

Customer : AREVA Sachsenwerk GmbH
Order No. : 4500191205 v. 28.04.05 Pos. 080

Berlin, 23.06.05

Test Certificate

6 Voltage transformers, Type EYE10b
FB-No. 201017434/080
Serial No. 05/5106501 to 05/5106506

Primary winding

Class of insulation T52/E
Insulation level [kV] 12/28/75
Rated primary voltage [V] 6300: $\sqrt{3}$
Rated voltage factor 1.9xU_N (8h)
Rated frequency [Hz] 50

Secondary winding

| | 1 | Auxiliary |
|---|-----------------|-----------|
| Rated secondary voltage [V] | 100: $\sqrt{3}$ | 100:3 |
| Rated output [VA] | 30 | 100 |
| Accuracy class | 0.2 | 3P |
| Secondary thermal limiting current [A] | 8 | - |
| Rated long time current of residual voltage winding [A] | - | 6 |

According to the rules for instrument transformers: IEC 60044-2

The voltage transformers withstood the high-voltage test :

- Power frequency voltage withstand test on primary winding
3kV, 50Hz, 1 min.
- Power frequency voltage withstand test on secondary windings and between sections
3kV, 50Hz, 1 min.
- Induced voltage withstand test (inter-turn test by exciting the secondary winding)
250Hz, 24 sec. (acc. IEC 60044-2 clause 9.2.1)
- Partial discharge measurement (combined with induced voltage withstand test according to 'procedure A', IEC 60044-2 clause 9.2.4.2)
30 sec. background noise < 2pC

Terminal markings were found to be correct.

The voltage transformers comply with the limits of error for the respective accuracy class.

For results of accuracy test please see page 2 - 7.

Date of test: 14.06.2005

Instrument transformer test room

by order Krause

Serial No. 05 / 5106501

Fb.No.201017434/080

| | | | | | | |
|--------------------|-----------------|---------|---------------|---------|----------------|---------|
| Sec. winding | 1 | | | | Auxiliary | |
| Rated ratio | 6300:√3/100:√3V | | | | 6300:√3/100:3V | |
| | 7.5VA ; PF 0.8 | | 30VA ; PF 0.8 | | 0 VA ; PF 1 | |
| U / U _N | F [%] | D [min] | F [%] | D [min] | F [%] | D [min] |
| 0.8 | +00.14 | +00.07 | -00.09 | +01.16 | | |
| 1.0 | +00.14 | +00.62 | -00.10 | +01.83 | +00.07 | +02.00 |
| 1.2 | +00.13 | +01.61 | -00.11 | +02.66 | | |

Serial No. 05 / 5106502

Fb.No.201017434/080

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|-----------------------------|----------------------|---------|---------------|---------|-----------------------------|---------|
| Sec. winding Rated ratio | 1 6300:√3/100:√3V | | | | Auxiliary 6300:√3/100:3V | |
| | 7.5VA ; PF 0.8 | | 30VA ; PF 0.8 | | 0 VA ; PF 1 | |
| U / U _N | F [%] | D [min] | F [%] | D [min] | F [%] | D [min] |
| 0.8 | +00.13 | -00.18 | -00.10 | +00.78 | | |
| 1.0 | +00.13 | +00.33 | -00.11 | +01.30 | +00.08 | +01.99 |
| 1.2 | +00.12 | +00.97 | -00.12 | +01.95 | | |

Serial No. 05 / 5106503

Fb.No.201017434/080

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|--------------------|-----------------|---------|---------------|---------|----------------|---------|
| Sec. winding | 1 | | | | Auxiliary | |
| Rated ratio | 6300:√3/100:√3V | | | | 6300:√3/100:3V | |
| | 7.5VA ; PF 0.8 | | 30VA ; PF 0.8 | | 0 VA ; PF 1 | |
| U / U _N | F [%] | D [min] | F [%] | D [min] | F [%] | D [min] |
| 0.8 | +00.15 | +00.24 | -00.09 | +00.95 | | |
| 1.0 | +00.15 | +00.59 | -00.09 | +01.50 | +00.07 | +01.87 |
| 1.2 | +00.14 | +01.30 | -00.09 | +02.24 | | |

Serial No. 05 / 5106504

Fb.No.201017434/080

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|--------------------|-----------------|---------|---------------|---------|----------------|---------|
| Sec. winding | 1 | | | | Auxiliary | |
| Rated ratio | 6300:√3/100:√3V | | | | 6300:√3/100:3V | |
| | 7.5VA ; PF 0.8 | | 30VA ; PF 0.8 | | 0 VA ; PF 1 | |
| U / U _N | F [%] | D [min] | F [%] | D [min] | F [%] | D [min] |
| 0.8 | +00.15 | +00.35 | -00.09 | +01.28 | | |
| 1.0 | +00.15 | +00.88 | -00.09 | +01.79 | +00.07 | +01.94 |
| 1.2 | +00.14 | +01.52 | -00.10 | +02.53 | | |

Serial No. 05 / 5106505

Fb.No.201017434/080

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|--------------------|-----------------|---------|---------------|---------|----------------|---------|
| Sec. winding | 1 | | | | Auxiliary | |
| Rated ratio | 6300:√3/100:√3V | | | | 6300:√3/100:3V | |
| | 7.5VA ; PF 0.8 | | 30VA ; PF 0.8 | | 0 VA ; PF 1 | |
| U / U _N | F [%] | D [min] | F [%] | D [min] | F [%] | D [min] |
| 0.8 | +00.16 | +00.53 | -00.08 | +01.59 | | |
| 1.0 | +00.16 | +01.10 | -00.08 | +02.15 | +00.08 | +02.09 |
| 1.2 | +00.16 | +01.84 | -00.08 | +02.84 | | |

Serial No. 05 / 5106506

Fb.No.201017434/080

| | | | | | | |
|-----------------------------|----------------------|---------|---------------|---------|-----------------------------|---------|
| Sec. winding Rated ratio | 1 6300:√3/100:√3V | | | | Auxiliary 6300:√3/100:3V | |
| | 7.5VA ; PF 0.8 | | 30VA ; PF 0.8 | | 0 VA ; PF 1 | |
| U / U _N | F [%] | D [min] | F [%] | D [min] | F [%] | D [min] |
| 0.8 | +00.14 | -00.06 | -00.10 | +00.86 | | |
| 1.0 | +00.13 | +00.63 | -00.10 | +01.39 | +00.07 | +02.00 |
| 1.2 | +00.12 | +01.45 | -00.12 | +02.17 | | |