON	Input 4 is ON.
	Red	ON	The sensor power of connector 3 has shorted.
	Red	Flashing	The sensor of connector 3 is disconnected.
3-B	Yellow	ON	Input 5 is ON.

Indicator	Color	Status	Meaning
4-A	Yellow	ON	Input 6 is ON.
	Red	ON	The sensor power of connector 4 has shorted.
	Red	Flashing	The sensor of connector 4 is disconnected.
4-B	Yellow	ON	Input 7 is ON.
5-A	Yellow	ON	Input 8 is ON.
	Red	ON	The sensor power of connector 5 has shorted.
	Red	Flashing	The sensor of connector 5 is disconnected.
5-B	Yellow	ON	Input 9 is ON.
6-A	Yellow	ON	Input 10 is ON.
	Red	ON	The sensor power of connector 6 has shorted.
	Red	Flashing	The sensor of connector 6 is disconnected.
6-B	Yellow	ON	Input 11 is ON.
7-A	Yellow	ON	Input 12 is ON.
	Red	ON	The sensor power of connector 7 has shorted.
	Red	Flashing	The sensor of connector 7 is disconnected.
7-B	Yellow	ON	Input 13 is ON.
8-A	Yellow	ON	Input 14 is ON.
	Red	ON	The sensor power of connector 8 has shorted.
	Red	Flashing	The sensor of connector 8 is disconnected.
8-B	Yellow	ON	Input 15 is ON.

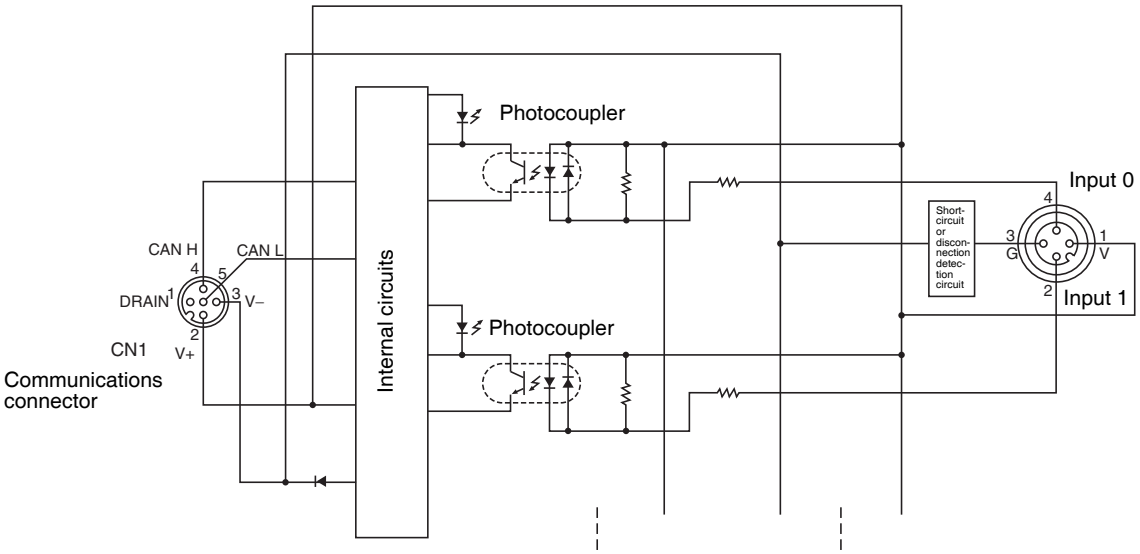
Note Although the connectors are numbered from 1 to 8, the input bits are numbered from 0 to 7. (The input bits are also numbered from 0 to 7 in the Configurator display.)

Component Names and Functions: DRT2-HD16C and DRT2-HD16C-1

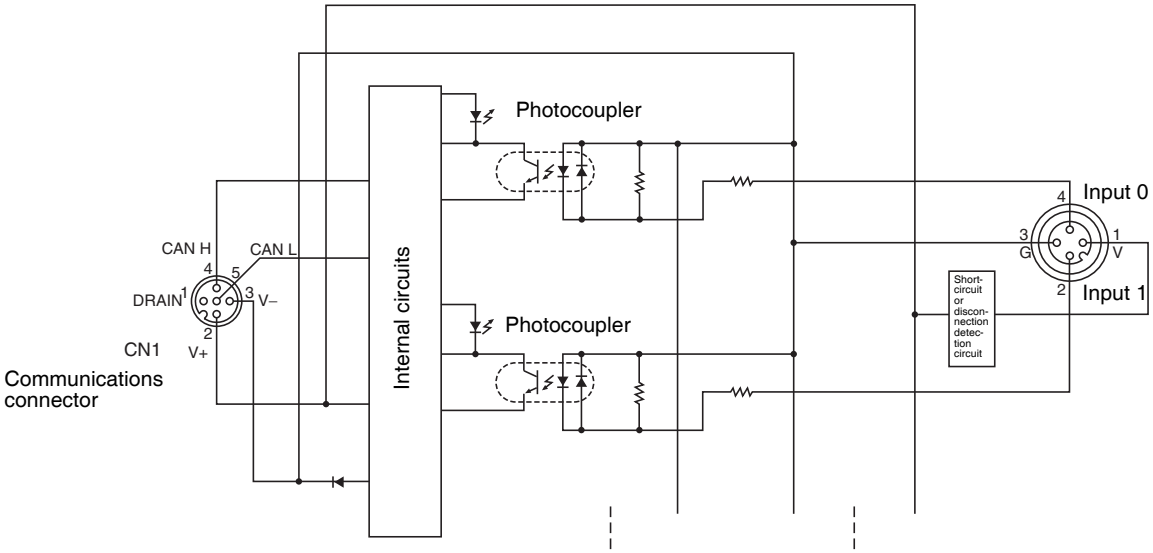


Internal Circuits

DRT2-HD16C (NPN)

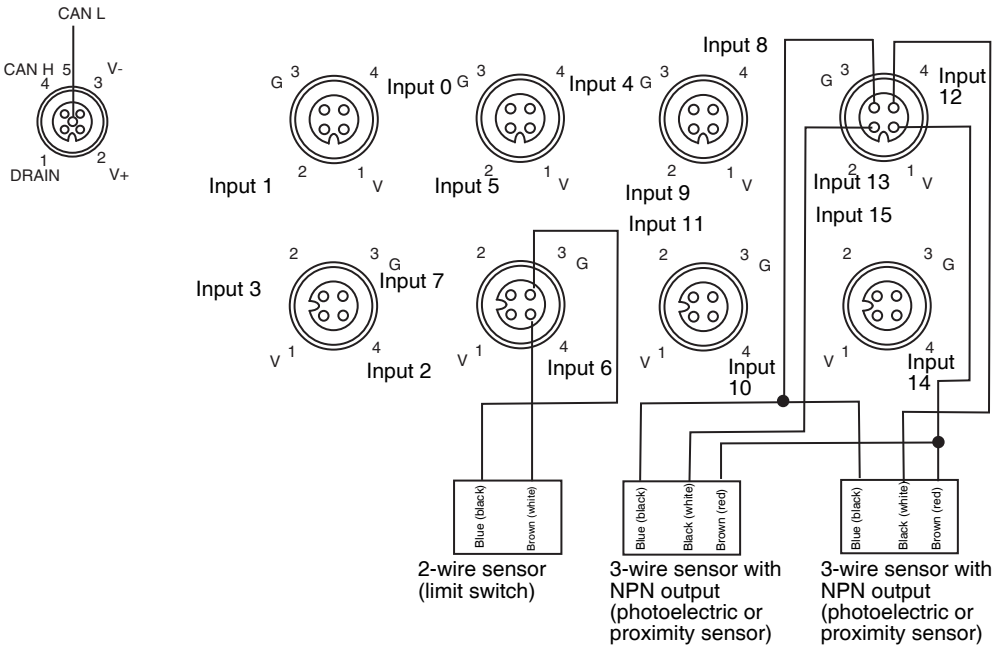


DRT2-HD16C-1 (PNP)

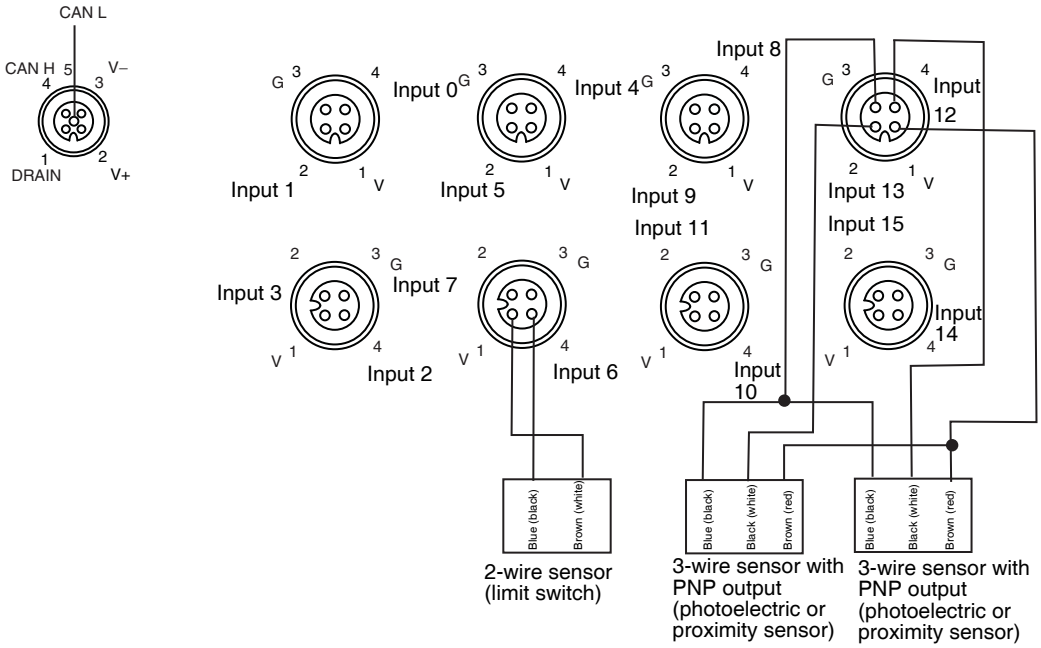


Wiring

DRT2-HD16C (NPN)



DRT2-HD16C-1 (PNP)



Note

1. Wire colors in parentheses are the previous JIS colors for photoelectric and proximity sensors.
2. The minimum sensor power supply voltage is a communications power supply voltage of −1.5 V. Confirm the rated power supply voltage of the connected sensors when selecting a power supply. Refer to *Appendix E Current Consumption Summary* before setting the communications power supply voltage.

Dimensions: DRT2-HD16C and DRT2-HD16C-1