NO:2019.09

CHINT ELECTRICS

BH-0.66，SDH-0.66
Current Transformers

User Instruction

Standard: 61869-2

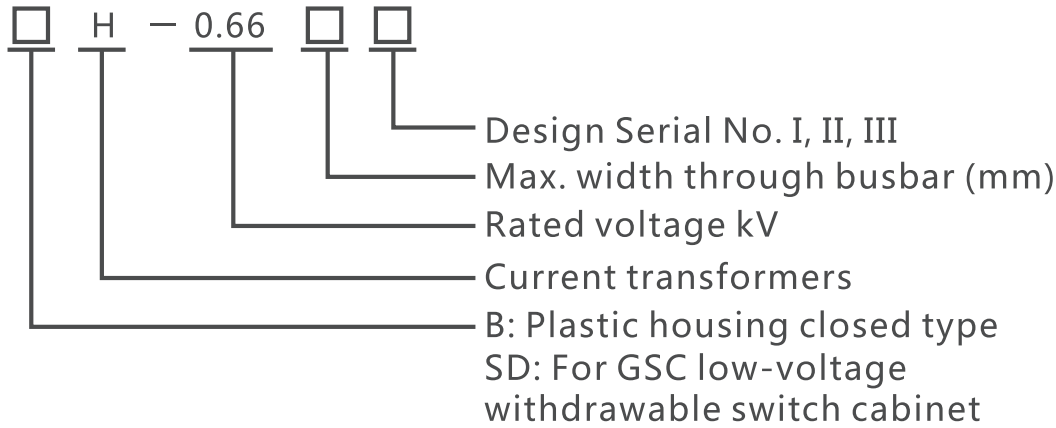
⚠ Safety Warning

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.

1 Main Functions and Typical Application

BH-0.66, SDH-0.66 current transformers (hereinafter referred to as the currrent transformers) is used for indoor AC circuit with rated voltage of 0.66kV and below and rated frequency of 50Hz/60Hz to measure the current and electric energy.

2 Type Designation



3 Normal Use, Installation and Transportation and Storage Conditions

3.1 Use conditions

3.1.1 The current transformers is indoor type, the application environment is -5 °C ~ 40 °C, the average relative humidity measured within 24h shall not exceed 95%, the average water vapor pressure within 24h shall not exceed 2.2kPa, the average relative humidity within one month shall not exceed 90%, and the average water vapor pressure within one month shall not exceed 1.8 kPa.

3.1.2 There should be no obvious pollution of dust, smoke, corrosive gases, vapors or salt in the ambient air.

3.2 Installation conditions

The product can be installed horizontally or vertically. The installation torque in horizontal direction shall not be greater than 1.5N·m, and that in

vertical direction shall not be greater than 2.0N·m. The installation should be firm without shaking, shock and vibration. The altitude of the installation site must not exceed 1,000m.

3.3 Transportation and storage conditions

The current transformers must be stored in an environment where there is no rain or snow, the air circulation is good, the relative humidity is not greater than 95%, and the temperature is between -5 ° C and 40 ° C.

4 Main Technical Parameters and Performance

See Table 1 for the main technical parameters of the current transformers.

Table 1 Main Technical Parameters of the Current Transformers

No.	Main technical parameters	BH-0.66, SDH-0.66
1	Rated primary current A	5~5000
2	Rated secondary current A	5, 1
3	Class of accuracy	0.2, 0.5, 1, 3, 0.2S, 0.5S
4	Rated output capacity VA	2.5, 5, 10, 20, 30

5 Structural Features and Working Principle

The housing is made of polycarbonate (PC) material, the core is rolled by silicon steel sheet or amorphous crystal material, and the secondary winding is by electromagnetic wire with corresponding insulation and heat resistance grade.

Based on the electromagnetic induction principle, the large current at the primary side is converted into the small current at the secondary side, so that it can be used for the measurement of current and electric energy in the AC circuit.

6 Outline and Installation Size

See Table 2 and Figures 1~18 for the outline and installation sizes of the current transformers.

Table 2 Outline, Windown and Installation Sizes of the Current Transformers

Product model	Outline Size			Installation Size		Window Size				Outline	h	Note
	Lmax	Wmax	Hmax	L1	L2	m	n	Φd	Figure			
BH-0.66 Solid type	69	84	87	38	-	Figure 5				Figure 15	37	
BH-0.66 20 I	62	35	81	33.5	-	Figure 6					32.5	
BH-0.66 30 I	61	34	81	32.5	-	Figure 7					32.75	
BH-0.66 30 I B	76	43	99	44	-	Figure 8					40.5	
BH-0.66 40 I	76	41	99	43.5	-	Figure 9					41	
BH-0.66 50 I	83	41	99	50	-	Figure 10					41	
BH-0.66 50 I	84	43	107	50	-						45	750/5A~1500A/5A 0.5 Class 1C lass
BH-0.66 60 I	103	41	127	50	-	Figure 11					55	1500/5A~2000/5A 0.5 Class 1 Class
BH-0.66 60 I	104	45	131	50	-						57	
BH-0.66 80 I	119	47	140	50	-	Figure 12					61	2000/5A~2500/5A 0.5 Class 1 Class
BH-0.66 80 I	127	47	149	50	-						66	
BH-0.66 100 I	146	47	156	50	-	102	22	-	Figure 13		69	2500/5A~3000/5A 0.5 Class 1 Class
BH-0.66 100 I	146	53	171	50	-	102	32.5	-			77	
BH-0.66 120 I	191	47	138	50	-	126	36	62	Figure 14		60	2500/5A~5000/5A 0.5 Class 1 Class
BH-0.66 120 I	197	47	173	50	-	130	60	70			78	

Table 2 continued

Product model	Outline Size			Installation Size		Window Size				Outline	h	Note
	Lmax	Wmax	Hmax	L1	L2	m	n	Φd	Figure			
SDH-0.66 40 II	80	47	105	45	-	42	31	-	-	Figure 16	45.5	
SDH-0.66 50 II	88	47	107	54	-	52	31.5	-	-		45.5	
SDH-0.66 50 II	88	47	121	54	-	52	31.5	-	-		52.5	750/5A~1500/5A 0.5 Class 1 Class
SDH-0.66 60 II	103	49	111	53	-	62	1.5	-	-	Figure 17	43.75	
SDH-0.66 60 II	103	49	128	53	-	62	31.5	-	-		56	1500/5A~2000/5A 0.5 Class 1 Class
SDH-0.66 80 II	123	48	119	60.5	-	82	32.5	-	-		54.5	
SDH-0.66 80 II	123	49	144	61	-	82	32.5	-	-		64	2000/5A~2500/5A 0.5 Class 1 Class
SDH-0.66 100 II	141	51	123	74.5	-	102	32.5	-	-		53.5	
SDH-0.66 100 II	141	51	159	75	-	102	50	-	-		71.5	2500/5A~3000/5A 0.5 Class 1 Class
SDH-0.66 120 II	171	49	156	54	-	122	52	-	-		69.5	
SDH-0.66 120 II	173	55	184	56	-	122	65	-	-		84	2500/5A~4000/5A 0.5 Class 1 Class
SDH-0.66 170 II	262	55	222	120	-	170	102	-	-		103	
SDH-0.66 200 II	246	51	207	154	-	202	81	-	-		95.5	
BH-0.66 20 III	65	55	87	41	44.5	22	11	-	-	Figure 1	35	

Table 2 continued

Product model	Outline Size			Installation Size		Window Size				Outline	h	Note
	Lmax	Wmax	Hmax	L1	L2	m	n	Φd	Figure			
BH-0.66 30 III	73	69	93	49	54	31	31	-	-	Figure 2	38.5	
BH-0.66 40 III	85	69	103	59	62	42	42	-	-		43.5	
BH-0.66 50 III	89	69	108	61	65	52	52	-	-	Figure 3	46	
BH-0.66 60 III	113	69	160	90	122	62	54	-	-	Figure 4	72	
BH-0.66 80 III	133	69	164	105	121	82	54	-	--		74	
BH-0.66 100 III	153	69	167	125	124	102	54	-	-		75.5	
BH-0.66 120 III	179	71	183	151	140	122	65	-	-		83.5	

Note: The outline and installation size changes due to product upgrade will not give further notice. The data in the table are for reference only.

Unit:mm

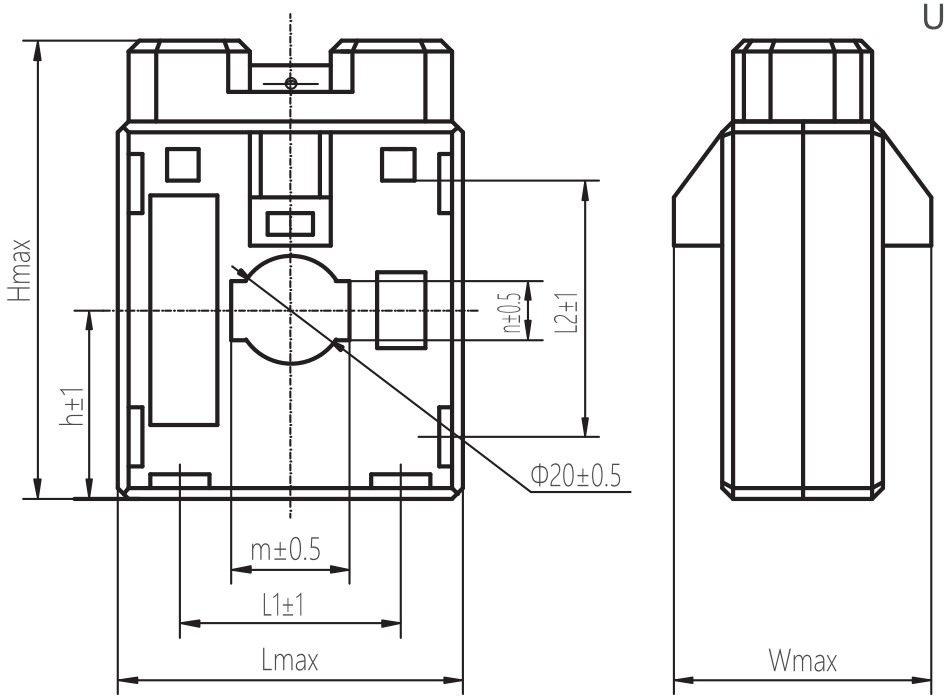


Figure 1 BH-0.66 20 III

Unit:mm

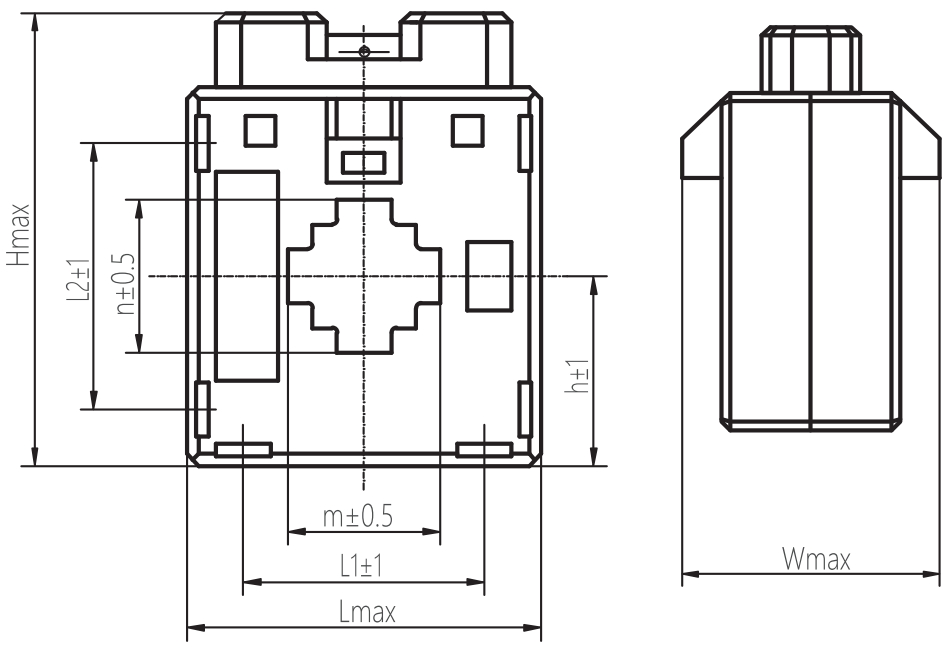


Figure 2 BH-0.66 30 III~40 III

Unit:mm

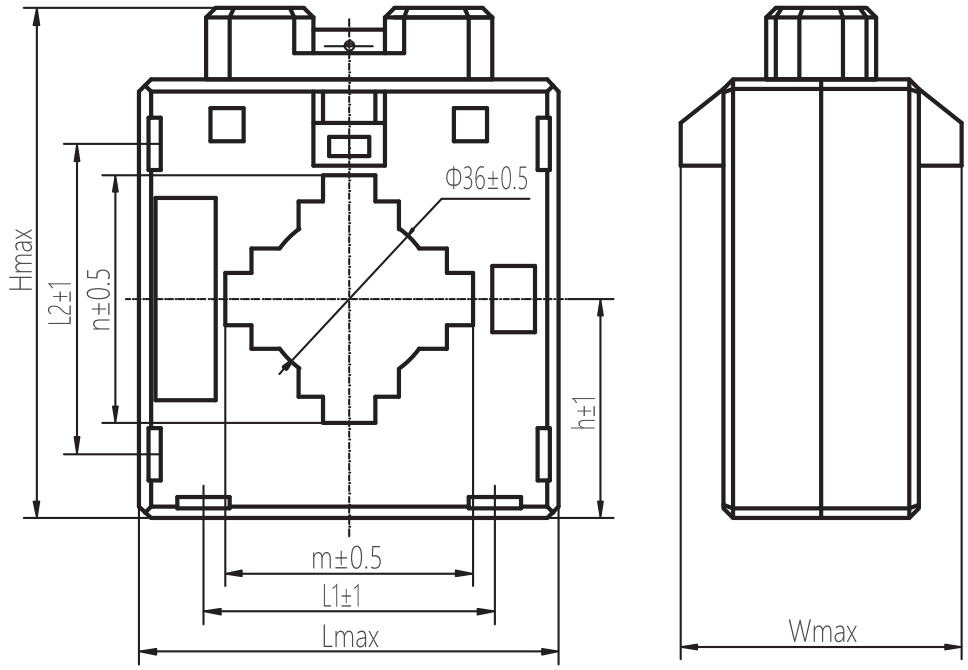


Figure 3 BH-0.66 50 III

Unit:mm

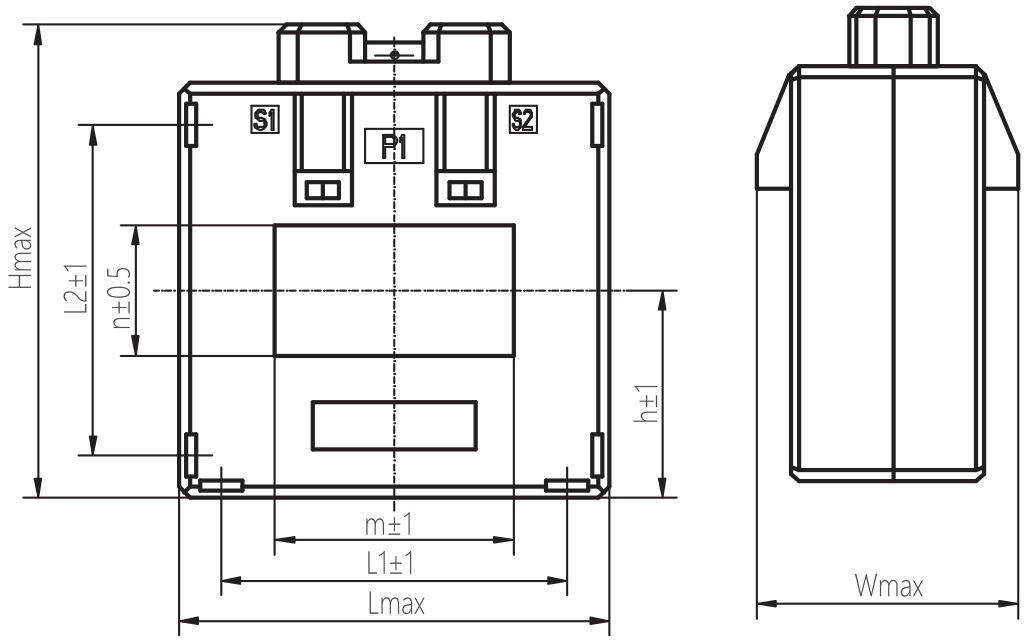


Figure 4 BH-0.66 60 III~120 III

Unit:mm

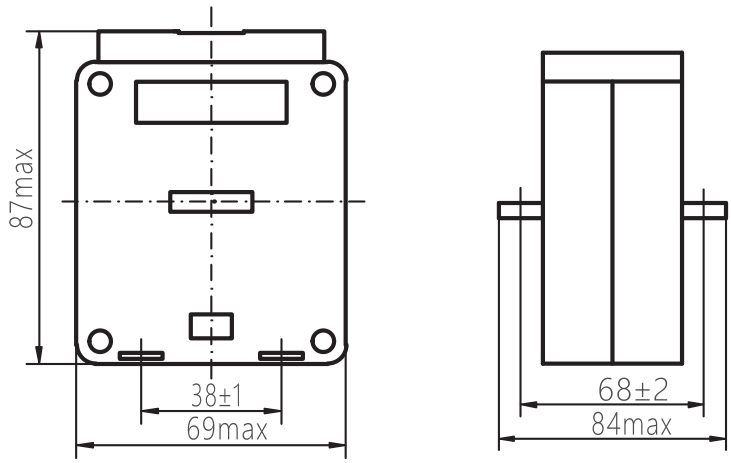


Figure 5 BH-0.66 Solid type

Unit:mm

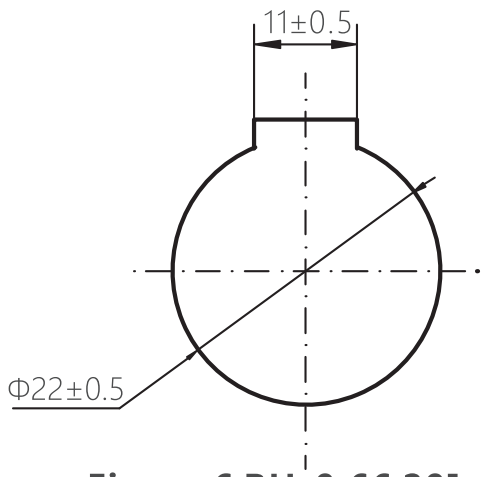


Figure 6 BH-0.66 20I

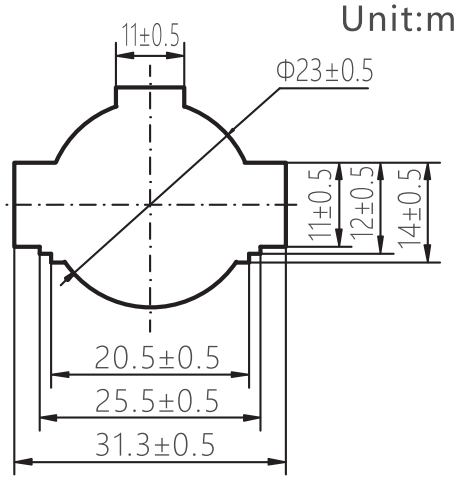


Figure 7 BH-0.66 30I

Unit:mm

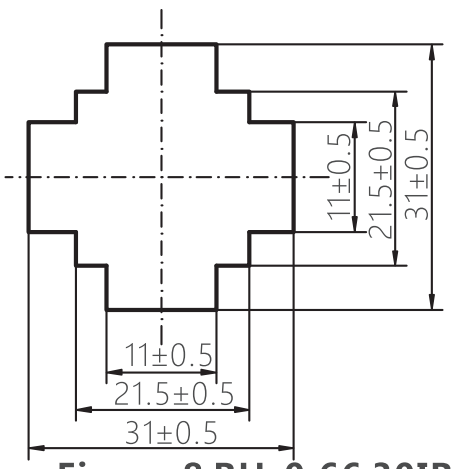


Figure 8 BH-0.66 30IB

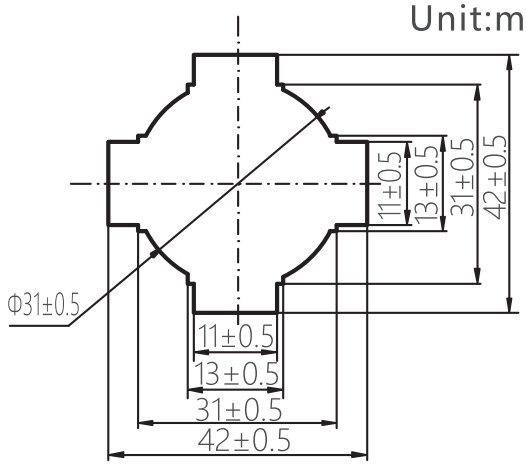


Figure 9 BH-0.66 40I

Unit:mm

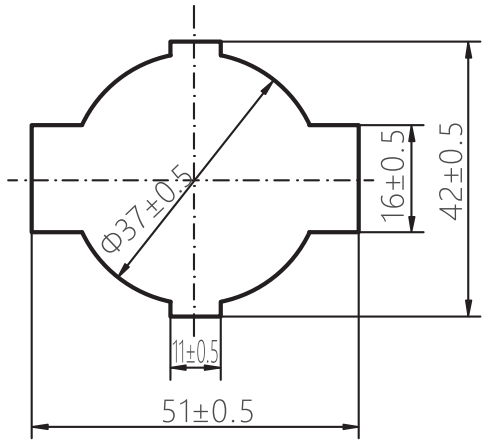


Figure 10 BH-0.66 50I

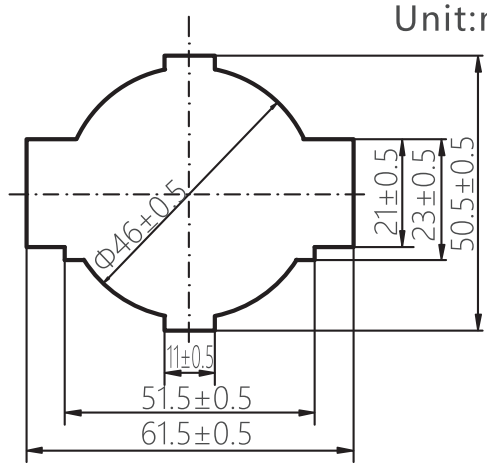


Figure 11 BH-0.66 60I

Unit:mm

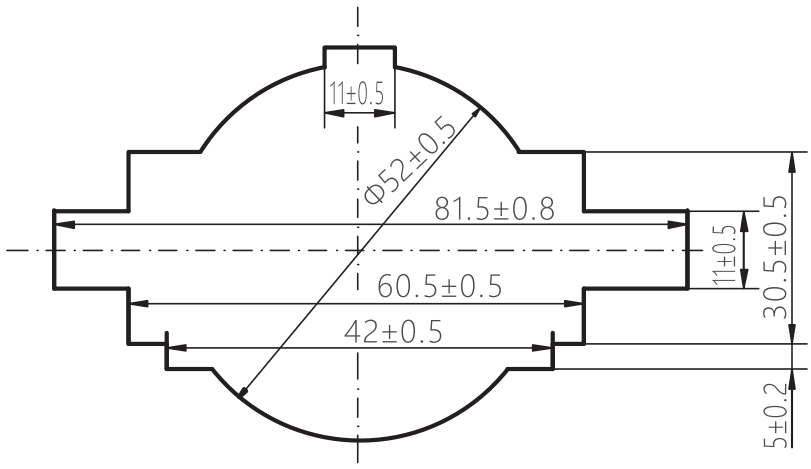


Figure 12 BH-0.66 80I

Unit:mm

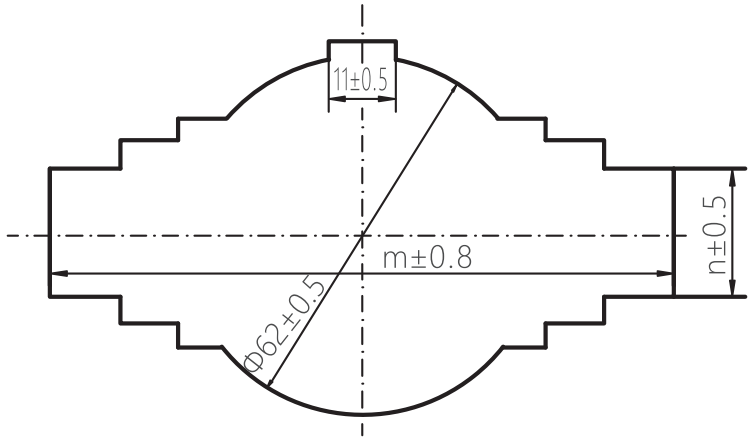


Figure 13 BH-0.66 100I

Unit:mm

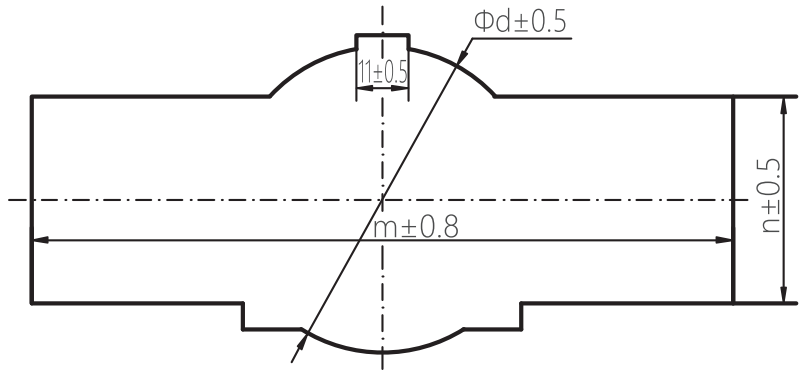


Figure 14 BH-0.66 120I

Unit:mm

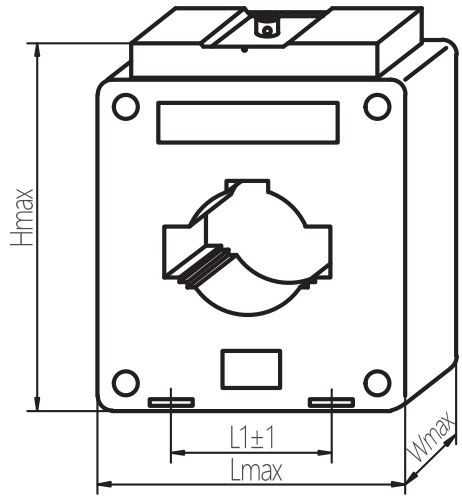


Figure 15 BH-0.66 Outline Drawing

Unit:mm

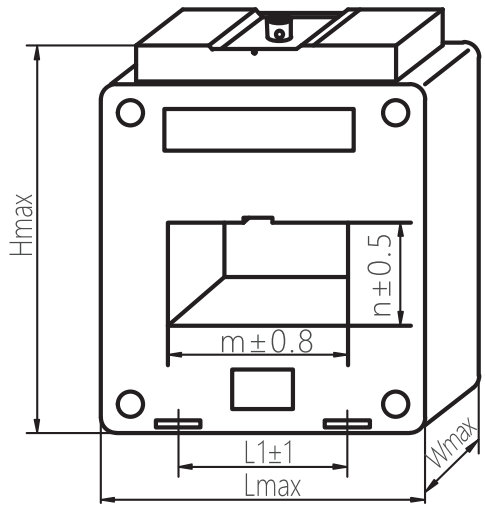


Figure 16 SDH-0.66 40Ⅱ~50Ⅱ Outline Drawing

Unit:mm

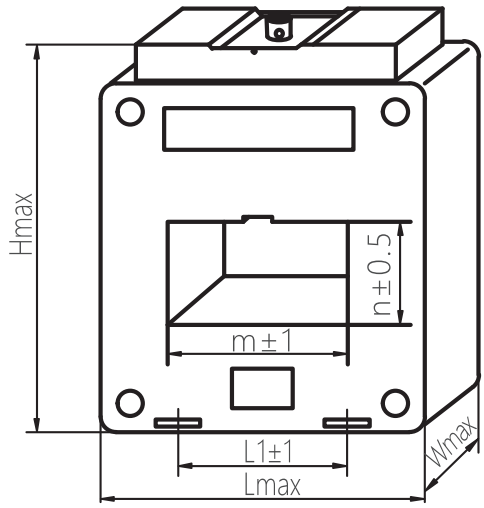


Figure 17 SDH-0.66 60Ⅱ~200Ⅱ Outline Drawing

Unit:mm

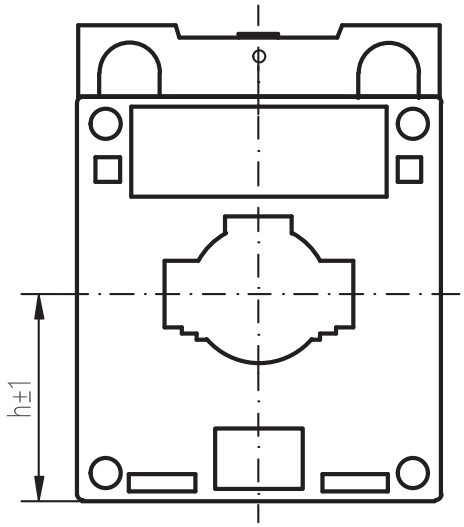


Figure 18 Center Hole Distance Diagram

7 Installation, Commissioning and Operation

7.1 The installation location and method of the current transformer should comply with the provisions of Article 3 and Figures 19~22.

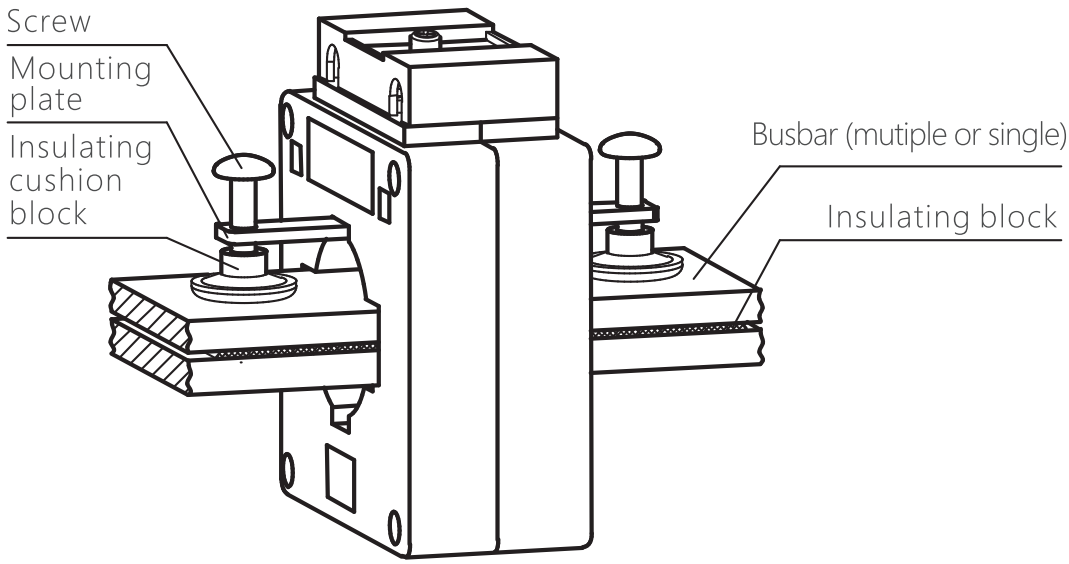


Figure 19 Busbar Fixed Type

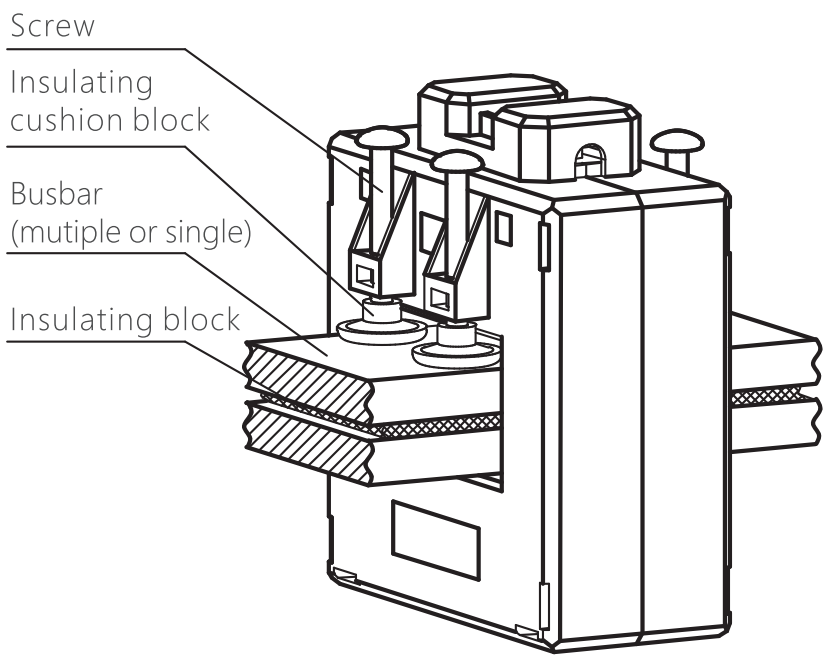


Figure 20 Busbar Fixed Type

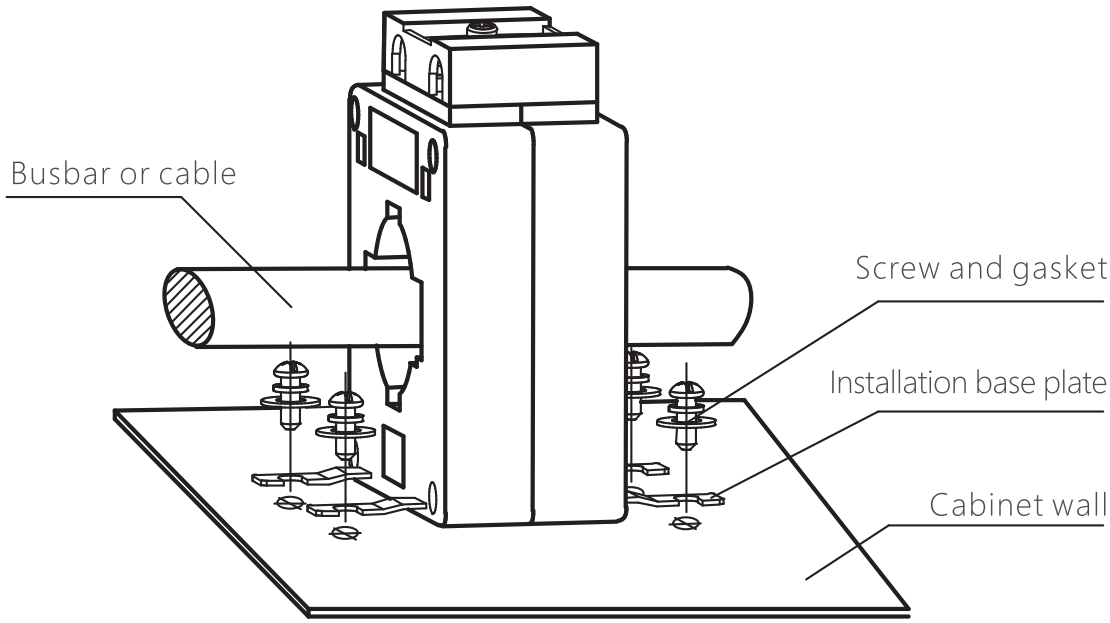


Figure 21 Base Plate Installation Type

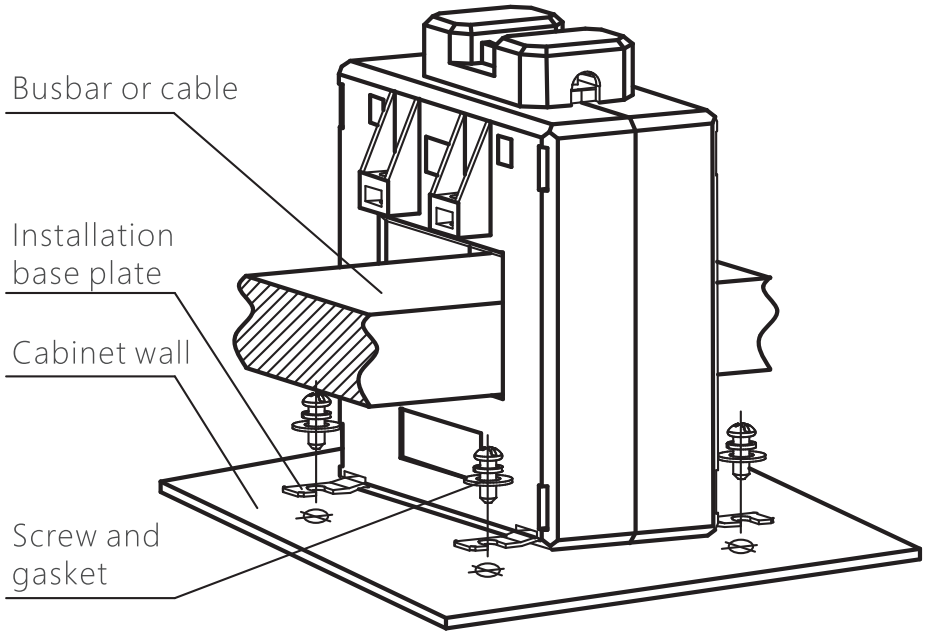


Figure 22 Base Plate Installation Type

7.2 Before installation, check whether the product is in good condition and whether the accessories are complete.

7.3 Check whether the nameplate parameters meet the selection requirements.

8 Maintenance, Lifting and Storage Precautions

8.1 Please avoid falling and squeezing and keep it dry during the transportation.

8.2 The current transformers is a measuring instrument. When it is used for a measuring purpose, it must be periodically verified according to the requirements and standards of the current transformers. It cannot be put into use unless it is verified to be qualified. The current transformers that fails to meet the standards of verification must be repaired or replaced and re-verified.

8.3 The current transformers must be protected from moisture and mildew when stored.

9 Analysis and Troubleshooting of Common Faults

Table 3 Analysis and Troubleshooting of Common Faults

Symptoms	Cause analysis	Troubleshooting method
The meter used with current transformer displayed value is differ widely with actual value.	1. The secondary load of the current transformers is large and exeeds the specified maximum output capacity. 2. The number of feedthru windings is incorrent, and multi feedthru windings are not done as required. 3. The current ratio of the current transformers does not match the meter.	1. Make sure the load is within the range. 2. Confirm the current and number of feedthru windings again. 3. Replace with another meter matching the current transformers.
Note: Power off before maintenance and troubleshooting.		

10 Ordering Instructions

Specifiy he model specification, current ratio, accuracy class, maximum width and quantity of the busbar when you place an order.

Consult with the manufacturer in case you have any special requirements.

11 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.

CHINT

QC PASS

BH-0.66 , SDH-0.66
Current Transformers
IEC/EN 61869-2

Check 06

Test date: Please see the packing

ZHEJIANG CHINT ELECTRICS CO., LTD.

CHINT ELECTRICS

BH-0.66 , SDH-0.66
Current Transformers
User Instruction

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