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PRODUCT FOR HIGH VOLTAGE APPLICATION

## **ELK-CT0 170 L**

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	≤63 kA/3s
Rated dynamic current	≤170 kA
Core support	integrated

### Description

The current transformer type ELK-CT0 without a primary conductor is designed for installation in SF<sub>6</sub> 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 20; 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:

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

Any accuracy class defined by international standards is possible:

- IEC 61869-1; IEC 618969-2;
- 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	up to 170 kV
Rated power-frequency withstand voltage, 1 min	275 (310 ANSI) kV	325 (365 ANSI) kV
Rated lightning impulse withstand voltage	650 kV	750 kV
Rated switching impulse withstand voltage	-	-
Rated frequency	50/60 Hz	50/60 Hz
Rated continuous thermal current	≤4 000 A	≤3 150 A
Rated dynamic current	≤170 kA	≤170 kA
Rated short-time withstand current, 3 sec	≤63 kA	≤63 kA
Rated primary current I <sub>r</sub>	100 - 3 150 A	100 - 3 150 A
Minimum functional pressure of SF <sub>6</sub> -gas (20°C)	630 kPa	630 kPa
Maximum ambient temperature	40°C	40°C
Minimum ambient temperature	-30°C	-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



01

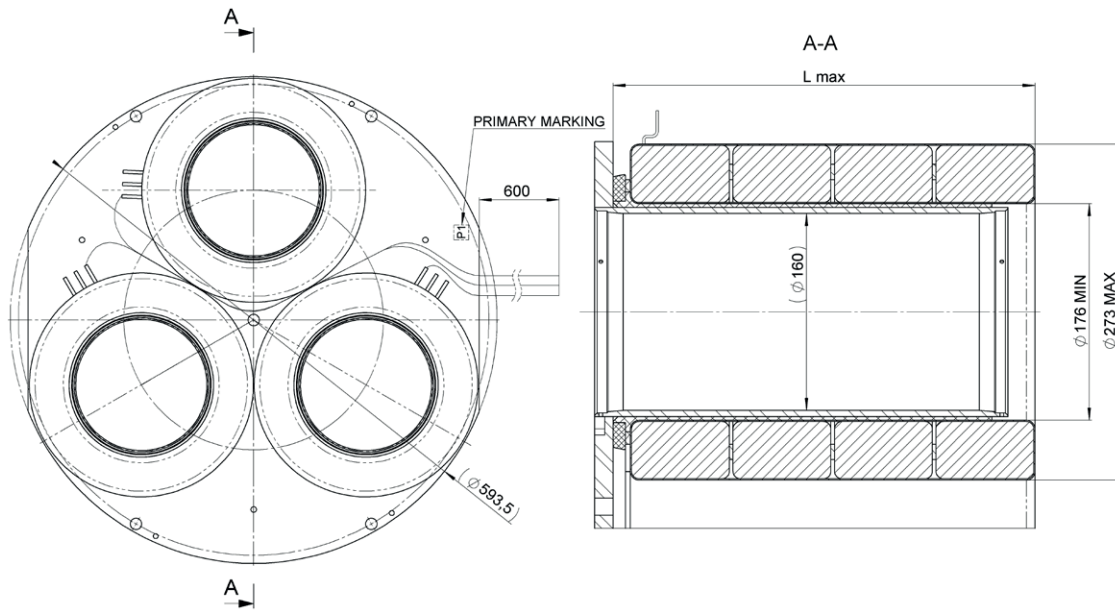
Outlet	Meaning
1st outlet of each phase	Customer's project number, Production serial number
Each outlet	Bushing plate terminal ID, Terminal marking according to given standard

# Dimensional Drawing

ELK-CT0 170 L

Drawing No.: 2RKA014943A0006

VERSION	A0001	A0002	A0003	A0004
L max. (mm)	343	353	443	493



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