

RDH5R

Series Isolation Switchgear Assembly



Product overview

RDH5R series isolating switch fuse sets are suitable for 50Hz AC, rated voltage up to 660V, rated current up to 630A industrial distribution networks: widely used in distribution circuits and motor circuits with high short circuit current, as manual infrequent Connection and disconnection. For circuit breakers or electrical isolation: can be operated under load and used for circuit short circuit protection.

Products comply with IEC 60947-3 and GB/T 14048.3 standards.

Selection Guide

RDH5R	160A	2	J
Product name	Rated current	Extremely an anagram	Handheld assistance
Isolation switch fuse group	160A 250A 400A 630A	2: The diode 3: Three poles 4: Quadropole	No: In-cabinet operation. J: Off-site operation.

Architectural feature

- The switch is made of glass fiber reinforced unsaturated polyester molding plastic and manual handle, which has high dielectric performance, protection ability and reliable operation safety.
- The switch adopts spring energy storage, instantaneous release of the acceleration closing mechanism and contact structure which connects and disconnects multiple parallel breaks at the same time, which improves the electrical performance and mechanical performance of the product.
- Switches 160A, 250A and 400A are designed in a modular design, while 630A is designed in an integral structure. It can ensure reliable overcurrent and short circuit safety protection during load operation and switching.
- Switches are divided into 2 poles, 3 poles and 4 poles (3 poles + can open and close the neutral pole).
- The handle can be directly installed on the switch to operate (called cabinet operation), or can be operated outside the distribution cabinet through an extended shaft (called cabinet operation).
- Auxiliary contacts and back wiring can be provided as required

Basic technical data

Main technical parameters of RDH5R series isolating switch fuse group (See Table I)

Table 1

Product model	RDH5R-160	RDH5R-250	RDH5R-400	RDH5R-630
Nominal insulation voltage U_i	660V	660V	660V	660V
Rated frequency	50Hz	50Hz	50Hz	50HZ
Use classes	AC-23B	AC-23B	AC-23B	AC-23B
Rated operational voltage U_e	380V	380V	380V	380V
Rated operational current I_e	160A	250A	400A	630A
Rated on-load capacity(peak)	1600A	2500A	4000A	6300A
Rated breaking capacity(peak)	1280A	2000A	3200A	5040A
Rated limit short circuit current (peak)	50KA	50KA	50KA	50KA

DISCONNECTOR

Table 1
Continued

Mechanical life (times)	3000	3000	2000	1000
Service life (times)	1000	1000	800	500
Fuse element used	RDT16-00	RDT16-1	RDT16-2	RDT16-3
Operating torque (N·m)	10	15	20	30
Weight (kg) excluding handle	1.9	3.3	4.8	14.6

Note: Rated current of auxiliary contacts(A C-15): 3A

Outline overal and installing dimensions

The shape and installation dimensions of RDH5R-160-630A(see Figure 1-4 and Table 2)

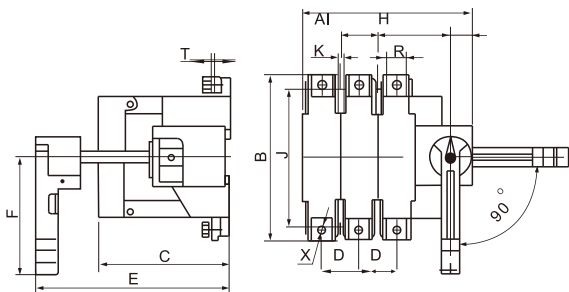


Figure 1 RDH5R-160A, 250A, 400A(cabinet operation)

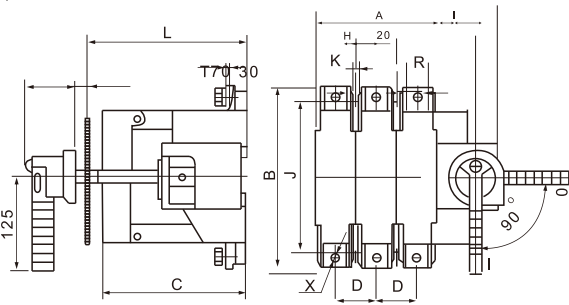


Figure 2 RDH5R-160A, 250A, 400A(out-of-cabinet operation)

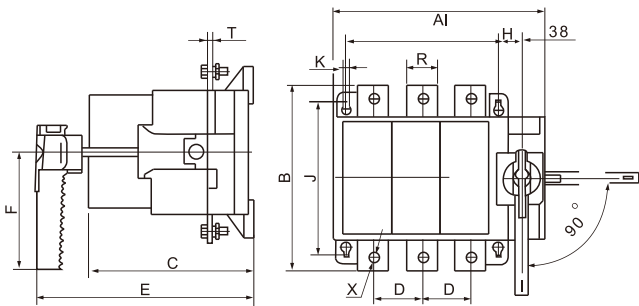


Figure 3 RDH5R-630A (cabinet operation)

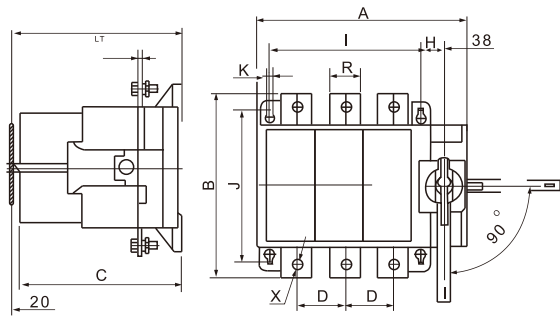


Figure 4 RDH5R-630A (out-of-cabinet operation)

The shape and installation dimensions of RDH5R-160-630 are shown in Table 2

Table 2

Product model	Outline dimension						Installation size				Term inator size			
	A	B	C	D	E	F	H	I	J	K	L	R	T	X
RDH5R-160/3	163	162	128	37	190	115	68	37	125	6	220-300	20	2.5	M8
RDH5R-160/4	200	162	128	37	190	115	68	74	125	6	220-300	20	2.5	M8
RDH5R-250/3	235	196	148	60	200	145	92	60	140	6	220-300	34	2.5	M10
RDH5R-250/4	295	196	148	60	200	145	92	120	140	6	220-300	34	2.5	M10
RDH5R-400/3	278	205	150	67	200	145	122	67	150	6	220-300	50	2.5	M10
RDH5R-400/4	345	205	150	67	200	145	122	134	150	6	220-300	50	2.5	M10
RDH5R-630/3	346	300	270	80	350	190	38	250	250	9	300-380	50	7	M12
RDH5R-630/4	426	300	270	80	350	190	38	330	250	9	300-380	50	7	M12

Panel opening size (see Figure 5)

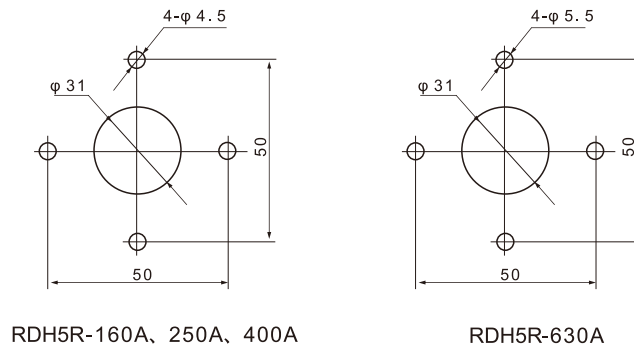


Figure 5 Panel opening Size (off Cabinet Operation)

Use the installation instructions

- ☐ The switch should be installed horizontally, and the switch should be in the open position before installation.
- ☐ The switch should be equipped with NT type fuse, whose performance should meet the requirements of GB13539.1 and 1GB13539.2, and the fuse should have the corresponding rated current and short circuit breaking capacity, when the switch is used in the motor circuit, the rated current of the fuse is allowed to be greater than the agreed heating current of the switch.
- ☐ The "L" in installation dimensions refers to the factory-set stand and installation depth, representing the distance from the mounting plate (or foot) to the panel surface. During installation, adjust the square shafts depth within the specified L-range based on the switch-to-cabinet-door distance. If the distance is shorter than the square shaft accordingly. After adjustment, securely fasten the bolts. This procedure applies when required by users.

For installation depths other than "L", please specify at the time of ordering.

- ☐ Determine the installation center position of the handle according to the shape and installation size of the switch, open an opening on the cabinet door panel according to the panel opening size (see Figure 5), and then fix the handle on the cabinet door panel.
- ☐ Turning the handle clockwise closes the switch, while counterclockwise rotation disconnects it. Before each operation, check the switch's status: when in the open position (0), clockwise rotation is required to close the switch; when in the closed position (I), counterclockwise rotation is necessary to disengage it.

User notes

- ☐ The RDH5R series switch must be used with a fuse, which can be provided by the user, but please use a good fuse to prevent excessive temperature rise.
- ☐ The price of the switch provided by our company does not include the fuse. If the user asks for it when ordering, our company can provide the fuse as a set, but generally it is not installed on the switch body.
- ☐ Please indicate the switch model and specification, number of poles and rated current of fuse when ordering.