



## FC 5300 LIVE LV CABLE IDENTIFIER



Compliant with European Directives **CE**

### Function:

The FC5300 allows the identification, with no possibility of error, of the live LV cable requiring an intervention, in the presence of several similar cables (LV, MV, telecommunication or other). The FC5300 also allows the live identification of the conductors in a three-pole LV cable already identified.

Compliant with EDF specification – Serect ST BT 840 (iss. C – 11/2000) and approved.

Compliant with directives:

- on electromagnetic compatibility (EMC directive) (89/336/EEC, 92/31/EEC, 93/68/EEC and 92-587/RF, 95-283/RF) standard NF EN 55011 ed.2009 / A1 2010
- on the safety of low voltage equipment (LV directive) (73/23/EEC and 75-848/RF)
- Standards : IEC/EN 61010-1 ed.3.0 (2010), IEC/EN 61010-031 ed.1.1 (2008),

Classe II – 1000 V – Cat.IV

### Uses:

The FC5300 modulator operates by tapping a particular signal on the current.

The low value of this current ( $\approx 4A$  RMS on the pulse) means it can be connected to practically any point on the LV network, including domestic sockets.

Although it can operate in single-phase mode (live – neutral connection) and two-phase (live - live connection), its standard operating mode is three-phase.

Three-phase connection has the advantage of allowing the user to successively identify the cable and identify the conductors in this cable without needing to touch the modulator or its connection.

### Basic composition of the FC5300:

- **FC5300E** : FC5300E modulator
- **FC5300D** : FC5300D detector
- **FC5K3SD** : differential probe
- **CFSS30BN** : brown fused mains lead 2.5 mm<sup>2</sup> L = 3 m
- **CFSS30N** : black fused mains lead 2.5 mm<sup>2</sup> L = 3 m
- **CFSS30G** : grey fused mains lead 2.5 mm<sup>2</sup> L = 3 m
- **5066BN** : brown alligator clip  $\varnothing 32$  mm
- **5066N** : black alligator clip  $\varnothing 32$  mm
- **5066G** : grey alligator clip  $\varnothing 32$  mm

Ref. **FC5300GB**

### Characteristics:

#### FC5300E modulator

Supply voltage	220 V rms to 400 V rms
Maximum operating voltage	440 V rms
Network frequency	50 Hz or 60 Hz to be specified
Number of channels	2
Duration of tapping per channel	0.256 s (per cycle)
Pulse cycle	0.16 Hz
Central frequencies tapped	channel L1 – L2: 527 Hz channel L3 – L2: 574 Hz
Rms tapping current	$\approx 4$ A /channel during impulse
Peak current	under 230 volts: $\approx 16$ A peak under 400 volts: $\approx 16$ A peak
Inputs protected internally by 3 HRC fuses (accessible to the user)	$\varnothing 10.3 \times 38 - 6A/1000V/34kA$
Mains leads protected at their IP2X connecting end by HRC fuses	$\varnothing 6.3 \times 32 - 7A/600V/50kA$
Operating temperature	-20°C to +40°C
Forced ventilation	2 + 2 fans
Max. temperature protection by switching off the tapping :	90 °C $\pm 3$
Filtering	150 kHz – 30 MHz
Approximate dimensions:	470 x 360 x 190 mm
Approximate mass	9.85 kg

#### FC5300D detector

Power supply	battery 3.7 V (Lithium-ion)
Endurance	over 1000 detections
Display	screen LCD 128 x 64 backlit
Battery level check	battery level indication
Choice of functions	by dedicated buttons
Standby	automatic
Power cutoff	automatic
External sensor	connection on connector
Analyser	DSP/ARM + PIC
Approximate dimensions	160 x 95 x 50 mm
Approximate mass	0.35 kg (with battery)
Battery charger	USB type, mains and vehicle
Protection	shockproof rubber-type shell

#### FC5k3SD differential probe

Receiving sensor	magnetic, differential
3 sensitivities according to the type of cable	
Protection by shockproof "rubber" positioning shoe	

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