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IECEE OPERATIONAL DOCUMENT

IEC System of Conformity Assessment Schemes for Electrotechnical Equipment and Components (IECEE System)

Factory Surveillance Report





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FOREWORD

Scope

To be determined

Document Owner

<u>CFS</u>

History of changes

Revision Date	Brief summary of changes				
2018-01-29	Updates have been made to "general guidance" as well as				
	subclauses 1.5 and 1.6.				

Effective date	Next maintenance due date
<u>2018-06-05</u>	<u>2021-06-05</u>



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Introduction

The objective of the Factory Surveillance is:

- to evaluate the capability of a Factory to produce products within a consistent Manufacturing process.
- to verify that the Manufacturer's Quality Management Measures, Assembly line, Inspection and Testing Procedures, Facilities and Equipment etc. are set to comply with the applicable requirements.
- to cover any declared additional certification-related requirements of the National Certification Bodies.

The Factory Surveillance should be focused on the relevant Scope of Category(ies) and Standard(s) associated with the certified products concerned.

General guidance

Guidance on how to fill in the present form is given in the document OD-G-4001, Guidance for <u>IECEE</u> Factory Inspectors.



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Contents (to be updated when agreed)

Item	Title	Covered / Included
1	General information	
2	Verification of purchased components and materials	
3	Production control, inspection and routine tests	
4	Functional check on test and measuring equipment	
5	Products seen in production during visit	
6	Calibration of safety test- and measuring equipment	
7	Handling and storage	
8	Reserved for future use	
9	Product Identification Document verification	
10	Corrective actions	
11	Quality Management System	
12	Reserved for future use	
13	Reserved for future use	
14	Customer complaints	
15	Control of product changes	
16	Reserved for future use	
17	Inspector's evaluation	



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1 General information

1.1 Manufacturer's registered name and factory location			
Manufacturer's registered name			
Street address of the factory and number			
Postal code			
City			
County			
Country			
GPS-coordinates (optional)			
1.2 Manufacturer's representative nam	e and contact data		
Manufacturer's representative name			
Position			
Telephone			
Fax			
Email			
1.3 Record below the names and p Surveillance	position held of the main people involved in the		
Same as mentioned under 1.2			
If not the same as mentioned under 1.2, ple	ase give details below:		
Manufacturer's representative name			
Position			
Telephone			
Fax			
Email			
1.4 Type of Surveillance			
☐ Pre-certification ☐ Post-certification	ification Surveillance		



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1.5 Prod	ucts covered by this surveillanc	е	
Category	Product	PID Number	<u>V</u> version/issuing date
1.6			
Name of	IECEE	Date of surveillance	
Factory Inspector		(YYYY-MM-DD)	
IECEE_FI Registration №			



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2 Verification of purchased components and materials which have a safety implication on the certified product (Incoming Inspection)

2.1	2.1 Are materials, components and sub-assemblies verified by the manufacturer as complying with appropriate specification?		N/A	NO	
2.2 Does this verification	Does this verification also include the verification of any Certification	YES	N/A	NO	
	Marks?				
		•		•	
RA S C I I I I	Description of procedure (one or more boxes may be ticked) Rely on suppliers' out-going inspection/ suppliers' quality plan Audit conducted at the suppliers' premises Supplier control based on manufacturers' check list Conduct own incoming inspection Identification check Checked for correct type Comparison to a reference Rating Certification mark Certificate of conformity				
	etails given on Inspector's Evaluation Informative page				
	ription of the procedure or ref. of documented procedure & revision or issue on etails given on Inspector's Evaluation Informative page	date:			
				ı	
2.3 If the manufacturer relies on Certificates of Conformity, do they clearly identify the product, quantity of items covered, the specification to which the products conform, the production date and are they properly issued?		YES	N/A	NO	
2.4 Is there a procedure covering the way to handle non-conforming		YES	N/A	NO	
	components and materials?				
	cription of the procedure or ref. of documented procedure & revision or issue on etails given on Inspector's Evaluation Informative page	date:			
2.5 Are the procedure and the way in which it is applied satisfactory? (e.g.: components and materials clearly identified and/or segregated to prevent unauthorised use?)		YES	N/A	NO	



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2.6	Are records of the incoming inspection maintained and satisfactory?	YES	N/A	NO
2.7	Are records kept at least for the period between two Surveillance visits?	YES	N/A	NO

3 Production Control, Inspection and Routine Tests

3.1	Are the quality assurance and manufacturing personnel adequately	YES	N/A	NO
briefed on their duties?				
3.2	Do they have readily available up-to-date documents, manufacturing	YES	N/A	NO
	and test instructions, photographs, drawings or samples on all those parts which have an impact on the safety of the finished products?			
3.3	Is there evidence that the production process ensures that the final	YES	N/A	NO
	product is identical to the reference version as described in clause 15.1?			
3.4	Is there a procedure to ensure that all products will be tested or	YES	N/A	NO
	inspected according to the manufacturer's requirements?			
	ription of the procedure or ref. of documented procedure & revision or issue on the control of the procedure of the control of	date:		
3.5 Is the production process controlled at appropriate stages?		YES	N/A	NO
				1
3.6	Are products inspected at appropriate stages of manufacture?	YES	N/A	NO
	(Production Line Inspection)			
Give details of all tests and inspections performed by the manufacturer and enter in the <u>routine test table</u> on the Test Data Sheet				
3.7	Do the Routine Tests entered on the Test Data Sheet sufficiently	YES	N/A	NO
	cover all routine test requirements?			

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3.8 Is there a procedure covering the way to handle non-conforming	YES	N/A	NO
products?			
Description of the procedure or ref. of documented procedure & revision or issue of Details given on Inspector's Evaluation Informative page	date:		
Procedure of handling non-conforming products (one or more boxes may be ticked) Automated segregation process Manual segregation process			
Non-conforming products are destroyed			
Non-conforming products are repaired			
☐ Others (please give details) ☐ Details given on Inspector's Evaluation Informative page			
Details given on <u>inspector's Evaluation informative page</u>			
	YES	N/A	NO
3.9 Are the procedure and the way in which it is applied satisfactory? (e.g. non-conforming products clearly identified or segregated to	163	IN/A	NO
prevent unauthorised use?)			
3.10 Are repaired and reworked (corrected) items again subjected to	YES	N/A	NO
appropriate tests/inspections in accordance with procedures?			
Description of the procedure or ref. of documented procedure & revision or issue of Details given on Inspector's Evaluation Informative page	date:		
3.11 Are test records of the routine tests maintained and satisfactory?	YES	N/A	NO
·			
		_	
3.12 Are records kept at least for the period between two Surveillance		N/A	NO
visits?			



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4 Functional check on test and measuring equipment used for safety tests (Dummy Test)

4.1 Is there a procedure describing how the functional checks shall be conducted?	YES	N/A	NO		
	utomated process anual process				
	ription of the procedure or ref. of documented procedure & revision or issue of etails given on <u>Inspector's Evaluation Informative page</u>	date:			
4.2	Is there evidence that the functional check of the equipment is	YES	N/A	NO	
	conducted properly, even if certified products were not in production?				
4.3	Is a functional check conducted with intervals which will allow	YES	N/A	NO	
	previous production to be retested if incorrect functioning is detected before it leaves the factory?				
4.4	Is the proper function of the test equipment verified with a simulated	YES	N/A	NO	
	failure (dummy) or by other equivalent means?				
☐ Te	☐ Simulated failure (dummy) ☐ Test procedure according to the equipment manual ☐ Internal self-test; test program included in equipment certification ☐ Internal self-test; verified by the inspector				
4.5	Is there evidence that the simulated failure (dummy) (if used)	YES	N/A	NO	
	represents the tripping limits?			Ш	
4.6	Is there a procedure requiring appropriate actions to be taken by the	YES	N/A	NO	
	operator if a functional check is found to be unsatisfactory?				
Description of the procedure or ref. of documented procedure & revision or issue date: Details given on Inspector's Evaluation Informative page					
4.7 Is this procedure appropriate to ensure that improperly checked	YES	N/A	NO		
	products are re-tested?				



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4.8	Are subsequent corrective actions taken recorded in all cases?	YES	N/A	NO
4.9	Are the test records of results of functioning checks of test and	YES	N/A	NO
measuring equipment maintained and satisfactory?				
4.10	Are records kept at least for the period between two Surveillance	YES	N/A	NO
visits?				

5 Products seen in Production during the Visit

Identify type number and any certification mark that appeared on products seen in production at the time of the visit. If no certified products were seen, indicate what kinds of products were manufactured at the time of visit. The manufacturing process should nevertheless be examined.
At least one kind of product per product category and electrical insulation class shall be listed.
☐ No production
Production seen
Complete Test Data Sheet for each kind of product per product category and electrical insulation class even if
there is no production.
Record the products seen in Production during visit on the Inspector's Evaluation Informative page.



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6 Calibration of Safety Test and Measuring Equipment

6.1 Is test and measuring equipment used calibrated or verified?		N/A	NO
(one or more boxes may be ticked) Verification done by the manufacturer by means of calibrated reference equipmed Calibration done by:			
 Laboratory accredited according to ISO/IEC 17025 Test equipment manufacturer/supplier National metrology institute 			
Other (please give details)			
Provide details for at least one electrical measuring equipment:			
Kind of equipment			
Type reference Calibration reference number			
Date of last calibration			
Calibration due date			
			ı
6.2 Is the reference equipment (if used for verification) calibrated?		N/A	NO
(one or more boxes may be ticked) Calibration of reference equipment done by: Laboratory accredited according to ISO/IEC 17025 Test equipment manufacturer/supplier National metrology institute			
Other (please give details)			
6.3 Is the equipment provided with a label or similar indicating the next	YES	N/A	NO
calibration/verification due date?			
			I
6.4 Do the calibration/verification records indicate that calibration is	YES	N/A	NO
traceable to national/international standards of measurement?			
			I
6.5 Are the records for calibration/verification of test and measuring	YES	N/A	NO
equipment maintained and satisfactory?			
6.6 Are records kept at least for the period between two Surveillance	YES	N/A	NO
visits?			



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7 Handling and Storage

7.1	7.1 Are the components and materials to be used for production stored and handled in such a way as to ensure that they will continue to comply with the applicable standards?		N/A	NO
7.2	Are the finished products stored and handled in such a way as to	YES	N/A	NO
	ensure that they will continue to comply with the applicable standards?			

8 (Reserved for future use)

9 Verification of Construction Identity against PID (Product Identification Document)

9.1	PID				
				NO	
Are a	all PIDs according to clause 1.5 available?				
9.2	Has it been verified that the components and materials from PID are	YES	N/A	NO	
	used?				
	List any component not listed on the PID on the <u>Inspector's Evaluation Informative page</u> . Unacceptable component changes shall be listed on the <u>Non Conformity Sheet</u>				
9.3	9.3 Has it been verified that the product is produced as described in the YES N/A NO				
	PID?				
	List any constructional change/deviation from the PID, on the <u>Inspector's Evaluation Informative page</u> . Unacceptable constructional changes/deviations from the PID shall be listed on the <u>Non Conformity Sheet</u>				



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10 Follow up on corrective actions from previous surveillances

Are all corrective	actions	from	previous	surveillances	completed	and	YES	N/A	NO
implemented?									
11 Quality Mana	ageme	nt Sy	stem						
If the manufacturer ha									
provide details of QMS provide copy of the cert		d, scop	e, name of	certification bod	dy/registrar an	nd cert	ificate e	xpiry da	ate, or
 QMS NOT certified QMS certified/registered by an accredited certification body/registrar 									
QMS certified/registered by a <u>non</u> -accredited certification body/registrar Copy of the certificate (if any) provided as appendix to this report									
,	`	ту) рго	viueu as a _l	ppendix to this i	ероп				
Details of QMS stand	lard:								
Does the scope of the		ation/re	gistration c	over the produc	ction of the co	ertified	l produc	ct:	
Yes	☐ No								
Name of certification	body/reg	istrar:							
Certificate no.: Certificate issued dat	e:								
Certificate expiry date	e:								
12 (Reserved fo	or flitiir	ים וופי	2)						
12 (INESELVEU IC	, iutui	e us	-						



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14 Customer complaints

The Manufacturer shall record any technical complaint regarding the certified product. The questions in this section shall be answered even if no customer complaints have been case the questions should be applied to the process	n receive	ed. In thi	is
14.1 Is there a procedure regarding how to handle customer complaints?	YES	N/A	NO
14.2 Are the received complaints reviewed on a regular basis regarding	YES	N/A	NO
whether they are related to single errors or system errors?			
Actual case checked Procedure checked	,		
14.3 Are corrective actions and decisions regarding customer complaints	YES	N/A	NO
recorded?			
☐ Actual case checked ☐ Procedure checked			
14.4 Is the originator of the complaint informed about the handling and	YES	N/A	NO
the result of the complaint?			
Actual case checked Procedure checked			
14.5 Are the records of customer complaints maintained and	YES	N/A	NO
14.5 Are the records of customer complaints maintained and satisfactory?	YES	N/A	NO
	YES	N/A	NO
	YES YES	N/A	NO NO
satisfactory?			



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15 Control of product changes

15.1 Is reference information about the manufactured product(s) available?	YES	N/A	NO		
(one or more boxes may be ticked) Set of drawings Parts list Product description / Product Information Document (PID) Reference sample Photo-documentation Other specification (please give details) Details are given on Inspector's Evaluation Informative page					
15.2 Is this reference under control of the:	YES	N/A	NO		
☐ Certificate holder ☐ Manufacturer ☐ Others					
15.3 Is there a procedure ensuring that no changes to the construction of	15.3 Is there a procedure ensuring that no changes to the construction of YES N/A NO				
certified products will be implemented prior to acceptance by the Certificate Holder? (if any)					
Description of the procedure or ref. of documented procedure & revision or issue of Details given on Inspector's Evaluation Informative page	date:				
15.4 If the manufacturer is also the Certificate Holder, is there a procedure	YES	N/A	NO		
ensuring that constructional changes of the certified product will be made only after approval by the Certification Body?					
Description of the procedure or ref. of documented procedure & revision or issue of Details given on Inspector's Evaluation Informative page	date:				
15.5 Does the manufacturer confirm that no changes or only authorized	YES	N/A	NO		
changes have been made to the concerned manufactured product since the last Surveillance?					
☐ No changes ☐ Changes authorized by the certificate holder					



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16 (Reserved for future use)

17 Inspector's evaluation

17.1	(including comments, recommendation	mity Sheet by referencing the applicable clauses in this repo ons, etc.) and explain them to the manufacturer. e actions the manufacturer intends to take.	rt
17.2	Findings and recommendations	s to the responsible NCB	
1	No unsatisfactory findings.	No unsatisfactory findings.	
		Product certification (if any) may continue.	
2	Minor unsatisfactory finding(s).	Manufacturer's corrective action(s) shall be checked at the next visit.	
		Product certification (if any) may continue.	
3	Major unsatisfactory finding(s). Safety not directly affected.	Manufacturer shall confirm the corrective action(s).	
		Product certification (if any) may continue after confirmation by the NCB. (Special or early routine Surveillance recommended for checking corrective action(s)).	
4	Critical unsatisfactory finding(s). Safety directly affected.	Repeated factory Surveillance recommended after the manufacturer has confirmed implementation of the corrective action(s). (The corrective actions might include total re-evaluation of the product).	
		Product certification (if any) likely to be suspended by the NCB.	
The N	lanufacturer has to inform the Issui	ing NCB.	
The re	esult of this surveillance will be pas	sed to the Issuing NCB.	



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17.3	Attachments added		YES	NO	
17.3	Attaciments added				
	Attachments: For page control, please write the reference number in the header of each attach	ment page.			
	General pages	No. of pag	es:		
	Signature page				
	Copy of Quality Management Certificate				
	Non Conformity Sheet				
	Inspector's Evaluation Informative page				
	Test Data Sheet – Routine Tests (Annex 1)				
	Other				
	Additional requirements for :				
	Europe (Annex SR Europe)				
	ENEC (Annex SR ENEC)				
Total	no. of pages of this report including all attachment pages:				
sign fo ☐ Pri	of this report shall be provided to the undersigned contact person who should be or its receipt. Inted copy provided ectronic copy provided	aware of the	content	s and	
	The responsibility for ensuring that a product is manufactured in accordance with the standard to which it was originally approved rests with the Manufacturer and the Certificate Holder (if any)				



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Signature Page					
Surveillance duration (in hours):					
Date:					
Inspector's name (printed letters)	Contact person's name (printed letters)				
Signature This report is an electronic report and is valid without signature	Signature This report is an electronic report and is valid without signature				
☐ For signature, see attached separate page					



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Non Conformity Sheet

Non Conformity Sheet No /				
Finding:				
Surveillance report item:				Level (see 17.2):
				·
The Manufacturer has to inform the C weeks. from the issuing date				proposed corrective actions within
Manufacturer's representative:	<u>Oi Telate</u>	u ron (Inspector:	
•				
Root Cause Analysis:				
Corrective Action:				
Root Cause Analysis accepted	YES	NO	Inspector / Repres	sentative of FSB:
Corrective Action accepted			Inspector / Repres	sentative of FSB:
Consolive Adiion accepted	YES	NO	mopeotor / Nepres	ornative of 1 ob.
Date implemented:			Implementation	verified on (date):
Implementation actisfactory			Inon a star / Darr	contative of ECD:
Implementation satisfactory	YES	NO	inspector / Repr	esentative of FSB:



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Inspector's Evaluation Informative page

Informative (optional) Use separate Supplementary Page for different Certification Bodies if necessary
Use separate supplementary rage for uniferent certification bodies if necessary

Annex 1 Test Data Sheet – Routine Tests

☐ No production	
☐ Production seen	Certification mark (if any):
Product Category (e.g. HOUS):	Kind of product (e.g. vacuum cleaner):
Type number:	Electrical Insulation Class:
Rated voltage:	

TESTS		% Test value check applied	Time		Failure indicated by	Remarks	W	
							R	
а	Earth continuity		V A	s	Ohm (max.)			
b	Insulation resistance		V d.c.	s	MOhm (min.)			
С	Leakage current		V		mA (max.)			
strength	Basic insulation		V	s	mA (max.)			
ctric stre	Supplementary insulation		V	S	mA (max.)			
Dielectric	Reinforced insulation		V	S	mA (max.)			
е	Load deviation							
f	Functional test							

Indicate method used (hot/cold, at mains voltage, low voltage resistance check, etc.).

W = test Witnessed by the inspector R = according to records

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Are all controls and components checked during the test?

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IEC SYSTEM OF CONFORMITY ASSESSMENT SCHEMES FOR ELECTROTECHNICAL EQUIPMENT AND COMPONENTS (IECEE)

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