

SC30, SC40-B/-C, SC50-E, SC50-L Split-Core Current Transformers

3-349-780-03
2/3.17

- Compact, split-core current transformers for primary nominal current from 60 A ... 1000 A and secondary nominal current of 1 A or 5 A.
- Very easy and time-saving installation thanks to split-core design.
- Particularly suited for retrofit purposes since the dismantling of primary leads is not necessary
- Allows for retrofitting without interrupting mains power supply
- Compact design allows for use in areas with restricted access and confined space
- Clearly audible click sound confirms proper installation. Additional safety is provided by UV proof cable ties.
- Accuracy class: 0.5, 1 or 3, depending on type



Application

Thanks to their compact design, the split-core current transformers are especially suited for use in areas of restricted access and confined space. The separable core makes it easier to install the transformers on cables or rails. The split-core current transformers are the right choice when an interruption of the electrical circuit is difficult or a measuring instrument has to be easily and quickly refitted. The safe installation of the primary lead in the current transformer is guaranteed by the mechanical design and is confirmed by a distinctly audible click sound. Two UV proof cable ties, which are part of the standard equipment, help to fix the transformer additionally.

Conditions of Use

Standard	IEC 61869-2
Rated short-term thermal current (I _{th}) 60 x I _{pr} /1s	
Rated continuous thermal current (I _{cth}) 100%	
Rated insulation level	0.72/3/- kV
Rated frequency	50/60 Hz
Material (housing)	PA 6.6, UL94:V2
Class of insulation	E (120 °C)
Cable opening	SC30: for leads with a max. dia. of 18 mm SC40-B: for leads with a max. dia. of 18 mm SC40-C: for leads with a max. dia. of 28 mm SC50-E: for leads with a max. dia. of 42 mm SC50-L: for leads with a max. dia. 2x 42 mmf

Technical Characteristics

Ambient Conditions

Deployment	indoor
Ambient temperature	-10 °C ... + 55 °C
Storage temperature	-20 °C ... + 70 °C
Relative humidity	5% ... 85%, no condensation allowed
Pollution degree	2
Protection class	IP20
Only suited for insulated primary conductors	

Length and cross-section of secondary lead as a function of:

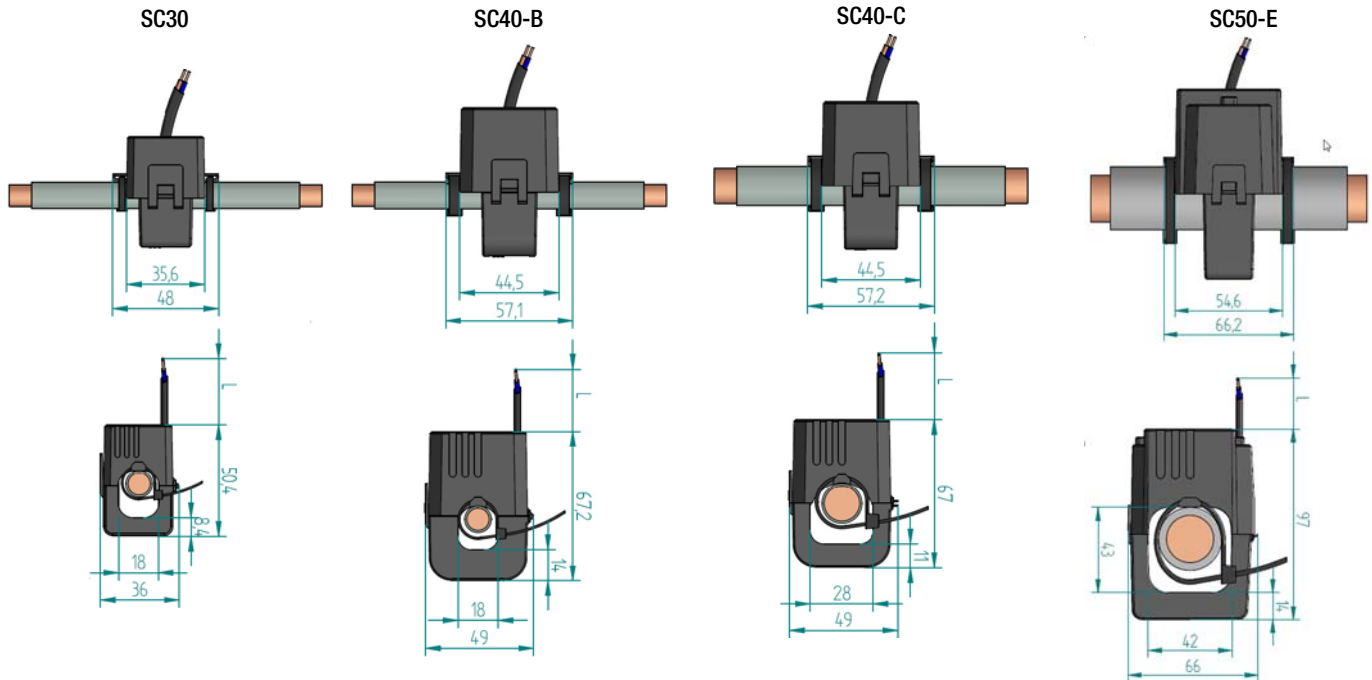
SC30: .../1A:	L = 3 m	0,5 mm ²
SC40-B: .../1A:	L = 3 m	0.5mm ²
SC40-B: .../5A:	L = 0.5 m	1.5mm ²
SC40-C: .../1A:	L = 3 m	0.5mm ²
SC40-C: .../5A:	L = 0.5 m	1.5mm ²
SC50-E .../1A:	L = 5 m	0.5mm ²
SC50-E .../5A:	L = 3 m	1.5mm ²
SC50-L .../1A:	L = 5 m	0,5mm ²
SC50-L .../5A:	L = 3 m	1,5mm ²

Weight

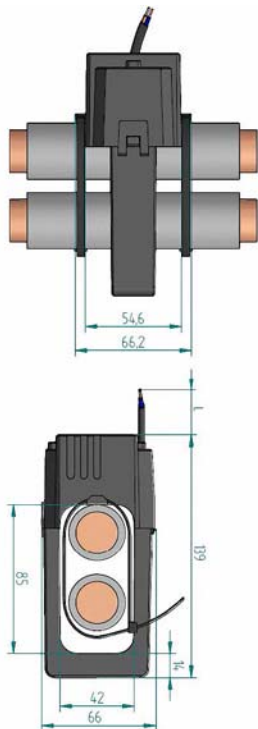
SC30: .../1A:	200 g
SC40-B: .../1A:	360 g
SC40-B: .../5A:	300 g
SC40-C: .../1A:	310 g
SC40-C: .../5A:	250 g
SC50-E .../1A:	525 g
SC50-E .../5A:	650 g
SC50-L .../1A:	725 g
SC50-L .../5A:	850 g

SC30, SC40-B/-C, SC50-E, SC50-L Split-Core Current Transformers

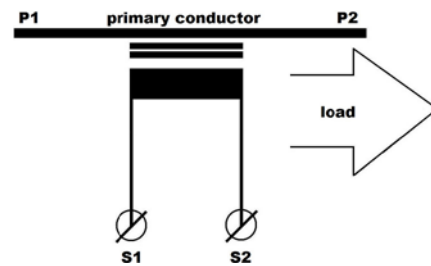
Dimensions



SC50-L



Wiring Diagram



SC30, SC40-B/-C, SC50-E, SC50-L Split-Core Current Transformers

Order Information

SC30 – Dia. 18 mm

Transmission factor	Class	Burden ¹⁾	Secondary lead	Article number
60/1A	3	0.2 V/A	3 m, 0.5 mm ²	U118A
75/1A	3	0.2 V/A	3 m, 0.5 mm ²	U118B
100/1A	3	0.2 V/A	3 m, 0.5 mm ²	U118C
125/1A	3	0.2 V/A	3 m, 0.5 mm ²	U118D
150/1A	3	0.2 V/A	3 m, 0.5 mm ²	U118E
200/1A	1	0.2 V/A	3 m, 0.5 mm ²	U118F
250/1A	1	0.2 V/A	3 m, 0.5 mm ²	U118G

¹⁾ burden at the end of the secondary lead

SC40-B – Dia. 18 mm

Transmission factor	Class	Burden	Secondary lead	Article number
100/1A	1	0.2 V/A	3 m, 0.5 mm ²	U118H
125/1A	1	0.2 V/A	3 m, 0.5 mm ²	U118I
150/1A	1	0.2 V/A	3 m, 0.5 mm ²	U118J
200/1A	0.5	0.2 V/A	3 m, 0.5 mm ²	U118K
250/1A	0.5	0.2 V/A	3 m, 0.5 mm ²	U118L
150/5A	1	1 V/A	0.5 m, 1.5 mm ²	U518A
200/5A	1	1 V/A	0.5 m, 1.5 mm ²	U518B
250/5A	0.5	1 V/A	0.5 m, 1.5 mm ²	U518C

SC40-C – Ø 28 mm

Transmission factor	Class	Burden	Secondary lead	Article number
200/1A	1	0.2 V/A	3 m, 0.5 mm ²	U128A
250/1A	1	0.2 V/A	3 m, 0.5 mm ²	U128B
300/1A	1	0.2 V/A	3 m, 0.5 mm ²	U128C
400/1A	1	0.2 V/A	3 m, 0.5 mm ²	U128D
500/1A	0.5	0.2 V/A	3 m, 0.5 mm ²	U128E
250/5A	1	1 V/A	0.5 m, 1.5 mm ²	U528A
300/5A	1	1 V/A	0.5 m, 1.5 mm ²	U528B
400/5A	1	1 V/A	0.5 m, 1.5 mm ²	U528C
500/5A	1	1 V/A	0.5 m, 1.5 mm ²	U528D

SC50-E – Dia. 42 mm

Transmission factor	Class	Burden ¹⁾	Secondary lead	Article number
250/1A	1	0.5 V/A	5 m, 0.5 mm ²	U142A
300/1A	1	0.5 V/A	5 m, 0.5 mm ²	U142B
400/1A	0.5	0.5 V/A	5 m, 0.5 mm ²	U142C
500/1A	0.5	0.5 V/A	5 m, 0.5 mm ²	U142D
600/1A	0.5	0.5 V/A	5 m, 0.5 mm ²	U142E
750/1A	0.5	0.5 V/A	5 m, 0.5 mm ²	U142F
800/1A	0.5	0.5 V/A	5 m, 0.5 mm ²	U142G
1000/1A ²⁾	0.5	0.5 V/A	5 m, 0.5 mm ²	U142H
300/5A	1	0.5 V/A	3 m, 1.5 mm ²	U542A
400/5A	1	0.5 V/A	3 m, 1.5 mm ²	U542B
500/5A	1	0.5 V/A	3 m, 1.5 mm ²	U542C
600/5A	0.5	0.5 V/A	3 m, 1.5 mm ²	U542D
750/5A	0.5	0.5 V/A	3 m, 1.5 mm ²	U542E
800/5A	0.5	0.5 V/A	3 m, 1.5 mm ²	U542F
1000/5A ²⁾	0.5	0.5 V/A	3 m, 1.5 mm ²	U542G

¹⁾ burden at the end of the secondary lead

²⁾ Ambient temperature -10 °C ... +40 °C

SC50-L – Dia. 2x 42 mm

Transmission factor	Class	Burden ¹⁾	Secondary lead	Article number
250/1A	1	0.5 V/A	5 m, 0.5 mm ²	U184A
300/1A	1	0.5 V/A	5 m, 0.5 mm ²	U184B
400/1A	0.5	0.5 V/A	5 m, 0.5 mm ²	U184C
500/1A	0.5	0.5 V/A	5 m, 0.5 mm ²	U184D
600/1A	0.5	0.5 V/A	5 m, 0.5 mm ²	U184E
750/1A	0.5	0.5 V/A	5 m, 0.5 mm ²	U184F
800/1A	0.5	0.5 V/A	5 m, 0.5 mm ²	U184G
1000/1A ²⁾	0.5	0.5 V/A	5 m, 0.5 mm ²	U184H
300/5A	1	0.5 V/A	3 m, 1.5 mm ²	U584A
400/5A	1	0.5 V/A	3 m, 1.5 mm ²	U584B
500/5A	1	0.5 V/A	3 m, 1.5 mm ²	U584C
600/5A	0.5	0.5 V/A	3 m, 1.5 mm ²	U584D
750/5A	0.5	0.5 V/A	3 m, 1.5 mm ²	U584E
800/5A	0.5	0.5 V/A	3 m, 1.5 mm ²	U584F
1000/5A ²⁾	0.5	0.5 V/A	3 m, 1.5 mm ²	U584G

¹⁾ burden at the end of the secondary lead

²⁾ Ambient temperature -10 °C ... +40 °C

SC30, SC40-B/-C, SC50-E, SC50-L Split-Core Current Transformers

Edited in Germany • Subject to change without notice • A PDF version is available on the internet

 **GOSSEN METRAWATT**

GMC-I Messtechnik GmbH
Südwestpark 15
90449 Nürnberg • Germany

Phone +49 911 8602-111
Fax +49 911 8602-777
E-Mail info@gossenmetrawatt.com
www.gossenmetrawatt.com