

# Heavy Duty Relay

HR723 Series



## Part Number Description

**HR723** - 1 2

<b>1</b> Contact Arrangement	1C : 1N/O + 1N/C	2A : 2N/O	2C : 2N/O + 2N/C
<b>2</b> Coil Voltage	24VDC	110VAC	220VAC

## General Specification

		Contact Ratings		Coil Ratings		General Ratings			
Contact Ratings	Contact Form	1N/O + 1N/C 2N/O 2N/O + 2N/C		Coil Ratings	Coil Voltage	Operating Time	Maximum Pick-up	30ms	
	Contact Material	Ag alloy					Minimum Drop-out	30ms	
	Maximum Contact Resistance	50mΩ					Insulation Resistance	100MΩ at 500VDC	
	Rated Current (Resistance Load)	30A 24VDC					Dielectric Strength	Between Contact Points: 2,000Vrms for 1 minute	
		30A 220VAC						Between Contact Points and Coil: 2,500Vrms for 1 minute	
	Maximum Switching Current	30A					Life Cycle	Mechanical : Min. 1,000,000	
	Maximum Rated Voltage	110VDC / 250VAC						Electrical : Min. 100,000	
Minimum Switching Current *	100mA 5VDC		Vibration Resistant	10~55Hz (width of vibration 3.3mm)					
Coil Ratings	Coil Consumption	DC	Approx. 2.8W	Ambient Temperature	-40°C ~ +60°C (with no icing or condensing)				
		AC	9.6VA	Ambient Humidity	5% ~ 80%RH (no condensing)				
		Minimum Pick-up Voltage	80% of Nominal Voltage		Weight	2A : Approx. 250g, 2C : Approx. 300g, 1C : Approx. 200g			
		Maximum Drop Out Voltage	DC : 10% of Nominal Voltage			Tightening Torque	1.2N·m (12.24kgf·cm)		
	AC : 30% of Nominal Voltage		Flammability rating	V0					
Rating	130 °C ± 5 °C (Class B) IEC 60335								

\* Specifications and materials can be changed without prior notice for the enhancement of the quality.

## Product Selection

	Contact Form	Rated Voltage	Part Number
	2N/O	220VAC	HR723-2A 220VAC
		110VAC	HR723-2A 110VAC
		24VDC	HR723-2A 24VDC
	1N/O + 1N/C	220VAC	HR723-1C 220VAC
		110VAC	HR723-1C 110VAC
		24VDC	HR723-1C 24VDC
	2N/O + 2N/C	220VAC	HR723-2C 220VAC
		110VAC	HR723-2C 110VAC
		24VDC	HR723-2C 24VDC

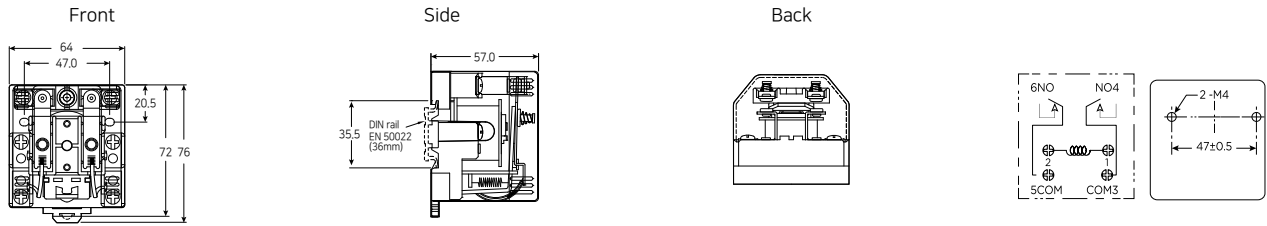
# Heavy Duty Relay

## HR723 Series

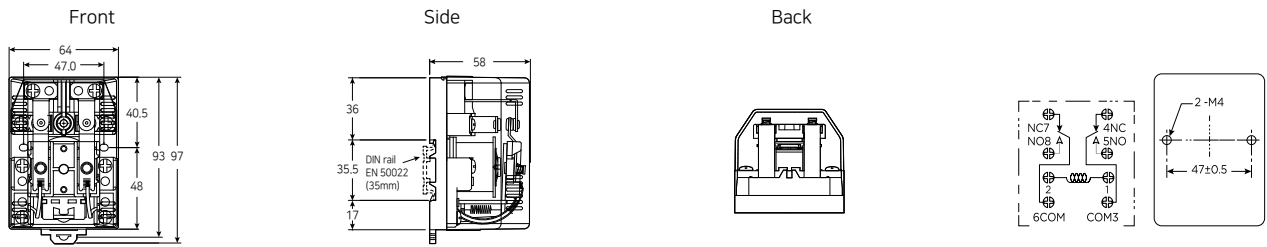
### Dimension

unit : mm

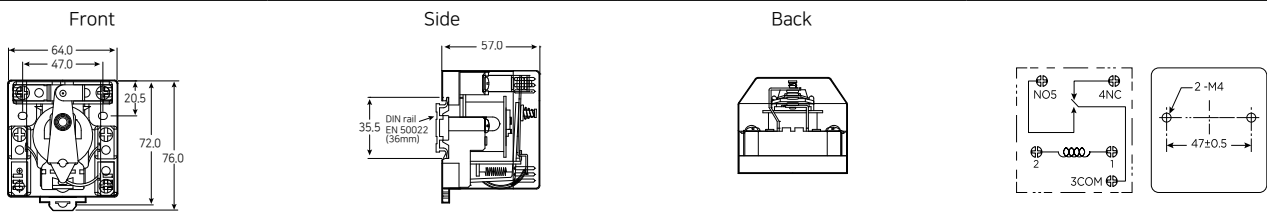
#### HR723-2A



#### HR723-2C

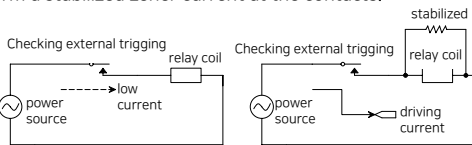


#### HR723-1C

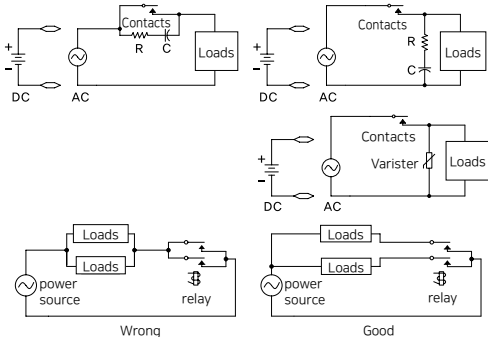


### Cautions when using the relays

- When the relay is triggered with external contact sensors or etc., and if the resistance at the contact is higher, there can be problems and failures with the triggering. In these cases, the reasons can be the aging of the contact terminals or the specification. So, it is recommended that a dummy resistance is added to form a stabilized zener current at the contacts.



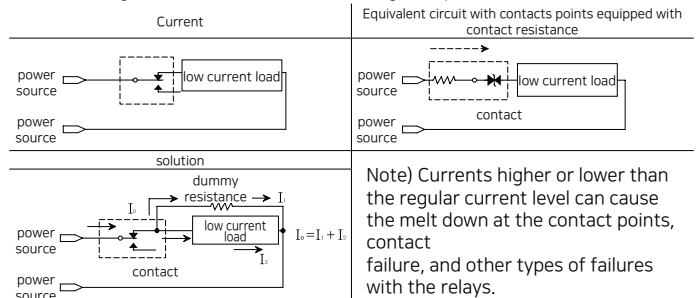
- For extended life span of the relay when used at the induction load, please arrange the contact protection circuit as shown here in.



- In case of relay products equipped with surge prevention circuits, the DC models have the return current diode, while the AC models have the R-C circuit. In case of DCs, there are diodes included inside. So, please take care when wiring for the polarity.
- When using a number of loads simultaneous. It is advised that the loads are connected to the relay contact points individually.
- When COMing a multiple number of loads, there can be imbalances between the contact points, which may lead to the destruction of the product.

#### ⚠ About the minimal switch regularity

A for the minimal switch regularity, the designers should consider a number of trouble shooting perspectives when the load is of types consuming very low amount of current. While the contact resistance consumes a very small amount of current, the design should include proper dummy resistance at both poles (parallel) for sequences with higher reliability, so that the current remains higher then the minimal switch regularity.



Note) Currents higher or lower than the regular current level can cause the melt down at the contact points, contact failure, and other types of failures with the relays.