

# IEC Type 5 A Split-core Current Transformer

PB119864



METSECT5XYxxx



7EN02-0479-00

PB119874



METSECT5XYxxx

**NOTE: Models of selected commercial references are shown here.**

**NOTE: Do not use the product if it is damaged. Contact Schneider Electric customer care representative for support.**



The CE and UKCA marking indicates RoHS compliance as per latest EU RoHS directive.



The IEC type 5 A split-core Current Transformer (CT) delivers secondary current (Is) of 0 to 5 A that is proportional to the current measured at the primary (Ip). The IEC type 5 A split-core current transformer is used in combination with measurement equipments like Ammeters, Kilowatt-hour meters, Measurement units, Control relays.

The CT selection depends on the conductor profile and the maximum intensity of the primary circuit.

**NOTE: Recommended to choose the CT ratio higher than the maximum load current.**

## 1 Safety Precautions

### ⚠ 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.
- This equipment must only be installed and serviced by qualified 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 before servicing.
- Use a properly rated voltage sensing device to confirm that power is off. DO NOT depend on this product for voltage indication.
- Current transformer secondaries must be shorted or connected to a low burden at all times.
- Products rated only for basic insulation must be installed on insulated conductors.
- Replace all doors, covers and protective devices before powering the equipment.
- This product must be installed inside a suitable fire and electrical enclosure.
- This product is not intended for life or safety applications.

**Failure to follow these instructions will result in death or serious injury.**

### ⚠ WARNING

#### RISK OF INJURY OR EQUIPMENT DAMAGE

- Do not apply current transformers to circuits having a phase-to-phase voltage greater than their voltage rating unless adequate additional insulation is applied between the primary conductor and the current transformers.
- Always open or disconnect circuit from power-distribution system (or service) of building before installing or servicing current transformers to reduce the risk of electric shock.
- The current transformers must not be installed in equipment where they exceed 75 percent of the wiring space of any cross-sectional area within the equipment.
- Restrict the installation of current transformers in an area where it would block ventilation openings.
- Restrict the installation of current transformer in area of breaker arc venting.
- Not suitable for Class 2 wiring methods and Not intended for connection to Class 2 equipment.
- Secure current transformer and route conductors so that they do not directly contact live terminals or bus (optional).

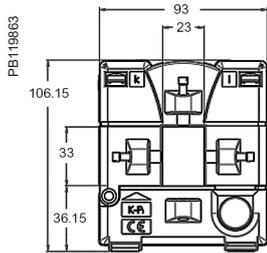
**Failure to follow these instructions may result in injury, fire or equipment damage.**

## 2 Dimensions

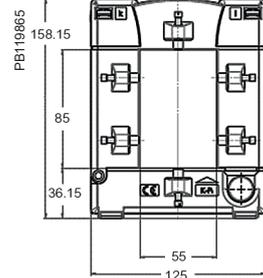
**NOTE: All dimensions are in mm (For inch conversion: 1 inch = 25.4 mm).**

**NOTE: Refer to section 5 for detailed commercial reference information.**

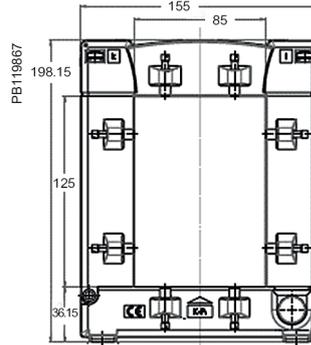
METSECT5GAxxx



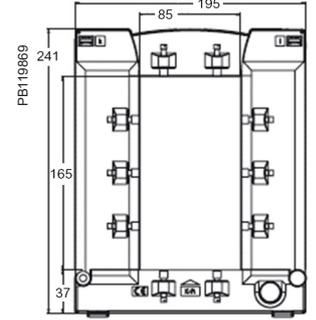
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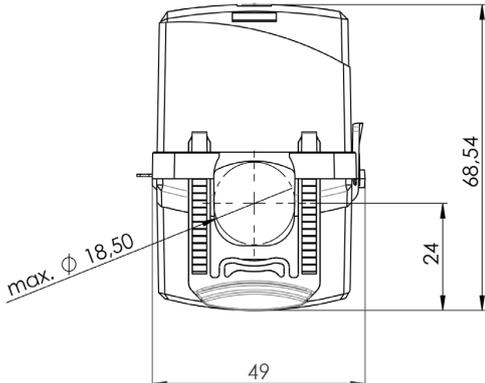
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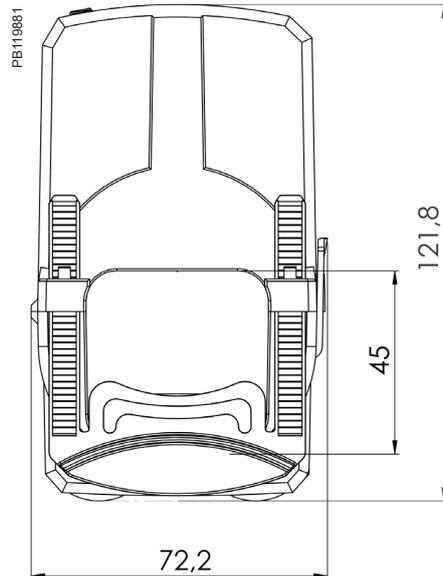
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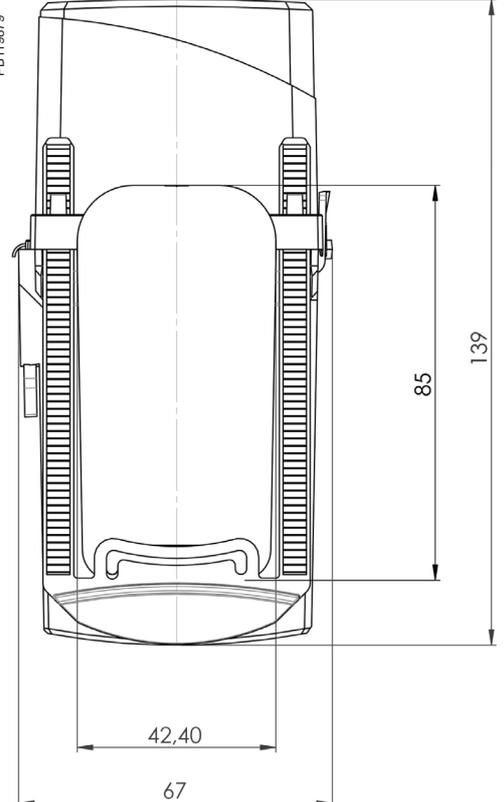
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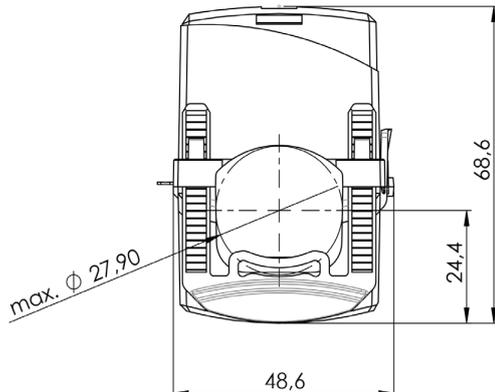
METSECT5HPxxx



METSECT5HMxxx



METSECT5HDxxx



PB119871

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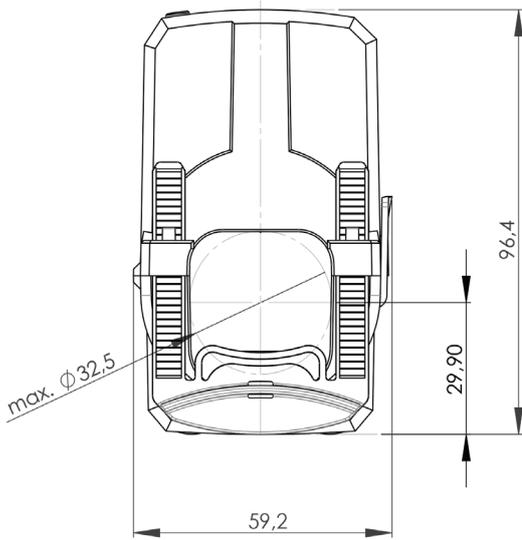
PB119873

## 2 Dimensions

NOTE: All dimensions are in mm (For inch conversion: 1 inch = 25.4 mm).  
NOTE: Refer to section 5 for detailed commercial reference information.

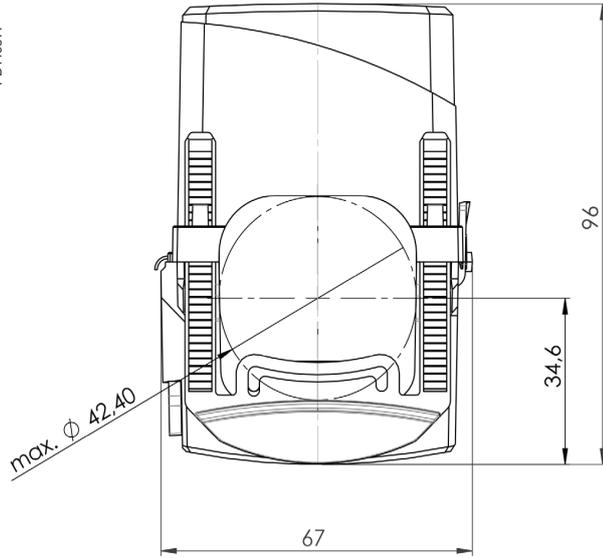
PB119875

METSECT5HGxxx



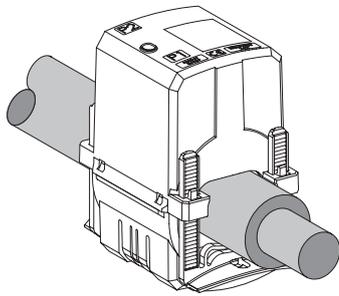
PB119877

METSECT5HJxxx

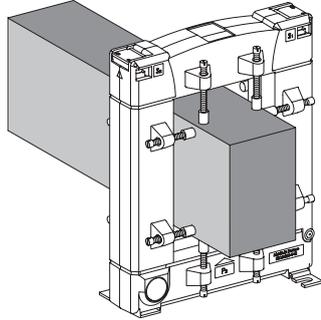


## 3 Mounting

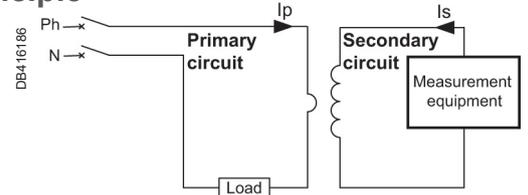
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DB445255



## 4 CT principle



When the primary circuit is energized, the measurement equipment acts as a short circuit which keeps the secondary voltage very low. This voltage increases significantly if the short circuit is removed.

**NOTE: Always keep the secondary circuit connected to low impedance path or short the current signal terminals of the measuring instrument.**

## 5 CT description

CT with let-through primary	CT internal type	Internal profile type and dimension in mm	Ip/5 A rating (A)*	Accuracy class VA rating			CT Commercial reference
				0.5	1	3	
<b>Type G - split core CT (bus bar)</b>							
 PB119862	GA	 FF V2 23 x 33	100	-	-	1.25	METSECT5GA010
			150	-	-	1.5	METSECT5GA015
			200	-	-	2.5	METSECT5GA020
			250	-	1.5	-	METSECT5GA025
			300	-	3.75	-	METSECT5GA030
			400	1	-	-	METSECT5GA040
 PB119864	GD	 FF V2 55 x 85	250	-	1.5	-	METSECT5GD025
			300	-	2.5	-	METSECT5GD030
			400	1	-	-	METSECT5GD040
			500	2.5	-	-	METSECT5GD050
			600	2.5	-	-	METSECT5GD060
			750	2.5	-	-	METSECT5GD075
			800	2.5	-	-	METSECT5GD080
			1000	5	-	-	METSECT5GD100
 PB119866	GG	 FF V2 85 x 125	250	-	1.5	-	METSECT5GG025
			300	-	2.5	-	METSECT5GG030
			400	-	2.5	-	METSECT5GG040
			500	2.5	-	-	METSECT5GG050
			600	2.5	-	-	METSECT5GG060
			750	2.5	-	-	METSECT5GG075
			800	2.5	-	-	METSECT5GG080
			1000	5	-	-	METSECT5GG100
			1200	5	-	-	METSECT5GG120
			1250	7.5	-	-	METSECT5GG125
			1500	7.5	-	-	METSECT5GG150

\* Maximum rated current (Imax) is 1.2 times of the primary current (Ip).

# 5 CT description

CT with let-through primary	CT internal type	Internal profile type and dimension in mm	Ip/5 A rating (A)*	Accuracy class VA rating			CT Commercial reference			
				0.5	1	3				
<b>Type G - split core CT (bus bar)</b>										
 PB119868	GJ	 FF V2 85 x 165	1000	10	-	-	METSECT5GJ100			
			1200	10	-	-	METSECT5GJ120			
			1500	10	-	-	METSECT5GJ150			
			1600	10	-	-	METSECT5GJ160			
			2000	10	-	-	METSECT5GJ200			
			2500	10	-	-	METSECT5GJ250			
			3000	15	-	-	METSECT5GJ300			
			4000	15	-	-	METSECT5GJ400			
<b>Type H - split core CT (cable)</b>										
 PB119872	HA	 18.4 x 19	150	-	1	-	METSECT5HA015			
			200	-	1.5	-	METSECT5HA020			
			250	1	-	-	METSECT5HA025			
	HD	 27.9 x 27	250	-	1	-	METSECT5HD025			
			300	-	1.5	-	METSECT5HD030			
			400	-	2.5	-	METSECT5HD040			
 PB119874	HG	 Ø32.5	100	-	-	1.5	METSECT5HG010			
			125	-	-	2.5	METSECT5HG013			
			150	-	-	3	METSECT5HG015			
			200	-	-	3	METSECT5HG020			
			250	-	-	3	METSECT5HG025			
			300	-	2.5	-	METSECT5HG030			
			400	-	5	-	METSECT5HG040			
			500	-	5	-	METSECT5HG050			
			600	-	5	-	METSECT5HG060			
			 PB119876	HJ	 42.4 x 43	300	-	2.5	-	METSECT5HJ030
400	-	5				-	METSECT5HJ040			
500	-	5				-	METSECT5HJ050			
600	2.5	-				-	METSECT5HJ060			
750	2.5	-				-	METSECT5HJ075			
800	2.5	-				-	METSECT5HJ080			
 PB119878	HM	 42.4 x 85				300	-	2.5	-	METSECT5HM030
						400	-	5	-	METSECT5HM040
			500	-	5	-	METSECT5HM050			
			600	2.5	-	-	METSECT5HM060			
			750	2.5	-	-	METSECT5HM075			
			800	2.5	-	-	METSECT5HM080			
 PB119874	HP	 Ø44	250	-	1.5	-	METSECT5HP025			
			300	-	2.5	-	METSECT5HP030			
			400	-	5	-	METSECT5HP040			
			500	-	5	-	METSECT5HP050			
			600	-	5	-	METSECT5HP060			
			750	-	5	-	METSECT5HP075			
			800	-	5	-	METSECT5HP080			
			1000	-	5	-	METSECT5HP100			

\* Maximum rated current (Imax) is 1.2 times of the primary current (Ip).

# 6 Installation

1. Turn off and lock out power to the primary circuit before installing the CT.
2. Use a properly rated voltage sensing device to confirm that power is off.
3. Connect the secondary output terminals of the CT to the respective current input terminals of the measuring instruments. Follow local / IEC guidelines on looping S2 terminals at CT, instruments and connect through the CT shorting block.
4. Release the clasp on one side of the CT and open it on the hinge. Check the core ends on both sections of the CT to ensure there is no debris in the closure areas.
5. Wrap the CT around the primary lead. A label on the product indicates the source side.
6. Close the CT until the clasp clicks into place to ensure that the contact surfaces are firmly seated.
7. Reconnect power and follow the installation guidelines for energizing the panel.

# 7 Specifications

- Secondary current Is (A): 5 A
- Maximum voltage rating Ue (V): 720 V
- Frequency: 50 / 60 Hz (Range: 47 - 63 Hz)
- Accuracy class: 0.5 -1, 3
- Instrument security / Safety factor (sf):  
**For Type G - split core CTs (bus bar)**  
 Up to 1000 A: ≤5  
 More than 1000 A: ≤10  
**For Type H - split core CTs (cable)**  
 Up to 1500 A: ≤5  
 More than 1500 A: ≤10
- Rated short time thermal current: 60 times the Ip current for 1 second (max 60 kA)
- Dielectric strength test: 3 kV, 50 Hz for one minute
- Degree of protection: IP20
- Operating temperature:  
**For Type G - split core CTs (bus bar)**  
 -5 to +40 °C (+23 to +104 °F)  
**For Type H - split core CTs (cable)**  
 -5 to +50 °C (+23 to +122 °F)
- Storage temperature: -25 to +70 °C (-13 to +158 °F)
- 5% to 85% RH non-condensing
- Standard compliance: IEC 61869-1, IEC 61869-2, VDE 0414
- Altitude of Operation: 3000 m (9843 ft)
- Pollution degree 2
- Insulation class: E
- Installation category III
- For indoor use only
- Secondary connection:  
 by terminals for lug or by tunnel terminals or by screws

## China ROHS Certificate

The "Administrative Measures for the Restriction of Hazardous Substances in Electric Appliance and Electronic Products" requires this document to be shipped with all IEC Type 5 A Split-core Current Transformer products to the People's Republic of China. Purchasers in other countries may disregard.

Les "Administrative Measures for the Restriction of Hazardous Substances in Electric Appliances and Electronic Products" exige que ce document soit transporté avec tous les produits de IEC Type 5 A Split-core Current Transformer en République Populaire de Chine. Les acheteurs des autres pays peuvent le négliger.

Las "Administrative Measures for the Restriction of Hazardous Substances in Electric Appliances and Electronic Products" requiere que este documento sea enviado con todos los productos IEC Type 5 A Split-core Current Transformer a la República Popular de China. Los usuarios en otros países pueden ignorar este documento.

**Product/ Produit/ Producto:** IEC Type 5 A Split-core Current Transformer

产品系列: 电力量度器仪及配件



部件名称 / Part Name	产品中有害有毒物质或元素的名称及含量 / Hazardous Substances					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr(VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
金属部件 / Metal parts	O	O	O	O	O	O
塑料部件 / Plastic parts	O	O	O	O	O	O
电子线路板 / PCBA	X	O	O	O	O	O

本表格依据SJ/T11364的规定编制。

O = 表示该有毒有害物质在该部件所有均质材料中的含量均在 SJ/T11363-2006 标准规定的限量要求以下。  
 X = 表示该有毒有害物质至少在该部件的某一均质材料中的含量超出SJ/T11363-2006标准规定的限量要求。

This table is made according to SJ/T 11364.

O: indicates that the concentration of hazardous substance in all of the homogeneous materials for this part is below the limit as stipulated in GB/T 26572.

X: indicates that concentration of hazardous substance in at least one of the homogeneous materials used for this part is above the limit as stipulated in GB/T 26572.

## Notices

Read these instructions carefully and look at the equipment to become familiar with the device before trying to install, operate, service or maintain it.

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.

**Schneider Electric is the trademark or registered trademark of Schneider Electric in France, the USA and other countries.**

- This product must be installed, connected and used in compliance with prevailing standards and/or installation regulations.
- If this product is used in a manner not specified by the manufacturer, the protection provided by the product may be impaired.
- The safety of any system incorporating this product is the responsibility of the assembler/installer of the system.

As standards, specifications and designs change from time to time, always ask for confirmation of the information given in this publication.