

Live network LV phase identifier

The updated knowledge of low voltage connectivity data (link between MV/LV transformer and phase with end user) results critical for the correct management of electrical distribution network.

With updated connectivity information a GIS solution may calculate transformer load balances, find critical network spots before any incident occurs, prepare maintenance task planning, ... i.e., **improves electric supply quality**.



In order to cope with electric utility needs, **Ariadna Instruments** has designed the **IF-3** Low Voltage phase identifier.

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

Ariadna IF3 works without de-energizing the line, so electrical supply is kept throughout the identification process.

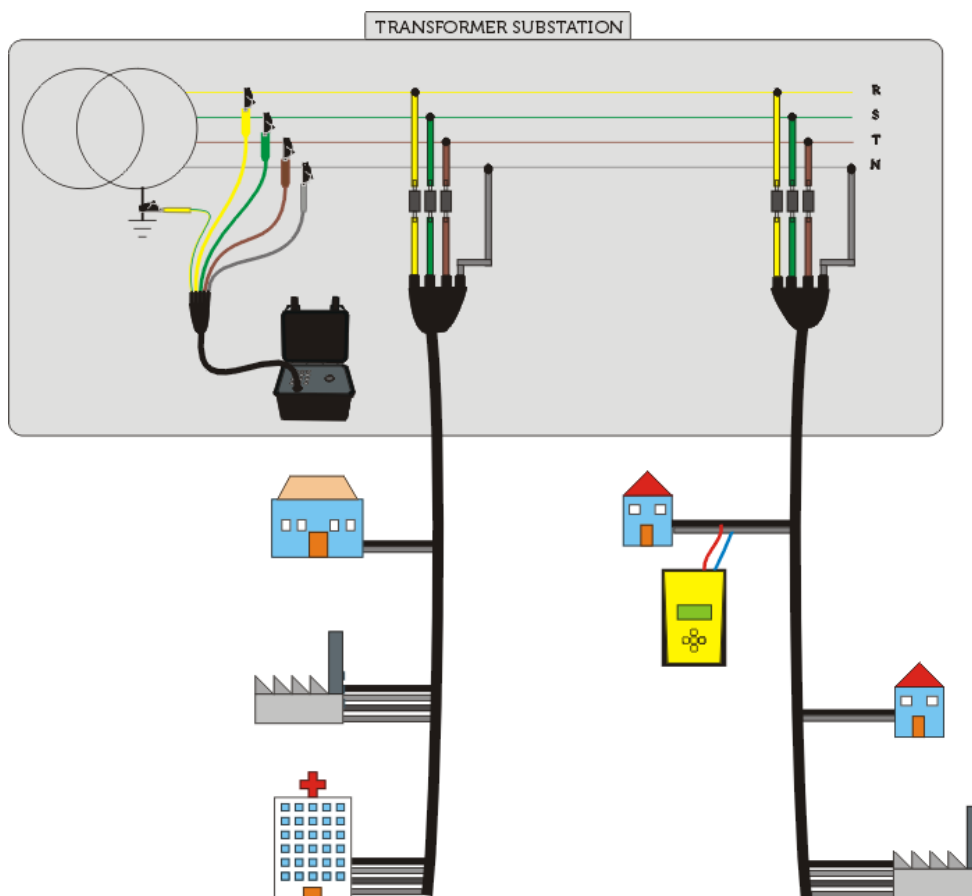
Main features:

- Works in service networks, without de-energizing the line.
- Three phases can be identified in few seconds.
- Central Device and Line Device 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.



CD Central Device

Working diagram



Ariadna IF3 phase identifier meets European Low Voltage Directive 73/23/CEE and is compliant with:

Central Device (CD):

EN-50178, Electronic Equipment for use in power installations.

Line Device (LD):

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

Technical features

Central Device (CD)

Dimensions (cm):	27.3x24.7x12.7
Protection:	IP65
Weight:	2.5 kg
V Phase-Phase	200-480 Vac (50/60Hz)
V Phase-Neutral	100-290 Vac (50/60Hz)
Vmax (Phase-Neutral / Phase-Phase)	480 Vac (50/60Hz)
Cable length:	300 cm
Short circuit protection:	2A fuses 5x20mm
Working temperature:	-10 °C / 55°C

Line Device (LD)

Dimensions (cm):	12 x 22 x 6,5
Protection:	IP54
Weight:	0,75 Kg
Power supply:	4 x 1,5v AA batteries
V working	100-290 Vac (50/60Hz)
Vmax	480 Vac (50/60Hz)
Cable length:	180 cm
Short circuit protection:	6A fuse 10x32mm
Working temperature:	-10 °C / 55°C

Power cable identification and location solutions