

PRODUCT FOR HIGH VOLTAGE APPLICATION

ELK-CTO 145 F

Current transformer for Gas-insulated Switchgear ELK-04



01 Example of outlets designation

| Technical parameters of CT | Value |
|--|---------------------|
| Highest voltage for CT | 0,72 kV |
| Power frequency voltage between sections | 3 kV |
| Rated primary current | 100 - 3 150 A |
| Rated short-time thermal current | ≤40 kA/3s |
| Rated dynamic current | ≤108 kA |
| Core support | integrated, screwed |

Description

The current transformer type ELK-CT0 without a primary conductor is designed for installation in SF₆ GIS indoor or outdoor systems ELK-04. The ELK-CT0 current transformers have the possibility of reconnection on the secondary side. The maximum number of secondary windings is 5; another number of secondary windings may be agreed between the supplier and purchaser upon request. The maximum number of taps per one phase is 15; another number of taps may be agreed between the supplier and purchaser upon request. The number and possible combinations of ring cores with extreme parameters are sometimes limited by the space available within the core support. There are more details about ELK-CT0 current transformer installation in a separate manual available upon request.

The secondary windings are designed for metering or protection purposes. One terminal of each used secondary winding and one terminal of unused winding have to be earthed during the transformer operation (unused short-circuited also).

Technical data

The current transformers are connected to various types of protection and measuring equipment and the specific requirements are accordingly multiple. In principle the current transformers can be assigned to two ranges of application:

- a) Measuring;
- b) Protection (possibly with transient requirements).

Any accuracy class defined by international standards is possible:

- IEC 61869-1; IEC 61869-2;
- IEC 60044-1;
- IEC 60044-6 protective types for transient performance;

- ANSI/IEEE C57.13;
- GOST 7746-2001;
- Additional national standards and regulations on request.

The transformer can be installed by an authorized person only and needs to comply with instructions for installation, use and maintenance.

| Technical data of switchgear ELK-04 | Value |
|--|-------------------|
| Rated voltage | up to 145 kV |
| Rated power-frequency withstand voltage, 1 min | 275 (310 ANSI) kV |
| Rated lightning impulse withstand voltage | 650 kV |
| Rated switching impulse withstand voltage | - |
| Rated frequency | 50/60 Hz |
| Rated continuous thermal current | ≤3 150 A |
| Rated dynamic current | ≤108 kA |
| Rated short-time withstand current, 3 sec | ≤40 kA |
| Rated primary current I _r | 100 - 3 150 A |
| Minimum functional pressure of SF ₆ -gas (20°C) | 630 kPa |
| Maximum ambient temperature | 40°C |
| Minimum ambient temperature | -30°C |

The above data are not limiting values. Additional data on request. We reserve the right to alter data and technical details without notice.

Outlets designation



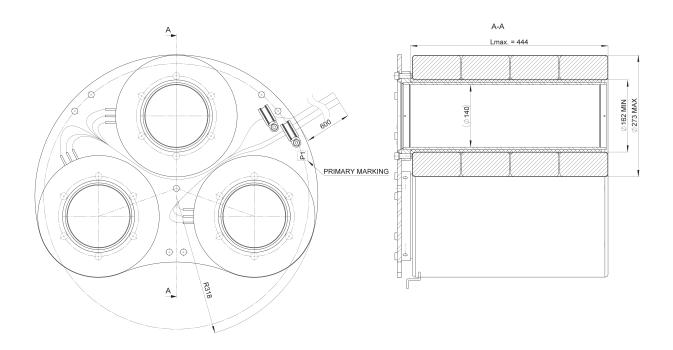
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| Outlet | Meaning |
|--------------------------|---|
| 1st outlet of each phase | Customer's project number, Production serial number |
| Each outlet | Bushing plate terminal ID, Terminal marking according to given standard |

Dimensional Drawing

ELK-CT0 145 F

Drawing No.: 2RKA014943A0006





CONTACT US
ABB s.r.o.
EPDS Brno
Videnska 117, 619 00 Brno,
Czech Republic

Tel.: +420 547 152 021 +420 547 152 854 Fax: +420 547 152 626 E-mail: kontakt@cz.abb.com 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.

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