

Intertek C&E Management System		Page 1 of 4
Work Instruction (Inspection)		Document No.: WI-R-EMEA-CERT-INSP-PCS032
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: Switches for appliances
Standards: IEC 61058
Marks: S, BEAB, BG, TICK, 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

~ Note: After printing or download, this document is no longer under control and shall be used for reference only. ~

Intertek C&E Management System		Page 2 of 4
Work Instruction (Inspection)		Document No.: WI-R-EMEA-CERT-INSP-PCS032
EMEA CERTIFICATION SCHEMES - PRODUCT CONTROL SPECIFICATIONS		
Issue Date:	Revision Date: 11 th Feb 2015 Effective Date: 19 th Feb 2015	Approved by: Anders Delsborn

3.2 Required inspections and tests (for Intertek Certification Marks)

Inspection/test	Test parameters	Sampling plan
Earthing continuity test	<p>Switches for incorporating into Class I equipment that have accessible metal parts which may become live in the event of an insulation fault, shall be tested as follows: -</p> <p>A current of 1.5 times the rated current but not less than 10A derived from an a.c source with no load voltage not exceeding 12V, is passed between the earthing point and each discrete path to accessible metal. The resistance shall not exceed 0.05Ω, when steady state conditions have been established.</p> <p>N.B. Care is to be taken that the contact resistance between the tip of the measuring probe and the metal parts under test does not influence the test results.</p>	100%
Insulation Resistance Test	The test is carried out using the test voltage and minimum resistance levels shown in Table 3. It is recommended that when using an a.c voltage, the instrument used measures only the in-phase component of the current flowing and no account shall be taken of the capacitive component, when completing insulation resistance measurement.	100%
Dielectric strength test	<p>This test is conducted between live parts and all accessible surfaces of the switch. When measuring reinforced or supplementary insulation to other than metal parts, each appropriate surface of insulation is covered with metal foil to provide an electrode for the test.</p> <p>N.B. A voltage of substantially sine wave form, having a frequency of 50/60Hz and the value as shown in Table 3 is applied for 10 seconds or for 2 seconds if the test voltage is raised to 1.1 times the values shown.</p> <p>No breakdown or flashover shall occur during these</p>	100%

~ Note: After printing or download, this document is no longer under control and shall be used for reference only. ~

Intertek C&E Management System		Page 3 of 4
Work Instruction (Inspection)		Document No.: WI-R-EMEA-CERT-INSP-PCS032
EMEA CERTIFICATION SCHEMES - PRODUCT CONTROL SPECIFICATIONS		
Issue Date:	Revision Date: 11 th Feb 2015	Approved by: Anders Delsborn
	Effective Date: 19 th Feb 2015	

	<p>tests.</p> <p>The current sensing device incorporated in the test circuit would normally trip at a current not exceeding 5mA.</p>	
--	--	--

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 T 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
SEMKO ASTA BEAB BG TICK Note: for BG and TICK, PVT is recommended but not mandatory.	Annual	<p>In addition to the above tests, a set of three randomly selected samples from production, per year, for each series (family) of switches are to be verified against the samples tested when certification was granted.</p> <p>As a minimum, the following tests should be conducted:</p> <ol style="list-style-type: none"> a) An endurance test at rated load & room ambient temperature for the number of operations as certified. b) Electric Strength after a) above. c) Temperature rise after a) above. d) Torque loading of screw terminals. <p>The above tests may be carried out in the Manufacturer's test rooms, at a suitably equipped Test House or may be arranged through Intertek. They should be carried out to the requirements of the Safety Standard unless otherwise agreed by Intertek.</p> <p>If significant problems are revealed, these must be investigated and production stocks bonded until resolved with Intertek's agreement.</p>

~ Note: After printing or download, this document is no longer under control and shall be used for reference only. ~

Intertek C&E Management System		Page 4 of 4
Work Instruction (Inspection)		Document No.: WI-R-EMEA-CERT-INSP-PCS032
EMEA CERTIFICATION SCHEMES - PRODUCT CONTROL SPECIFICATIONS		
Issue Date:	Revision Date: 11 th Feb 2015	Approved by: Anders Delsborn
	Effective Date: 19 th Feb 2015	

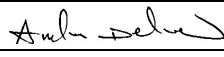
		All test records must be available for inspection.
--	--	--

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
ASTA	Samples to be selected each year as detailed on the sample selection record (form AFT-17) provided to the inspector before each visit.
SEMKO, BG, TICK	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

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

End of Document

~ Note: After printing or download, this document is no longer under control and shall be used for reference only. ~