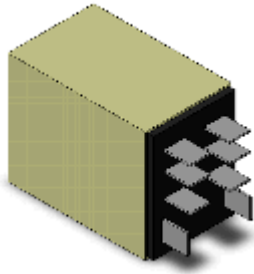


Bi-power Relays

# LY2N DC24

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

|                            |  |
|----------------------------|--|
| <b>Coil ratings</b>        | 24 VDC 36.9 mA   |
| <b>Operating indicator</b> | LED  |
| <b>Contact form</b>        | DPDT   |
| <b>Contact method</b>      | Single   |
| <b>Contact material</b>    | Ag alloy   |
| <b>Contact rated load</b>  | 110 VAC 10 A (Resistive load)<br>110 VAC 7.5 A (Inductive load (cosφ = 0.4))<br>24 VDC 10 A (Resistive load)<br>24 VDC 5 A (Inductive load (L/R = 7 ms)) |
| <b>Terminal structure</b>  | Plug-in terminal   |

Ratings / Performance

As of July 16, 2020

### Ratings

|                             |  |  |
|-----------------------------|--|--|
| <b>Operating indicator</b>  |  | LED  |
| <b>Degree of protection</b> |  | Closed type (cover)  |
| <b>Terminal structure</b>   |  | Plug-in terminal   |
| <b>Coil</b>                 | <b>Coil ratings</b>                    | 24 VDC 36.9 mA   |
|                             | <b>Coil resistance</b>                 | 650 Ω  |
|                             | <b>Operate voltage (Set voltage)</b>   | 80% max.   |
|                             | <b>Release voltage (Reset voltage)</b> | 10% min.   |
|                             | <b>Maximum voltage</b>                 | 110%   |
|                             | <b>Power consumption</b>               | Approx. 0.9 W  |
| <b>Contact</b>              | <b>Contact rated load</b>              | 110 VAC 10 A (Resistive load)<br>110 VAC 7.5 A (Inductive load (cosφ = 0.4))<br>24 VDC 10 A (Resistive load)<br>24 VDC 5 A (Inductive load (L/R = 7 ms)) |
|                             | <b>Max. contact voltage</b>            | 250 VAC<br>125 VDC   |
|                             | <b>Max. contact current</b>            | AC: 10 A<br>DC: 10 A   |
|                             | <b>Contact form</b>                    | DPDT   |
|                             | <b>Contact method</b>                  | Single   |
|                             | <b>Contact material</b>                | Ag alloy   |

### Performance

|  |  |
|--|--|
|  |  |
|--|--|

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

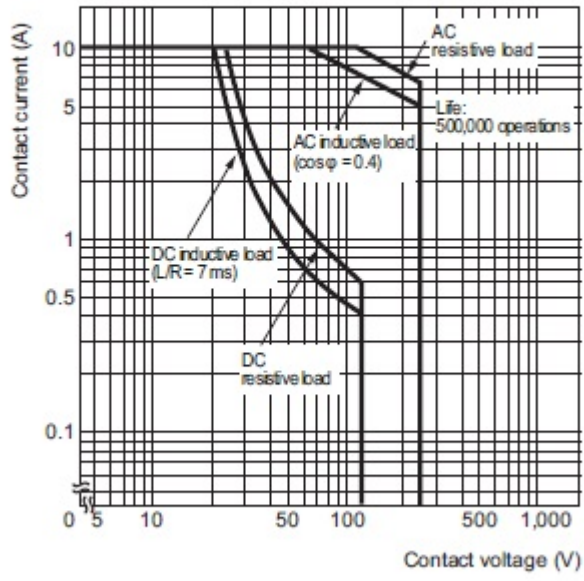
As of July 16, 2020

Characteristic chart

As of July 16, 2020

Switching capacities

# LY2



As of July 16, 2020