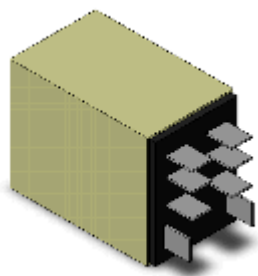


Bi-power Relays

LY2N DC12

Single stable, Single, Plug-in terminal, Operating indicator LED, Not equipped, 24 VDC 10 A, 110 VAC 10 A, Output DPDT (24 VDC 10 A)



Image

Coil ratings	12 VDC 75 mA
Operating indicator	LED
Contact form	DPDT
Contact method	Single
Contact material	Ag alloy
Contact rated load	110 VAC 10 A (Resistive load) 110 VAC 7.5 A (Inductive load (cosφ = 0.4)) 24 VDC 10 A (Resistive load) 24 VDC 5 A (Inductive load (L/R = 7 ms))
Terminal structure	Plug-in terminal

Ratings / Performance

As of July 16, 2020

Ratings

Operating indicator		LED
Degree of protection		Closed type (cover)
Terminal structure		Plug-in terminal
Coil	Coil ratings	12 VDC 75 mA
	Coil resistance	160 Ω
	Operate voltage (Set voltage)	80% max.
	Release voltage (Reset voltage)	10% min.
	Maximum voltage	110%
	Power consumption	Approx. 0.9 W
Contact	Contact rated load	110 VAC 10 A (Resistive load) 110 VAC 7.5 A (Inductive load (cosφ = 0.4)) 24 VDC 10 A (Resistive load) 24 VDC 5 A (Inductive load (L/R = 7 ms))
	Max. contact voltage	250 VAC 125 VDC
	Max. contact current	AC: 10 A DC: 10 A
	Contact form	DPDT
	Contact method	Single
	Contact material	Ag alloy

Performance

--

Contact resistance	50 mΩ max. (Voltage drop method with 5 VDC 1 A)
Operating time	25 ms max. (With rated operating power applied, 23 °C, not including contact bounce)
Reset time	25 ms max. (With rated operating power applied, 23 °C, not including contact bounce)
Maximum operating frequency	Mechanical: 18000 time/h Rated load: 1800 time/h
Insulation resistance	Between coil and contacts: 100 MΩ min. (at 500 VDC) Between contacts of same polarity: 100 MΩ min. (at 500 VDC) Between contacts of different polarity: 100 MΩ min. (at 500 VDC)
Dielectric strength	Between coil and contacts: 2000 VAC 50/60 Hz 1 min Between contacts of same polarity: 1000 VAC 50/60 Hz 1 min Between contacts of different polarity: 2000 VAC 50/60 Hz 1 min
Vibration resistance (destruction)	10 to 55 to 10 Hz, 0.5-mm single amplitude (1-mm double amplitude)
Vibration resistance (Malfunction)	10 to 55 to 10 Hz, 0.5-mm single amplitude (1-mm double amplitude)
Shock resistance (destruction)	1000 m/s ²
Shock resistance (Malfunction)	200 m/s ²
Endurance (Mechanical)	100 million operations min. (switching frequency 18,000 operations/h)
Endurance (Electrical)	500,000 operations min. (23 °C, switching frequency 1,800 operations/h)
Failure rate	100 mA at 5 VDC (failure level: Preference value, Switching frequency: 120 operations per minute)
Ambient temperature (Operating)	-25 to 40 °C (with no freezing or condensation)
Ambient humidity (Operating)	5 to 85% RH
Weight	Approx. 40 g
Mounting method	Socket

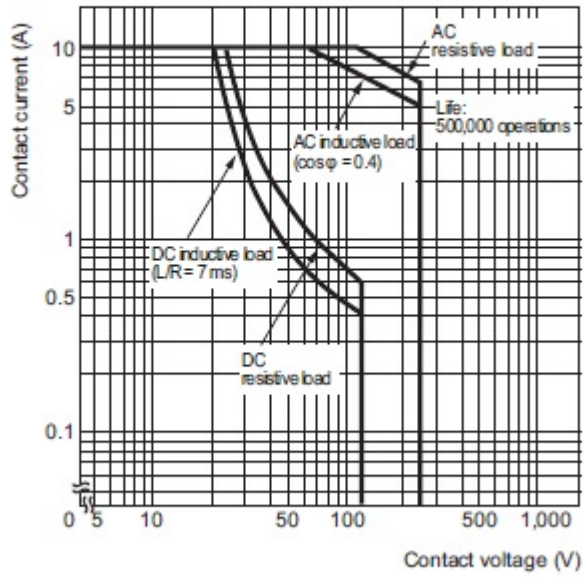
As of July 16, 2020

Characteristic chart

As of July 16, 2020

Switching capacities

LY2



As of July 16, 2020