

Type LGX-34-879

Extended range, high accuracy outdoor current transformer

Product features

- 34.5 kV outdoor, 200 kV BIL, 60 hertz
- Primary current ratios: 200:5 to 2000:5
- Electrical specifications:
 - Creep: 29" (737 mm)
 - Strike (to base): 18" (457 mm)
- Approximate weight: 232 lbs (105 kg)

Application

The ABB Kuhlman LGX-34-879 outdoor window-type current transformer is rated for use on 34.5 kV systems with 200 kV BIL. Primary current ratios are available from 200:5 to 2000:5 at 60 hertz with a rating factor of up to 4.0. This dry-type, solid-cast current transformer operates with high accuracy for metering applications.

Mechanical description

The core and coil assembly is wound and encapsulated in a molded cast resin with a 4½" window diameter epoxy primary bushing to provide high withstand capabilities. The high strength epoxy has a semi-conductive interior with a pigtail lead, to be connected to the primary conductor to equalize the voltage and prevent radio interference and corona. An optional primary bus bar with NEMA 4-hole pads is also available. The secondary terminals are ¼"-20 copper studs with associated hardware located inside a removable terminal box with two 1" NPT conduit hubs. The nameplate is made of anodized aluminum and is affixed to each unit on the opposite side of the terminal box.

Mounting

The unit is designed for mounting in the upright or underhung position with the tube horizontal, or in the cantilever position with the tube vertical.

CAUTION:

- Do not mount in the cantilever position with the tube horizontal, as the baseplate can collapse. Mounting holes are punched in the aluminum baseplate.
- The high voltage sleeve and its bar assembly is not to be used to support the primary buswork or conductors.

Testing

The unit is individually tested per the IEEE C57.13 standards.

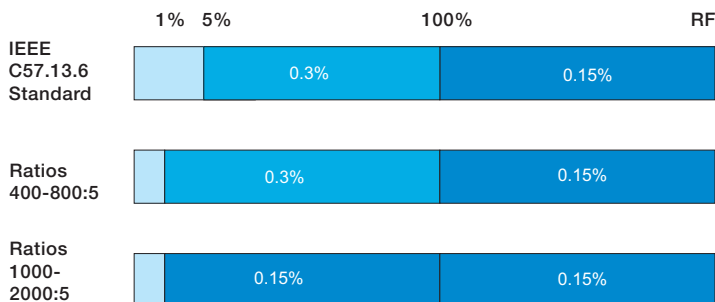


Options

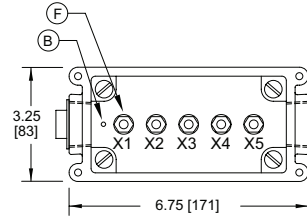
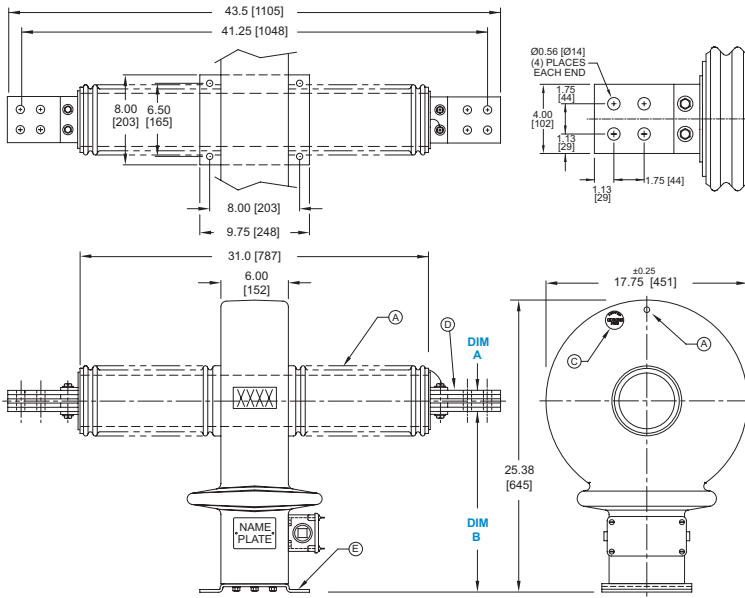
The LGX-34-879 is available with a primary bus bar kit or conductive bird guards to prevent foreign objects from entering the porcelain window. Contact the factory for other needs.

Accuracy performance

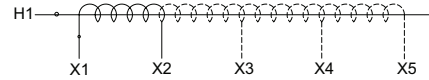
The LGX-34-879 will operate with 0.15 or 0.15s high accuracy for an extended range for metering applications with burdens of B-0.1 up to B-1.8. The transformer maintains 0.15 accuracy from 1% of I_{nom} through its rating factor on certain designs, and can be used continuously to this level (see ratings and burdens specific to each ratio).



Unit dimensions



Terminal box detail, multi-ratio (MR) shown



Note: Metric dimensions are displayed in [mm].

Notes:

- A. H1 polarity mark is permanently engraved white dot
- B. X1 polarity mark is permanently engraved white dot
- C. "Corona free" decal
- D. Primary bars are copper CDA 11000, electro-tin flash plated, mounted in high voltage sleeve, with pigtail lead connected to control corona and R.I.V.
- E. Baseplate (aluminum), 0.25" [6.4] thick with four 0.56" [14.2] diameter holes
- F. Secondary terminal: maximum torque value should not exceed 50 in-lbF.

Primary bar ordering information

Part number	Max. current amperes	No. of bars	Stack THK (Dim. A) in. [mm]	HT to base (Dim. B) in. [mm]	Weight lbs [kg]
424-0175-901	up to 1200 A	1	0.25 [6.4]	16.13 [410]	20 [9]
424-0175-902	1201-2500	2	0.75 [19]	15.88 [403]	37 [17]
424-0176-903	2501-5500	3	1.63 [41]	15.44 [392]	75 [34]

For optional bird guards (one pair), order part number 123-0098-901

For more information please contact:

ABB Inc.
Instrument Transformers
 3022 NC 43 North
 Pinetops, NC 27864
 USA
 Phone: +1 252 827 3212
 Fax: +1 252 827 4286

www.abb.com/mediumvoltage

Note:

We reserve the right to make technical changes or modify the contents of this document without prior notice. With regard to purchase orders, the agreed particulars shall prevail. ABB does not accept any responsibility whatsoever for potential errors or possible lack of information in this document. We reserve all rights in this document and in the subject matter and illustrations contained therein. Any reproduction—in whole or in parts—is forbidden without ABB's prior written consent.

Copyright 2010 ABB.
 All rights reserved.

Selection guide

Ratio	Catalog number	0.15 / 0.3 @ burden	0.15 / 0.3 accuracy range	Rating factor
400:5	G094015X050-1	B-0.5 / B-0.9	400/4 to 1200 A	3.0
600:5	G096015X090-1	B-0.9 / B-1.8	600/6 to 2400 A	4.0
800:5	G098015X090-1	B-0.9 / B-1.8	800/8 to 3200 A	4.0
1000:5	G091025X180-1	B-1.8	10 to 4000 A	4.0
1200:5	G091225X180-1	B-1.8	12 to 4800 A	4.0
1500:5	G091525X180-1	B-1.8	15 to 4500 A	3.0
2000:5	G092025X180-1	B-1.8	20 to 4000 A	2.0

Available in multi-ratio designs (full tap ratings same as single ratio above).

1 second thermal/mechanical rating: 80x full winding I_{nom} /unlimited mechanical.

Available with a primary bar kit (maximum 5500 A). Change last digit of catalog from 1 to 3.

Additional styles available upon request. Contact your ABB sales representative or call +1-252-827-3212 for more information.