

PRODUCT FOR HIGH VOLTAGE APPLICATION

CN14C

Current transformer for Gas-insulated
switchgear ELK-14/245C



Technical parameters of CT	Value
Highest voltage for equipment	245/253 kV
Rated power frequency test voltage	460 kV
Rated primary current	100 - 3 150 A
Rated short-time thermal current	≤50 kA/3s
Rated dynamic current	≤135 kA

Description

The current transformer type CN14C without primary conductor is designed for installation in SF₆ GIS indoor or outdoor systems. The CN14C current transformers have the possibility of reconnection on secondary side. The maximum number of secondary windings is 5, 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 CN14C 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:

- 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;
- GOST 7746-2001;
- ANSI/IEEE C57.13;
- 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.

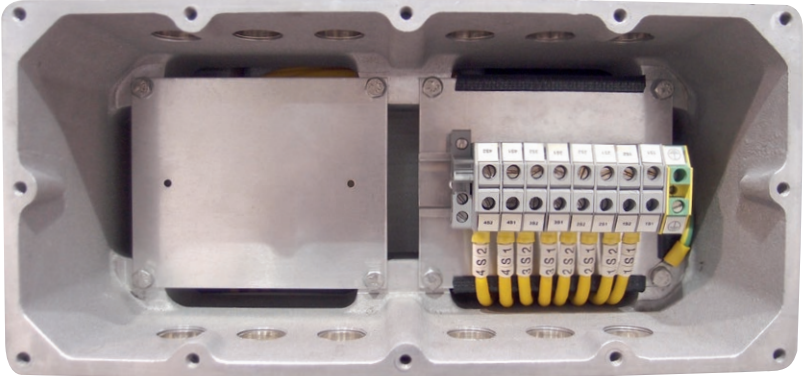
Technical data of switchgear ELK-14/245C	Value
Rated voltage	up to 245/253 kV
Rated power-frequency withstand voltage, 1 min	460 kV
Rated lightning impulse withstand voltage, 1.2/50 μs.	1 050 kV
Highest voltage for equipment	245/253 kV
Rated frequency	50/60 Hz
Rated continuous thermal current I _{cth}	≤3 150 A
Rated dynamic current	≤135 kA
Rated short-time thermal current	≤50 kA / 3s
Rated primary current	100 to 3 150 A
Minimum functional pressure of SF ₆ -gas (20°C)	700 kPa
Maximum ambient temperature	40°C
Minimum ambient temperature	-25°C

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

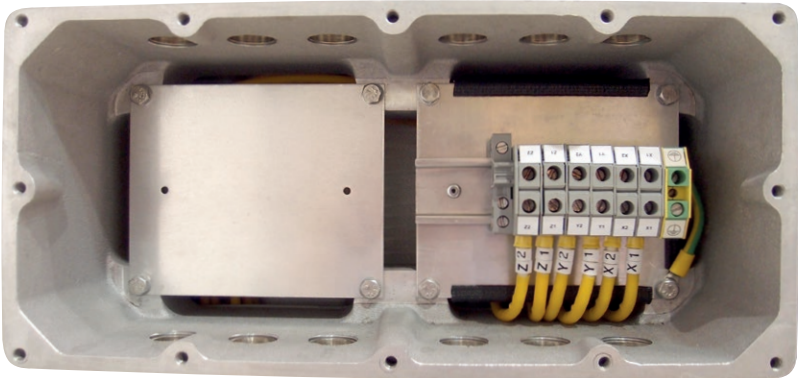
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01 Example of second-
ary terminal marking -
IEC standard marking

02. Example of second-
ary terminal marking -
IEEE standard marking

Marking of current transformer outlets



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01



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02

Dimensional Drawing

CN14C

Configuration A0001

Drawing No.: 2RKA020327A0001

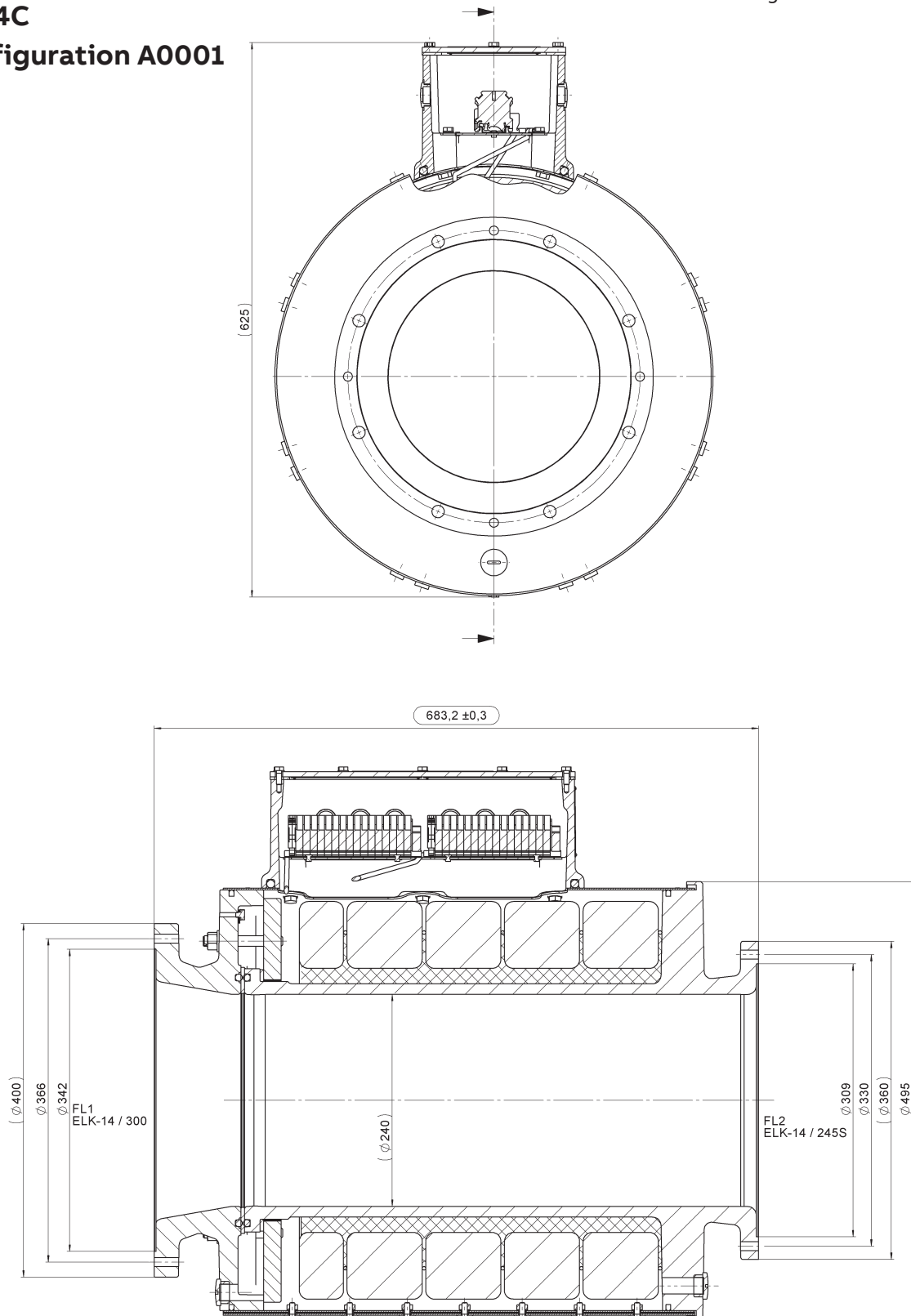


Figure A0002

The drawing illustrates the ELK-14 / 245S valve assembly. The top view shows a circular flange with a diameter of 625 mm and a central opening of 240 mm. The cross-sectional view shows the internal components, including the valve body and the actuator. The overall height of the assembly is 685 ± 0.3 mm. The flange has a thickness of 330 mm and a diameter of 360 mm. The internal components are labeled FL1 ELK-14 / 245S.

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