



## NEWLEAD TRADE SUZHOU CO.,LTD

### Suzhou Newlead Augmented Intelligence Equipment Co.Ltd

- Test box: 3m×3m×3M(prepared by users)
- Gas source: propane and air ( prepared by users)
- Power supply: three phases and five lines, AC380V 50/60Hz 10A

## YN52019 BS Wire and Cable Fire Resistance Tester

### Product description:

The structure and performance of BS fire resistance impact shock tester, including fire resistance test, water spray fire resistance test and mechanical fire resistance test, suitable for mineral insulated cable which the rated voltage is not exceeding 450/ 750V, maintain circuit integrity for a long time under fire conditions. In comply with the British fire resistance cable standard BS 6387 <Performance requirements for cables required to maintain circuit integrity under fire conditions>

### Standard:

- BS6387: 2013

#### 1. Fire resistance test: the fire resistance test bed consists of the following parts:

##### 1.1: Heat source

Cable support system: Both ends of the cable sheath are horizontal clamped. The middle part of the cable is fixed by two metal rings (spacing distance 300mm), the metal rings and the other metal parts of the device are grounded. For those non-armored cables which diameters are less than 10mm, or some other cable with noticeable displacement occurred during the test, the metal rings should be 2 pcs, and each metal ring is fixed in the original ring at about 150mm

1.2 Continuous detection device: During the test, make the current get through all the cores of the cable, a three-phase star shape connected transformer or three single-phase transformers (or a single-phase transformer, if the test is for single-core cable), and ensure that it is absolutely able to keep it maintaining 3A maximum allowable leakage current at the test voltage. At the other end of the cable, each core wire is connected with a lamp, and load the current of close to 0.25A under the rated cable voltage

1.3 Heat supply is a tubular gas burner with 610 mm length and can be forced to supply methane and a flame dense

1.4 Temperature measurement: place a armored thermometer of 1.5mm diameter near the inlet, and be parallel to the top of the burner 75mm

1.5 Testing flame temperature and time: (view BS6387 flame rating)

A 650 ± 40 -- 3 hours

B 750 ± 40 -- 3 hours

C 950 ± 40 -- 3 hours

S 950 ± 40 -- 20 minutes

1.6 Specimen: Specimen is a section of finished product, with a length not less than 1200mm, remove the sheath and covering layer of 100mm on the both ends. The wires of the cable two ends should be in accordance with the electrical connection

1.7 Test voltage: 100~1000V adjustable

1.8 Test Current: 100~260mA adjustable

#### 2. BS resistance to mechanical shock and fire:

2.1 Walls and installations: The walls are made of heat resistant, flame retardant materials, and fixed to the two horizontal girders, one on upper of the board and the other one on bottom of the board. This board is about 900mm long, 300mm wide, 9mm thick, and the total weight of walls (that is to say, the board plus the supporting frame) is 10 ± 0.5 kg. Each girder is about 1m long, 25 m<sup>2</sup> square pipe. If you need to fill materials, you need to place them inside

