

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	Item 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 ₂ 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 cos θ=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 ² × 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 μ s) 10 times each for positive and negative polarity	
Mechanical capability	Vibration resistance		16.7Hz (double amplitude 4.8mm)	
	Shock resistance	Malfunction	500m/s ² (half-sine pulse 11ms)	
		Destruction	1000m/s ² (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.	No freezing and condensing at low temperature
	Others		No influence of corrosive gases such as sulfide gas	
Mass			Approx. — g	

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