

Ariadna ILF6

Live network LV line phase and feeder identifier

Low Voltage connectivity data (relates data from MV/LV transformer and phases with end user) results critical for the correct management of electrical distribution network. The use of this data in a GIS solution allows calculation of transformer load balances, faults, preventive maintenance tasks planning, etc., and at end, to guarantee the quality of the electrical supply.

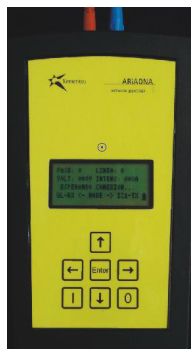


Central Unit (UC)

In order to cope with Electric Utilities needs, **Ariadna Instruments** has designed the **ILF6**, a Low Voltage phase and feeder identifier.

This equipment determines connectivity between subscribers and the different lines and phases of an MV/LV transformer substation in a fast, easy and reliable way.

Ariadna ILF6 works without de-energizing the line, so electrical supply is kept throughout the identification process.



Line Unit (UL)

Main features:

- Works in service, without de-energizing the line.
- Three phases and up to 6 feeders can be identified in a few seconds.
- Proved efficiency in lines up to 1 km.
- Central and Line Unit communicate with each other by means of coded messages through the distribution network. This way the use of radio or other communication extra equipment is avoided.
- A single operator can easily use it.
- Operational for all kind of Low Voltage network configurations, up to 440 V between phases, 50 or 60 Hz, with coupled and/or ringed lines.
- “Plug and Play”. Contains all features needed to start working, without any additional programming or adjust.

Working diagram

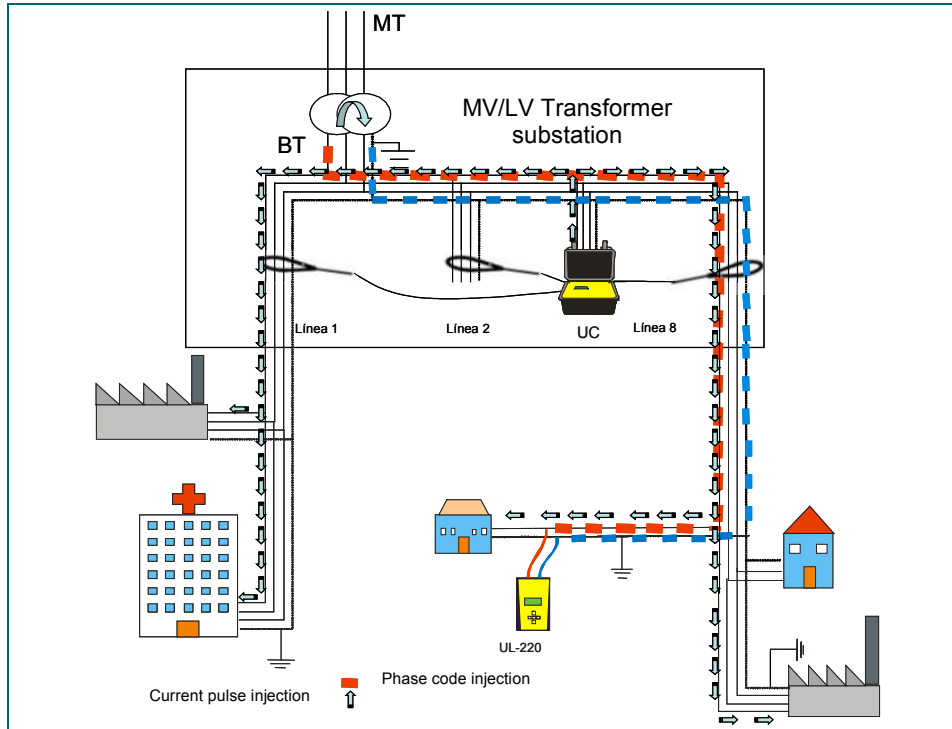


Ariadna ILF6 phase and feeder identifier meets European Low Voltage Directive 73/23/CEE and is compliant with:

Central Device (UC):
EN-50178, Electronic Equipment for use in power installations.

Line Device (UL):
EN 61010-1 (Safety requirements for Electrical Equipment for measurement, control and laboratory use).

The above mentioned conformity is indicated with the CE Symbol.



Operation sequence.

At MV/LV transformer substation

- Central Unit (UC) is connected to transformer LV side.
- UC injects 3 codes, each one at each phase (represented only one phase in above diagram).
- Each line is braced by connection ring.

At Low Voltage network point

- Line Unit (UL) receives phase and feeder information.

Technical features

Central Unit (CU)		Line Unit (LU)	
Dimensions (cm):	34.3x32.7x15.7	Dimensions (cm):	12 x 22 x 6,5
Protection:	IP54	Protection:	IP54
Weight:	4 kg	Weight:	0,75 Kg
V Phase-Neutral:	100-280 Vac (50Hz)	Power supply:	4x1,5v AA batt.
V Phase-Phase:	200-440 Vac (50Hz)	Output current:	100 A Peak
Cable length:	300 cm	Max. network voltage for signal transmission:	250 V
Sensor ring cable length	200 cm	Cable length	180 cm
S.C. protection:	4A fuses	S.C. protection	6A 10x38 fuses
Miss-connection protection:	Internal	Signal injection:	Direct. C. clamps

Power cable identification and location solutions



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