



Reference No.: ET14115275-LVD

## LVD TEST REPORT

On Behalf of

**ZHEJIANG DIXSEN ELECTRICAL CO., LTD**

**Current transformer**

**Models: ABO-30, ABO-40, ABO-60, ABO-85, ABO-100,  
ABO-125, ABO-30T, ABO-B, ABO-C (5~5000/5A)**



Prepared for : ZHEJIANG DIXSEN ELECTRICAL CO., LTD  
Daoqiao Industrial Zone, Wenzhou, Zhejiang,  
China

Prepared by : Shenzhen Easy Test Electronic Products Co., Ltd.  
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Tested By :

Reviewed By :







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<b>TEST REPORT</b>	
<b>IEC 61869-2:2012</b>	
<b>Instrument transformers –Part 2: Additional requirements for current transformers</b>	
Report reference No	: ET14115275-LVD
Testing laboratory	: Shenzhen Easy Test Electronic Products Co., Ltd.
Address	: Unit 1914, No.1 Tairan Ninth Road, Chegongmiao, Futian, Shenzhen, China
Testing location	: As above
Applicant1	: ZHEJIANG DIXSEN ELECTRICAL CO., LTD
Address	: Daoqiao Industrial Zone, Wenzhou, Zhejiang, China
Manufacturer	: ZHEJIANG DIXSEN ELECTRICAL CO., LTD
Address	: Daoqiao Industrial Zone, Wenzhou, Zhejiang, China
Standard	: IEC 61869-2:2012
Test procedure	: LVD Scheme
Procedure deviation	: N.A.
Non-standard test method	: N.A.
Type of test object	: Current Transformer
Trademark	: Dixsen
Model/type reference	: ABO-30, ABO-40, ABO-60, ABO-85, ABO-100, ABO-125, ABO-30T, ABO-B, ABO-C (5~5000/5A)
Ratio	: See page 4.





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**Particulars: test item vs. test requirements**

Equipment mobility.....: Fixed equipment

Operating condition.....: Continuous

Protection against ingress of water ....: IPX0

**Possible test case verdicts:**

-test case does not apply to the test object.....: N(.A.)

-test object does meet the requirement.....: P(ass)

-test object does not meet the requirement.....: F(ail)

**General remarks:**

"(see remark #)" refers to a remark appended to the report.

(see appended table)" refers to a table appended to the report.

Throughout this report a comma is used as the decimal separator.

The test results presented in this report relate only to the object tested.

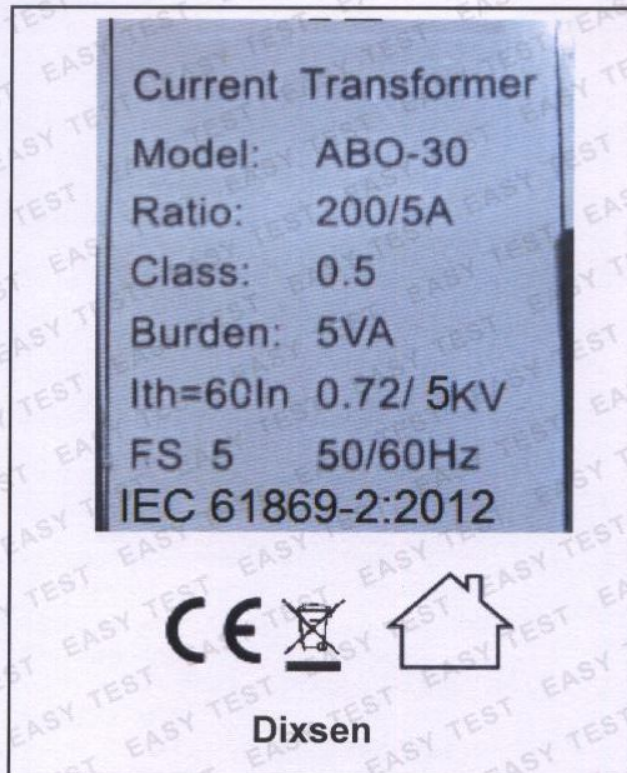
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Copy of marking plate:



Remark: These models: ABO-30, ABO-40, ABO-60, ABO-85, ABO-100, ABO-125, ABO-30T, ABO-B, ABO-C (5~5000/5A) are identical in structure, schematic circuit and critical component except for different model and voltage, so all tests were performed with ABO-30.





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Clause	Requirement – Test	Result - Remark	Verdict
<b>5</b>	<b>Ratings</b>		<b>P</b>
5.3	Rated insulation levels		P
5.3.2	Rated primary terminal insulation level		P
	Clause 5.3.2 of IEC 61869-1:2007 is applicable with the addition of the following:		--
	For a current transformer without primary winding and without primary insulation of its own, the value $U_m = 0,72$ kV is assumed.	$U_m = 0,72$ kV	P
5.3.5	Insulation requirements for secondary terminals		P
	Clause 5.3.5 of IEC 61869-1:2007 is applicable with the addition of the following:		--
	The secondary winding insulation of class PX and class PXR current transformers having a rated knee point e.m.f. $E_k \geq 2$ kV shall be capable of withstanding a rated power frequency withstand voltage of 5 kV r.m.s. for 60 s.	5 kV	P
5.3.201	Inter-turn insulation requirements		P
	The rated withstand voltage for inter-turn insulation shall be 4,5 kV peak.		P
	For class PX and class PXR current transformers having a rated knee point e.m.f. of greater than 450 V, the rated withstand voltage for the inter-turn insulation shall be a peak voltage of 10 times the r.m.s. value of the specified knee point e.m.f., or 10 kV peak, whichever is the lower.		P
5.5	Rated output		P
5.5.201	Rated output values		P
	The standard values of rated output for measuring classes, class P and class PR are: 2.5-5.0- 10-15 and 30VA.	5VA	P
	Values above 30 VA may be selected to suit the application.		N
5.5.202	Rated resistive burden values		N
	Standard values for rated resistive burden in R for class TPX, TPY and TPZ current transformers are: 0.5-1-2-5Ω		N
	The preferred values are underlined.		N





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Clause	Requirement – Test	Result - Remark	Verdict
	The values are based on a rated secondary current of 1 A. For current transformers having a rated secondary current other than 1 A, the above values shall be adjusted in inverse ratio to the square of the current.		N
5.6	Rated accuracy class		P
5.6.201	Measuring current transformers		P
5.6.203.1	Accuracy class designation for measuring current transformers		P
	For measuring current transformers, the accuracy class is designated by the highest permissible percentage of the ratio error (E) at rated primary current and rated output.		P
5.6.201.2	Standard accuracy classes		P
	The standard accuracy classes for measuring current transformers are: 0.1-0.2-0.2S-0.5-0.5S-1-3-5	0.5	P
5.6.201.3	Limits of ratio error (E) and phase displacement for measuring current transformers		N
	For classes 0,1 - Q,2 - 0,5 and i, the ratio error and phase displacement at rated frequency shall not exceed the values given in Table 201 where the burden can assume any value from 25 % to 100 % of the rated output.		N
	For classes 0,2S and 0,5S the ratio error and phase displacement at the rated frequency shall not exceed the values given in Table 202 where the burden can assume any value from 25 % and 100 % of the rated output.		N
	For class 3 and class 5, the ratio error at rated frequency shall not exceed the values given in Table 203 where the burden can assume any value from 50 % to 100 % of the rated output. There are no specified limits of phase displacement for class 3 and class 5.		N
	For all classes, the burden shall have a power-factor of 0,8 lagging except that, when the burden is less than 5 VA, a power-factor of 1,0 shall be used, with a minimum value of 1 VA.		N
5.6.201.4	Extended burden range		N
	For all measuring; classes, an extended burden range can be specified. The ratio error and phase displacement shall not exceed the limits of the appropriate class given in Table 201, Table		N





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Clause	Requirement – Test	Result - Remark	Verdict
	202 and Table 203 for the range of secondary burden from 1 VA up to rated output.		
	The power factor shall be 1,0 over the full burden range. The maximum rated output is limited to 15 VA.		N
5.6.201.5	Extended current ratings		N
	Current transformers of accuracy classes 0.1 to 1 may be marked as having an extended current rating provided they comply with the following two requirements:		--
	a) the rated continuous thermal current shall be the rated extended primary current.		N
	b) the limits of ratio error and phase displacement prescribed For 120 % of rated primary current in Table 201 shall be retained up to the rated extended primary current.		N
5.6.201.6	Instrument security factor		P
	An instrument security factor may be specified.		P
	Standard values are:		P
	FS 5 and FS 10	FS 5	P
5.6.202	Protective current transformers		P
5.6.202.1	General		P
	Three different approaches are designated to define protective current transformers (see Table 204).		P
	In practice, each of the three definitions may result in the same physical realization.		P
5.6.202.2	Class P protective current transformers		N
5.6.202.2.1	Standard accuracy limit factors (ALF)		N
5.6.202.2.2	Accuracy class designation		N
5.6.202.2.3	Standard accuracy classes		N
5.6.202.2.4	Error limits for class P protective current transformers		N
5.6.202.3	Class PR protective current transformers		N
5.6.202.3.1	Standard accuracy limit factors (ALF)		N





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Clause	Requirement – Test	Result - Remark	Verdict
5.6.202.3.2	Accuracy class designation		N
5.6.202.3.3	Standard accuracy classes		N
5.6.202.3.4	Error limits for class PR protective current transformers		N
5.6.202.3.5	Remanence factor ( $K_R$ )		N
5.6.202.3.6	Secondary loop time constant ( $T_S$ )		N
5.6.202.3.7	Secondary winding resistance ( $R_{ct}$ )		P
5.6.202.4	Class PX and class PXR protective current transformers		P
5.6.202.5	Protective current transformers for transient performance		N
5.6.202.5.1	Error limits for TPX, TPY and TPZ current transformers		P
	With rated resistive burden connected to the current transformer, the ratio error and the phase displacement at rated frequency shall not exceed the error limits given in Table 206.		P
	All error limits are based on a secondary winding temperature of 75°C.		P
5.6.202.5.2	Limits for remanence factor ( $K_R$ )		P
5.6.202.5.3	Specification Methods		N
	The two specification methods are illustrated in Table 207.		N
	In some cases, the choice of one specific duty cycle cannot describe all protection requirements. Therefore, the alternative definition offers the possibility to specify "overall requirements", which cover the requirements of different duty cycles.		N
	The specifications shall not be mixed, otherwise the current transformer may be over-determined.		N
5.6.203	Class assignments for selectable-ratio current transformers		N
5.6.203.1	Accuracy performance for current transformers with primary reconnection		N
			P





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Clause	Requirement – Test	Result - Remark	Verdict
	For all accuracy classes, the accuracy requirements refer to all specified reconections.		P
5.6.203.2	Accuracy performance for current transformers with tapped secondary windings		P
	For all accuracy classes, the accuracy requirements refer to the highest transformation ratio, unless specified othemise.		P
	When required by the purchaser, the manufacturer shall give information about the accuracy performance at lower ratios.		P
5.201	Standard values far rated primary current		N
	The standard values for rated primary current are: 10-12.5-15-20-25-30-40-50-60-75A		N
5.202	Standard values for rated secondary current		P
	The standard values for rated secondary current are 1 A and 5 A.	5 A	P
	For protective current transformers for transient performance, the standard value of the rated secondary current is 1 A.		P
5.203	Standard values for rated continuous thermal current		P
	The standard value for rated continuous thermal current is the rated primary current.		P
	When a rated continuous thermal current greater than the rated primary current is specified, the preferred values are 120 %, 150 % and 200 % of rated primary current.		P
5.204	Short-time current ratings		P
5.204.1	Rated short-time thermal current (I <sub>th</sub> )		P
	A rated short-tirr nt (I <sub>th</sub> )s hall be assigned to the transformer.	I <sub>th</sub> =60I <sub>n</sub>	P
	The standard value for the auration of the rated short-time thermal current is 1 s.		P
5.204.2	Rated dynamic current (I <sub>dyn</sub> )		P
	The standard value of the rated dynamic current (I <sub>dy</sub> ) is 2,5 times the rated short-time thermal current (I <sub>th</sub> )		P
<b>6</b>	<b>Design and construction</b>		<b>P</b>
6.4	Requirements for temperature rise of parts and components		P
6.4.1	General		P





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Clause	Requirement – Test	Result - Remark	Verdict
	This clause of IEC 61 869-1 :2007 is applicable with the addition of the following:		P
	The temperature rise in a current transformer when carrying a primary current equal to the rated continuous thermal current, with a unity power-factor burden corresponding to the rated output, shall not exceed the appropriate value given in Table 5 of IEC 61869-1:2007.		P
	These values are based on the service conditions given in Clause 4.		P
6.13	Markings		P
6.13.201	Terminal markings		P
6.13.201.1	General rules		P
	The terminal markings shall identify:		--
	a) the primary and secondary windings;		P
	b) the winding sections, if any;		P
	c) the relative polarities of windings and winding sections;		P
	d) the intermediate taps, if any.		P
6.13.201.2	Method of marking		P
	The marking shall consist of letters followed, or preceded where necessary, by numbers. The letters shall be in block capitals.		P
6.13.201.3	Markings to be used		P
	The markings of current transformer terminals shall be as indicated in Table 208.		P
6.13.201.4	Indication of relative polarities		P
	All the terminals marked P1, S1 and C1 shall have the same polarity at the same instant.		P
6.13.202	Rating plate markings		P
6.13.202.1	General		P
	The markings related to the particular accuracy classes are given in Subclauses 6.13.202.2 to 6.13.202.6		--





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Clause	Requirement – Test	Result - Remark	Verdict
	a) the rated primary and secondary current (e.g. 100/1 A);	See page 4.	P
	b) the rated short-time thermal current (I <sub>th</sub> )(e.g. I <sub>th</sub> = 40 k A);	See page 4.	P
	c) the rated dynamic current (I <sub>dyn</sub> ) it differs from) 2.5 x I <sub>th</sub> (e.g. I <sub>dyn</sub> = 85 kA);		N
	d) on current transformers with two or more secondary windings, the use of each winding and its corresponding terminals;		P
	e) the rated continuous thermal current if different from the rated primary current.		P
6.13.202.2	Specific marking of the rating plate of a measuring current transformer		N
	The accuracy class and instrument security factor (if any) shall be indicated following the indication of the corresponding rated output.		N
6.13.202.3	Specific marking of the rating plate of a class P protective current transformer		N
	The rated accuracy limit Factor shall be indicated following the corresponding rated output and accuracy class.		N
6.13.202.4	Specific marking of the rating plate of class PR protective current transformers		N
	The rated accuracy limit factor shall be indicated following the corresponding rated output and accuracy class.		N
	If specified, the following parameters shall also be indicated:		--
	- the secondary loop time constant (T <sub>s</sub> );		N
	- the upper limit of the secondary winding resistance (R <sub>CT</sub> );		N
6.13.202.5	Specific marking of the rating plate of class PX and PXR protective current transformers		N
	The class requirements may be indicated as follows:		N
	- the rated turns ratio		N
	- the rated knee point e.m.f. (E <sub>k</sub> );		N
	- the upper limit of exciting current (I <sub>e</sub> ) at the rated knee point e.m.f. and/or at the stated percentage thereof;		N
	- the upper limit of secondary winding resistance (R <sub>ct</sub> )		N
	If specified, the following parameters shall also be indicated:		--





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	- the dimensioning factor (Kx);		N
	- the rated resistive burden [Rb).		N

6.13.202.6	Specific marking of the rating plate of current transformers for transient performance		N
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<b>7</b>	<b>Tests</b>		<b>P</b>
7.1	General		P
7.1.2	Lists of tests		P
7.2	Type tests		P
7.2.2	Temperature-rise test		P
7.2.2.201	Test set up		P
	IEC 61869-1:2007, 7.2.2 is applicable with the following additions:		--
	The current transformer shall be mounted in a manner representative of the mounting in service and the secondary windings shall be loaded with the burdens according to 6.4.1. However, because the position of the current transformer in each switchgear installation can be different, the test setup arrangement is left to the manufacturer.		P
	For current transformers in three phase gas-insulated metal enclosed switchgear, all three phases have to be tested at the same time.		P
7.2.2.202	Measurement of the ambient temperature		P
	The sensors to measure the ambient temperature shall be distributed around the current transformer, at an appropriate distance according to the current transformer ratings and at about half-height of the transformer, protected from direct heat radiation.		P
	To minimise the effects of variation of cooling-air temperature, particularly during the last test period, appropriate means should be used for the temperature sensors such as heat sinks with a time-constant approximately equal to that of the transformer.		P
	The average readings of two sensors shall be used for the test.		P
7.2.2.203	Duration of test		P
	The test can be stopped when both of the following conditions are met:		P





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	- the test duration is t equal to three times the current transformer thermal time constant;		P
	- the rate of temperature rise of the windings (and of the top oil of oil-immersed current transformers) does not exceed 1 K per hour during three consecutive temperature rise readings.		P
	The manufacturer shall estimate the thermal time constant by one of the following methods:		P
	- before the test, based on the results of previous tests on a similar design. The thermal time constant shall be confirmed during the temperature rise test.		P
	- during the test, from the temperature rise curve(s) or temperature decrease curve(s) recorded during the course of the test and calculated according to Annex 2D.		P
	- during the test, as the point of intersection between the tangent to the temperature rise curve originating at 0 and the maximum estimated temperature rise.		P
	- during the test, as the time elapsed until 63 % of maximum estimated temperature rise.		P
7.2.2.204	Temperatures and temperature rises		P
	The purpose of the test is to determine the average temperature rise of the windings and, for oil-immersed transformers, the temperature rise of the top oil, in steady state when the losses resulting from the specified service conditions are generated in the current transformer.		P
	The average temperature of the windings shall, when practicable, be determined by the resistance variation method, but for windings of very low resistance, thermometers, thermocouples or other appropriate temperature sensors may be employed.		P
	Thermometers or thermocouples shall measure the temperature rise of parts other than windings. The top-oil temperature shall be measured by sensors applied to the top of metallic head directly in contact with the oil.		P
	The temperature rises shall be determined by the difference with respect to the ambient temperature measured as indicated in 7.2.2.202.		P





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Clause	Requirement – Test	Result - Remark	Verdict
7.2.2.205	Test modalities for current transformers having $U_m < 450$ kV		P
	The test shall be performed by applying the rated continuous thermal current to the primary winding.		P
7.2.2.206	Test modalities for oil-immersed current transformers having $U_m \geq 556$ kV		N
	The test shall be performed by simultaneously applying the following to the current Transformer:		--
	the rated continuous thermal current to the primary winding;		N
	The test current may also be applied by energizing one or more secondary windings, if the voltages at the secondary terminals of the energizing cores are at least as high as if connected to rated burden, with the primary winding short-circuited and the non-supplied secondary winding(s) connected to the rated burden(s).		N
	the highest voltage of the equipment divided by $\sqrt{3}$ between the primary winding and earth. One terminal of each secondary winding shall be connected to earth.		N
7.2.3	Impulse voltage withstand test on primary terminals		P
	IEC 61869-1:2007, 7.2.3.1 applicable with the addition of the following:		--
	The test voltage shall be applied between the terminals of the primary winding (connected together) and earth. The frame, case (if any), and core (if intended to be earthed) and all terminals of the secondary winding(s) shall be connected to earth.		P
	For three-phase current transformers for gas insulated substations, each phase shall be tested, one by one. 'During the test on each phase, the other phases shall be earthed.		P
	For the acceptance criteria of gas-insulated metal enclosed transformers, refer to IEC62 271-203:2011, Clause 6.2.4.		P
7.2.3.1	General		P
7.2.6	Tests for accuracy		P
7.2.6.201	Test for ratio error and phase displacement of measuring current transformers		P





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Clause	Requirement – Test	Result - Remark	Verdict
	To prove compliance with 5.6.201.3, 5.6.201.4 and 5.6.201.5, accuracy measurements shall be made at each value of current given in Table 201, Table 202 and Table 203 respectively, at the highest and at the lowest value of the specified burden range.		P
	Transformers having an extended current rating shall be tested at the rated extended primary current instead of 120 % of rated current.		P
7.2.6.202	Determination of the instrument security factor (FS) of measuring current transformers		P
7.2.6.203	Test for composite error of class P and PR protective current transformers		P
	The following two test procedures are given:		--
	a) Compliance with the limits of composite error given in Table 205 shall be demonstrated by a direct test in which a substantially sinusoidal current equal to the rated accuracy limit primary current is passed through the primary winding with the secondary winding connected 20 a burden of magnitude equal to the rated burden but having, at the discretion of the manufacturer, a power factor between 0,8 inductive and unity (see 2A.4, 2A.5, 2A.6, 2A.7.		P
	The test may be carried out on a transformer similar to the one being supplied, except that reduced insulation may be used, provided that the same geometrical arrangement is retained.		P
	As far as very high primary currents and single-bar primary winding current transformers are concerned, the distance between the return primary conductor and the current transformer should be taken into account from the point of view of reproducing service conditions.		P
	b) For low-leakage reactance current transformers according to Annex 2C, the direct test may be replaced by the following indirect test.		P
	The exciting voltage shall be measured with an instrument which has a response proportional to the average of the rectified signal, but calibrated in r.m.s..The exciting current shall be measured using an r.m.s measuring instrument having a minimum crest factor of 3.		P
	In determining the composite error by the indirect method, a possible correction of the turns ratio need not be taken into account.		P





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Clause	Requirement – Test	Result - Remark	Verdict
7.2.6.204	Test far error at limiting conditions for class TPX, TPY and TPZ protective current transformers		N
	The purpose of the type test is to prove the compliance with the requirements at limiting conditions. For test methods refer to Annex 2B		N
7.2.6.205	Test of low-leakage reactance type for class PX and PXR protective current transformers		N
	The proof of low-leakage reactance shall be made according to Annex 2C.		N
7.2.201	Short-time current tests		P
7.3	Routine tests		N
7.3.1	Power-frequency voltage withstand tests on primary terminals		N
	This clause of IEC 61869-1 is applicable with the addition of the Following:		--
	The test voltage shall be applied between the short-circuited primary winding and earth. The short-circuited secondary windings), the frame, case (if any) and core (if there is a special earth terminal) shall be connected to earth.		N
7.3.5	Tests for accuracy		N
7.3.5.201	Tests for ratio error and phase displacement of measuring current transformers		N
	The routine test for accuracy is in principle the same as the type test in 7.2.6.201, but routine tests at a reduced number of currents and/or burdens are permissible provided it has been shown by type tests on a similar transformer that such a reduced number of tests are sufficient to prove compliance with 5.6.201.3		N
7.3.5.202	Tests for ratio error and phase displacement of class P and PR protective current transformers		N
7.3.5.203	Test for composite error of class P and PR protective current transformers		N
7.3.5.204	Test for ratio error and phase displacement for class TPX, TRY and TPL protective current transformers		N
7.3.5.205	Test for error at limiting conditions for class TPX, TPY and TPZ protective current transformers		N
7.3.5.206	Test for turns ratio error far class PX and PXR protective current transformers		N
7.3.201	Determination of the secondary winding resistance (Rct)		N
7.3.202	Determination of the secondary loop time constant (Ts)		N





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Clause	Requirement – Test	Result - Remark	Verdict
7.3.203	Test for rated knee point e.m.f. (Ek) and exciting current at Ek		N
7.3.204	Inter-turn overvoltage test		N
7.4	Special tests		N
7.4.3	Measurement of capacitance and dielectric dissipation factor		N
7.4.6	Internal arc fault test		N
7.5	Sample tests		N
7.5.1	Determination of the remanence factor		N
7.5.2	Determination of the instrument security factor (FS) of measuring current transformers		N

Annex 2A	Protective current transformers classes P, PR	Verdict
2A.1	Vector diagram	N
2A.2	Turns correction	N
2A.3	The error triangle	N
2A.4	Composite error	N
2A.5	Direct test for composite error	N
2A.6	Alternative method for the direct measurement of composite error	N
2A.7	Use of composite error	N

Annex 2B	Protective current transformer classes for transient performance	Verdict
2B.1	Basic theoretical equations for transient dimensioning	N
2B.1.1	Short-circuit	N
2B.1.2	Transient dimensioning factor Ktd	N
2B.1.3	C-0-C-0 duty cycles	N
2B.2	Measurement of the core magnetization characteristic	N
2B.2.1	General	N
2B.2.2	A.C. method	N
2B.2.2.1	Determination of the magnetizing inductance Lm	N
2B.2.2.2	Determination of the error at limiting conditions	N





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Clause	Requirement – Test	Result - Remark	Verdict
2B.2.2.3	Determination of the remanence factor $K_r$		N
2B.2.3	B.C. method		N
2B.2.3.1	General		N
2B.2.3.2	Determination of the remanence factor $K_R$		N
2B.2.3.3	Determination of the magnetizing inductance $L_m$		N
2B.2.3.4	Determination of the error at limiting conditions		N
2B.2.4	Capacitor discharge method		N
2B.3	Direct test for determination of the error at limiting conditions		N
2B.3.1	General		N
2B.3.2	Direct test		N
2B.3.3	Determination of the factor of construction		N
<b>Annex 2C</b>	<b>Proof of law-leakage reactance type</b>		<b>N</b>
<b>Annex 2D</b>	<b>Technique used in temperature rise test of oil-immersed transformers to determine the thermal constant by an experimental estimation</b>		<b>N</b>
<b>Annex 2E</b>	<b>Alternative measurement of the ratio error (E)</b>		<b>N</b>
<b>Annex 2F</b>	<b>Determination of the turns ratio error</b>		<b>N</b>





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7.2.2 Table: temperature- rise test		P
Test condition.....	Attained a steady temperature when the rate of temperature rise does not exceed 1 K per hour.	---
Burden.....	5VA	---
Primary current.....	200A	---
Ambient temperatureT1(°C) .....	25.1	---
Ambient temperatureT2(°C) .....	25.0°C	---
Temperature of part/at:	Test(K)	Required Tmax(K)
Winding (1)	63.2	105
Winding (2)	64.8	105
Winding (3)	63.6	105
Winding (4)	64.7	105
I Winding (5)	62.9	105
Winding (6)	62.5	105
Enclosure(1)	40.6	55
Enclosure (2)	39.5	55
Supplementary information:		

7.2.3 Table: Impulse tests on primary winding		P
test voltage applied between	test voltage (V)	breakdown (Yes/No)
Input and Plastic Enclosure With Metal Foil	5000Vac	No
Supplementary information:		





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Attachment	Table: list of critical component			P
Object /Part No	Manufacturer/ Trade Mark	Type/ Model	Technical data	File No./Licence No.
Winding	---	---	130°C	UL
Plastic Enclosure	---	---	V-0, 80°C	UL





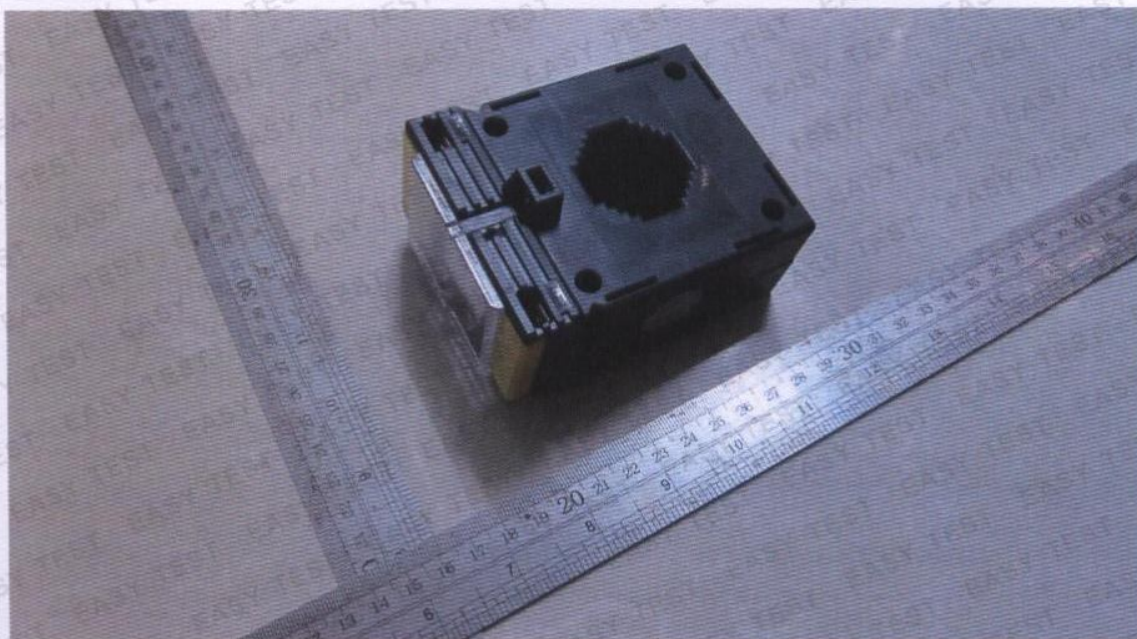
Reference No.: ET14115275-LVD

## APPEDIX A - EUT PHOTOS

### A.1 EUT PHOTO-WHOLE VIEW OF UNIT



### A.2 EUT PHOTO-FRONT VIEW OF UNIT

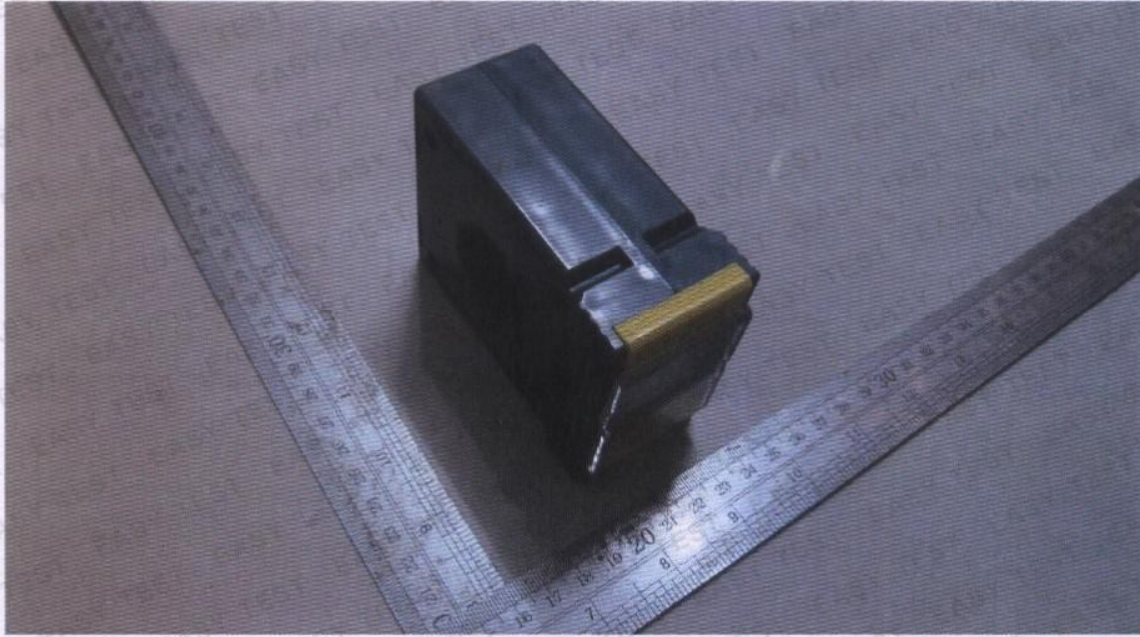




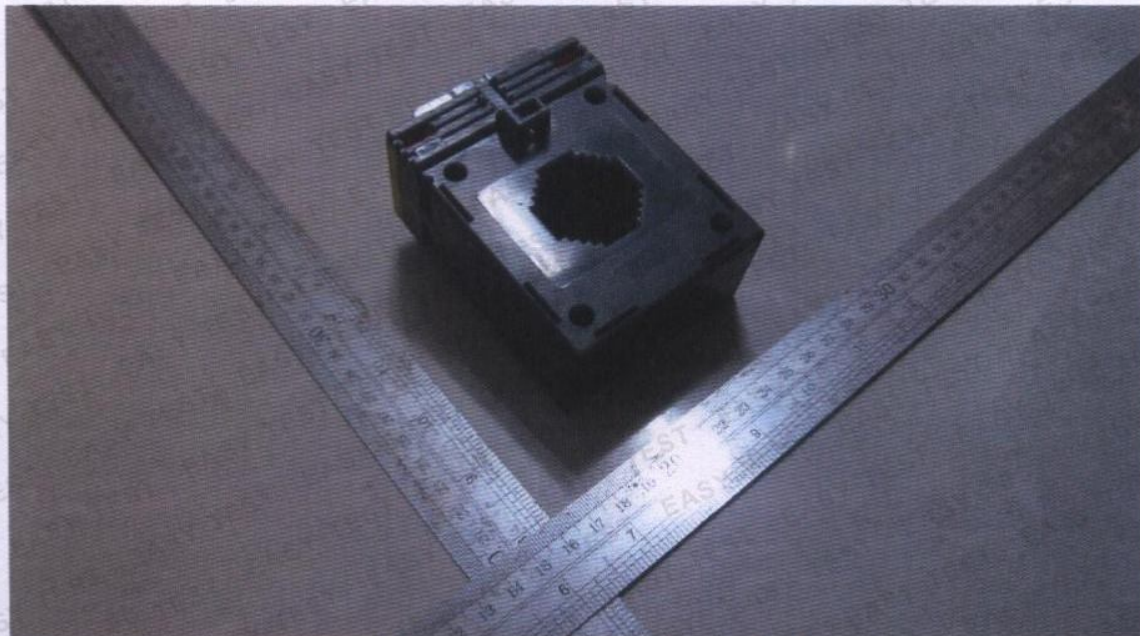


Reference No.: ET14115275-LVD

### A.3 EUT PHOTO-SIDE VIEW OF UNIT



### A.4 EUT PHOTO-BACK VIEW OF UNIT

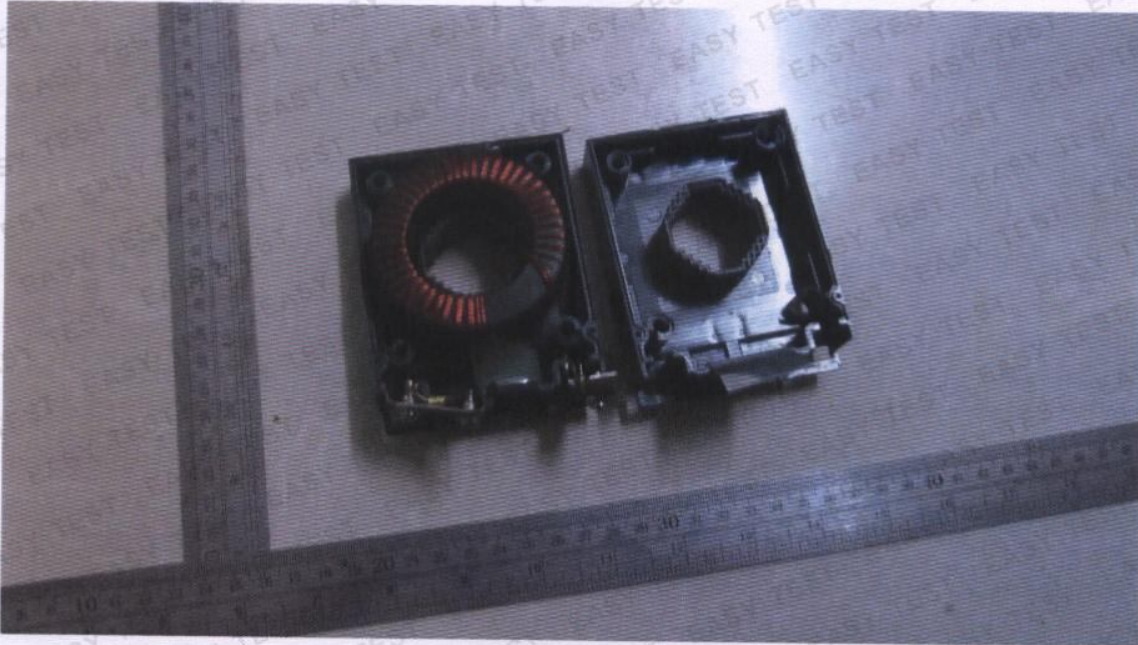






Reference No.: ET14115275-LVD

### A.5 EUT PHOTO-INSIDE VIEW 1 OF UNIT



### A.6 EUT PHOTO-INSIDE VIEW 2 OF UNIT

