

# ndb

Advanced and  
Innovative Solutions



## VCI-3™

### Voice Cable Identification System

The VCI-3™ is a cable identification and phasing system used during installation or maintenance works on de-energized three phase systems.

#### ADVANTAGES

- ✔ Unique balanced injection system that eliminates signal bleeding on other wires
- ✔ Three different frequencies to identify each phase
- ✔ Easy to install and operate
- ✔ Extended range: up to 10 km (6 miles) of working distance
- ✔ Tone transmission for more than 8 hours
- ✔ Lightweight and compact
- ✔ Optional magnetic sensing transducer
- ✔ Phase detection by transmitter tone presence or absence
- ✔ Digital filtering of network harmonics
- ✔ Unique dual grounded method

#### OPERATION MODE

The tone transmitter integrates a speaker and a microphone to record the vocal identification message. The transmitter uses direct connection injection clips or three clamps for magnetic current injection. The clamps induces current in the conductor and no concerns with the cable sheath. Thanks to its rechargeable battery pack, it can provide more than eight hours of continuous work.

The compact detector uses a magnetic sensor. It has a built-in speaker with adjustable volume and a earphones jack to listen to the vocal identification message even in noisy environments. The sensor detection threshold is adjustable according to cable type and length. Detection is guaranteed by a digital processing system that checks for the presence or absence of every tone that comes in from the transmitter end. ndb Technologies' unique process guarantees a safe, precise and flawless detection.



VCI-3™ system



VCI-3™ in field application

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## VCI-3E™ TECHNICAL SPECIFICATIONS

<b>Battery</b>	7x NiMH AA batteries
<b>Autonomy</b>	8 hours
<b>Charge time</b>	5 hours
<b>Dimensions</b>	210 x 130 x 55 mm (8.27 x 5.12 x 2.17 inches)
<b>Weight</b>	750 g (2.01 lbs)
<b>Operating temperatures</b>	-10°C to 45°C (14°F to 113°F)
<b>Storage temperatures</b>	-20°C to 45°C (-4°F to 113°F)
<b>Charge temperatures</b>	0°C to 45°C (32°F to 113°F)

## VCI-3D™ TECHNICAL SPECIFICATIONS

<b>Battery</b>	Li-Ion 3.7V 900mA
<b>Autonomy</b>	4 hours
<b>Charge time</b>	5 hours
<b>Vocal message bandwidth</b>	300Hz to 3000Hz
<b>Dimensions</b>	130 x 75 x 26 mm (5.12 x 2.95 x 1.02 inches)
<b>Weight</b>	170 g (0.46 lbs)
<b>Operating temperatures</b>	-10°C to 45°C (14°F to 113°F)
<b>Storage temperatures</b>	-20°C to 45°C (-4°F to 113°F)
<b>Charge temperatures</b>	0°C to 45°C (32°F to 113°F)

## OVERVIEW

The VCI-3™ uses a current injection technique. The current is injected in the wire conductors or by magnetic transducers. Grounding is required at one or two ends of the three phase circuit, which can stay in place during the intervention to ensure maximum operator safety. The detector's unique tone sensing system guarantees flawless and safe identification and tagging. The VCI-3™ is a compact device that is very easy to use.

## STANDARD ACCESSORIES:

- VCI-3E™ Transmitter
- VCI-3D™ Detector
- Magnetic sensor
- Battery charger
- Cable kit
- Transportation case
- User manual
- Calibration certificate



**Optional transmitter clamp kit**



**Optional detector compass probe kit**



**Typical cable identification setup**