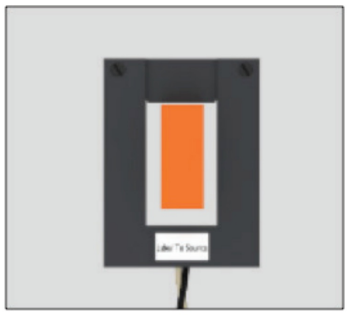
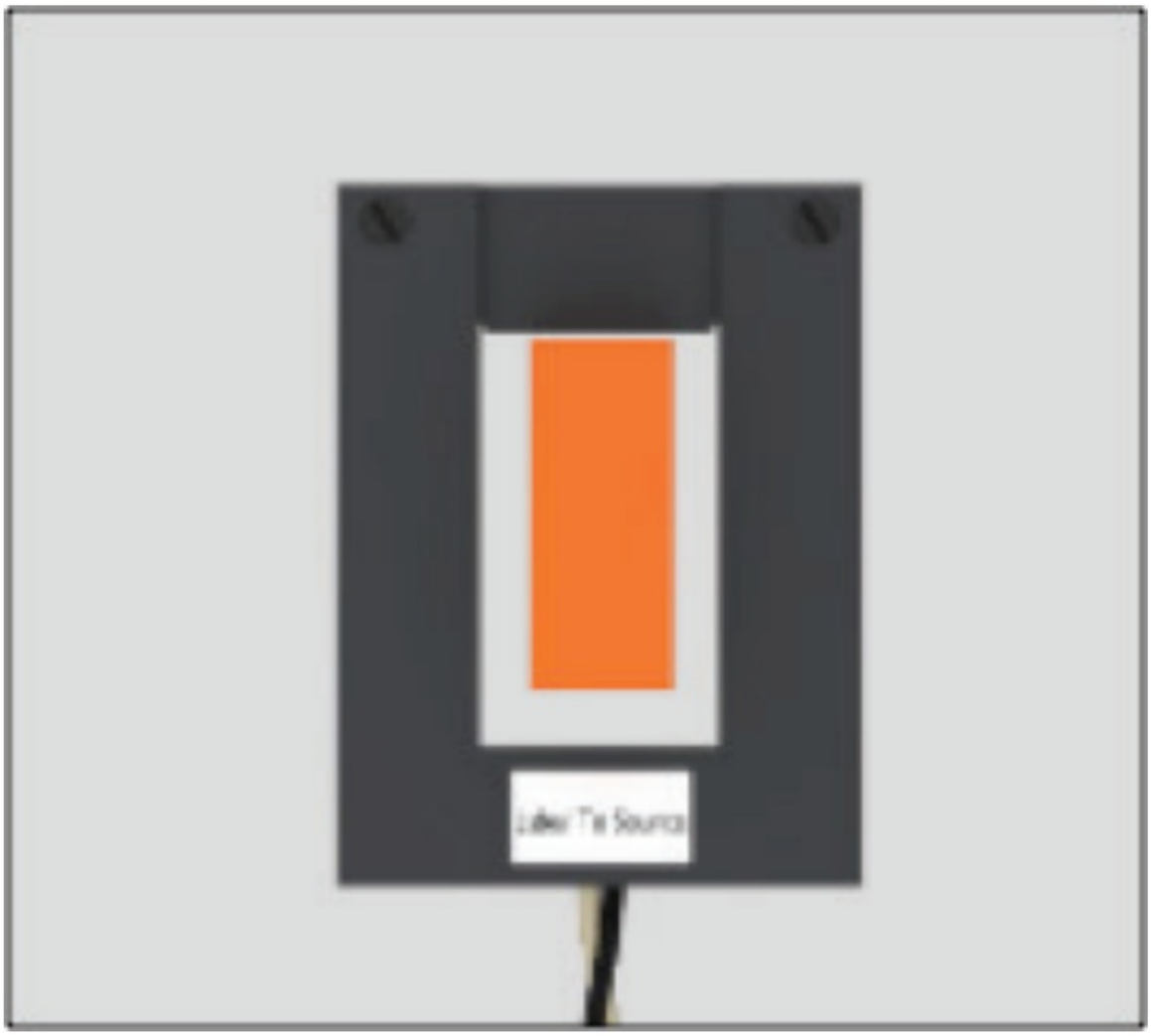


Schneider Electric PowerLogic HDPM6000 Series CT Models for High Accuracy and Split Core Variants Installation Guide

Schneider Electric PowerLogic HDPM6000 Series CT Models for High Accuracy and Split Core Variants



Contents

Safety Information

Important information

Read these instructions carefully and look at the equipment to become familiar with the device before trying to install, operate, service or maintain it. The following special messages may appear throughout

this bulletin or on the equipment to warn of potential hazards or to call attention to information that clarifies or simplifies a procedure.

The addition of either symbol to a “Danger” or “Warning” safety label indicates that an electrical hazard exists which will result in personal injury if the instructions are not followed.

This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

⚠DANGER
DANGER indicates an hazardous situation which, if not avoided, will result in death or serious injury

⚠**WARNING**
WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.

⚠**CAUTION**
CAUTION indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

⚠**NOTICE**
NOTICE is used to address practices not related to physical injury.

Please note

Electrical equipment should be installed, operated, serviced and maintained only by qualified personnel. No responsibility is assumed by Schneider Electric for any consequences arising out of the use of this material.

A qualified person is one who has skills and knowledge related to the construction, installation and operation of electrical equipment and has received safety training to recognize and avoid the hazards involved.

PowerLogic HDPM6000 Series CT Models for High Accuracy and Split-Core Variants (20A 4000A)

Safety Precautions

Installation, wiring, testing and service must be performed in accordance with all local and national electrical codes.

⚠DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

- Apply appropriate personal protective equipment (PPE) and follow safe electrical work practices. See NFPA 70E in the USA or applicable local standards.
- Th electrical personnel.
- Turn off all power supplying equipment before working on or inside the equipment.
- Product may use multiple voltage/power sources. Disconnect all sources of power before servicing.
- Always use a properly rated voltage sensing device to confirm power is off
- Do not depend on this product for voltage indication.
- Current transformer secondaries must be shorted or connected to a burden at all times.
- Products rated for basic insulation must be installed on insulated conductors.
- Replace all doors, covers, and protective devices before powering the equipment.
- Install device is an appropriate electric and fire enclosure per local regulation
- This product is not intended for life or safety applications. Failure to follow these instructions will result in dea th or serious injury.

⚠**WARNING**

RISK OF INJURY OR EQUIPMENT DAMAGE Do not apply current transducers to circuits having a phase-to-ph ase voltage greater than their voltage rating unless adequate additional insulation is applied between the primar y conductor and the current transducers.
equipment damage.

Schneider Electric assumes no responsibility for damage of equipment or personal injury caused by products operated on circuits above their published ratings.

Introduction

Schneider Electric PowerLogic High Accuracy and Split-Core Current Transducers (CTs) provide secondary voltage AC proportional to the primary (sensed) current. For use with the HDPM6000 platform only, these CTs provide a means to transform electrical service amperages to a voltage compatible with monitoring equipment. These CTs range from 20A to 4000A voltage ratings with 0.2% to 1% accuracy.

Ordering Information

Model Number	**Description**	**Accuracy**

SUN2		
METSEHDPM20A12H	20A, High Accuracy Split-Core CT, 12′ lead	0.2%
METSEHDPM20A30H	20A, High Accuracy Split-Core CT, 30′ lead	0.2%
SUN3		
METSEHDPM75A12H	75A, High Accuracy Split-Core CT, 12′ lead	0.2%
METSEHDPM75A4H	75A, High Accuracy Split-Core CT, 30′ lead	0.2%
METSEHDP150A12H	150A, High Accuracy Split-Core CT, 12′ lead	0.2%
METSEHDP150A30H	150A, High Accuracy Split-Core CT, 30′ lead	0.2%
SUN4		
METSEHDP300A12H	300A, High Accuracy Split-Core CT, 12′ lead	0.2%
METSEHDPM300A30H	300A, High Accuracy Split-Core CT, 30′ lead	0.2%

METSEHDPM400A12H	400A, High Accuracy Split-Core CT, 12′ lead	0.2%
METSEHDPM400A30H	400A, High Accuracy Split-Core CT, 30′ lead	0.2%
SUS4		
METSEHDPM150A12	150A, Split-Core CT, 12′ lead	0.5%
METSEHDPM150A30	150A, Split-Core CT, 30′ lead	0.5%
METSEHDPM150A60	150A, Split-Core CT, 60′ lead	0.5%
METSEHDPM150A5	150A, Split-Core CT, HDPM6000S, 5″ lead with connector	0.5%
METSEHDPM150A16	150A, Split-Core CT, HDPM6000B, 16″ lead	0.5%
METSEHDPM300A12	300A, Split-Core CT, 12′ lead	0.5%
METSEHDPM300A30	300A, Split-Core CT, 30′ lead	0.5%
METSEHDPM300A60	300A, Split-Core CT, 60′ lead	0.5%

METSEHDPM300A5	300A, Split-Core CT, HDPM6000S, 5″ lead with connector	0.5%
METSEHDPM300A16	300A, Split-Core CT, HDPM6000B 16″ lead	0.5%
METSEHDPM400A12	400A, Split-Core CT, 12′ lead	0.5%
METSEHDPM400A30	400A, Split-Core CT, 30′ lead	0.5%
METSEHDPM400A60	400A, Split-Core CT, 60′ lead	0.5%
METSEHDPM400A5	400A, Split-Core CT, HDPM6000S, 5″ lead with connector	0.5%
METSEHDPM400A16	400A, Split-Core CT, HDPM6000B 16″ lead	0.5%
METSEHDPM600A12	600A, Split-Core CT, 12′ lead	0.5%
METSEHDPM600A30	600A, Split-Core CT, 30′ lead	0.5%
METSEHDPM600A60	600A, Split-Core CT, 60′ lead	0.5%
METSEHDP600A5H	600A, Split-Core CT, HDPM6000S, 5″ lead with connector	0.5%

METSEHDP600A16H	600A, Split-Core CT, HDPM6000B 16″ lead	0.5%
SUSF		
METSEHD150A12	150A, Split-Core CT, 1″x1″, 12′ lead	1%
METSEHD150A30	150A, Split-Core CT, 1″x1″, 30′ lead	1%
METSEHD150A60	150A, Split-Core CT, 1″x1″, 60′ lead	1%
METSEHD300A12	300A, Split-Core CT, 1″x1″, 12′ lead	1%
METSEHD300A30	300A, Split-Core CT, 1″x1″, 30′ lead	1%
METSEHD300A60	300A, Split-Core CT, 1″x1″, 60′ lead	1%
METSEHD300A12L	300A, Split-Core CT, 2″x2″, 12′ lead	1%
METSEHD300A30L	300A, Split-Core CT, 2″x2″, 30′ lead	1%
METSEHD300A60L	300A, Split-Core CT, 2″x2″, 60′ lead	1%

METSEHD400A12	400A, Split-Core CT, 1.25″x1.25″, 12′ lead	1%
METSEHD400A30	400A, Split-Core CT, 1.25″x1.25″, 30′ lead	1%
METSEHD400A60	400A, Split-Core CT, 1.25″x1.25″, 60′ lead	1%
METSEHD400A12L	400A, Split-Core CT, 2.5″x2.5″, 12′ lead	1%
METSEHD400A30L	400A, Split-Core CT, 2.5″x2.5″, 30′ lead	1%
METSEHD400A60L	400A, Split-Core CT, 2.5″x2.5″, 60′ lead	1%
METSEHD600A12	600A, Split-Core CT, 3″x 3″, 12′ lead	1%
METSEHD600A30	600A, Split-Core CT, 3″ x 3″, 30′ lead	1%
METSEHD600A60	600A, Split-Core CT, 3″ x 3″, 60′ lead	1%
METSEHD800A12	800A, Split-Core CT, 4″x 4″, 12′ lead	1%
METSEHD800A30	800A, Split-Core CT, 4″ x 4″, 30′ lead	1%

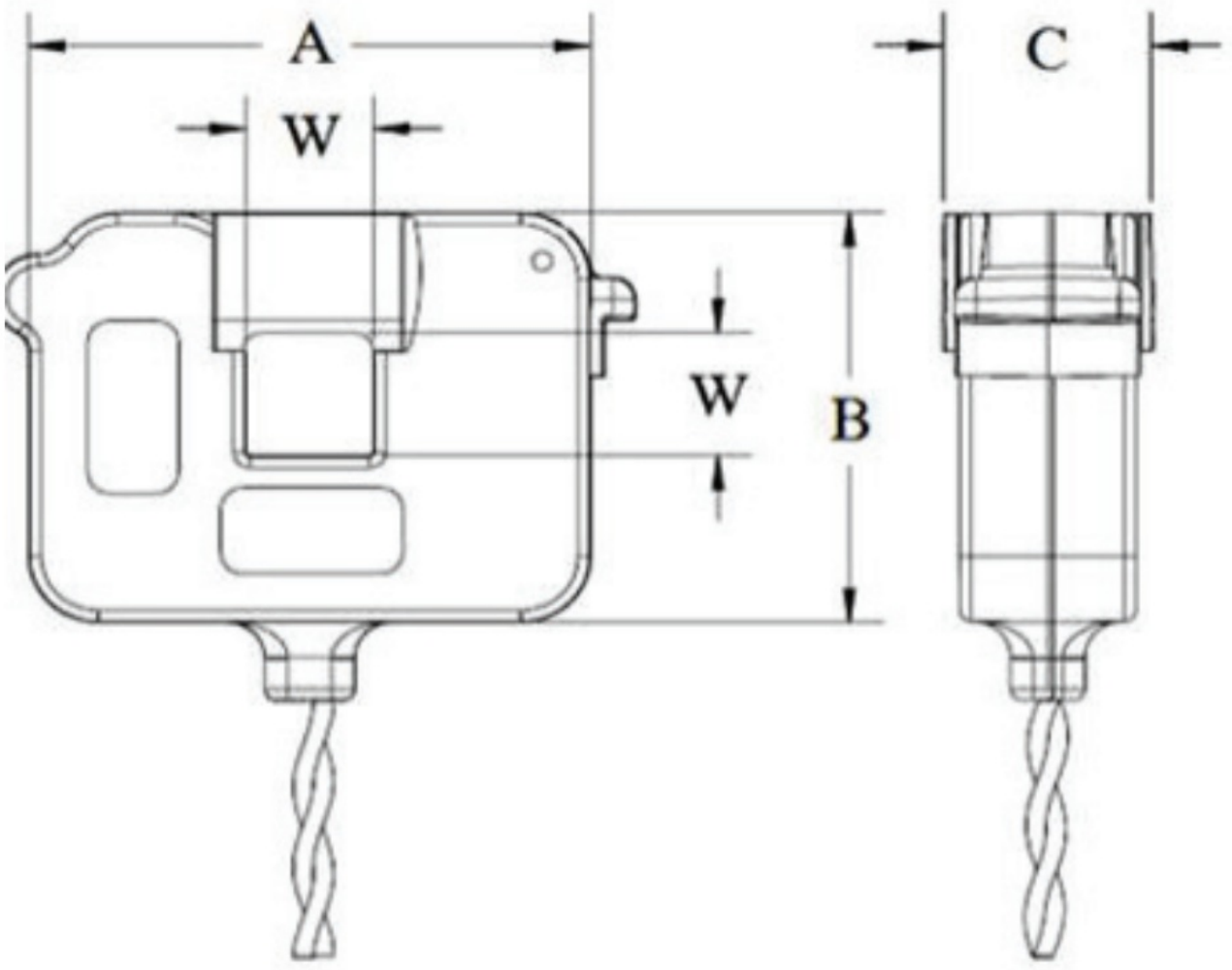
METSEHD800A60	800A, Split-Core CT, 4″ x 4″, 60′ lead	1%
METSEHD1000A12	1000A, Split-Core CT, 4″x 4″, 12′ lead	1%
METSEHD1000A30	1000A, Split-Core CT, 4″ x 4″, 30′ lead	1%
METSEHD1200A12	1200A, Split-Core CT, 4″x 6″, 12′ lead	1%
METSEHD1200A30	1200A, Split-Core CT, 4″ x 6″, 30′ lead	1%
METSEHD1600A12	1600A, Split-Core CT, 4″x 6″, 12′ lead	1%
METSEHD1600A30	1600A, Split-Core CT, 4″ x 6″, 30′ lead	1%
METSEHD1600A12L	1600A, Split-Core CT, 4.5″x 4.5″, 12′ lead	1%
METSEHD1600A30L	1600A, Split-Core CT, 4.5″ x 4.5″, 30′ lead	1%
METSEHD2000A12	2000A, Split-Core CT, 4″x 6″, 12′ lead	1%
METSEHD2000A30	2000A, Split-Core CT, 4″ x 6″, 30′ lead	1%

METSEHD2000A12L	2000A, Split-Core CT, 6″x 3″, 12′ lead	1%
METSEHD2000A30L	2000A, Split-Core CT, 6″ x 3″, 30′ lead	1%
METSEHD3000A12	3000A, Split-Core CT, 4″x 4″, 12′ lead	1%
METSEHD3000A30	3000A, Split-Core CT, 4″ x 4″, 30′ lead	1%
METSEHD3000A12L	3000A, Split-Core CT, 4″x 6″, 12′ lead	1%
METSEHD3000A30L	3000A, Split-Core CT, 4″ x 6″, 30′ lead	1%
METSEHD3000A12XL	3000A, Split-Core CT, 5″x 12″, 12′ lead	1%
METSEHD3000A30XL	3000A, Split-Core CT, 5″ x 12″, 30′ lead	1%
METSEHD4000A12	4000A, Split-Core CT, 5″x 12″, 12′ lead	1%
METSEHD4000A30	4000A, Split-Core CT, 5″ x 12″, 30′ lead	1%

Specifications

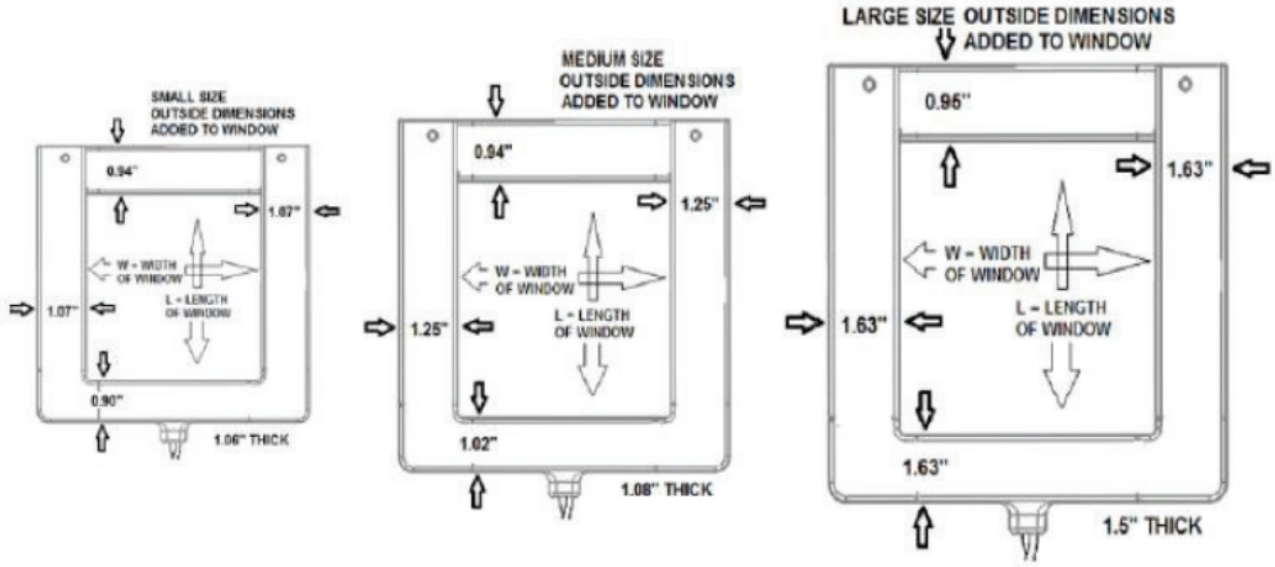
Output at Rated Current	0.25VAC
Accuracy	0.2% (SUN2/SUN3/SUN4), 0.5% (SUS4) and 1% (SUSF)
Operating Temperature Range	-40 to 55 °C (-40 to 131 °F)
Storage Temperature Range	-50 to +70 °C (-58 to 158 °F)
Frequency Range	50/60 Hz
Leads	B/W twisted pair 18 AWG, AWM, UL1015, 600V, 105 °C
Max. Voltage L-N Sensed Conductor	600 VAC
Altitude of Operation	2000 m max.
Humidity Range	0 to 95% non-condensing
Continuous current rating factor	1
Installation Category	Cat III, Pollution Degree 2
Agency Approvals	UL2808, CE

Dimensions SUN2, SUN3, SUN4 & SUS4



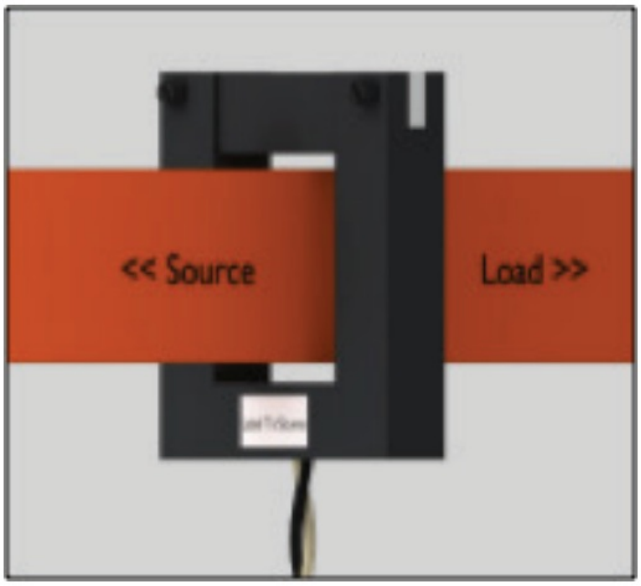
Model	W Window	A Dimension	B Dimension	C Dimension
SUN2	0.4 in (10.17 mm)	2.4 in (60.69 mm)	1.65 in (41.91 mm)	0.85 to 1.1 in (21.58 to 27.94 mm)
SUN3	0.7 in (17.80 mm)	3.0 in (76.19 mm)	2.4 in (60.96 mm)	1.1 in (27.94 mm)
SUN4	1.25 in (31.75 mm)	3.3 in (83.81 mm)	3.1 in (78.74 mm)	1.3 in (31.04 mm)
SUS4	1.25 in (31.75 mm)	3.3 in (83.81 mm)	3.1 in (78.74 mm)	1.3 in (31.04 mm)

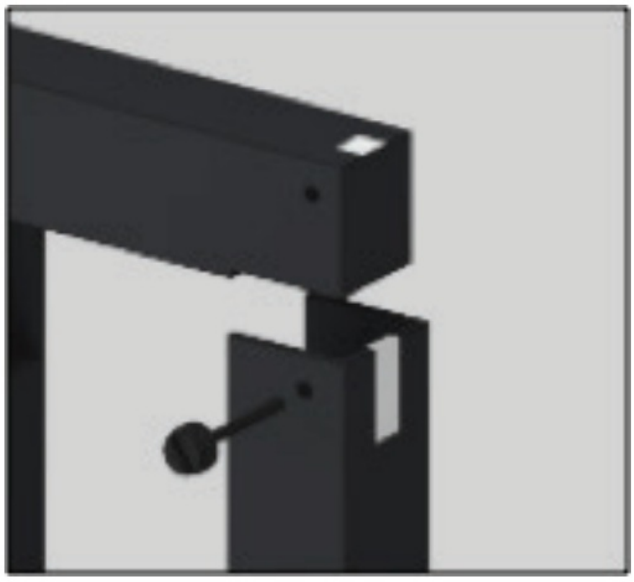
SUSF



Busbar and Phase Orientation

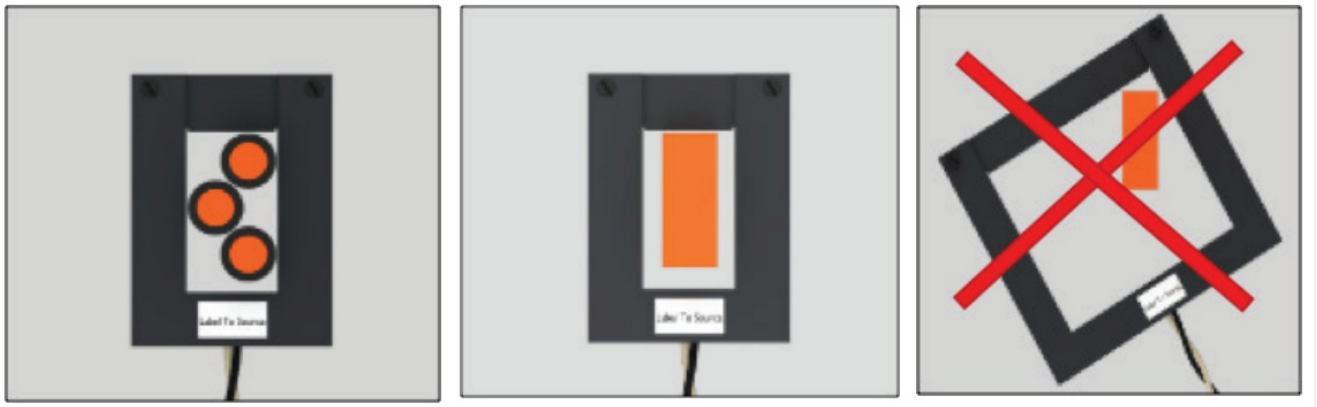
- The white mark ensures orientation every time the top is attached.
- Typically, the white mark is on the top right side when looking at the product label.
- Refer to label for correct CT orientation.





Proper Size and Fitting

- The window of the CT should be big enough to fit the busbar without excess space.
- A split-core CT should not be oversized around the bus/conductor, resulting in an inaccurate/bad reading.
- The busbar should also be in the center of the CT window to allow the coils to energize evenly.



Installation

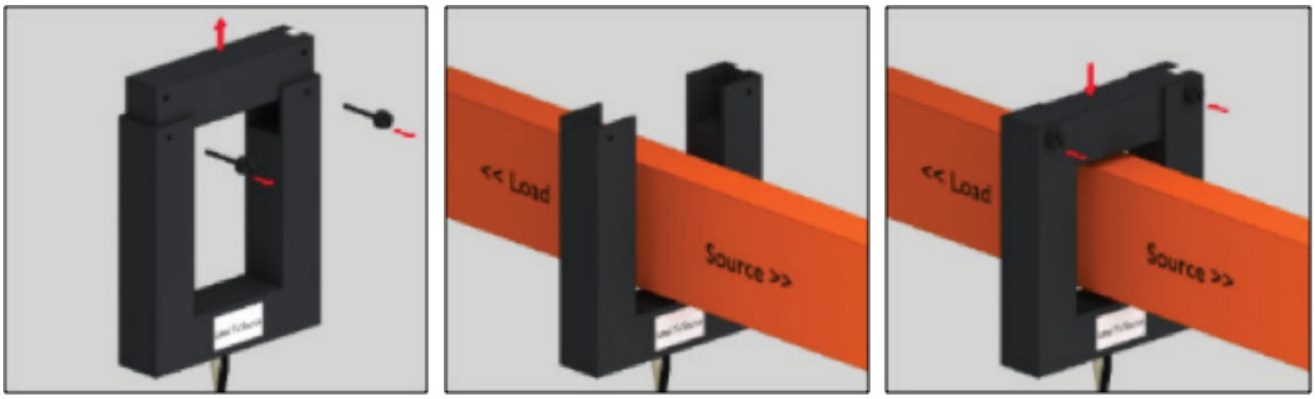
Installation must be performed by a qualified electrician. Turn off and lock out power to the primary circuit before installing these CTs. Use a properly rated voltage sensing device to confirm that power is off.

In any application where fault currents can exceed 20 times the rated current of the CT, use wire ties or similar fasteners to secure both sides of the I-bar to the CT housing.

NOTICE
INCORRECT POLARITY Align CT arrow to point in the direction of the power flow. **Failure to follow this instruction can result in incorrect readings.**

Remove the screws (or push-pins) from the CT and take the top off.

- Slide the body of the CT over the busbar.
- Refer to label for correct CT orientation.
- Re-attach the top to the body of the CT, using the white mark to orient how the top will fit.
- Place the screws/push-pins back to secure the top to the CT.
- Once the CT is installed onto the busbar, terminate the leads to the metering device prior to turning on the power.



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Documents / Resources

	Schneider Electric PowerLogic HDPM6000 Series CT Models for High Accuracy and Split Core Variants [pdf] Installation Guide PowerLogic HDPM6000 Series, CT Models for High Accuracy and Split Core Variants, PowerLogic HDPM6000 Series CT Models for High Accuracy and Split Core Variants

References

- Schneider Electric Global | Global Specialist in Energy Management and Automation