

OPERATIONAL DOCUMENT

CIG 023

Factory Inspection Report

WARNING: THIS DOCUMENT IS ONLY VALID IF USED BY ECS MEMBERS AND THEIR AUTHORISED AGENTS

Approved by: MCCB meeting 10 April 2019 No. of pages: 22
Date of issue: November 2020 (editorial revision)
Supersedes: April 2019 Page 1 of 22

NOTE:

Front Pages only for document control and shall be excluded from numbering and actual Factory Inspection Report

This document contains:

- Two Cover Pages (excluded from page numbering)
- FACTORY INSPECTION REPORT
- Inspectors Finding/Observation Sheet (part 1)
- Inspector's Information Page
- TEST DATA SHEET Product Verification Tests / Periodic Tests (PVT)
- TEST DATA SHEET Routine Tests
- SAMPLE SELECTION SHEET

Additional note: This document has been re-issued due to the need to correct a typo in Cl. 6.1 as following: "Is evidence given that the calibration interval of more than once per one year can be accepted due to the specific usage and the result of previous calibration/verification?""

FACTORY INSPECTION REPORT

Inspection carried out by (Name of Inspection Body):

Reference number of the Body carrying out the inspection:

For page control, please write this number in the header of each page (including the attachments).

GENERAL GUIDANCE

- The questions of this Factory Inspection Report are based on the requirements given in Operational Document CIG 021.
- Guidance for the Inspector is given in Operational Document CIG 024.
- Both documents, OD CIG 021 and OD CIG 024 shall be taken into account during inspection.
- Instructions to the Inspector are shown in italics.
- The report shall be completed even if there is no production at the time of the visit.
- For all 'NO' answers details shall be provided on the Inspectors Finding/Observation Sheet (part 1).
- For 'N/A' answers rationale shall be provided as to why the item is not applicable, unless it is obvious to be not relevant.
- If functional safety aspects need to be considered details should be given on Inspector's Information page.
- Details should be given on Inspector's Information page.
- This report as well as objective evidences attached to this report shall be written at least in English.

1 GENERAL INFORMAT	ION			
1.1 Factory registered nar	ne and	factory location		
Factory registered name:				
Street and No.:				
Postal code:				
City:				
Province:				
Country:				
GPS-coordinates (optional):		N:	☐ E: ☐ W:	
1.2 Factory representative		and contact data		
Factory representative name:				
Position:				
Telephone:		Country Code:	City Code:	Phone:
Fax:		Country Code:	City Code:	Phone:
E-Mail:				
1.3	nspecto	rs Information Page)	
1.4 Pre-Licence		Routine	☐ ENEC	
☐ HAR		☐ EMC	Others:	

Section comple	ns B.1 and ete?	B.2 (or provide	n given in the Qued in another for opriate and attach a	ma	, – – –
1.6 Inspec	tion Details:				
1.0 mapec	don betans.				
Certification Body requesting inspection	Inspection X of Y	Certification Body's Reference No.	Product Category		Kind of Product
	I	l			
1.7 Name (of Inspector:				Date of inspection:
					(YYYY-MM-DD)
(e.g. new pro	duction line,	extension of a pro	·		last inspection? of relevant production processes)
☐ Details gi☐ Objective	ven on Inspe	ctor's Information provided as an att			or or issue date: ory Inspection Report.
1.9 Have reinspection as		ges been made re	elated to the compa	any	r's organisation with impact to
☐ YES ☐ N	10 D	I/A (for pre-licenc	e inspection)		
If 'YES', p	lease provide d	details.			

Description of the procedure or ref. of documented procedure & revision or issue date: Details given on Inspector's Information page. Objective evidence is provided as an attachment to this Factory Inspection Report. Please refer to attachment no.:

2	Verification of purchased components and materials which have a safe on the certified product (Incoming Inspection)	ty imp	licatio	on
2.1	Are materials, components and sub-assemblies verified by the Factory as complying with appropriate specification?	YES	N/A	NO
2.2	Does this verification also include the verification of the Certification Marks? NOTE : There shall be instructions as to which Certification Marks have to appear on the components/products in order to accept them.	YES	N/A	NO
(one	cription of the procedure or more boxes may be ticked) tely on suppliers' out-going inspection udit conducted at the suppliers' premises upplier control based on Factory check list conduct own incoming inspection dentification check Checked for correct type Comparison to a reference Rating Certificate of conformity others (provide details):			
Desc	ription of the procedure or ref. of documented procedure & revision or issue date: Details given on Inspector's Information page. Dispective evidence is provided as an attachment to this Factory Inspection Replease refer to attachment no.:	oort.		
2.3	If the Factory 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 components and materials?	YES	N/A	NO
	ription of the procedure or ref. of documented procedure & revision or issue date: Details given on Inspector's Information page. Details evidence is provided as an attachment to this Factory Inspection Replease refer to attachment no.:	oort.		
2.5	Is 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
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 inspection visits?	YES	N/A	NO

3	Production Control, Monitoring and Routine Tests			
3.1	Are the Quality Assurance and Personnel in production adequately briefed on their duties?	YES	N/A	NO
3.2	Do they have readily available up-to-date documents, production and test instructions, photographs, drawings or samples on all those parts which have an impact on the safety of the finished products?	YES	N/A	NO
3.3	Is there evidence that the production process ensures that the final product is identical to the certified version as described in clause 15?	YES	N/A	NO
3.4	Is there a procedure to ensure that all products will be tested or inspected according to the Factory requirements?	YES	N/A	NO
	Cription of the procedure or ref. of documented procedure & revision or issue date: Details given on Inspector's Information page. Details given on Inspection's Information page. Details given on Inspection Repellers refer to attachment no.:	oort.		
3.5	Is the production process controlled at appropriate stages?	YES	N/A	NO
3.6	Are products examined at appropriate stages of production (Production Line Inspection)? NOTE: Give details of all tests and inspections performed by the Factory and enter in the routine test table on the TEST DATA SHEET	YES	N/A	NO □
3.7	Do the Routine Tests entered on the TEST DATA SHEET sufficiently cover all the Certification Bodies' requirements?	YES	N/A	NO
3.8	Is there a procedure covering the way to handle non-conforming products?	YES	N/A	NO
(one	cedure of handling non-conforming products or more boxes may be ticked) Automated segregation process Manual segregation process Non-conforming products are destroyed Non-conforming products are repaired Others (provide details): Details given on Inspector's Information page cription of the procedure or ref. of documented procedure & revision or issue date: Details given on Inspector's Information page.	oort.		

3.9	Is the procedure and the way in which it is applied satisfactory? (e.g. non-conforming products clearly identified and segregated to prevent unauthorised use?)	YES	N/A	NO
3.10	Are repaired and reworked (corrected) items again subjected to appropriate tests/examinations in accordance with procedures?	YES	N/A	NO
	ription of the procedure or ref. of documented procedure & revision or issue date: Details given on Inspector's Information page. Details evidence is provided as an attachment to this Factory Inspection Representation refer to attachment no.:	port.		
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 inspection visits?	YES	N/A	NO
4	Functional Check of Test and Measuring Equipment used for Safety Te	sts		
4.1	Is there evidence that the functional check of the equipment is conducted properly, even if certified products were not in production?	YES	N/A	NO
4.2	Is there a procedure describing how the functional checks shall be conducted?	YES	N/A	NO
	ription of the procedure or ref. of documented procedure & revision or issue date: Details given on Inspector's Information page. Dispective evidence is provided as an attachment to this Factory Inspection Replease refer to attachment no.:	port.		
4.3	Is the proper function of the test equipment verified with a simulated failure (dummy) or by other equivalent means? 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 Others (provide details):	YES	N/A	NO
	Ciriota (provide detaila).			
4.4	Is a functional check conducted with intervals which will allow previous production to be retested if incorrect functioning is detected before it leaves the factory?	YES	N/A	NO
4.5	To the one problem on the state of the state	\/FC	N1/A	NIC
4.5	Is there evidence that the simulated failure represents the tripping limits as required? NOTE:	YES	N/A	NO
	Except for spark testers in cable production.			
1				

	Is there a procedure requiring appropriate actions to be taken by the operator if a functional check is found to be unsatisfactory?	TES	N/A	NO
	ription of the procedure or ref. of documented procedure & revision or issue date: Details given on Inspector's Information page. Dijective evidence is provided as an attachment to this Factory Inspection Replease refer to attachment no.:	port.		
4.7	Is this procedure appropriate to ensure that improperly checked products are re-tested?	YES	N/A	NO
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 measuring equipment maintained and satisfactory?	YES	N/A	NO
4.10	Are records kept at least for the period between two inspection visits?	YES	N/A	NO
5	Products seen in Production during visit			
the vi				110 01
The p At lea N Prode Insula Type Certif If YE Comp	certified products were seen, indicate what kinds of products were produced at the tire production process shall nevertheless be examined. Instead of product per product category and electrical insulation class shall be list to production. It is production seen for the following product: of product: uct category: ation Class: if reference: fication Marks: YES NO S provide details: belete TEST DATA SHEET for each kind of product per product category and electrical if there is no production.	ted.		ass
The part of the pa	production process shall nevertheless be examined. The state one kind of product per product category and electrical insulation class shall be list to production The production seen for the following product: The of product: The product: The product category: The product category: The product category: The product category: The product category and electrical product per product category and electrical product per product category and electrical product product category and electrical product product category and electrical product product product product category and electrical product prod	ted.		3SS
The part of the pa	production process shall nevertheless be examined. The state one kind of product per product category and electrical insulation class shall be list to production The production seen for the following product: The of product: The product: The product category: The product category: The product category: The product category: The product category and electrical product per product category and electrical product per product category and electrical product product category and electrical product product category and electrical product product product product category and electrical product prod	ited. Il insula		ass
The part lead North Nort	production process shall nevertheless be examined. Ast one kind of product per product category and electrical insulation class shall be list to production the production product: of product: uct category: ation Class: the reference: fication Marks: YES NO S provide details: blete TEST DATA SHEET for each kind of product per product category and electricatif there is no production.	ted. Il insula		

Is calibration/verification interval more than one year? ☐ YES ☐ NO		
- If "YES", give details <u>and</u> answer the question below!		
Details:		
Is evidence given that the calibration interval of more to be accepted due to the specific usage and the result of calibration/verification?	·	N/A NO
Provide details for at least one electrical measuring equipme Kind of equipment: Type reference: Calibration reference number: Date of last calibration: Calibration due date:	ent:	
6.2 Is reference equipment (used for verificati	on) calibrated? YES N	N/A NO
(one or more boxes may be ticked) Calibration of reference equipment done by: Laboratory accredited according to ISO/IEC Test equipment Producer/Supplier National metrology institute Other (provide details):	17025	
6.3 Is the equipment provided with a label or s 'calibration due' date?	similar indicating the next YES N	N/A NO
6.4 Do the calibration/verification records indication traceable to national/international standard		N/A NO
6.5 Are the records for calibration/verification equipment maintained and satisfactory?	of test and measuring YES N	N/A NO
6.6 Are records kept at least for the period be	tween two inspection visits? YES N	J/A NO
7 Handling and Storage		
7.1 Are the components and materials to be used for handled in such a way as to ensure that they will the applicable standards?		/A NO

7.2 Are the finished products stored and handled in such a way as to ensure that they will continue to comply with the applicable standards?	YES	N/A	NO
8 Product Verification Tests / Periodic Tests (PVT)			
8.1 Are required PVT conducted?	YES	N/A	NO
(one or more boxes may be ticked) ☐ NO PVT required, all questions of this section shall be marked with 'N/A' ☐ PVT conducted at the factory location ☐ PVT conducted at an external laboratory owned by the Factory ☐ PVT conducted at an external laboratory owned by the Licence Holder ☐ PVT conducted by independent external laboratory ☐ PVT conducted by certification body's laboratory ☐ Others (provide details):			
 □ Details given on Inspector's Information page □ Objective evidence is provided as an attachment to this Factory Inspection Please refer to attachment no.: 	Report.		
NOTE: Describe which tests (required by the Certification Body/certification scheme) are cosampling rate on TEST DATA SHEET – Product Verification Tests / Periodic Tests		and at	what
8.2 Are the tests conducted in accordance with procedures?	YES	N/A	NO
7 HO WIE LOSS SCHAUSER IN ACCORDANCE WITH PROCESSION			
Description of the procedure or ref. of documented procedure & revision or issue date: Details given on Inspector's Information page. Objective evidence is provided as an attachment to this Factory Inspection Please refer to attachment no.:	Report.		
8.3 Is appropriate equipment that is required for conducting tests available?	YES	N/A	NO
8.4 Are the tests described in TEST DATA SHEET – Product Verification Tests / Periodic Tests (PVT) in compliance with the requirements of the Certification Schemes and/or the requesting Certification Body?	YES	N/A	NO
8.5 Is there a procedure requiring actions to be taken if PVT are found to be unsatisfactory?	YES	N/A	NO
Description of the procedure or ref. of documented procedure & revision or issue date: Details given on Inspector's Information page. Objective evidence is provided as an attachment to this Factory Inspection Please refer to attachment no.:	Report.		
8.6 Are the records of Product Verification Tests / Periodic Tests (PVT) maintained and satisfactory?	YES	N/A	NO

8.7	Are records kept at least for the period between two inspection visits?	YES	N/A	NO
9	Void			
10	Unsatisfactory Findings from Previous Inspection - Follow-Up			
10.1	Are inspection reports kept at least for the period between two inspection visits?	YES	N/A	NO
	If there were any unsatisfactory findings entered in the previous inspection report, have these been corrected?	YES	N/A	NO
	TE: le Inspection Report is not available, tick 'N/A' and give details. lere were no findings at the previous inspection report, tick 'N/A' as well.			
Provi	de details of each unsatisfactory finding and how each has been resolved.			
11	Quality Management System			
	Factory has a Quality Management System certified or assessed by an accredited EMS standard, scope, name of certification body and certificate expiry date or provide control Quality Management System NOT certified an accredited Body Quality Management System certified by an accredited Body Quality Management System certified by a non-accredited Body Copy of the certificate provided as appendix to this report Operation of QMS standard: Operation of QMS standard:			
	lame of certification body: Certificate issued date: Certificate expiry date:			
12	Factory self-assessment of the production and control process of cert	ified p	roduc	ts
12.1	Does the Factory regularly check that all procedures as required by the Certification Body(ies) and the harmonised inspection scheme (CIG 021) are followed?	YES	N/A	NO
12.2	Are records regarding results and actions taken available? NOTE: The use of CIG 023 to document the results of the self-assessment is recommended.	YES	N/A	NO
12.3	Are the personnel carrying out above required checks appropriately trained and independent of the process being assessed?	YES	N/A	NO

ass	nere were any unsatisfactory findings identified from the Factory self- essment of the production and control process of certified products, we these been corrected?	YES	N/A	NO
12.5 Are	records kept at least for the period between two inspection visits?	YES	N/A	NO
13 Vo	d			
14 Ted	chnical Complaints			
The ques	ry shall record any technical complaint regarding the certified product. tions in this section shall be answered even if no customer complaints have becausestions shall be applied to the process.	en rec	eived.	In this
14.1 Is t	here a procedure regarding how to handle customer complaints?	YES	N/A	NO
Detai Object	n of the procedure or ref. of documented procedure & revision or issue date: ls given on Inspector's Information page. etive evidence is provided as an attachment to this Factory Inspection Reperter to attachment no.:	ort.		
☐ YES	✓ complaints been received? □ NO □ N/A (for pre-licence inspection)			
	ve details/reference!			
Object	ls/reference given on Inspector's Information page. ctive evidence is provided as an attachment to this Factory Inspection Rep e refer to attachment no.:	oort.		
	the received complaints reviewed on a regular basis regarding whether y are related to single errors or system errors?	YES	N/A	NO
☐ Actua	l case checked Procedure checked			
	corrective actions and decisions regarding customer complaints orded?	YES	N/A	NO
☐ Actua	l case checked Procedure checked			
	he originator of the complaint informed about the handling and the result he complaint?	YES	N/A	NO
☐ Actua	I case checked			
14.5 Are	the records of customer complaints maintained and satisfactory?	YES	N/A	NO

14.6 A	Are records kept at least for the period between two inspection visits?	YES	N/A	NO
15	Certified Products and Changes to Certified Products			
15.1.1	Is reference about the certified version available?	YES	N/A	NO
Se Re	more boxes may be ticked) It of drawings		e deta	ils):
□ De	etails given on Inspector's Information page			
15.1.2	Is this reference under control of the Licence Holder?	YES	N/A	NO
15.2.1	Have changes been made to the certified product since last inspection?			
	☐ YES ☐ NO			
	If 'YES', answer the question below.If 'NO', tick 'N/A' below.			
15.2.2	Have these changes been made with the authorisation of the Licence Holder?	YES	N/A	 S
15.3	If the Factory IS NOT the Licence Holder: Is there a procedure ensuring that no changes to the construction of certified products will be implemented prior to acceptance by the Licence Holder?	YES	N/A	NO
	Note: If the factory is also the Licence Holder, tick 'N/A'.			
Det	tion of the procedure or ref. of documented procedure & revision or issue date: tails given on Inspector's Information page. jective evidence is provided as an attachment to this Factory Inspection Rejase refer to attachment no.:	oort.		
15.4	If the Factory IS also the Licence Holder: Is there a procedure ensuring that constructional changes of the certified product will be made only after approval by the Certification Body?	YES	N/A	NO
	Note: If the factory is not the Licence Holder, tick 'N/A'.			
Det	tion of the procedure or ref. of documented procedure & revision or issue date: tails given on Inspector's Information page. jective evidence is provided as an attachment to this Factory Inspection Rejase refer to attachment no.:	oort.		

16 Selection and Shipping of Re-Examination Sample(s)			
Regarding samples requested by the Certification Body(ies) please refer to the table IDEN SELECTED SAMPLES and enter details as appropriate.	TIF	ICATIC	N OF
Is sample selection for re-examination required?			
☐ YES ☐ NO			
If YES by which Certification Bodies:			
16.1 If selection of samples for re-examination is required, have the required samples been selected?	≣S □	N/A	NO
The reasons why no samples were selected during the inspection: (one or more boxes may be ticked) No production, no stock: Build to clients' order (no extra samples available) No access to warehouse			
 □ Warehouse not at Factory location □ Factory has been instructed to send re-examination samples: □ Others (provide details): 			
 Details given on Inspectors Finding/Observation Sheet (part 1) Objective evidence is provided as an attachment to this Factory Inspection Repo Please refer to attachment no.: 	rt.		
16.2 If the selected sample(s) do not bear the Certification Mark then provide the re selection in the table IDENTIFICATION OF SELECTED SAMPLES. (one or more boxes may be ticked) Type reference is mentioned on the certification bodies certification list Mark is applied on the package, catalogue or by other means Special sample selection order Others (provide details) Details given on Inspector's Information page Objective evidence is provided as an attachment to this Factory Inspection Please refer to attachment no.:			

17	Inspector's Evaluation							
	Note: This clause reflect the result of the inspection from the view of the Inspector. The final decision will be taken by the accepting/receiving Certification Body.							
17.1	, , , , , ,							
Numl	per of Finding Sheets issued:	Number of Observation Sheets issued:						
17.2	Give your recommendations by ticking th	ne appropriate box.						
1	No unsatisfactory findings	Grant or continue certification.						
2	Minor unsatisfactory finding(s)	Factory corrective action(s) will be checked at next visit. Grant or continue certification.						
3	Major unsatisfactory finding(s) Safety not directly affected	Factory shall confirm corrective action(s). Grant or continue certification. Special or early routine inspection recommended for checking corrective action(s).						
4	Critical unsatisfactory finding(s) Safety directly affected	Certification refused/suspended and repeated factory inspection recommended after the Factory has confirmed implementation of corrective action(s).						
17.3	Attachments: For page control, write the reference number in the header of each attachment page. Finding/Observation Sheets Revised OD CIG 022 B1 Revised OD CIG 022 B2 OD CIG 023 Appendix 1 – Signature Page (Part 1) OD CIG 023 Appendix 1 – Inspection Summary Page (Part 2)No. of pages: OD CIG 023 Appendix 2 – ENEC Appendix No. of pages: OD CIG 023 Appendix 3 – ENEC+ Appendix Copy of Quality Management Certificate No. of pages: Others Total no. of pages of this report including all attachment pages:							
	(Front pages to be excluded from pages	ge numbering!)						
	y of this report shall be provided to the un nts and sign for its receipt.	dersigned contact person who should be aware of the						
come	Printed copy provided	☐ Electronic copy provide	ed					
(part	Content of this report including findings as documented on Inspectors Finding/Observation Sheet (part 1)(s) (if any) have been explained by the Inspector to the Factory contact person.							
	The responsibility for ensuring that a product is produced in accordance with the standard to which it was originally approved rests with the Licence Holder.							
	Inspection reports shall be kept at least for the period between two inspection visits!							

For confidentiality reasons the contact person requests the preparation of individual copies of this report for each Licence Holder.							
☐ YES ☐ NO ☐ N/A							
Inspection duration: hours							
Date:	Date:						
Inspector's name (printed letters):	Contact person's name (printed letters):						
Signature: Signature:							
For signatures see attached signature page.							

Inspectors Finding/Observation Sheet (part 1)

This part is to be filled by the Inspector/Factory during the inspection

NOTE: Use separate Inspectors Finding/Observation Sheets for different Certification Bodies and/or Licence Holders if necessary; e.g. for reasons of confidentiality.

Finding Sheet No.: of	:	Observat	tion Sheet No.:	of
Finding/Observation:				
Related clause number:		Findir	ng	
		Inspecto	rs Evaluation Level (a	s per 17.2):
		21	3 🗌 4	
			ways required!	
			rvation	
		Action re	equired: YES 🗌 🔝 N	IO 🗌
Proposed Corrective Action/	Action:			
·				
Proposed Corrective Action/ A inspector	Action accepted by the	ne	YES NO	N/A
Inspector *)	Factory represent	ative *)	*) For signatu	
Date Name	Date Na	me	*) For signatu	

Inspector's Information Page

Note: Use se necessary.	parate Supplementary Page for different Certification Bodies and/or different Licence Holders if
Related clause number of this report:	Comments:

TEST DATA SHEET – Product Verification Tests / Periodic Tests (PVT)

NOTE:
CB stands for Certification Body or Certification Scheme

СВ	Product, Sampling Rate, Standards Clause or Test-Parameters, Results

TEST DATA SHEET - Routine Tests

☐ Production seen	☐ No production seen	Certification mark:		
Product Category:	Kind of product:	Rated voltage:	Electrical Insulation Class:	
Type reference:		Certification Bodies Routine Test Requirement:		

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

e Indicate method used (hot/cold, at mains voltage, low voltage resistance check, etc.).
 f Are all controls and components checked during the test?
 W = Test witnessed by the Inspector; R = according to records

SAMPLE SELECTION SHEET			at Factory:				Date:	
Selected for	Label No.	Quantity		Product/Type/Technical data	Licence No.	Production period		ode ters
							□P □S	□F □T □A
							□P □S	□F □T □A
							□P □S	□F □T □A
							□P □S	□F □T □A
							□P □S	□F □T □A
							□P □S	□F □T □A
							□P □S	□F □T □A

Code letters:

P = Sample from Production

S = Stock

F = Forwarded by the Factory

T = Transported to the Certification Body by the Inspector

A = Shipped by the Inspection Agency