

ISSUE	DESCRIPTION	NAME	DATE
1	New drawing	JS	27/06/08
2			

Approval		
Technical		--/--/--
Production		--/--/--
Project		--/--/--

Bill of Materials AA3752			
1	1	ZAA3752	Connection Cable
2	1	001274	MT32 Label For AA3752
3	1	001259	MT32 Label - Product AA3752
4	1	WMI527	GRIPPER BAG 10"X 14"

General Test & Inspection of MT32

The test process is to prove the following situations

The finished product when used in the correct manner functions correctly.  
The final product is electrically safe and free from electrical defects.

The tests must be carried out in the order described in this document and applied to every assembly produced. Provided all tests are passed successfully a suitable code must be fixed to each assembly indicating which day or batch it was a part of.

The test equipment must identify the specific failure detail if a fault is identified.

Calibration And Operation Verification

All test equipment will be fully calibrated at least once in every 12 months. An approved independent company will carry out the calibration. There will be documented records kept of this process.

Proof of functionality

A set of sample test products will be used at the start of each production day or shift to prove that the equipment is continuing to recognise any faults should they occur.

There will be one sample test piece for each safety test (tests 1-5 ). Each sample will be constructed in such a way that it is connected to the test equipment in the same manner as normal product but will produce the specific fault being tested for.

Each sample will be clearly identified with the specific test and the whole assembly will be easily identifiable to avoid any confusion with normal product.

A functional test will be considered failed if the specific fault is not recognised or a different fault is detected.

Production will only be continued if the proof of function tests achieves the correct result.

Should a failure be identified all product preceding the failed function test but after the last successful function test must be re-tested.

Visual inspection

Check that: -

The assembly is complete.

All components are free from damage.

The product is assembled correctly in accordance with the relevant drawings, illustrations and instructions.

1) Functional/continuity test

Applied between the incoming, intermediate (if applicable) and outgoing terminals of each conductor of a wiring section in turn. Measured by passing a minimum current of 25 amps at between 6-24 volts for a minimum of 1second.This will ensure that every conductor is connected to and positioned correctly from its origin to each outlet/terminal. (This may require the test to be repeated for multiple outlets/terminals unless the test equipment is designed to apply simultaneous tests to each outlet)

Where there is a clean/functional earth (isolated ground) circuit the test must ensure it is connected to every outlet/terminal as specified in the assembly. The test must also ensure that there is a standard earth (PE) connection to any exposed conducting parts and there is no connection between the clean and standard earth systems.

2) Earth (PE) continuity 1

This is a low voltage high current test with an applied voltage of 6-12 volts to pass a current of 25 amperes minimum for a duration of 2 seconds. The test must prove that there is a total earth path resistance not greater than 0.1 $\Omega$  between the incoming, intermediate (such as socket outlet) and outgoing terminals.

This test must be applied between the incoming terminal of the standard earth (PE) connection and any exposed conducting parts of the assembly.

3) Clean Earth (Functional/Isolated ground) continuity 2

This is a low voltage high current test with an applied voltage of 6-12 volts to pass a current of 25 amperes minimum for duration of 2 seconds. The test must prove that there is a total earth path resistance not greater than 0.1 $\Omega$  between the incoming, intermediate (such as socket outlet) and outgoing terminals This may require the test to be repeated for multiple outlets unless the test equipment is designed to apply simultaneous tests to each outlet.

4) Dielectric Strength (Flash) Test

This test is applied to ensure no breakdown of insulation occurs during normal use. Measured by applying voltage of 1500Vac for duration of 2 seconds to each conductor in turn with all the other conductors combined. This test should also be applied between the live and neutral conductors combined and any exposed metal parts of any assembly. The test fails if a current of 0.5 mA or greater is detected.

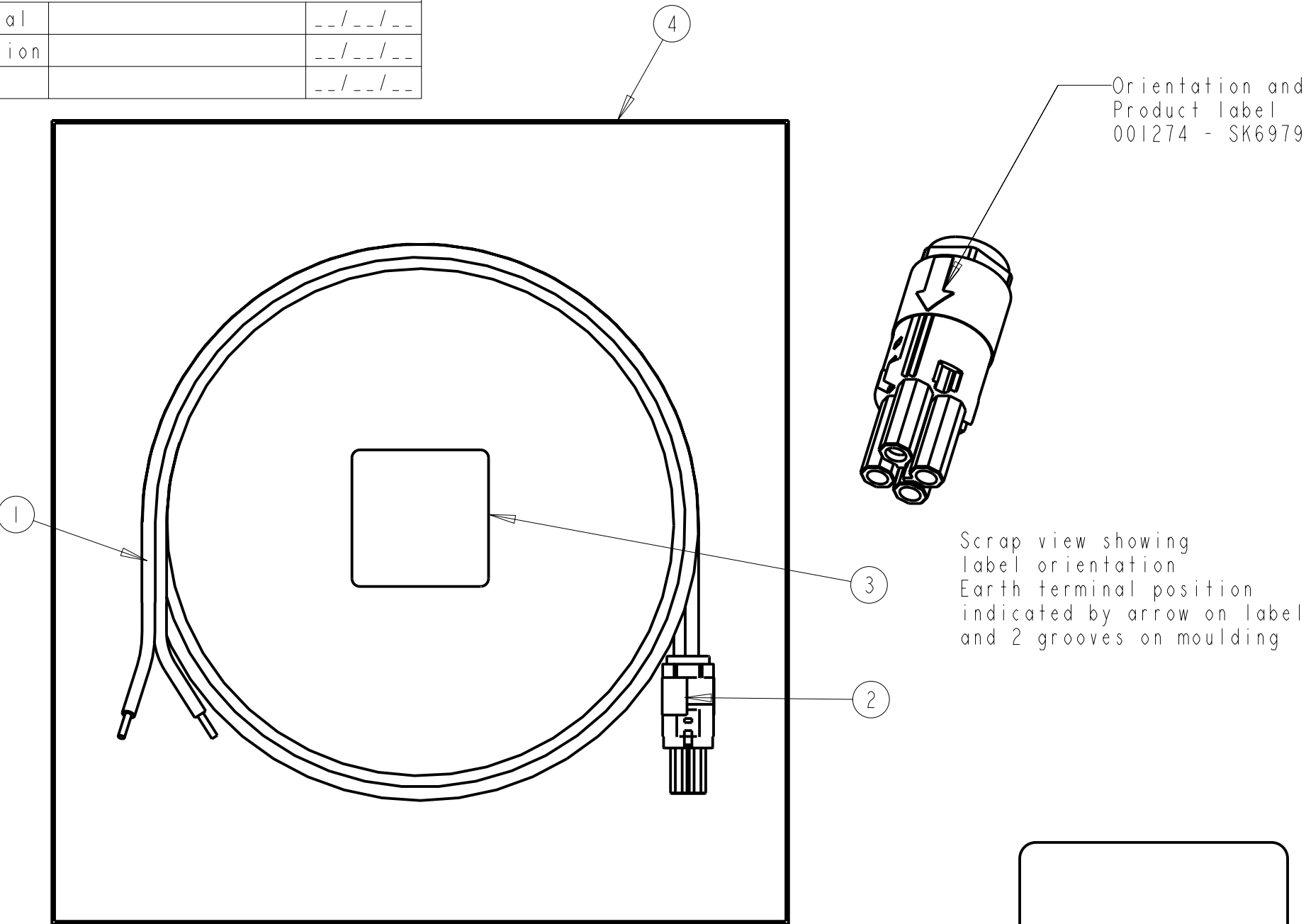
5) Insulation Test



This test is to ensure there is sufficient insulation resistance between live parts and earth and is carried out between each conductor in turn with all the other conductors combined The test is applied at 1000Vdc for a duration of 2 seconds. This test should be applied between all the live and neutral conductors connected together and any exposed conducting parts. The measured value of insulation resistance is to be 2M $\Omega$  or greater.

Mechanical Testing

Push test

Each pin and socket when loaded into a connector is to be push tested on assembly with a force of 25 Newtons. If any pin/socket slips back it is to be re-inserted and retested if it fails again a new locking device is to be used.



DRG No. SK6946-AA3752	STATUS SK/PR	DESIGNER johns	UNITS MM	DATE 10-Apr-08	PROJECT No.	DESIGN APP.
					ASSET NO.	PRODUCTION APP.
HASTINGS EAST SUSSEX TN38 9YJ TEL: 01424 722280 FAX: 01424 442078 EMAIL: engineering@marshall-tufflex.com					MATERIAL	THIRD ANGLE PROJ.
PART CODE AA3752					COLOUR	
PRODUCT DESCRIPTION Connection Cable Male 1.5 M 4mm Cable					SURFACE FINISH	SCALE

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