# Accessories AC Current Transformer (max 23mm Ø cable) Type CTD-1X

#### **CARLO GAVAZZI**



#### **Product Description**

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

- 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

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

# Optional fixing kit: CTD-kit

### **Type Selection**

Primary current	Secondary current	Option
From 50 to 300A	1A	XXX: none
(Refer to Range Table)	5A	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 <sub>th</sub> I <sub>dyn</sub>	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)	≤ 5 (Class: 0.5, 1 and 3)

### **General Specifications**

Standards	According to EN61869-2
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.

	Two panel mounting fixing clips.
Special features	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 termi nals)
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)			
Α	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)			
Α	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).

#### Wiring Diagram



### **Dimensions (mm)**



