

# RELAYS & CONTACTORS

## OMRON GENERAL-PURPOSE RELAYS G2R-S, LY, MK SERIES



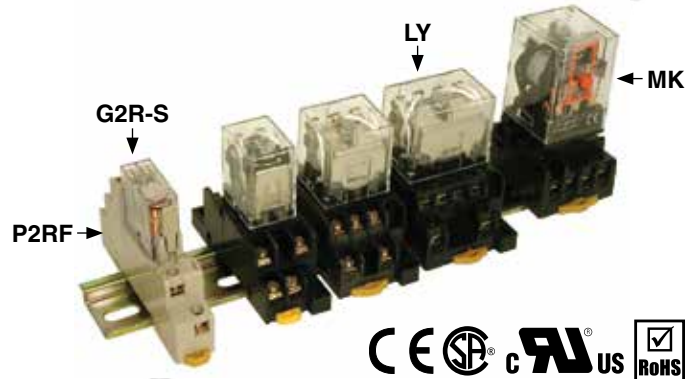
OMRON®

### DESCRIPTION

The Omron general-purpose relays are available in the **LY**, **MK**, and **G2R-S Series**. The **LY Series** is available in SPDT, DPDT, 3PDT, and 4PDT contact configurations driven by AC or DC coils. It has up to a 15A switching capacity and blade terminals for socket mounting.

The **MK Series** is available in DPDT and 3PDT configurations driven by AC or DC coils and has up to a 10A switch rating. The **MK Series** has pin-type terminals for socket-mounting and comes standard with a mechanical indicator and push-to-test button.

The **G2R-S Series** is available with SPDT or DPDT contacts rated up to 10A and driven by AC or DC coils. They are socket-mounted, and their small size saves space. They come with a mechanical indicator, optional LED, and lockable test button.



### FEATURES

- Blade-style, pin-style and compact models
- DIN rail or surface mount
- UL recognized, CSA certified, CE certified

### SPECIFICATIONS

#### COIL RATINGS

LY SERIES		Rated Current (mA)								Coil Resistance (Ω)							
		60 Hz				50 Hz				SPDT		DPDT		3PDT		4PDT	
		SPDT	DPDT	3PDT	4PDT	SPDT	DPDT	3PDT	4PDT								
AC	24	46	46	67	80	54	54	80	93.6	180	180	100	78				
	120	9.2	9.2	13.7	21.8	10.8	10.8	16.0	25.5	4430	4430	2300	1800				
DC	24	36.9		58.6	69	36.9		58.6	69	650	650	410	350				

MK SERIES		Rated Current (mA)		Coil Resistance (Ω)
		60 Hz		
AC	24	96.3		48.4
	120	21		932
DC	24	56		430

G2R-S SERIES		Rated Current (mA)		Coil Resistance (Ω)
		60 Hz		
AC	24	37.4		253
	120	7.5		7,286
DC	24	21.6		1,113

#### CONTACT RATINGS

LY SERIES	
Contact Form	UL Contact Ratings
SPDT	15A @ 240 VAC (inductive)
	15A @ 28 VDC (resistive)
	1/2 hp @ 120 VAC (motor)
DPDT	13A @ 120 VAC (resistive)
	12A @ 240 VAC (inductive)
	10A @ 28 VDC (resistive)
3PDT 4PDT	1/2 hp @ 120 VAC (motor)
	10A @ 240 VAC (inductive)
	10A @ 28 VDC (resistive)
	1/2 hp @ 240 VAC (motor)

MK SERIES	
Contact Form	UL Contact Rating
DPDT	10A @ 250 VAC (resistive)
	10A @ 28 VDC (resistive)
	7A @ 250 VAC (inductive)
3PDT	10A @ 120 VAC (resistive)
	10A @ 28 VDC (resistive)
	10A @ 250 VAC (resistive)
	7A @ 250 VAC (inductive)

G2R-S SERIES	
Contact Form	UL Contact Rating
SPDT	10A @ 30 VDC (resistive)
	10A @ 250 VAC (general purpose)
DPDT	5A @ 30 VDC (resistive)
	5A @ 250 VAC (general purpose)

<b>Min operating voltage</b>	80% of rated voltage AC 70% of rated voltage DC
<b>Max continuous applied voltage</b>	110% of rated voltage AC/DC
<b>Drop-out voltage</b>	
AC	30% or more of the rated voltage
DC	10% (LY), 15% (MK, G2R-S) or more of the rated voltage
<b>Contact material</b>	
LY, G2R-S	Silver cadmium oxide
MK	Silver
<b>Contact resistance</b>	100 mΩ maximum
<b>Operating time</b>	30 ms maximum
<b>Release time</b>	25 ms maximum
<b>Min load</b>	
LY, G2R-S	100 mA/5 VDC
MK	10 mA/1 VDC
<b>Agency approvals</b>	UL-recognized component, File #E41643 (LY, G2R-S), #E41515 (MK); CSA certified, File #LR31928 (LY, G2R-S); #LR41408 (MK); CE certified
<b>Warranty</b>	1 year

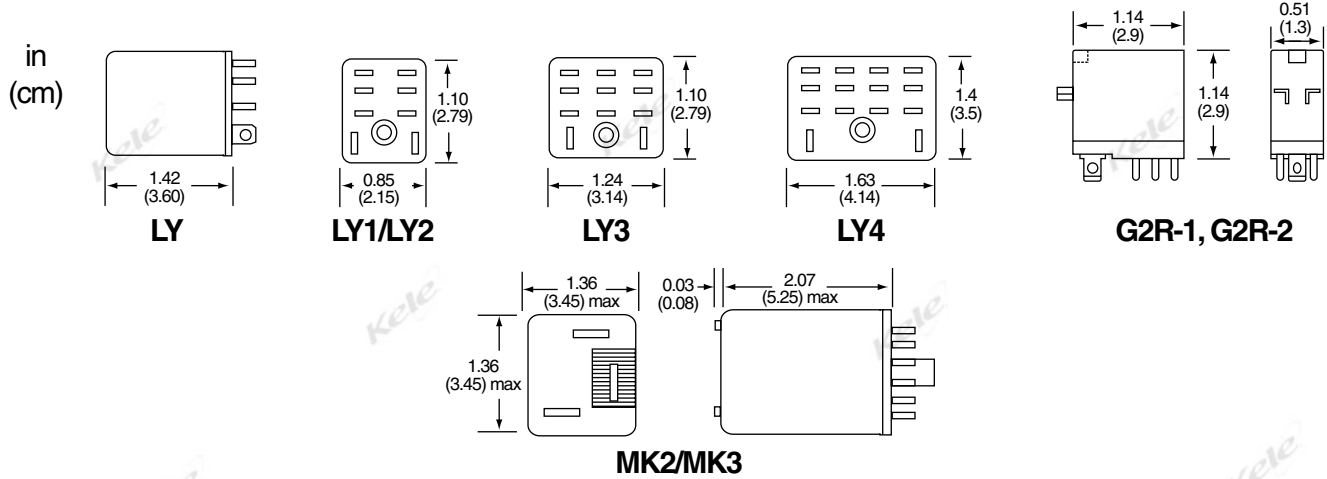


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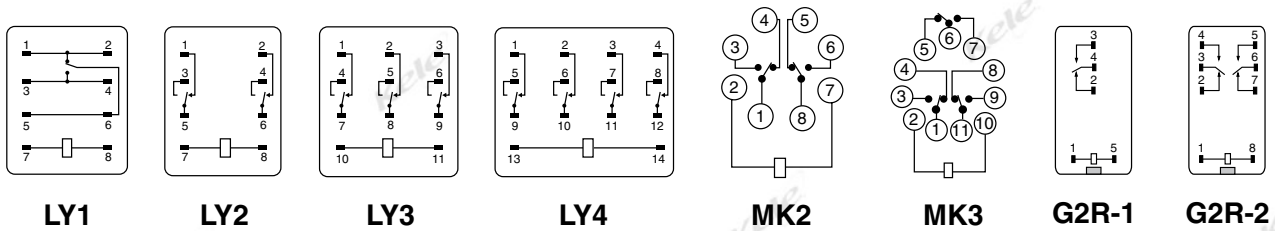
## OMRON GENERAL-PURPOSE RELAYS

### G2R-S, LY, MK SERIES

#### DIMENSIONS



#### WIRING



#### ORDERING INFORMATION

##### LY SERIES

MODEL	DESCRIPTION
LY	LY Series
1	SPDT contact configuration
2	DPDT contact configuration
3	3PDT contact configuration
4	4PDT contact configuration
I4	Push-to-test button (optional) (two- and four-pole only when combined with N option)
N	LED indicator (optional)
AC24	24 VAC
DC24	24 VDC
AC120	120 VAC

LY 2 I4 N AC24

**Example:** LY2I4NAC24 DPDT relay with push-to-test button, LED indicator, and 24 VAC coil.

Use with PTF Series sockets

##### MK SERIES

MODEL	DESCRIPTION
MK	MK Series
2	DPDT contact configuration
3	3PDT contact configuration
P	
N	LED indicator (optional)
	Two-pole
5	Three-pole
S	Push-to-test button (standard)
AC24	24 VAC
DC24	24 VDC
AC120	120 VAC

MK 3 P N 5 S AC24

**Example:** MK3PN5SAC24 3PDT relay with LED indicator, push-to-test button, and 24 VAC coil.

Use with PF Series sockets

##### G2R-S SERIES

MODEL	DESCRIPTION
G2R	G2R Series
1	SPDT contact configuration
2	DPDT contact configuration
S	No options
SNI	LED indicator, test button
AC24(S)	24 VAC
DC24(S)	24 VDC
AC120(S)	120 VAC

G2R 1 S AC24(S)

**Example:** G2R1SAC24(S) SPDT relay with 24 VAC coil.

Use with P2RF Series sockets

**DINRSTL, DINRALU**  
**PF, PTF, PRF Series**

#### RELATED PRODUCTS

DIN rail  
Relay sockets