

# 8

## 릴레이류 RELAYS

- 8-1 소형 파워 릴레이
- 8-2 콘트롤 릴레이
- 8-3 파워 릴레이
- 8-4 자기유지형 릴레이  
(전력용 보조 계전기)

- 8-1 Mini Power Relay
- 8-2 Control Relay
- 8-3 Power Relay
- 8-4 Keep Relay  
(Auxiliary Relay for Electric Power)

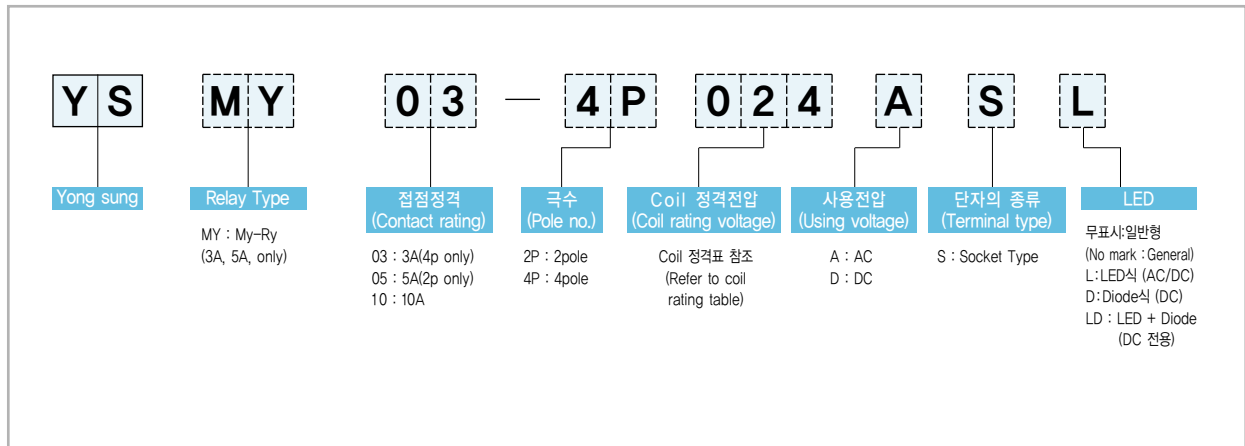
### 8-1

#### 소형 파워 릴레이 Mini Power Relay

Yong Sung File No. E200434



#### 형식 구분도 | Type Classification Diagram



#### 특징 | Features

- 소형경량이므로 복잡한 제어회로에 적합합니다.
- 소형으로서 개폐용량이 높습니다.
- 소전류 소모형으로 DC용은 반도체 회로에 적합합니다.
- 종류가 다양하므로 용도별 선택이 용이합니다.
- With mini-size and lightness, it is suitable for complicated control circuit.
- High switching capacity and small size.
- Suitable for semiconductor circuit due to lower current consumption.
- Various types are available.

성능 개요 | Performance Summary |

항 목 (Item)		성 능 (Performance)
접촉저항 (Contact resistance)		below 50mΩ (Initial value)
절연저항 (Insulation resistance)		above 100MΩ (DC 500V. Meg)
내전압 (Withstand voltage)	접점상호간 (Between contacts)	AC 1,000V/min
	충전부와 비충전부간 (Between charging part and non-charging part)	AC 2,000V/min
수 명 (Lifetime)	기계적 (Mechanical)	above 3,000,000times
	전기적 (Electrical)	above 500,000times
동작시간 (Operating time)		below 20ms
복귀시간 (Return time)		below 20ms
내진동 (Withstand vibration)		10~55Hz double amplitude 1.0mm
최대개폐빈도 (Max. Switching frequency)	기계적 (Mechanical)	20 times/min
	전기적 (Electrical)	20 times/min
사용주위온도 (Ambient temperature)		-25℃ ~ +40℃
상대습도 (Relative humidity)		MAX. 90%

코일 정격 | Coil Rating |

	정격전압(V) (Rating voltage)	정격전류(mA) (Rating current)	COIL 저항(Ω) (Coil resistance)	소비전력(VA,W) (Power Consumption)	동작전압(V) (Operation voltage)	복귀전압(V) (Return voltage)	최대허용전압(V) (Max. allowable voltage)		
AC	24	50	167	1.2VA	below 80%	above 30%	110%		
	110	12	3,600	1.3VA					
	220	8	12,500	1.6VA					
DC	24	48	480	1.2W		below 80%		above 10%	110%
	48	23	1,760	1.2W					
	110	11	10,080	1.2W					
	125	10	12,450	1.2W					
	220	6.8	33,450	1.4W					

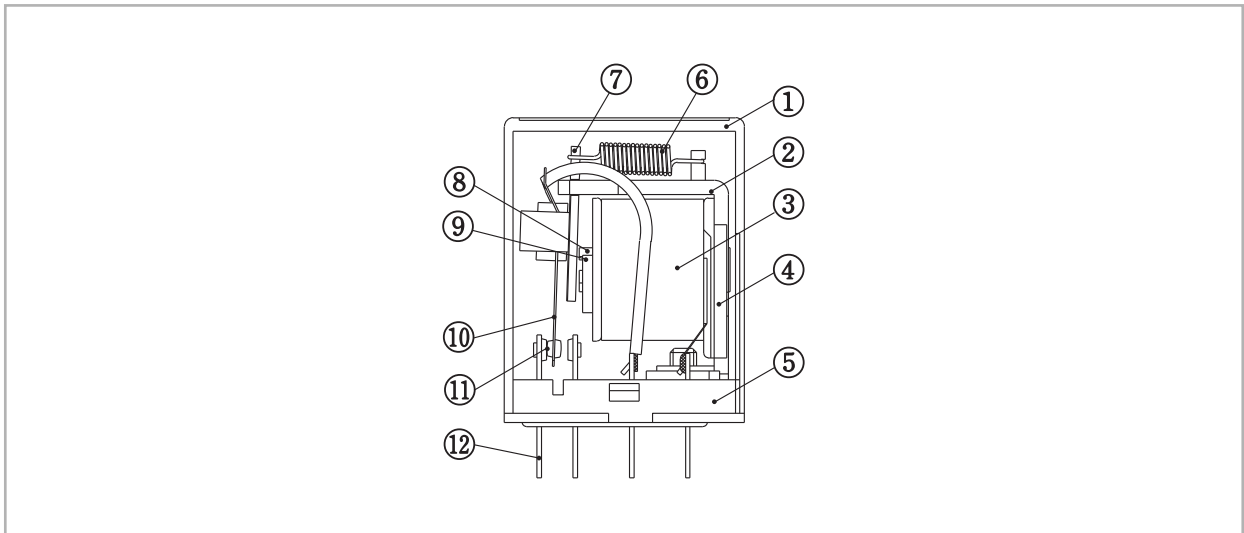
※ 주 1. 정격전류의 허용범위 (23℃일때) : ±15%  
 2. Coil 저항의 허용범위 (23℃일때) : ±10%  
 3. LED Type은 회로에 따라 반불이 발생될 수 있으니 사용전 검토 바랍니다.

※ Note 1. Allowable range of rating current (at 23℃) : ±15%  
 2. Allowable range of coil resistance (at 23℃) : ±10%  
 3. Preliminary examination recommended due to possible dimness phenomena depending on circuit for LED type.

## 접점 정격 | Contact Rating

구분 (Classification)	극 수 (Pole No.)	접점허용전력 (Contact Allowable Power)		전압(V) (Voltage)	정격부하 (Rating load)		정격통전전류(A) (Rating conductive current)
		저항부하 (Resistance load)	유도부하 (Inductive load)		저항부하 (Resistance load) (COS $\phi$ =1)	유도부하 (Inductive load) (COS $\phi$ =0.4, L/R=7ms)	
MY03	4	AC660VA	AC176VA	AC220V	3	0.8	3
		DC72W	DC36W	DC24V	3	1.5	
MY05	2	AC1100VA	AC440VA	AC220V	5	2	5
		DC120W	DC48W	DC24V	5	2	

## 내부 구조도 | Inside Structure Diagram



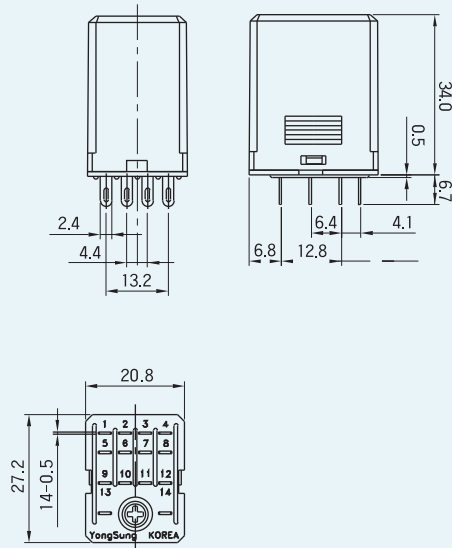
No.	부 품 (Part)	재 질 (Materials)
1	Cover	PC 수지 (Polycarbonate Resin)
2	Frame	탄소강 (Carbon Steel)
3	Coil	구리선 (Polyurethane Copper Wire)
4	Bobbin	66 나일론 (66 Nylon)
5	Base	PBT Resin
6	Return Spring	스테인리스 (Stainless Steel)
7	Amature	순철 (Pure Iron)
8	Washer plate	동판 (Plate Copper)
9	Shaft	순철 (Pure Iron)
10	Moving Terminal	인천동 (Phosphor Bronze)
11	Contact	은접점 (Ag)
12	Fixed Terminal	황동 (Brass)

외형 / 치수도

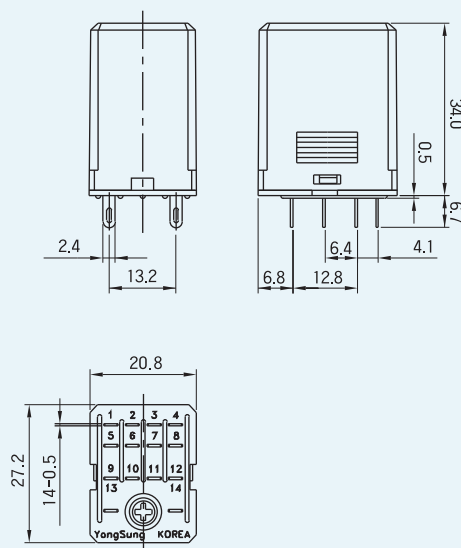
| Shape / Dimension Drawing |

(unit : mm)

YSMY03-4P

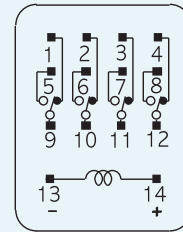


YSMY05-2P



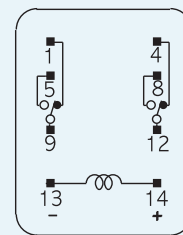
내부 결선도

| Inside Connection Diagram |



YSMY03-4P

적용소켓 : YSSKMY-4  
(Applied socket : YSSKMY-4)



YSMY05-2P

적용소켓 : YSSKMY-2  
(Applied socket : YSSKMY-2)