

Intertek C&E Management System		Page 1 of 4
Work Instruction (Inspection)		Document No.: WI-R-EMEA-CERT-INSP-PCS018
EMEA CERTIFICATION SCHEMES - PRODUCT CONTROL SPECIFICATIONS		
Issue Date:	Revision Date: 11 th Feb 2015	Approved by: Anders Delsborn
	Effective Date: 19 th Feb 2015	

1.0 Purpose

Product Control Specifications (PCS) specify the requirements for routine inspections, tests, Product Verification Tests and sample selection for products certified under an Intertek EU Type 5 certification scheme (including GS, S, BEAB, ASTA, ENEC, BAUART and TICK MARK). They are for use by manufacturers and by factory inspectors.

2.0 Scope

Products: Fixed capacitors for electromagnetic interference suppression and connection to the supply mains

Standards: EN 60384-14

Marks: S, BG, ENEC, TICK Mark, ENEC

3.0 Routine inspections and tests

3.1 General

The following requirements apply to most products.

Variations may be permitted by prior, written agreement from the certification body.

The factory should have a quality plan defining all inspections and tests on materials, components and completed products as appropriate.

Completed products shall be marked to confirm satisfactory completion of all required testing.

Any products which fail inspection or testing shall be segregated and not allowed to continue through the process until rectified and re-inspected or retested.

Products shall not be released until the testing equipment has been checked again following a production batch.

Records of inspections and test should be maintained and held for at least two years.

Records shall include:

- Type of product
- Date of test
- Place of manufacture
- Quantity tested
- Number of failures and actions taken

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3.2 Required inspections and tests (for Intertek Certification Marks)

Inspection/test		Test parameters	Sampling plan	
Satisfactory appearance, markings and any user instructions correct and clear		Visual inspection	100%	
Continuity check and measuring of values		Rated values considering the tolerances	100%	
Dielectric strength test min 2s			100%	
Class	Rating	Test voltage	To case (if metal)	
X	≤ 1000V	4,3xU _R d.c	2xU _R + 1500V a.c. – min 2000V a.c.	
Y1	≤ 500V	4000V a.c	4000V a.c.	
Y2	≥ 150V - ≤ 500V	1500V a.c. or 2250V d.c.	2xU _R + 1500V a.c. - min 2000V a.c.	
Y4	< 150V	900V a.c. or 1350V d.c.	900V a.c. or 1350V d.c.	
Insulation resistance test, not less than 10s depending on capacitance			100%	
Rating		Test value (d.c.)		
U _R < 100V		10V		
100V < U _R 200V		100V		
Capacitor technology		Between terminals		To case (if metal)
		C _R > 0,33μF RC in s	C _R ≤ 0,33μF R in MΩ	R in MΩ
Paper, ester impregnated		500	1500	2000
Paper, other impregnants		2000	6000	6000
Ceramic		---	6000	6000

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3.3 Required inspections and tests (for ENEC Marked products)

In addition to the inspections and tests detailed in section 3.2, the requirements of document ENEC 303 Annex U shall be fulfilled.

4.0 Product Verification Tests/Periodic testing (refer to CIG 021 clause 4.8)

Product verification tests are in addition to the production line inspection and routine tests and are performed on samples taken randomly from the production line.

The manufacturer is responsible for conducting or arranging for the following periodic testing to be completed. Records shall be available for review during factory inspection visits.

Certification Mark	Frequency	PVT/periodic testing required
ENEC SEMKO, BG and TICK-mark	Annual Recommended	<p>PVT is required for ENEC mark For S-, BG- and TICK-mark PVT is not mandatory but it is recommended to demonstrate ongoing compliance with EU Directives. For each basic type certified, the following tests according to the product standard is required/recommended:</p> <ul style="list-style-type: none"> • Marking cl. 1.6 • Test Group I: <ul style="list-style-type: none"> Group 2 – Damp heat, steady state, cl. 4.12 Group 6 – Passive flammability, cl. 4.17 • Test Group II: <ul style="list-style-type: none"> Group 3 – Impulse voltage, cl. 4.13 <ul style="list-style-type: none"> – Endurance, cl. 4.14 Group 7 – Active flammability, cl. 4.18 <p>Tests have to be performed on types, which have results close to the limits in the type test.</p>

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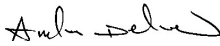
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5.0 Surveillance testing by the Certification Body

If required, samples are selected during the factory inspection and the manufacturer should send these to the address provided. If samples are required but not available at the time of the inspection, the manufacturer should send these as soon as they become available. If there is no stock or production, the manufacturer should advise the certification body that samples will not be provided due to no production.

The certification body will arrange for the required testing to be completed. This will be charged to the manufacturer or Licence holder. A report of the testing will be provided.

Certification Mark	Surveillance testing requirements
SEMKO, BG and TICK-mark	Regular selection of samples is not required. Samples may be required if any deviations to the type tested or non-compliance with the product standard are suspected.
ENEC	Samples for product surveillance are selected by the inspector at the time of factory inspection, to be sent to Intertek.

Document History				
Revision No.	Date	Changes	Name & Title	
			Author	Approving Official
1	11/02/2015	Original issue	Torbjörn Andersson/ R W Hayward	

End of Document

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