Data Sheet

S5000 Axxis
Sheath Fault Location System

- Fast effective fault finding
- Continuous and pulsed output
- Order code: 14785968

Description
Unplanned downtime is the high cost problem Regional Electricity Companies and other network owners dread. Often, serious electrical cable problems start with unattended minor faults such as sheath faults. The Bicotest AXXIS S5000 System provides fast effective remedies. The system diagnoses and pinpoints trouble spots accurately.

The AXXIS System
At the heart of the system is the industry standard S271T Transmitter. This is supported by the high specification S271R Receiver which displays the signals from the S271M Magnetometer for pre-location, or the S271P Probes for pinpointing the sheath fault.

Continuous and Pulsed Output
The S271T Transmitter is used in the continuous (d.c.) mode to test the sheath. Should the sheath fail to hold the specified voltage, the pulsed output is used to locate the fault. The current leakage at the fault position sets up pools of potential. The S271R Receiver and S271P Probes utilize these to enable the fault to be pinpointed.

The Receiver can be synchronized with the Transmitter and will produce an audible signal in synchronization with the pulsed current being applied to the cable sheath for use in electrically noisy situations.

AXXIS - Accurate to a Fault
On long lengths of cable, fault pre-location may be necessary to save time and this can be done by using the S271M Magnetometer. The Magnetometer detects the magnetic field created by the current flowing in the sheath. At the fault position, this magnetic field will either disappear or reduce substantially, thus indicating the arm in which the Probes should be used.

An Axxis System components comply with the EMC directive 89/336/EEC, the Low Wattage Directive 73/23/EEC and the Transitional Arrangements of the Amendment to the Low Voltage Directive 93/68/JEEC and are manufactured under the rigours of ISO 9001.
**S5000 Axxis Sheath Fault Location System**

**Application**

![AXXIS™ S5000 System Diagram]

**Specification**

**S271T Transmitter**
- **Output Voltage:** 0 - 12 kV continuously variable
- **Output Current:** 500 mA @ 2kV (nominal)
- **Operation:** Continuous or coded
- **Metering:** 0 - 12 kV ± 3%
- **Size (mm):** 500 x 350 x 355mm
- **Weight (kg):** 32 kg
- **Power Supply:** 240V, 50 Hz
  (110/120 V, 60Hz version available as an option - please specify)

**S271R Receiver**
- **Size (mm):** 150 x 240 x 110 mm
- **Weight (kg):** 1.5 kg
- **Power Supply:** 2 x 9 V batteries, PP3 Alkaline
  (IEC equivalent 6F50-2)

**S271M Magnetometer**
- **Size (mm):** 770 x 260 x 160mm
- **Weight (kg):** 3 kg

**S271P Probes**
- **Length (mm):** 1000 mm
- **Weight (kg):** 1.3 kg (including case)

**Delivery of Axxis™ Sheath Fault Location System Includes**
- S271T Transmitter in transit case
- S271R Receiver in transit case
- S271M Magnetometer in transit case
- S271P Probes in carry bag
- Discharge Hook
- All necessary leads
- Operating Manual
- One year Warranty