

LY

General Purpose Relay

Features

- Arc barrier equipped relay with high dielectric strength
- Long dependable service life assured by AgCdO contacts
- Choose models with LED indicator, push-to-test button, and upper mounting bracket
- LR approved versions are available



Contact Data

Contact ratings

SPDT (Single contact): 15 A, 110 VAC, 24 VDC (Resistive); 10 A, 110 VAC (Inductive); 7 A, 24 VDC (Inductive); 15 A, 240 VAC, 28 VDC (Resistive); 5 A, 120 VAC Tungsten (TV-5); 1/2 HP, 120 VAC; 470 VA, 120 VAC (Pilot Duty)

DPDT (Single contact): 10 A, 110 VAC, 24 VDC (Resistive); 7.5 A, 110 VAC (Inductive); 5 A, 24 VDC (Inductive); 13 A, 120 VAC, 28 VDC (Resistive); 12 A, 240 VAC (Resistive); 3 A, 120 VAC, Tungsten (TV-3); 1/2 HP, 120 VAC; 1/3 HP, 240 VAC; 345 VA, 120/240 VAC (Pilot duty)

3PDT/4PDT (Single contact): 10 A, 240 VAC, 28 VDC (Resistive); 1/2 HP, 240 VAC; 10 A, 110 VAC, 24 VDC (Resistive); 7.5 A, 110 VAC (Inductive); 5 A, 24 VDC (Inductive)

Maximum operating voltage 250 VAC, 125 VDC

Maximum operating current

SPDT: 15 A

DPDT/3PDT/4PDT: 10 A

Maximum switching capacity

SPDT, Resistive: 1,700 VA, 360 W

DPDT/3PDT/4PDT, Resistive: 1,100 VA, 240 W

Minimum permissible load 100mA at 5 VDC

Coil Data (% of rated voltage)

Pickup voltage 80% max.

Dropout voltage 30% min. (AC); 10% min. (DC)

Maximum voltage 110%

Characteristic Data

Initial contact resistance 50mΩ max.

Insulation resistance 100MΩ min. (at 500 VDC)

Dielectric strength

2,000 VAC, 50/60 Hz for 1 minute

Between contacts of same polarity: 1,000 VAC, 50/60 Hz for 1 minute

Service life

Mechanical: 50,000,000 operations min.

Electrical: SPDT: 200,000 operations min. at 15 A, 110 VAC, 24 VDC (Resistive);

10 A, 110 VAC (Inductive); 7 A, 24 VDC (Inductive)

DPDT: 500,000 operations min. at 10 A, 110 VAC, 24 VDC (Resistive);

7.5 A, 110 VAC (Inductive); 5 A, 24 VDC (Inductive)

3PDT/4PDT: 200,000 operations at 10 A, 110 VAC, 24 VDC (Resistive);

7.5 A, 110 VAC (Inductive); 5 A, 24 VDC (Inductive)

Construction Data

Termination Plug-in/solder terminals or PC board terminals

Weight

SPDT/DPDT: 1.41 oz. (40 g)

3PDT: 1.76 oz. (50 g)

4PDT: 2.47 oz. (70 g)

Packaging method Trays

Ordering Information

Part number	Rated voltage (V)	Coil res. (Ohms)	Power	Contact rating	Type
LY1 -DC12	-DC24	24 DC	650	15 A	SPDT
	-AC24	24 AC	180	15 A	Standard
	-AC110/120	110/120 AC	4,430	15 A	Plug-in/ Solder
	-AC220/240	220/240 AC	18,790	15 A	
LY1-0 -DC12	-DC24	24 DC	650	15 A	SPDT
	-AC24	24 AC	180	15 A	Standard
	-AC110/120	110/120 AC	4,430	15 A	PCB
	-AC220/240	220/240 AC	18,790	15 A	
LY1F -DC12	-DC24	24 DC	650	15 A	SPDT
	-AC24	24 AC	180	15 A	Upper Mounting Bracket
	-AC110/120	110/120 AC	4,430	15 A	Plug-in/ Solder
	-AC220/240	220/240 AC	18,790	15 A	
LY1N -DC12	-DC24	24 DC	650	15 A	SPDT
	-AC24	24 AC	180	15 A	LED Indicator
	-AC110/120	110/120 AC	4,430	15 A	Plug-in/ Solder
	-AC220/240	220/240 AC	18,790	15 A	
LY2 -DC12	-DC24	24 DC	650	10 A	DPDT
	-AC24	24 AC	180	10 A	Standard
	-AC110/120	110/120 AC	4,430	10 A	Plug-in/ Solder
	-AC220/240	220/240 AC	18,790	10 A	
LY2-0 -DC12	-DC24	24 DC	650	10 A	DPDT
	-AC24	24 AC	180	10 A	Standard
	-AC110/120	110/120 AC	4,430	10 A	PCB
	-AC220/240	220/240 AC	18,790	10 A	
LY2F -DC12	-DC24	24 DC	650	10 A	DPDT
	-AC24	24 AC	180	10 A	Upper Mounting Bracket
	-AC110/120	110/120 AC	4,430	10 A	Plug-in/ Solder
	-AC220/240	220/240 AC	18,790	10 A	
LY2N -DC12	-DC24	24 DC	650	10 A	DPDT
	-AC24	24 AC	180	10 A	LED Indicator
	-AC110/120	110/120 AC	4,430	10 A	Plug-in/ Solder
	-AC220/240	220/240 AC	18,790	10 A	
LY212N -DC12	-DC24	24 DC	650	10 A	DPDT LED
	-AC24	24 AC	180	10 A	Indicator
	-AC110/120	110/120 AC	4,430	10 A	Push-to-test Button
	-AC220/240	220/240 AC	18,790	10 A	Plug-in/ Solder
LY3 -DC12	-DC24	24 DC	410	10 A	3PDT
	-AC24	24 AC	100	10 A	Standard
	-AC120	120 AC	2,450	10 A	Plug-in/ Solder
	-AC240	240 AC	10,400	10 A	

Note: 1. Other coil voltages available.

2. Surge suppression diode available for DC coils.