

Sibille Fameca Electric

RN 7 Sud - ZI Les Plaines n°17
26780 Malataverne
FRANCE

Tél. : (0033) 04 75 90 58 00
Fax : (0033) 04 75 90 58 39
E-mail : contact@sf-electric.com
Internet : www.sfe-export.com



FC-2200

CABLE AND PHASE IDENTIFICATION SYSTEM

The FC2200 allows cable and phase identification on de-energized cables. It is used for installation and maintenance work on de-energized cables. The FC2200 also increases worker security by using a reliable cable and phase identification technique and by its simplicity of operation.

Safe and simple

The magnetic current injection principle of the FC2200 eliminates the necessity of connecting directly to the cable. It requires an earth connection at each end of the circuit and these earth connections can be left in place for the whole process, eliminating the need to go back to the transmitter's location and enhancing the user's safety. The detector has a unique tone detection system that guarantees identification and phasing without any adjustment and without mistakes.

How it works

The FC2200 has two major parts:

- A tone transmitter with three magnetic current injection clamps
- A tone detector with removable magnetic sensor

The FC2200 uses a fully digital technology for the transmission and the detection of the tones. The transmission of the tracking frequencies is done by three magnetic clamps. This type of transmitter without direct connection to the cable induces a current in the cable even if it is installed over the insulation of the cable. Three clamps are installed directly over the cable's insulation, in a place where the phases are identified and where concentric neutral is deviated towards the earth circuit (generally at overhead or underground cable ends, or in substations).



Cable Terminations

Grounding sets connected to earth circuit are installed at each end of the circuit to ensure current circulation and user safety as well. The detector uses either a magnetic sensor (no direct connection needed) or a compass, when the cable is cut and tracking of the phases is required to reconnect to the network. The detection is done by a digital system that checks for the presence or absence of each of the transmitter's tones. These functions make the FC2200 a very simple and safe instrument.



Main advantages

Transmitter FC2200E

- Current injection over cable insulation via magnetic clamps.
- Unique balanced injection system avoids any return on other cables.
- Uses three distinctive tones for phase tracking.
- Quick and easy to install and use.
- Enhanced reach: up to 5km of effective distance.
- Permanent transmission of tones for ten to twelve hours.
- Compact and lightweight.

Detector FC2200D

- Easy to use.
- Tone detection that uses fully digital, reliable technology.
- Uses magnetic sensor over cable insulation.
- Automatic control of tone reception
- Phase tracking by detection of presence or absence of transmitter tones.
- Use of lower frequencies to reach a longer cable length range.



The FC2200D detector, with its magnetic sensor.

Technical specifications

Transmitter

Injection clamps	3
Opening the jaw	50 mm (1.96 ")
Pulse length	0.4 sec.
Repetition rate	3 sec.
Injection currents	5 mA to 1 A
Battery tension	8 Volts
Available current	2,2 A
Autonomy	10 to 12 hours



Detector

Detection frequencies	437, 468 ,531 Hz
Reception level control	32 dB

A cushioned nylon bag holds detector and captors, thus protecting them from dirt and shocks and easing their transportation as well.

Sensor

Detection captor type	magnetic
Length of the cables	1.5 meters.



The FC2200E's rugged carrying bag also holds the charger and the transmitter's inducer clamps, while protecting the transmitter from weather hazards. The detector's bag sits inside, optimizing the size of the whole system to a single compact package, very easy to handle. An advantage of the FC2200 small dimensions is that it can be hooked to a pole, thus allowing its use on an overhead termination.

