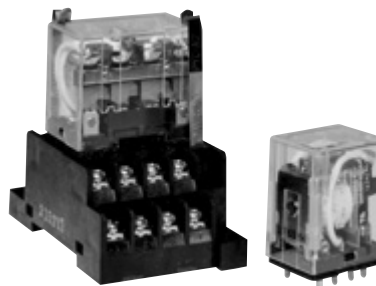


General Purpose Relay LY

- Arc barrier equipped.
- High dielectric strength (2,000 VAC).
- Long dependable service life assured by AgCdO contacts.
- Choose models with single or bifurcated contacts, LED indicator, diode surge suppression, push-to-test button, or RC circuit.
- All models meet UL and CSA approvals; VDE, LR, and SEV approved versions are available.



Ordering Information

To Order: Select the part number and add the desired coil voltage rating (e.g., LY1-DC6).

Type	Terminal	Contact form	Model					
			Single contact			Bifurcated contact		
			Standard bracket mounting	Upper mounting bracket	Lower mounting bracket	Standard bracket mounting	Upper mounting bracket	Lower mounting bracket
Standard	Plug-in/solder	SPDT	LY1	LY1F	LY1S	—	—	—
		DPDT	LY2	LY2F	LY2S	LY2Z	LY2ZF	LY2ZS
		3PDT	LY3	LY3F	LY3S	—	—	—
		4PDT	LY4	LY4F	LY4S	—	—	—
	PCB	SPDT	LY1-0	—	—	—	—	—
		DPDT	LY2-0	—	—	LY2Z-0	—	—
		3PDT	LY3-0	—	—	—	—	—
		4PDT	LY4-0	—	—	—	—	—
LED indicator	Plug-in/solder	SPDT	LY1N	—	—	—	—	—
		DPDT	LY2N	—	—	LY2ZN	—	—
		3PDT	LY3N	—	—	—	—	—
		4PDT	LY4N	—	—	—	—	—
Diode surge suppression	Plug-in/solder	SPDT	LY1-D	—	—	—	—	—
		DPDT	LY2-D	—	—	LY2Z-D	—	—
		3PDT	LY3-D	—	—	—	—	—
		4PDT	LY4-D	—	—	—	—	—
LED indicator and diode surge suppression	Plug-in/solder	SPDT	LY1N-D2	—	—	—	—	—
		DPDT	LY2N-D2	—	—	LY2ZN-D2	—	—
		4PDT	LY4N-D2	—	—	—	—	—
RC circuit	Plug-in/solder	SPDT	LY1-CR	—	—	—	—	—
		DPDT	LY2-CR	—	—	LY2Z-CR	—	—
LED indicator and RC circuit	Plug-in/solder	SPDT	LY1N-CR	—	—	—	—	—
		DPDT	LY2N-CR	—	—	LY2ZN-CR	—	—

Note: 1. Types with specifications other than those listed are available. Contact your Omron Sales representative.
 2. To order connecting sockets and mounting tracks, see "Accessories" section.

Type	Terminal	Contact form	Model					
			Single contact			Bifurcated contact		
			Standard bracket mounting	Upper mounting bracket	Lower mounting bracket	Standard bracket mounting	Upper mounting bracket	Lower mounting bracket
Push-to-test button	Plug-in/solder	SPDT	LY114	—	—	—	—	—
		DPDT	LY214	—	—	LY2Z12	—	—
		3PDT	LY314	—	—	—	—	—
		4PDT	LY414	—	—	—	—	—
LED indicator and push-to-test button	Plug-in/solder	DPDT	LY214N	—	—	LY2Z12N	—	—
		4PDT	LY414N	—	—	—	—	—

Note: 1. Types with specifications other than those listed are available. Contact your Omron Sales representative.
 2. To order connecting sockets and mounting tracks, see "Accessories" section.

■ Accessories

Connecting Sockets

To Order: Select the appropriate part numbers for sockets, clips, and mounting tracks (if required) from the following charts.

Track Mounted Sockets

Relay	Socket*	Relay hold-down clip		Mounting track
		Standard	RC circuit	
SPDT DPDT	PTF08A-E	PYC-A1	Y92H-3	PFP-100N/PFP-50N & PFP-M or PFP-100N2 PFP-S (Option spacer)
3PDT	PTF11A			
4PDT	PTF14A-E			

* Track mounted socket can be used as a front connecting socket.

Back Connecting Sockets

Relay	Solder terminal socket	Wire wrap terminal socket	Relay hold-down clip				Socket Mounting Plate			
			Standard	Push-to-test	RC circuit	Mtg. plate	1	10	12	18
SPDT DPDT	PT08	PT08QN	PYC-P	PYC-P2	PYC-1	PYC-S	PYP-1	—	—	PYP-18
3PDT	PT11	PT11QN					PTP-1-3	—	PTP-12	—
4PDT	PT14	PT14QN					PTP-1	PTP-10	—	—

Note: Types PYP-18, PTP-12 and PTP-10 may be cut to any desired length.

Relay	PC terminal socket	Relay hold-down clip		
		Standard	Push-to-test	RC circuit
SPDT DPDT	PT08-0	PYC-P	PYC-P2	PYC-1
3PDT	PT11-0			
4PDT	PT14-0			

Specifications

■ Contact Data

Load	Single contact				Bifurcated contact	
	SPDT		DPDT, 3PDT, 4PDT		DPDT	
	Resistive load (p.f. = 1)	Inductive load (p.f. = 0.4) (L/R = 7 ms)	Resistive load (p.f. = 1)	Inductive load (p.f. = 0.4) (L/R = 7 ms)	Resistive load (p.f. = 1)	Inductive load (p.f. = 0.4) (L/R = 7 ms)
Rated load	15 A at 110 VAC 15 A at 24 VDC	10 A at 110 VAC 7 A at 24 VDC	10 A at 110 VAC 10 A at 24 VDC	7.5 A at 110 VAC 5 A at 24 VDC	5 A at 110 VAC 5 A at 24 VDC	4 A at 110 VAC 4 A at 24 VDC
Contact material	AgCdO					
Carry current	15 A		10 A		7 A	
Max. operating voltage	250 VAC 125 VDC					
Max. operating current	15 A		10 A		7 A	
Max. switching capacity	1,700 VA 360 W	1,100 VA 170 W	1,100 VA 240 W	830 VA 120 W	550 VA 120 W	440 VA 100 W
Min. permissible load	100 mA, 5 VDC				10 mA, 5 VDC	

■ Coil Data

1- and 2-pole Types – AC

Rated voltage (V)	Rated current (mA)		Coil resistance (Ω)	Coil inductance (ref. value) (H)		Pick-up voltage	Dropout voltage	Maximum voltage	Power consumption (VA, W)
	50 Hz	60 Hz		Armature OFF	Armature ON				
6	214.10	183	12.20	0.04	0.08	80% max.	30% min.	110%	Approx. 1.00 to 1.20 (60 Hz)
12	106.50	91	46	0.17	0.33				
24	53.80	46	180	0.69	1.30				
50	25.70	22	788	3.22	5.66				
100/110	11.70/12.90	10/11	3,750	14.54	24.60				
110/120	9.90/10.80	8.40/9.20	4,430	19.20	32.10				
200/220	6.20/6.80	5.30/5.80	12,950	54.75	94.07				
220/240	4.80/5.30	4.20/4.60	18,790	83.50	136.40				
									Approx. 0.90 to 1.10 (60 Hz)

1- and 2-pole Types – DC

Rated voltage (V)	Rated current (mA)	Coil resistance (Ω)	Coil inductance (ref. value) (H)		Pick-up voltage	Dropout voltage	Maximum voltage	Power consumption (VA, W)
			Armature OFF	Armature ON				
6	150	40	0.16	0.33	80% max.	10% min.	110%	Approx. 0.90
12	75	160	0.73	1.37				
24	36.90	650	3.20	5.72				
48	18.50	2,600	10.60	21				
100/110	9.10/10	11,000	45.60	86.20				

- Note:**
1. The rated current and coil resistance are measured at a coil temperature of 23°C (73°F) with tolerances of +15%, -20% for AC rated current, and ±15% for DC rated coil resistance.
 2. The AC coil resistance and inductance are reference values at 60 Hz.
 3. The performance characteristics are measured at a coil temperature of 23°C (73°F).
 4. Class B coil insulation is available.

3-pole Type – AC

Rated voltage (V)	Rated current (mA)		Coil resistance (Ω)	Coil inductance (ref. value) (H)		Pick-up voltage	Dropout voltage	Maximum voltage	Power consumption (VA, W)
	50 Hz	60 Hz		Armature OFF	Armature ON				
6	310	270	6.70	0.03	0.05	80% max.	30% min.	110%	Approx. 1.60 to 2.00 (60 Hz)
12	159	134	24	0.12	0.21				
24	80	67	100	0.44	0.79				
50	38	33	410	2.24	3.87				
100/110	15.90/18.30	13.60/15.60	2,300	10.50	18.50				
120	17.30	14.8	2,450	11.50	20.60				
200/220	10.50/11.60	9.00/9.90	8,650	34.80	59.50				
240	9.40	8	10,400	38.60	74.60				

3-pole Type – DC

Rated voltage (V)	Rated current (mA)	Coil resistance (Ω)	Coil inductance (ref. value) (H)		Pick-up voltage	Dropout voltage	Maximum voltage	Power consumption (VA, W)
			Armature OFF	Armature ON				
6	234	25.70	0.11	0.21	80% max.	10% min.	110%	Approx. 1.40
12	112	107	0.45	0.98				
24	58.60	410	1.89	3.87				
48	28.20	1,700	8.53	13.90				
100/110	12.70/13	8,500	29.60	54.30				

4-pole Type – AC

Rated voltage (V)	Rated current (mA)		Coil resistance (Ω)	Coil inductance (ref. value) (H)		Pick-up voltage	Dropout voltage	Maximum voltage	Power consumption (VA, W)
	50 Hz	60 Hz		Armature OFF	Armature ON				
6	386	330	5	0.02	0.04	80% max.	30% min.	110%	Approx. 1.95 to 2.50 (60 Hz)
12	199	170	20	0.10	0.17				
24	93.60	80	78	0.38	0.67				
50	46.80	40	350	1.74	2.88				
100/110	22.50/25.50	19/21.80	1,800	10.50	17.30				
120	19.00	16.40	2,200	9.30	19				
200/220	11.50/13.10	9.80/11.20	6,700	33.10	57.90				
240	11.00	9.50	9,000	33.20	63.40				

4-pole Type – DC

Rated voltage (V)	Rated current (mA)	Coil resistance (Ω)	Coil inductance (ref. value) (H)		Pick-up voltage	Dropout voltage	Maximum voltage	Power consumption (VA, W)
			Armature OFF	Armature ON				
6	240	25	0.09	0.21	80% max.	10% min.	110%	Approx. 1.50
12	120	100	0.39	0.84				
24	69	350	1.41	2.91				
48	30	1,600	6.39	13.60				
100/110	15/15.90	6,900	32	63.70				

Note: 1. The rated current and coil resistance are measured at a coil temperature of 23°C (73°F) with tolerances of +15%, -20% for AC rated current, and ±15% for DC rated coil resistance.

2. The AC coil resistance and inductance are reference values at 60 Hz.

3. The performance characteristics are measured at a coil temperature of 23°C (73°F).

4. Class B coil insulation is available.