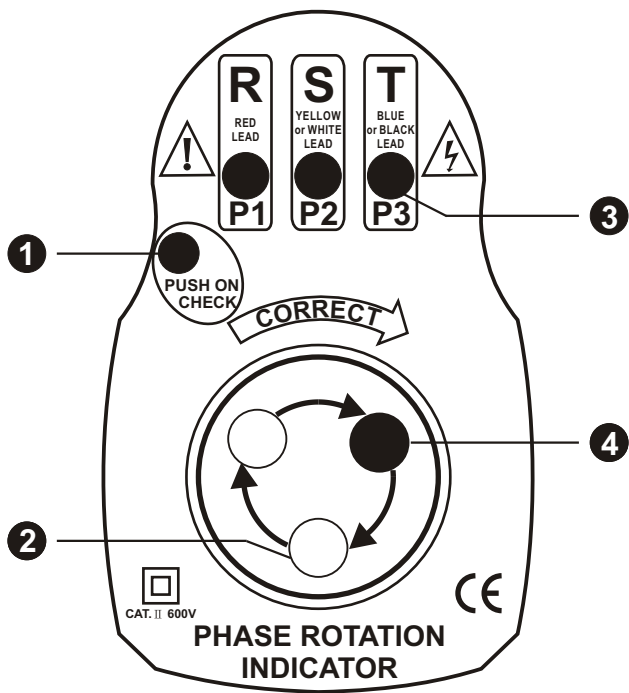


# **PHASE SEQUENCE INDICATOR**

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**INSTRUCTION MANUAL**



- (1) Pushbutton Switch
- (2) Phase Rotation Indication Window
- (3) Open Phase Check Lamps
- (4) Rotating Disc

# 1. INTRODUCTION

## NOTE

*This meter has been designed and tested according to IEC Publication 348, Safety Requirements for Electronic Measuring Apparatus, IEC 1010 (EN 61010) and other safety standards. Follow all warnings to ensure safe operation.*

## WARNING

**READ "SAFETY NOTES" (NEXT PAGE)  
BEFORE USING THE METER.**

## 2. SAFETY NOTES


Read the following safety information carefully before attempting to operate or service the meter.

Use the meter only as specified in this manual ; otherwise the protection provided by the meter may be impaired.


Rated environmental conditions :

- (1) Indoor use.
- (2) Installation Category II .
- (3) Pollution Degree 2.
- (4) Altitude up to 2000 Meter.
- (5) Relative Humidity 80% Max.
- (6) Ambient Temperature 0~40°C.

Observe the International Electrical Symbols listed below.

 Meter is protected throughout by double insulation or reinforced insulation.

 Warning ! Risk of electric shock.

 Caution ! Refer to this manual before using the meter.

 Alternating current.

### **3. FEATURES**

#### **TWO FUNCTIONS IN ONE UNIT**

It is designed to check phase sequence. Lamps provided on the unit will tell you whether phase is open or which phase is open at a glance.

#### **LARGE SIZE ALLIGATOR CLIPS**

Can easily hold terminals of switch boards.

#### **HIGHLY RELIABLE**

Can check a wide range of 3-phase power source from 90V to 600V.

Sealed against dust, the unit ensures highly dependable and trouble-free performance.

#### **FUNCTIONAL DESIGN**

Small, lightweight and portable. Designed for maximum ease of operation.

#### **SAFETY DESIGN**

No exposed metal parts. Safety features are incorporated throughout, including the pushbutton switch designed to minimize damage due to negligence.

## 4. MEASURING METHODS

- (1) Connect color coded alligator clips to the terminals of a 3-phase power source where a rotating electrical machine, such as a motor will be connected. Connecting order may be optional.
- (2) Press the pushbutton switch located on top of the unit. Keep this button pressed during phase sequence or open phase check. When the pushbutton switch is released, it immediately goes off.
- (3) Make sure that all of the three lamps for open phase check are on. If so, there is no open phase. When any of the three lamps is not on, there is open phase.

Open phase check lamp "R" is not on → Open phase on terminal where RED alligator clip is connected

Open phase check lamp "S" is not on → Open phase on terminal where YELLOW alligator clip is connected

Open phase check lamp "T" is not on → Open phase on terminal where BLUE alligator clip is connected

When the open phase check lamps are not on, the rotating disc does not turn.

- (4) Check the rotating direction of the inside disc through the phase sequence indication window. When the rotating disc turns counter-clockwise, alternate the connection of the two of the three alligator clips, then the rotating disc will turn clockwise. When the rotating disc turns clockwise, phase sequence is R, S and T in order of the power source terminals where the RED, YELLOW and BLUE alligator clips are connected.

## 5. SPECIFICATIONS

Voltage : 90V~600V AC.

Frequency Response : 50/60Hz.

Safety Standard :

BS EN 61010-1 IEC 1010-1 CAT II 600V.

Storage Temperature & Humidity :

-20°C ~ +60°C at 90% max.

relative humidity.

Operating Temperature & Humidity :

-10°C ~ +40°C at 80% max.

relative humidity.

Dimensions :

134(L) x 85(W) x 45(D)mm.

Weight : Approx. 540g.

Cord : 1.1m each of Red(R), Yellow(S) and Blue(T) cord.

Accessories :

Instruction Manual, carrying Case.

Remark :

In case continuous use is necessary, it is recommended that making measurements does not operate continuously over 10 minutes, or keep a interval of ten -minute off operation at least.

## **6. MAINTENANCE**

Cleaning and Storage :

- (1) To avoid electrical shock or damage to the meter, do not get water inside the case.
- (2) Periodically wipe the case with a damp cloth and detergent ; do not use abrasives or solvents.