

## - Features

- Domestically Smallest-sized Relay board with 32 Points

Relay board without Varistor : $174.0(\mathrm{~W}) \times 70.0(\mathrm{D}) \times 39.5(\mathrm{H})$
Relay board with Varistor : 174.0(W) $\times 70.0(\mathrm{D}) \times 49.5(\mathrm{H})$,
equipment dimension is minimized

- 2 Kinds of Relay : High-enduranc type, Economic type

High-endurance Relay Board: TAKAMISAWA NYP relay was mounted Economic Relay Board : PANASONIC PA relay mounted

- Production of Relay Board mounting Varistor for Contact Protection As Varistor is attached to both ends of Relay Contact Point in parallel, the Contact Point can be protected from Arc which occurs when opening/ closing the Contact Point, which expands the life of Relay.
- Improved Stability and Convenience

As the Relay is so designed that LED for checking out the operation state of Relay can be attached and it can be mounted on Channel, the work performance is improved.
With a built-in circuit absorbing a surge, it is possible to protect Contact Point and prevent abnormal operation.

- Safe Design meeting the requirements of PL (Production Liability) Code The product whose components and PCB are exposed to the outside incurs any safety accident due to an electric shock, and abnormal operation due to dust. But, our product is enclosed in a case and is designed in a very electrically safe structure.
- Supply of cable that can be connected to various PLC and Controller Keeping sufficient inventory of connectors that can be used for domestic/ foreign PLC, M/C, DCS, DDD, etc. all the time, we can supply any order of small quantity but large kinds.
For the Specifications of cable to be connected to various PLCs, please see page 160 to 185 'Selection List'.
- Model Selection

| Model | Installation Relay | Point(s) | Rated voltage | Common |  | Interface |  | $\begin{array}{\|c} \hline \text { Demension } \\ (W * D \mathrm{~mm}) \end{array}$ | $\begin{array}{\|c\|} \text { Contact } \\ \text { protection } \\ \text { circuit } \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Coil | Contact | Coil | Contact |  |  |
| R32C-YNT | TAKAMISAWA | $\begin{aligned} & \text { 32Point } \\ & (1 \mathrm{a} * 32) \end{aligned}$ | 24 V DC | NPN $\oplus$ COM | 8Points Common | $\begin{aligned} & \text { Connector } \\ & \text { MIL-C- } \\ & 83503 \\ & \text { 40Pin } \end{aligned}$ | Screw <br> terminal 7.62Pitch 40Pole | $\begin{gathered} 174.0 * 70.0 \\ \text { DIN Rail } \\ \text { (Channel) } \end{gathered}$ | - |
| R32C-YPT | NYP-24W-K |  |  | PNP $\Theta$ COM |  |  |  |  |  |
| R32C-NS5A-40P | PANASONIC PA1a-24V |  |  | NPN $\oplus$ COM |  |  |  |  |  |
| R32C-PS5A-40P |  |  |  | PNP $\Theta$ COM |  |  |  |  |  |
| R32C-YNT-V | TAKAMISAWA |  |  | NPN $\oplus$ COM |  |  |  |  | Varistor |
| R32C-YPT-V | NYP-24W-K |  |  | PNP $\Theta$ COM |  |  |  |  |  |
| R32C-NS5A-V | PANASONICPA1a-24V |  |  | NPN $\oplus$ COM |  |  |  |  |  |
| R32C-PS5A-V |  |  |  | PNP $\Theta$ COM |  |  |  |  |  |

- NYP / PA Relay specifications

| Item |  | NYP-24W-K | PA1a-24V |
| :--- | :--- | :--- | :--- |
| Contact | Arrangement | 1 a | 1 a |
|  | Nominal switching capacity(resistive load) | 5 A 250 V AC/5A 30V DC | 5 A 250 V AC/5A 30V DC |
|  | Max. switching current | 5 A | 5 A |
|  | Max. switching voltage | $270 \mathrm{~V} \mathrm{AC/150V} \mathrm{DC}$ | $250 \mathrm{~V} \mathrm{AC/110V} \mathrm{DC}$ |
| Coil | Nominal voltage | 24 V DC | 24 V DC |
|  | Pick-up voltage | 16.1 V DC | 16.8 V |
|  | Drop-out voltage | 2.4 V DC | 1.2 V DC |
|  | Coil resistance | $4,800 \Omega$ | $3,200 \Omega$ |
|  | Nominal operation power | 120 mW | 180 mW |
| Surge voltage between contact and coil | $5,080 \mathrm{~V}$ | $4,000 \mathrm{~V}$ |  |
| Initial breakdown voltage between contact and coil | $3,000 \mathrm{~V}$ AC 1min | $2,000 \mathrm{~V}$ rms |  |
| Country of origin | JAPAN | CHINA |  |

- How to replace a Relay (Tool for the replacement of a relay is built in)



## - Material / Specification

| Case | Modified PPO |
| :--- | :--- |
| Cover | Polycarbonate |
| P.C.B | Epoxy $1.6 \mathrm{t} / 20 \mathrm{z}$ |
| Applicable wire | $1.25 \mathrm{~mm}^{2} / \mathrm{MAX}$ |
| Terminal Screw | $\mathrm{M} 3 \times 8 \mathrm{~L}$ |
| Screw torque | $1.2 \mathrm{~N} \cdot \mathrm{~m}(12 \mathrm{Kgf} \cdot \mathrm{cm})$ |
| Ambient temperature | $-10^{\circ} \mathrm{C} \sim+50^{\circ} \mathrm{C}$ |

## - Applicable crimp terminal



## - Examples of Connection with PLC

(For the Specification of Connection Cable by Maker, please see page 160 to 185 and/or contact us.)
-MITSUBISHI, LS XGT


- LS GLOFA



## - R32C Series (Without Varistor) Dimension

* R32C-Y $\square$ T, R32C- $\square S 5 A-40 P$



## R32C Series (With Varistor) Dimension

* R32C-Y $\square \mathrm{T}-\mathrm{V}, \mathrm{R} 32 \mathrm{C}-\square S 5 \mathrm{~A}-\mathrm{V}$



## R32C Series (32 Points Common type with 8 ports for load)

Domestically Smallest 32 Points Relay Board, most suitable for the output of control system such as PLC, etc.


- R32C Series (With Varistor) Wiring diagram
* R32C-YNT-V / R32C-NS5A-V (NPN) $\oplus C O M$

Connector


