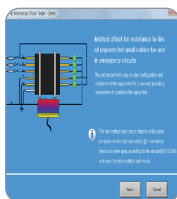
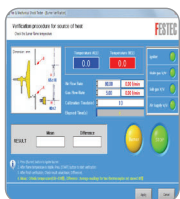
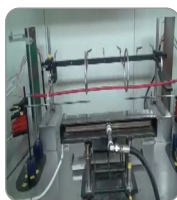
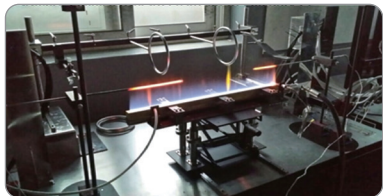
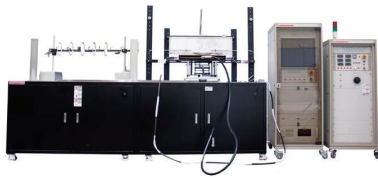


High Temperature Fire Resistance Tester

고온 내화 시험기, CFC-218, BS 6387 Category C



Introduction

FESTEC's High Temperature Fire Resistance Tester as a Fire resistance tester measures whether a vertically installed bundle of wires or cable maintain the integrity of the circuit when it is exposed to a flame with an adjusted heat source output equal to a temperature of at least 950°C. FESTEC's High Temperature Fire Resistance Tester can perform a high temperature test up to 950°C which is not carried out in IEC 60331-11 & 21 test But satisfy the specifications of BS 6387.

In addition, automatic ignition is installed for user safety and reproducibility/repetition, calibration plate is installed on the burner, and burner calibration can be carried out easily, and specifications can be added for a Flame retardant test (5.14) of KWS 409 (Korea Cable Industry Cooperative).

Standard

- BS 6387 : Test Method for resistance to fire cables required to maintain circuit integrity under fire conditions

Feature

- The burner has a Venturi Mixer structure and it is a ribbon type's propane gas burner with a front length of 610mm.
- Structured with 3 rows of cross holes, Average front width of burner: 15mm, Hole diameter: 1.32mm, Distance between the center: 3.2mm.
- On both sides of the burner plate, small holes honed into pilot holes are allowed to maintain sparks.
- The sample support shall be secured to one end of the sample so that it cannot move firmly with a clamp and the other side is designed to allow heat expansion in the direction of length.
- The middle part of the cable is supported by two metal rings located approximately 300 mm away.
- Any other part of the support unit as well as the two metal rings is grounded.
- Sample support ring has an inside diameter of about 150mm and is designed in circular form with a metal diameter of 10±2mm.
- The front face of the heat source is designed to be at least 200mm above the bottom of the chamber and at least 300mm away from any chamber wall.
- The horizontal center axis of the burner is designed to be 70±10mm below the lowest point of the cable specimen, and the vertical front surface of the burner is designed to be approximately 45mm away from the center vertical axis of the cable sample.
- Two thermocouple thermometers (A, B) are installed on the left and right sides of 45mm in the horizontal direction of the burner centerline to ensure that the flower garden is within 950±40°C for 3 hours.

Test Result

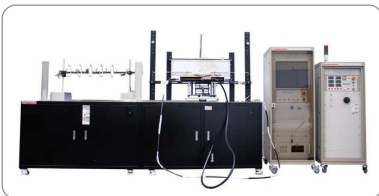
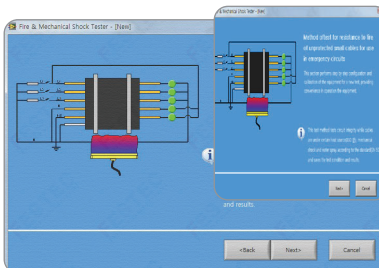
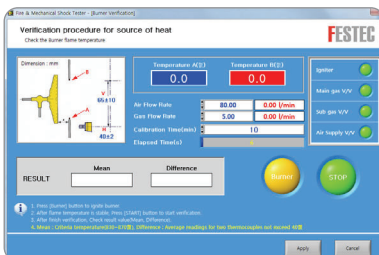
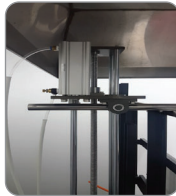
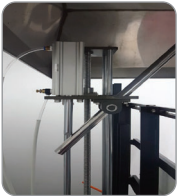
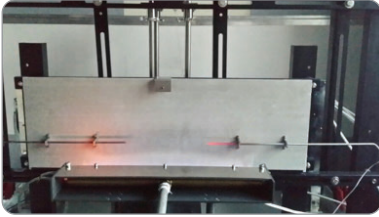
- Cable test description
- Manufacturer
- Voltage Test
- Cable Bending Radius
- Applied performance Requirements
- Test criterion or related standards
- Flame application time
- Voltage maintenance (ex. Fuse fails, interruption of circuit breaker)
- Rupture of conductor (ex. Lamp blackout)

Specification

Model	FT-CFR-818
Size	1,600 × 850 × 1,650
Size(Table)	600 × 750 × 1,200
Power	AC 380V 3-phase, 50/60Hz, 30A
Weight	100kg
Exhaust	Min. 15 m³/min
Utilities	Propane Gas, Compressed Air, Hood, Duct, Dust Collector

High Temperature Mechanical Shock Tester

고온 타격 시험기, CFZ-219, BS 6387 Category Z



Introduction

FESTEC's High Temperature Mechanical Shock Tester measures whether a vertically installed bundle of wires or cable is exposed to a flame with an adjusted heat source output equal to a temperature of at least 950°C, by applying additional indirect blows to maintain the integrity of the circuit.

FESTEC's High Temperature Mechanical Shock Tester can perform a high temperature test up to 950°C which is not carried out in IEC 60331-1,2,3 test But satisfy the specifications of BS 6387.

In addition, automatic ignition is installed for user safety and reproducibility/repetition, calibration plate is installed on the burner, and burner calibration can be carried out easily, and specifications can be added for IEC 60331-1, IEC 60331-2, and IEC 60331-3

Standard

- BS 6387 : Test Method for resistance to fire cables required to maintain circuit integrity under fire conditions

Feature

- The burner has a Venturi Mixer structure and it is a ribbon type's propane gas burner with a front length of 500mm
- Structured with 3 rows of cross holes, Average front width of burner: 15mm, Hole diameter: 1.32mm, Distance between the center: 3.2mm.
- The specimen holder(wall and mounting) used for cable installation is rigidly fitted to the support with a steel frame.
- The specimen holder(wall and mounting) to mount cable is consisted of fixed steel frame with rigidity supporter, and fire-resistance board is equipped. Fire-resistance board to fix on Up-Down Frame of specimen Holder is 900mm of Length, 300mm of Height, and 9mm of thickness, and the total weight of specimen holder is 10±2kg.
- The shock wave generator of mild steel round rod, Diameter : 25±5% Length : 600±5%
- The shock wave generator is rotated on an axis parallel to the test specimen anchorage in a horizontal plane 200mm away from the plane above the specimen retention device to give sufficient impact to the specimen retention device, and is two unequal lengths 400 mm and 200mm
- During 3 hours, it measures exactly if flame is within 950±40°C.
- The horizontality center of Burner is installed to 35±10mm from the floor of the wall against of holder.
- The front of burner is located at least 65±10mm above from the chamber's floor. The horizontal axis of burner is located 45±10mm downwards from the center cable sample and the vertical axis of burner is located approx.

Test Result

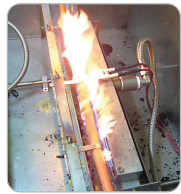
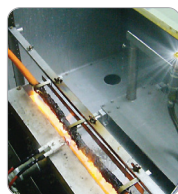
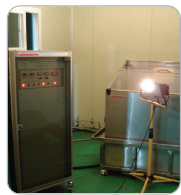
- Cable test description
- Manufacturer
- Voltage Test
- Cable Bending Radius
- Applied performance Requirements
- Test criterion or related standards
- Flame application time
- Voltage maintenance (ex. Fuse fails, interruption of circuit breaker)
- Rupture of conductor (ex. Lamp blackout)

Specification

Model	FT-CFZ-219
Size	1,600 × 850 × 1,650
Power	AC 380V 3-phase, 50/60Hz, 30A
Weight	100kg
Exhaust	Min. 15 m³/min
Utilities	Propane Gas, Compressed Air, Hood, Duct, Dust Collector

Fire Resistance Water Spray Tester

내화분무시험기, CFW-820, BS 6387 Category W



Introduction

FESTEC's BS 6387 Tester, BS 6386 standard is belong to British, is a testing device that checks for the standard level of current in the cable, and also checks the cable's resistance for heat and water of the cable.

Standard

- BS 6387 - Performance requirements for cables required to maintain circuit integrity under fire conditions – Annex D.3 Resistance to fire with water

Feature

- Heat source (Burner) has a Ventury Mixer structure. The length of burner's front surface is 500mm, ribbon type propane gas burner.
 - The standard burner's front surface width is 15mm, the hole diameter is 1.32mm, the distance between the center is 3.2mm – 3 line of cross-row holes are design.
 - In Burner plate, keep the flame on both sides of the pilot hole for polishing small hole line allowed.
 - It has a sprinkler for water spray, so it sprays water equality in the cable.
 - When spray the water, it protect for splashing out, it have a cover device on the upside.
 - It allows the Calibration Bottle for water injection quantity of check and control.
 - The pressure of the water support to the sprinkler is 2.5Kpa~3.5Kpa range can control.
 - The injection quantity is 0.25l/s/m²~0.30l/s/m².
 - Don't need water supply equipment and it have a tank under the chamber for keep the water rotated.
 - It have a guide on the burner for protect water injection from the flame for turn off.
 - It have a cover for power supply of the terminal to protect electrical short.
 - From the burner supply, it can correct measure fire resource 650+50°.
 - Voltage supplier device has each 3A or 2A fuse
 - It has 2 type of mode which manual mode by control panel and auto mode by computer software.
- Before order, user can select it. It is customizing. And if order IEC 60331-11,12 and BS 6387, user can use one Slidacs system(various up to 1,000V power supplier). Cost should be down.

Test Result

Confirm any damage to the cable due to high temperature and water or the current status of approved power.

Specification

Model	FT-CFW-820
Size	1,480 × 1,200 × 1,250
Size(Control)	600 × 750 × 1,200
Power	AC 380V 3-phase, 50/60Hz, 30A
Weight	150kg
Exhaust	Min. 15 m ³ /min
Utilities	Propane Gas, Compressed Air, Hood, Duct, Dust Collector