

5-1 Current transformers

CW Series Low-voltage Current Transformers (less than or equal to 1100V)

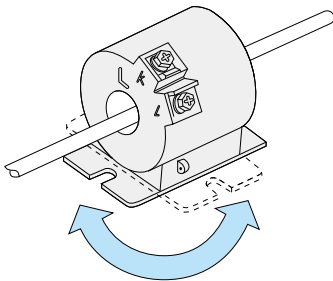
CW-5L/CW-15L/CW-40L Cable wiring/Round window through-type



Use

- General-use meters

Features



- The direction of the mounting plate can be turned 90°.
- 600V vinyl wiring can be used for the primary conductor.
- Secondary terminal insulation cap (page 34) is available as an option.

Specifications

Applicable standard: JIS C 1731-1

Type	Rated primary current (A)		Rated burden (VA)	Accuracy (class)	Overcurrent strength (times)	Highest voltage/withstand voltage (kV)	Frequency (Hz)	External dimensions	Mass (kg)														
	Secondary current 5A	Secondary current 1A																					
CW-5L	60	60	5	1.0	40	1.15/4/-	Both 50/60	Fig. 5	1.9														
	75	75																					
	100	100																					
	120	120						15	1.0	40	1.15/4/-	Both 50/60	Fig. 1	0.6									
	150	150																					
	160	160																					
	180	180																					
	200	200																					
	240	240																					
	250	250											40	1.0	40	1.15/4/-	Both 50/60	Fig. 2	0.5				
	300	300																					
	400	400																					
	500	500																40	1.0	40	1.15/4/-	Both 50/60	Fig. 3
600	600																						
750	750																						
100	100	40	1.0	40	1.15/4/-	Both 50/60	Fig. 5																2.0
120	120																						
150	150																						
160	160						40	1.0	40	1.15/4/-	Both 50/60	Fig. 4											1.0
180	180																						
200	200																						
240	240											40											1.0
250	250																						
300	300																						
400	400												40	1.0	40	1.15/4/-	Both 50/60						
500	500																						
600	600																						
750	750																	40	1.0	40	1.15/4/-	Both 50/60	
150	150																						
160	160																						
180	180	40	1.0	40	1.15/4/-	Both 50/60																	
200	200																						
240	240																						
250	250						40	1.0	40	1.15/4/-	Both 50/60												
300	300																						
400	400																						
500	-											40											1.0
600	-																						
750	-																						

Notes

*1 Withstand voltage value indicates commercial power frequency withstand voltage/lightning impulse withstand voltage.

*2 Product weight may vary due to changes in core characteristics.

Regarding Rated Primary Current (current transformation ratio)

Through-type current transformers can be used for several rated primary currents by changing the through number of the primary conductor, and are therefore flexible and economical. (When ordering, be certain to specify the current transformation ratio □□□/□A, which is the primary conductor through number per one turn).

Example: If the current transformation ratio is 200/5A:

Through number 1 turn ∙∙Rated primary current 200A
 Through number 2 turns ∙∙Rated primary current 100A
 Through number 4 turns ∙∙Rated primary current 50A

These circuits can be used with this current transformer.

Refer to page 16 for proper use of through number in the primary conductor, rated primary current (current transformation ratio) and through-type enabled primary conductor size.

■ Using Primary Conductor Through Number and Rated Primary Current (current transformation ratio)

The following table specifies rated primary currents, through number in the conductor, and nominal cross-sectional areas of through enabled 600V vinyl wiring (600V IV wiring) (ϕ indicates a single-wire diameter).

The following table covers the allowable current of 600V vinyl wiring at the ambient temperature of 40°C.

5VA				5VA				5VA			
CW-5L				CW-5L				CW-5L			
Rated primary current (A)	Primary current (A)	Through No. (turns)	Primary conductor size (mm ²)	Rated primary current (A)	Primary current (A)	Through No. (turns)	Primary conductor size (mm ²)	Rated primary current (A)	Primary current (A)	Through No. (turns)	Primary conductor size (mm ²)
60	10	6	5.5	100	10	10	5.5	150	10	15	3.5
	15	4	14		20	5	14		15	10	5.5
	20	3	22		25	4	22		25	6	14
	30	2	22		50	2	38		30	5	14
	60	1	150		100	1	200		50	3	22
75	15	5	8	120	15	8	8	150	75	2	38
	25	3	22		20	6	14		150	1	200
	75	1	150		30	4	22				
100	10	10	$\phi 2$	150	10	15	3.5	160	20	8	8
	20	5	8		15	10	5.5		40	4	22
	25	4	14		25	6	8		80	2	38
	50	2	22		60	2	38		160	1	200
	100	1	150		120	1	200				
120	15	8	5.5	160	10	15	3.5	180	20	9	5.5
	20	6	8		15	10	5.5		30	6	14
	30	4	14		25	6	8		60	3	22
	40	3	22		30	5	14		90	2	38
	60	2	22		75	2	38		180	1	200
150	15	10	$\phi 2$	180	20	8	8	200	25	8	8
	25	6	8		40	4	22		40	5	14
	30	5	8		80	2	38		50	4	22
	50	3	22		160	1	200		100	2	38
	75	2	22						200	1	200
160	15	10	$\phi 2$	180	20	9	5.5	240	40	6	14
	25	6	8		30	6	8		60	4	22
	30	5	8		60	3	22		80	3	38
	50	3	22		90	2	38		120	2	60
	75	2	22		180	1	200		240	1	325
180	20	8	5.5	200	20	10	5.5	250	25	10	8
	40	4	14		25	8	8		50	5	22
	80	2	22		40	5	14		125	2	60
	160	1	150		50	4	22		250	1	325
					100	2	38				
200	20	9	$\phi 2$	240	30	8	8	300	30	10	8
	30	6	8		40	6	14		50	6	14
	60	3	22		60	4	38		60	5	22
	180	1	150		80	3	60		75	4	38
					120	2	60		100	3	60
240	40	6	14	250	20	10	5.5	400	40	10	8
	60	4	38		25	8	8		50	8	14
	80	3	60		40	5	22		100	4	38
	120	2	60		125	2	60		400	1	325
	240	1	325		250	1	325				
250	25	10	8	300	30	10	8	500	50	10	22
	50	5	22		50	6	14		100	5	60
	125	2	60		60	5	22		125	4	100
	250	1	325		75	4	38		250	2	200
					100	3	60		500	1	500
300	30	10	8	400	30	10	8	600	60	10	22
	50	6	14		50	8	14		75	8	38
	60	5	22		100	3	60		100	6	60
	75	4	38		150	2	60		150	4	100
	100	3	60		300	1	325		200	3	150
400	40	10	8	500	40	10	8	750	200	2	200
	50	8	14		50	8	14		300	2	200
	100	4	38		100	4	38		600	1	500
	400	1	325		400	1	325				
					50	10	22		75	10	22
500	50	10	22	600	50	10	22	750	150	5	60
	100	5	60		100	5	60		750	1	200 × 2 conductors
	125	4	100		125	4	100				
	250	2	200		250	2	200				
	500	1	500		500	1	500				
600	60	10	22	750	60	10	22				
	75	8	38		75	8	38				
	100	6	60		100	6	60				
	150	4	100		150	4	100				
	200	3	150		200	3	150				
750	300	2	200		300	2	200				
	600	1	500		600	1	500				
					75	10	22				
					150	5	60				
					750	1	200 × 2 conductors				