DNH50
DC Disconnect Switch

Product Catalog

DNH50
DC Disconnect Switch

Installation Convenience, Simple Operation

Non-polarized design, supports top-in/bottom-out and bottom-in/top-out

Mounting feet angle freely adjustable according to actual requirements

Superior Performance, Safety and Reliability

Meets DC-PV2 high-standard utilization category, rated voltage up to DC 2000V

Provides breaking capacity of DC 500V to DC 1000V per pole; only 2 poles required for DC 2000V, maximum current reaches 630A

Visible breakpoint

Adopts permanent magnet (third-generation rare-earth permanent magnet material) and narrow-slit arc extinguishing

Minimum arcing time only 3.249ms

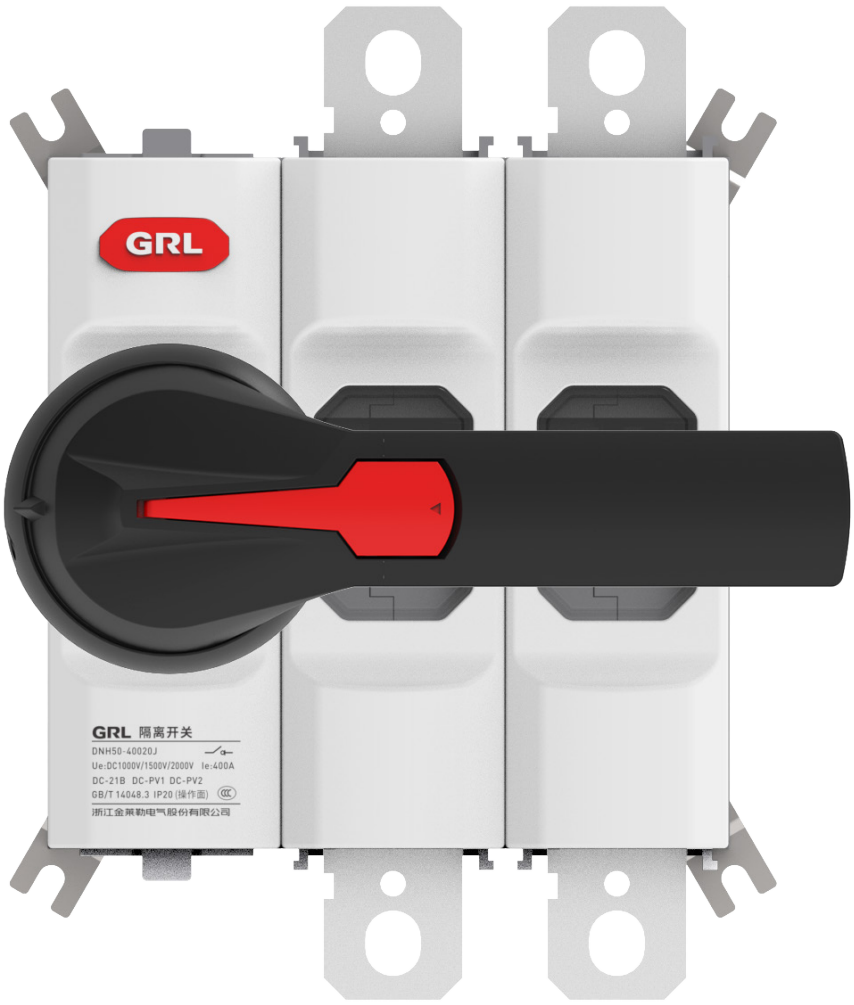
Utilizes spring energy storage mechanism for rapid switching

Compact Design, Modular Combination

Free combination, customizable on demand to meet diverse user requirements

Fully Independent R&D

2 invention patents, 1 utility model patent



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Application

DNH50 series disconnectors are suitable for low voltage distribution networks with DC2000V, 630A or below. They are used for infrequent connect/disconnect of the main circuit, and for isolating the circuit. They are widely used in solar photovoltaic, energy storage system (ESS) and DC equipment systems. Standards: GB/T 14048.1、GB/T 14048.3；IEC 60947-1、IEC 60947-3 standards.

Model and Meaning

DN H 50 - □ □ □ □ □

Auxiliary contact:
F11means1NO+1NC,F22means2NO+2NC
F33means3NO+3NC,F44means4NO+4NC

Operation mode:
No note for operation inside the cabinet
"J" means operationoutside the cabinet from the front
"S" means operation outside the cabinetfrom the side
(optional when the number of poles is 02 or 20)

Number of poles:
02 means 2 poles -mechanism located on the left
20 means 2 poles- mechanism located on the right
11 means 2 poles- mechanism located between poles
22 means 4 poles- mechanism located between poles
(two circuits)

Phase-to-phase protection:
"G" means Phase Barrier
"H" means Terminal Cover
no note if not required

Rated current: 80A、100A、125A、160A、200A、225A、250A、275A、315A、320A、400A、500A、630A

Design serial number

DC isolating switch

Company code

Main Technical Parameters (DNH50- 80~320)

Specifications			DNH50-80	DNH50-100	DNH50-125	DNH50-160	DNH50-200
Rated Operating Current (Ie) (A)			80	100	125	160	200
Rated Insulation Voltage (Ui) (V)			2000V				
Utilization Category	Rated Operating Voltage (Ue) (V)	Number of Cirruits	/				
DC-21B DC-PV1	DC1000	1 Cirruit	80	100	125	160	200
	DC1000	2 Cirruits	80	100	125	160	200
	DC1500	1 Cirruit	80	100	125	160	200
	DC1500	2 Cirruits	80	100	125	160	200
	DC2000	1 Cirruit	80	100	125	160	200
	DC2000	2 Cirruits	80	100	125	160	200
DC-PV2	DC1000	1 Cirruit	80	100	125	160	200
	DC1000	2 Cirruits	80	100	125	160	200
	DC1500	1 Cirruit	80	100	125	160	200
	DC1500	2 Cirruits	80	100	125	160	200
	DC2000	1 Cirruit	80	100	125	160	200
	DC2000	2 Cirruits	80	100	125	160	200
Rated Power-frequency Withstand Voltage (V)			6000				
Rated Impulse Withstand Voltage (Uimp) (kV)			12				
Rated Short-time Withstand Current (Icw/1s) (kA)			12	12	12	12	12
Rated Short-circuit Making Capacity (Icm) (kA)			20	20	20	20	20
Mechanical Life (cycles)			10000				
Electrical Life (cycles)			600	600	600	600	600

DNH50
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Specifications			DNH50-225	DNH50-250	DNH50-275	DNH50-315	DNH50-320
Rated Operating Current (Ie) (A)			225	250	275	315	320
Rated Insulation Voltage (Ui) (V)			2000V				
Utilization Category	Rated Operating Voltage (Ue) (V)	Number of Cirruits	/				
DC-21B DC-PV1	DC1000	1 Cirruit	225	250	275	315	320
	DC1000	2 Cirruits	225	250	275	315	320
	DC1500	1 Cirruit	225	250	275	315	320
	DC1500	2 Cirruits	225	250	275	315	320
	DC2000	1 Cirruit	225	250	275	315	320
	DC2000	2 Cirruits	225	250	275	315	320
DC-PV2	DC1000	1 Cirruit	225	250	275	315	320
	DC1000	2 Cirruits	225	250	275	315	320
	DC1500	1 Cirruit	225	250	275	315	320
	DC1500	2 Cirruits	225	250	275	315	320
	DC2000	1 Cirruit	225	250	275	315	320
	DC2000	2 Cirruits	225	250	275	315	320
Rated Power-frequency Withstand Voltage (V)			6000				
Rated Impulse Withstand Voltage (Uimp) (kV)			12				
Rated Short-time Withstand Current (Icw/1s) (kA)			12	12	12	12	12
Rated Short-circuit Making Capacity (Icm) (kA)			20	20	20	20	20
Mechanical Life (cycles)			10000				
Electrical Life (cycles)			500	500	500	500	500

Main Technical Parameters (DNH50- 400~630)

Specifications			DNH50-400	DNH50-500	DNH50-630
Rated Operating Current (Ie) (A)			400	500	630
Rated Insulation Voltage (Ui) (V)			2000V		
Usage Category	Rated Operating Voltage (Ue) (V)	Number of Cirruits	/		
DC-21B DC-PV1	DC1000	1 Cirruit	400	500	630
	DC1000	2 Cirruits	400	500	630
	DC1500	1 Cirruit	400	500	630
	DC1500	2 Cirruits	400	500	630
	DC2000	1 Cirruit	400	500	630
	DC2000	2 Cirruits	400	500	630
DC-PV2	DC1000	1 Cirruit	400	500	630
	DC1000	2 Cirruits	400	500	630
	DC1500	1 Cirruit	400	/	/
	DC1500	2 Cirruits	400	/	/
	DC2000	1 Cirruit	400	/	/
	DC2000	2 Cirruits	400	/	/
Rated Power-frequency Withstand Voltage (V)			6000		
Rated Impulse Withstand Voltage (Uimp) (kV)			12		
Rated Short-time Withstand Current (Icw/1s) (kA)			12	12	12
Rated Short-circuit Making Capacity (Icm) (kA)			20	20	20
Mechanical Life (cycles)			10000		
Electrical Life (cycles)			400	200	200

Working Conditions

Ambient Temperature	-40°C~+70°C, with the average temperature over any 24-hour period not exceeding +35°C.
Humidity	When the maximum temperature is +40°C, the relative humidity of air shall not exceed 50%. Higher relative humidity is permissible at lower temperatures, for example, up to 90% at +20°C. Special measures shall be taken against occasional condensation caused by temperature changes;
Altitude	⩽5000m
Pollution Degree	3
Installation Conditions	The switch shall be installed where there is no significant shaking, impact vibration, or exposure to rain and snow. The location shall be free from explosive hazardous substances, and the medium shall contain no gases or dust sufficient to corrode metals or damage insulation;

Note: If intended for use where ambient air temperature exceeds +40°C or falls below -5°C, the user shall inform the manufacturer.

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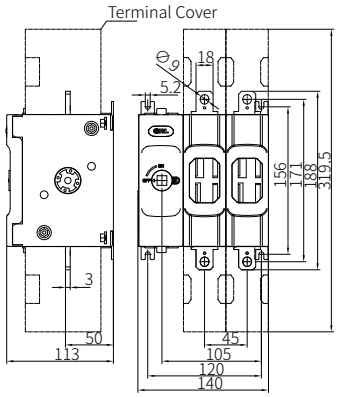
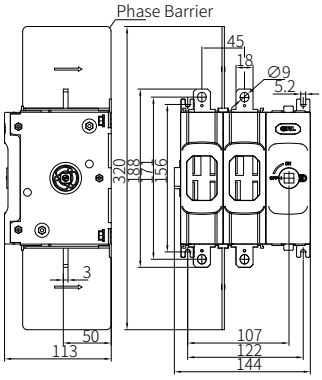
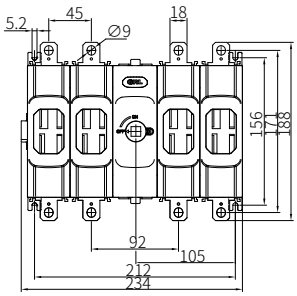
Dimensions(mm)

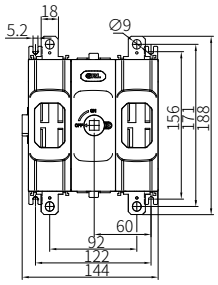
DNH50- 80 ～ 320

pole:02	pole:20	pole:22	pole:11



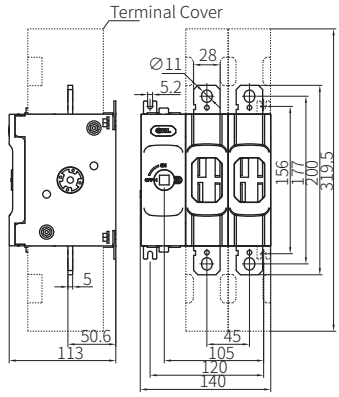


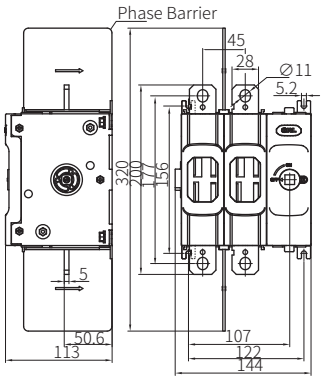


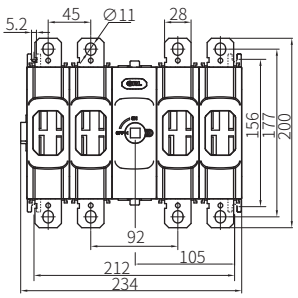


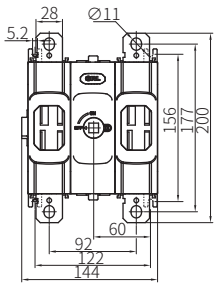
DNH50- 400～630

pole:02	pole:20	pole:22	pole:11

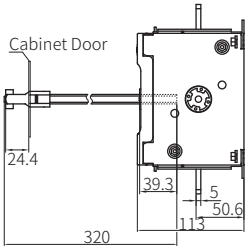


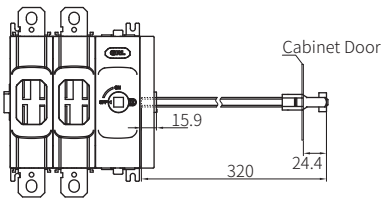




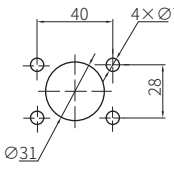


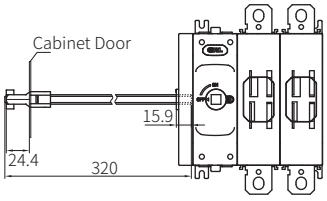
Front External Operation	External Operation, Poles: 20	External Operation, Poles: 02





Cabinet door opening size





Connecting rod component dimensions

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