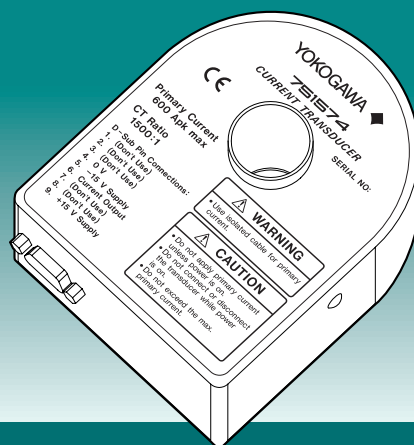


Current Transducer 751574



Power Measurement with Large Currents

The current transducer can be used for power measurement of large currents which cannot be measured directly using a power meter. Its highly precise, wide bandwidth characteristics (including DC) make it useful in a variety of applications such as those involving EV, inverters, and fuel cell power measurement.

Main Features

- **Wide dynamic range** 0A–600 A (DC), 600 A peak (AC)
- **Wide bandwidth** DC–100 kHz
- **High accuracy** $\pm(0.05\% \text{ of rdg} + 40 \mu\text{A})$

Specifications

Rated Current: DC 0–600 A
AC 600 A peak

Output Current: 400 mA (when the primary rated current of 600 A is flowing)

Current Transformation Ratio: 1500:1

Direction of Current: Per the arrows printed on the main unit.

Accuracy: DC $\pm(0.05\% \text{ of rdg} + 40 \mu\text{A})$
50/60 Hz $\pm(0.05\% \text{ of rdg} + 40 \mu\text{A})$
Within 3 months after calibration

Reference Conditions:
23 \pm 5°C, 30–70% RH, sine wave input
Input current 2 A–600 A, common mode voltage 0 V
Power supply voltage DC $\pm(15 \pm 0.75)$ V
Conductor \varnothing 25 mm, when using a linear conductor of 300 mm or more

Influence of the conductor position: add $\pm 0.05\%$ of rdg.

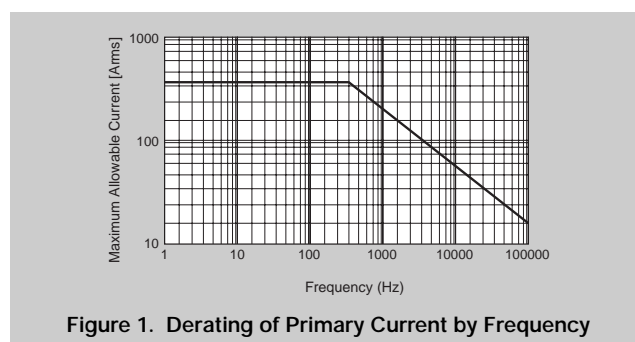
Accuracy 12 months after calibration:
Add the error in the reading value $\times 0.5$ to the above accuracies.

Frequency Band: DC–100 kHz (–3dB)

Temperature Coefficient:
0.01%/°C (10–18 °C, 28–50 °C)

Continuous Maximum Allowable Input:
600 A peak (see figure 1 for 400 Hz or greater)

Instantaneous Maximum Allowable Input:
3000 A peak at 0.1 sec. or less (reference value)



Current Transducer

751574

Specifications

Burden Resistance: 2.5 Ω or more (see figure 2)

Operating Temperature/Humidity:

10–50°C, 20–80 % RH

(no condensation allowed)

Storage Temperature Range:

0–60°C (no condensation allowed)

External Dimensions:

Approx. 122(W) \times 98(H) \times 57(D) mm

(excluding the connector, primary cable guide, and other protrusions)

Diameter of the Primary Current Hole: ϕ 26 mm

Output and Power Supply Connector: D-Sub 9 pin

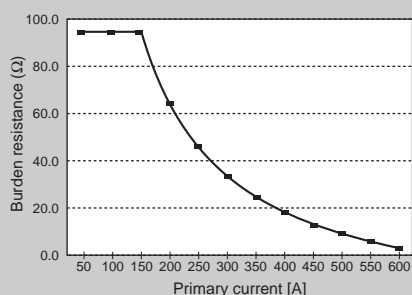


Figure 2. Derating of Primary Current by Burden Resistance

Weight: Approx. 1 kg.

Emission: Conforms to EN61326 standards

Immunity: Conforms to EN61326 standards

Power Supply Voltage: $\pm(15\text{ V} \pm 5\%)$

Power Consumption:

Approx. 5 VA (however the secondary output current is zero)

Current Consumption: Approx. (330 mA + output current)

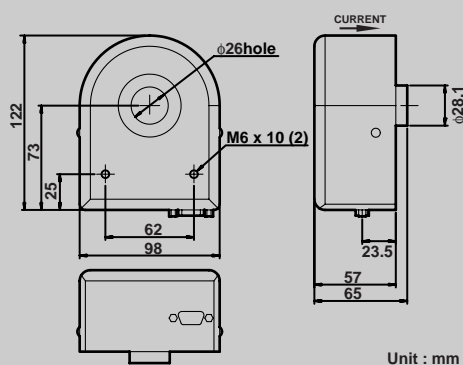


Figure 3. External Dimensions

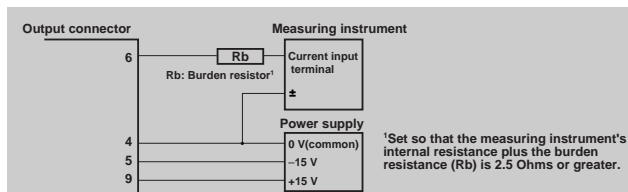


Figure 4. Connection Example

Output connector signal allocation

Pin No.	Signal
1 to 3	[Do not connect]
4	0 V power supply input
5	-15 V power supply input
6	Secondary signal output
7,8	[Do not connect]
9	+15 V power supply input

Model and Suffix Codes

Model Code	Description
751574	Current Transducer

Assured accuracy and calibration are not possible when the Current Transducer (Model 751574) is combined with WT series instruments or the PZ4000. Also please be aware that measurement errors can occur depending on the conductor and wiring.

Accessories (Sold Separately)

Product	Part No.	Specifications	Minimum Purchase Quantity
Output Connector	B8200JQ	D-Sub 9 pin, with screws	1
Burden Resistor	B8200JR	10 Ω \times 4 pcs.	1

Also on Sale

Model Code	Suffix Code	Description
751521		Single phase
751523	-10	3 phase U, V
	-20	3 phase U, W
	-30	3 phase U, V, W
Supply Voltage	-1	100V AC (50/60Hz)
	-3	115V AC (50/60Hz)
	-7	230V AC (50/60Hz)
Power Cord	-D	UL/CSA standard
	-F	VDE standard
	-R	SAA standard
	-J	BS standard

Accuracy assurance and calibration are possible when the Current Sensor Unit (Model 751521, 751523) is combined with WT series instruments or the PZ4000.

NOTICE

- Before operating the product, read the instruction manual thoroughly for proper and safe operation.
- If this product is for use with a system requiring safeguards that directly involve personnel safety, please contact the Yokogawa sales offices.

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