



## MPHASE – 1-69 kV

### ➔ Wireless phase comparator

#### STANDARD

IEC 61481-1 (2014) *Live working – Phase comparators - Part 1: Capacitive type to be used for voltages exceeding 1 kV a.c.*  
CE : Compliance with European directives.

#### USE

- MPHASE is designed to carry out phase comparison between two MV circuits of a Three Phase system before connection.
- Each units of the set can be used for checking Voltage Presence

#### ADVANTAGES

- Light and compact unit that can be used safely for outdoor (overhead lines) and indoor (substations) operations.
- Positive indication for "in phase" conditions
- Voltage presence indication
- Indication of active radio link between the 2 units

#### **The wireless concept provides:**

- Better safety by suppression of cable link hazard
- Better distance range between test points (more than 25m)
- Possibility of phasing through walls (for instance between substation bus bars and overhead cable terminals)

#### **Enhanced indication that can be clearly noticed in most working conditions:**

- The visual indication is visible in all usual working environments, from sunlight to fog, with a wide angle of visibility and from the side thanks to an optic ring.
- The 100 dB (1m) sound signal is designed to remains audible even in heavy traffic or strong wind, thanks to its acoustic "horn".

#### **Thanks to the direct access to the battery and sealed electronics compartment, the battery replacement will prevent from :**

- Accidental interchange of housing or circuitry,
- Damage to electronic circuits,
- Humidity ingress into the device when the battery is replaced outdoors.





## ▶ TECHNICAL SPECIFICATIONS

**AC voltage range: 1 to 69 kV**

**Network frequency: 50 and 60 Hz**

- Permanent standby status with *automatic wake-up function*
- **Transmitter (T)** : grey housing  
The presence of voltage is indicated by an intermittent **RED** light and a beeping sound then transmits phase information to the receiver.
- **Receiver (R)** : **blue housing**  
The presence of voltage is indicated by intermittent **RED** lights (2LED) and a beeping sound, and phase concordance is indicated by **solid RED** lights (4 LED) and a steady sound
- Indication of the radio link by a **BLUE** light indication
- HF radio transmission operating at 433.9 MHz
- Minimum distance range in open air 25 m
- Self test checking all measuring circuits, phasing functions, radio link and battery level
- A low battery level is indicated by an **ORANGE** light
- Designed for outdoor and indoor use
- Operating temperature: -25 ° C to +55 ° C
- Humidity: 96 % max.
- Power supply voltage: 9 V alkaline cell – IEC 6LR61 (1 by module)
- Accepts the use of rechargeable battery with identical supply voltage
- Polycarbonate housing
- Dimensions of each module : Ø 59 mm, L = 280 mm without the Y contact electrode nor electrode extension
- Net weight of each module: 0.390 kg with stick adaptor
- Operating manual with a choice of languages, depending on the package.





## → Version with electrode extension

### ▶ USE

- Electrode extension for testing through access holes
- Indoor and outdoor use

### ▶ ADVANTAGES

- Allows access to live phases without opening the cubicle substation.
- Minimum insertion diameter of 40 mm

### ▶ TECHNICAL SPECIFICATIONS

- Voltage range : 1 – 36 kV max.
- Insertion depth : 260 mm, 400 mm, 600 mm and 900 mm
- Electrode : V56 fixed
- Sturdy insulated tube : Ø 15 mm



Reference	Voltage range	Frequency	Stick adaptor *	Contact electrode	User's Manual **	Packaging
MPHASE0169FHUA	1 – 69 kV	50 / 60 Hz	Universal & APV	V56	Pack F	Soft case with conductive lining for EMC protection
MPHASE0136FHUAANT260	1-36 kV			V56 Electrode extension 260mm ***		Soft case

\* Other stick adaptor available on required

\*\*\* Other electrode extension length available 400, 600 and 900mm

\*\* Pack F : FR/GB/DE/ES/PT/PL -- Pack G : GB/GR/NL/BG/IT/AR/TR

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