

CHINT

CHINT ELECTRICS

NH40 Series
Switch Disconnecter
User Instruction

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Switch Disconnecter

User Instruction

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Standard: IEC 60947-3

Safety Warning

- ① Only professional technicians are allowed for installation and maintenance.
- ② Installation in any damp, condensed-phase environment with inflammable and explosive gas is forbidden.
- ③ When the product is being installed or maintained, the power must be switched off.
- ④ You are prohibited from touching the conductive part when the product is operating.

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1 Purpose of Use

NH40 series switch disconnecter is applicable to infrequent making and breaking of circuits and isolation of circuits in the power distribution system of industrial enterprises. If the current is above 1,000A, it is only used for electrical isolation and shall not be operated with load.

2 Key Technical Parameters

Table 1 Key Technical Parameters

Ambient conditions								
Ambient temp. (°C)	-35°C ~ +70°C							
Hot and humid atmospheric conditions	+40°C, relative humidity 50%; up to 90% at +20°C;							
Altitude	No influence below 2,000m							
Pollution class/installation category	Class 3							
NH40-16 to NH40-630								
Agreed heating current A	16-100	125	160	200	250	315	400	630
Rated insulation voltage V	1000							
Rated operating voltage V	415/690							
Rated current A	16-100	125	160	200	250	315	400	630
Mechanical life (times)	12000							
Electrical life (times)	1000			500		500		500
Operating force N	1.8~2.5		5.8~8.2		9.5~13		14~21.5	
Use class	AC-21B		AC-23A(415V)、AC-22A(690V)					
Rated short time withstand current cw kA	2	7	7	9	9	20	20	20
Rated short time making capacity cm kA	2.84	11.9	11.9	15.3	15.3	40	40	40
Rated impulse withstand voltage kV	8		12					
NH-1000 to NH40-3150								
Agreed heating current A	1000	1250	1600	2000	2500	3150		
Rated insulation voltage V	1000							
Rated operating voltage V	415/690							
Rated current A	1000	1250	1600	2000	2500	3150		
Mechanical life (times)	4000	4000	4000	4000	2500	2500		
Electrical life (times)	200							
Operating force N	27~39			46~66				
Use class	AC-22B							
Rated short time withstand current cw kA	30	30	30	50	50	50		
Rated short time making capacity cm kA	50	50	50	105	105	105		
Rated impulse withstand voltage kV	12							

3 Outline and installation size

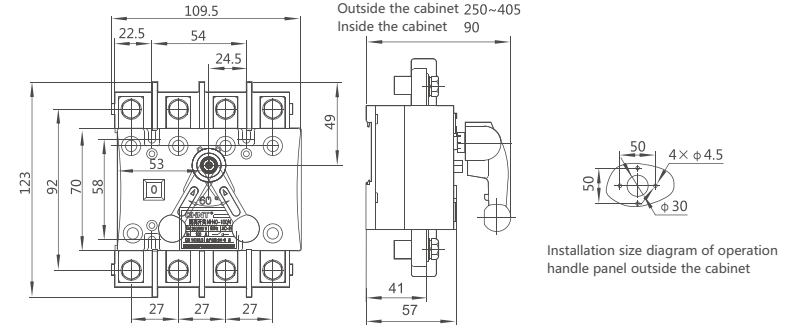


Figure 1 NH40-16~100A

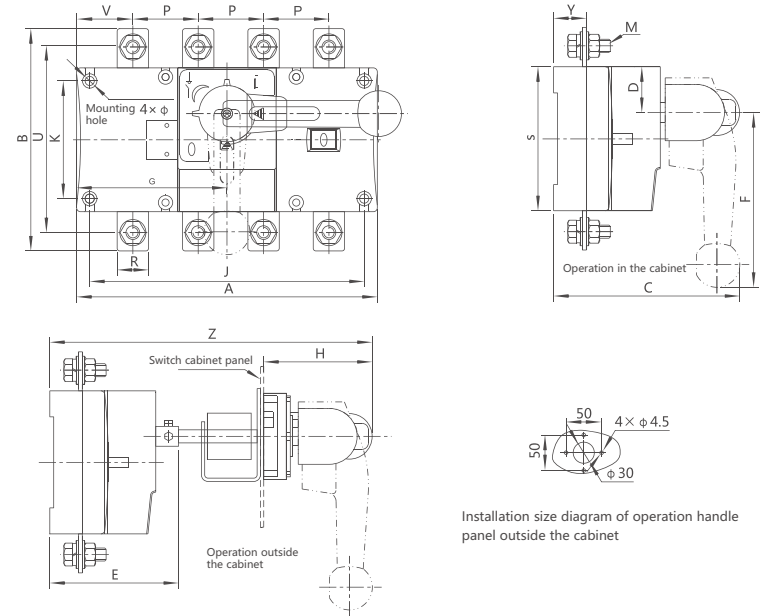


Figure 2 NH40-125~630A

Table 2 Size table

Unit: mm

Specification	A	B	C	D	E	F	Φ	J	H	K	G	P	R	S	U	M	V	Y	Z
125A/3	140	135	130	27	93	135	5.5	120	85	65	55	36	18	85	115	8	38	24	355~460
160A/3	140	135	130	27	93	135	5.5	120	85	65	55	36	20	85	115	8	38	24	355~460
125A/4	170	135	130	27	93	135	5.5	150	85	65	85	36	18	85	115	8	31	24	355~460
160A/4	170	135	130	27	93	135	5.5	150	85	65	85	36	20	85	115	8	32	24	355~460
200A/3	180	170	145	35	103	135	6.5	160	85	90	60	50	25	110	142	10	43	25	365~470
250A/3	180	170	145	35	103	135	6.5	160	85	90	60	50	25	110	142	10	43	25	365~470
200A/4	230	170	145	35	103	135	6.5	210	85	90	110	50	25	110	142	10	43	25	365~470
250A/4	230	170	145	35	103	135	6.5	210	85	90	110	50	25	110	142	10	43	25	365~470
315A/3	230	240	195	50	135	160	7	210	105	140	84	65	32	160	205	12	53	37	440~555
400A/3	230	240	195	50	135	160	7	210	105	140	84	65	35	160	205	12	53	37	440~555
630A/3	230	260	195	50	135	160	7	210	105	140	84	65	40	160	220	12	52	37	440~555
315A/4	290	240	195	50	135	160	7	270	105	140	144	65	32	160	205	12	47	37	440~555
400A/4	290	240	195	50	135	160	7	270	105	140	144	65	35	160	205	12	48	37	440~555
630A/4	290	260	195	50	135	160	7	270	105	140	144	65	40	160	220	12	47	37	440~555

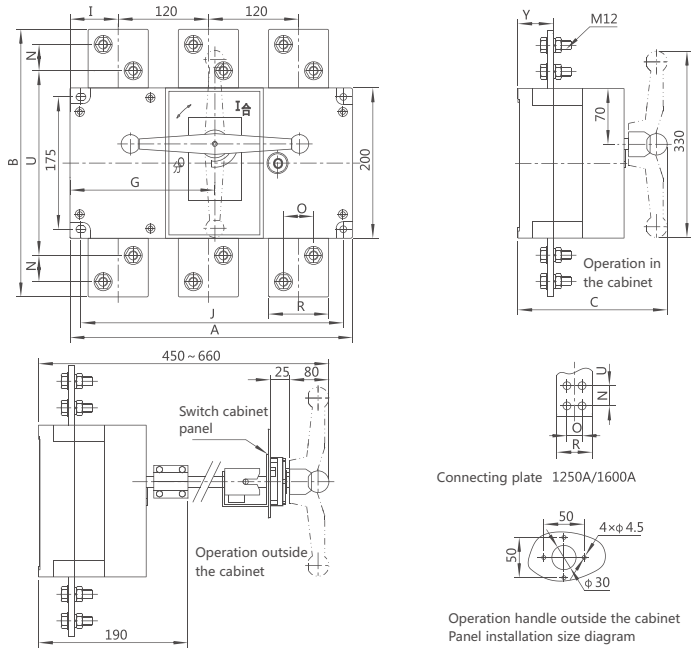


Figure 3 NH40-1000~1600A

Table 3 Size table

Unit: mm

Specification	A	B	C	G	I	J	N	R	O	U	Y
1000A/3	378	316	240	192.5	66	353	22	60	32	240	48
1250A/3	378	356	240	192.5	66	353	35	70	35	246	48
1600A/3	378	356	240	192.5	66	353	35	80	40	246	48
1000A/4	498	316	240	252.5	61	468	22	60	32	240	48
1250A/4	498	356	240	252.5	61	468	35	70	35	246	48
1600A/4	498	356	240	252.5	61	468	35	80	40	246	48

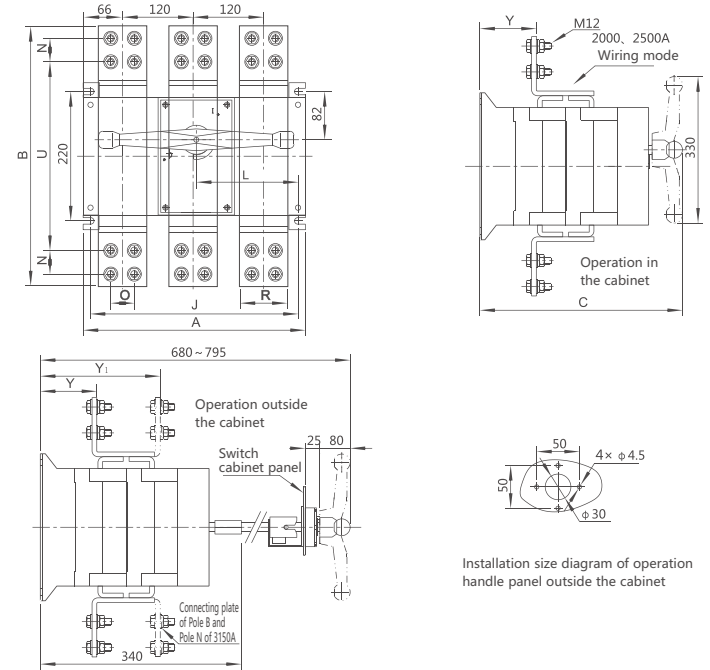


Figure 4 NH40-2000~3150A

Table 4 Size table

Unit: mm

Specification	A	B	C	L	J	N	O	R	Y	Y1
2000A/3	378	450	374	173.5	353	40	40	80	105	-
2500A/3	378	450	374	173.5	353	40	40	80	105	-
3150A/3	378	510	374	173.5	353	50	50	120	105	210
2000A/4	498	450	374	235	473	40	40	80	105	-
2500A/4	498	450	374	235	473	40	40	80	105	-
3150A/4	498	510	374	235	473	50	50	120	105	210

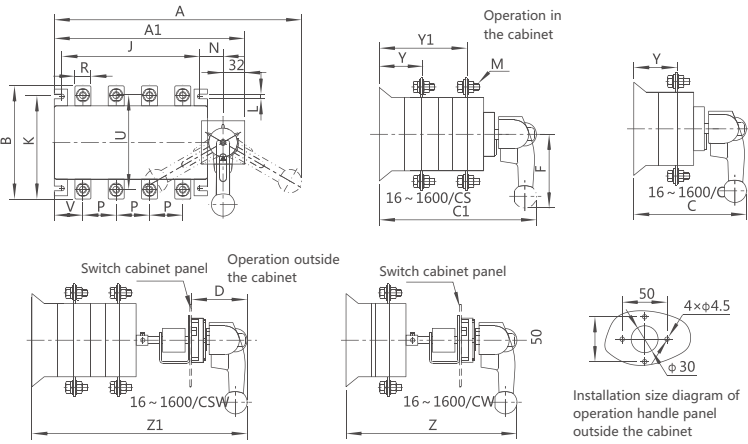


Figure 5 NH40-16~1600/C, NH40-16~1600/CS

Table 5 Size table

Unit: mm

Specification	A	A1	B	C	C1	D	F	J	K	L	N	P	R	V	M	Y	Y1	Z	Z1
16~100A/3	293	173	115	135	185	85	135	116	50/84	7	25	30	14	20	6	39	90	360~465	440~545
125A/3	295	195	145	155	235	85	135	120	95	7	29.5	36	18	31	8	58	122	410~515	480~595
160A/3	295	195	145	155	235	85	135	120	95	7	29.5	36	20	29	8	58	122	410~515	480~595
16~100A/4	293	173	115	135	185	85	135	116	50/84	7	25	30	14	20	6	39	90	360~465	440~545
125A/4	325	225	145	155	235	85	135	150	95	7	29.5	36	18	31	8	58	122	410~515	480~595
160A/4	325	225	145	155	235	85	135	150	95	7	29.5	36	20	29	8	58	122	410~515	480~595
200A/3	335	232	175	176	260	85	135	160	115	7	29.5	50	25	37	10	67	148	430~535	510~615
250A/3	335	232	175	176	260	85	135	160	115	7	29.5	50	25	37	10	67	148	430~535	510~615
200A/4	385	282	175	176	260	85	135	210	115	7	29.5	50	25	37	10	67	148	430~535	510~615
250A/4	385	282	175	176	260	85	135	210	115	7	29.5	50	25	37	10	67	148	430~535	510~615
315A/3	430	298	270	233	335	105	160	210	180	9	43	65	32	48	12	84	196	515~630	620~735
400A/3	430	298	270	233	335	105	160	210	180	9	43	65	35	48	12	84	196	515~630	620~735
630A/3	430	298	270	233	335	105	160	210	180	9	43	65	40	48	12	84	196	515~630	620~735
315A/4	490	358	270	233	335	105	160	210	180	9	43	65	32	48	12	84	196	515~630	620~735
400A/4	490	358	270	233	335	105	160	210	180	9	43	65	35	48	12	84	196	515~630	620~735
630A/4	490	358	270	233	335	105	160	210	180	9	43	65	40	48	12	84	196	515~630	620~735
1000A/3	580	445	350	280	424	105	165	353	220	11	47	120	60	66	12	108	253	605~720	750~865
1250A/3	580	445	390	280	424	105	165	353	220	11	47	120	70	66	12	108	253	605~720	750~865
1600A/3	580	445	390	280	424	105	165	353	220	11	47	120	80	66	12	108	253	605~720	750~865
1000A/4	700	565	350	280	424	105	165	473	220	11	47	120	60	66	12	108	253	605~720	750~865
1250A/4	700	565	390	280	424	105	165	473	220	11	47	120	70	66	12	108	253	605~720	750~865
1600A/4	700	565	390	280	424	105	165	473	220	11	47	120	80	66	12	108	253	605~720	750~865

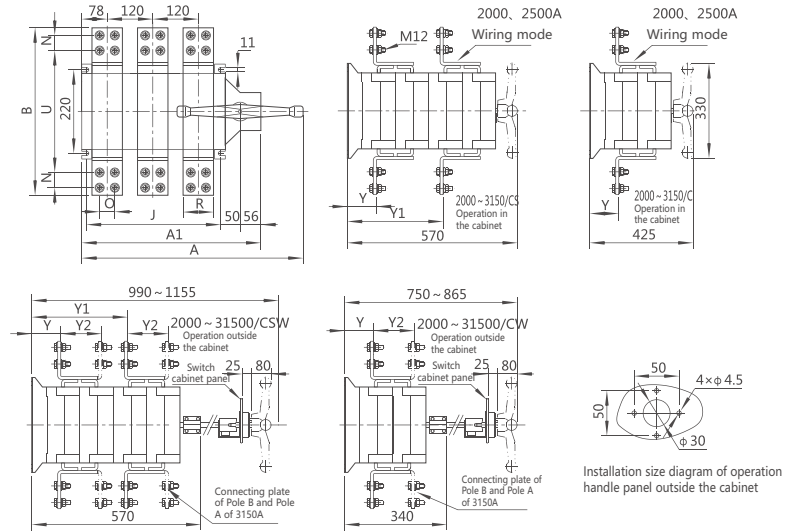


Figure 6 NH40-2000~3150/C, NH40-2000~3150/CS

Table 6 Size table

Unit: mm

Specification	A	A1	B	R	J	U	O	N	Y	Y1	Y2
2000A/3	580	472	440	80	353	325	40	40	105	335	-
2500A/3	580	472	440	80	353	325	40	40	105	335	-
3150A/3	580	472	510	120	353	360	50	50	105	335	105
2000A/4	700	592	440	80	473	325	40	40	105	335	-
2500A/4	700	592	440	80	473	325	40	40	105	335	-
3150A/4	700	592	510	120	473	360	50	50	105	335	105

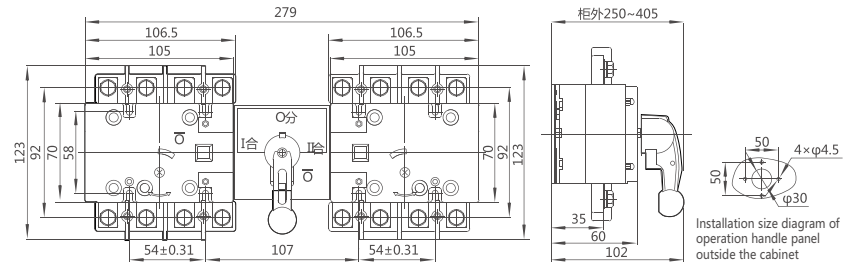


Figure 7 NH40-16~100/3S, NH40-16~100/4S

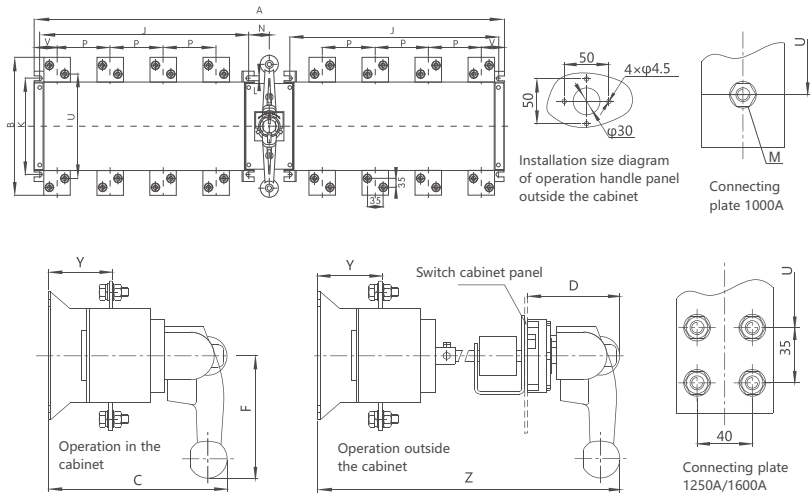


Figure 8 NH40-125~1600/3S, NH40-125~1600/4S

Table 7 Size table

Unit: mm

Specification	A	B	C	D	F	J	K	L	N	P	R	U	V	M	Y	Z
125A/3	308	135	155	85	135	120	95	7	29.5	36	18	115	31	8	58	410~515
160A/3	308	135	155	85	135	120	95	7	29.5	36	20	115	29	8	58	410~515
125A/4	380	135	155	85	135	150	95	7	29.5	36	18	115	31	8	58	410~515
160A/4	380	135	155	85	135	150	95	7	29.5	36	20	115	29	8	58	410~515
200A/3	402	170	176	85	135	160	115	7	29.5	50	25	142	37	10	67	430~535
250A/3	402	170	176	85	135	160	115	7	29.5	50	25	142	37	10	67	430~535
200A/4	501	170	176	85	135	210	115	7	29.5	50	25	142	37	10	67	430~535
250A/4	501	170	176	85	135	210	115	7	29.5	50	25	142	37	10	67	430~535
315A/3	535	240	233	105	160	210	180	9	43	65	32	205	48	12	84	515~630
400A/3	535	240	233	105	160	210	180	9	43	65	35	205	48	12	84	515~630
630A/3	535	260	233	105	160	210	180	9	43	65	40	220	48	12	84	515~630
315A/4	655	240	233	105	160	270	180	9	43	65	32	205	48	12	84	515~630
400A/4	655	240	233	105	160	270	180	9	43	65	35	205	48	12	84	515~630
630A/4	655	260	233	105	160	270	180	9	43	65	40	220	48	12	84	515~630
1000A/3	825	316	280	105	322	353	220	11	50	120	60	240	78	12	108	605~720
1250A/3	825	356	280	105	322	353	220	11	50	120	70	246	78	12	108	605~720
1600A/3	825	356	280	105	322	353	220	11	50	120	80	246	78	12	108	605~720
1000A/4	1065	316	280	105	322	473	220	11	50	120	60	240	78	12	108	605~720
1250A/4	1065	356	280	105	322	473	220	11	50	120	70	246	78	12	108	605~720
1600A/4	1065	356	280	105	322	473	220	11	50	120	80	246	78	12	108	605~720

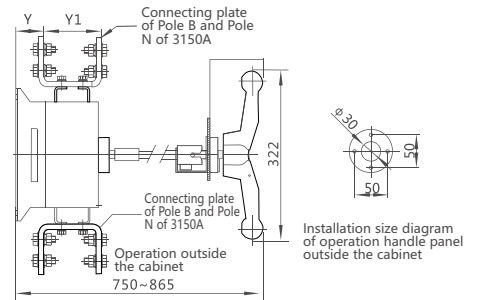
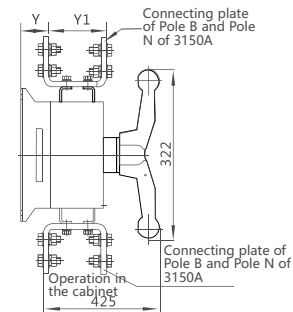
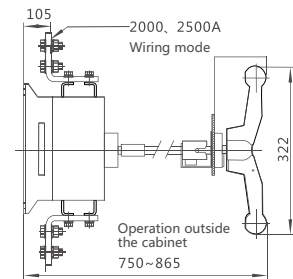
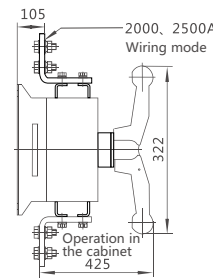
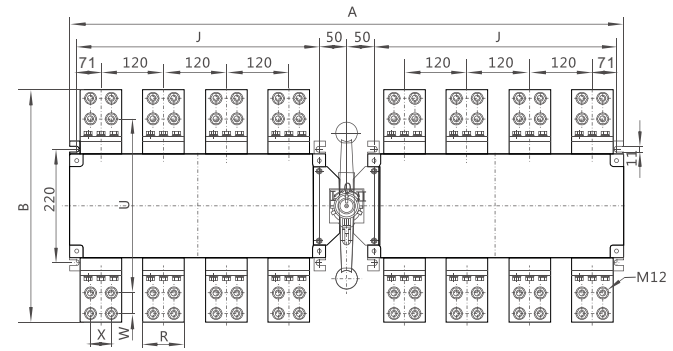


Figure 9 NH40-2000~3150/3S, NH40-2000~3150/4S

Table 8 Size table

Unit: mm

Specification	A	B	J	R	U	Y	Y1	X	W
2000A/3	835	440	353	80	325	105	95	40	40
2500A/3	835	440	353	80	325	105	95	40	40
3150A/3	835	510	353	120	360	105	95	50	50
2000A/4	1075	440	473	80	325	105	95	40	40
2500A/4	1075	440	473	80	325	105	95	40	40
3150A/4	1075	510	473	120	360	105	95	50	50

4 Installation, Commissioning and Operation

1. Pull the switch operation handle, the arrow on the handle points to "0", the observation window displays "0", and the switch is off. The arrow points to "I", the observation window displays "I" and the switch is on.
2. After commissioning, turn off the power and use the handle to turn the switch to the "0" position.

5 Maintenance

1. Guard against damp, dust, vibration and sun exposure.
2. Remove dust from the surface of the enclosure at regular intervals to maintain good insulation.

6 Environmental Protection

In order to protect the environment, the product or product parts should be disposed of according to the industrial waste treatment process, or be sent to the recycling station for assortment, dismantling and recycling.

CHNT

QC PASS

NH40 Series Switch
 Disconnector
 IEC 60947-3

Check 08

Test date: Please see the packing

ZHEJIANG CHINT ELECTRICS CO., LTD.

