DCNLR SERIES60V DC MAX CONTACTOR RELAY





DCNLR200NB48

DCNLR100NB

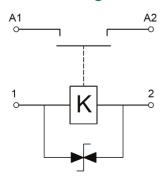
Description

Ideal for safely disconnecting DC energy sources in 48V applications that require continuous run time, the DCNLR Series 60V DC Max Contactor Relay features an IP67 rating for protection against water and dust common in harsh environmental conditions. The remote-operated contactor has a space-saving design and can be easily installed in any orientation, making it simple to incorporate into battery electric vehicles (BEV), hybrid electric vehicles (HEV), material handling equipment, telecom power supplies, battery energy storage systems, construction machinery, heavy-duty trucks, buses, and more. Configurations of the DCNLR Series remote DC contactor come with a continuous current rating of either 100A or 200A. The 200A DCNLR Series contactor models feature a 12V, 24V, 48V, or 60V coil, while the 100A models are available with a 12V, 24V, or 48V coil.

Web Resources

Download 2D print, installation guide and technical resources at: **littelfuse.com/DCNLR**

Electrical Diagram



Specifications

Max Voltage Rating (V DC): 60

Current Rating Continuous (A): 100, 200

Coil Voltage Rating (V DC): 12, 24, 48, 60

Ingress Protection: IP67

Operating Temperature (°C): -40 to +85

Features and Benefits

- Available with a continuous current rating of 100A or 200A
- Thermoplastic housing and an IP67 rating enable use in harsh automotive environments and heavy equipment applications
- Remote-operated, space-saving design can be easily mounted in any orientation
- Main contacts are rated for 48V (typical) and 60V (max)
- Common coil voltage options of 12V, 24V, 48V, and 60V
- Non-polarized copper alloy main contacts
- Integral coil suppression

Applications

- Battery Electric Vehicles
- Hybrid Electric Vehicles
- Material Handling Equipment
- Telecom Power Supplies
- Battery Energy Storage Systems
- Construction Machinery
- Heavy-Duty Trucks
- Buses

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Ordering Information

PART	CONTINUOUS CURRENT (A) SYSTEM NOMINAL (V DC)	E RATING		COIL	COIL	AUX		
NUMBER			MAX VOLTAGE (V DC)	MOUNTING	VOLTAGE (V DC)	TYPE	CONTACT	POLARIZED
DCNLR100NB12	100	48	60	BOTTOM	12	Single	No	No
DCNLR100NB24	100	48	60	воттом	24	Single	No	No
DCNLR100NB48	100	48	60	BOTTOM	48	Single	No	No
DCNLR200NB12	200	48	60	воттом	12	Single	No	No
DCNLR200NB24	200	48	60	BOTTOM	24	Single	No	No
DCNLR200NB48	200	48	60	воттом	48	Single	No	No
DCNLR200NB60	200	48	60	BOTTOM	60	Single	No	No

Performance Data

MAIN CONTACT				
Contact Arrangeme	SPST NO			
Rated Operating Volt	48V DC			
Max Short Circuit Current	DCNLR100	400A @ 48V DC		
iviax Short Circuit Current	DCNLR200	800A @ 48V DC		
Dialogatic Withstand Voltage	DCNLR100	2000V AC		
Dielectric Withstand Voltage -	DCNLR200	2200V AC		
Insulation Resistence	≥ 100MΩ @ 500V DC			
May Valtaga Dran	DCNLR100	≤ 50mV @ 100A		
Max Voltage Drop –	DCNLR200	≤ 80mV @ 200A		

COIL DATA					
Voltage Rating (V DC)			24	48	60
Pickup Voltage @ 25°C (V DC MAX)			18	36	45
Dropout Voltage @ 25°C (V DC MIN)			2	4	5
Hald Comment (A)	DCNLR100	0.48	0.24	0.12	-
Hold Current (A)	DCNLR200	0.78	0.39	0.2	0.16
Coil Motto @ 25°C (M/)	DCNLR100		8		
Coil Watts @ 25°C (W)	DCNLR200		9.5		

LIFE			
Electrical Life	30,000		
Mechanical Life	200,000		

OPERATE / RELEASE TIME				
Close (ms)	25			
Release (ms)	12			

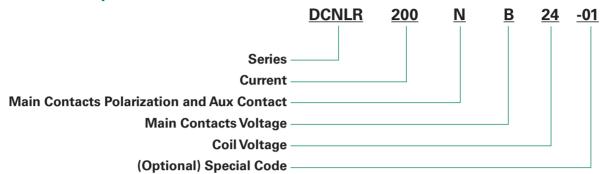
ENVIRONMENTAL DATA				
Shock		Shock, 11ms ½ Sine, Peak, Operating 20G		
Vibration		Vibration, Sine, 80-2000Hz., Peak 20G		
Operating Ambient Temperature		-40°C~+85°C		
	DCNLR100	193		
Weight (g)	DCNLR200	350		

Note: Estimated Make Break Charts and Time Current Curves Coming Soon



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Part Number System



MAIN CONTACTS POLARIZATION AND AUX CONTACT					
	POLARIZED?	INCLUDE AUX CONTACT?			
N:	No	No			

MAIN CONTACTS VOLTAGE RATING				
B:	48	V DC		

COIL VOLTAGE				
12:	12	V DC		
24:	24	V DC		
48:	48	V DC		
60:	60	V DC		