

IP52 Test Report

for

Fusion Splicer

Arc Fusion Splicer Swift K33

Contents

1. General -----	3
2. Fusion Splicer Specifications -----	3
3. Dust resistance (IP5x) test -----	4
3.1 Purpose-----	4
3.2 Test method -----	4
3.3 Test results -----	5
4. Water resistance (Rain IPx2) test-----	6
4.1 Purpose -----	6
4.2 Test method -----	6
4.3 Test results -----	7

- a. The tests were conducted according to the internal judgment criteria.
- b. The contents described may not be copied, distributed, or used in whole or in part without prior permission.

1. General

This test report presents the test results for environmental testing (water resistance, dust resistance) of UCL Swift's core-aligned fiber fusion splicer.

2. Fusion Splicer

- Model Name : SWIFT K33
- External Size : 130 x 158 x 138 (mm)
- Weight : 2.25 kg (including battery)



Figure 1. Arc Fusion Splice SWIFT K33

3. Dust resistance (IP5x) test

3.1 Purpose

This ensures that the fusion splicer is protected from harsh dust environments and functions perfectly, ensuring quality.

3.2 Test method

3.2.1 Place the fusion splicer in a 1 cubic foot box.

3.2.2 Put about 6 teaspoons of silica powder with particles of 0.1~500 μm in size into a sealed box.

3.2.3 Circulate the silica powder inside the box by blowing air for about 12 minutes.

(Application of internal evaluation criteria in accordance with the test method of Telcordia TR-NWT-000264)

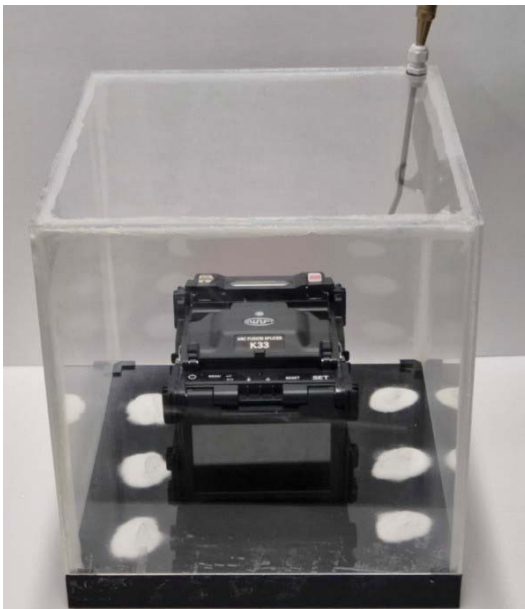


Figure 2.1. Perparing for dust test



Figure 2.2. After dust test

3.3 Test results

- 3.3.1 Wipe off the silica powder on the surface of the fusion splicer, ON/OFF, and check whether the buttons operating normally. : Pass
- 3.3.2 Check the normal operation status of each function such as fiber fusion splicing and sleeve heater. : Pass

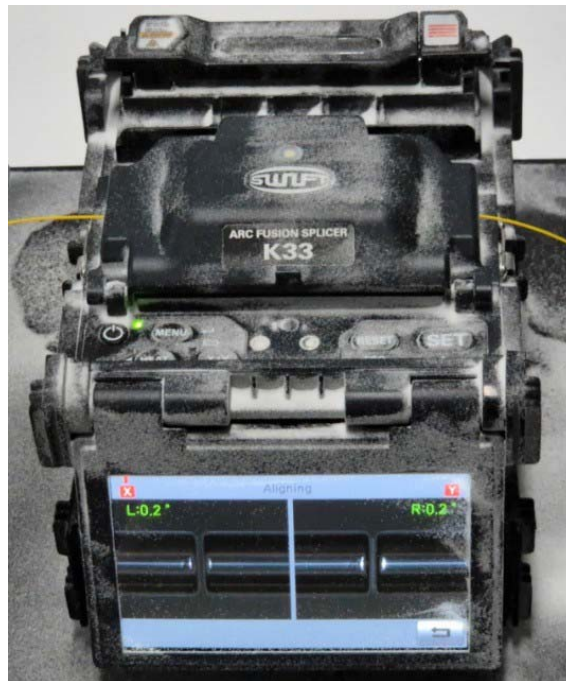


Figure 3. SWIFT K33 After dust blowing

4. Water resistance (Rain IPx2) test

4.1 Purpose

This is to protect the fusion splicers from rain and ensure quality so that it can operate without problems even under outdoor working conditions.

4.2 Test method

4.2.1 Install the artificial rain nozzle approximately 2.5 m above the test product.

4.2.2 Adjust the nozzle and flow meter so that 10 mm of artificial rain is sprayed per hour.

4.2.3 Spray through the nozzle on the fusion splicer for 10 minutes.

(Application of internal evaluation criteria according to IEC 60068-2-18 Ra.1)



Figure 4. Water resistance test artificial rain nozzle

4.3 Test results

- 4.3.1 After completely removing moisture from the outside of the fusion splicer to which artificial rain has been applied, turn the power ON/OFF to check the button operation status. : [Pass](#)
- 4.3.2 Check the normal operation status of each function such as optical fiber fusion splicing and sleeve heater, etc. : [Pass](#)



Figure 5. SWIFT K33 After Artificial Rain