

CURRENT TRANSFORMER WITH SF₆ INSULATION FOR VOLTAGE LEVEL 123 kV - 145 kV TYPE CTI



DESCRIPTION

- New generation of SF₆ current transformer type CTI is the result of own knowledge, own technology and longtime experiences in manufacturing of SF₆ insulated instrument transformers.
- The main characteristics of new generation SF₆ current transformer family, type CTI are:
 - Inverse design
 - Gas SF₆ as the main insulation
 - Porcelain or composite insulator as the external insulation
 - Metal parts from aluminium
 - Primary conductors from copper or aluminium, fully separated from HV insulation
 - Drastically reduced dimensions and weight
 - No ageing of insulation
 - No explosions
 - Minimum maintenance
 - Yearly gas leakage up to 0,5%
 - Insulation control through gas pressure control (on-line monitoring)
 - Primary reconnection 1:2:4
 - Wide primary current range: (100 - 3000) A
 - Short time current:
 - up to 31,5 kA/1sec. (the lowest ratio)
 - up to 50 kA/1sec. (the highest ratio).
 - Withstanding of phase voltage without pressure of SF₆ gas

STANDARDS

The current transformers are in accordance with IEC, JUS, ANSI, BS or some other standards upon request.

APPLICATION

Current instrument transformer for outdoor installation type CTI is used for separation of measuring and safety devices from high voltage as well as for measuring current transformation to a level appropriated for mentioned devices.

UPON SPECIAL REQUEST

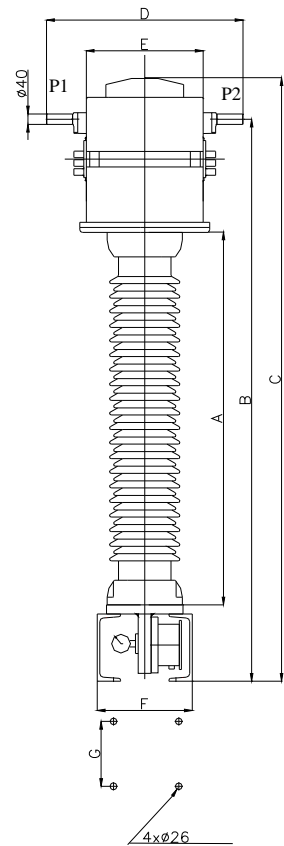
- Composite insulator
- Manometer with more than two signal contacts (alarm-disconnection)
- Additional plug for measurement – pressure control with irretrievable valve
- More cable ingress on secondary box
- Non - standard primary connection
- Metal membrane
- Possibility of replacement of old device with CTI, and submission measuring drawing of existed device
- Possibility of operating at temperature under -30°C

ORDERING DATA

- Rated voltage
- Rated frequency
- Rated primary and secondary current
- Rated short-time thermal current (I_{th})
- Rated continuous thermal current (I_{cth})
- Rated dynamic current (I_{dyn})
- Rated output / Accuracy class / Security factor FS (measurement)
- Rated output / Accuracy class / Accuracy limit factor (protection)
- Ambient temperature
- Creepage distance
- Seismic class request
- Attitude
- Standard

TECHNICAL CHARACTERISTICS

Type	Measure unit	CTI 123	CTI 145
Highest system voltage	kV	123	145
Power frequency withstand voltage 1 min	kV	230	275
Impulse withstand voltage 1,2/50 μ s, full wave	kV	550	650
Rated frequency	Hz	50 or 60	
Flashover distance (minimum)	mm	1280	
Creepage distance	mm	4539	
Rated primary current I _n	A	up to 3000	
Rated secondary current	A	1 or 5	
Rated short - time thermal current I _{th} /1s	kA	100 I _n	
Rated continuous thermal current I _{th}	%I _n	120 or upon request	
Rated dynamic current I _{din}	kA	2,5 I _{th}	
Rated power	VA	10 - 150	
Accuracy class / Security factor		For measurement: 0,2 – 0,5 – 1 / FS = 5 – 10	
Accuracy class / Accuracy limit factor		For protection: 5P – 10P / 5-10-15-20-30	
Number of cores		Up to 5	
Design with air-gap core		Upon request	
Primary terminals	mm	Ø40x120 or upon request	
Dimensions	A	mm	1440 \pm 1
	B	mm	2106 \pm 1
	C	mm	2290 \pm 1
	D	mm	713
	E	mm	414
	F	mm	351
	G	mm	295
Rated pressure of SF6 gas at 20 ⁰ C	bar	4	
Mass	kg	300	
Ambient temperature	⁰ C	from - 40 up to + 40	



Note:

All data contained herewith are to be considered as information only.

The manufacturer reserves all rights for changes for the purpose of technical improvement

A list of guaranteed values with dimension drawing attached should be submitted upon Customer's request.