

PRODUCT FOR HIGH VOLTAGE APPLICATION

## **ELK CN14-840**

# Current transformer for Gas -insulated Switchgear ELK-14



01 Example of secondary terminal marking - IEC standard marking)

02 Example of secondary terminal marking - IEEE standard marking

Technical parameters of CT	Value
Highest voltage for equipment	300 kV
Rated power frequency test voltage	460 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 CN14 without primary conductor is designed for installation in SF<sub>6</sub> GIS indoor or outdoor systems. The ELK CN14 current transformers have the possibility of reconnection on secondary side. The maximum number of secondary windings is 6, another number of secondary windings may be agreed between the supplier and purchaser per request. 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 CN14 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 not used winding have to be earthed during the transformer operation (not used 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:

- 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-14	Value
Rated voltage	up to 300 kV
Rated power-frequency withstand voltage, 1 min	460 kV
Rated lightning impulse withstand voltage, 1.2/50 $\mu s$ .	1 050 kV
Rated switching impulse withstand voltage, 250/2 500 µs	850 kV
Highest voltage for equipment	300 kV
Rated frequency	50/60 Hz
Rated current	≤4 000 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 <sub>6</sub> -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





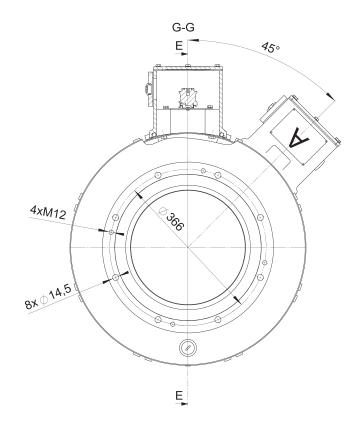
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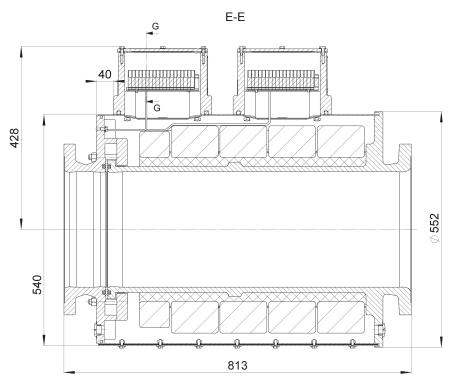
### **Dimensional Drawing**

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**ELK CN14-840** 

rawing No.: 2RKA014242A0220







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