

# Accessories

## AC Current Transformer (max 23mm $\phi$ cable)

### Type CTD-1X

CARLO GAVAZZI



- Cable and bus-bar type current transformer
- 0.5 class, currents from 50 to 300 A
- Removable DIN-rail mounting holder
- Removable panel fixing clips
- 2 cable/bus-bar isolated fixing screws
- Double screw terminals (up to 8-wire connections)
- Sealable terminal block covers

### Product Description

Cable/Bus-bar type current transformer with DIN-rail/bus-bar and panel mounting facility. Rated primary currents from 50 A to 300 A.

### Ordering Key CTD-1X 100 5A XXX

Model \_\_\_\_\_  
 Primary current \_\_\_\_\_  
 Secondary current \_\_\_\_\_  
 Option \_\_\_\_\_

### Optional fixing kit: CTD-kit

### Type Selection

Primary current	Secondary current	Option
From 50 to 300A (Refer to Range Table)	1A 5A	XXX: none XTX: tropicalization

### Input Specifications

Operating frequency	48 to 62 Hz
Max. system voltage	0.72 kV
Rated insulation level	3 kV/1 min. @ 50 Hz
Insulation class	E (max 75°C)
Short-time current rating $I_{th}$ $I_{dyn}$	Typical 100 $I_n$ / 1 s 2.5 $I_{th}$ The short-time thermal current $I_{th}$ is anyway limited by the cable/bus-bar size
Extended current rating	120%
Security factor (FS)	$\leq 5$ (Class: 0.5, 1 and 3)

### General Specifications

Standards	According to EN60044-1
Housing	ABS, self-extinguishing: UL 94 V-0
Mounting	DIN-rail bus-bar and panel mounting
Standard accessories	Two terminal block screws. Two sealable terminal block covers. Two panel mounting fixing clips. One DIN rail adapter.
Optional accessories	Extended fixing kit CTD-kit: Six cable/bus-bar fixing screws. Six plastic caps for cable/bus-bar fixing screws.

#### Special features

Two panel mounting fixing clips.

1 A secondary current, Tropicalization

#### Working temperature

-25°C to +60°C (-13°F to 140°F) (R.H. < 90% non condensing @ 40°C)

#### Storage temperature

-30°C to +70°C (-22°F to 158°F) (R.H. < 90% non condensing @ 40°C)

#### Approvals

CE, cUrus and CSA

#### Connection

Cable cross section area

Screw type  
From 1.5 to 6 mm<sup>2</sup>  
Min/Max screws tightening torque relevant to terminal block screws:  
From 1 to 2 Nm  
Max screws tightening torque relevant to the cable/bus-bar fixing screws: 0,3 Nm

#### Protection degree

IP00  
IP20 (with sealable terminal block covers + wire terminals)

#### Cable diameter

Max. 23 mm

#### Bus-bar size

Max. 20x5 mm

#### Weight

From 150 to 200 g

### Output Specifications

Rated secondary current 5 A or 1 A

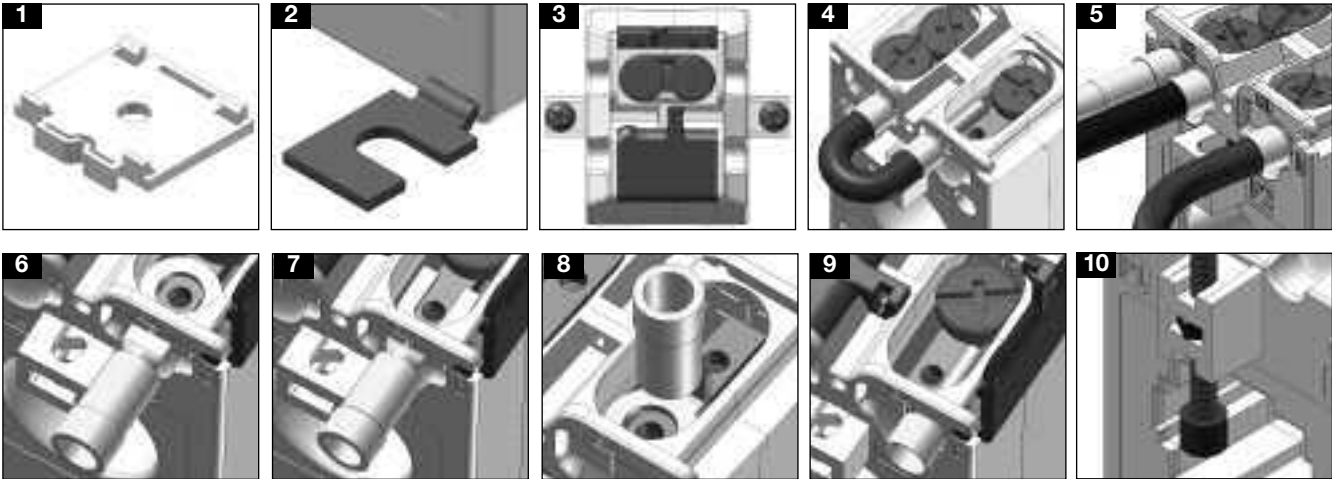


Range Table

Model CTD-1X from 50A to 100A			
Primary Current	Burden (VA)		
A	CL 0.5	CL 1	CL 3
50 (@60°C/140°F)		1	1.25
60 (@60°C/140°F)		1	1.25
70 (@60°C/140°F)		1.5	1.75
75 (@60°C/140°F)	1	1.25	1.75
80 (@60°C/140°F)	1.25	1.5	2
100 (@60°C/140°F)	1.5	1.75	2.25

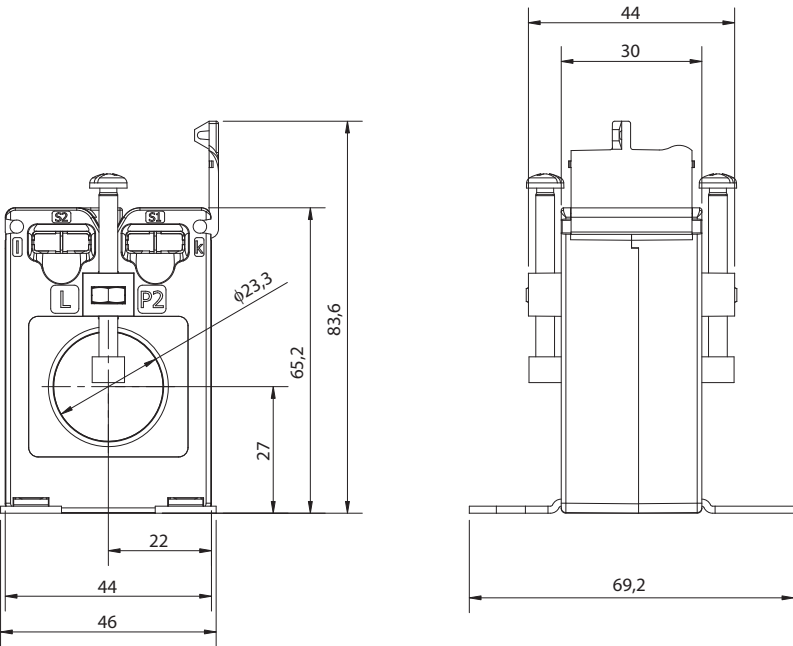
Model CTD-1X from 120A to 300A			
Primary Current	Burden (VA)		
A	CL 0.5	CL 1	CL 3
120 (@60°C/140°F)	1.75	2	2.5
125 (@60°C/140°F)	2	2.25	2.75
150 (@60°C/140°F)	2.25	2.5	3
160 (@60°C/140°F)	2.5	2.75	3.25
200 (@60°C/140°F)	3	3.25	3.75
250 (@50°C/122°F)	4.5	4.75	5.25
300 (@50°C/122°F)	5	5.5	6

Benefits



- Easy and quick mounting either on a panel or on a DIN-rail (see figure 1-2).
- Protection of screw terminals using specific sealable covers to assure always the best safety (see figure 3).
- Bridging of current transformer output without changing the connection of the secondary, so to avoid any output overvoltage during either the maintenance or the installation procedure (see figure 4).
- Easy output and earth connection (see fig. 5).
- Screw terminals compatible with any kind of wire terminals (see figure 6-7-8-9).
- Multiple screws provided with insulation caps to grant a strong and reliable fixing of the current transformer to the bus-bar (see figure 10).

Dimensions (mm)



Wiring Diagram

