## **MH Current Transformers**





## **Current Transformer**



# MH Current Transformer Tape wound construction for Low Voltage AC network measurement

#### Device features

#### **METERING CT**

- Monitoring of kWh/ W/ A
- Class 0.5/ 1/ 3
- Cast Resin or Insulated Tape
   Wound

#### **PROTECTION CT**

- For detection of circuit fault condition with high peak current handling
- Class 5P/ 10P/ PX
- Insulated Tape Wound construction

#### **Standard Compliance**

- IEC 61869-2 for performance of Instrument transformer
- IEC 60044-1 for manufacturing and testing method used
- IP 20 Degree of Protection for indoor application

#### **Customized CT**

- MH CT are available in custom built specification such as PX type requirement
- We have over 20 years' experience in making CT with precise tolerance & special performance

### **Product description**

MH CT are used in energy metering and feeder protection application. Designed for use in low voltage 50/60Hz network, the CT are installed in electrical switch board, control panel and motor control centre. High grade annealed grain-oriented silicon steel is used in the CT core to provide improved accuracy and linearity of measurement.

The CT can be directly installed onto bare copper busbar up to 720VAC rating. Available in a wide variety of dimensions and current ratio rating. Connection to the Secondary winding is made via 2 bolt terminal. Customized model can be manufactured to customer specification.

MH CT are manufactured to comply with IEC 60044-1 and IEC 61869-2 standard. This ensure that each CT will provide measurement at its rated accuracy when operating at fluctuating temperature, humidity, surge impulses and radio interference. Additional requirement for protective CT are applied to ensure its reliable operation in the event of heavy fault condition.

### Product selection guide

#### Metering CT

Class 0.5	For kWh revenue meter application where accurate recording of energy consumption is required. 0.5% Current (Ratio) Error at 100% Rated Current.
Class 1	For general metering of feeder 1% Current (Ratio) Error at 100% Rated Current.
Class 3	For industrial load status indication purpose. 3% Current (Ratio) Error at 100% Rated Current.

#### **Protection CT**

	scheme. 5% composite error at rated Accuracy Limit Factor.
10P	For general time coordination and instantaneous over current scheme. 10% composite error at rated Accuracy Limit Factor.
PX	Special application where protection scheme require precise parameter defined for Knee Point Voltage, Turn Ratio, Maximum Excitation Current at Knee Point, CT Secondary Resistance, (Customized built item)

For stringent time graded coordination protection

#### **Examples of CT Specification**

Metering CT	e.g. 400/5, CL1 10VA 400A Primary Full Load, 5A Secondary Output, 10VA Burden, Class 1
Protection CT	e.g. 1600/5, 5P10 15VA  1600A Primary Full Load, 5A Secondary Output,  15VA Burden, 5P10 Stringent Time Coordination with

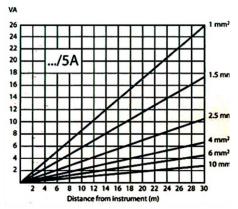


## **Current Transformer**

#### Technical data

Rated insulation	720VAC		
voltage			
Rated impulse	3kV/ 1min		
voltage			

#### Instrument Wire Distance





### Standard Model Range

Primary / Secondary	VA				
Current Rating	5	15	CL5 P10	Class 0.5	Class 1
6000/5	•	•	•	•	•
5000/5	•	•	•	•	•
4000/5	•	•	•	•	•
3200/5	•	•	•	•	•
3000/5	•	•	•	•	•
2500/5	•	•	•	•	•
2000/5	•	•	•	•	•
1600/5	•	•	•	•	•
1500/5	•	•	•	•	•
1200/5	•	•	•	•	•
1000/5	•	•	•	•	•
800/5	•	•	•	•	•
600/5	•	•	•	•	•
500/5	•	•	•	•	•
400/5	•	•	•	•	•
300/5	•	•	•	•	•
200/5	•	•	•	•	•
150/5	•	•	•	•	•
120/5	•	-	-	-	•
100/5	•	•	•	•	•
80/5	•	-	-	-	•
60/5	•	•	-	•	•
50/5	•	-	-	-	•
40/5	•	-	-	•	•

Legend:

standard item

o upon request

Note:

Other rating and sizes are available on customized built order.



#### **About MH Current Transformer**

MH Current Transformer (MH CT) is designed and manufactured by Challenge Industrial Co. (Malaysia) Sdn. Bhd. which founded in the year 1993 by joint venture in between Mun Hean Malaysia Sdn. Bhd. and Challenge Industrial Co. Ltd. The MH Current Transformer is solely made under MH Instrument, a wing under Mun Hean Group. The founding of MH Current Transformer is to in line with Mun Hean's flagship product, MH Protection Relays and Meters. On 1994, the product range for Protection Current Transformer is extended to Class X Type and subsequently in year 1996, Class 0.5 Metering Current Transformer is included in the production range. The complete chain of value creation including product design & development, production, and testing is based in Selangor, Malaysia. The major expansion of production area at the mid of year 2014 shows that the product demand of MH Current Transformer is increasing. Today, MH Current Transformer has been sold to Singapore, Hong Kong, Myanmar, Philippine, Indonesia and Vietnam, and it is the market leader in Malaysia and Singapore.



# **MH Current Transformers**

Authorized Distributor:					

