

CURRENT TRANSFORMER



Introduction

The current transformer is a current conversion device, which has the dual functions of current conversion and isolation. It converts the large current of the high-voltage circuit or low-voltage circuit into a low-voltage small current (generally 5A), which is supplied to the instrument and relay protection device.

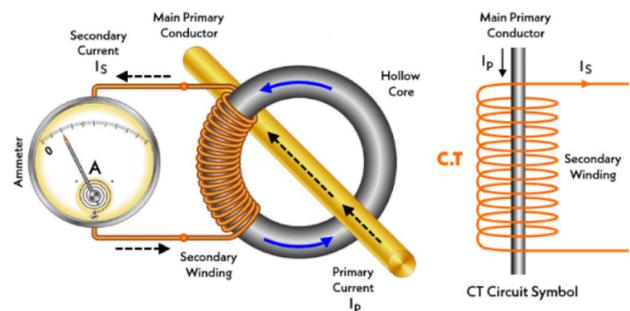
Current transformer are widely used in power systems, industrial automation, and electronic equipment to monitor the magnitude and change of current.



Application

- Wind power.
- Automatic industry.
- Solar energy generation.
- Electric vehicle charging pile.
- Power monitoring and control.
- Power meter calibration and inspection.
- Electrical equipment monitoring and protection.
- IoT device monitoring and control.

Working Principle



Main Features

- Small size, easy to install.
- Non-contact measurement reduces difficulty of installation and maintenance.
- High measurement accuracy, accurately measure size of the current.
- Effective isolation of the measured current loop and the measurement circuit.
- Rapid response to current changes, real-time monitoring and feedback of current signals.
- Various output methods, such as analog signal output, digital signal output or communication interface output.

HCT SERIES CURRENT TRANSFORMER

■ CURRENT TRANSFORMER

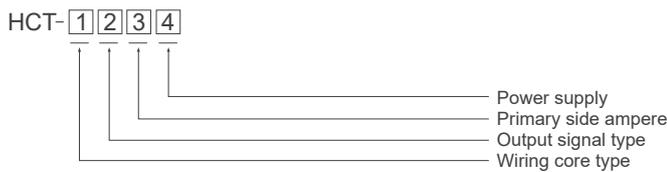


Introduction

The Hall effect series current transformer is a highly advanced and sophisticated device that utilizes the hall effect principle to provide precise and accurate measurements of DC currents. It offers a galvanic isolation between the primary and secondary circuits, ensuring safety and preventing any electrical interference.

The open-loop system generates an electronic output signal that can be conveniently connected to PLC or DSP terminal control systems for direct acquisition and use. With its cutting-edge design and dependable performance, this current sensor is an excellent choice for various industrial applications.

Ordering Information



Num.	Code	Description
1	B	Solid core
	S	Split core
2	V	Voltage output
	A	Current output
3	50	50Amp
	100	100Amp
	200	200Amp
	300	300Amp
4	15	±15V
	12	±12V

Main Features

- No insertion losses.
- Small size, easy installation.
- Low power consumption.
- Linear output characteristics.
- Realize remote monitoring and control.
- High immunity to external interference.
- Magnetic field principle, non-contact measurement.
- Short response time, fast response to current changes.
- DC current and AC current measurement.

Application

- Automatic industry.
- Welding equipment.
- Variable speed drives.
- Power quality monitoring.
- Variable frequency electrical appliances.
- Switched mode power supplies (SMPS).
- Battery supplied applications.
- Uninterruptible power supplies.

Technical Characteristics

Parameter	Value
Supply voltage	±12V, ±15V, +12V~+24V
Power consumption	<30mA
Rated output	±4V±1%, 0-5V(+2.5V) ±1%, 4-20mADC ±1%
Supply voltage	±12V, ±15V, +12V~+24V
Offset drift	@-40~+85°C, ≤±1
Output drift	@-40~+85°C, ≤±1
Response time	≤1s
Isolation resistance	@DC 500v, 1000MΩ
Storage environment	-40 to +85°C

SCT SERIES CURRENT TRANSFORMER

■ CURRENT TRANSFORMER



■ Introduction

SCT series split-core current senses AC current from 30 to 600 Amps passing through the center conductor.

Split core design permits non-contact current measurements through magnetic field induction without requiring that the primary wire be taken offline and disconnected for CT installation. This method permits a safer, easy and portable current measurement.

■ Main Features

- Split core design, low core loss and high precision.
- No need to disconnect the busbar, easy to install, and does not affect normal power consumption.
- Small size and light weight.
- Buckle opening and closing structure, easy to open and close.

■ Application

- Motor, lighting.
- Electrical instrumentation.
- Automatic control system.
- Electronic multi-function energy meter (APM series meter).
- Instrument measurement and protection.

■ Ordering Information

Model	Input(A)	Output(ma)	CT Ratio (unit:A)	Burden(Ω) Class 0.5	Size (H*W*D)	Core
SCT10	0-30A	0-30ma	1000/1	10Ω	41*30.7*31.8mm	10mm
	0-60A	0-30ma	2000/1			
	0-80A	0-26.6ma	3000/1			
SCT16	0-100A	0-100ma	1000/1		48.5*36.5*38.6mm	16mm
	0-120A	0-60ma	2000/1			
	0-150A	0-50ma	3000/1			
	0-160A	0-80ma	2000/1			
SCT24	0-100A	0-100ma	1000/1		65*52.6*40.9mm	24mm
	0-200A		2000/1			
	0-300A		3000/1			
	0-400A		4000/1			
SCT36	0-200A	0-100ma	2000/1		87*66.7*49.7mm	36mm
	0-300A		3000/1			
	0-400A		4000/1			
	0-500A		5000/1			
	0-600A		6000/1			

DPT SERIES CURRENT TRANSFORMER

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Introduction

DPT series split core current transformer protects the current transformer through the core. It has been specially designed to facilitate their installation in new or already existing networks. Connection of conventional CTs usually requires the interruption of the primary side circuit to pass cables or bus-bars through the transformer core or to connect such cables to the primary terminals.

DPT series CT core can easily have opened and installed and connected without any supply interruption. Thus saving time and the installation costs. This split core current sensor is for the rated frequency of 50HZ voltage below 0.66KV measuring current power and relay protection.

Main Features

- 100A-6000A AC current input range.
- A standard secondary output rating of 5 amps.
- Revenue grade accuracy meets IEC61000-1 class 0.5 / 1.0.
- Push-open mechanism makes the installation quick and simple.
- Two built-in installation methods: place DP series CT on the wall or busbar.
- Wide inner window allows various types cables and busbars to clamp.

Application

- Sub-metering(MCM Series meter).
- Current transducer.
- Power factor meter.
- Instrumentation.
- KWH meter.
- Current sensing relays.
- Energy management systems .

Ordering Information

Model	Primary current (amp)	Burden (VA)		Size (H*W)	Core (H*W)
		Class 0.5	Class 1.0		
DPT-23	100, 150, 200, 250	/	1.5	111*90mm	32*20mm
	300	1.5	2.5		
	400	2.5	3.75		
DPT-58	250	/	1.5	146*116mm	80*50mm
	300	/	2.5		
	400	1.5	2.5		
	500, 600	2.5	5		
	750	2.5	5		
	800	3.75	5		
DPT-88	1000	5	10	147*146mm	80*80mm
	250,300	/	1.5		
	400	/	2.5		
	500, 600	1.5	2.5		
	750	2.5	5		
DPT-812	800	3.75	5	188*146mm	120*80mm
	1000	7.5	7.5		
	500, 600	/	2.5		
	750	2.5	5		
DPT-816	800	5	2.5	247*189mm	160*80mm
	1000	7.5	3.75		
	1200, 1250, 1500	10	5		
	1000	5	10		
	1500	7.5	10		
	2000	10	15		
2500	15	20			
	3000, 4000, 5000, 6000	20	25		

MES SERIES CURRENT TRANSFORMER

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Introduction

MES solid core current transformer is a range of low-cost molded case 5A current transformers. This solid core CT has an integral hinged plate terminal cover that will accommodate cables up to 41mm in diameter and 35mm wide.

MES solid core current transformer is supplied with a DIN-rail mounting clip and mounting feet. 9 models of solid core current transformers are available.

Main Features

- Silicon steel core.
- Secondary side 5A, optional 1A.
- Built-in hinged terminal cover.
- Primary current from 5A to 3000A.
- Three built-in fixing methods: busbar support mounting, din rail mounting, and tetanic bracket panel mounting.
- This AC current transformer smaller than general model in volume.
- The solid core CT matches requirements in space-limited panels.

Application

- Automatic industry.
- Welding equipment.
- Variable speed drives.
- Power quality monitoring.
- Variable frequency electrical appliances.
- Switched mode power supplies (SMPS).
- Battery supplied applications.
- Uninterruptible power supplies.

Ordering Information

Model	Primary current (amp)	Burden (VA)		Size (W*H*D)	Core (H*W)
		Class 0.5	Class 1.0		
MES-62B	5/5,10/5,15/5,20/5,25/5,30/5, 40/5,50/5,60/5,75/5,100/5,150/5	1.5	2.5	87.5 x 62 x 57mm	None (screw connection)
MES-62/20	30/5	/	2.5(4T)	87.5 x 62 x 57mm	Φ22mm
	40/5,50/5	/	2.5(3T)		
	60/5	/	2.5(2T)		
	75/5	/	1.5		
	80/5	/	2.5		
	100/5	1.5	2.5		
	150/5	2.5	3.75		
	200/5	3.75	5		
MES-62/30	30/5	/	2.5(4T)	87.5 x 62 x 57mm	31 x 31mm / Φ30mm
	40/5	/	2.5(3T)		
	50/5,60/5	/	2.5(2T)		
	75/5	/	1.5		
	100/5	1.5	2.5		
	150/5	2.5	3.75		
	200/5	3.75	5		
MES-80/30	30/5	/	2.5(4T)	86.5 x 80 x 77mm	31 x 30mm / Φ30mm
	50/5,60/5	/	2.5(2T)		
	75/5	/	1.5		
	100/5	/	2.5		
	150/5	2.5	3.75		
MES-80/40	200/5	3.75	5	86.5 x 80 x 77mm	41 x 31mm / Φ30mm
	100/5	/	2.5		
	150/5	2.5	3.75		
	200/5	3.75	5		