

Customer : AREVA Sachsenwerk GmbH  
Order No. : 4500191205 v. 28.04.05 Pos. 090

Berlin, 04.07.05

## Test Certificate

9 Current transformers, Type CT 12H  
FB-No. 201017434/090  
Serial No. 05/5107401 to 05/5107409

Class of insulation T72/E  
Insulation level [kV] 12/28/75  
Rated short-time thermal current  $I_{th}$  [kA] 50 3s  
Rated frequency [Hz] 50  
Rated dynamic current  $I_{dyn}$  [kA] 120

Core	1	2
Rated ratio [A/A]	4000/ 1	4000/ 1
Rated output [VA]	15	20
Accuracy class	0.2	10P
Instrument security factor	FS5	-
Accuracy limit factor	-	10

$$I_{max} = 1.0 \times I_N$$

According to the rules for instrument transformers: IEC 60044-1

Terminal markings were found to be correct.

The current transformers withstood the high-voltage test.

- Power-frequency test on primary winding / busbar : passed
- Power-frequency test on secondary windings : passed
- Inter turn test : passed
- Partial discharge test : passed

The results of the accuracy test, performed after demagnetization, comply with the limits of error for the respective accuracy class.

For results of accuracy test please see page 2 - 10

Date of test: 24.06.2005

Instrument transformer test room

by order Krause

**Serial No. 05 / 5107401**

Fb.No. 201017434/090

Core 1		1.Rated ratio 4000/ 1							
		15VA; PF0.8		3.75VA; PF1					
I / I <sub>N</sub>		F [%]	D [min]	F [%]	D [min]	F [%]	D [min]	F [%]	D [min]
1.0		-00.13	+00.26	-00.04	-00.72				
0.2		-00.03	-01.00						
0.05		-00.03	-00.97						

Core 2		1.Rated ratio 4000/ 1							
		20VA; PF0.8		10VA; PF0.8					
I / I <sub>N</sub>		F [%]	D [min]	F [%]	D [min]	F [%]	D [min]	F [%]	D [min]
1.0		-00.07	+00.08						

**Serial No. 05 / 5107402**

Fb.No. 201017434/090

Core 1		1.Rated ratio 4000/ 1							
		15VA; PF0.8		3.75VA; PF1					
I / I <sub>N</sub>		F [%]	D [min]	F [%]	D [min]	F [%]	D [min]	F [%]	D [min]
1.0		-00.19	-00.68	-00.05	-00.63				
0.2		-00.05	+00.33						
0.05		-00.03	-02.38						

Core 2		1.Rated ratio 4000/ 1							
		20VA; PF0.8		10VA; PF0.8					
I / I <sub>N</sub>		F [%]	D [min]	F [%]	D [min]	F [%]	D [min]	F [%]	D [min]
1.0		-00.05	-00.28						

**Serial No. 05 / 5107403**

Fb.No. 201017434/090

<b>Core 1</b>		<b>1.Rated ratio 4000/ 1</b>							
		15VA; PF0.8				3.75VA; PF1			
I / I <sub>N</sub>	F [%]	D [min]	F [%]	D [min]	F [%]	D [min]	F [%]	D [min]	
1.0	-00.12	-00.37	-00.08	-00.51					
0.2	-00.04	-01.12							
0.05	-00.03	+00.96							

  

<b>Core 2</b>		<b>1.Rated ratio 4000/ 1</b>							
		20VA; PF0.8				10VA; PF0.8			
I / I <sub>N</sub>	F [%]	D [min]	F [%]	D [min]	F [%]	D [min]	F [%]	D [min]	
1.0	-00.04	-00.30							

**Serial No. 05 / 5107404**

Fb.No. 201017434/090

Core 1		1.Rated ratio 4000/ 1							
		15VA; PF0.8		3.75VA; PF1					
I / I <sub>N</sub>		F [%]	D [min]	F [%]	D [min]	F [%]	D [min]	F [%]	D [min]
1.0		-00.16	-00.46	-00.05	-00.36				
0.2		-00.02	-01.35						
0.05		-00.03	-01.25						

Core 2		1.Rated ratio 4000/ 1							
		20VA; PF0.8		10VA; PF0.8					
I / I <sub>N</sub>		F [%]	D [min]	F [%]	D [min]	F [%]	D [min]	F [%]	D [min]
1.0		-00.04	-00.33						

**Serial No. 05 / 5107405**

Fb.No. 201017434/090

<b>Core 1</b>		<b>1.Rated ratio 4000/ 1</b>							
		15VA; PF0.8		3.75VA; PF1					
$I / I_N$		F [%]	D [min]	F [%]	D [min]	F [%]	D [min]	F [%]	D [min]
1.0		-00.15	+00.83	-00.01	-00.26				
0.2		-00.03	+00.78						
0.05		-00.03	-03.22						

  

<b>Core 2</b>		<b>1.Rated ratio 4000/ 1</b>							
		20VA; PF0.8		10VA; PF0.8					
$I / I_N$		F [%]	D [min]	F [%]	D [min]	F [%]	D [min]	F [%]	D [min]
1.0		-00.04	-00.33						

## Serial No. 05 / 5107406

Fb.No. 201017434/090

<b>Core 1</b>		<b>1.Rated ratio 4000/ 1</b>							
		15VA; PF0.8				3.75VA; PF1			
$I / I_N$	F [%]	D [min]	F [%]	D [min]	F [%]	D [min]	F [%]	D [min]	
1.0	-00.12	-00.43	-00.04	-00.24					
0.2	-00.03	+01.50							
0.05	-00.02	+01.07							

<b>Core 2</b>		<b>1.Rated ratio 4000/ 1</b>							
		20VA; PF0.8				10VA; PF0.8			
$I / I_N$	F [%]	D [min]	F [%]	D [min]	F [%]	D [min]	F [%]	D [min]	
1.0	-00.06	-00.30							

**Serial No. 05 / 5107407**

Fb.No. 201017434/090

Core 1		1.Rated ratio 4000/ 1							
		15VA; PF0.8				3.75VA; PF1			
I / I <sub>N</sub>		F [%]	D [min]	F [%]	D [min]	F [%]	D [min]	F [%]	D [min]
1.0		-00.15	+00.28	-00.03	+00.07				
0.2		-00.02	+00.78						
0.05		-00.04	-02.93						

Core 2		1.Rated ratio 4000/ 1							
		20VA; PF0.8				10VA; PF0.8			
I / I <sub>N</sub>		F [%]	D [min]	F [%]	D [min]	F [%]	D [min]	F [%]	D [min]
1.0		-00.04	-00.49						



**Serial No. 05 / 5107408**

Fb.No. 201017434/090

**Core 1** | 1.Rated ratio 4000/ 1

	15VA; PF0.8		3.75VA; PF1					
I / I <sub>N</sub>	F [%]	D [min]	F [%]	D [min]	F [%]	D [min]	F [%]	D [min]
1.0	-00.16	+01.07	-00.02	-00.75				
0.2	+00.01	+01.67						
0.05	-00.01	-02.62						

**Core 2** | 1.Rated ratio 4000/ 1

		20VA; PF0.8		10VA; PF0.8					
I / I <sub>N</sub>	F [%]	D [min]		F [%]	D [min]	F [%]	D [min]	F [%]	D [min]
1.0	-00.04	-00.26							

**Serial No. 05 / 5107409**

Fb.No. 201017434/090

Core 1		1.Rated ratio 4000/ 1							
		15VA; PF0.8				3.75VA; PF1			
I / I <sub>N</sub>		F [%]	D [min]			F [%]	D [min]		
1.0		-00.14	+00.56			-00.03	-00.59		
0.2		-00.04	-00.88						
0.05		-00.03	+00.08						

Core 2		1.Rated ratio 4000/ 1							
		20VA; PF0.8				10VA; PF0.8			
I / I <sub>N</sub>		F [%]	D [min]			F [%]	D [min]		
1.0		-00.06	-00.68						