



Product for High Voltage Application

ELK CN3-1080

Current transformer for Gas-insulated Switchgear ELK-3

Technical parameters of CT	Value
Highest voltage for equipment	420 kV
Rated power frequency test voltage	650 kV
Rated primary current	100 - 4 000 A
Rated short-time thermal current	≤63 kA/3s
Rated dynamic current	≤171 kA

Description

The current transformer type ELK CN3 without primary conductor is designed for installation in SF₆ GIS indoor or outdoor systems. The ELK CN3 current transformers have the possibility of reconnection on the secondary side. The maximum number of secondary windings is 8; another number of secondary windings may be agreed between the supplier and purchaser upon request. The maximum number of taps per secondary winding is 5; 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 housing. There are more details about ELK CN3 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).

The terminals allow M4 connection.

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 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 authorized person only and need to comply with instructions for installation, use and maintenance.

Technical data of switchgear ELK-3	Value
Rated voltage	up to 420 kV
Rated power-frequency withstand voltage, 1 min	650 kV
Rated lightning impulse withstand voltage, 1.2/50 μs.	1 425 kV
Rated switching impulse withstand voltage, 250/2 500 μs	1 050 kV
Highest voltage for equipment	420 kV
Rated frequency	50/60 Hz
Rated current	≤4 000/5 000 A
Rated dynamic current	≤171 kA
Rated short-time thermal current	≤63 kA/3s
Rated primary current	100 to 4 000 A
Minimum functional pressure of SF ₆ -gas (20°C)	450 kPa
Maximum ambient temperature	40°C
Minimum ambient temperature	-40°C

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

Marking of current transformer outlets

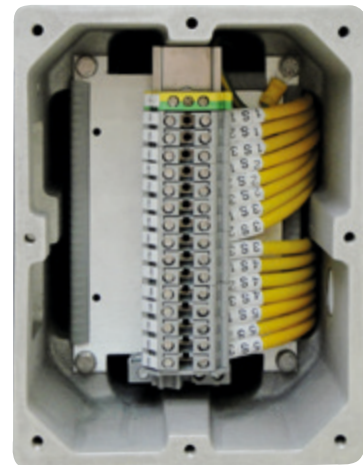


Fig. 1. Example of secondary terminal marking - IEC standard marking

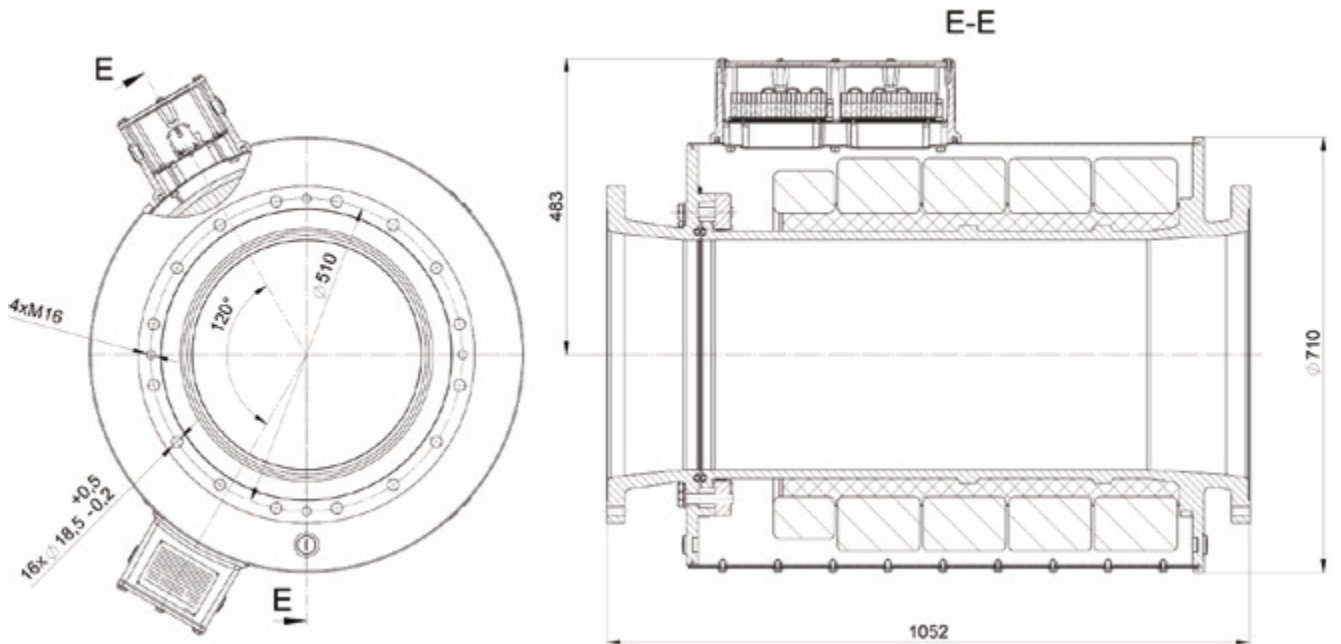


Fig. 2. Example of secondary terminal marking - IEEE standard marking

Dimensional drawings

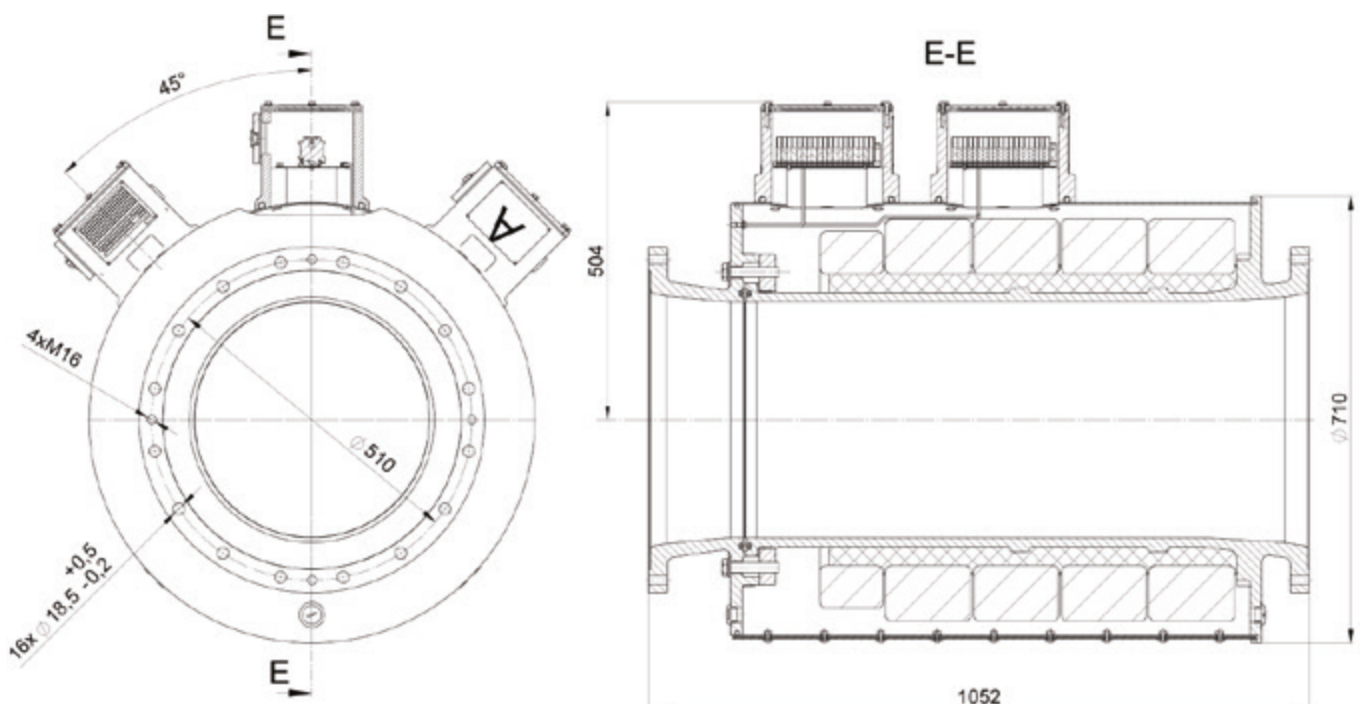
ELK CN3-1080

Drawing No.: 2RKA016411A0002, rev. A



ELK CN3-1080

Drawing No.: 2RKA014241A0610, rev. A.



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