



Zero Adjustment	Approx. ±5% of span. (Adjustable by the front-accessible trimmer.)
Span Adjustment	Approx. ±5% of span. (Adjustable by the front-accessible trimmer.)

Ranges Available	Current Signal	Voltage Signal
Output Range (DC)	0 to 20mA	-10 to 10V
Output Span (DC)	4 to 20mA	10mV to 20V
Output Bias	0 to 100%	-100 to 100%

Note: For current output signals, the accuracy of any current output smaller than 0.1mA is not guaranteed.

Output Spec. Ex. 1: For 4 to 20mA output, the output span is 16mA and the bias +25%.

Output Spec. Ex. 2: For -1 to 4V output, the output span is 5V and the bias -20%.

### ● PERFORMANCE

Accuracy Rating	Better than ±0.4% of span with at least 10% input (at 25°C±5°C).
Temperature Effect	Better than ±0.2% of span per 10°C change in ambient.
Response Time	450ms max. (0 to 90%) with a step input at 100%.
CMRR	100dB min. (500V AC, 50/60Hz)
Isolation	4-way isolation between input, output 1, output 2, and power.
Insulation Resistance	100MΩ min. (@ 500V DC) between input, output 1, output 2, power, and ground.
Dielectric Strength	Input / [Output 1, Output 2] / [Power, Ground]: 2000V AC for 1 minute (Cutoff current: 0.5mA) Power / Ground: 2000V AC for 1 minute (Cutoff current: 5mA) Output 1 / Output 2: 500V AC for 1 minute (Cutoff current: 0.5mA)
Surge Withstand Capability	Tested as per ANSI/IEEE C37.90.1-1989.
Operating Environment	Ambient temperature: -5 to 55°C Humidity: 5 to 90% RH (non-condensing)
Storage Temperature	-10 to 60°C

### ● PHYSICAL

Installation	Wall/DIN rail mounting
Wiring	M3.5 screw terminal connection (with a power terminal block cover & drop-proof screws)
Screwing Torque	0.8 to 1.0 [Nm] * Recommended
External Dimensions	W29 × H86 × D125 mm (including the mounting screw and socket)
Weight	Main unit: 120g max. Socket: 80g max.

### ● MATERIAL

Housing	ABS resin (UL 94V-0)
Terminal Block	PBT resin (UL 94V-0)
Terminal Block Cover	PC resin (UL 94V-2)
DIN Rail Stopper	PP resin (UL 94HB)
Screw Terminal	Nickel-plated steel

Contacts Material and Finish	Brass with 0.2μm gold plating
Printed Circuit Board	Glass fabric, epoxy resin (FR-4: UL 94V-0)

### CLAMP TYPE CT SPECIFICATIONS

#### ● CTF-5A

##### Input 0-5A

Rated Primary Current	5A AC (rms)
Maximum Allowable Current	100A (rms), continuous.
Applicable Wire Size	φ7.9 mm max.
External Dimensions	W25.3 × H41.3 × D33 mm (not including the protrusion)
Weight	Approx. 60g

#### ● CTF-50A

##### Input (0-10A) to (0-50A)

Rated Primary Current	50A AC (rms)
Maximum Allowable Current	100A (rms), continuous.
Applicable Wire Size	φ9.5 mm max.
External Dimensions	W25.5 × H48 × D23 mm (not including the protrusion)
Weight	Approx. 45g

#### ● CTF-100A

##### Input (0-60A) to (0-100A)

Rated Primary Current	100A AC (rms)
Maximum Allowable Current	200A (rms), continuous.
Applicable Wire Size	φ14.5 mm max.
External Dimensions	W30.5 × H55 × D29.5 mm (not including the protrusion)
Weight	Approx. 80g

#### ● CTF-200A

##### Input (0-125A) to (0-200A)

Rated Primary Current	200A AC (rms)
Maximum Allowable Current	300A (rms), continuous.
Applicable Wire Size	φ24 mm max.
External Dimensions	W35.5 × H76 × D45 mm (not including the protrusion)
Weight	Approx. 190g

#### ● CTF-400A

##### Input (0-225A) to (0-400A)

Rated Primary Current	400A AC (rms)
Maximum Allowable Current	600A (rms), continuous.
Applicable Wire Size	φ35.5 mm max.

External Dimensions	W35.5 × H94 × D62.5 mm (not including the protrusion)
Weight	Approx. 310g

●CTF-600A

Input (0-500A) to (0-600A)

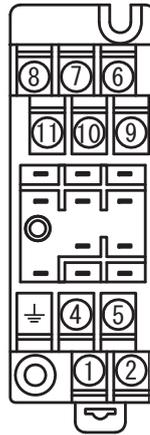
Rated Primary Current	600A AC (rms)
Maximum Allowable Current	800A (rms), continuous.
Applicable Wire Size	φ35.5 mm max.
External Dimensions	W35.5 × H94 × D62.5 mm (not including the protrusion)
Weight	Approx. 360g

●GENERAL SPECIFICATIONS

Applicable Frequency	50Hz/60Hz/400Hz
Accuracy	±1%
Open-Circuit Protection	Built-in overvoltage clamping device; clamping voltage 7.5V
Insulation Resistance	100MΩ min. (@ 500V DC) between the housing and output terminals.
Dielectric Strength	2200V AC for 1 minute between the housing and output terminals. (Cutoff current: 0.5mA)
Operating Environment	Ambient temperature: -10 to 60°C Humidity: 5 to 80% RH (non-condensing)

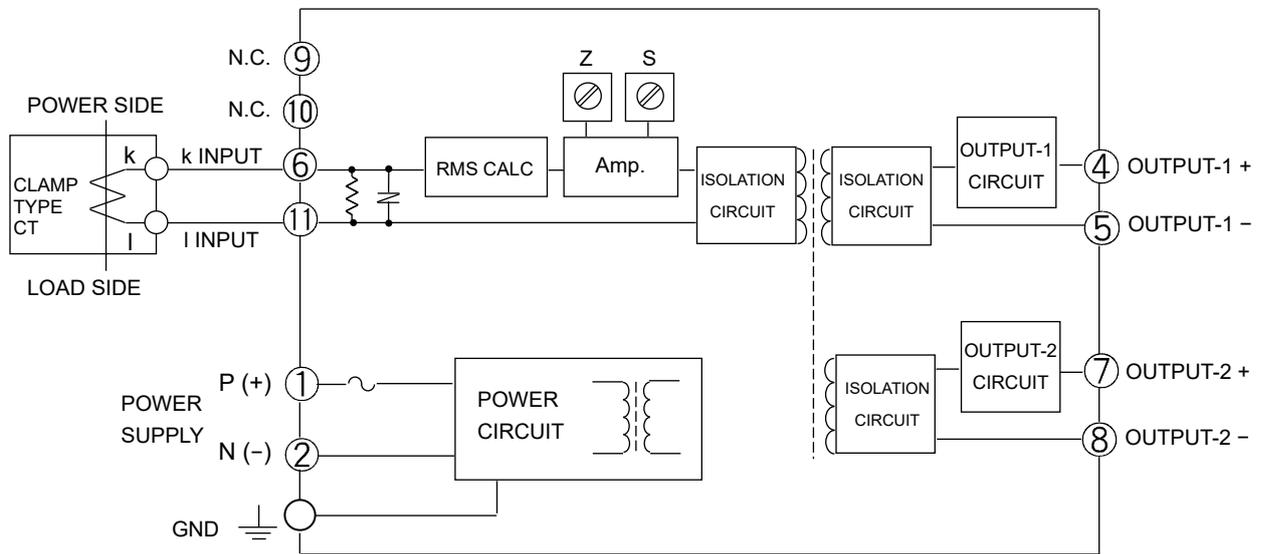
Storage Temperature	-20 to 60°C
Wiring	M3 screw terminal connection
Screwing Torque	0.5 [Nm] * Recommended
CT Output Cable	Shielded cable with a nominal conductor cross-section of 0.5 to 2.0 mm <sup>2</sup>
Housing Material	PP resin (UL 94V-0)

TERMINAL ASSIGNMENTS



①	P (+)	POWER
②	N (-)	
⊥	GND	
④	+ OUTPUT 1	
⑤	- OUTPUT 1	
⑥	k INPUT	
⑦	+ OUTPUT 2	
⑧	- OUTPUT 2	
⑨	N.C.	
⑩	N.C.	
⑪	I INPUT	

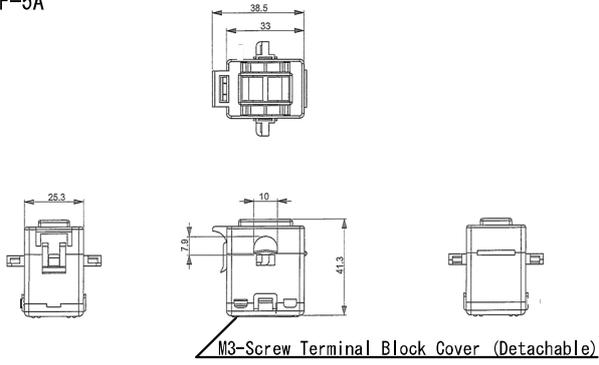
BLOCK DIAGRAM



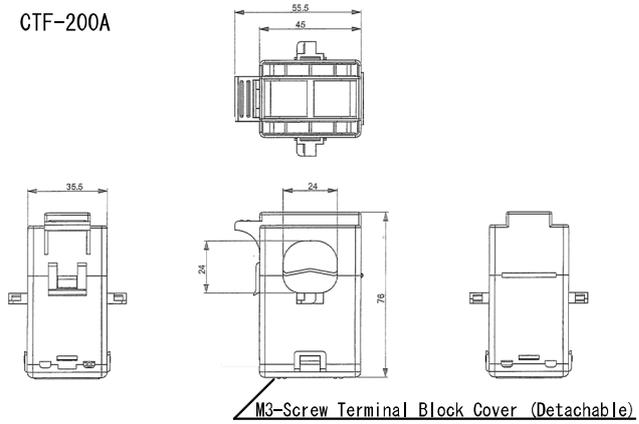
\* The output terminals of the supplied clamp type CT should be connected to the input terminals on the transmitter's terminal block.  
 \* A connecting cable is not included.  
 \* A shielded cable not longer than 30 meters should be used to connect the clamp type CT to the transmitter's terminal block.

**DIMENSIONAL OUTLINE DRAWINGS**

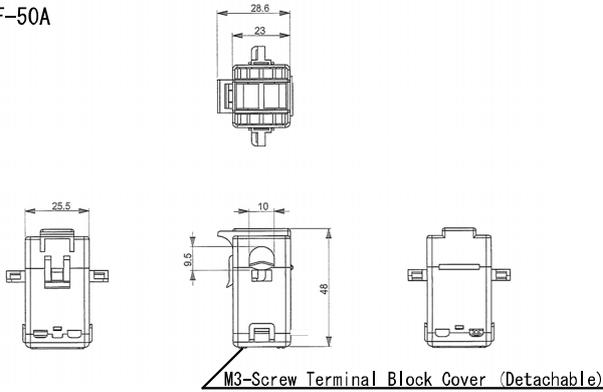
CTF-5A



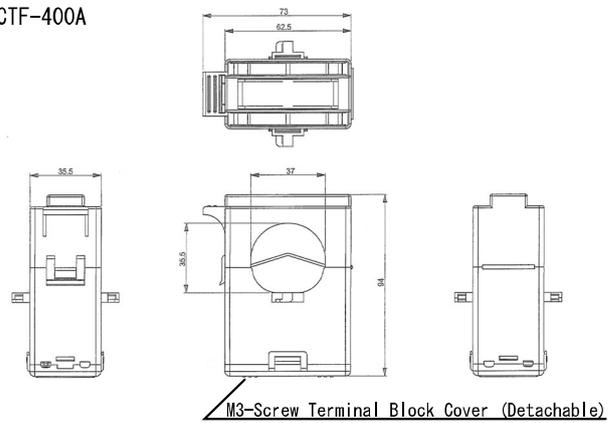
CTF-200A



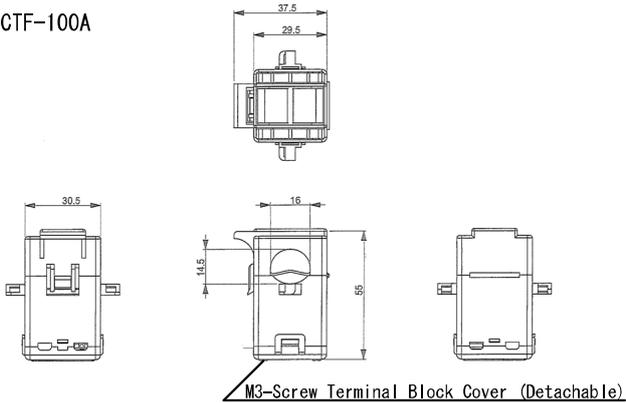
CTF-50A



CTF-400A



CTF-100A



CTF-600A

