INSTRUCTION MANUAL

NPN TRANSISTOR OUTPUT MODULE, 32 points | MODEL R8Y-DCZH32A

BEFORE USE ....

Thank you for choosing us. Before use, please check contents of the package you received as outlined below.
If you have any problems or questions with the product, please contact our sales office or representatives.

■ PACKAGE INCLUDES:

Discrete output module.....(1)

■ MODEL NO.

Confirm Model No. marking on the product to be exactly what you ordered.

■ INSTRUCTION MANUAL

This manual describes necessary points of caution when you use this product, including installation, connection and basic maintenance procedures.

POINTS OF CAUTION

■ CONFORMITY WITH EU DIRECTIVES

- The equipment must be mounted inside a panel.
- The actual installation environments such as panel configurations, connected devices and connected wires may affect the protection level of this unit when it is integrated in a panel system. The user may have to review the CE requirements in regard to the whole system and employ additional protective measures* to ensure CE conformity.

  * For example, installation of noise filters and clamp filters for the power source, input and output connected to the unit, etc.

■ GENERAL PRECAUTIONS

- Before you remove or mount the unit, turn off the power supply and output signal for safety.
- Switches on the side of the module can be set for maintenance only while the power supply is off. Do not access them while the power is supplied.

■ ENVIRONMENT

- Indoor use.
- When heavy dust or metal particles are present in the air, install the unit inside proper housing with sufficient ventilation.
- Do not install the unit where it is subjected to continuous vibration. Do not subject the unit to physical impact.
- Environmental temperature must be within -10 to +55°C (14 to 131°F) with relative humidity within 30 to 90% RH in order to ensure adequate life span and operation.

■ WIRING

- Do not install cables close to noise sources (relay drive cable, high frequency line, etc.).
- Do not bind these cables together with those in which noises are present. Do not install them in the same duct.

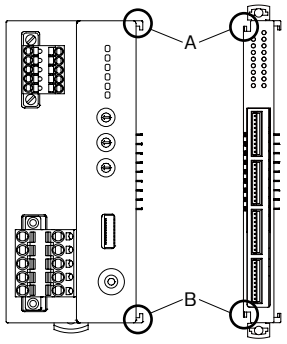
■ AND ....

- The unit is designed to function as soon as power is supplied, however, a warm up for 10 minutes is required for satisfying complete performance described in the data sheet.

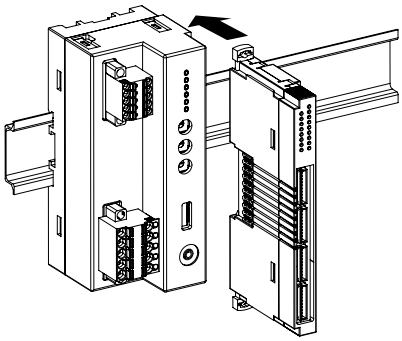
INSTALLATION

■ HOW TO MOUNT THE MODULE ON DIN RAIL

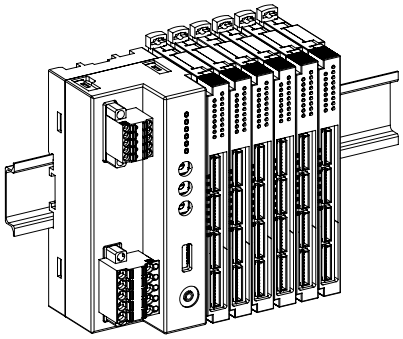
• I/O Module



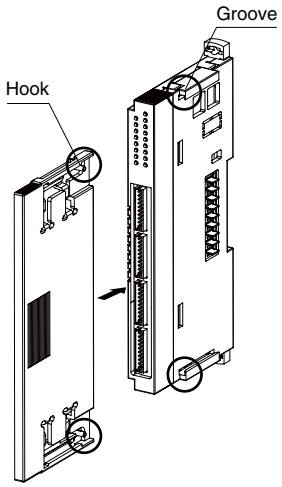
Confirm that the locking clamps of the I/O module are set.
Insert the module in parallel to the next one while aligning the grooves of both modules (A & B in the above figure).
Maintain it perpendicularly to the rail.



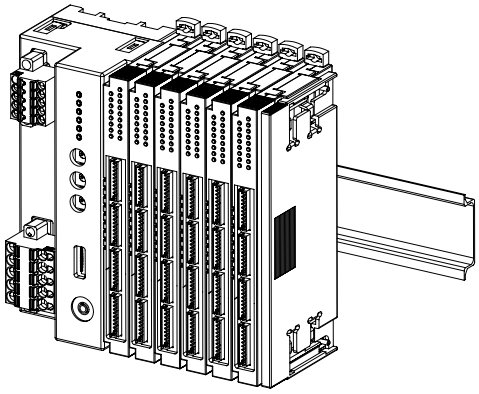
More I/O modules can be added in the same manner.



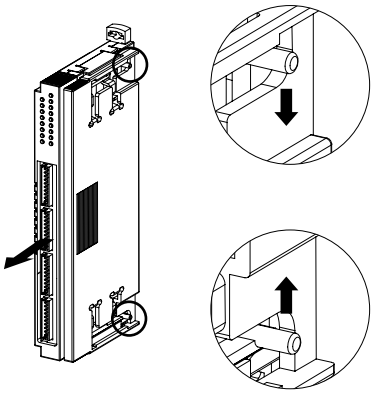
• Protective Cover



The protective cover is to be attached over the connected I/O module at the right end.
Align the hooks on the cover with the grooves of the module and slide it straight until the hooks are latched.

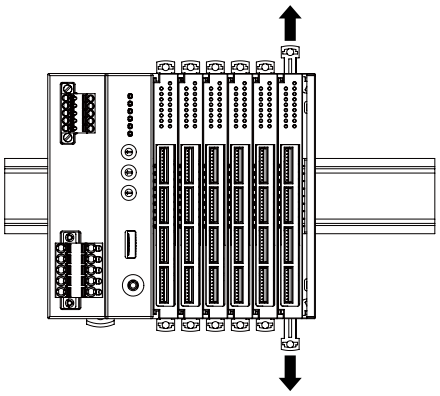


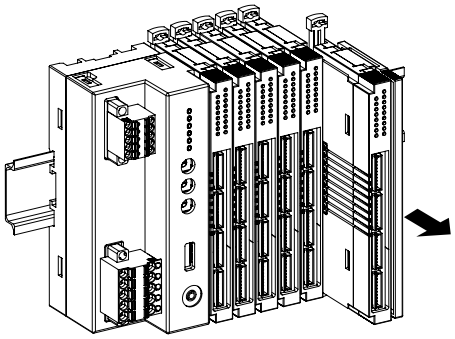
When removing the cover, pull it out while squeezing the hooks inward.



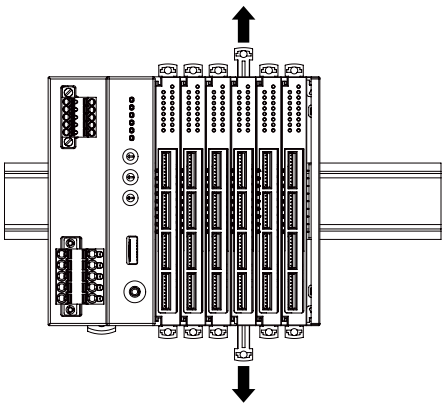
■ HOW TO UNMOUNT THE MODULE FROM DIN RAIL

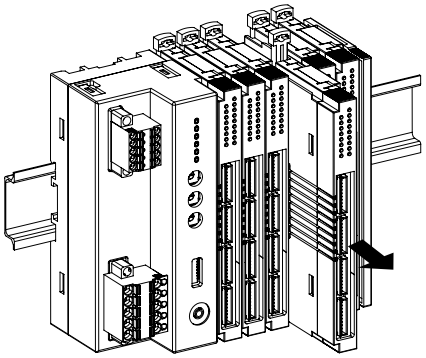
Release the locking clamps and pull out straight the module.





• Removing an intermediate module



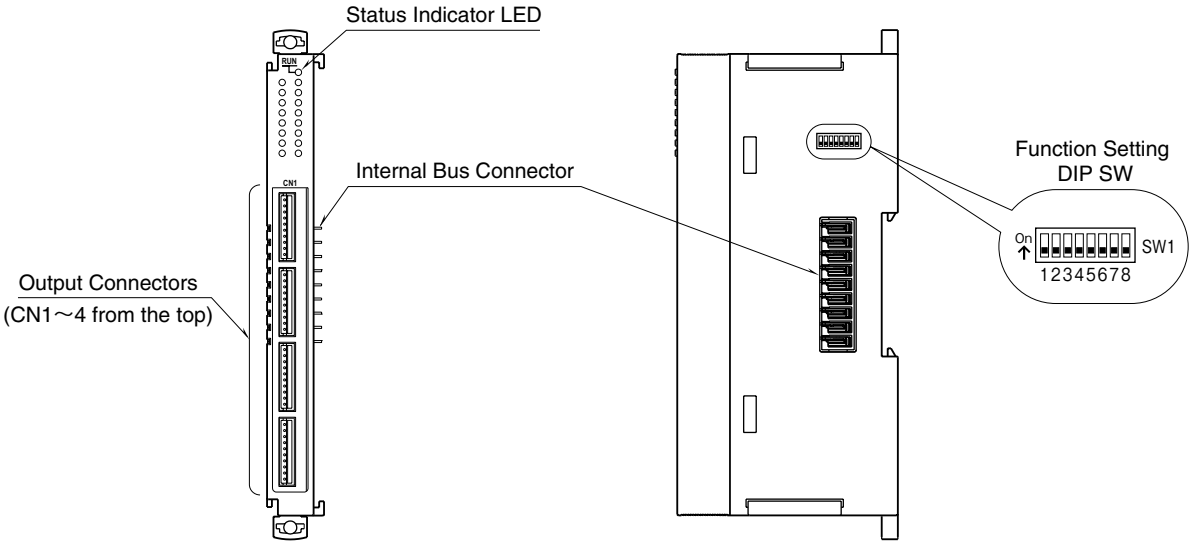


Caution !

1) Be careful not to hurt your hand by pointed edges of the internal communication bus connector.
2) I/O modules cannot hold tightly on the DIN rail by themselves without power/network module.
   Secure them to the position if necessary by using DIN rail end plates.

COMPONENT IDENTIFICATION

■ **FRONT VIEW** ■ **SIDE VIEW**



■ INDICATOR LED

LED	OPERATION	FUNCTION
Status	OFF	Stopping
	Green ON	Valid host communication
	Red ON	Setting error

■ MODULE ADDRESS

The SW1-1, SW1-2 determines the tenth place digit, while the SW1-3, SW1-4, SW1-5, SW1-6 does the ones place digit of the address.
Address is selected between 0 to 30.
(Factory setting: 0)

MODULE ADDRESS	SW1				
	×10			1	2
	×1	3	4	5	6
0		OFF	OFF	OFF	OFF
1		OFF	OFF	OFF	ON
2		OFF	OFF	ON	OFF
3		OFF	OFF	ON	ON
4		OFF	ON	OFF	OFF
5		OFF	ON	OFF	ON
6		OFF	ON	ON	OFF
7		OFF	ON	ON	ON
8		ON	OFF	OFF	OFF
9		ON	OFF	OFF	ON

■ OPERATING MODE

(*) Factory setting

• Output at The Loss of Communication

Same output for all channels.

OUTPUT AT THE LOSS OF COMMUNICATION	SW1-7
Output Hold (*) (last data correctly received is hold)	OFF
Stop output (Output fixed at OFF)	ON

■ TERMINATOR DIP SW

TERMINATOR SW	SW1-8
Without (*)	OFF
With	ON

■ **OUTPUT CONNECTOR ASSIGNMENT**

• ZH connector

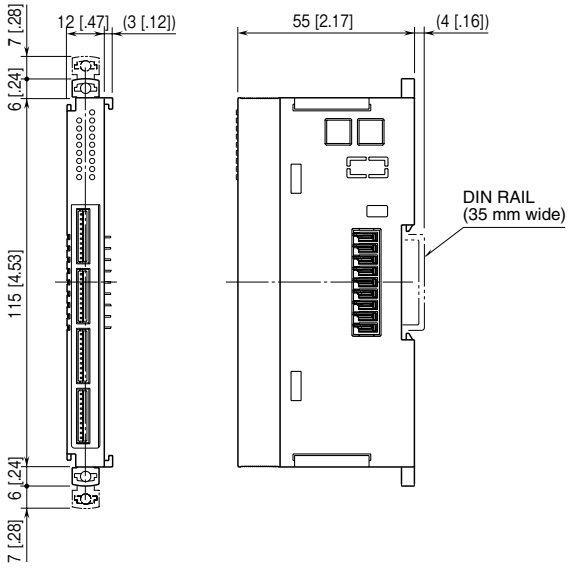
Unit side connector: S10B-ZR (Japan Solderless Terminal MFG.Co.Ltd)
Recommended socket: ZHR-10 (Japan Solderless Terminal MFG.Co.Ltd)
Recommended contact: SZH-002T-P0.5 (Japan Solderless Terminal MFG.Co.Ltd)
Applicable wire size: AWG28-26
(The socket and contact are not included in the package. Refer to the specifications of the product.)

CN1			CN2			CN3			CN4		
PIN No.	ID	FUNCTION	PIN No.	ID	FUNCTION	PIN No.	ID	FUNCTION	PIN No.	ID	FUNCTION
10	24V	Excitation supply 24V	10	24V	Excitation supply 24V	10	24V	Excitation supply 24V	10	24V	Excitation supply 24V
9	Do 1	Output 1	9	Do 9	Output 9	9	Do 17	Output 17	9	Do 25	Output 25
8	Do 2	Output 2	8	Do 10	Output 10	8	Do 18	Output 18	8	Do 26	Output 26
7	Do 3	Output 3	7	Do 11	Output 11	7	Do 19	Output 19	7	Do 27	Output 27
6	Do 4	Output 4	6	Do 12	Output 12	6	Do 20	Output 20	6	Do 28	Output 28
5	Do 5	Output 5	5	Do 13	Output 13	5	Do 21	Output 21	5	Do 29	Output 29
4	Do 6	Output 6	4	Do 14	Output 14	4	Do 22	Output 22	4	Do 30	Output 30
3	Do 7	Output 7	3	Do 15	Output 15	3	Do 23	Output 23	3	Do 31	Output 31
2	Do 8	Output 8	2	Do 16	Output 16	2	Do 24	Output 24	2	Do 32	Output 32
1	0V	Excitation supply 0V	1	0V	Excitation supply 0V	1	0V	Excitation supply 0V	1	0V	Excitation supply 0V

TERMINAL CONNECTIONS

Connect the unit as in the diagram below.

■ **EXTERNAL DIMENSIONS unit: mm [inch]**



■ CONNECTION DIAGRAM