



DHECN[®]

HH15(QSA) Series

Selection Manual for Isolation
Switch Fuse Group



DONGHUA ELECTRIC STOCK CO., LTD. OF ZHEJIANG

HH15 (QSA) Series Isolation Switch Fuse Group

Version Number:202403

Current classification: 63A, 125A, 160A, 250A, 400A
630A, 800A, 1000A, 1250A, 1600A



HH15-400



HH15-630



HH15-1000



HH15-1250

Scope of Application

HH15 (QSA) series products are mainly used for AC 50Hz, rated voltage up to AC690V, and agreed heating current up to 1600A. They are used in distribution circuits and motor circuits with high short-circuit current. As a manual and infrequently operated main switch or main switch, it is particularly suitable for installation in advanced drawer type low-voltage complete sets. The double throw switch is used for infrequent connection and disconnection of dual electrical circuits. This switch complies with GB/T14048.3 and IEC60947-3 standards.

Product Model Meaning

HH 15 S - □ / □ □

"1" indicates having one auxiliary contact; "2" indicates having 2 auxiliary contacts

Number of poles: "3" represents 3 poles; "4" represents 3 poles+N poles that can be turned on or off; "3N" represents 3 poles+straight through N poles

Conventional thermal current

No: single throw switch, S double throw switch (single throw products are installed on the same bottom plate, and mechanical interlocking is used to manually switch between common power supply and backup power supply)

Design code: Direct series connection of external copper bars to replace fuse links

Disconnecting switch

Normal Working and Installation Conditions

1. The ambient air temperature shall not be higher than +40℃ and not lower than -5℃.
2. The elevation of the installation site shall not exceed 2000m.
3. Humidity: When the maximum temperature is +40℃, the relative humidity of the air does not exceed 50%. Higher relative humidity can be allowed at lower temperatures, such as reaching 90% at 20℃. Special measures should be taken for occasional condensation caused by temperature changes.
4. The pollution level of the surrounding environment is Level 3.
5. The switch should be installed in a place without significant shaking, shock vibration, and invasion of rain and snow. At the same time, the installation location should be free of explosive hazardous media, and there should be no gas and dust in the media that can corrode metal and damage insulation.

Structure Characteristics

The switch adopts a fully enclosed structure to ensure stable operation reliability and performance improvement; Featuring a unique rolling insertion contact system. Each phase has two sets of contact systems with this dual break point, the contact system. The current is passed through several rollers separately, resulting in a significant reduction in the electric reaction force on each roller. During the movement, the contact between the roller and the static contact has both rolling and sliding friction. This can effectively avoid welding. The operating mechanism has energy storage springs, so the movement speed of the moving contact group is independent of the magnitude of the operating force and the operating speed.

The actuator consists of a panel mounted handle and a hand the driving coupling, extension shaft, shaft coupling, and driving shaft are composed of a handle meshing driving coupling. the operating handle is installed on the switchgear door. When the cabinet door is closed, the handle fits with the operating rod of the switch. When the switch is in the closed position, the handle is interlocked with the cabinet door to prevent it from opening.

Structure Characteristics

The depth of installation of switches in a complete set of cabinets can be considered according to the needs of the combination installation of various electrical components. The extension shaft and shaft coupling are only used when the drive shaft is not long enough, and have a considerable range of movement.

Main Technical Specifications

The matching relationship between switches and fuses

Agreed heating current Ith	Matching fuse size	Rated current of fuse (A)
63	NT00	4、6、10、16、20、25、32、40、50、63
125	NT00	10、16、25、32、40、50、63、80、100、125
160	NT00	10、16、25、32、40、50、63、80、100、125、160
250	NT1	63、80、100、125、160、200、250
400	NT2	160、200、250、315、400
630	NT3	250、315、400、500、630
800	CRT3	800
1000	NT4	800、1000
1250	NT4	800、1000、1250
1600	RT20-4	1600

Main technical parameters of switches

Model and specification			HH15 (QSA)-63	HH15 (QSA)-125	HH15 (QSA)-160	HH15 (QSA)-250	HH15 (QSA)-400	HH15 (QSA)-630	HH15 (QSA)-800	HH15 (QSA)-1000	HH15 (QSA)-1250	HH15 (QSA)-1600
Agreed heating current (A)			63	125	160	250	400	630	800	1000	1250	1600
Rated insulation voltage (V)			1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Rated impulse withstand voltage (kV)			8	8	12	12	12	12	12	12	12	12
Rated working current (A)	400V		63	125	160	250	400	630	800	1000	1250	1600
	690V		63	100	160	250	315	500	630	800	1000	1250
Rated making and breaking energy Force (A) (at 1.05Ue)	AC690V,AC-23B COSΦ: 0.35	Current connection	630	1250	1600	2500	4000	6300	8000	10000	12500	16000
	AC690V,AC-23B COSΦ: 0.35	Off	504	1000	1280	2000	3200	5040	6400	8000	10000	12800
Mechanical lifespan (times)			1400	1400	800	800	800	800	500	500	500	500
Electrical lifespan (times)			200	200	200	200	200	200	100	100	100	100
Operating torque (Nm)			7.5	7.5	16	16	16	30	40	40	40	50
Rated limiting short-circuit current (kA)			50	50	50	50	50	50	100	100	100	100
Utilization category			AC-23B	AC-23B	AC-23B	AC-23B	AC-23B	AC-23B	AC-23B	AC-23B	AC-23B	AC-23B
Pollution degree			3	3	3	3	3	3	3	3	3	3
Installation category			III	III	III	III	III	III	III	III	III	III

Installation Precautions

- 1.The contact parameters of the switch have been set by the manufacturer and cannot be adjusted freely 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 is consistent with the product wiring holes to avoid product damage caused by external forces.

Ordering Notice

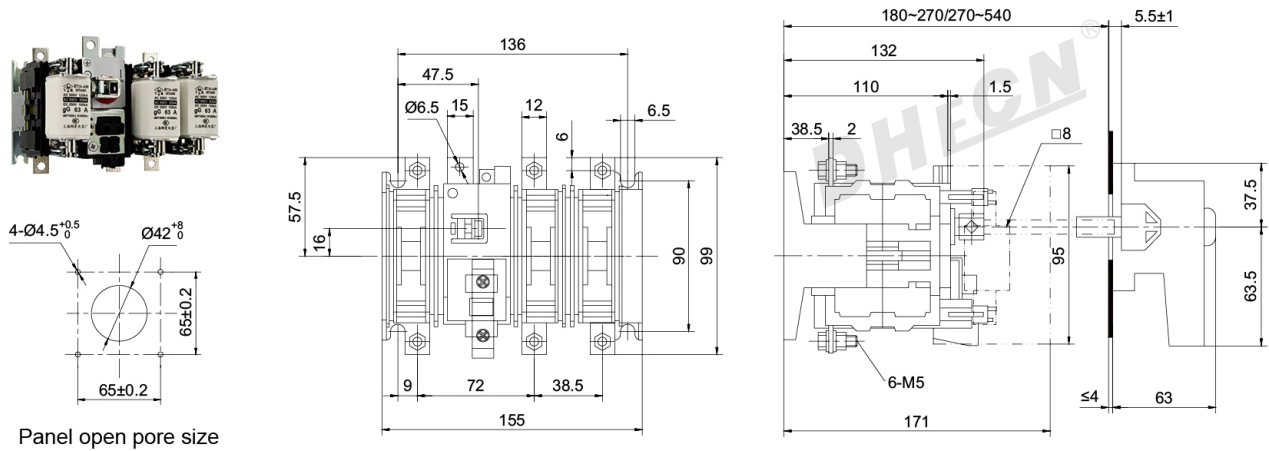
The customer must specify the product model, agreed heating current, number of poles, whether there is a fuse, whether there is an auxiliary contact switch, and the number of switches when ordering the switch.

Ordering example: HH15 (QSA) -630/32, equipped with 500A melt, quantity 20 units.

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

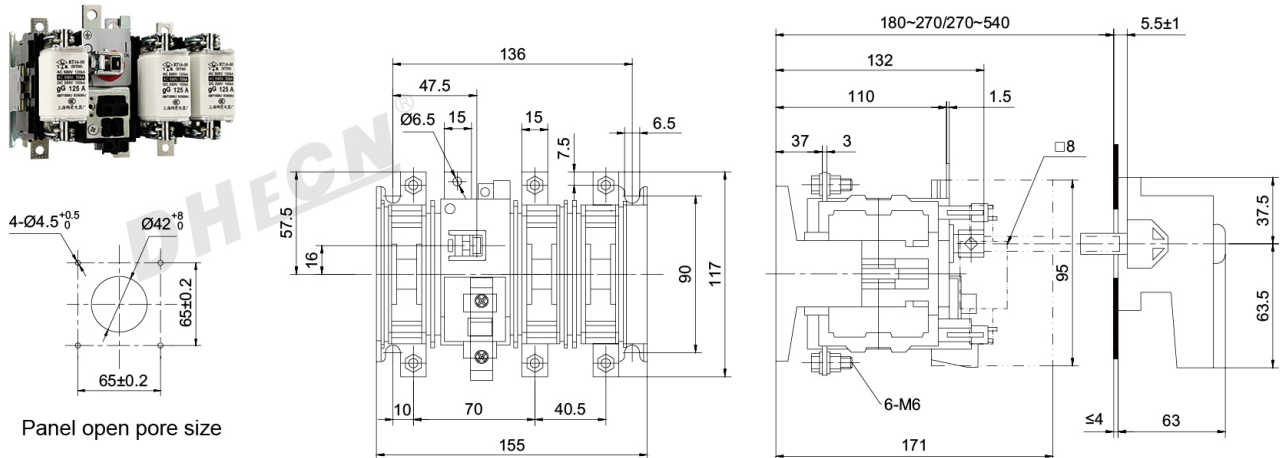
HH15(QSA)-63/3 Installation and external dimensions (mm)

HH15(QSA)-63/3 installation drawing



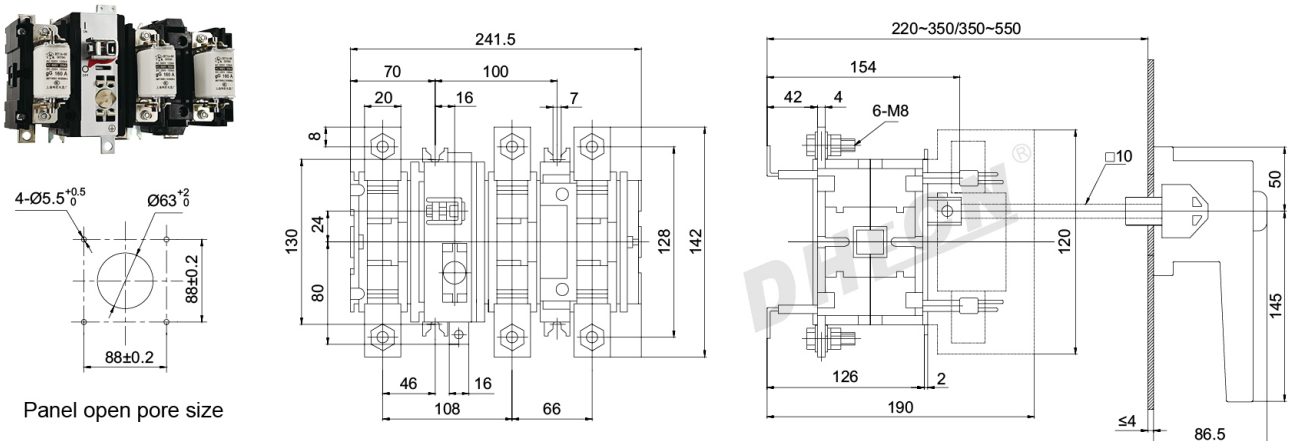
HH15(QSA)-125/3 Installation and external dimensions (mm)

HH15(QSA)-125/3 installation drawing



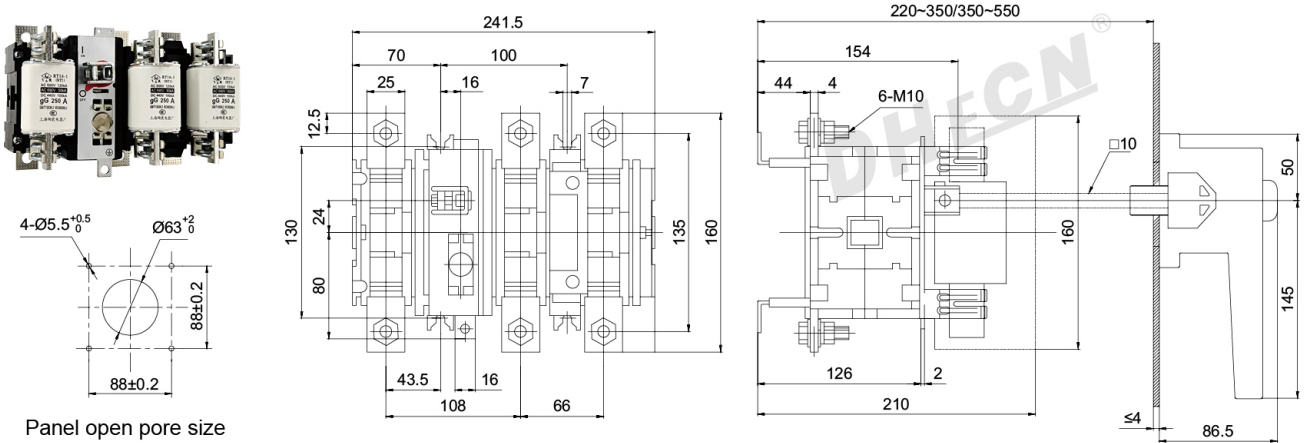
HH15(QSA)-160/3 Installation and external dimensions (mm)

HH15(QSA)-160/3 installation drawing



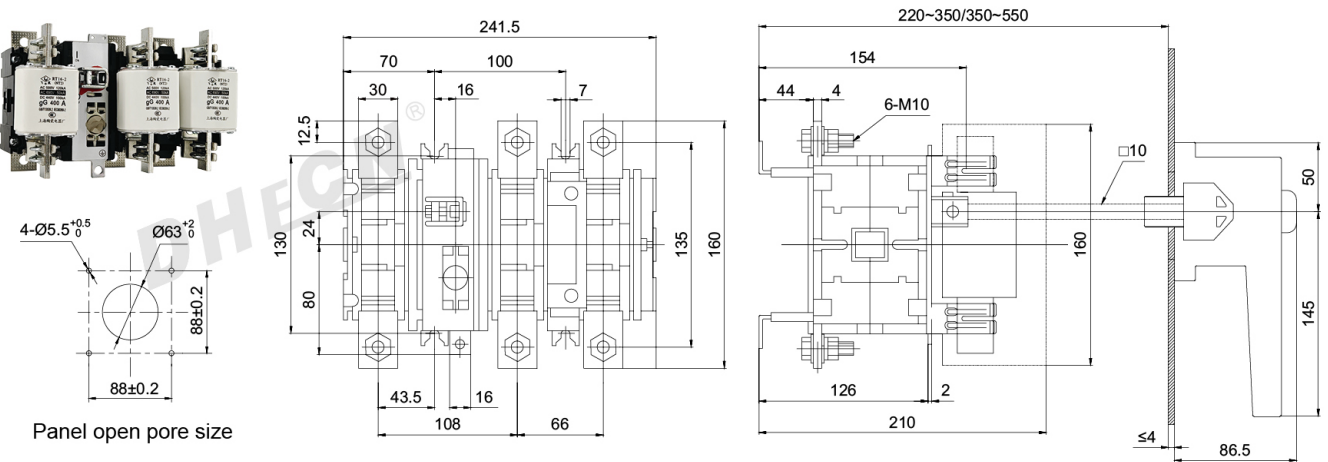
HH15(QSA)-250/3 Installation and external dimensions (mm)

HH15(QSA)-250/3 installation drawing



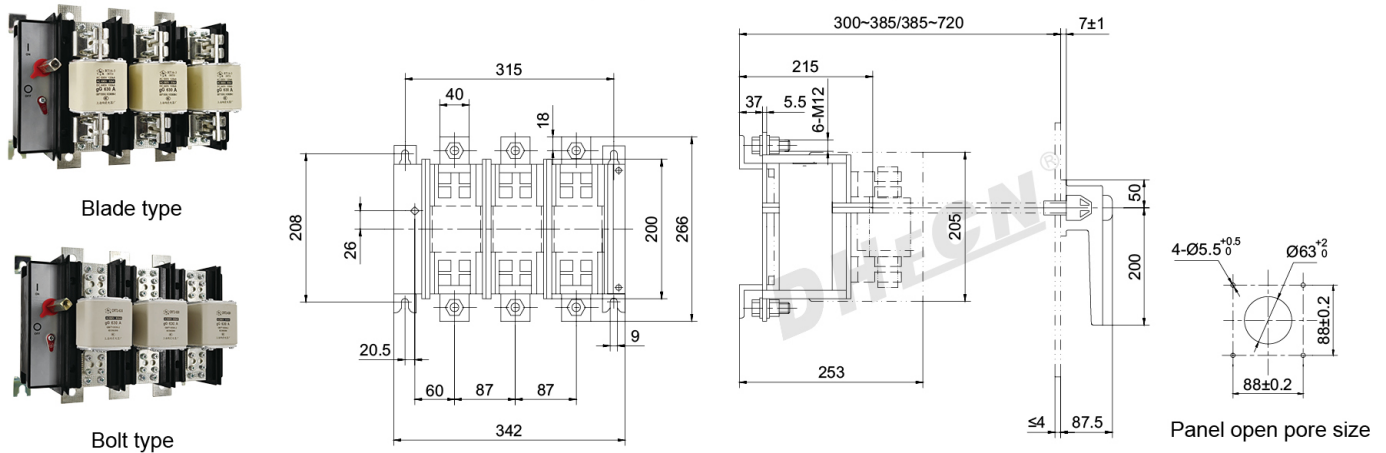
HH15(QSA)-400/3 Installation and external dimensions (mm)

HH15(QSA)-400/3 installation drawing



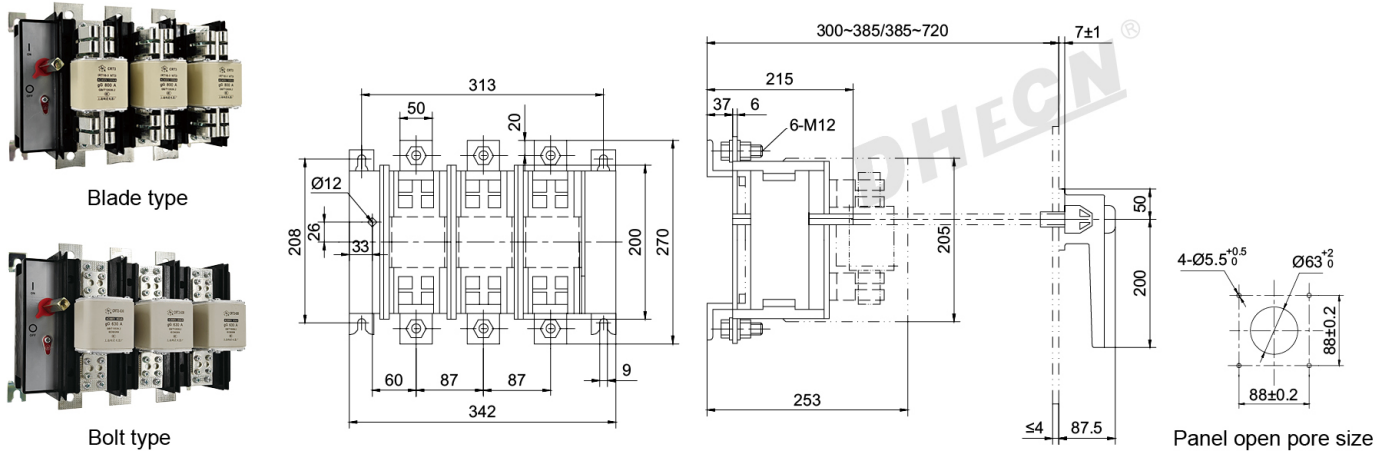
HH15(QSA)-630/3 Installation and external dimensions (mm)

HH15(QSA)-630/3 installation drawing



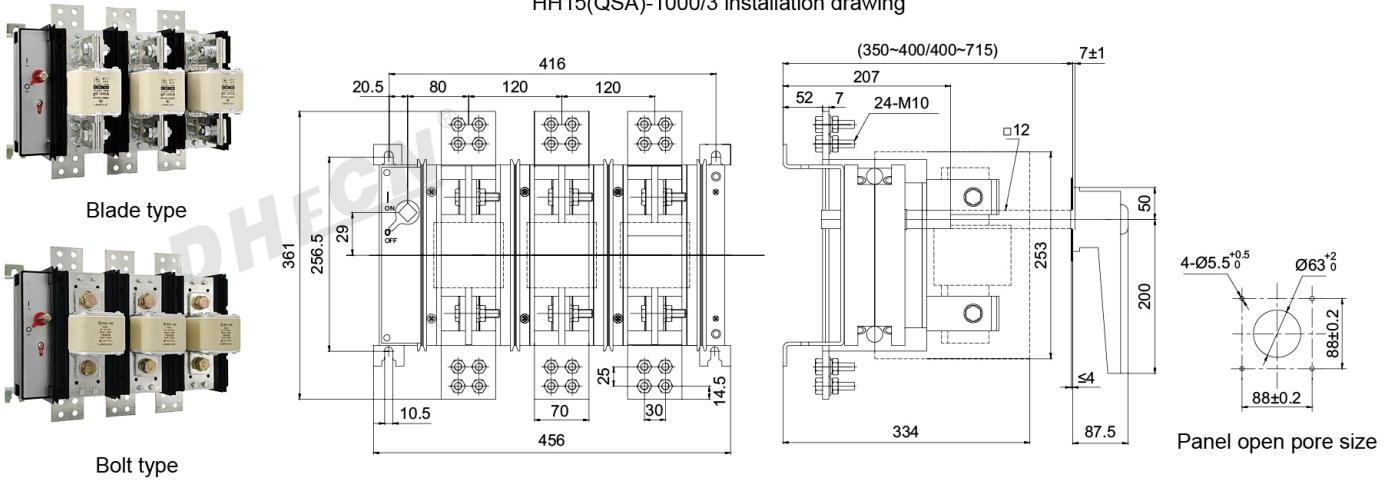
HH15(QSA)-800/3 Installation and external dimensions (mm)

HH15(QSA)-800/3 installation drawing



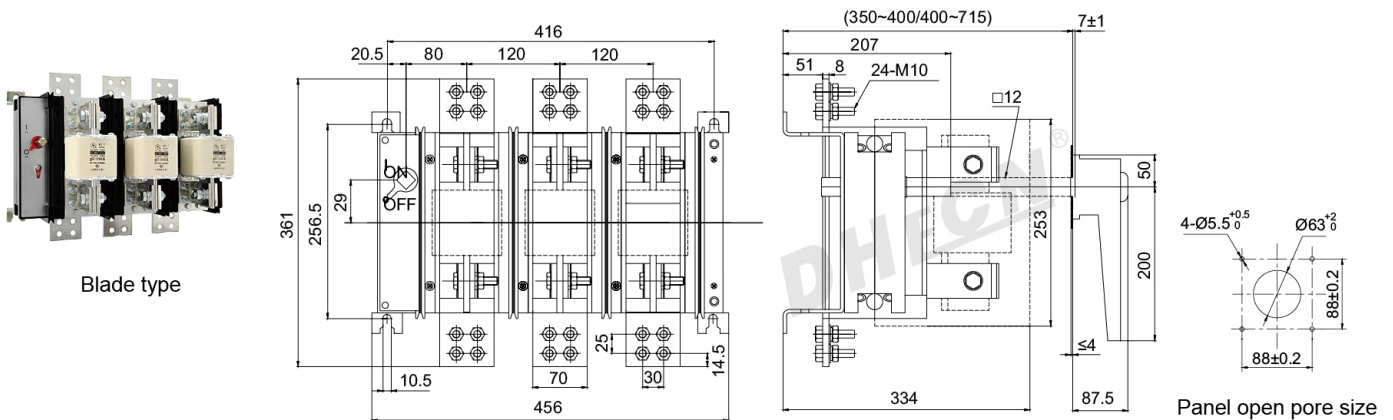
HH15(QSA)-1000/3 Installation and external dimensions (mm)

HH15(QSA)-1000/3 installation drawing



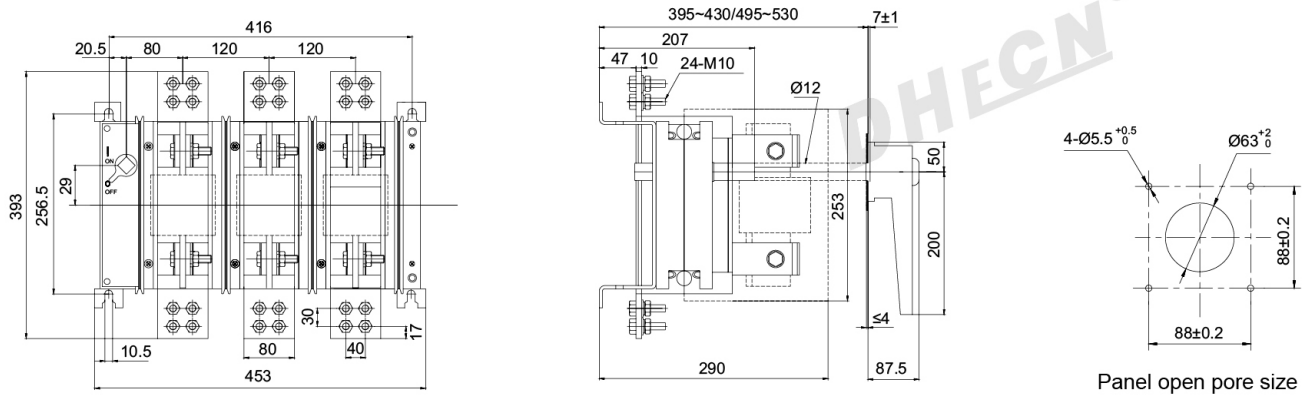
HH15(QSA)-1250/3 Installation and external dimensions (mm)

HH15(QSA)-1250/3 installation drawing



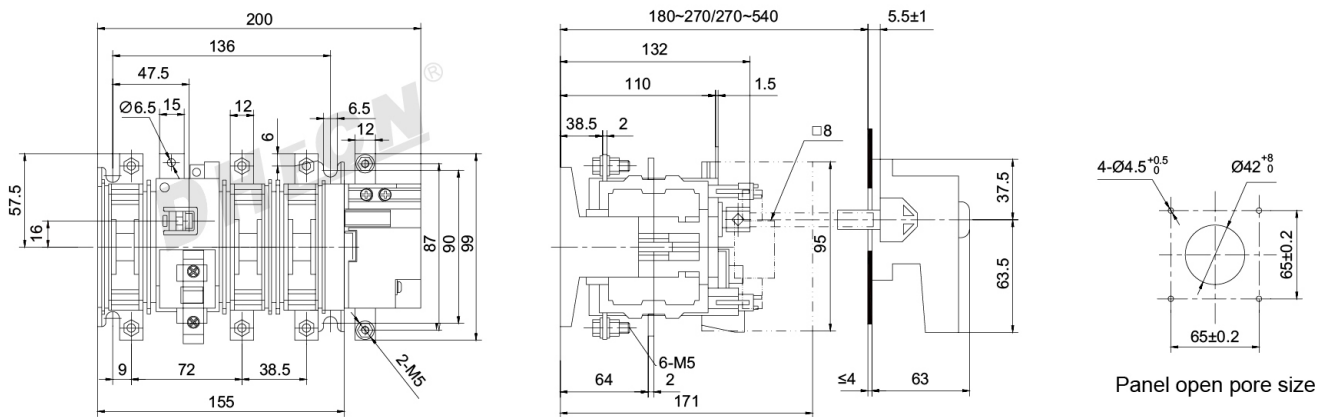
HH15(QSA)-1600/3 Installation and external dimensions (mm)

HH15(QSA)-1600/3 installation drawing



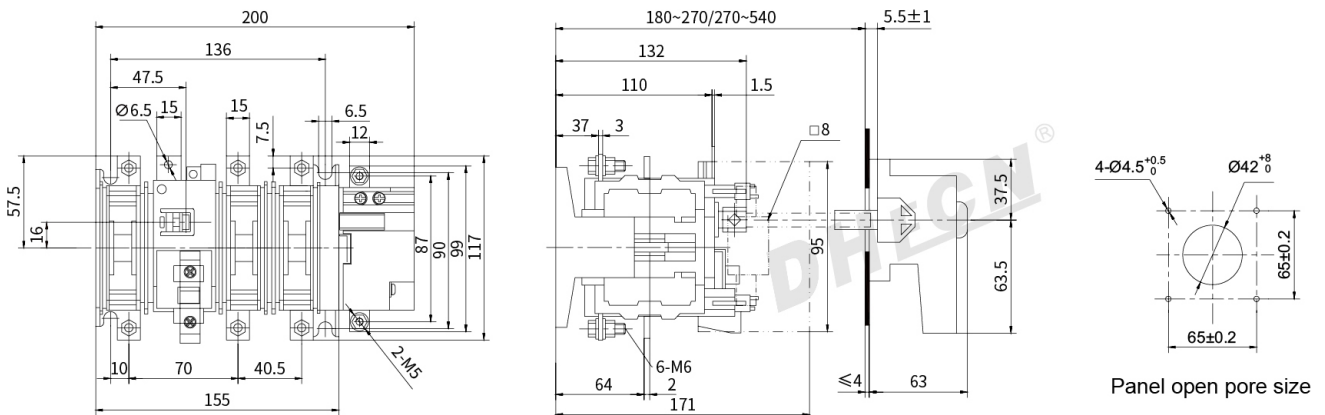
HH15(QSA)-63/4 Installation and external dimensions (mm)

HH15(QSA)-63/4 installation drawing



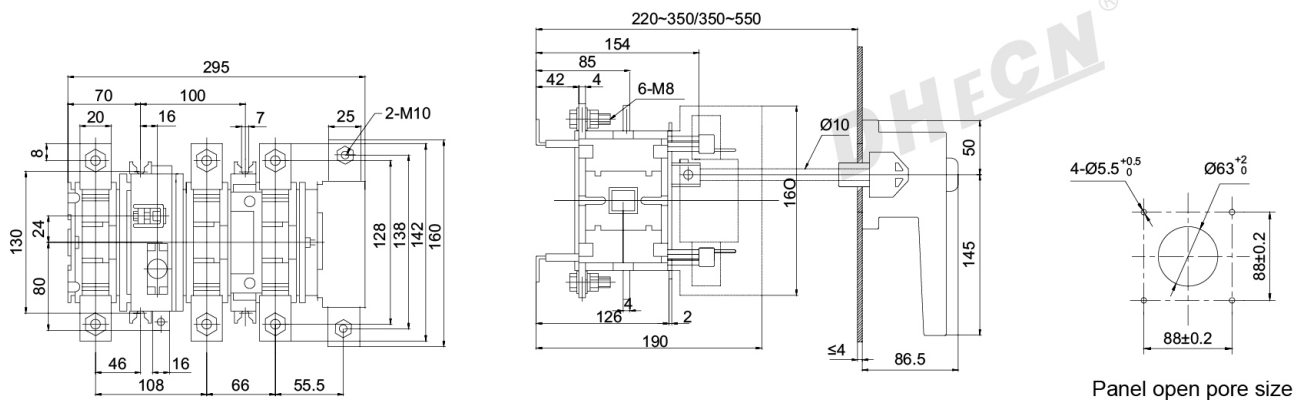
HH15(QSA)-125/4 Installation and external dimensions (mm)

HH15(QSA)-125/4 installation drawing



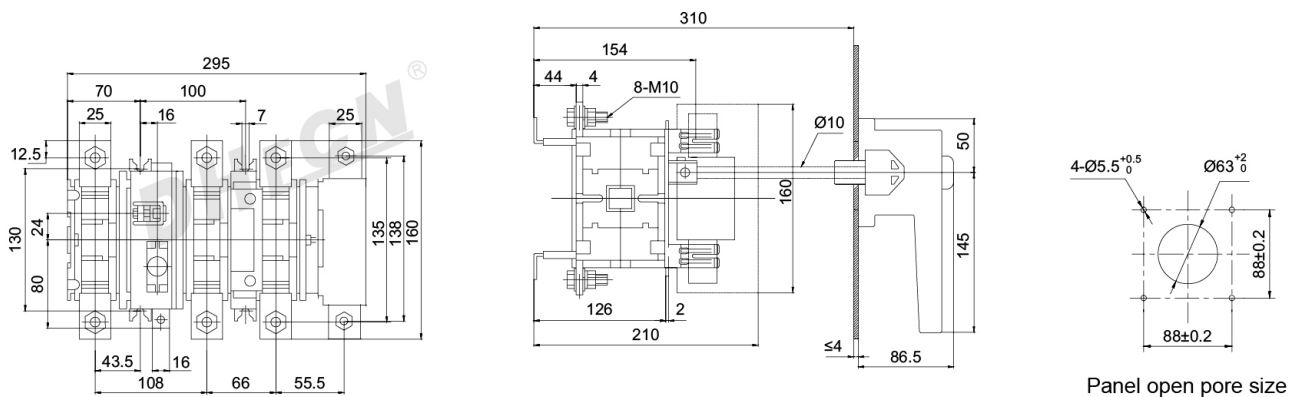
HH15(QSA)-160/4 Installation and external dimensions (mm)

HH15(QSA)-160/4 installation drawing



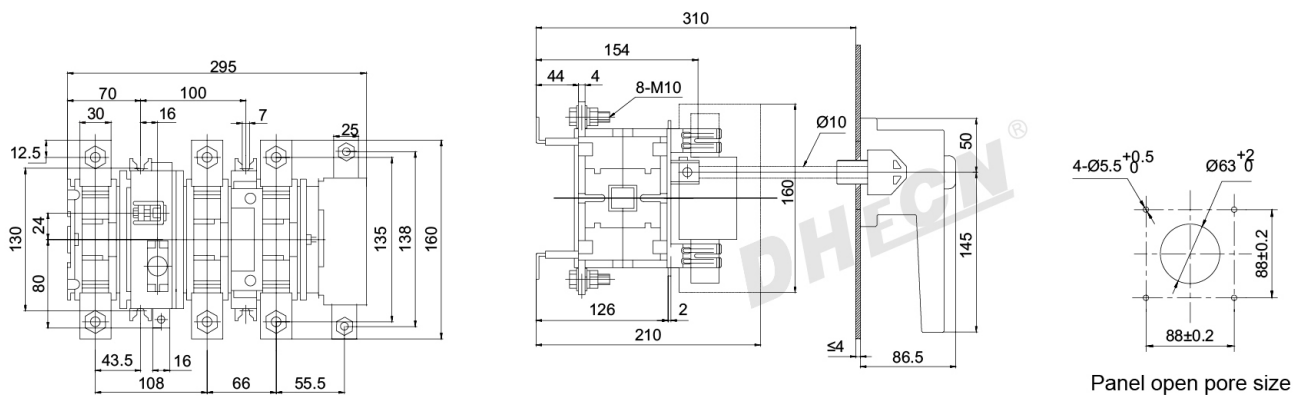
HH15(QSA)-250/4 Installation and external dimensions (mm)

HH15(QSA)-250/4 installation drawing



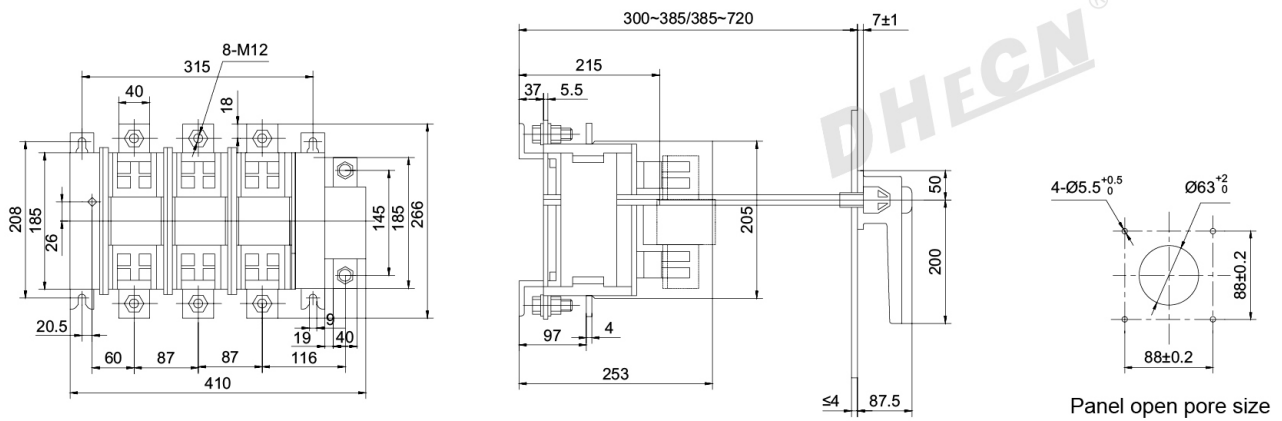
HH15(QSA)-400/4 Installation and external dimensions (mm)

HH15(QSA)-400/4 installation drawing



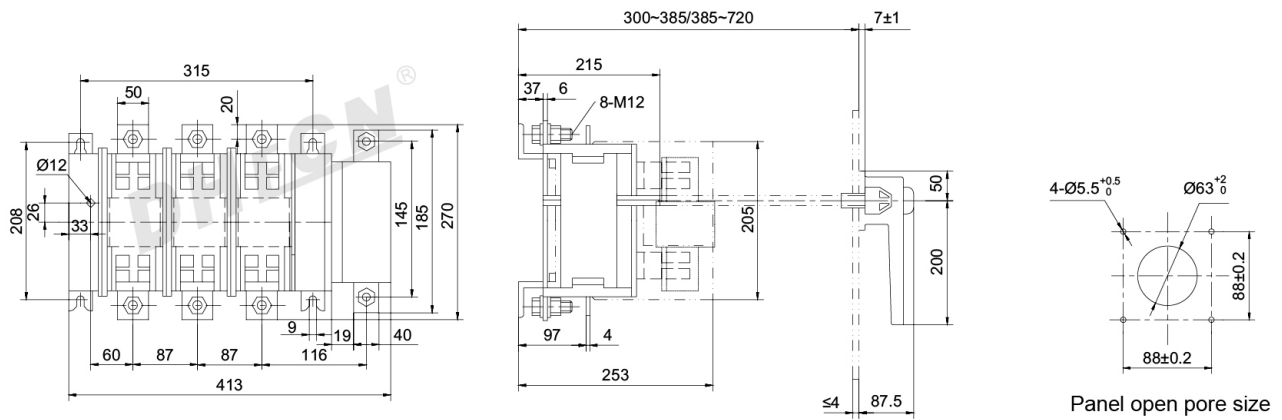
HH15(QSA)-630/4 Installation and external dimensions (mm)

HH15(QSA)-630/4 installation drawing



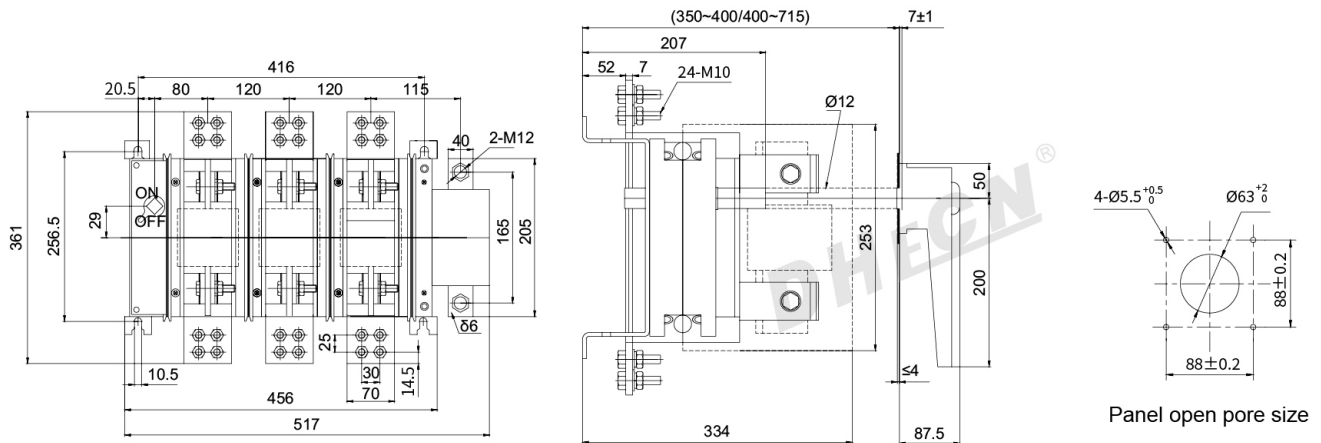
HH15(QSA)-800/4 Installation and external dimensions (mm)

HH15(QSA)-800/4 installation drawing



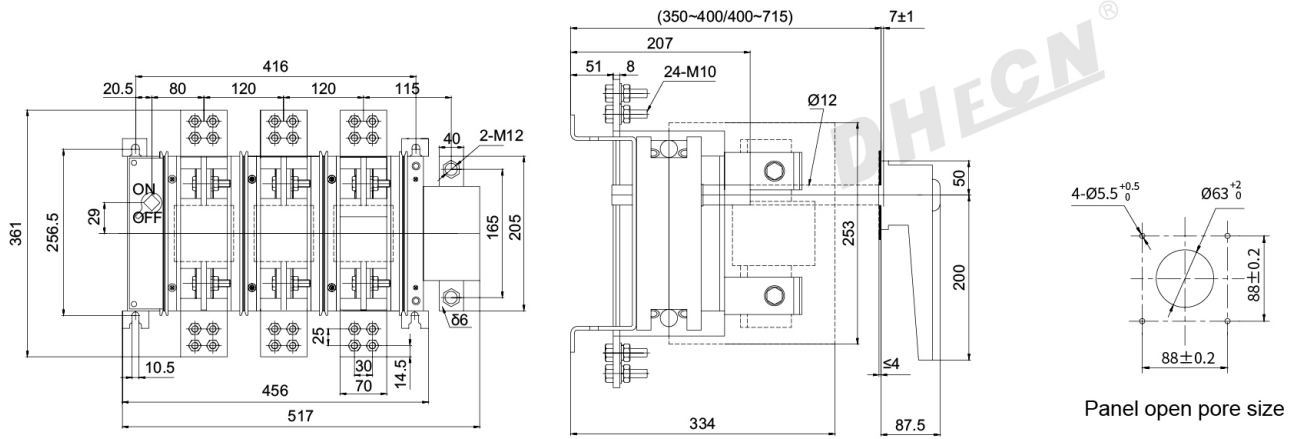
HH15(QSA)-1000/4 Installation and external dimensions (mm)

HH15(QSA)-1000/4 installation drawing



HH15(QSA)-1250/4 Installation and external dimensions (mm)

HH15(QSA)-1250/4 installation drawing



HH15(QSA)-1600/4 Installation and external dimensions (mm)

HH15(QSA)-1600/4 installation drawing

