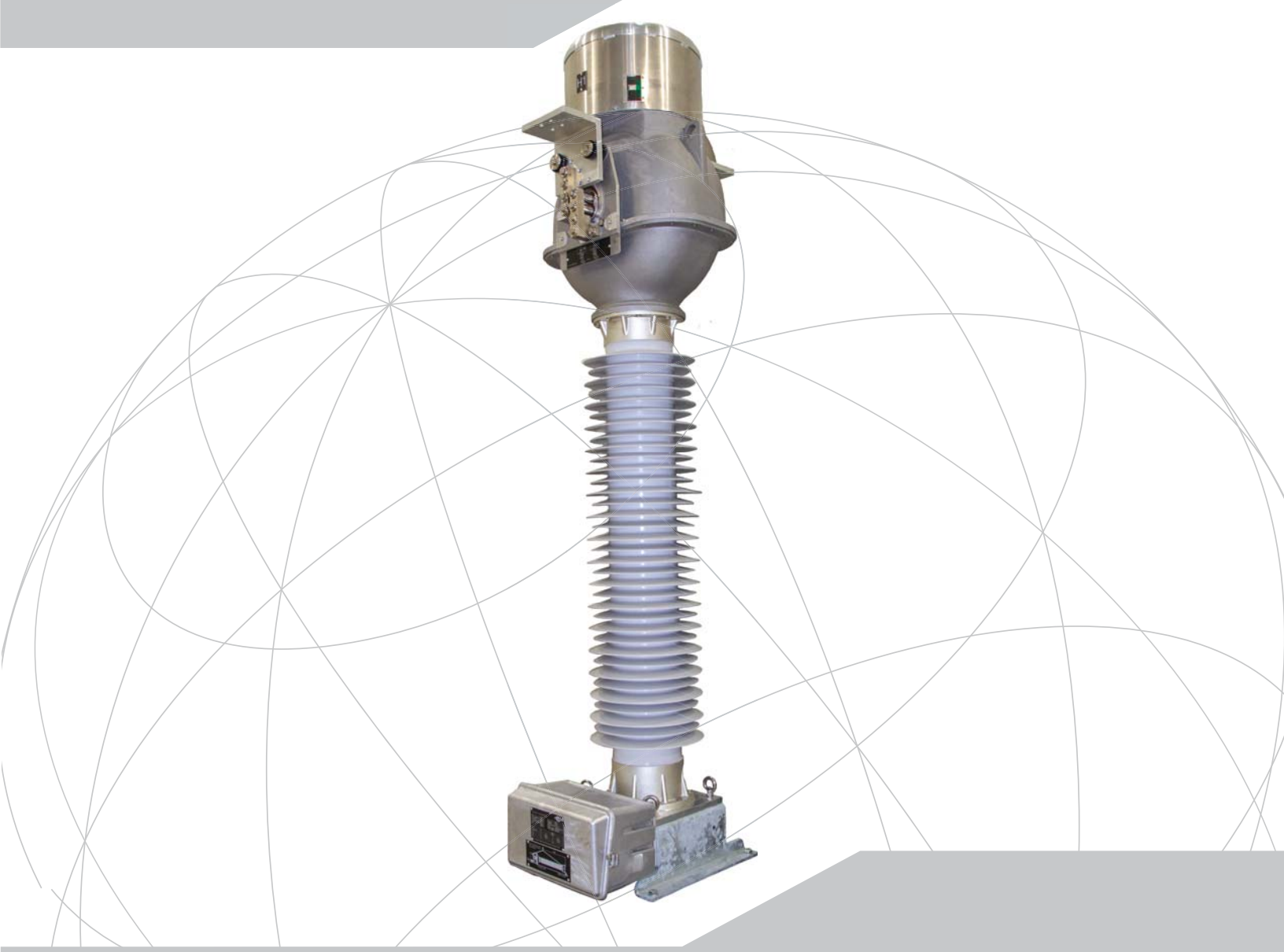
Type ICO
Outdoor Oil-Filled Current Transformer
72.5kV - 245kV



Ritz USA - Lavonia, GA

The Ritz Instrument Transformer Group has a long and proud tradition of building quality products. The company was founded in Hamburg, Germany, over 70 years ago and since that time has expanded through acquisition and organic growth to its current size of 8 locations across the globe. Throughout its history, Ritz has remained privately owned; the shares currently with a Trust, thus giving it flexibility and purpose not enjoyed by publicly traded companies.

Ritz has remained focused on its core competencies. The Ritz Group has achieved additional diversification and financial strength by expanding beyond being just a manufacturer of instrument transformers into other product fields, all the while adhering to our knowledge base in winding, insulation systems, and molding. Each manufacturing location is certified to the exacting ISO 9001 Quality Standard. Our geographic dispersion and global focus have allowed us to become experts in all the world's major standards. This knowledge not only allows us to meet the expectations of customers using the various standards but also to develop a synthesis of these standards as our own internal measures.

To be more responsive to the North American customer base and to gain global cost efficiencies, the Ritz Group established a manufacturing plant (Ritz USA) in Lavonia, Georgia. The mission of this company is to maintain profitability and growth through customer satisfaction, industry-leading quality, and efficient product development and manufacture. The factory is designed to manufacture and test low, medium, and high voltage instrument transformers for both the utility and OEM markets.

High Voltage Applications

CVO
Capacitive Voltage Transformer
72kV - 550kV

ICO
Current Transformer
72kV - 245kV

IVO
Voltage Transformer
72kV - 245kV

CMO
Combined Current and
Voltage Transformer
72kV - 245kV

Line Traps

Revenue Metering
and Protection Relay
Applications

ISO9001-2015

General
Type ICO is an Inductive Current Transformer (CT) used in high voltage systems to provide current outputs to revenue-based meters, protective relays, and other system current monitoring instruments.

This brochure details the features and ratings of the Ritz Type ICO for voltage class ratings from 72kV thru 245kV.

Construction
The external insulation is provided by a polymer hollow-core insulator consisting of a fiberglass reinforced resin tube with molded-on silicone rubber sheds and marine-grade aluminum flanges. Polymer insulators provide a strong resistance to pollution and maintain long lasting high levels of hydrophobicity. In addition, polymer insulators reduce weight, increase seismic withstand performance, and offer a higher level of safety. As an option, porcelain insulators can be provided.

Mineral oil and paper insulation system, with the paper insluation and grounding layers applied and controlled by machine.

Insulator flange bolts and hardware at top and bottom of unit are stainless steel and are torqued to specifications at the factory.

Internal fault-current carrying path.

CT head housing includes two (2) lifting eyes to facilitate proper handling during installation.

Includes one (1) oil drain plug located at the bottom side of the unit.

Head housing and base materials are non-corrosive marine grade aluminum.

Oil level indicator at top of CT primary housing is positioned for viewing angle when operator is in position at front of secondary terminal box. Oil level viewing window is glass.

2-hole ground pad provision is positioned at base of unit.

Four (4) mounting holes are spaced to facilitate new and retrofit mounting patterns of support structures. Adapter plates to fit non-standard hole mounting patterns can be designed.

Seismic Performance
Seismic performance is considered in all aspects of the CT design. Designs can be supplied to comply with seismic standards.

Primary Terminal Connection
Aluminum NEMA 4-hole pad provisions are provided. Copper provided upon request.

Secondary Terminal Box
Customer secondary connections are housed in a cast marine-grade aluminum terminal box on the front of the unit with a large swing-out lockable door. An aluminum removable or field-drillable gland plate is provided for customer conduit hubs. Terminal box has provisions for optional condensation heater element.

Nameplate
Laser engraved nameplate is mounted on the front face of the secondary terminal box.

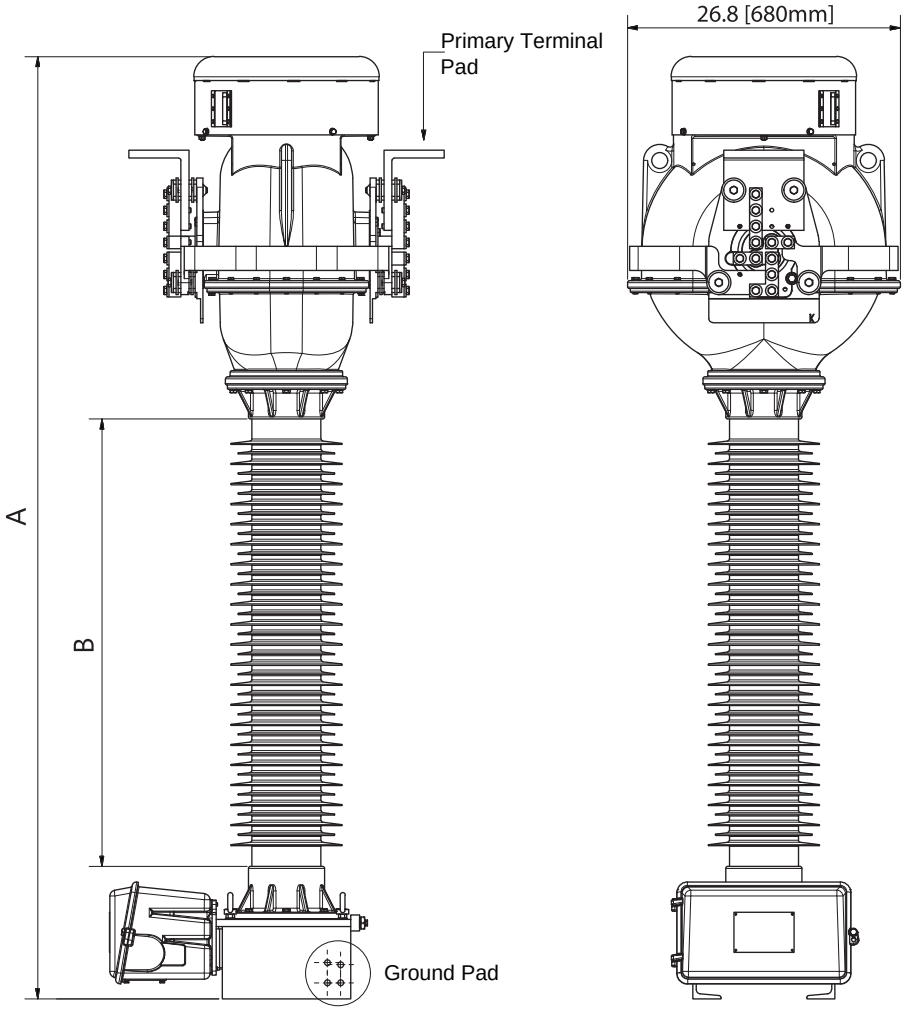
Standards
Ritz can design Type ICO to meet all national and international standards including IEEE/ANSI, CSA, IEC and to any customer requirements.

Extended Range Current Transformer
By request, CT can be supplied with field selectable primary-turns so that any of the three types/ratios can be selected.

Primary	Ratio	0.15B1.8 Range	RF
Tap 3	500:5	0.25A to 1000A	2.0
Tap 2	1000:5	0.5A to 2000A	2.0
Tap 1	2000:5	1.0A to 4000A	2.0

	NOM. SYSTEM VOLTAGE (kV)	MAX. SYSTEM VOLTAGE (kV)	BIL (kV)	TOTAL HEIGHT Dim A (in[mm])	CREEPAGE DISTANCE (in[mm])	STRIKE DISTANCE Dim B (in[mm])	TOTAL WEIGHT (lbs[kg])	OIL WEIGHT (lbs[kg])
ICO72	69	72	350	86.3 [2193]	121.3 [3080]	37.8 [960]	727 [330]	132 [60]
ICO123	115	123	550	86.3 [2193]	121.3 [3080]	37.8 [960]	727 [330]	132 [60]
ICO145	138	145	650	92.4 [2348]	142.9 [3630]	43.9 [1115]	772 [350]	143 [65]
ICO170	161	170	750	105.4 [2678]	167.3 [4250]	52.8 [1340]	1102 [500]	221 [100]
ICO245	230	245	1050	132.6 [3368]	299.0 [7595]	78.0 [1980]	1653 [750]	330 [150]

Consult factory for other rating and dimensional information for special designs.



Represented By

**Information within subject to change without notice*

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