EHC-ZCT 系列零序/剩余电流互感器

EHC-ZCT Series Zero Phase/Residual CT

特点/用途 Key Features/Application：

- 用于剩余漏电断路器，剩余电流式电气火灾监控探测器、漏电保护开关(RCCB 、RCBO 、MCB、MCCB)等等；
- 工作频率: 50Hz/60Hz；
- 初次级工频耐压 2KV/Min，绝缘电阻≥50MΩ/500Vdc；
- 初次级工频耐压 4KV/Min(环氧树脂灌封)，绝缘电阻≥1000MΩ/500Vdc；
- 工作温度范围: -40℃~75℃ ；

- Widely used in circuit leakage current protection such as residual current circuit breaker, leakage current protection switch (RCCB 、RCBO 、MCB 、MCCB) etc.
- Working Frequency: 50Hz/60Hz;
- Power-frequency Withstand Voltages: 2000V 50Hz/1min, Insulation Resistance: ≥50MΩ/500Vdc;
- Encapsulated with epoxy resin poor working condition:4000V 50Hz/1min, Insulation Resistance: ≥1000MΩ/500Vdc;
- Operating Temperature: -40 ~75℃;

以下所示是此系列产品中较有代表性的几种，我们可以根据用户的特殊需求来设计和生产产品。

Only few typical products of this series are shown in the following pages. EHC is capable of making other customized design and manufacturing per user request.

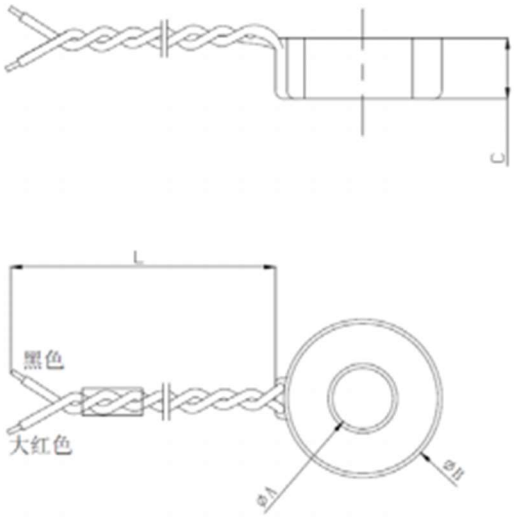
规格及参数 Specifications and Parameters：

型号 Model	一次电流 Primary Current	输出电压 Output Voltage	采样电阻 Sampling resistance	不平衡电流 Unbalanced current
EHC-ZCT106	5～300mA	5～300mV	1KΩ	<2mA@125A
EHC-ZCT160	100mA	7mV	50 Ω	<5mA@160A
EHC-ZCT250	100mA	7mV	50 Ω	<5mA@250A
EHC-ZCT630	100mA	7mV	50 Ω	<5mA@630A

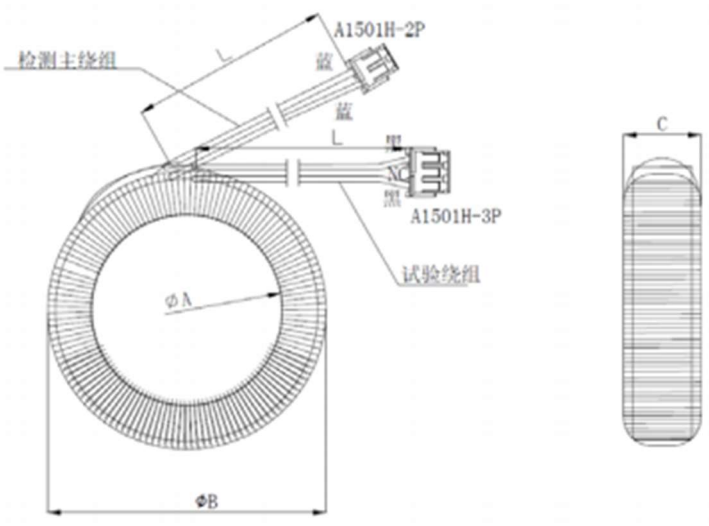
参考尺寸对照表 Dimension table

型号 Model	ϕA(mm)	ϕB(mm)	C(mm)
EHC-ZCT106	8.5	22.6	10
EHC-ZCT160	28.5	41	10
EHC-ZCT250	37	54	11
EHC-ZCT630	57	76	16

EHC-ZCT106



EHC-ZCT160/250/630



保护原理 Principle of Operation：

零序电流互感器接线与原理如图 2 所示，Zb 是执行机构的线圈阻抗， Rb 是互感器次级的采样电阻。当产生漏电流或零序电流时，在执行机构的线圈内流过一个电流 Io，这电流或直接产生一个电磁力使执行机构动作；或者经过采样电阻，产生一个电压信号 Vb 作为微电子电路的输入信号，通过电子放大电路驱动执行机构动作。

The wiring and principle of the zero-sequence current transformer are shown in Figure 2. Zb is the coil impedance of the actuator, and Rb is the sampling resistance of the secondary side of the transformer. When leakage current or zero-sequence current occurs, a current Io flows through the coil of the actuator, which either directly generates an electromagnetic force to actuate the actuator. Or, through a sampling resistor, a voltage signal Vb is generated as the input signal of the microelectronic circuit, and the actuator is driven to operate through an electronic amplification circuit.

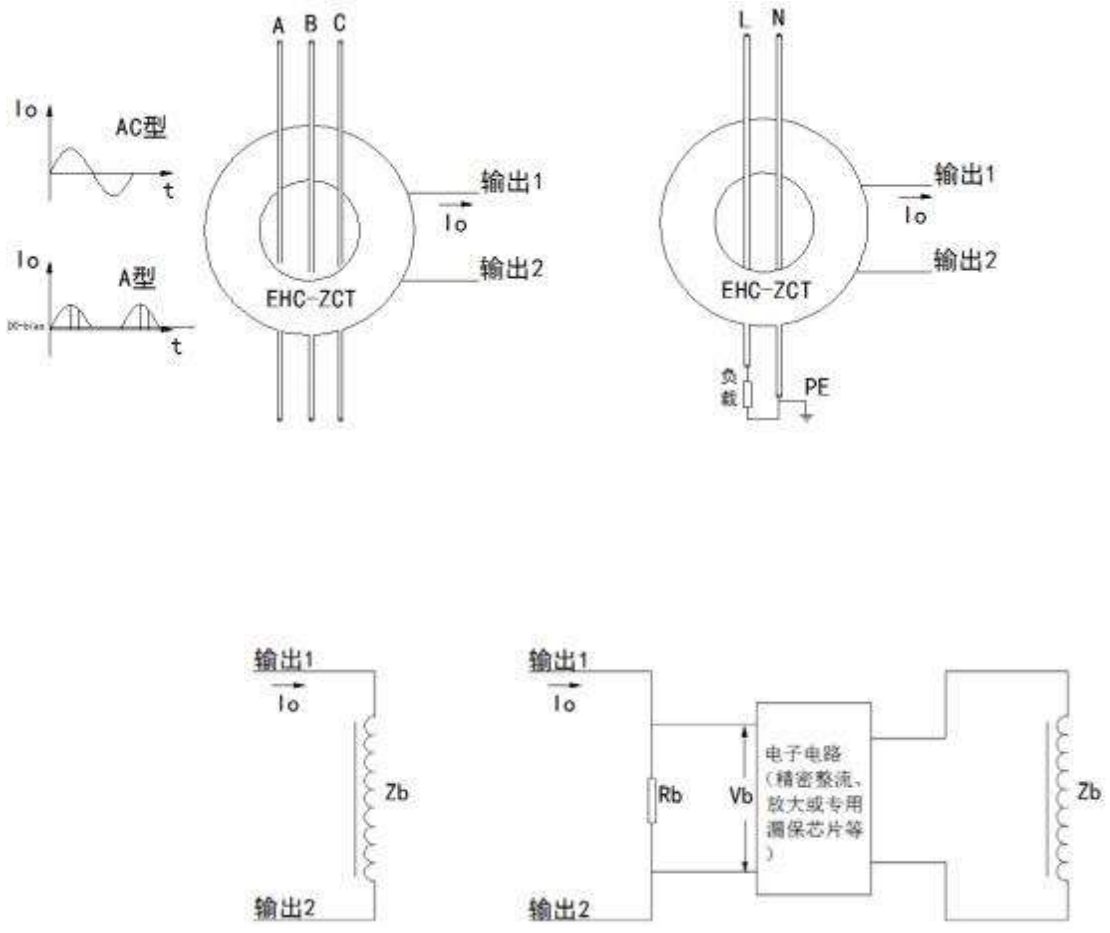


图 2

Figure 2