

Configuration and Construction

PROTECTIVE CONSTRUCTION

1. Dust Cover Type

To protect from dust, these types are covered, for example, with a plastic case. We recommend hand soldering, because these relays are not constructed to prevent flux and cleaning fluid from entering during automatic soldering.

2. Flux-Resistant Type

The relay is constructed so that flux will not enter inside the relay during automatic soldering. However, cleaning is not possible.

3. Sealed Type

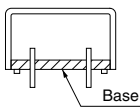
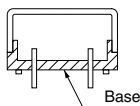
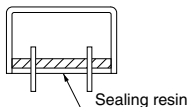
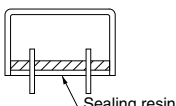
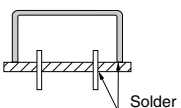
Construction is designed to prevent seeping of flux when soldering and cleaning fluid when cleaning. Designed for minimal release of harmful gas at the contacts.

4. Sealed capsule type

This type is hermetically sealed with ceramic and metal plating. No harmful gas or humidity will ever reach the contacts. This type cannot be washed.

CONSTRUCTION AND CHARACTERISTIC

(○: Yes, ×: No, △: Caution)

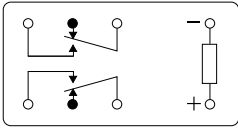
Type	Construction	Characteristics	Automatic Soldering	Automatic Cleaning	Dust Resistance	Harmful Gas Resistance
Dust Cover Type		Most basic construction where the case and base (or body) are fitted together.	△	×	△	×
Flux-Resistant Type		Terminals are sealed or molded simultaneously. The joint between the case and base is higher than the surface of the PC board.	○	×	△	×
		Terminals, case and base are filled with sealing resin. Construction is not hermetically sealed.	○	×	△	×
Sealed Type		Sealed construction including terminals and case. The base is sealed with sealing resin.	○	○	○	○*
Sealed capsule type (EP and EV relays only)		Hermetically sealed construction by sealing the metal case and plate, and the terminal and ceramic part, with solder.	×	×	○	○

*Since the plastic material is porous, please avoid atmospheric exposure to silicon.

OPERATIONAL FUNCTION

1. Single Side Stable Type

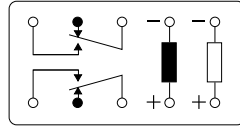
Relay which turns on when the coil is energized and turns off when de-energized.



(Schematic example: DS relay)

3. 2 Coil Latching Type

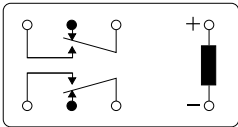
Relay with latching construction composed of 2 coils: set coil and reset coil. The relay is set or reset by alternately applying pulse signals of the same polarity.



(Schematic example: DS relay)

2. 1 Coil Latching Type

Relay with latching construction that can maintain the on or off state with a pulse input. With one coil, the relay is set or reset by applying signals of opposite polarities.



(Schematic example: DS relay)

4. Operation Indication

Indicates the set and reset states (electrically or mechanically) for easy maintenance. Also available are an LED version (HC relay with LED, etc.).



LED type
HC relay

TERMINAL CONFIGURATION

Type	PC board through hole terminal	PC board self-clinching terminal	Plug-in terminal	Quick connect terminal	Screw terminal
Typical relay					
Terminal configuration					
Typical relay type	GQ(AGQ), TX, DS relay	TQ relay	HJ, HN relay	LE (ALE), LF relay	HE, EP (AEP) relay

MOUNTING METHOD

Type	Insertion mount	Socket mount	Terminal socket mount	TM type	TMP type
Mounting configuration					
Typical relay options	TQ, DS, S relay	NC, HC relay	HJ, HC relay	HC, HL relay	LE (ALE), LF (ALF) relay

Note: Sockets are available for certain PC board relays. (S relay, ST relay, etc.)