



LO-RCT-XX round core-type current transformer is mainly used in cable circuit environment. It has beautiful appearance, compact size and flexible application. According to the cable specifications used in the main circuit, there are 9 specifications corresponding to the core hole diameter. The diameter of the core hole ranges from 30mm-300mm, suitable for 100A-1500A cable. The minimum detected leakage current value can reach below 5mA, and the accuracy meets or exceeds the national standard requirements of GB14287.2. Balance characteristics can be designed according to user needs.

The shell of this series of products is made of environmentally friendly flame-retardant ABS engineering plastics or flame-retardant PC/ABS alloy materials. It uses high-permeability nanocrystalline soft magnetic materials, combined with reasonable structural design and rigorous production technology, with high precision and good balance characteristics, small size, high insulation strength, strong insulation resistance, easy installation and other characteristics, it can work reliably and stably in harsh environments.

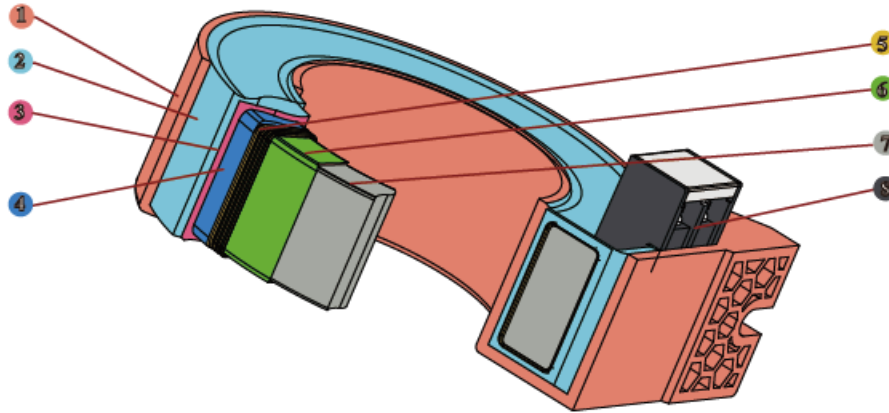
The product is produced using an epoxy resin full-casting process, which completely seals the secondary winding and shielding structure. It has excellent waterproof and moisture-proof capabilities. It adopts direct wire output or waterproof plug wiring, and can work reliably in humid environments. On request, special materials can also be used to work reliably outdoors.

Product colors can be produced according to customer specifications and can meet different color schemes

Features:

- Resin casting process, excellent waterproof and moisture-proof performance
- It has strong overload capability and can be overloaded 20 times the rated current for a long time if necessary.
- Excellent balance characteristics, small size products meet the detector alarm threshold requirement of 30mA
- High precision: precision level 0.5/1.0/3, optional compact design, small size

Structure:



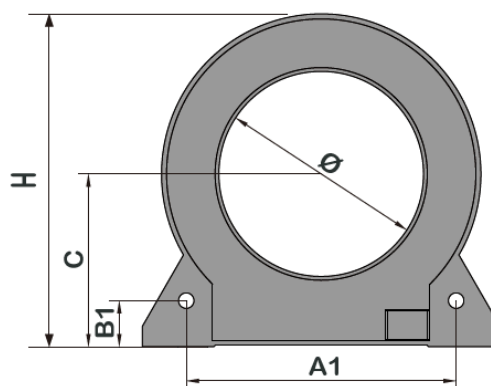
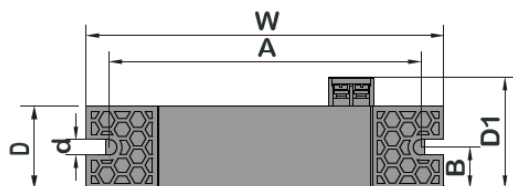
S/N	Name	Main features
1	Product shell	Flame-retardant ABS plastic or PC/ABS alloy plastic, with high temperature resistance, high strength and good flame retardant properties
2	Resin encapsulation material	A material specially formulated for electronic packaging made of epoxy resin and other insulating and thermally conductive materials.
3	Shield	Made of high magnetic permeability silicon steel or other magnetic permeability materials to ensure excellent balance characteristics
4	Insulating protective film	Polyester film/PVC film/cable paper, etc., used to protect enameled wires from damage
5	secondary winding wire	Made of oxygen-free copper material, directly welded with polyurethane paint film, temperature resistant up to 155 degrees Celsius
6	Insulating protective film	Polyester film/PVC film/crepe paper, etc., used to protect enameled wires from damage
7	Ring core	Highly permeable nanocrystalline soft magnetic materials or permalloy materials
8	Secondary terminal block	High-quality terminal blocks, current up to 10A/torque up to 8kgf.cm

Normal use and installation conditions:

- Installation location: indoor/outdoor. Ambient temperature $-40^{\circ}\text{C} \sim +45^{\circ}\text{C}$
- It is recommended that the relative humidity of the environment should not be greater than 80%
- The altitude does not exceed 3000m
- Atmospheric conditions: There are no seriously polluted, corrosive and explosive media in the atmosphere
- An environment without significant frequent vibration and shock. Storage temperature : ---
 $-20^{\circ}\text{C} \sim +75^{\circ}\text{C}$

Balance performance:

P/N	Main circuit rated operating current	Test current	Conductor diameter	Conductor insulation thickness	Unbalance current
LO-RCT-30	$0 \leq I_n \leq 100\text{A}$	100A	6mm	1.0mm	$\leq 3\text{mA}@100\text{A}$
LO-RCT-46	$0 \leq I_n \leq 160\text{A}$	315A	10mm	1.5mm	$\leq 5\text{mA}@315\text{A}$
LO-RCT-65	$0 \leq I_n \leq 225\text{A}$	315A	10mm	1.5mm	$\leq 10\text{mA}@315\text{A}$
LO-RCT-80	$0 \leq I_n \leq 400\text{A}$	630A	14mm	2.0mm	$\leq 10\text{mA}@630\text{A}$
LO-RCT-100	$0 \leq I_n \leq 630\text{A}$	630A	14mm	2.0mm	$\leq 10\text{mA}@630\text{A}$
LO-RCT-120	$0 \leq I_n \leq 1000\text{A}$	1000A	20mm	2.0mm	$\leq 30\text{mA}@1000\text{A}$
LO-RCT-150	$0 \leq I_n \leq 1250\text{A}$	2000A	50mm	2.0mm	$\leq 30\text{mA}@2000\text{A}$
LO-RCT-200	$0 \leq I_n \leq 1500\text{A}$	2000A	50mm	2.0mm	$\leq 30\text{mA}@2000\text{A}$
LO-RCT-300	$0 \leq I_n \leq 2000\text{A}$	2000A	50mm	2.0mm	$\leq 30\text{mA}@2000\text{A}$



Model specifications	Main circuit current (A)	Aperture (mm)	Overall dimensions (mm)			Dimensions (mm)						
			H	D	W	A	A1	B	B1	C	D1	d
LO-RCT-30	≤100A	30	67	25	76	69	58	12.5	11.5	35	36	5
LO-RCT-46	≤160A	46	86	28	98	87	72	14	13	45	39	5
LO-RCT-65	≤225A	65	105	28	124	110	96	14	14	53	39	6
LO-RCT-80	≤400A	80	130	32	140	122	106	16	18	67.5	43	6
LO-RCT-100	≤630A	100	148	32	167	153	129	16	21	74.5	43	6
LO-RCT-120	≤1000A	120	172	32	188	170	142	16	20	88	43	6
LO-RCT-150	≤1250A	150	206	32	225	205	178	16	34	103.5	43	6
LO-RCT-200	≤1500A	200	274	40	296	278	226	20	44	138	51	6
LO-RCT-300	≤2000A	300	377	40	400	382	320	20	45	190	51	8