

DATASHEET

STH Series

Low-voltage current transformers for measurement, monitoring and protection.



PRODUCT OVERVIEW

The STH range of current transformers can be used to test, control, display and record the operation of electrical equipment, and to protect equipment against damage in AC circuits with rated voltages below 720 V and frequencies of 50/60 Hz. The products can also be used as part of a complete mine-transformer assembly.

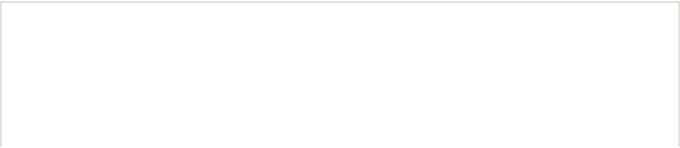
FEATURES

- Safe, easy to install and portable.
- Wide inner window allows clamping of large cables or busbars.
- Wide range of sizes accommodates existing installations.

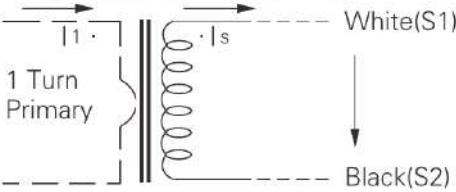
APPLICATIONS

- Current measurement, monitoring and protection for electrical wiring and equipment.
- Current and power measurement for motors, lighting, compressors, HVAC and automation-control systems.
- Current, power and energy monitoring, and relay protection devices.

CIRCUIT CONNECTION DIAGRAM



Circuit connection diagram



1 turn primary — White (S1) → Black (S2), primary current I_1 , secondary current I_s .

ELECTRICAL PARAMETERS

PARAMETER	VALUE
Frequency	50/60 Hz
Rated input	1 A – 5000 A
Measuring range	5% I_n – 120% I_n
Rated output	1 A, 5 A
Rated voltage	0.72 kV AC
Dielectric strength	3.0 kV / 1 mA / 1 min
Insulation resistance	DC 500 V / 100 MΩ minimum

MECHANICAL PARAMETERS

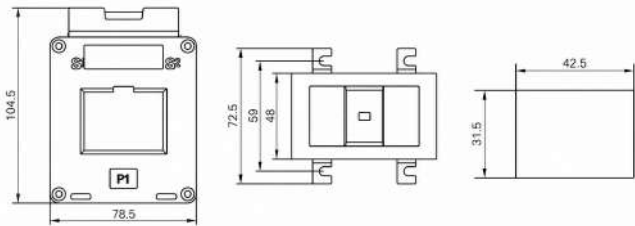
Case	PC / UL94-V0
Bobbin	PBT
Core	Silicon steel
Construction	Screw

Operating temperature	-25°C to +75°C
Operating humidity	≤85%
Output connection	Terminal



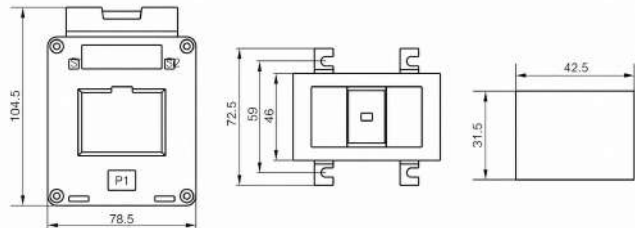
STH-40

STH-40



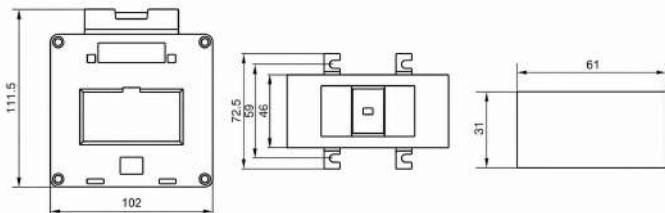
STH-50

STH-50



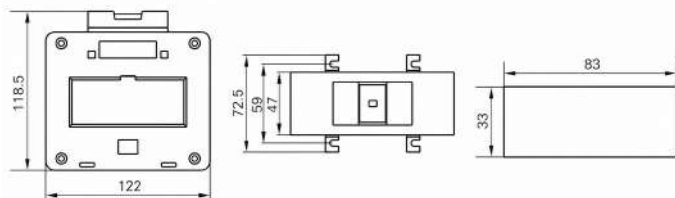
STH-60

STH-60



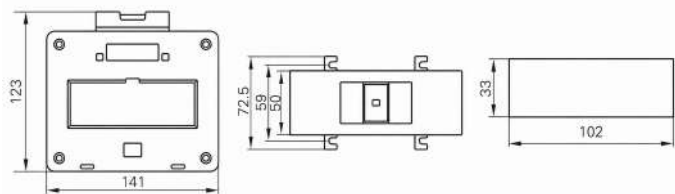
STH-80

STH-80



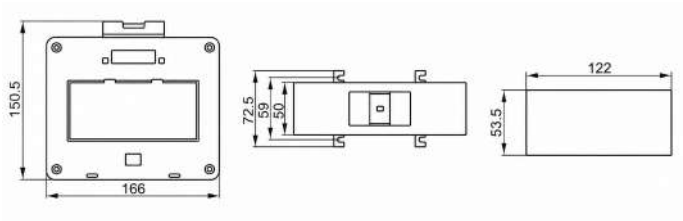
STH-100

STH-100

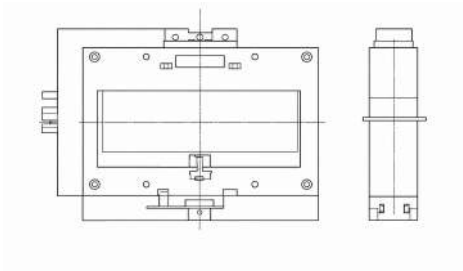




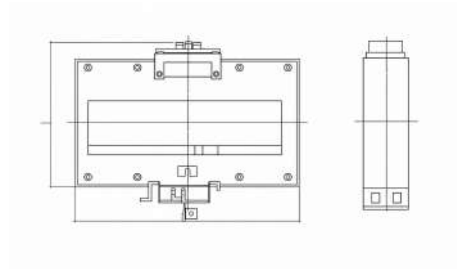
STH-120



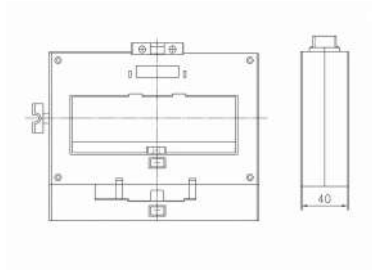
STH-130



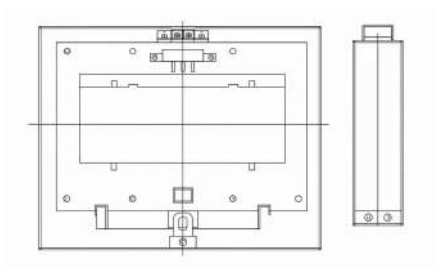
STH-150



STH-180



STH-220



Technical parameters by model

Ratio shown as primary current / 5 A secondary. Rated frequency 50/60 Hz for all models.

STH-40

RATIO	CL. 0.5 (VA)	CL. 1.0 (VA)
150/5 A	2.5	10
200/5 A	5	5
250/5 A	5	5
300/5 A	5	5
400/5 A	5	5
500/5 A	10	10
600/5 A	10	10

STH-60

RATIO	CL. 0.5 (VA)	CL. 1.0 (VA)
300/5 A	5	5
400/5 A	5	5
500/5 A	5	5
600/5 A	5	5
750/5 A	5	5
800/5 A	10	10
1000/5 A	10	10
1200/5 A	10	10

STH-50

RATIO	CL. 0.5 (VA)	CL. 1.0 (VA)
200/5 A	5	5
250/5 A	5	5
300/5 A	5	5
400/5 A	5	5
500/5 A	5	5
600/5 A	10	10
750/5 A	10	10
800/5 A	10	10

STH-80

RATIO	CL. 0.5 (VA)	CL. 1.0 (VA)
750/5 A	5	5
800/5 A	5	5
1000/5 A	10	10
1200/5 A	10	10
1500/5 A	10	10
1600/5 A	10	10
2000/5 A	15	15

Technical parameters by model

Ratio shown as primary current / 5 A secondary. Rated frequency 50/60 Hz for all models.

STH-100

RATIO	CL. 0.5 (VA)	CL. 1.0 (VA)
1000/5 A	10	10
1200/5 A	20	10
1500/5 A	20	10
2000/5 A	20	10
2500/5 A	30	30
3000/5 A	30	30

STH-130

RATIO	CL. 0.5 (VA)	CL. 1.0 (VA)
1500/5 A	20	30
1600/5 A	20	30
2000/5 A	20	30
2500/5 A	20	30
3000/5 A	20	30
4000/5 A	20	30
5000/5 A	20	30
6000/5 A	20	30

STH-120

RATIO	CL. 0.5 (VA)	CL. 1.0 (VA)
1500/5 A	20	30
1600/5 A	20	30
2000/5 A	20	30
2500/5 A	20	30
3000/5 A	20	30
4000/5 A	20	30

STH-150

RATIO	CL. 0.5 (VA)	CL. 1.0 (VA)
1000/5 A	15	15
1250/5 A	15	15
1500/5 A	15	15
1600/5 A	15	15
2000/5 A	15	20
2500/5 A	15	20
3000/5 A	15	20
3200/5 A	15	20
3500/5 A	15	20
4000/5 A	15	20
5000/5 A	15	20
6000/5 A	20	30
7500/5 A	20	30
8000/5 A	20	30

Technical parameters by model

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Ratio shown as primary current / 5 A secondary. Rated frequency 50/60 Hz for all models.

STH-180

RATIO	CL. 0.5 (VA)	CL. 1.0 (VA)
1000/5 A	15	15
1250/5 A	15	15
1500/5 A	15	15
1600/5 A	15	15
2000/5 A	15	20
2500/5 A	15	20
3000/5 A	15	20
3200/5 A	15	20
3500/5 A	15	20
4000/5 A	15	20
5000/5 A	15	20
6000/5 A	20	30
7500/5 A	20	30
8000/5 A	20	30
10000/5 A	20	30

STH-220

RATIO	CL. 0.5 (VA)	CL. 1.0 (VA)
3000/5 A	20	20
4000/5 A	20	20
5000/5 A	20	20
6000/5 A	30	30
7000/5 A	30	30
7500/5 A	30	30
8000/5 A	30	30
10000/5 A	30	30

ACCURACY CLASS CHARACTERISTICS

