

# DLR40

Under development

## ■ Features

- Contact rating AC240V 120A
- Dielectric strength: Between open contact AC2000V  
Between contact and coil AC4000V
- Low contact resistance and low heat generation due to double contacts

## ■ Coil ratings

AC/DC	Voltage (V)	Operate voltage	Exciting time	Single coil		Maximum voltage
				Coil resistance (Ω) ±10% (at 20°C)	Power consumption (W) (at 20°C)	
DC	4.5	80% max. of rated voltage (Initial)	50ms min.	6.8	3	1.5 times the rated voltage
	5.0			8.3		
	12			48		
	24			192		

## ■ Ratings・Performance

Item		Performance	Notes
Contact specification	Contact configuration	1a	
	Contact material	AgSnO <sub>2</sub> type	
	Rated current	AC120A	
	Max. switching voltage	AC240V	
	Over-current capability	AC180A 20min AC2500A 0.01s	
	Overshoot capability	AC200V steady-state current 120A 10 times	Lamp load
	Contact resistance	0.2mΩ max.	DC6V 1A
Switching capability Life	Electrical endurance	AC200V 120A cosθ=0.8 2000 times	
	Mechanical endurance	100 000 times	
Operate time		30ms max. (excluding contact bounce time)	at coil rated voltage
Temperature rise	Temperature rise at connecting terminals	AC132A 50°C max.	Terminal root of relay 38mm <sup>2</sup> × 1.5m with wire connection
Insulation capability	Insulation resistance		DC500V 1000MΩ min.
	Dielectric strength	Between open contact	AC2000V 50/60Hz 1min
		Between contact and coil	AC4000V 50/60Hz 1min
Lightning impulse voltage	Between contact and coil	12kV (1.2 × 50 μs) 10 times each for positive and negative polarity	
Mechanical capability	Vibration resistance		16.7Hz (double amplitude 4.8mm)
	Shock resistance	Malfunction	500m/s <sup>2</sup> (half-sine pulse 11ms)
		Destruction	1000m/s <sup>2</sup> (half-sine pulse 0.2 to 6ms)
Usage environment	Usage and storage conditions		Temperature: -40°C to +70°C Humidity: 5% to 85%RH ※ Prolonged high temperature and humidity are not allowed.
	Others		No influence of corrosive gases such as sulfide gas
Mass			Approx. — g

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