户外防水无线电流温度传感器

OUTDOOR WATERPROOF WIRELESS CURRENT TEMPERATURE SENSOR

物联网电流传感器生产商

IOT CURRENT SENSOR MANUFACTURER

专业，方能体现品质和效率

Professional, can reflect quality and efficiency

CTHF 户外防水无线电流温度传感器 OUTDOOR WATERPROOF WIRELESS CURRENT TEMPERATURE SENSOR YUCHENG

> 产品概述 Product overview

无线无源电流温度传感器是为实现低压配电网智能化、自动化的需求，全面的数据采集和监测就具有其必要性。通过实时在线监测电缆、母排等的温度、电流、电压，获取早期隐患，保障用户安全用电。 无源复合型传感器利用输电线周围感应的电磁能量获取电能，在线监测电缆的温度、电流，结合无线通讯，完成快速精确在线测量并省却线缆的束缚，实现数据无线传输功能。产品无需外部电源，终身免维护。适合低压开关柜输电导线的温度及电流的在线监测。传 感器通过不电气设备表面直接接触，通过其内置模拟温度传感器感知接触面环境温度并得到对应的电压信号，由电压信号不感应的关系，可以确定带电设备表面的温度。非直接接触，采用电场感应检测线路是否带电，检测线路空载无电流通过时是否带电。

Wireless passive current temperature sensor is to realize the needs of intelligent and automatic low-voltage distribution network, comprehensive data acquisition and monitoring is necessary. Through real-time online monitoring of the temperature, current and voltage of cables and bus bars, early hidden dangers can be obtained to ensure the safety of users. The passive composite sensor uses the electromagnetic energy around the transmission line to obtain electric energy, online monitoring the temperature and current of the cable, combined with wireless communication, to complete fast and accurate online measurement and save the shackles of the cable, and realize the function of wireless data transmission. The product does not need external power supply and is maintenance free for life. It is suitable for on-line monitoring of temperature and current of transmission conductor in low voltage switchgear. The sensor is not in direct contact with the surface of the electrical equipment, and its built-in analog temperature sensor senses the ambient temperature of the contact surface and gets the corresponding voltage signal. According to the relationship between the voltage signal and non induction, the surface temperature of the live equipment can be determined. Non direct contact, electric field induction is used to detect whether the line is charged, and to detect whether the line is charged when there is no load and no current passing through.

> 产品功能 Product function

◆ 双电源供电

收集交流通电线路的电磁能量并将其转化成电能，为传感器提供工作电源。当被测物通过交流电流大于 0.5A 时，传感器即可启动工作。并通过智能储能技术贪存多余电能，确保传感器连续工作。如果线路中的电流小于启动电流戒者线路处于停电状态，可使用传感器内的备用电池供电，保持传感器的正常工作。

◆ 数据测量传输

传感器工作期间，可根据设定的采集频率，通过温度传感器测量线缆的表面温度、电流互感器测量流经电缆的电流，实现线缆温度和电流的同时在线监测。同时传感器可根据搜集能量的多少自动调节测量时间间。采集的数据通过 433MHz 无线链路传送至接收装置。

◆ Double power supply

The electromagnetic energy of AC power line is collected and converted into electrical energy to provide working power for the sensor. When the measured object through the AC current is greater than 0.5A, the sensor can start to work. Intelligent energy storage technology is used to store excess power to ensure the continuous operation of the sensor. If the current in the circuit is less than the starting current and the circuit is in power failure state, the standby battery in the sensor can be used to supply power to keep the sensor working normally.

◆ Data measurement and transmission

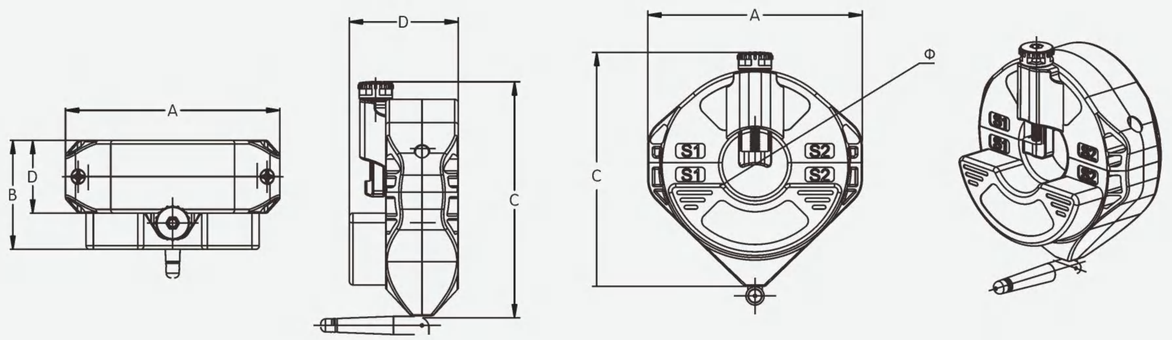
During the working period of the sensor, according to the set acquisition frequency, the surface temperature of the cable can be measured by the temperature sensor, and the current flowing through the cable can be measured by the current transformer, so as to realize the online monitoring of the cable temperature and current at the same time. At the same time, the sensor can automatically adjust the measurement time according to the amount of collected energy. The collected data is transmitted to the receiving device through 433MHz wireless link.

> 性能指标 Performance index

技术参数 Technical parameter			
无线接收方式 Wireless receiving mode	星形结构 点对点通信 Star structure point to point communication	能量源 Energy source	工频磁场+可更换高温锂电池 Power frequency magnetic field +replaceable high temperature lithium battery
温度、电流采集与发射周器 Temperature and current acquisition and transmitter	5S(一次电流 1A 以上) Primary current above 1A	CT 去电最小电流 Minimum deenergization current	0.5A，AC
最小启动电流冷启动时间 Minimum starting current cold start time	≤4min	工作湿度范围 Working humidity range	–40~150℃(非电池供电) Non battery powered
推荐工作温度范围 Recommended operating temperature range	–40~+85℃	防护等级 Protection level	IP42
存储温度 Storage temperature	–20 ~ +55℃	安装方式 Installation method	卡扣式安装 Snap fit installation

> 外形及安装尺寸 Outline and installation dimensions

型号规格 Model and specification	额定输入(A) Rated input	额定输出(mA/v) Rated output	精度等级 Accuracy class	外形尺寸 Dimensions(mm)				
				Φ	A	B	C	D
CTHF–36	50A 100A 200A 500A 800A 1000A 2000A	0~1V (0~5A) NTC 10K NTC 50K NTC 100K	0.1 0.2 0.5 1.0	36	118	60	129	40
CTHF–60				60	152	60	160	40



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WIRELESS CURRENT TEMPERATURE SENSOR

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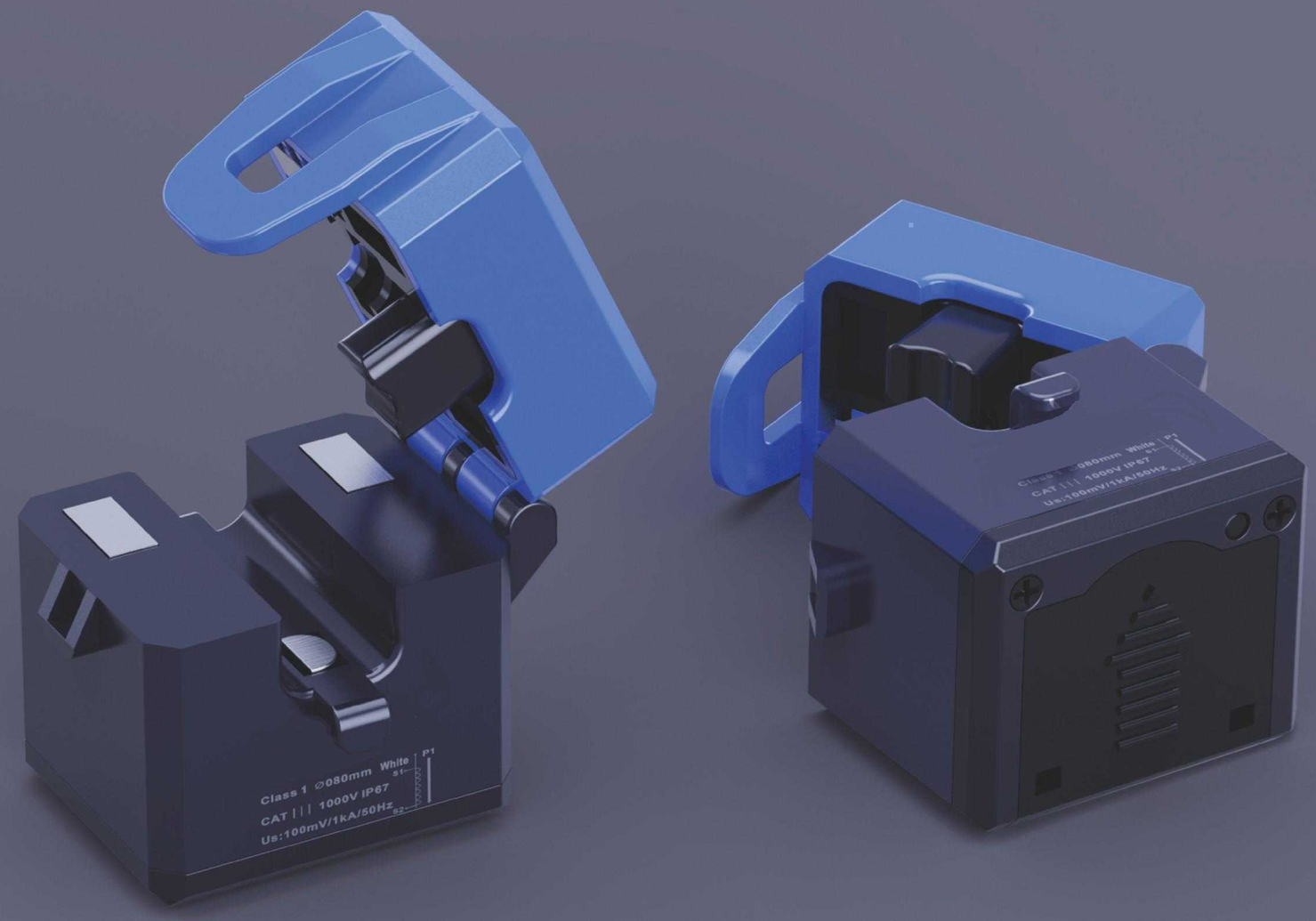

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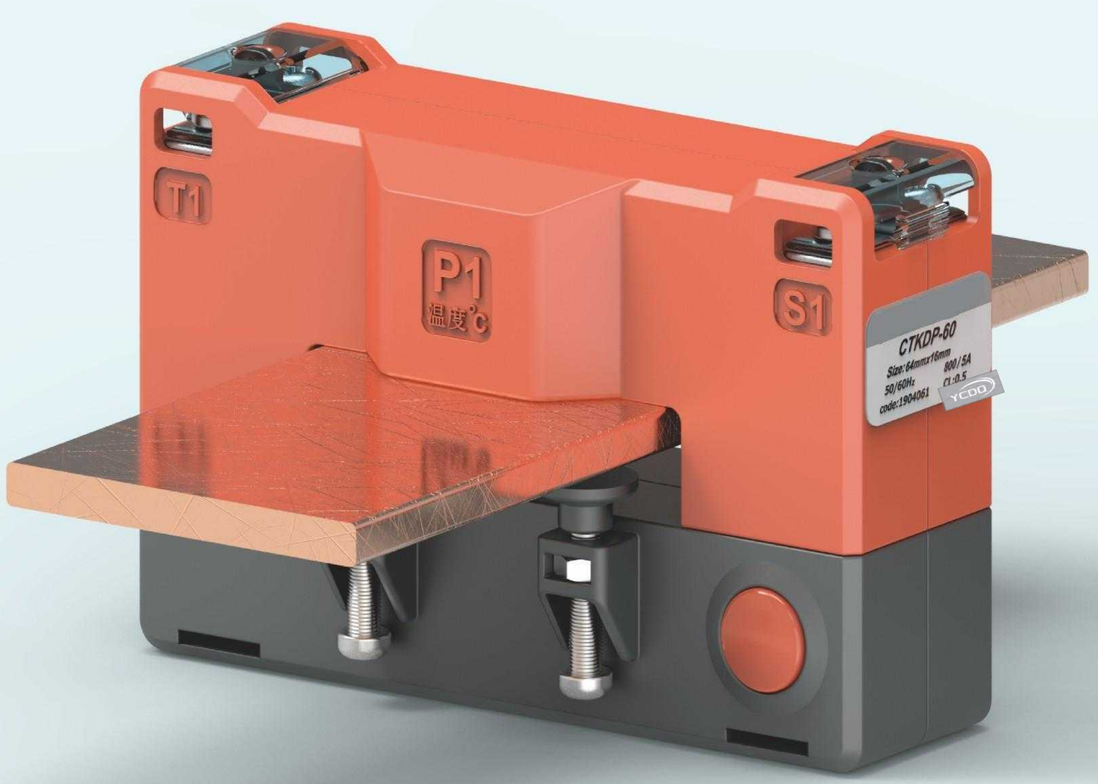

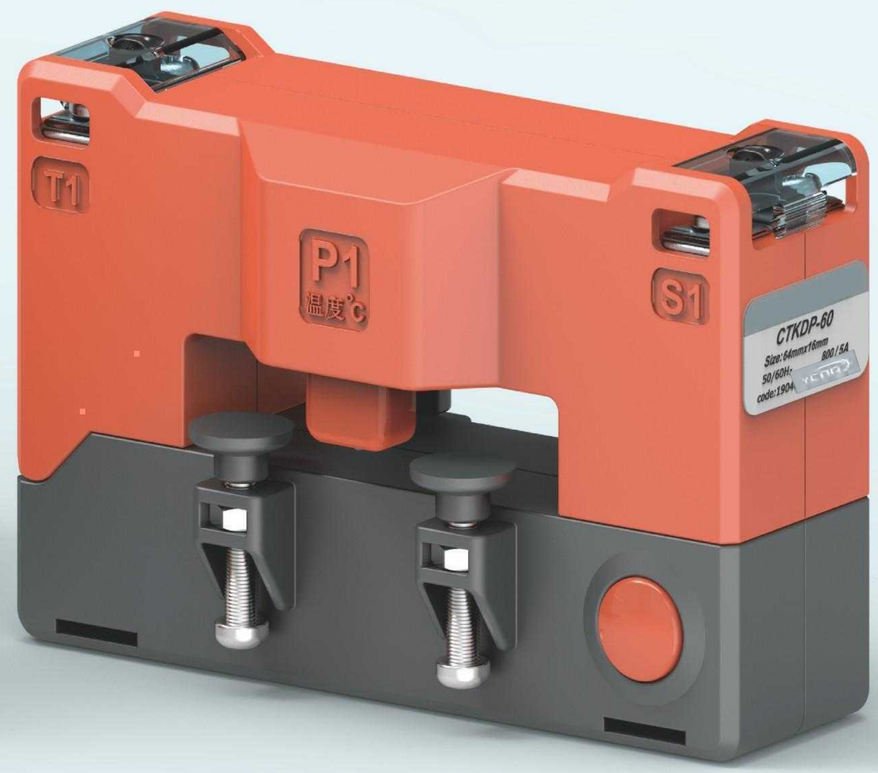

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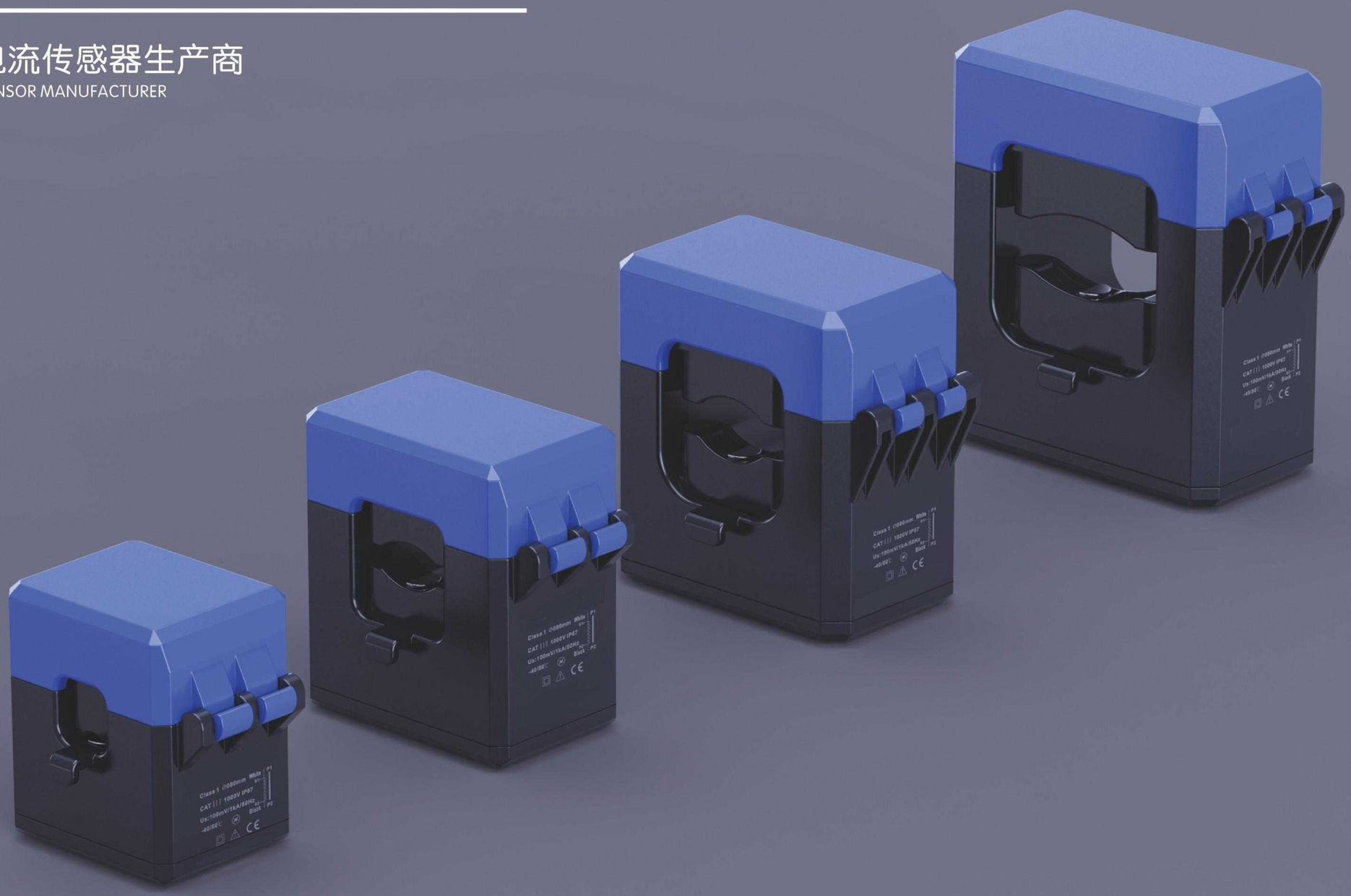

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CTWXY 无线电流温度传感器 WIRELESS CURRENT TEMPERATURE SENSOR YUCHENG

> 产品概述 Product overview

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推荐工作温度范围 Recommended operating temperature range	–40~+85℃	防护等级 Protection level	IP42
存储温度 Storage temperature	–20 ~ +55℃	安装方式 Installation method	卡扣式安装 Snap fit installation

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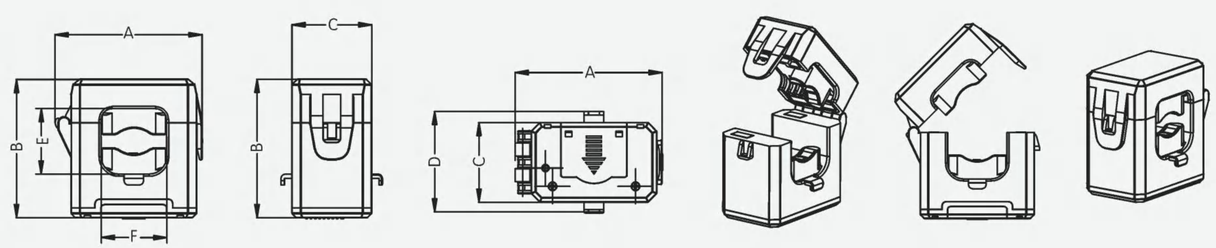
				A	B	C	D	E	F
WXY–10	50A 100A 200A 500A 800A 1000A 2000A	0~1V (0~5A) NTC 10K NTC 50K NTC 100K	0.1 0.2 0.5 1.0	48	46	33	43	11	11
WXY–20				48	56	33	43	20	20
WXY–30				57	64	37	47	30	30
WXY–40				68	80	37	47	40	40



无线电流温度传感器

WIRELESS CURRENT TEMPERATURE SENSOR

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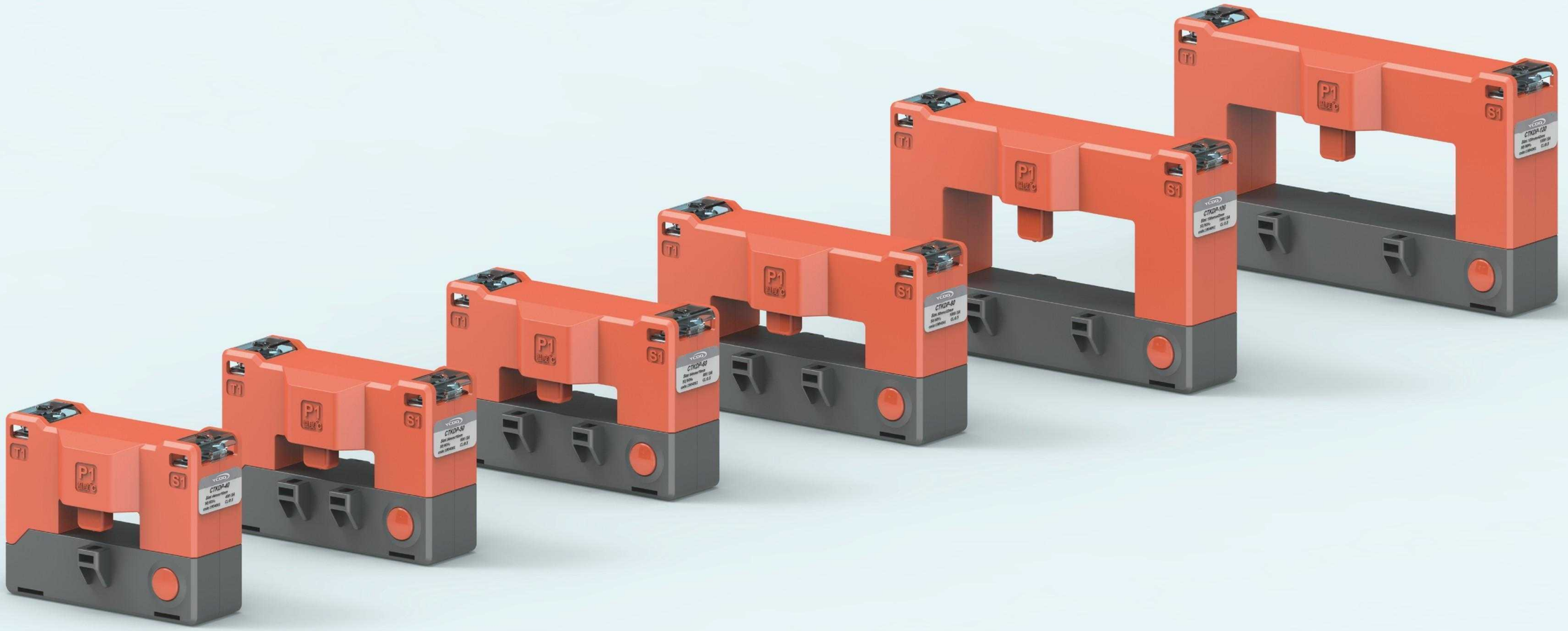

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				A	B	C	D	F	K
WXF–40	50A 100A 200A 500A 800A 1000A 2000A 3000A 4000A 5000A	0~1V (0~5A) NTC 10K NTC 50K NTC 100K	0.1 0.2 0.5 1.0	104	79	56	36	44	16
WXF–50				114	79	56	36	54	16
WXF–60				124	79	56	36	64	16
WXF–80				144	83	56	36	84	20
WXF–100				164	105	56	36	104	42
WXF–120				184	105	56	36	124	42