Flexible Rogowski Coil Current transformer

FCT-XXX Series

FCT series is a current transducer for permanent installation. Simple to install and easy to retrofit, the Rogowski (sense) coil is thin, lightweight, lexible and clip-around. The secondary output from the transducer is an instantaneous voltage proportional to the measured primary current providing an accurate, low cost, wide-band measurement of the primary current.

Specification

Current range	0-100KA AC	
Coil length	As per details	
Lead length	As per details	
0.7.1.101/10	120 mV/1000A @ 60 Hz 100 mV/1000A @ 50 Hz	
Output signal(di/dt)	0~0.333V 0-5V AC(with integrator) 4-20mA or as per your request.	
Power Supply	9Vdc -10% to 24Vdc (+20%	
Accuracy(typ.)	<0.5% typical at 20% to 120% of rated current (most accurate position, 25°C)	
Linearity (10% to 100% of range)	±0.2% of reading	
Bandwidth (-3dB)	1Hz to 1MHz	
Conductor position sensitivity	±1% of reading	
Operating temperature	-20°C to 70°C	

Position sensitivity



Conductor Position	Typical Error(%)	
 Adjacent to the coil edge 	<0.8%	
In the centre of the coil	<0.2%	
 Adjacent to the connector joint 	<1%	

Materials

Coil & cable	Thermoplastic rubber
Couplings	flame retardant UL 94 V-0 rated
	PA6 UL 94 V-O rated
Color(coil)	Black, Yellow, Red, Green, Blue
Shielded	100% coil, 100% output cable

Order code

Rated current(A)	Coil Length (mm)	Cable Length (m)	Color
250A	300mm	1m	Black
500A	520mm	2m	Yellow
900A	800mm	3.5m	Red
	•••	•••	Green
100000A	Custom lengths	Custom lengths	Blue

For example: FCT-1000-300-1-B has a rated primary current 1000A, 300mm coil, 1m cable and it is black.



Model

A-FCT	High accuracy coil
H-FCT	High frequency coil
S-FCT	High sensitivity coil
T-FCT	Thicker coil
ME333	333mV rms output
ME005	±5.0V rms output
ME015	0-5V DC output
ME420	4-20mA DC output
ME100	0-100mA rms output
ME001	0-1 A rms output

Advantages

- Simple to install (especially in limited space)
- ♦ Wide dynamic current range
- No magnetic saturation
- Intrinsically safe
- Wide bandwidth

Applications

- Power meters
- Energy sub-meters
- Power quality monitoring
- Condition monitoring
- Distributed measurement systems.
- Lighting current
- Electric furnace
- Harmonic management
- Relay Protection

Further information

The FCT series can be configured to suit a great many applications. If your requirement is outside the listed, please contact us to discuss your application.