

# Current Transformers

## GIF 48

### General Description

Ritz manufactures an extensive line of cast epoxy resin insulated transformers across the voltage range of 5.5 kV to 72.5 kV. This brochure describes one model of outdoor Current Transformers in the 48 kV class with performance ratings that coincide with industry standard product offerings. Ritz, because of product depth, familiarity with international standards and custom design capability, is also able to design according to customer specific needs.

### Construction

The toroidal core and winding assembly is encapsulated in cycloaliphatic epoxy resin in a single process under vacuum using the pressure gelation method. The resin color is grey. Brown is available by special order. Epoxy resin was chosen because of its excellent tracking resistance, high mechanical strength, ability to withstand ultraviolet radiation and weathering effects, and its inflammability.

### Thermal Rating

Maximum thermal rating is 100 times nominal current for one second, up to a maximum of 63 kA.

### Primary Terminals

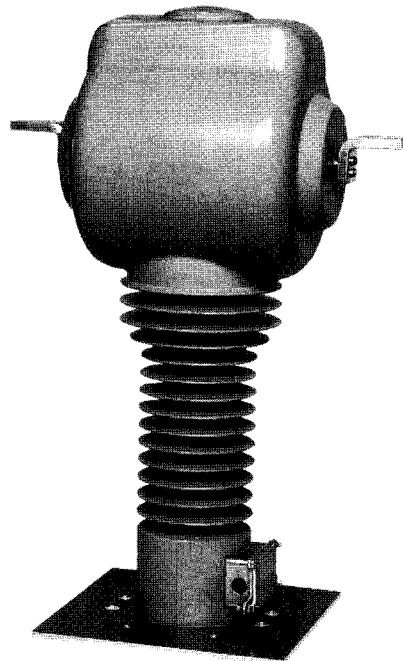
Primary terminals are flat, tin-plated copper NEMA two-hole or four-hole pad, depending on designation. Primary terminals are detachable so that alternate terminal configurations can be considered. Maximum allowable terminal pull is 1100 lbs.

### Secondary Terminals

Secondary terminals are brass screw type with a 0.24" diameter. Each terminal can be earthed in the terminal box.

### Terminal Box

The secondary terminal box is cast aluminum. Two threaded 1" horizontal hubs with pipe plugs for making connections to 1" conduit are



provided. A ground lug designed to accept a one hole connector is part of the terminal box.

### Base Plate

The base plate is made of marine grade aluminum.

### Mounting

This transformer may only be mounted in the vertical upright position. Please consult Ritz for alternate designs to accommodate horizontal and suspended mountings.

### Nameplates

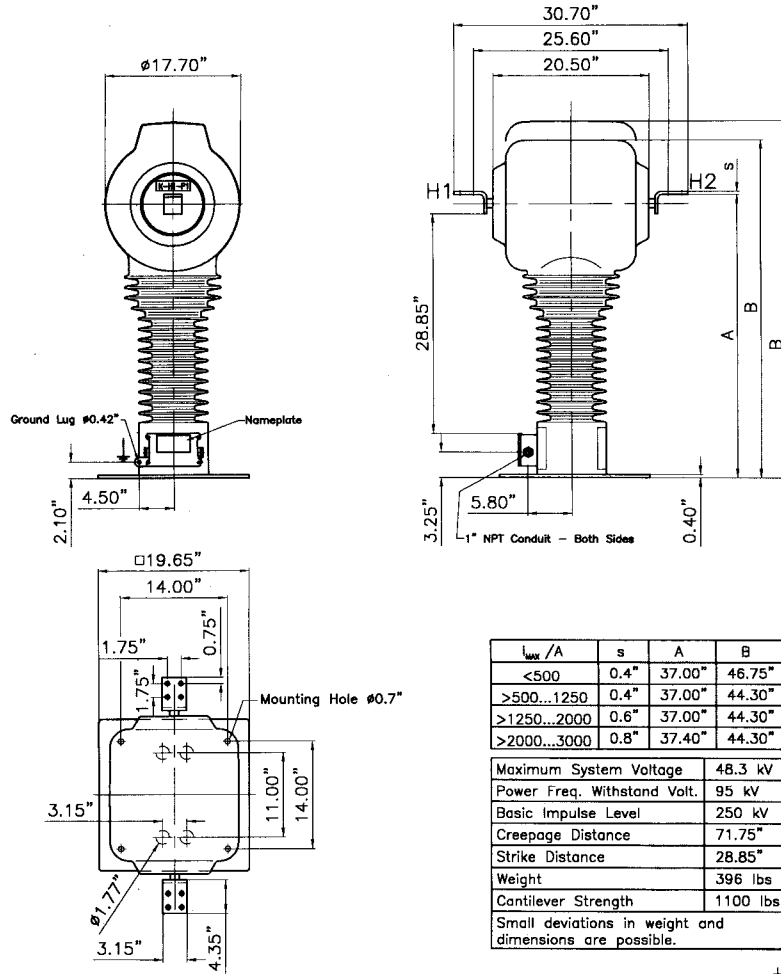
Nameplates are of marine grade aluminum, and marked by using a metal photo process.

### Tests

Routine tests in compliance with IEEE are standard. In addition, internal partial discharge measurements are performed as a routine test, with acceptance criteria of  $<20 \text{ pC}$  at  $1.2 V_m/\sqrt{3}$  and  $<50 \text{ pC}$  at  $1.2 V_m$ . Test cards are included with each unit.

### Commissioning and Maintenance

Transformers are supplied ready for service. No special tools are required. Instruction manuals are provided with each shipment. Periodic application of silicone grease is recommended.



**CURRENT TRANSFORMER TYPE: GIF 48-59 (NEMA 2-Hole Pad)**

CURRENT RATIO	CATALOGUE NUMBER	ANSI ACCURACY CLASS, 60 Hz		RATING FACTOR
		Meter	Relay	
25/50:5	114526059 45960	0.3B-2.0	C400 FULL C200 TAP	1.5 FULL 2.0 TAP
50/100:5	114526059 45961	0.3B-2.0	C400 FULL C200 TAP	1.5 FULL 2.0 TAP
75/150:5	114526059 45962	0.3B-2.0	C400 FULL C200 TAP	1.5 FULL 2.0 TAP
100/200:5	114526059 45963	0.3B-2.0	C400 FULL C200 TAP	1.5 FULL 2.0 TAP
150/300:5	114526059 45964	0.3B-2.0	C400 FULL C200 TAP	1.5 FULL 2.0 TAP
200/400:5	114526059 45965	0.3B-2.0	C400 FULL C200 TAP	1.5 FULL 2.0 TAP
300/600:5	114526059 45966	0.3B-2.0	C400 FULL C200 TAP	1.5 FULL 2.0 TAP
400/800:5	114526058 45967	0.3B-2.0	C400 FULL C200 TAP	1.5 FULL 2.0 TAP

**CURRENT TRANSFORMER TYPE: GIF 48-58 (NEMA 4-Hole Pad)**

CURRENT RATIO	CATALOGUE NUMBER	ANSI ACCURACY CLASS, 60 Hz		RATING FACTOR
		Meter	Relay	
500/1000:5	114526058 45968	0.3B-2.0	C400 FULL C200 TAP	1.5 FULL 2.0 TAP
600/1200:5	114526058 45969	0.3B-2.0	C400 FULL C200 TAP	1.5 FULL 2.0 TAP
800/1600:5	114526058 45970	0.3B-2.0	C400 FULL C200 TAP	1.5 FULL 2.0 TAP
1000/2000:5	114526058 45971	0.3B-2.0	C400 FULL C200 TAP	1.5 FULL 2.0 TAP
1500/3000:5	114526058 45972	0.3B-2.0	C800 FULL C400 TAP	1.0 FULL 2.0 TAP

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