



DHECN[®]

DGL Series

Load Isolation Switch Selection Manual



DONGHUA ELECTRIC STOCK CO., LTD. OF ZHEJIANG

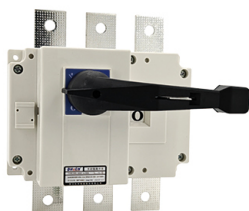
DGL Series Load Isolation Switch

Version Number: 202412

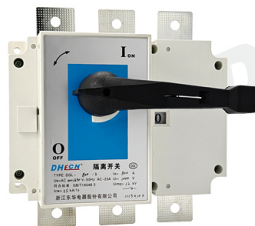
Current level: 63A、100A、125A、160A、200A、250A
315A、400A、500A、630A、800A、1000A
1250A、1600A、2000A、2500A、3150A



DGL-100/3、4



DGL-630/3



DGL-800/3



DGL-800/3J

Area of Application

The DGL series load isolation switch (hereinafter referred to as the switch) is suitable for AC 50Hz rated voltage up to AC690V, with a specified heating current of 3150A, and is used for infrequent connection and disconnection of circuits and electrical isolation.

This product complies with the standard GB/T14048.3 IEC60947-3.

Meaning of Product Model

DGL □ - □ / □ J K □ B H

- Operation behind the cabinet (no need to label)
- Wiring behind the board (not required or labeled)
- Number of auxiliary contacts, 11: NO+NC, 22:2NO+2NC (not specified)
- Visual contact window (not required or labeled)
- Out of cabinet operation (not required or marked)
- Number of poles, 2:2 poles, 3:3 poles, number of poles, "4" represents 3 poles+switchable N poles
- Rated working current
- C: Side operation, Z-conversion load isolation switch (Z1 upper and lower structure, Z2 left and right structure), no need to label
- Load isolation switch

Normal Working and Installation Conditions

- The ambient air temperature should not exceed +40 °C and should not be lower than -5 °C .
- The altitude of the installation site shall not exceed 2000m.
- Humidity: When the maximum temperature is +40 °C , the relative humidity of the air does not exceed 50%. Higher relative humidity is allowed at lower temperatures, such as reaching 90% at 20 °C . Due to temperature changes Special measures should be taken to prevent occasional condensation.
- The pollution level of the surrounding environment is level 3.
- The switch should be installed in a place without significant shaking, impact vibration, and no rain or snow invasion. At the same time, the installation location should be free of explosive hazardous media, and there should be no gases or substances in the media that can corrode metals and damage insulation dust.

Structural Feature

The product has a beautiful and innovative appearance, with a marked window on the front indicating the contact opening and closing status. The acceleration mechanism of the spring energy storage instantaneous release realizes quick connection or disconnection, independent of the speed of the operating handle, greatly improving the ability to extinguish the arc. The shell made of glass fiber reinforced unsaturated polyester resin has good flame retardant performance, dielectric performance, carbonization resistance, and impact resistance. The parallel double break point contacts have self-cleaning function, and all contacts have two separate contact surfaces. The isolation distance is large, and when in the "0" position, the handle can be locked to avoid accidental operation. There are two design options for the upper cover with a current level of 160A~630A. Option 1: The base and upper cover are made of the same material; Option 2: The upper cover is made of transparent material, allowing customers to directly observe the on/off status of the internal structural contacts. A fully transparent upper cover is generally used for cabinet operations.

Main Technical Parameters

Model	DGL-63	DGL-100	DGL-125	DGL-160	DGL-200	DGL-250	DGL-315	DGL-400	DGL-500	DGL-630	DGL-800	DGL-1000	DGL-1250	DGL-1600	DGL-2000	DGL-2500	DGL-3150
Conventional thermal current (A)	63	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150
Rated working current (A)	63	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150
Rated operational voltage (V)	400				380/660			400/690				380/660			380		
Rated insulation voltage (V)	750	750	750	750	1000	1000	1000	1000	1000	1000	1000	800	800	800	660	660	660
Rated impulse withstand voltage (kV)	6	6	6	6	12	12	12	12	12	12	12	12	12	12	8	8	8
Rated connection capacity (A)	63	100	125	160	2000	2500	3150	4000	5000	6300	8000	10000	12500	16000	2000	2500	3150
Rated breaking capacity (A)	63	100	125	160	1600	2000	2520	3200	4000	5040	6400	8000	10000	12800	2000	2500	3150
Mechanical lifespan (times)	10000	10000	10000	10000	7000	7000	7000	7000	7000	7000	2500	2500	2500	2500	2000	2000	2000
Electrical lifespan (times)	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	500	500	500	500	100	100	100
Short time withstand current (kA/1s)	10	10	10	10	9	9	20	20	20	20	25	30	30	30	80	80	80
Operating force (N)	≤400	≤400	≤400	≤400	≤400	≤400	≤400	≤400	≤400	≤400	≤400	≤600	≤600	≤600	≤600	≤600	≤600
Utilization category	AC-20A				AC-23A										AC-20A		
Pollution degree	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Degrees of protection provided by enclosure	IP00	IP00	IP00	IP00	IP00	IP00	IP00	IP00	IP00	IP00	IP00	IP00	IP00	IP00	IP00	IP00	IP00

Installation Precautions

- 1.The contact parameters of the switch have been set by the manufacturer and cannot be adjusted arbitrarily during use.
- 2.During the connection process between the busbar and the product, it is necessary to ensure that the distance between the busbar holes and the product wiring holes is consistent to avoid product damage caused by external forces.

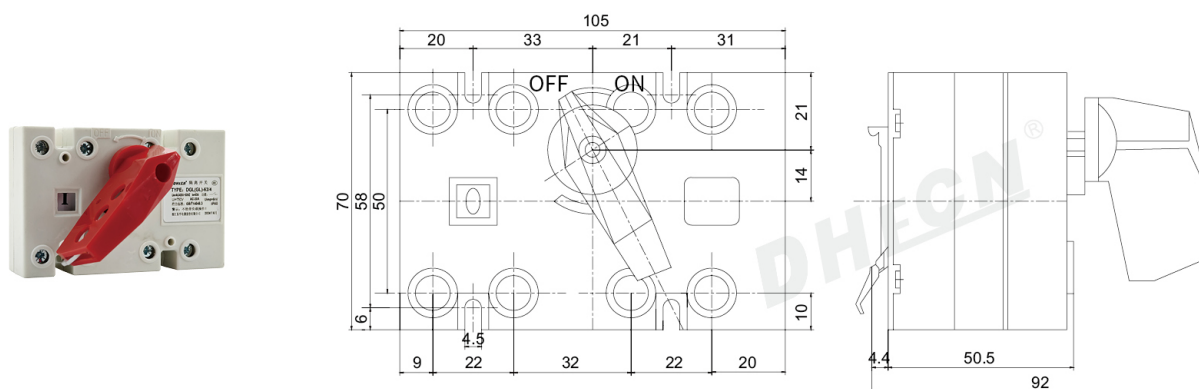
Ordering Instructions

Customers must specify the product name, model, rated current, number of poles, and quantity, for example: DGL-400/3JK11, quantity 10 units

Note: The specifications and outline dimensions may change due to product improvements without prior notice, and the actual product shall prevail.

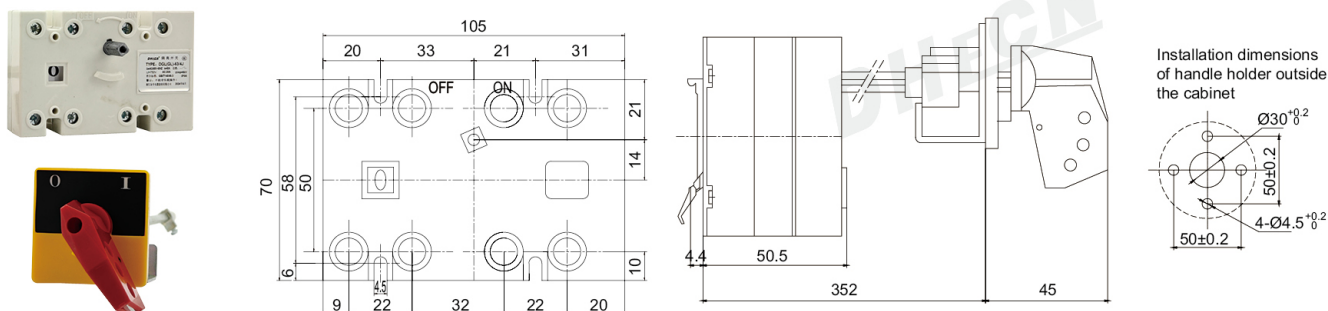
DGL-63/3、4 Directly operate installation and outline dimensions (mm)

DGL-63/3、4 directly operate the installation diagram



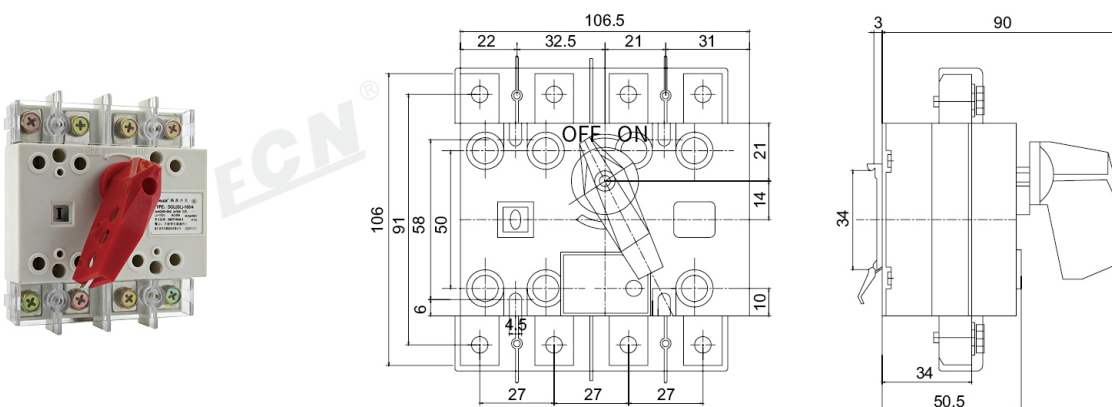
DGL-63/3J、4J Installation and outline dimensions for operation outside the cabinet (mm)

DGL-63/3J、4J installation diagram for operation outside the cabinet



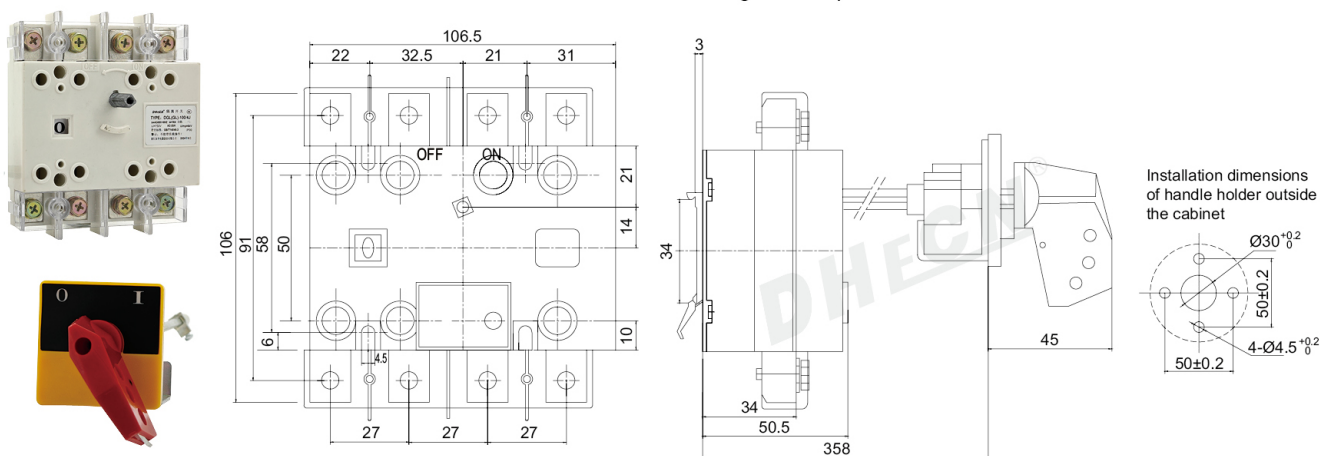
DGL-100/3、4 Directly operate installation and outline dimensions (mm)

DGL-100/3、4 directly operate the installation diagram



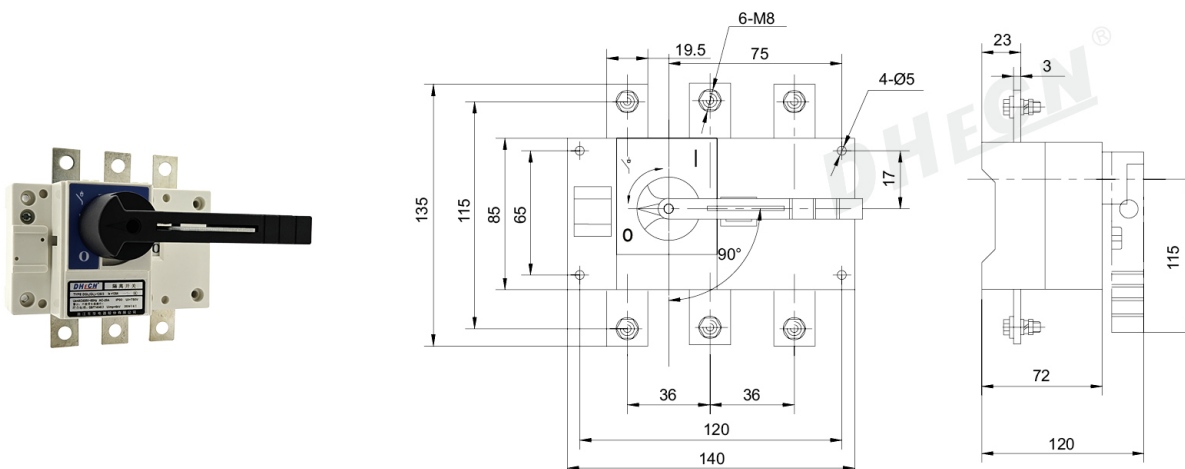
DGL-100/3J、4J installation and outline dimensions for operation outside the cabinet (mm)

DGL-100/3J、4J installation diagram for operation outside the cabinet



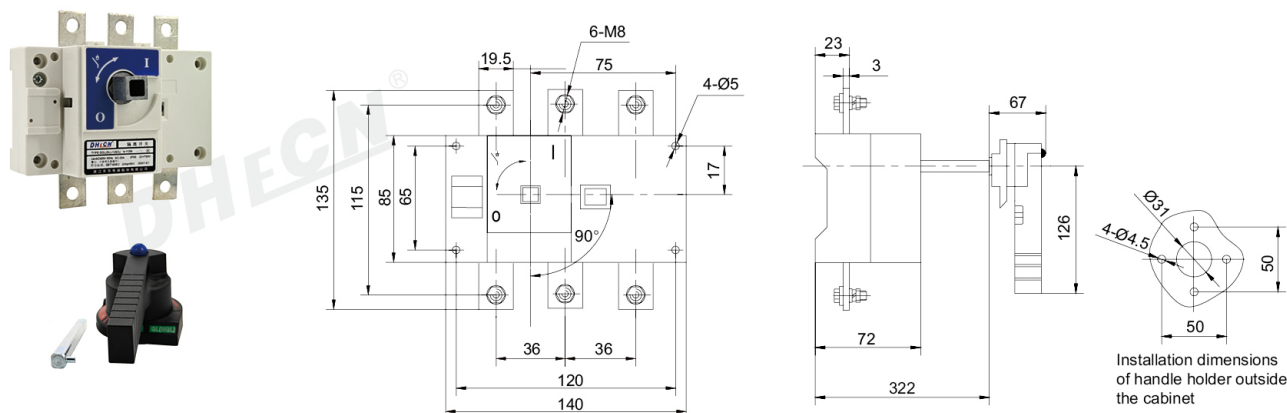
DGL-125/3 directly operate installation and outline dimensions (mm)

DGL-125/3 directly operate the installation diagram



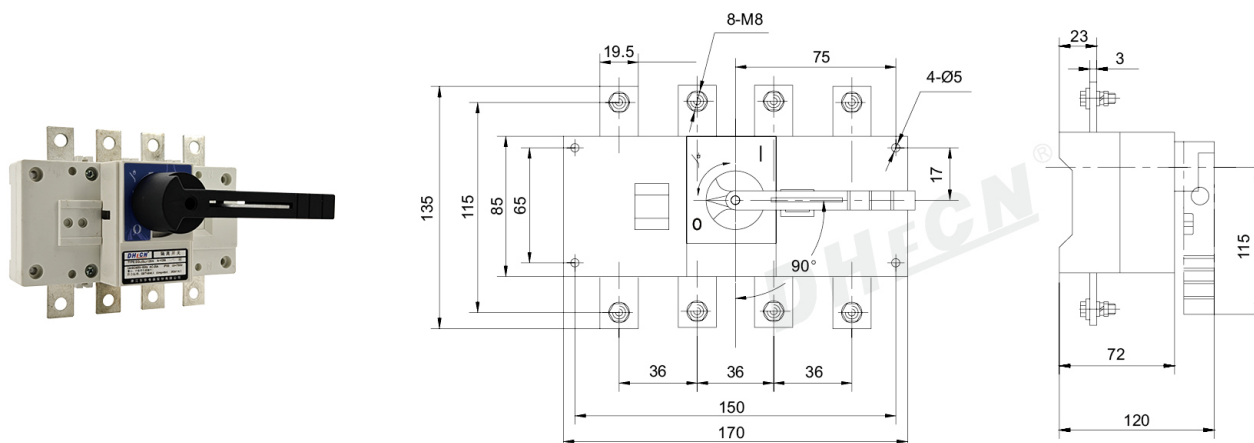
DGL-125/3J installation and outline dimensions for operation outside the cabinet (mm)

DGL-125/3J installation diagram for operation outside the cabinet



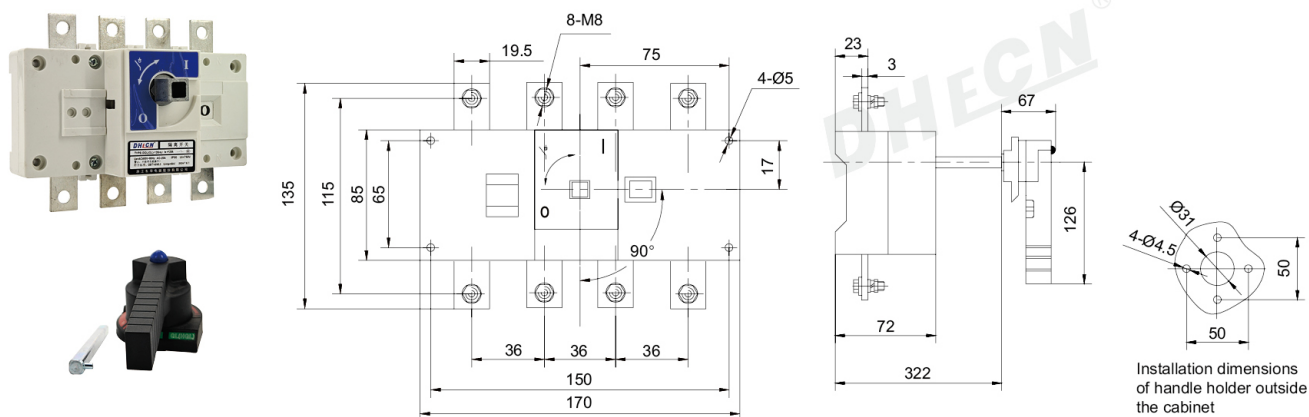
DGL-125/4 directly operate installation and outline dimensions (mm)

DGL-125/4 directly operate the installation diagram



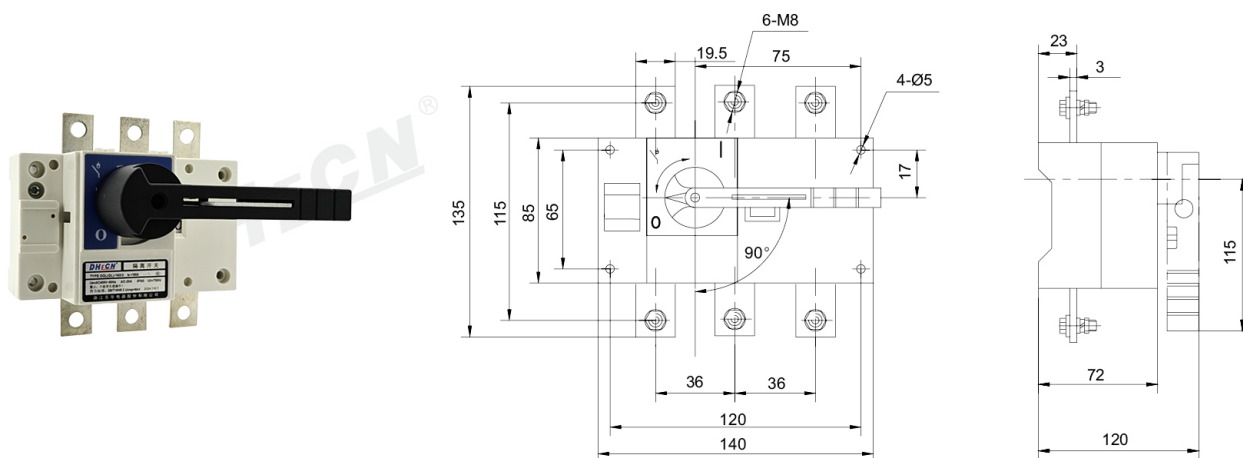
DGL-125/4J installation and outline dimensions for operation outside the cabinet (mm)

DGL-125/4J installation diagram for operation outside the cabinet



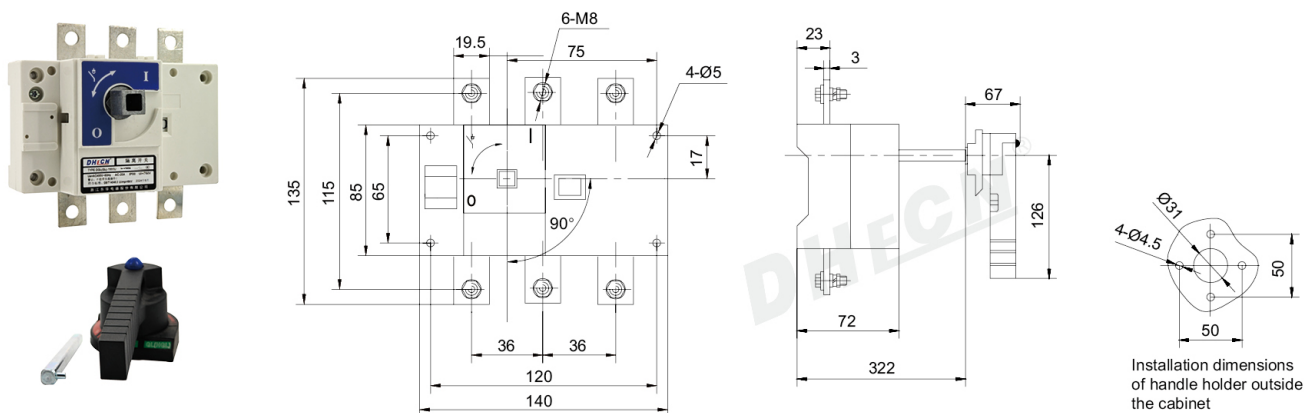
DGL-160/3 directly operate installation and outline dimensions (mm)

DGL-160/3 directly operate the installation diagram



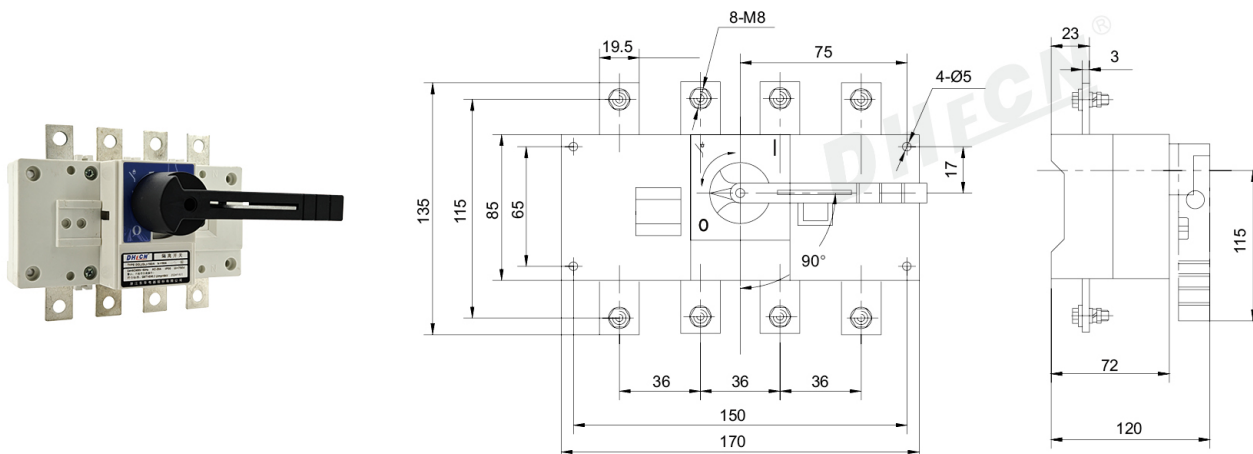
DGL-160/3J installation and outline dimensions for operation outside the cabinet (mm)

DGL-160/3J installation diagram for operation outside the cabinet



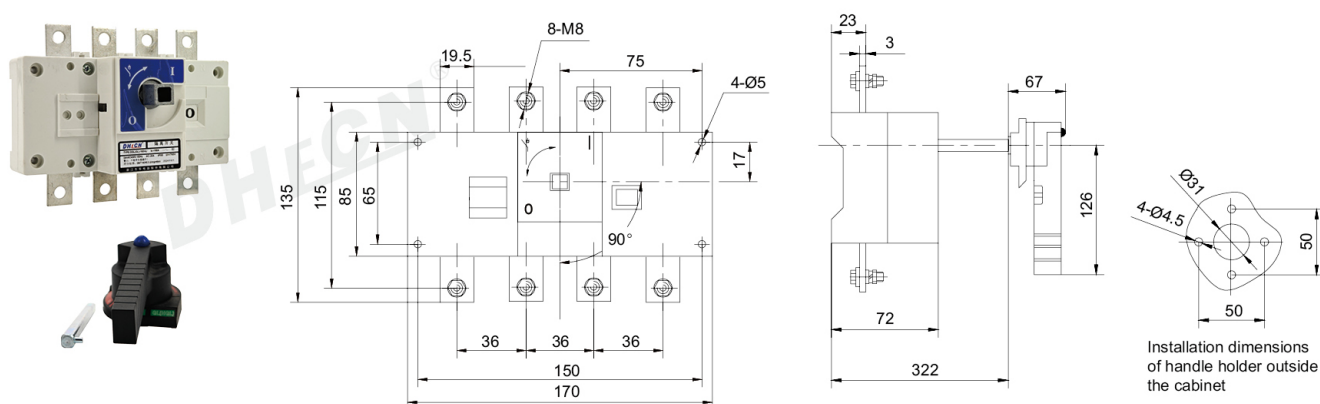
DGL-160/4 directly operate installation and outline dimensions (mm)

DGL-160/4 directly operate the installation diagram



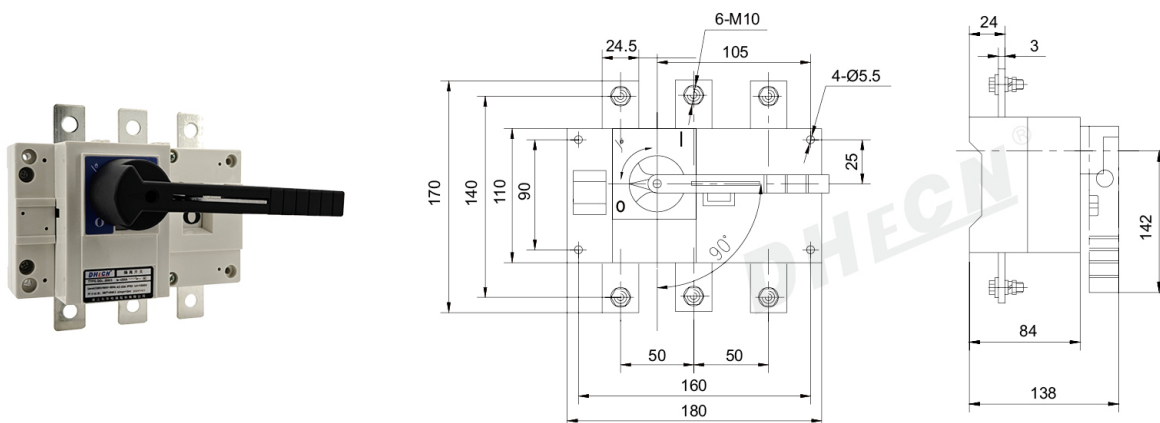
DGL-160/4J installation and outline dimensions for operation outside the cabinet (mm)

DGL-160/4J installation diagram for operation outside the cabinet



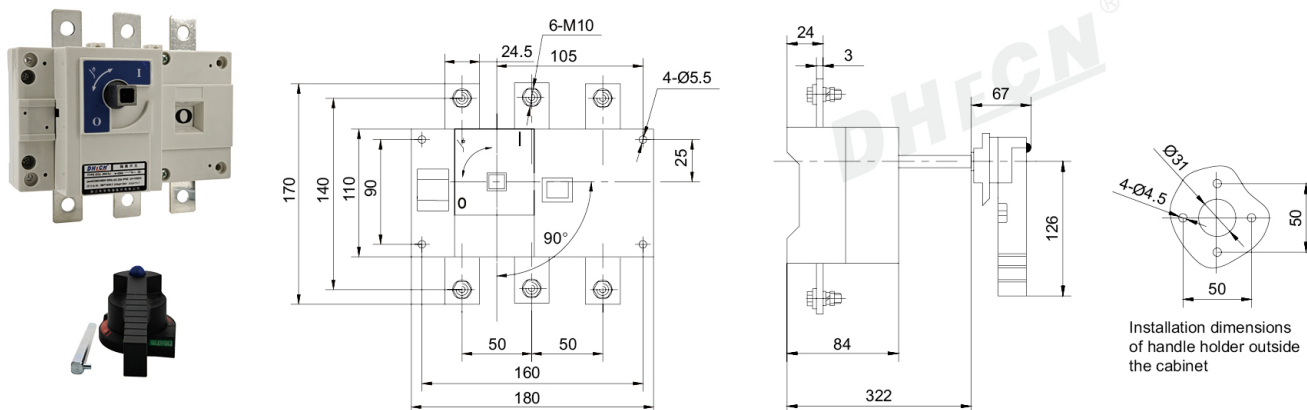
DGL-200/3 directly operate installation and outline dimensions (mm)

DGL-200/3 directly operate the installation diagram



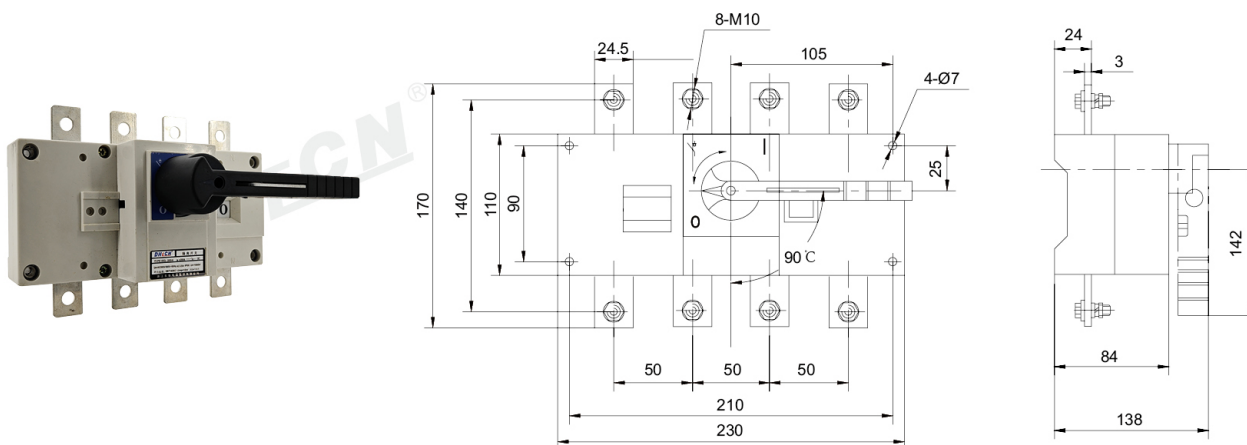
DGL-200/3J installation and outline dimensions for operation outside the cabinet (mm)

DGL-200/3J installation diagram for operation outside the cabinet



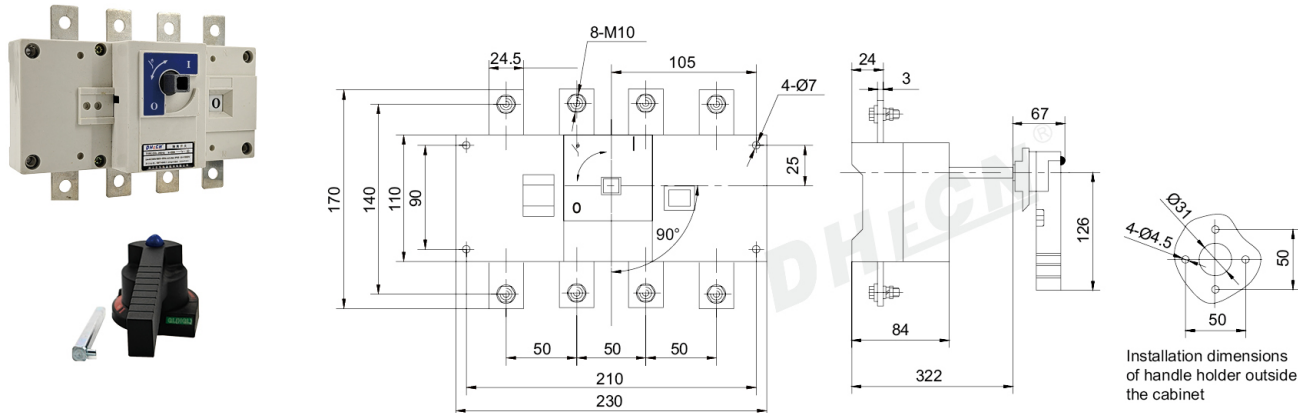
DGL-200/4 directly operate installation and outline dimensions (mm)

DGL-200/4 directly operate the installation diagram



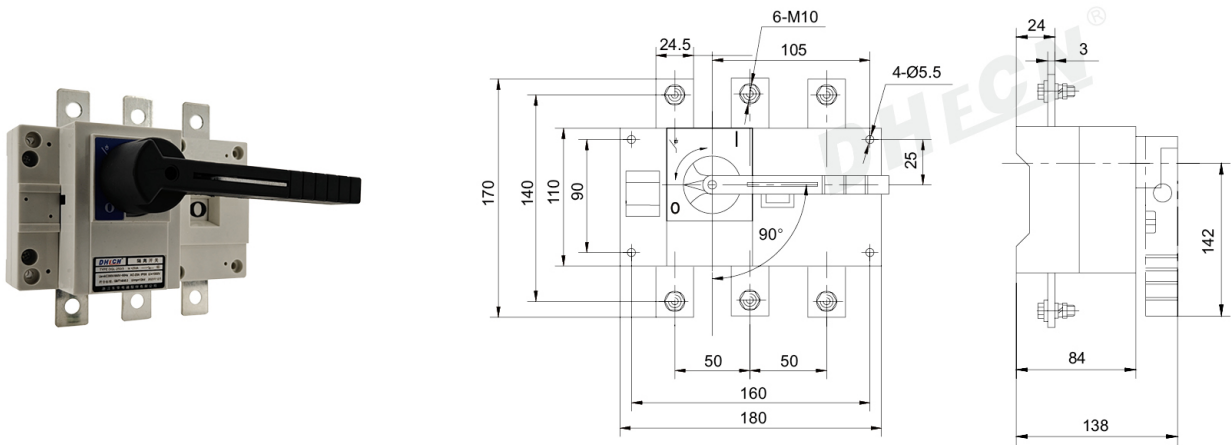
DGL-200/4J installation and outline dimensions for operation outside the cabinet (mm)

DGL-200/4J installation diagram for operation outside the cabinet



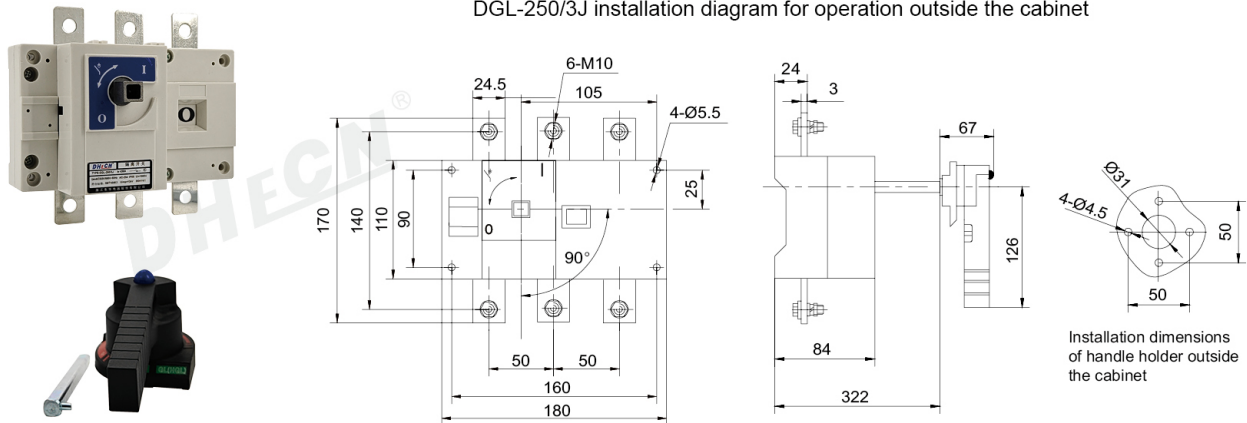
DGL-250/3 directly operate installation and outline dimensions (mm)

DGL-250/3 directly operate the installation diagram



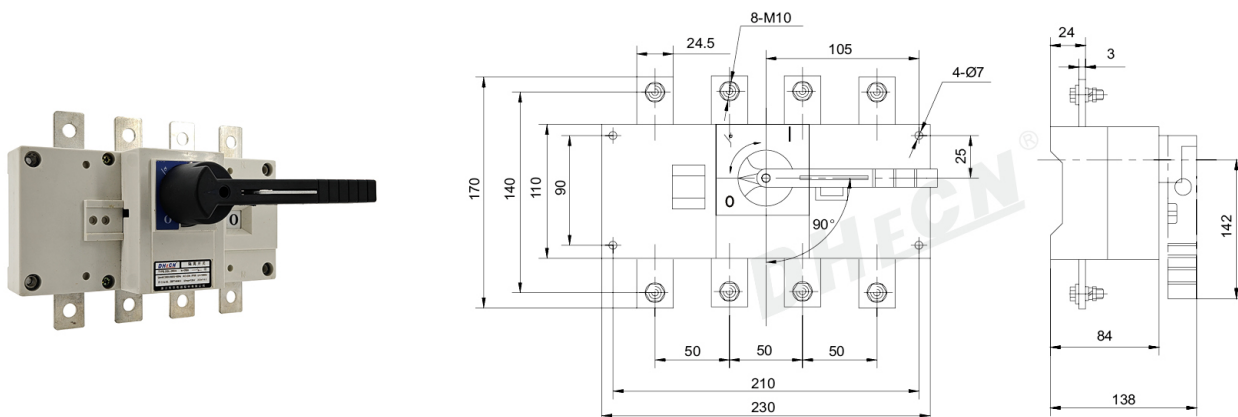
DGL-250/3J installation and outline dimensions for operation outside the cabinet (mm)

DGL-250/3J installation diagram for operation outside the cabinet



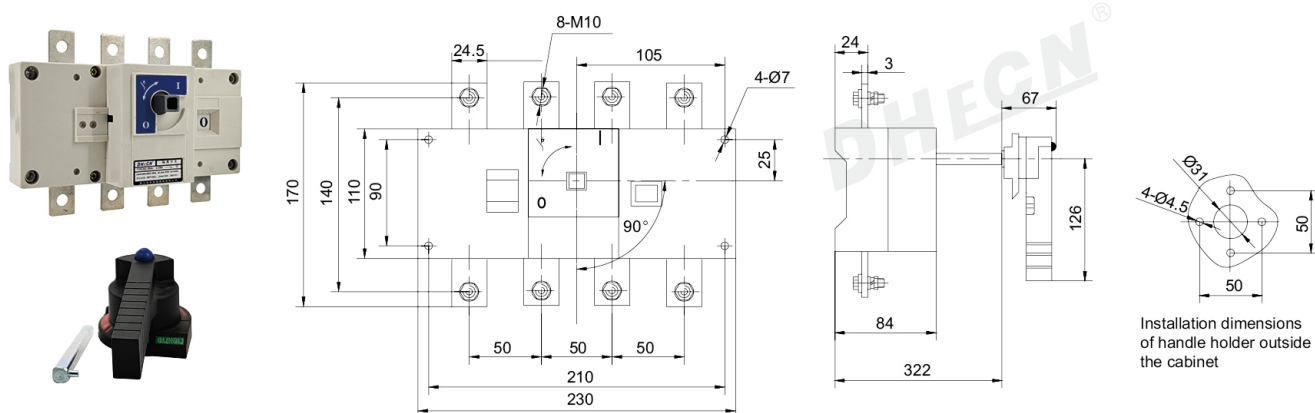
DGL-250/4 directly operate installation and outline dimensions (mm)

DGL-250/4 directly operate the installation diagram



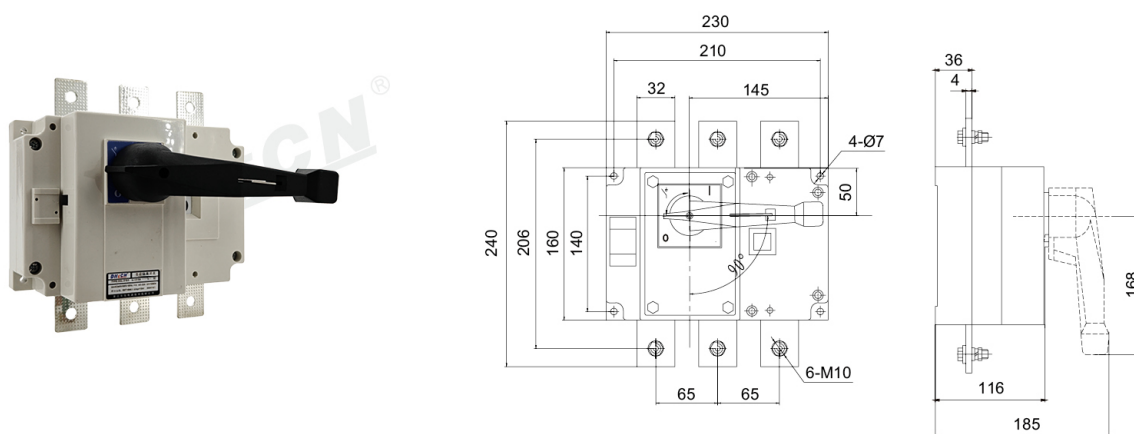
DGL-250/4J installation and outline dimensions for operation outside the cabinet (mm)

DGL-250/4J installation diagram for operation outside the cabinet



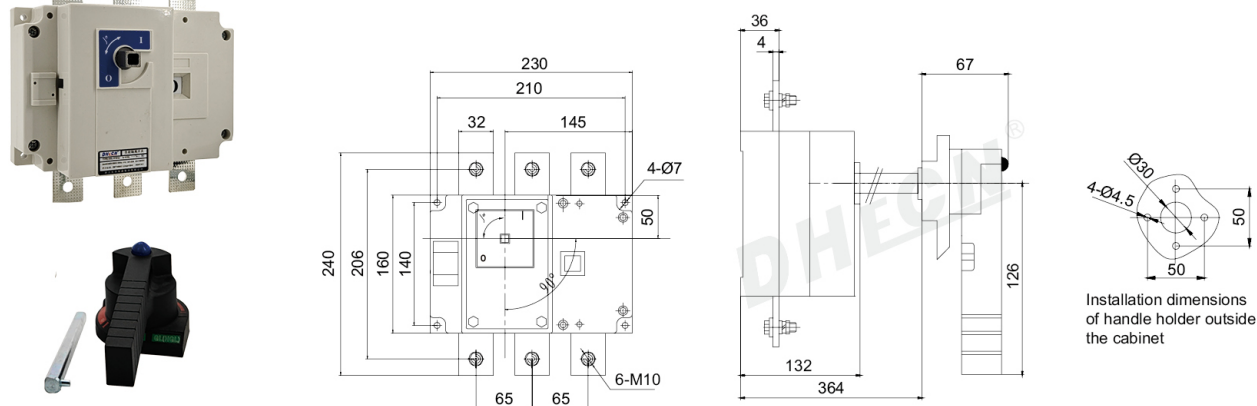
DGL-315/3 directly operate installation and outline dimensions (mm)

DGL-315/3 directly operate the installation diagram



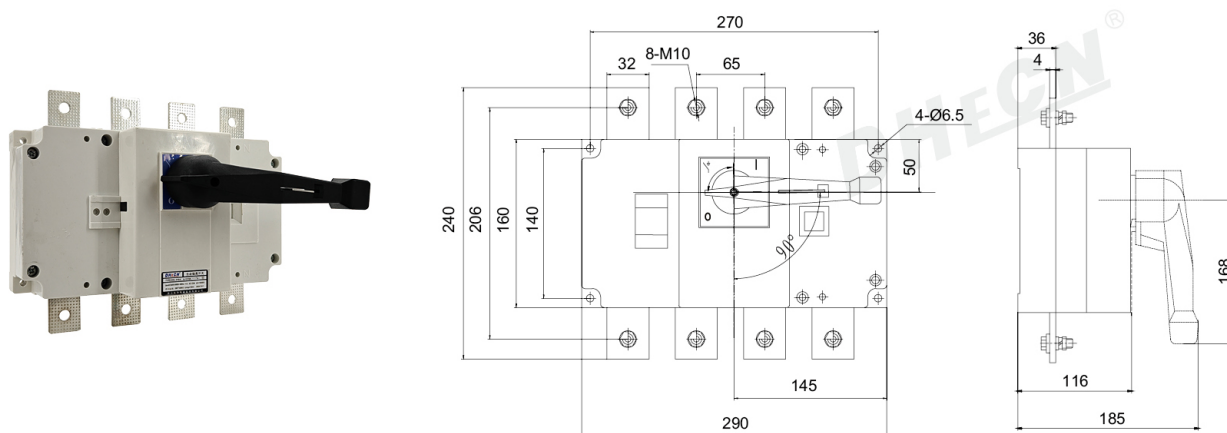
DGL-315/3J installation and outline dimensions for operation outside the cabinet (mm)

DGL-315/3J installation diagram for operation outside the cabinet



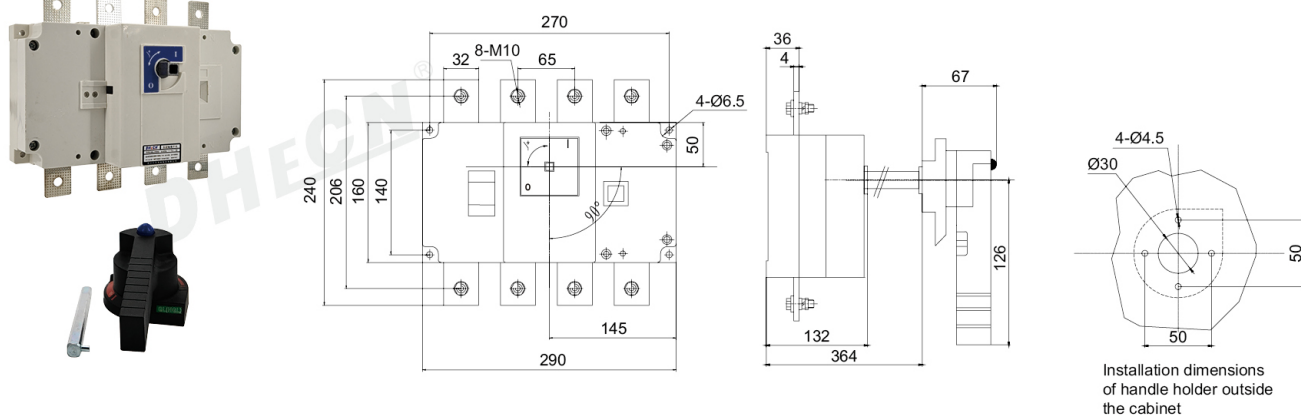
DGL-315/4 directly operate installation and outline dimensions (mm)

DGL-315/4 directly operate the installation diagram



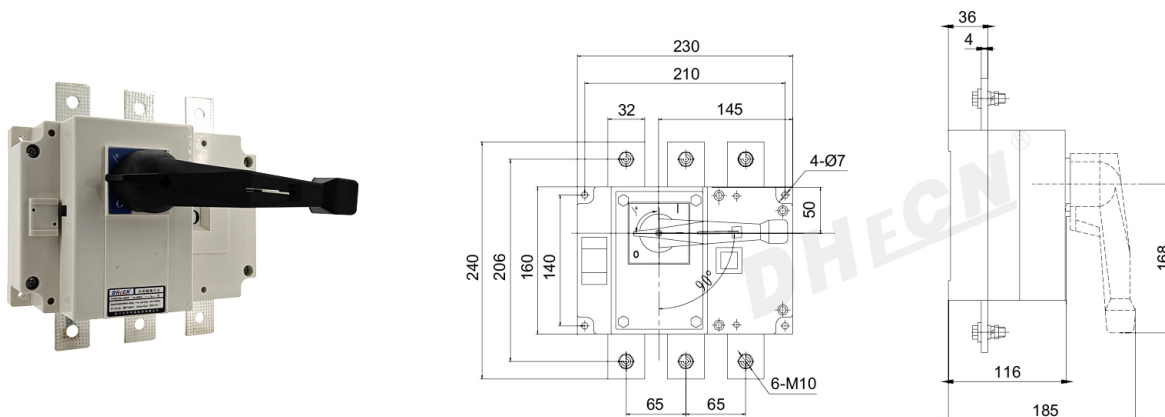
DGL-315/4J installation and outline dimensions for operation outside the cabinet (mm)

DGL-315/4J installation diagram for operation outside the cabinet



DGL-400/3 directly operate installation and outline dimensions (mm)

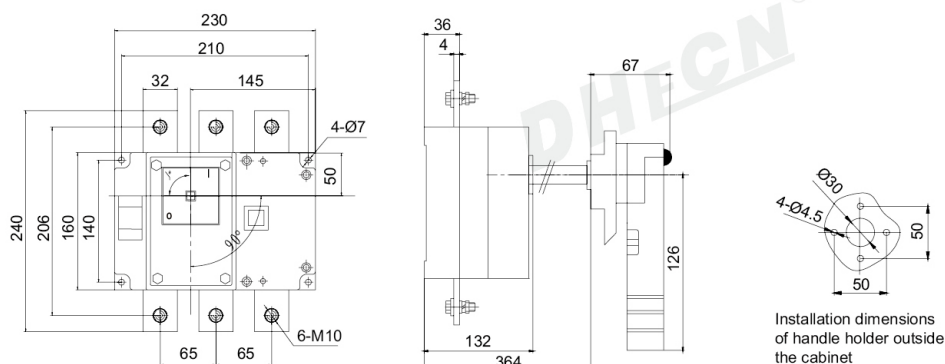
DGL-400/3 directly operate the installation diagram



DGL-400/3J installation and outline dimensions for operation outside the cabinet (mm)

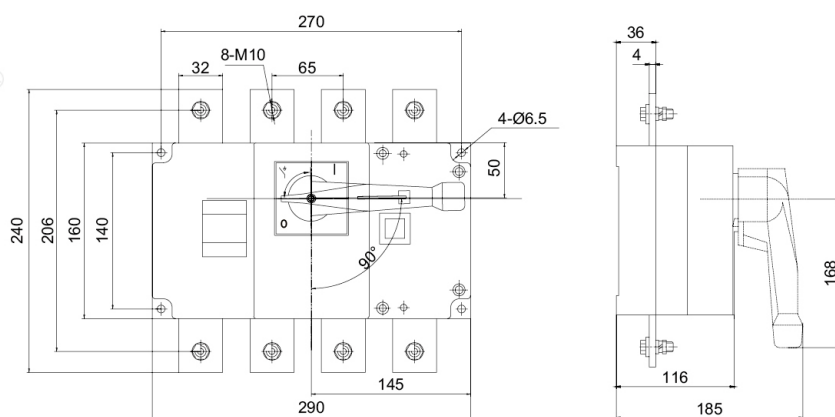
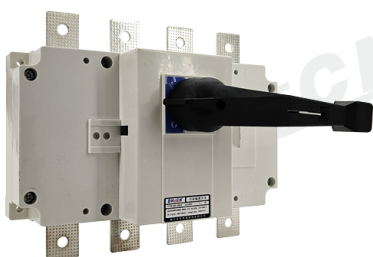


DGL-400/3J installation diagram for operation outside the cabinet



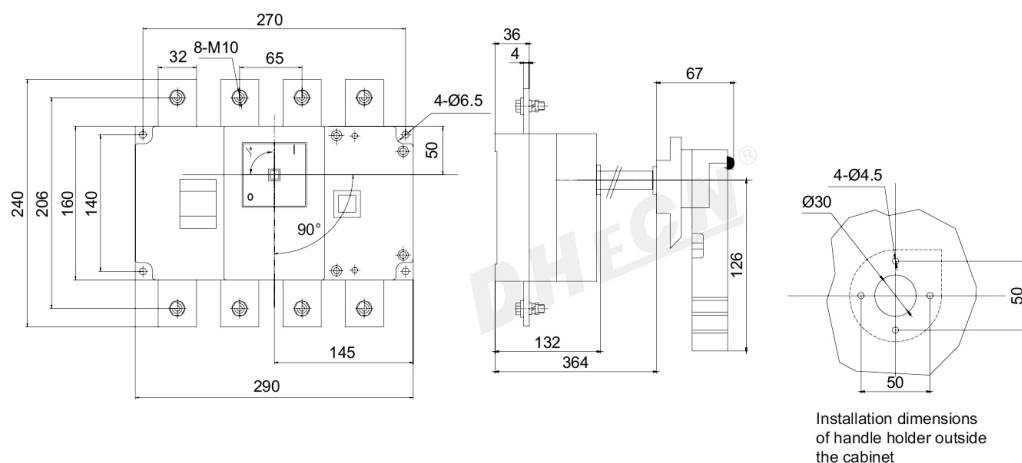
DGL-400/4 directly operate installation and outline dimensions (mm)

DGL-400/4 directly operate the installation diagram

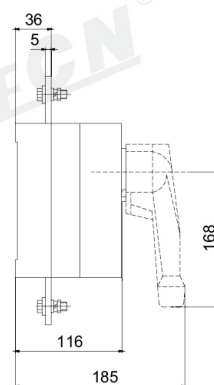
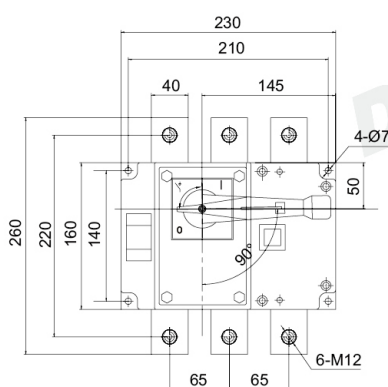


DGL-400/4J installation and outline dimensions for operation outside the cabinet (mm)

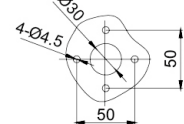
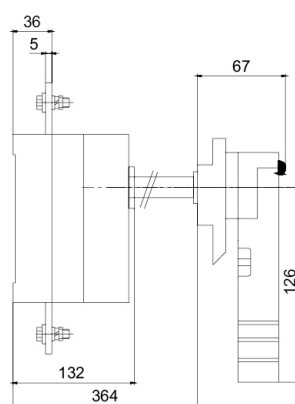
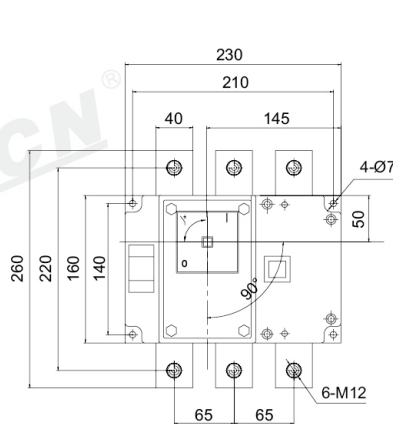
DGL-400/4J installation diagram for operation outside the cabinet



DGL-500/3 directly operate the installation diagram

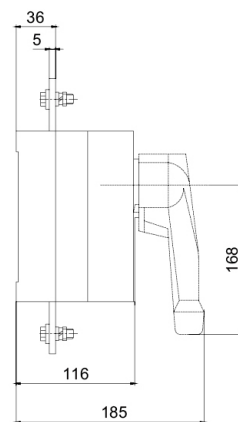
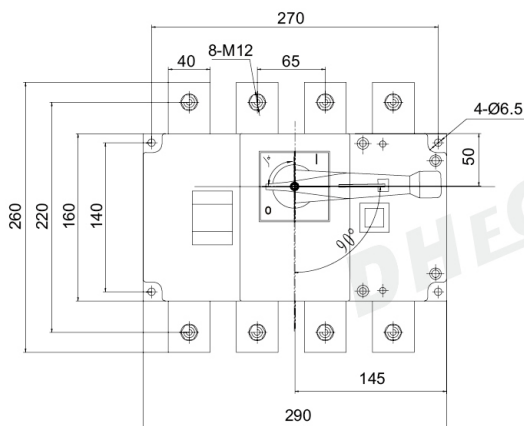


DGL-500/3J installation diagram for operation outside the cabinet



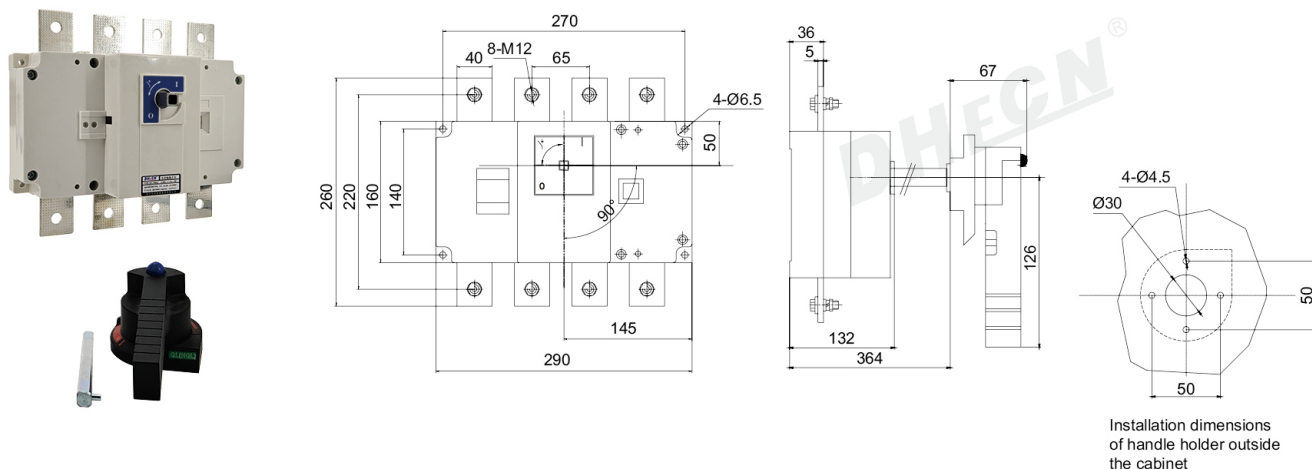
Installation dimensions
of handle holder outside
the cabinet

DGL-500/4 directly operate the installation diagram



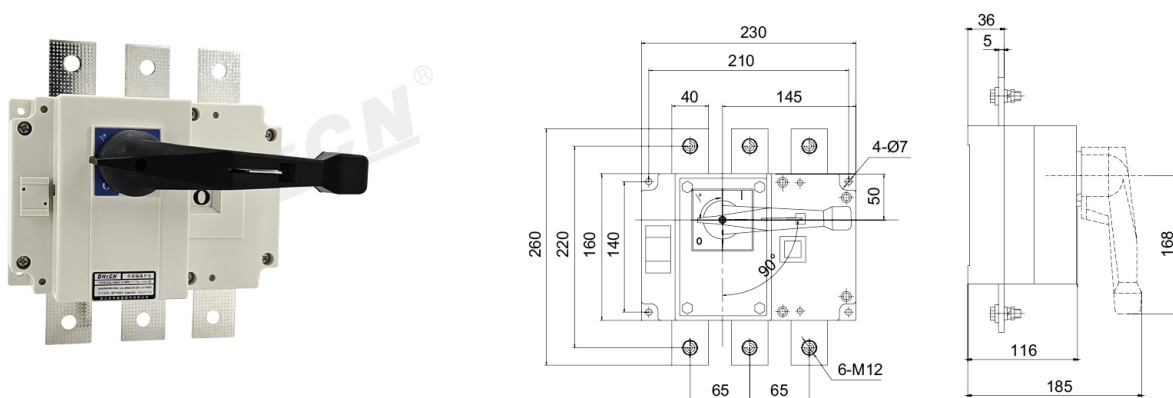
DGL-500/4J installation and outline dimensions for operation outside the cabinet (mm)

DGL-500/4J installation diagram for operation outside the cabinet



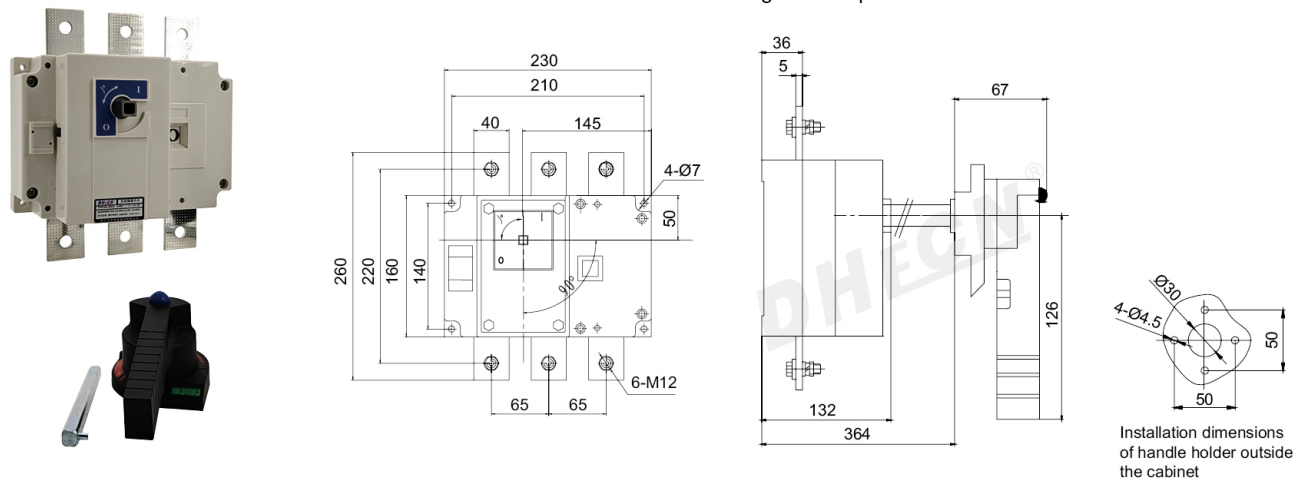
DGL-630/3 directly operate installation and outline dimensions (mm)

DGL-630/3 directly operate the installation diagram



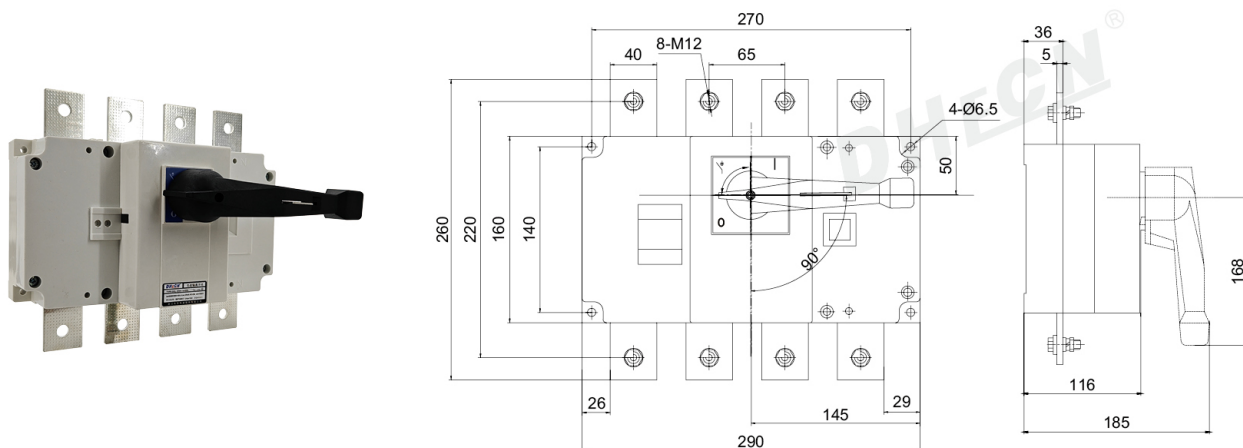
DGL-630/3J installation and outline dimensions for operation outside the cabinet (mm)

DGL-630/3J installation diagram for operation outside the cabinet



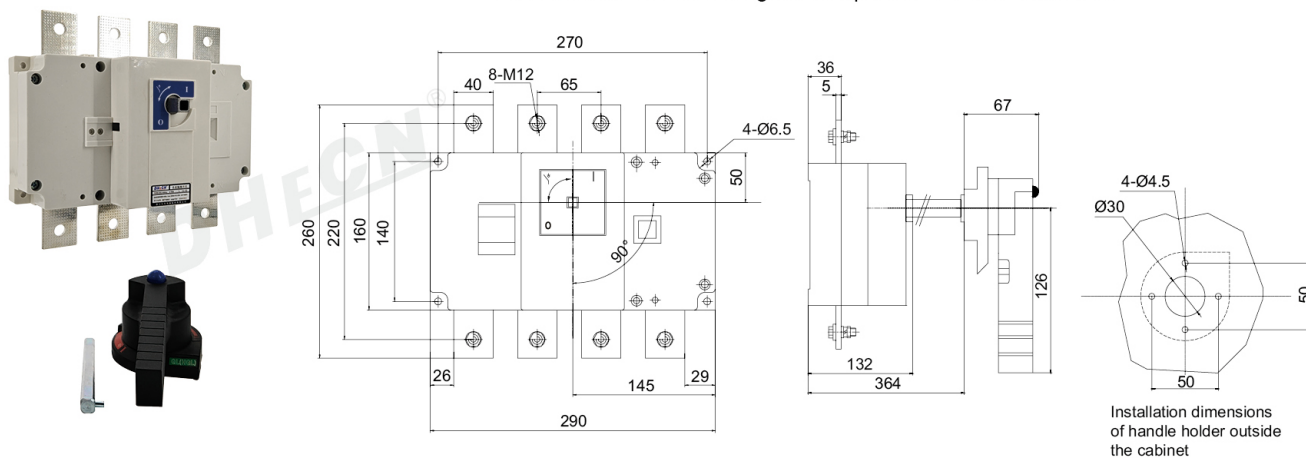
DGL-630/4 directly operate installation and outline dimensions (mm)

DGL-630/4 directly operate the installation diagram



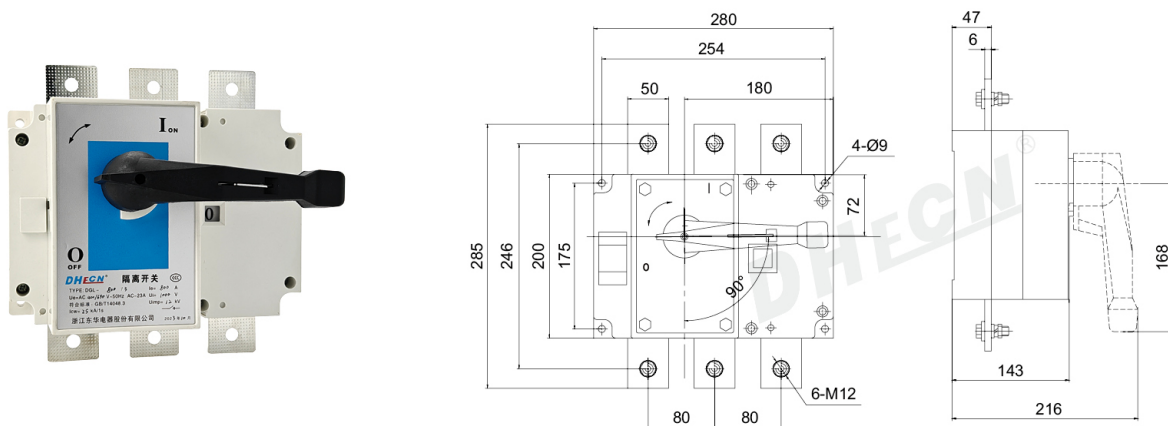
DGL-630/4J installation and outline dimensions for operation outside the cabinet (mm)

DGL-630/4J installation diagram for operation outside the cabinet



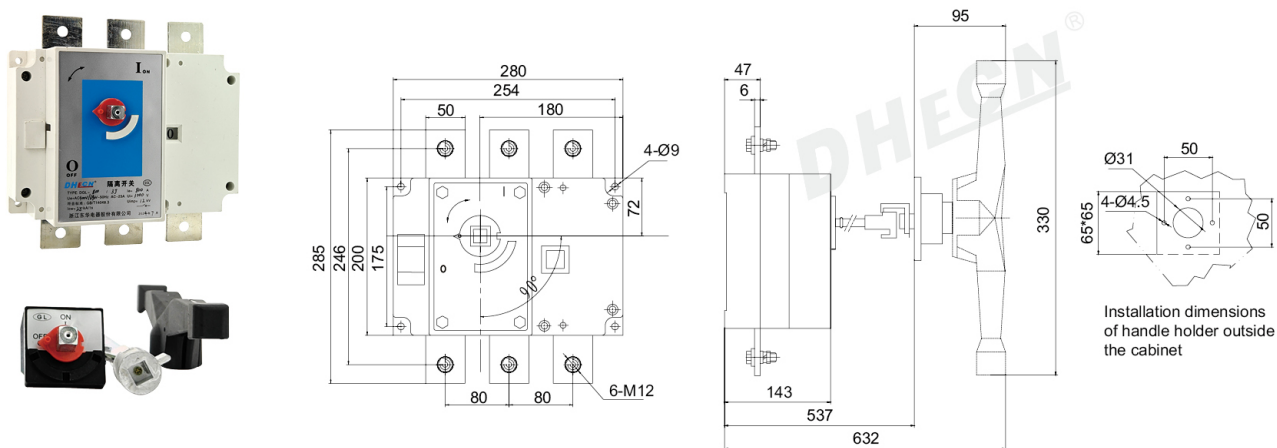
DGL-800/3 directly operate installation and outline dimensions (mm)

DGL-800/3 directly operate the installation diagram



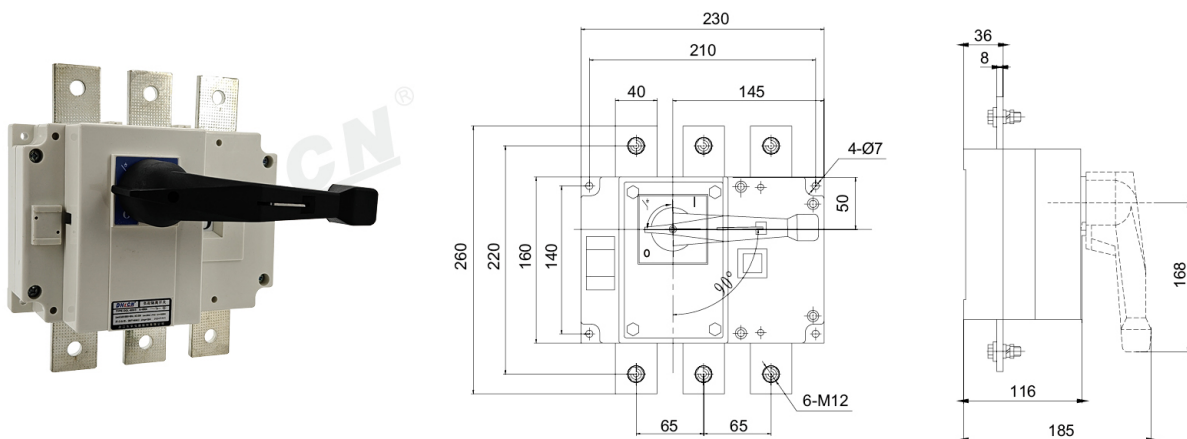
DGL-800/3J installation and outline dimensions for operation outside the cabinet (mm)

DGL-800/3J installation diagram for operation outside the cabinet



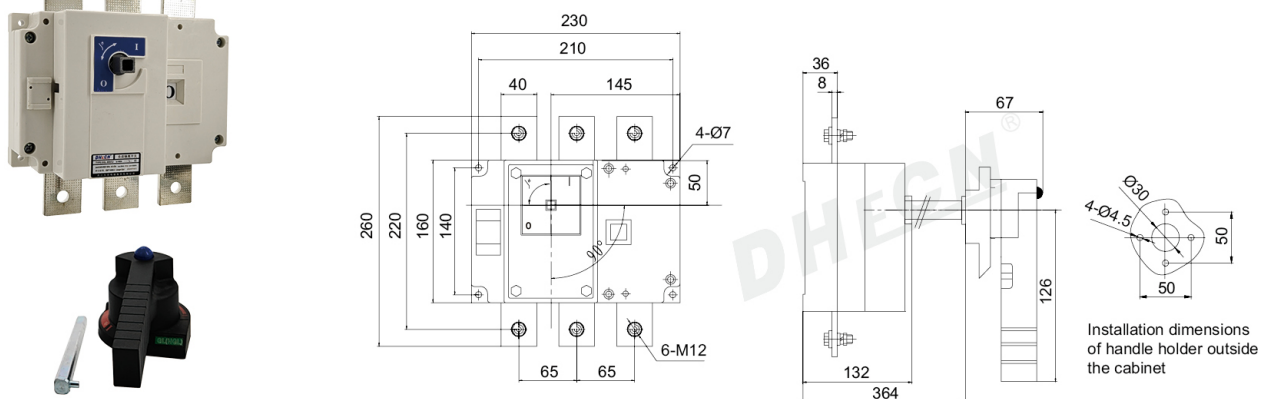
DGL-800/3(K) directly operate installation and outline dimensions (mm)

DGL-800/3(K) directly operate the installation diagram



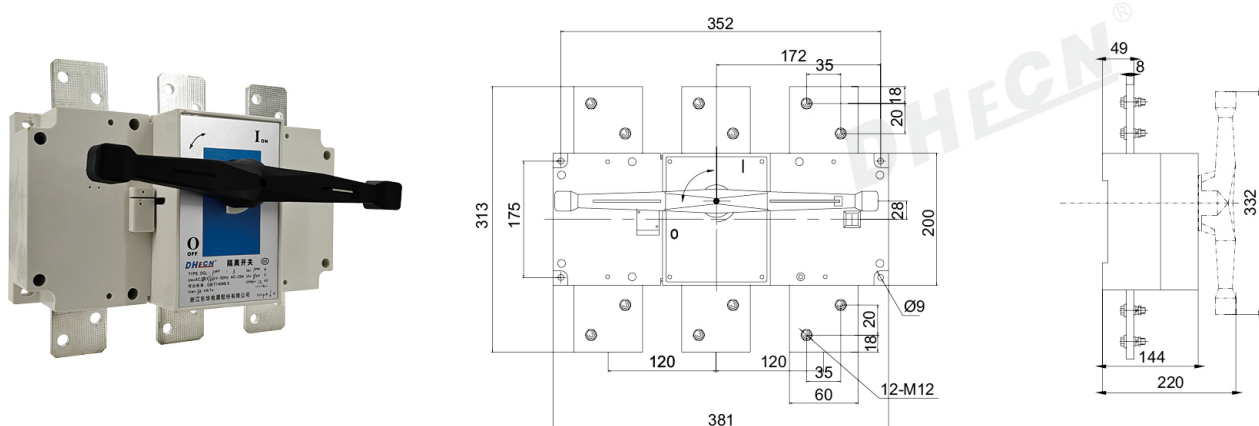
DGL-800/3J(K) installation and outline dimensions for operation outside the cabinet (mm)

DGL-800/3J(K) installation diagram for operation outside the cabinet



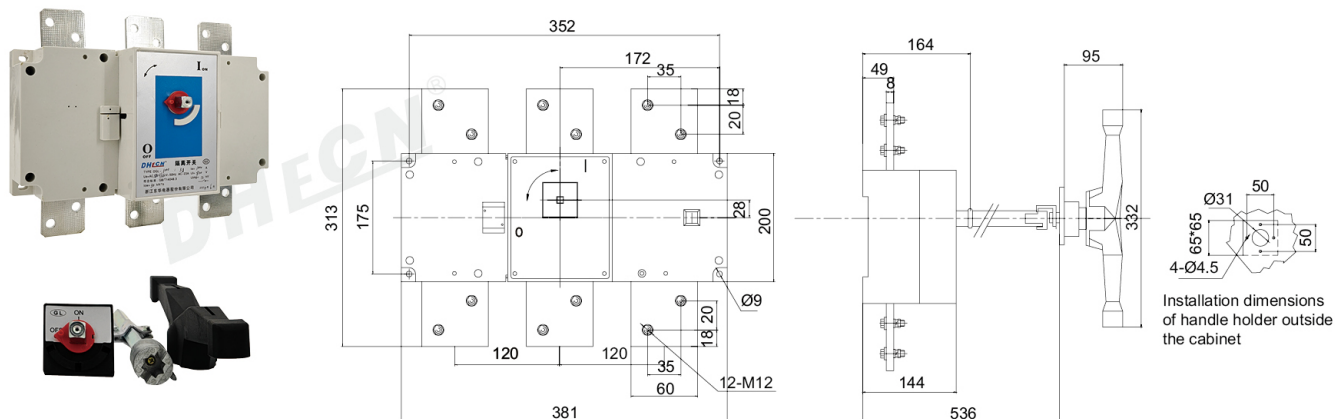
DGL-1000/3 directly operate installation and outline dimensions (mm)

DGL-1000/3 directly operate the installation diagram



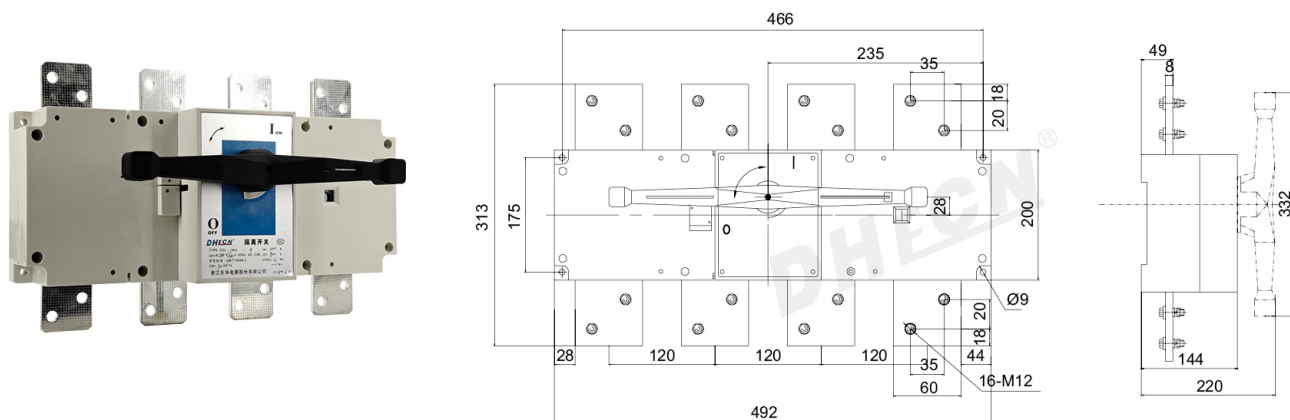
DGL-1000/3J installation and outline dimensions for operation outside the cabinet (mm)

DGL-1000/3J installation diagram for operation outside the cabinet



DGL-1000/4 directly operate installation and outline dimensions (mm)

DGL-1000/4 directly operate the installation diagram



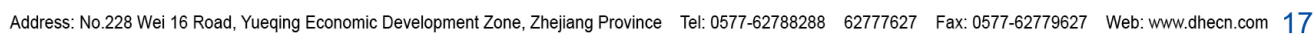
DGL-1000/4J installation diagram for operation outside the cabinet



DGL-1250/3 directly operate the installation diagram

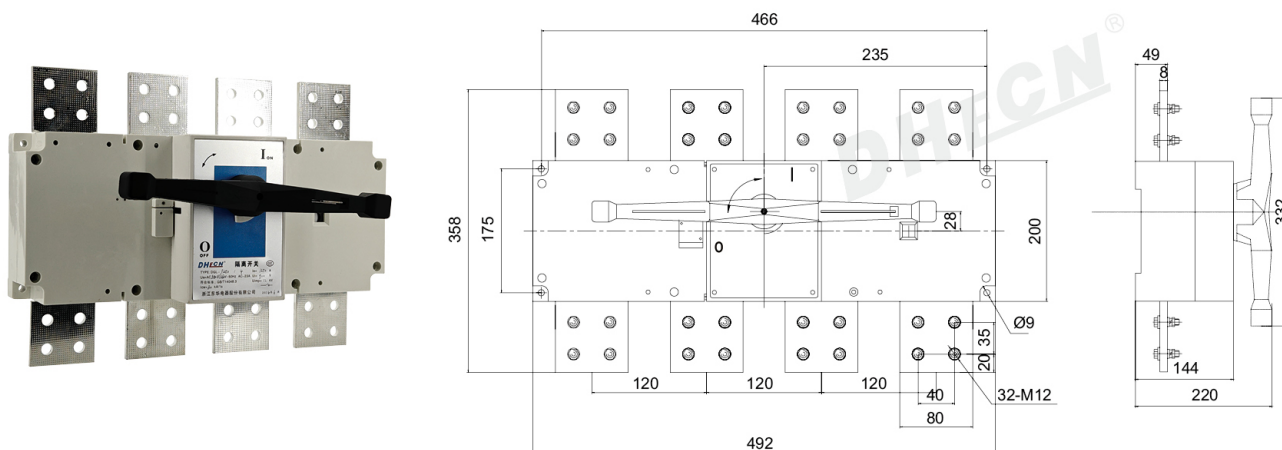


DGL-1250/3J installation diagram for operation outside the cabinet



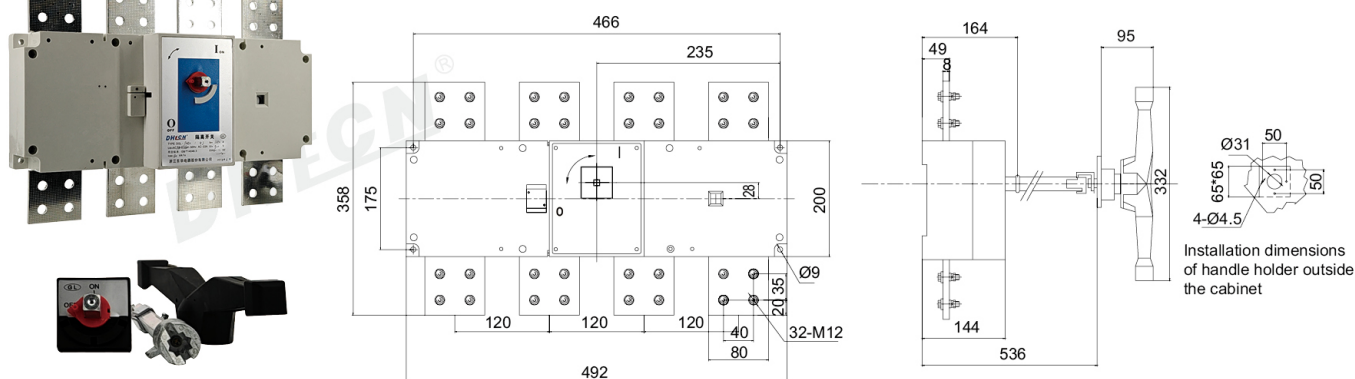
DGL-1250/4 directly operate installation and outline dimensions (mm)

DGL-1250/4 directly operate the installation diagram



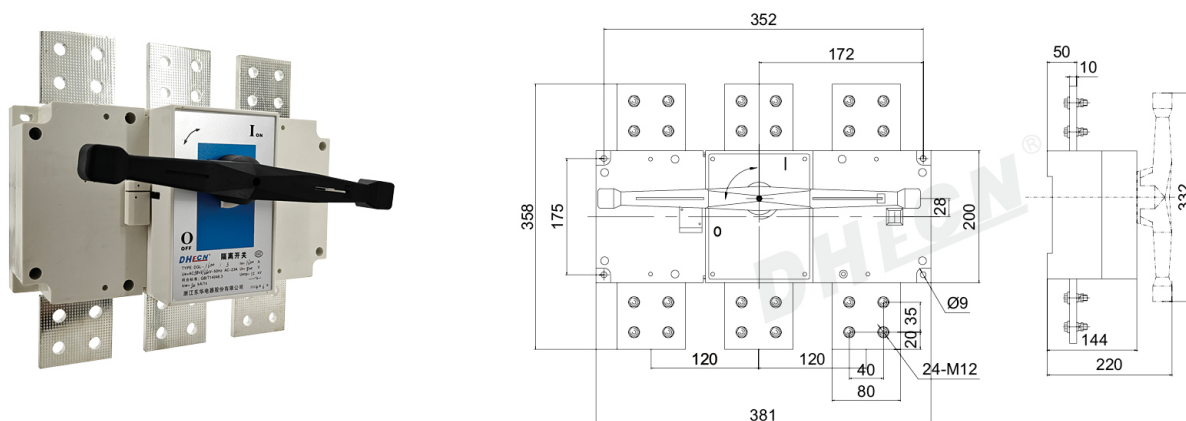
DGL-1250/4J installation and outline dimensions for operation outside the cabinet (mm)

DGL-1250/4J installation diagram for operation outside the cabinet



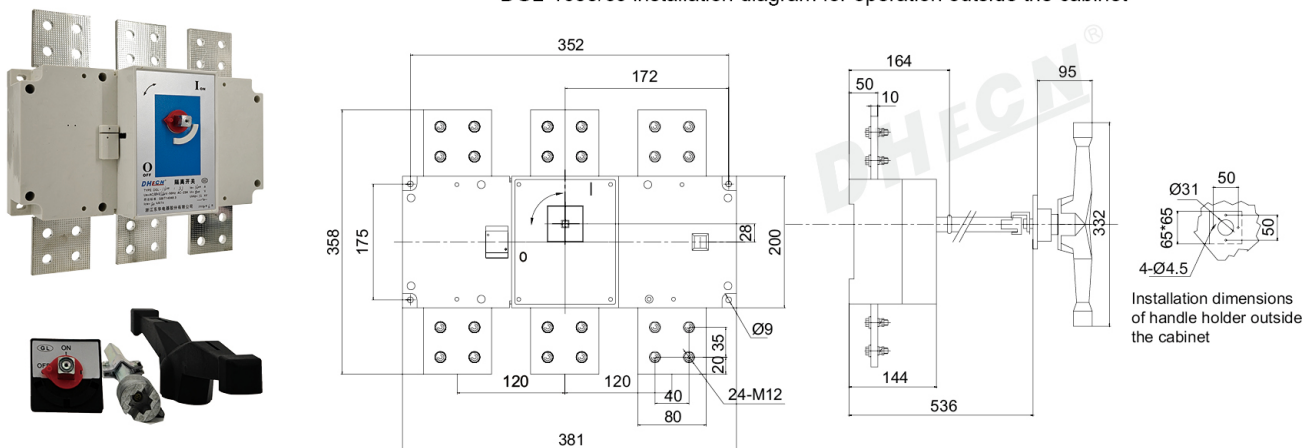
DGL-1600/3 directly operate installation and outline dimensions (mm)

DGL-1600/3 directly operate the installation diagram



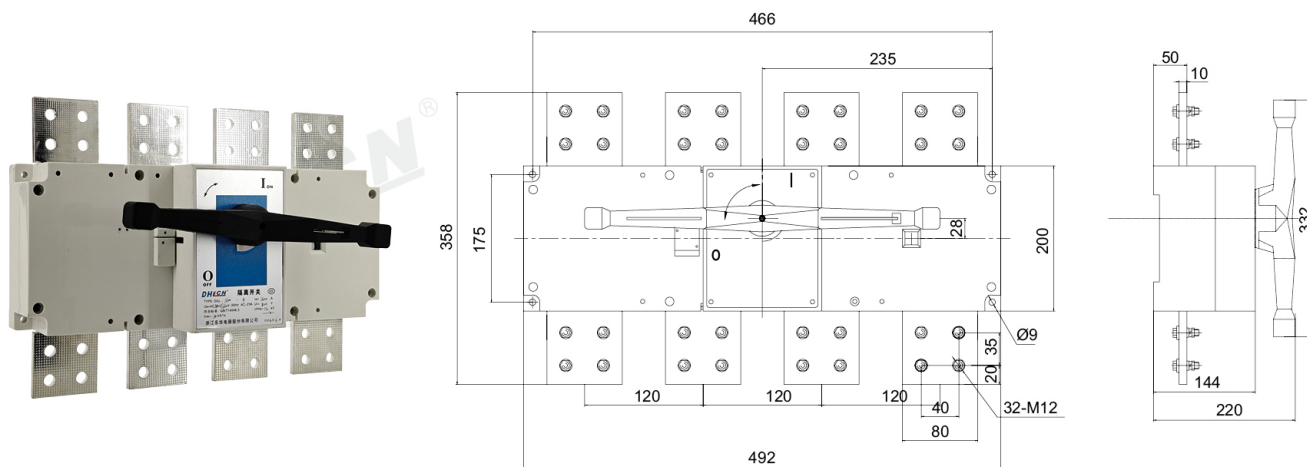
DGL-1600/3J installation and outline dimensions for operation outside the cabinet (mm)

DGL-1600/3J installation diagram for operation outside the cabinet



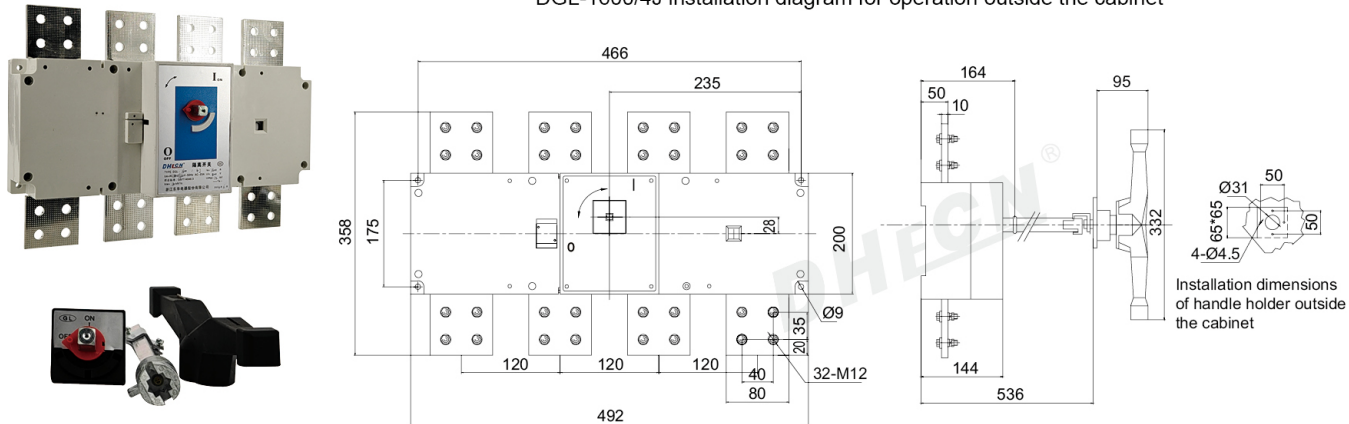
DGL-1600/4 directly operate installation and outline dimensions (mm)

DGL-1600/4 directly operate the installation diagram



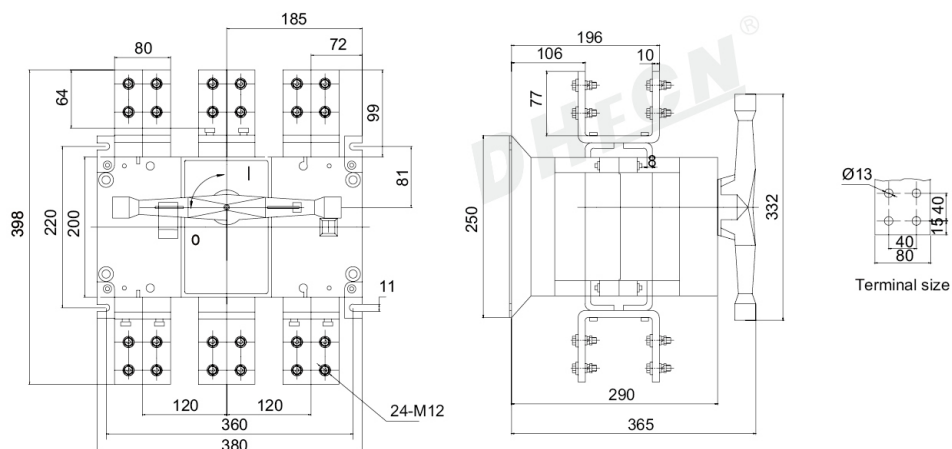
DGL-1600/4J installation and outline dimensions for operation outside the cabinet (mm)

DGL-1600/4J installation diagram for operation outside the cabinet



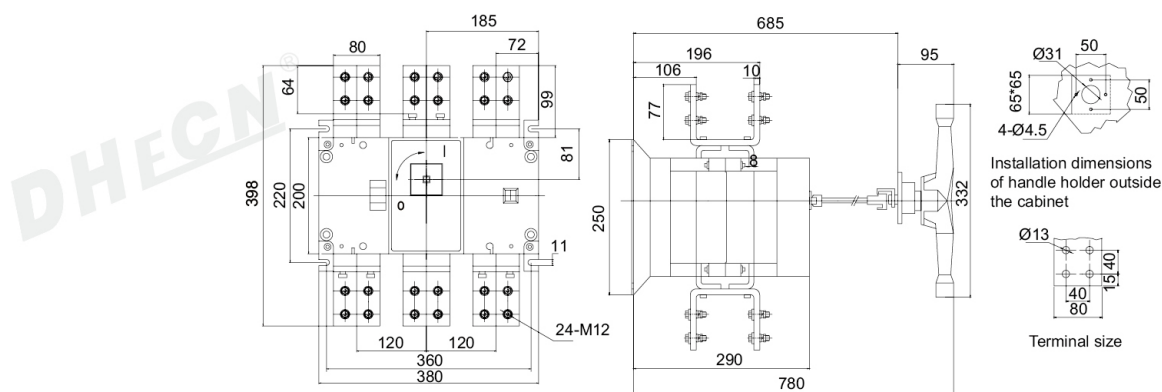
DGL-2000/3 directly operate installation and outline dimensions (mm)

DGL-2000/3 directly operate the installation diagram



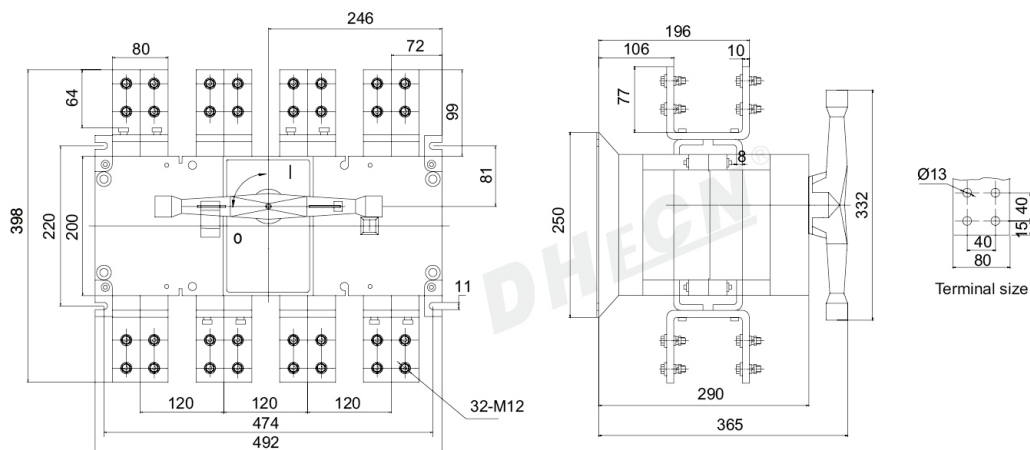
DGL-2000/3J installation and outline dimensions for operation outside the cabinet (mm)

DGL-2000/3J installation diagram for operation outside the cabinet



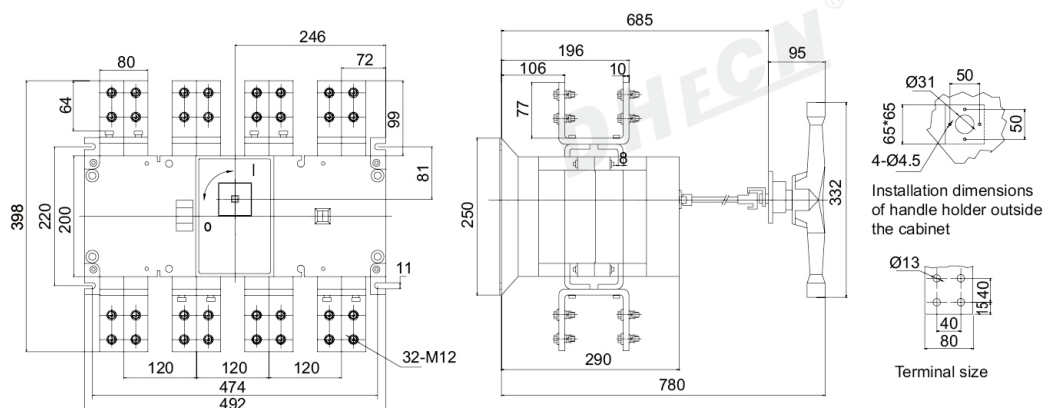
DGL-2000/4 directly operate installation and outline dimensions (mm)

DGL-2000/4 directly operate the installation diagram



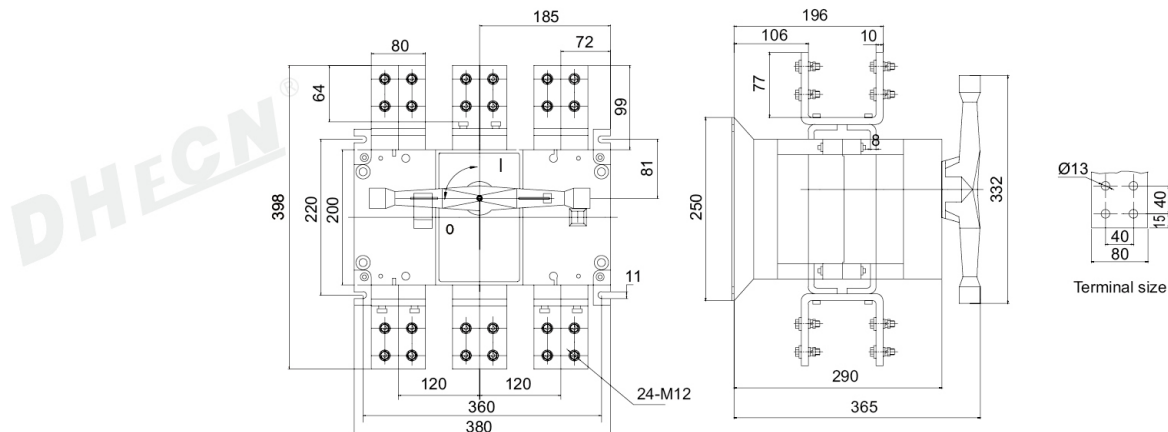
DGL-2000/4J installation and outline dimensions for operation outside the cabinet (mm)

DGL-2000/4J installation diagram for operation outside the cabinet



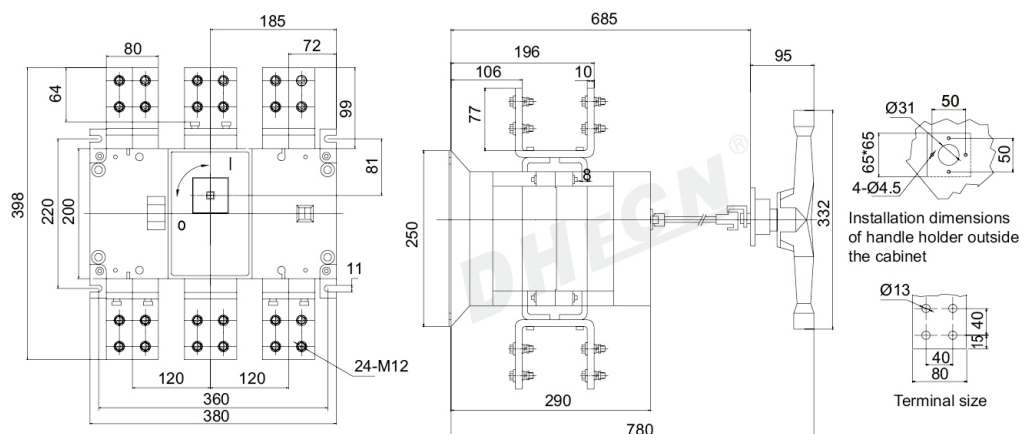
DGL-2500/3 directly operate installation and outline dimensions (mm)

DGL-2500/3 directly operate the installation diagram



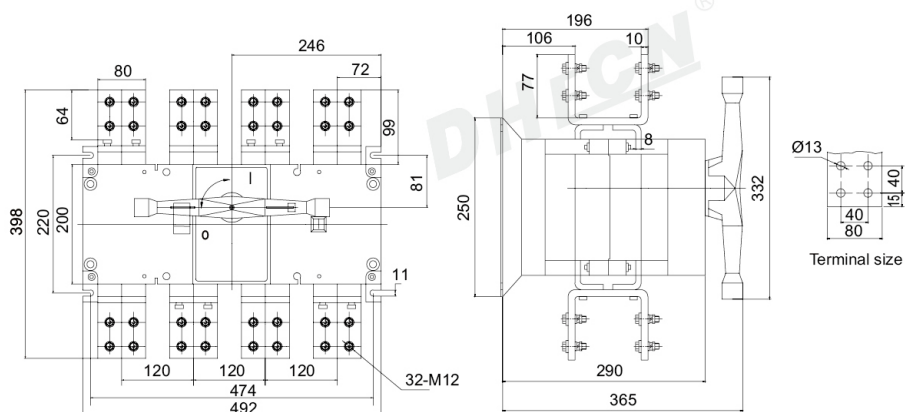
DGL-2500/3J installation and outline dimensions for operation outside the cabinet (mm)

DGL-2500/3J installation diagram for operation outside the cabinet



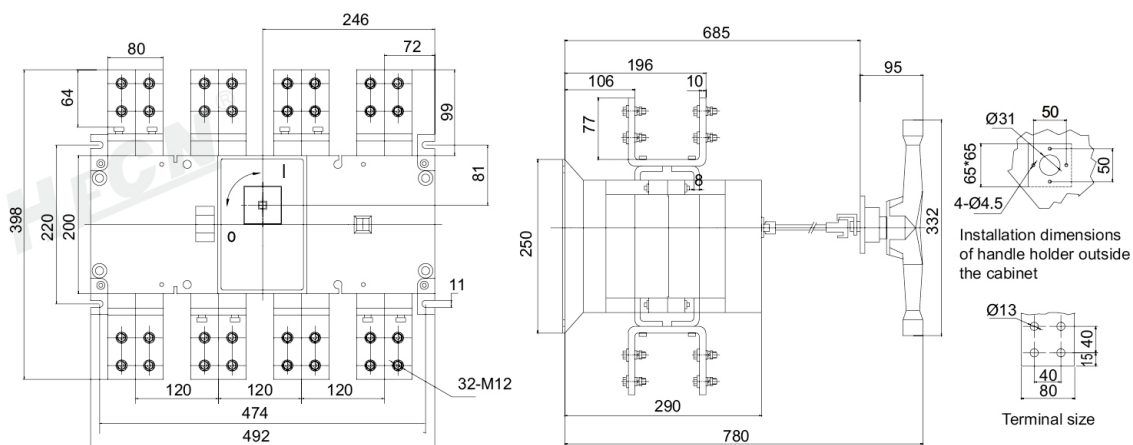
DGL-2500/4 directly operate installation and outline dimensions (mm)

DGL-2500/4 directly operate the installation diagram



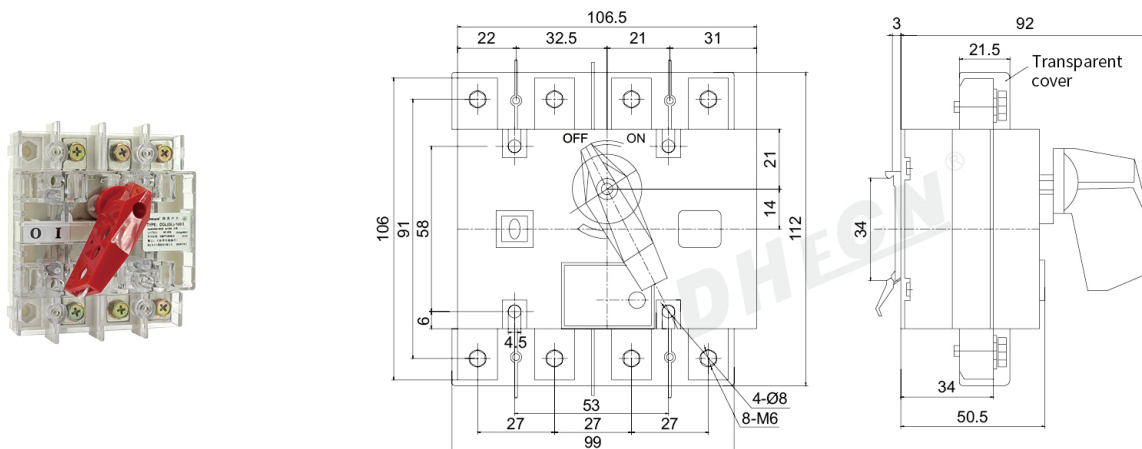
DGL-2500/4J installation and outline dimensions for operation outside the cabinet (mm)

DGL-2500/4J installation diagram for operation outside the cabinet



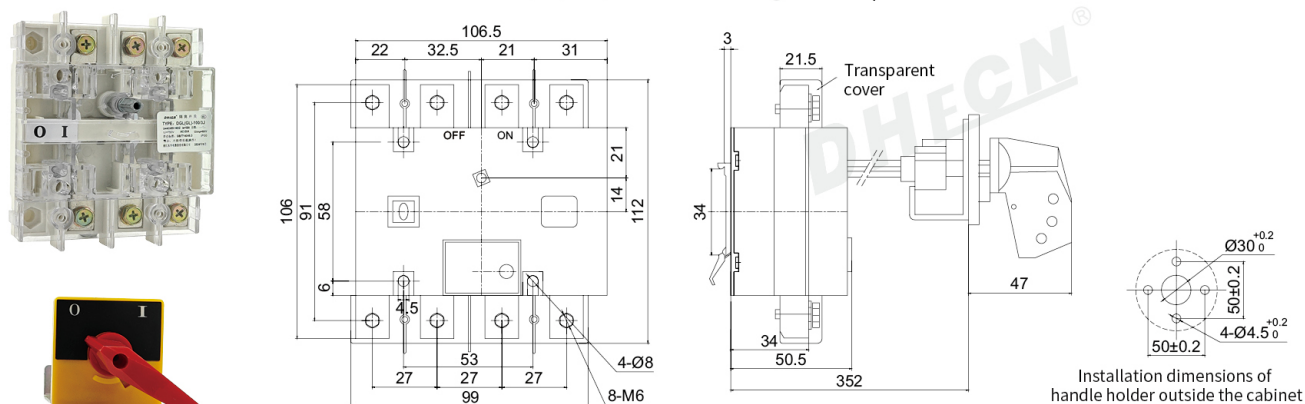
DGL-100/3、4 Transparent shell type direct operation and outline dimensions (mm)

DGL-100(3、4) Installation diagram for direct operation



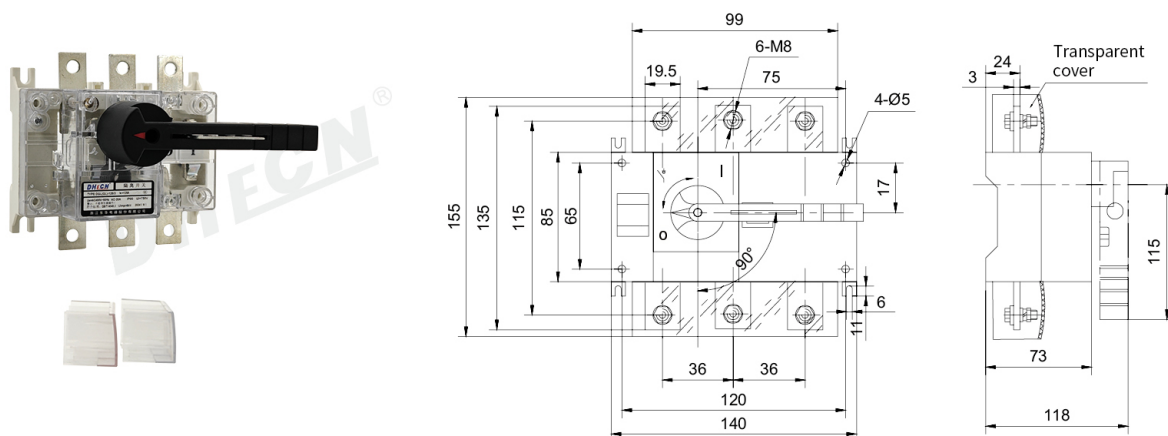
DGL-100/3J、4J Transparent shell type installation and outline dimensions for operation outside the cabinet (mm)

DGL-100 (3J、4J) Installation diagram for operation outside the cabinet



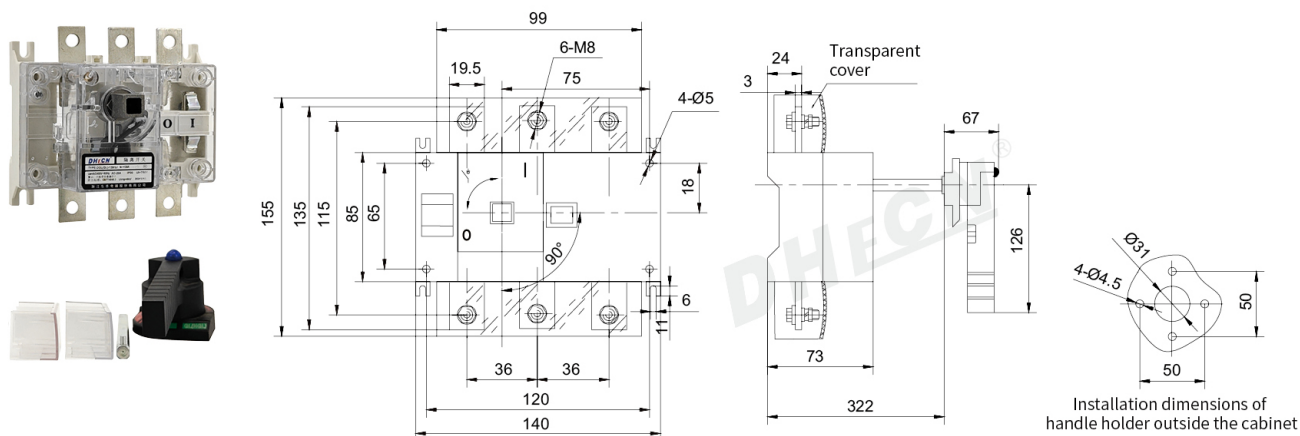
DGL-125/3 Transparent shell type direct operation and outline dimensions (mm)

DGL-125/3 Installation diagram for direct operation



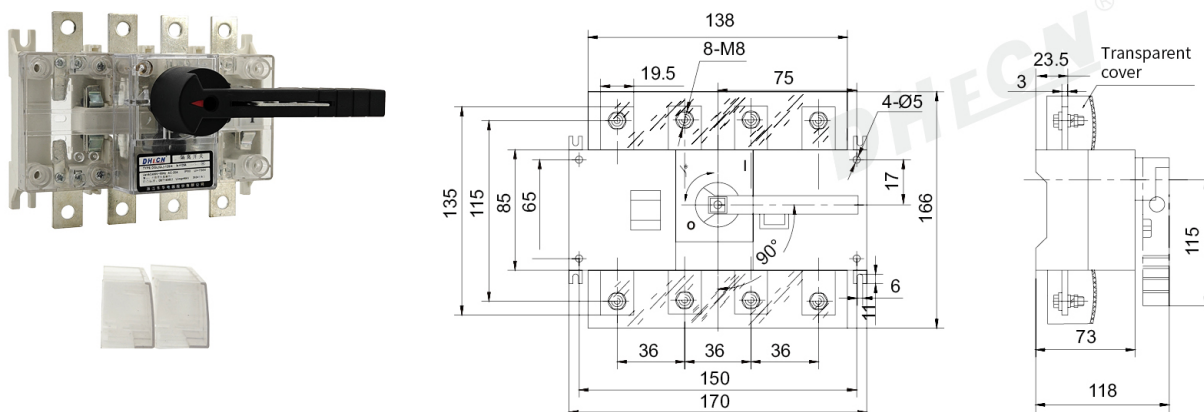
DGL-125/3J Transparent shell type installation and outline dimensions for operation outside the cabinet (mm)

DGL-125/3J Installation diagram for operation outside the cabinet



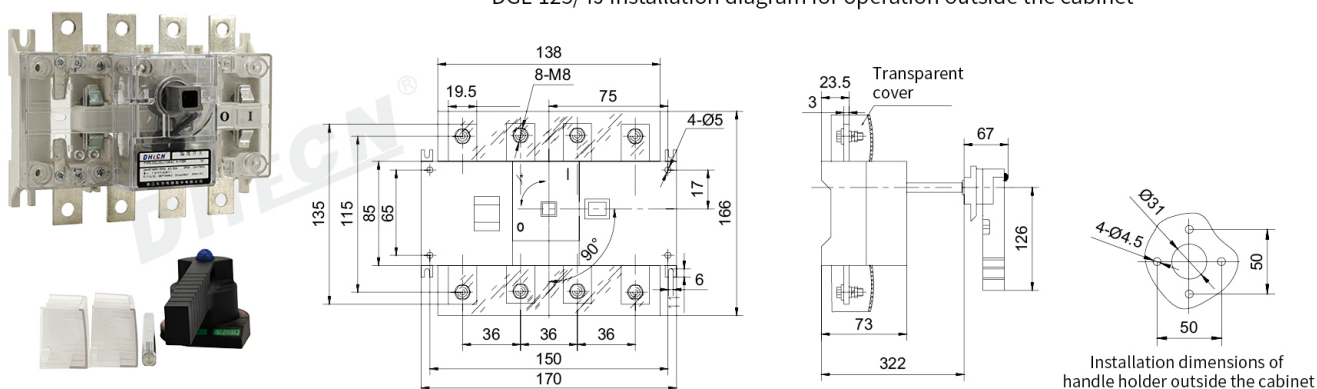
DGL-125/4 Transparent shell type direct operation and outline dimensions (mm)

DGL-125/4 Installation diagram for direct operation



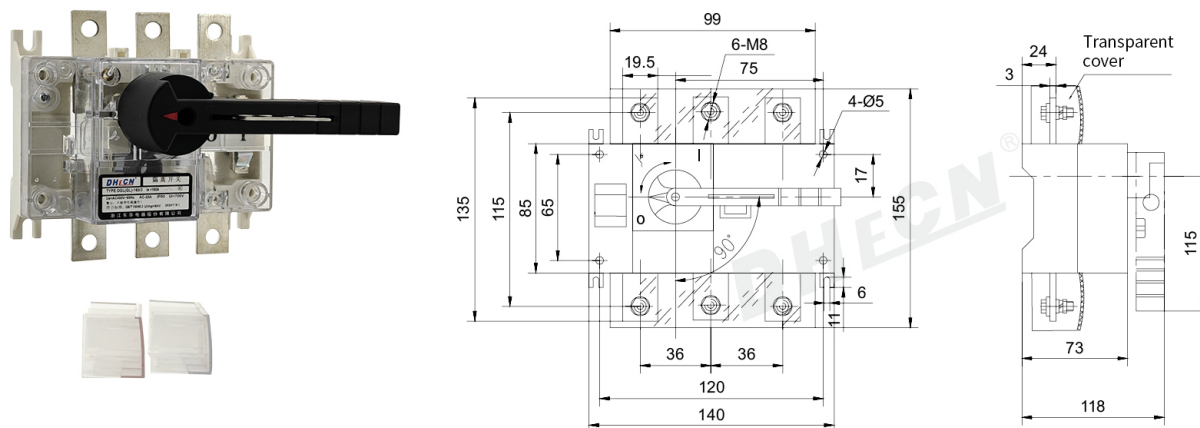
DGL-125/4J Transparent shell type installation and outline dimensions for operation outside the cabinet (mm)

DGL-125/4J Installation diagram for operation outside the cabinet

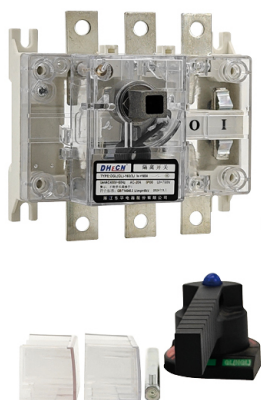


DGL-160/3 Transparent shell type direct operation and outline dimensions (mm)

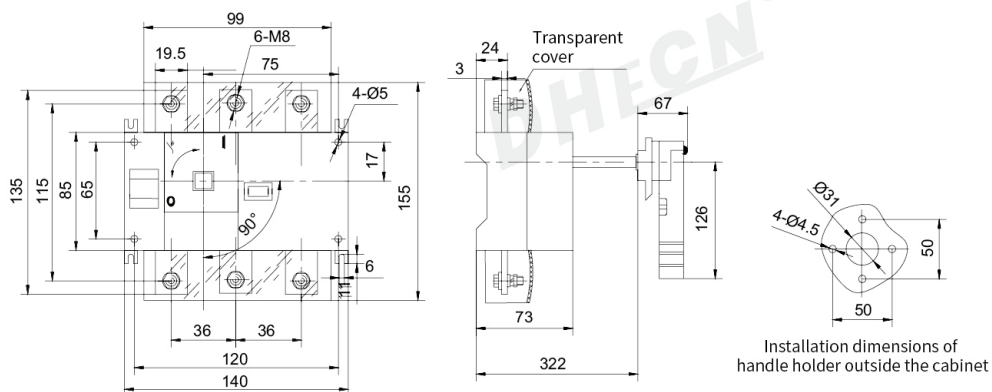
DGL-160/3 Installation diagram for direct operation



DGL-160/3J Transparent shell type installation and outline dimensions for operation outside the cabinet (mm)

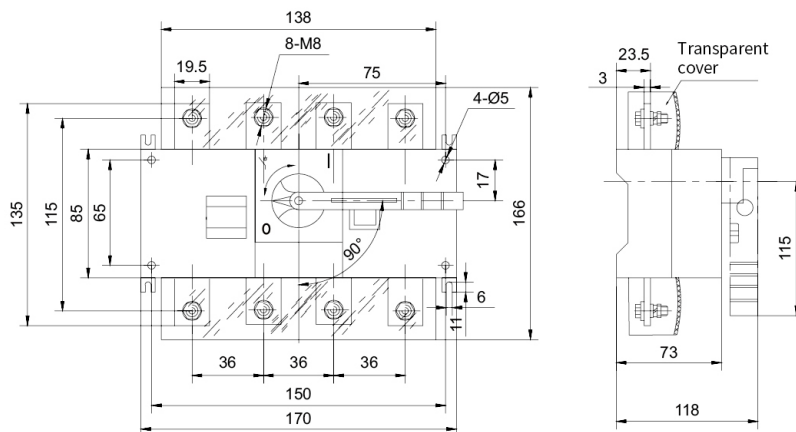
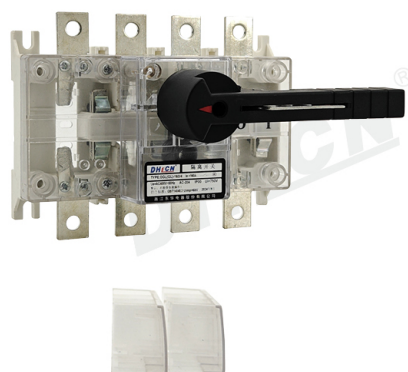


DGL-160/3J Installation diagram for operation outside the cabinet



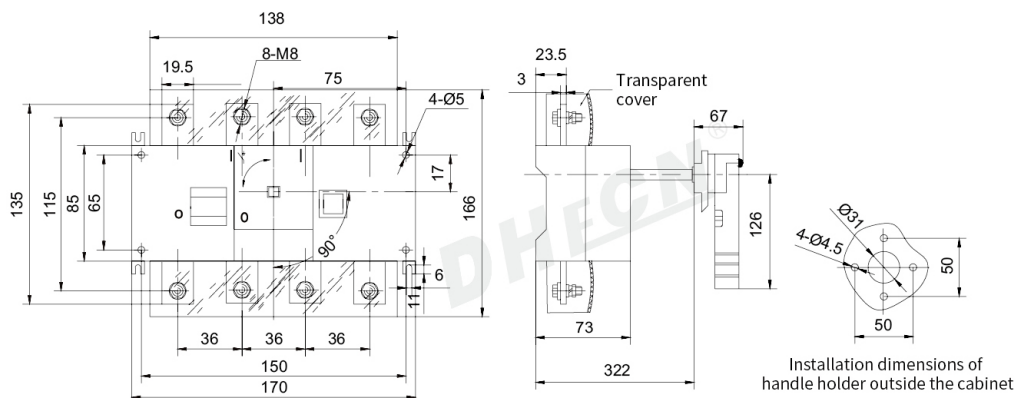
DGL-160/4 Transparent shell type direct operation and outline dimensions (mm)

DGL-160/4 Installation diagram for direct operation



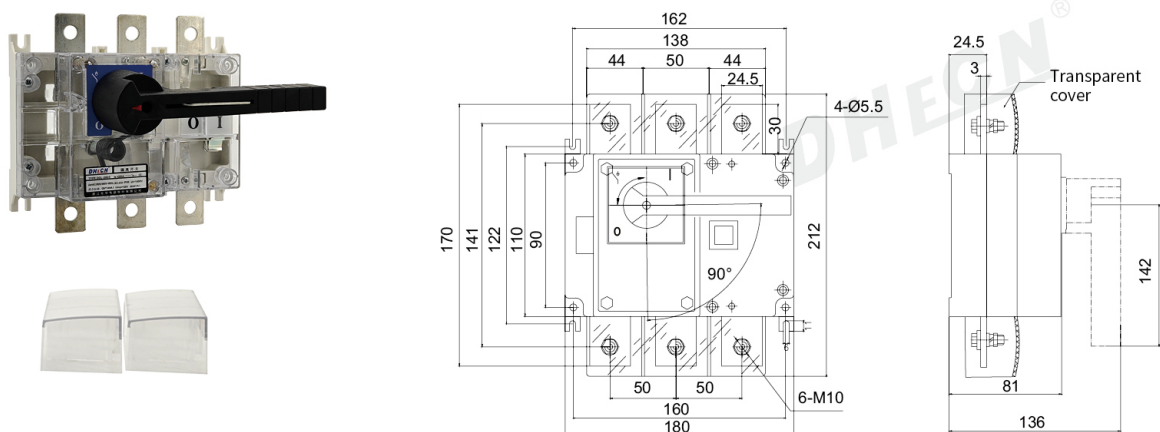
DGL-160/4J Transparent shell type installation and outline dimensions for operation outside the cabinet (mm)

DGL-160/4J Installation diagram for operation outside the cabinet



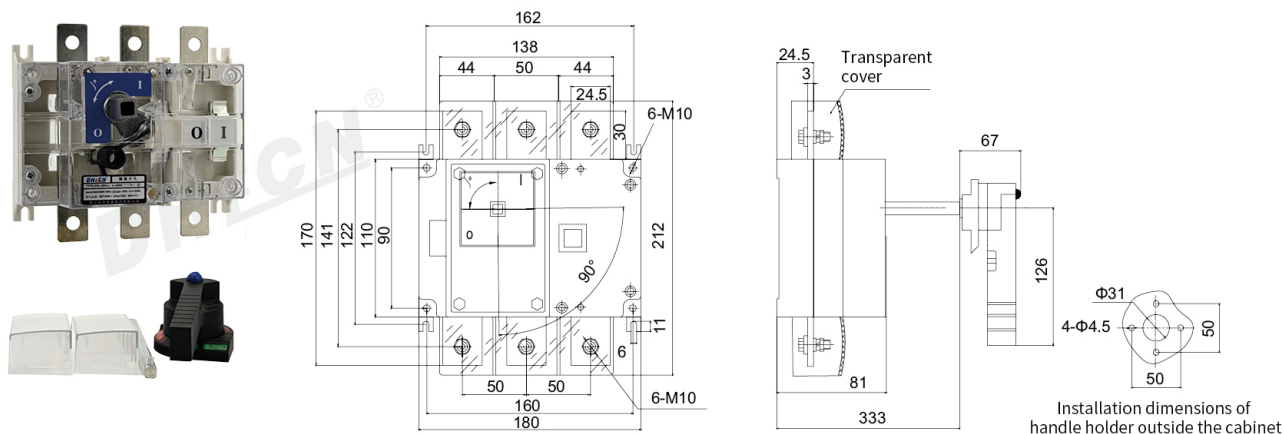
DGL-200/3 Transparent shell type direct operation and outline dimensions (mm)

DGL-200/3 Installation diagram for direct operation



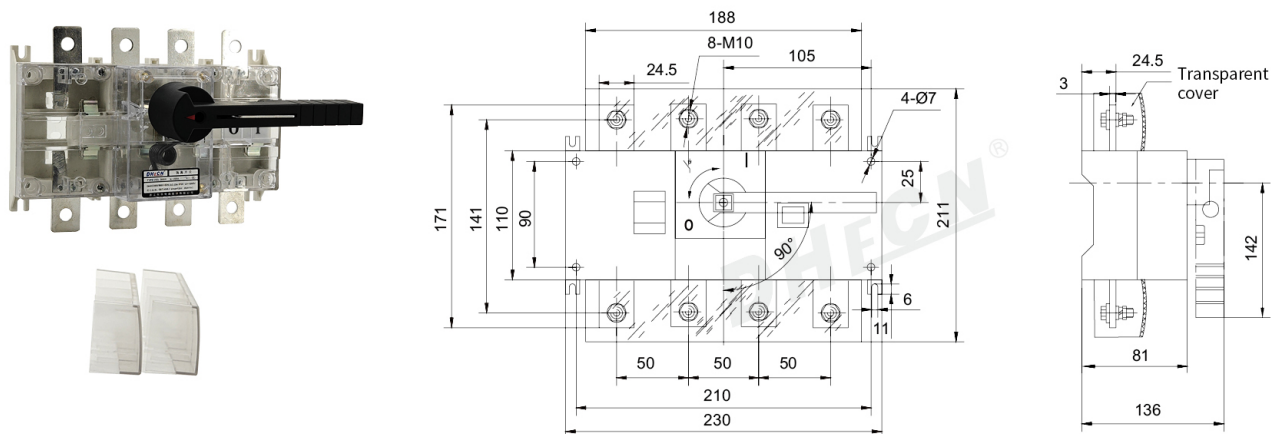
DGL-200/3J Transparent shell type installation and outline dimensions for operation outside the cabinet (mm)

DGL-200/3J Installation diagram for operation outside the cabinet



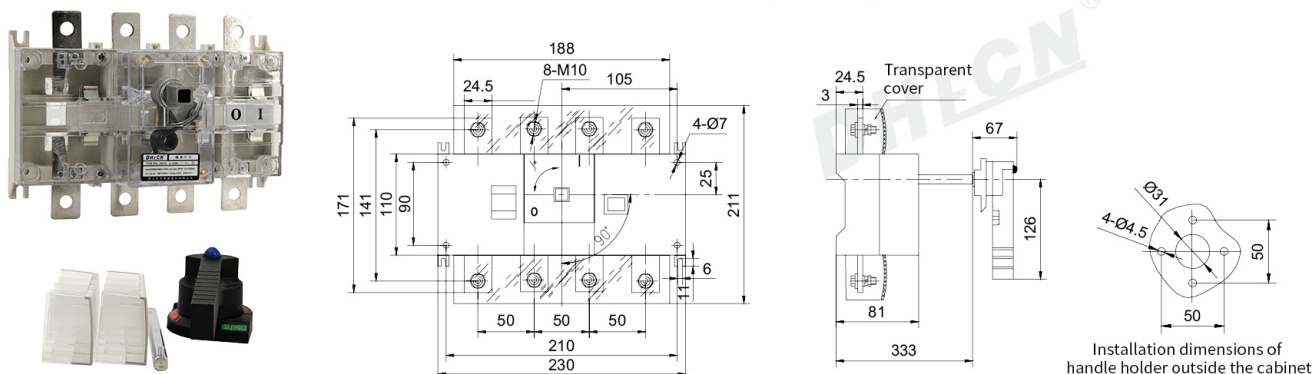
DGL-200/4 Transparent shell type direct operation and outline dimensions (mm)

DGL-200/4 Installation diagram for direct operation



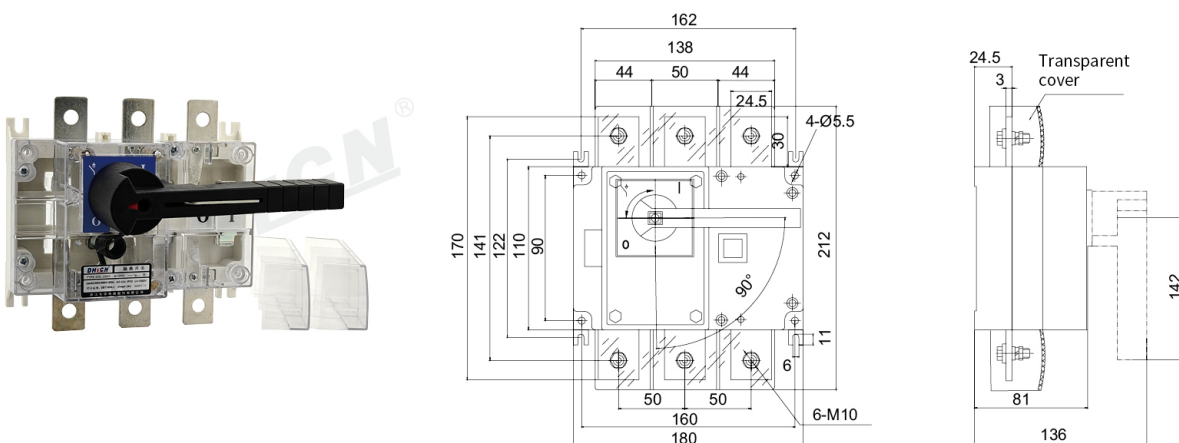
DGL-200/4J Transparent shell type installation and outline dimensions for operation outside the cabinet (mm)

DGL-200/4J Installation diagram for operation outside the cabinet



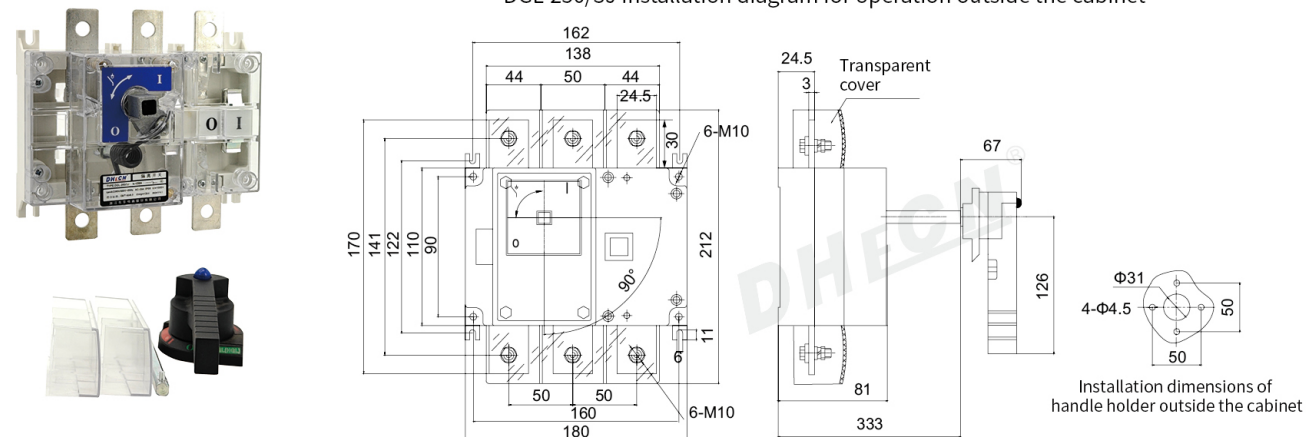
DGL-250/3 Transparent shell type direct operation and outline dimensions (mm)

DGL-250/3 Installation diagram for direct operation



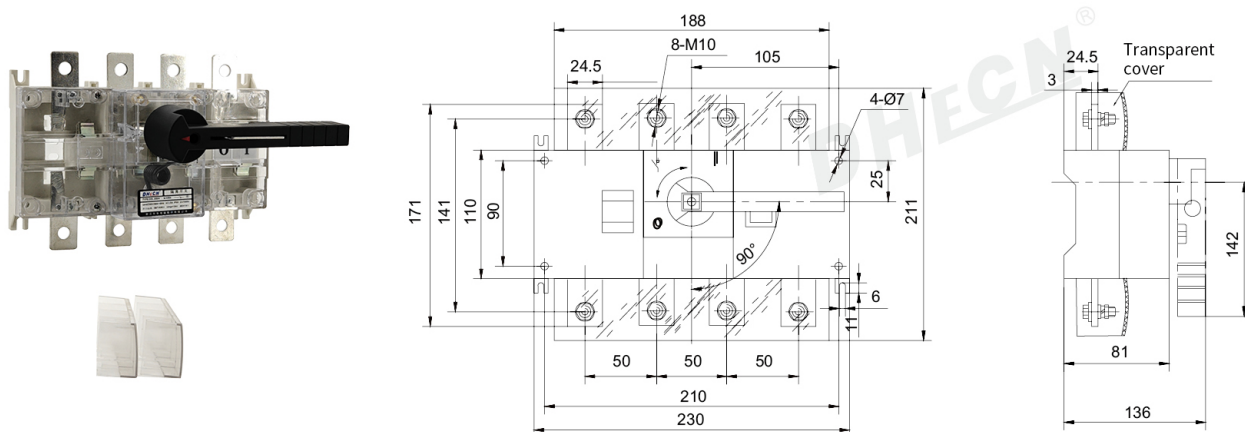
DGL-250/3J Transparent shell type installation and outline dimensions for operation outside the cabinet (mm)

DGL-250/3J Installation diagram for operation outside the cabinet



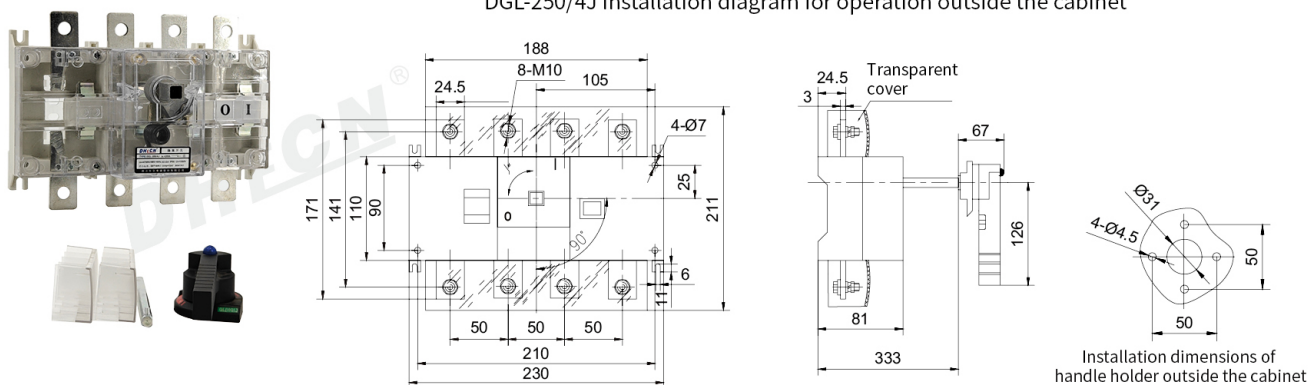
DGL-250/4 Transparent shell type direct operation and outline dimensions (mm)

DGL-250/4 Installation diagram for direct operation



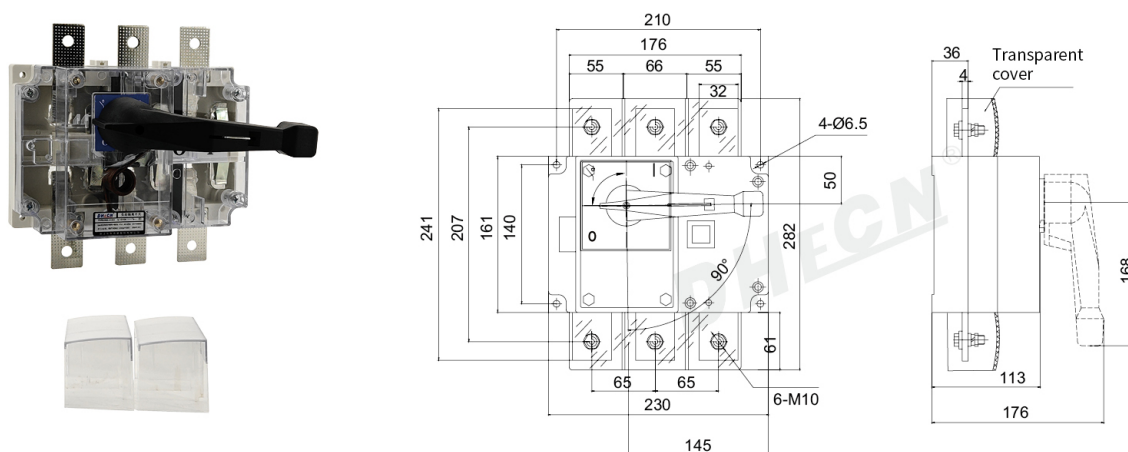
DGL-250/4J Transparent shell type installation and outline dimensions for operation outside the cabinet (mm)

DGL-250/4J Installation diagram for operation outside the cabinet

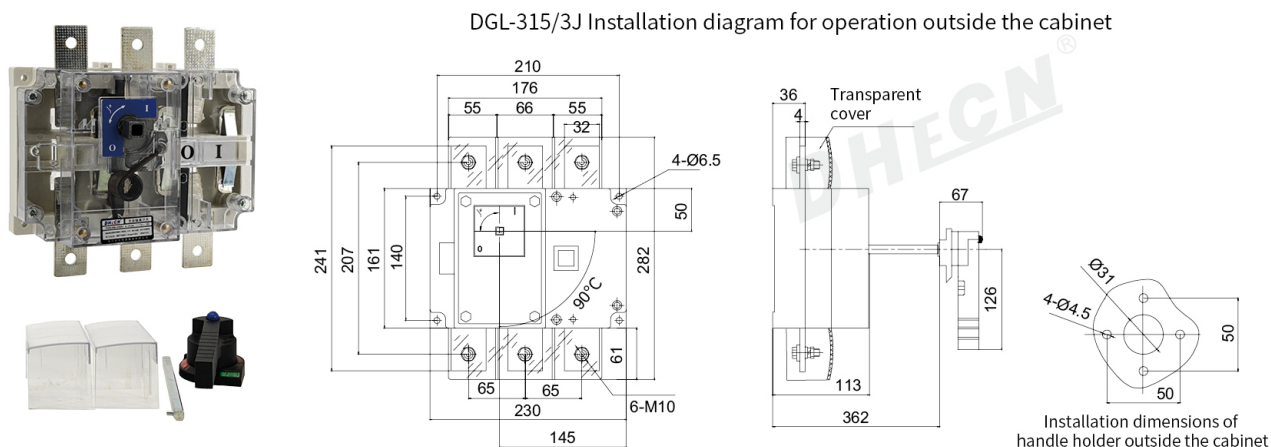


DGL-315/3 Transparent shell type direct operation and outline dimensions (mm)

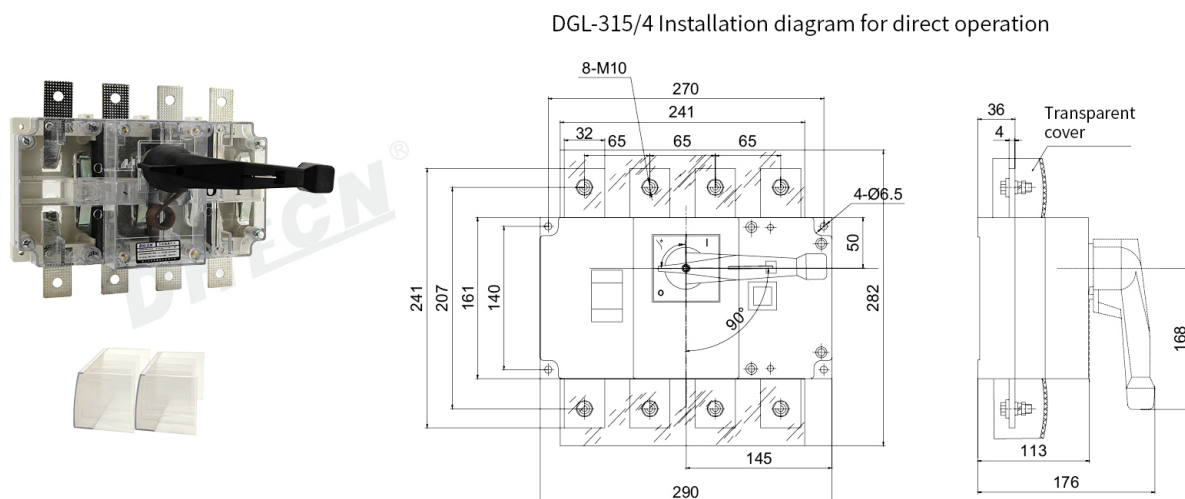
DGL-315/3 Installation diagram for direct operation



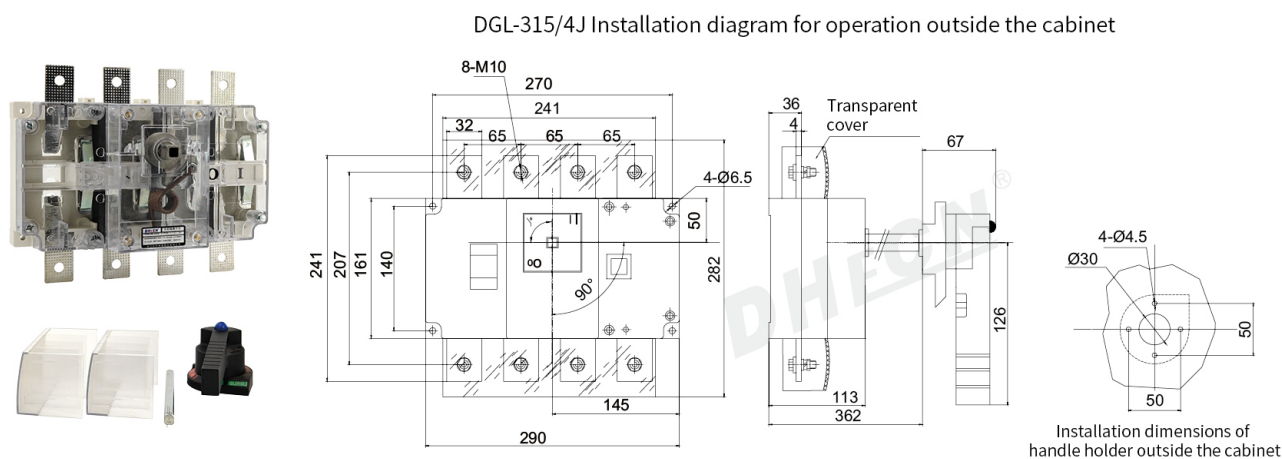
DGL-315/3J Transparent shell type installation and outline dimensions for operation outside the cabinet (mm)



DGL-315/4 Transparent shell type direct operation and outline dimensions (mm)

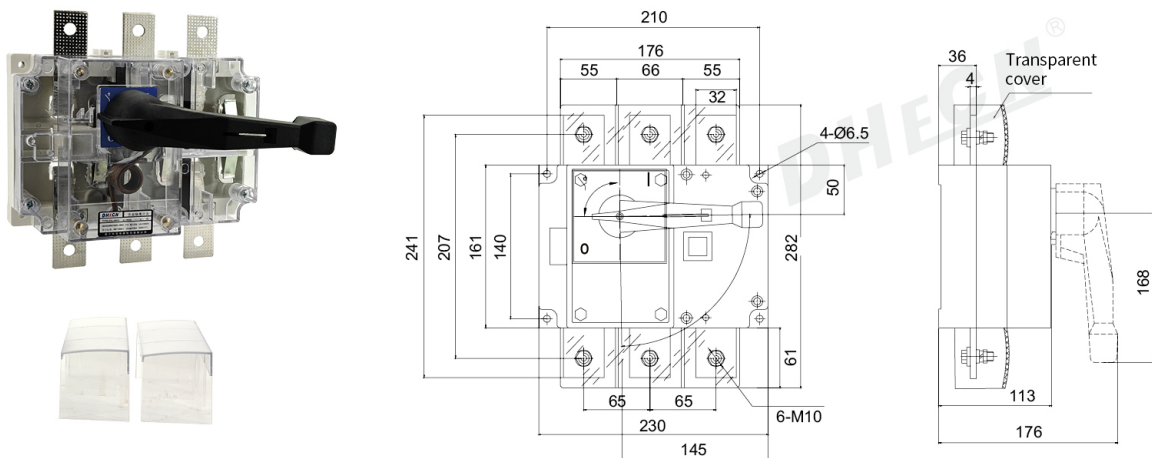


DGL-315/4J Transparent shell type installation and outline dimensions for operation outside the cabinet (mm)



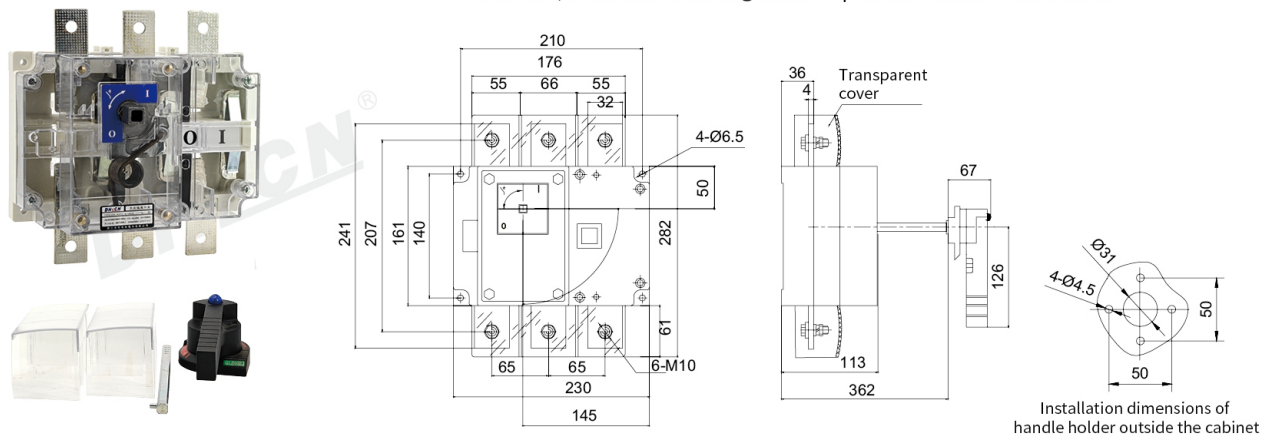
DGL-400/3 Transparent shell type direct operation and outline dimensions (mm)

DGL-400/3 Installation diagram for direct operation



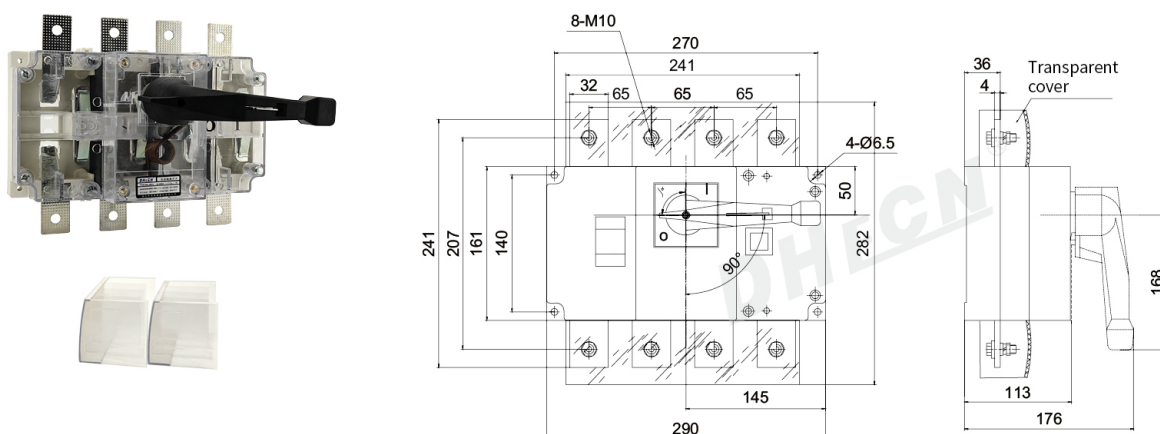
DGL-400/3J Transparent shell type installation and outline dimensions for operation outside the cabinet (mm)

DGL-400/3J Installation diagram for operation outside the cabinet



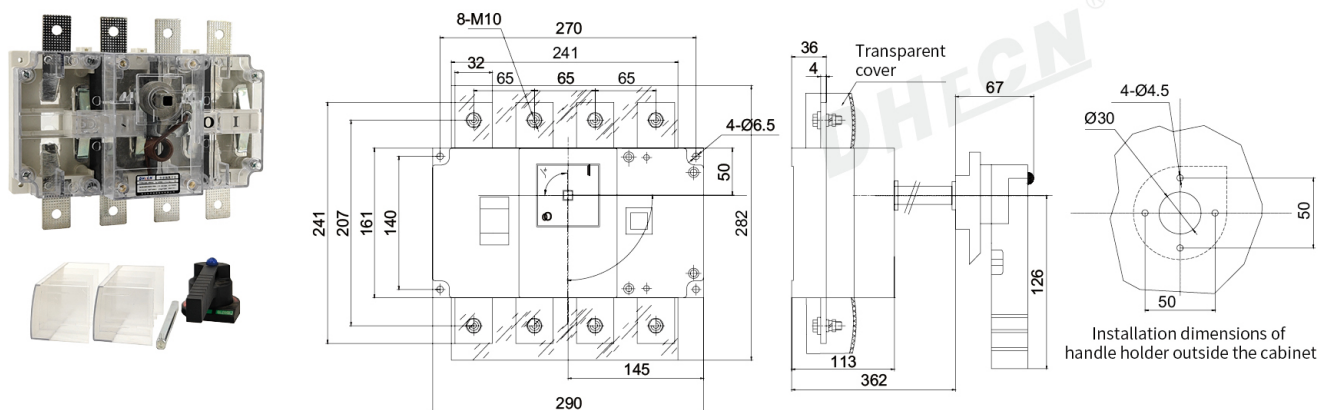
DGL-400/4 Transparent shell type direct operation and outline dimensions (mm)

DGL-400/4 Installation diagram for direct operation



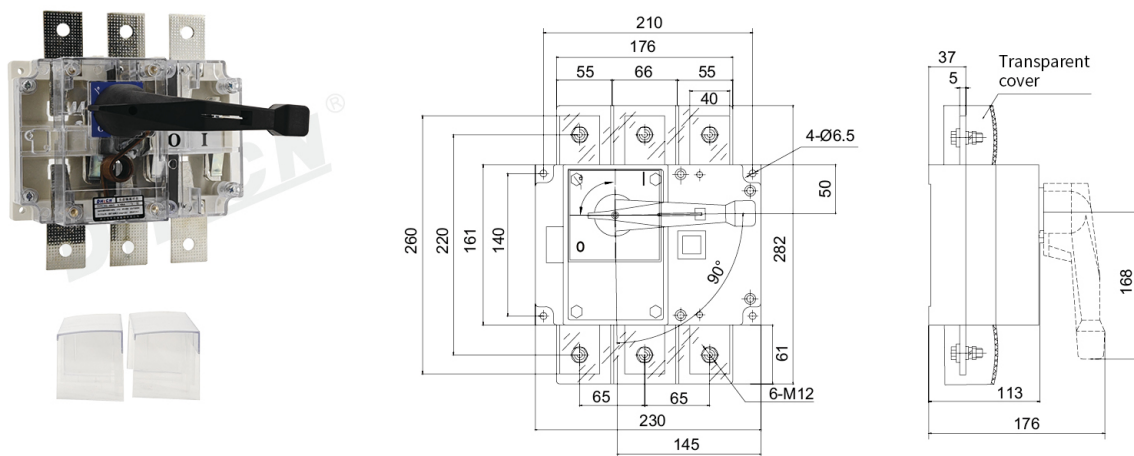
DGL-400/4J Transparent shell type installation and outline dimensions for operation outside the cabinet (mm)

DGL-400/4J Installation diagram for operation outside the cabinet



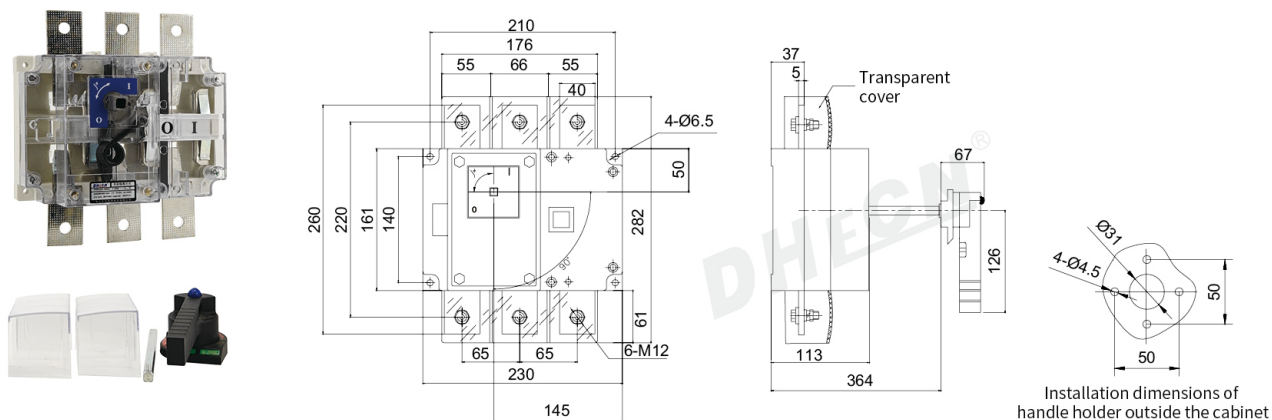
DGL-500/3 Transparent shell type direct operation and outline dimensions (mm)

DGL-500/3 Installation diagram for direct operation



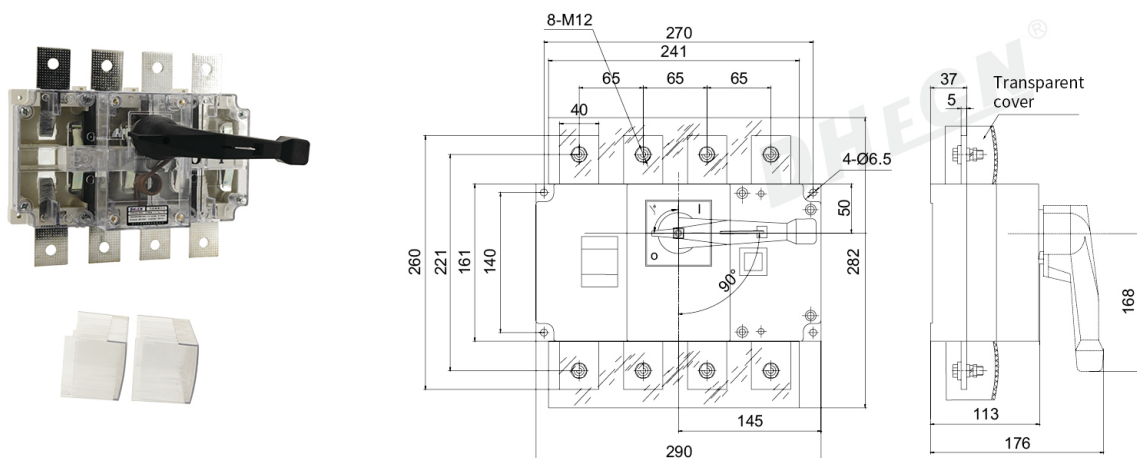
DGL-500/3J Transparent shell type installation and outline dimensions for operation outside the cabinet (mm)

DGL-500/3J Installation diagram for operation outside the cabinet



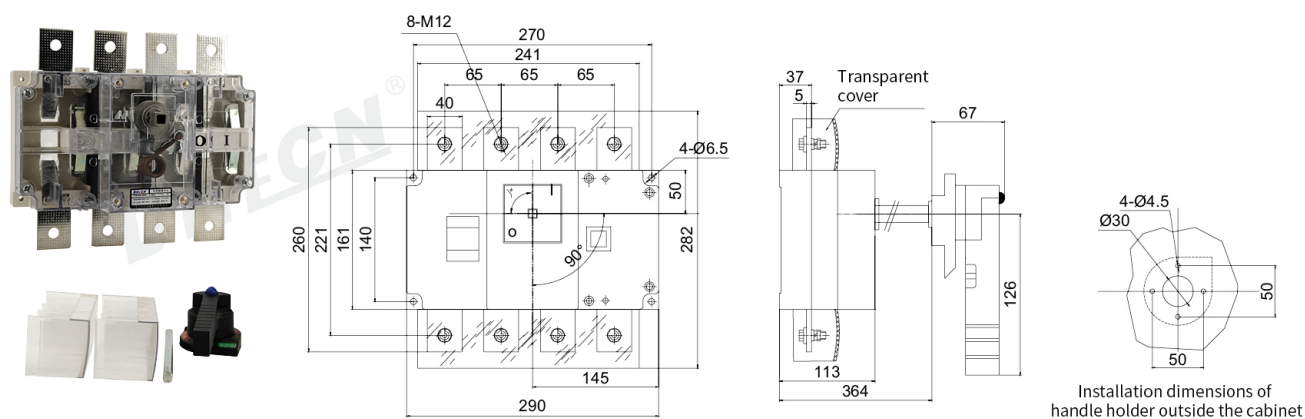
DGL-500/4 Transparent shell type direct operation and outline dimensions (mm)

DGL-500/4 Installation diagram for direct operation



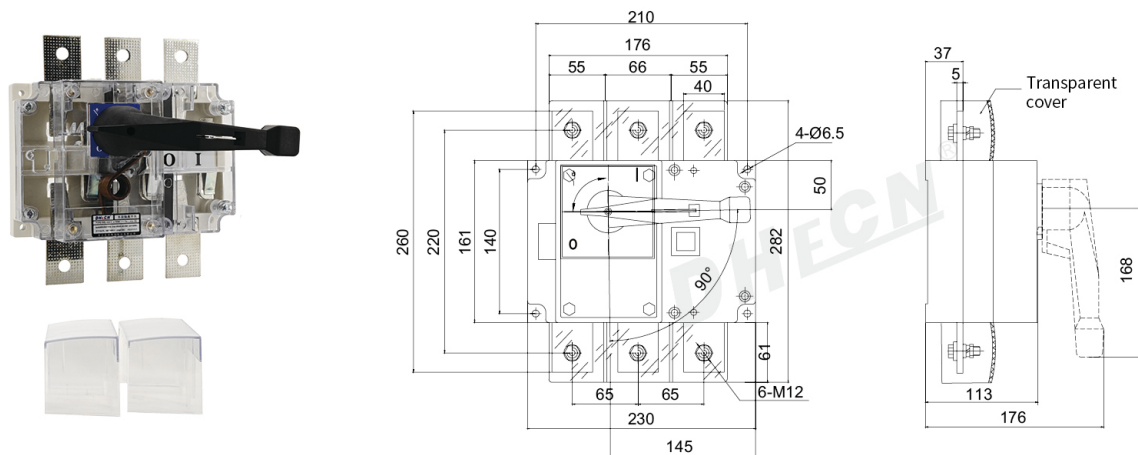
DGL-500/4J Transparent shell type installation and outline dimensions for operation outside the cabinet (mm)

DGL-500/4J Installation diagram for operation outside the cabinet



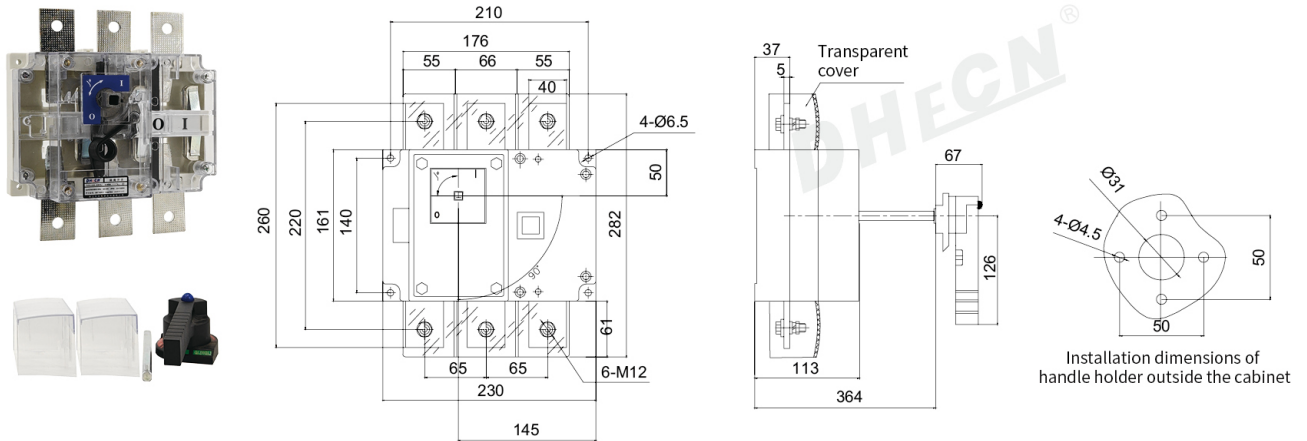
DGL-630/3 Transparent shell type direct operation and outline dimensions (mm)

DGL-630/3 Installation diagram for direct operation



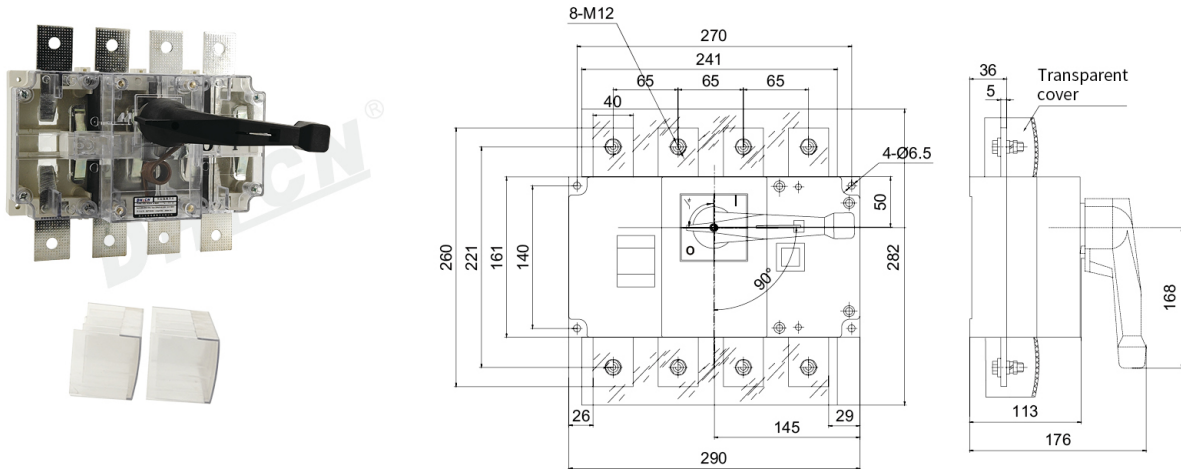
DGL-630/3J Transparent shell type installation and outline dimensions for operation outside the cabinet (mm)

DGL-630/3J Installation diagram for operation outside the cabinet



DGL630/4 Transparent shell type direct operation and outline dimensions (mm)

DGL-630/4 Installation diagram for direct operation



DGL-630/4J Transparent shell type installation and outline dimensions for operation outside the cabinet (mm)

DGL-630/4J Installation diagram for operation outside the cabinet

