



DHECN[®]

HR6、DHR6 Series

Fuse Switch Disconnecter
Selection Manual



DONGHUA ELECTRIC STOCK CO., LTD. OF ZHEJIANG

HR6 Series Fuse Switch Disconnecter

版号: 202312

Current Class: 160A、250A、400A、630A
800A、1000A

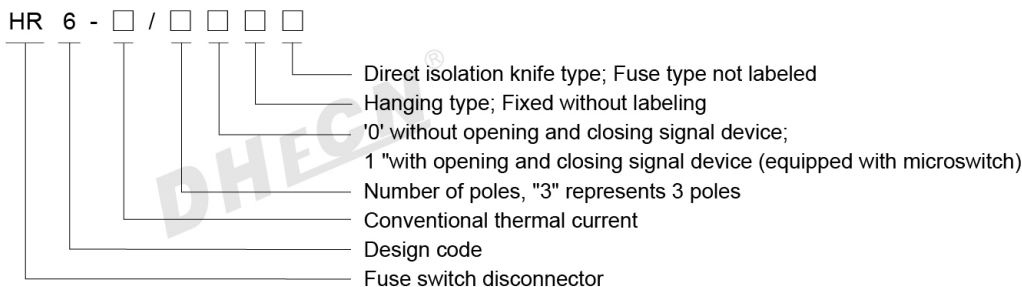


Scope of Application

The HR6 series fuse switch disconnector (hereinafter referred to as the switch) is used in distribution circuits and motor circuits with high short-circuit current of 50Hz AC, rated voltage up to AC690V, and agreed heating current up to 1000A. It is used as a power switch, isolation switch, emergency switch, and circuit protection, but is generally not used for directly opening or closing a single motor.

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

Product Model Meaning



Normal Working and Installation Conditions

- 1.The ambient air temperature shall not exceed + 40℃ and not be lower than -5℃ .
- 2.The altitude 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, impact 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 or dust in the media that can corrode metals and damage insulation.

Structural Feature

The switch is composed of a base, a cover, and an arc extinguishing chamber, all made of arc resistant plastic and is a fully plastic structure. The static contact is directly installed on the base, making the disassembly and assembly of the arc extinguishing chamber convenient. Each arc extinguishing chamber has two parts: an inner chamber and an outer chamber. Multiple metal arc extinguishing grids are used to enhance the arc extinguishing ability and improve the contact life. The NT type fuse link is installed inside the cover, which can rotate in a fan-shaped manner and has a large electrical isolation distance to meet the requirements of the isolation switch. The cover can be easily removed from the base, making installation and replacement of the fuse link very convenient. There are two sets of installation holes on the base, which can meet the requirements for installation in various switchgear cabinets and panels.

On both sides of the switch, auxiliary contacts can be installed as needed to send signals indicating the opening and closing status of the switch. The direct isolation knife type can be used as a knife switch. The hanging type installation can be directly installed in the busbar system without drilling, meeting the requirements of the national grid. The hanging type product also provides upper and lower input and output structures, namely upper wiring type (upper incoming line) and lower wiring type (lower outgoing line).

Main Technical Parameters

Matching relationship between switches and fuses

Conventional thermal current (A)	Model of fuse link	Rated operational voltage (V)	Rated current of fuse link (A)
160	NT00、RT16-00	AC-23B 400	2、4、6、10、16、20、25、32、40、50、63、80、100、125、160
	NH00	AC-23B 690	2、4、6、10、16、20、25、32、40、50、63、80、100
250	NT1、RT16-1	AC-23B 400	40、50、63、80、100、125、160、200、225、250
	NH1	AC-23B 690	40、50、63、80、100、125、160、200
400	NT2、RT16-2	AC-23B 400	160、200、250、300、315、350、400
	NH2	AC-23B 690	160、200、250、300、315
630	NT3、RT16-3	AC-23B 400	315、400、500、630
	NH3	AC-23B 690	315、400、500
800	CRT3	AC-23B 400	800
1000	NT4、RT17	AC-23B 400	800、1000
	NH4	AC-23B 690	800

Main technical parameters of the switch

Model Specifications			HR6-160	HR6-250	HR6-400	HR6-630	HR6-800	HR6-1000
Conventional Thermal Current (A)			160	250	400	630	800	1000
Rated Insulation Voltage U_i (V)			1000	1000	1000	1000	1000	1000
Rated Impulse Withstand Voltage (kV)			12	12	12	12	12	12
Rated Working Current(A)	500V		160	250	400	630	800	1000
	690V		100	200	315	425	630	800
Rated making and breaking capacity (A) (1.05 U_e)	AC500V,AC-22B COS Φ : 0.65	Connect	1600	2500	4000	6300	8000	10000
	AC500V,AC-22B COS Φ : 0.65	Breaking	1280	2000	3200	5040	6400	8000
Mechanical Life (Time)			1400	800	800	800	800	800
Electrical Life (Time)			200	200	200	200	200	200
Operating Force (N)			≤400	≤400	≤400	≤400	≤400	≤400
Rated Conditional Short-circuit Current (kA) (AC-21B/AC-22B)			50	50	100	100/50	100	100
Usage Category			AC-23B	AC-23B	AC-23B	AC-23B	AC-23B	AC-23B
Pollution Degree			3	3	3	3	3	3
Degrees of Protection Provided by Enclosure			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 row holes is consistent with the product wiring holes to avoid product damage caused by external forces.

Ordering Information

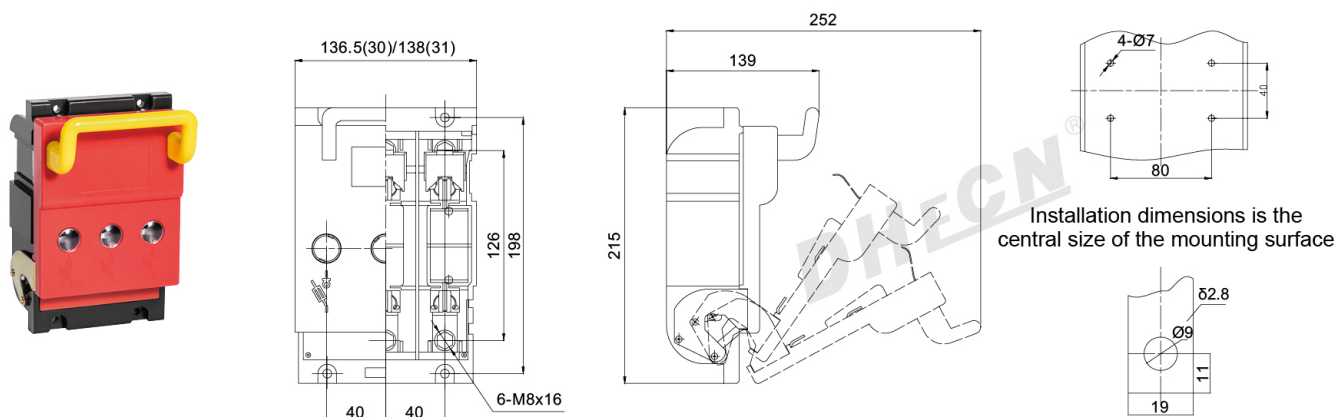
The customer must indicate the product name, model, rated current, number of poles, and quantity, etc. Example 1: HR6-400/30 690V (with fuse: 400A) Quantity: 10 units;
Example 2: HR6-630/31G (upper incoming line) 690V (with fuse: 630A) Quantity: 10 units

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

HR6-160 Installation and overall dimensions(mm)

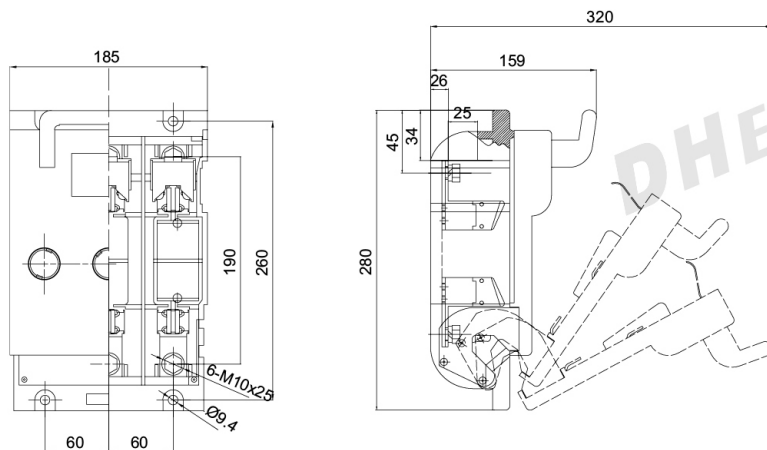
HR6-160 installation drawing

Installation dimensions

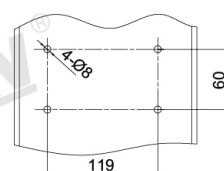


HR6-250 Installation and overall dimensions(mm)

HR6-250 installation drawing



Installation dimensions

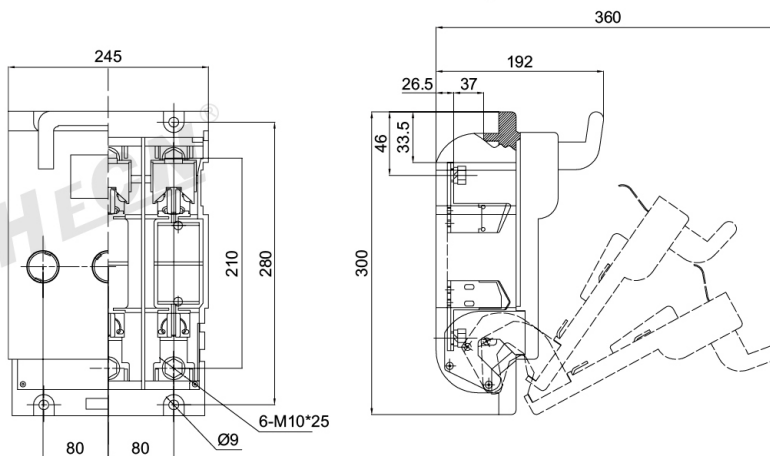


Installation dimensions is the central size of the mounting surface

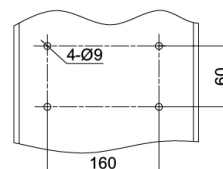


HR6-400 Installation and overall dimensions(mm)

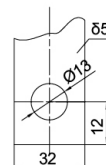
HR6-400 installation drawing



Installation dimensions

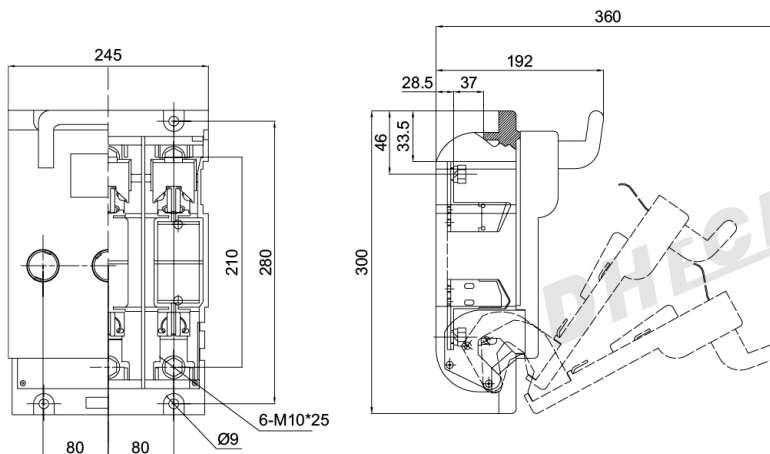


Installation dimensions is the central size of the mounting surface

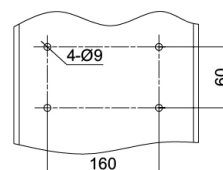


HR6-630 Installation and overall dimensions(mm)

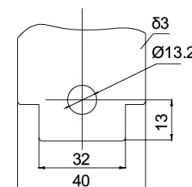
HR6-630 installation drawing



Installation dimensions



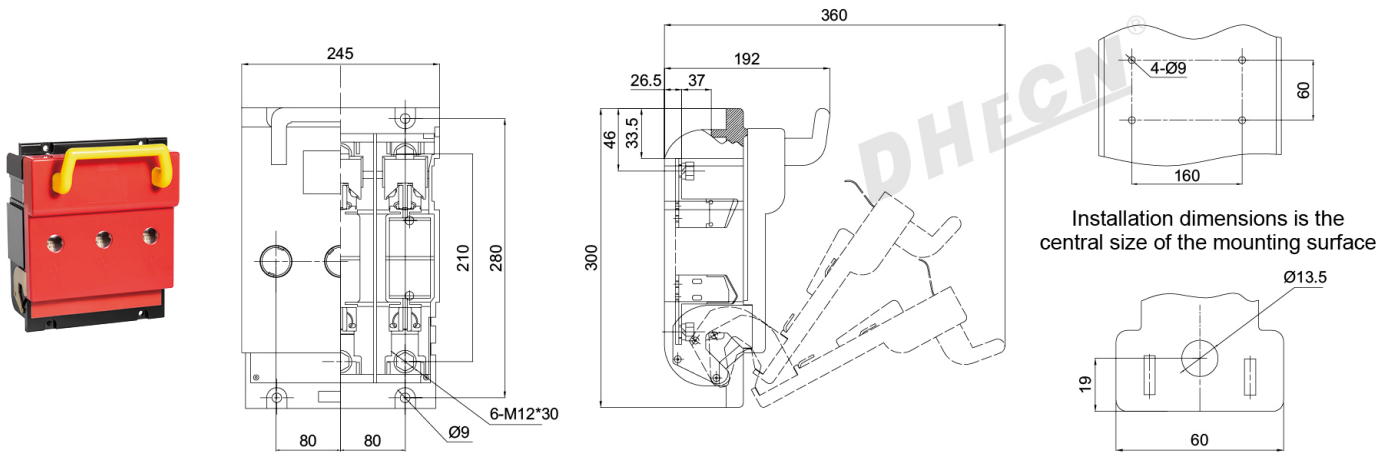
Installation dimensions is the central size of the mounting surface



HR6-800 Installation and overall dimensions(mm)

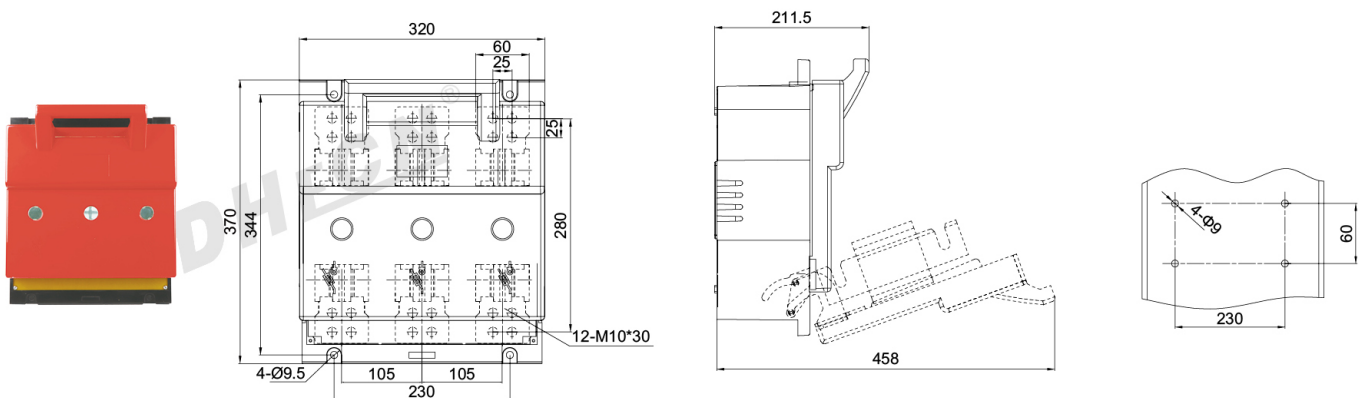
HR6-800 installation drawing

Installation dimensions



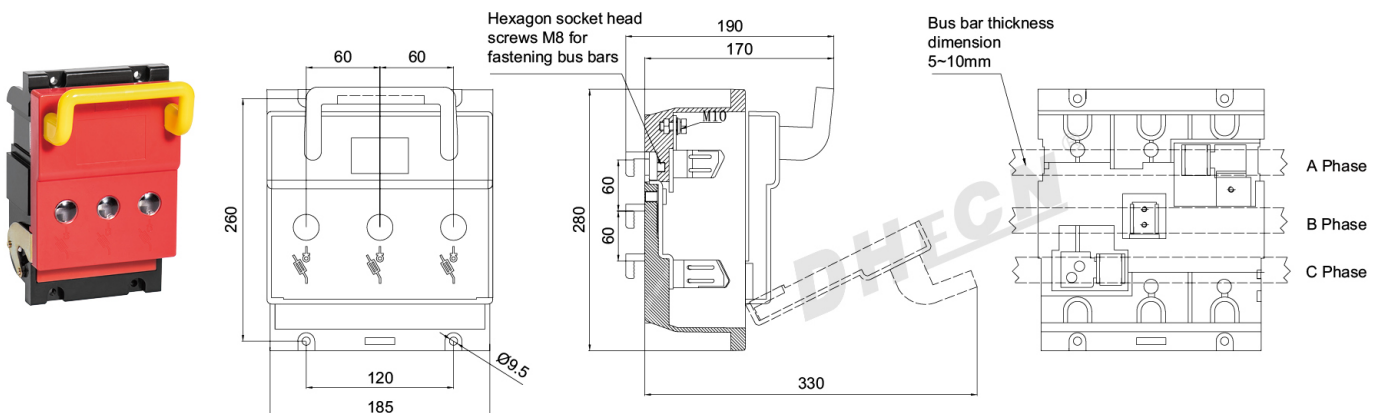
HR6-1000 Installation and overall dimensions(mm)

HR6-1000 installation drawing



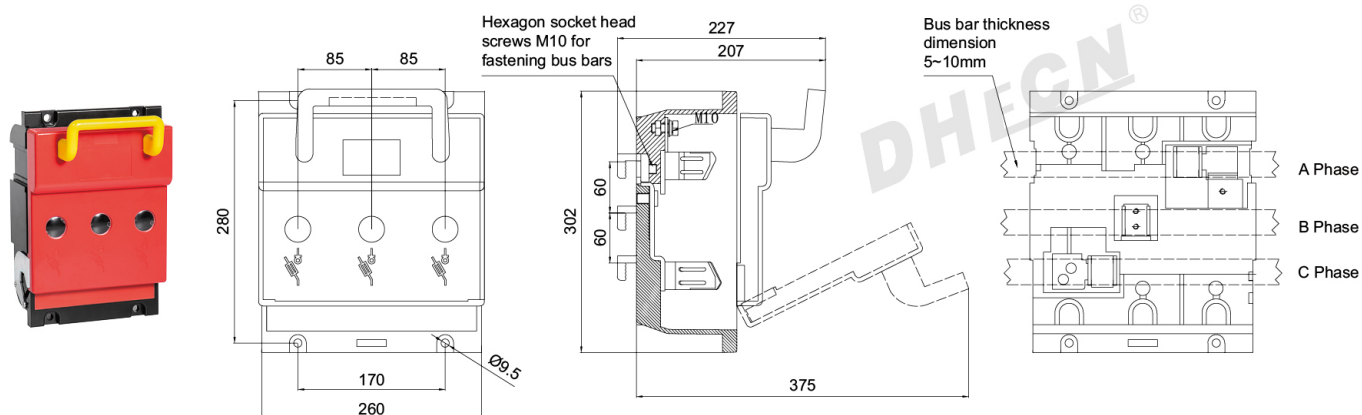
HR6-250 Hanging installation and overall dimensions (mm)

HR6-250Hanging installation drawing



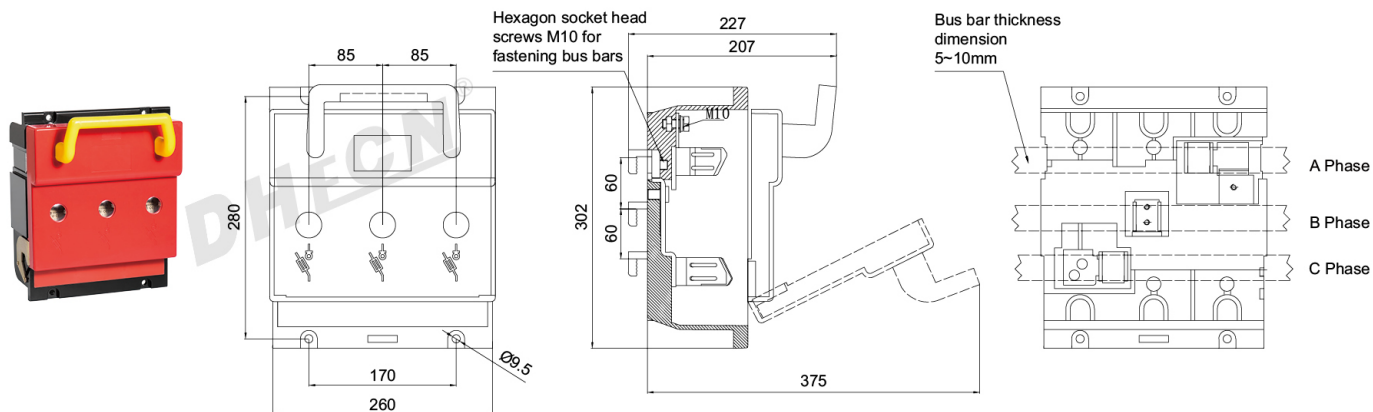
HR6-400 Hanging installation and overall dimensions (mm)

HR6-400 Hanging installation drawing



HR6-630 Hanging installation and overall dimensions (mm)

HR6-630 Hanging installation drawing



HR6-800 Hanging installation and overall dimensions (mm)

HR6-800 Hanging installation drawing

