

## SAFETY PRECAUTIONS

This instrument is designed, manufactured and tested to meet IEC-348 (Safety requirements for electronic measuring apparatus) safety class II.

This instruction manual contains warnings and safety rules that must be observed by the user to ensure safe operation of the instrument and retaining it in safe condition. Therefore, read these operating instructions thoroughly and completely before using the instrument.

The symbol  $\triangle$  on the instrument means that the user must refer to the relevant section of this instruction manual for safe operation of the instrument.

Pay particular attention to all  $\triangle$  WARNINGS and  $\triangle$  CAUTIONS in this instruction manual.  $\triangle$  WARNING indicates warnings to avoid an electric shock and  $\triangle$  CAUTION indicates cautions to avoid damages to the instrument.

### $\triangle$ WARNINGS

- Never open the instrument when making measurements.
- If the instrument is in the following conditions, do not attempt to make measurements. The instrument must be checked or repaired before use.
  - Instrument is apparently broken in visual check.
  - Test leads are damaged.
  - Instrument can not be operated for intended measurements.
  - Instrument has been stored for a long period of time under improper conditions.
  - Instrument receives stress by severe transportation.
- High voltage is loaded onto three phase lines. As it is very dangerous to get an electric shock, pay attention when you perform the work of connecting the instrument to the lines.
- Even if all open phase lamps are not lit on, one phase may be still live circuit. Pay attention to avoid an electric shock.
- For replacement of fuse, use the fuse only with rated current and designated electrical specifications. Do not replace with the fuse with different rated current as a temporary expedient. Or do not short the fuse holder.

### $\triangle$ CAUTIONS

- Make sure never to apply a voltage more than 600V AC rms. between the test leads of the instrument and earth to avoid any damage to the instrument.
- Do not measure for more than five minutes when measuring on 500V AC or more, although the instrument is designed for the use of the voltage 110V through 600V AC.

## FEATURES

### Two Functions in One Unit

Model 8031 is designed to check phase sequence. Lamps provided on the unit will also tell you whether phase is open or which phase is open at a glance.

### Large -Size Alligator Clips

Can easily hold terminals of switchboards.

### Highly Reliable

Can check a wide range of 3-phase power source from 110V to 600V. Sealed against dust, the unit ensures highly dependable and trouble-free performance.

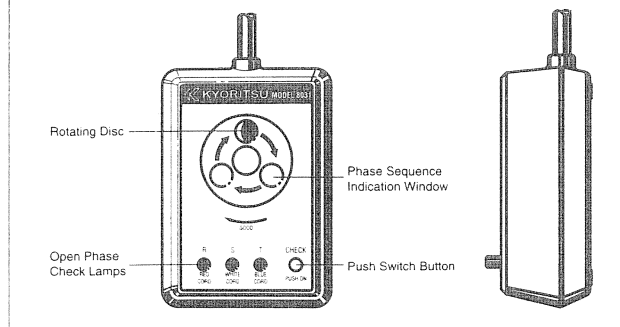
### Functional Design

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

### Safety Design

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

## DESIGNATIONS



## SPECIFICATIONS

	Model 8031
<b>Voltage</b>	110V-600V
<b>Time Limit for Continuous Use</b>	Within 5 minutes in case voltage is above 500V.
<b>Frequency</b>	50/60 Hz
<b>Withstand Voltage</b>	4,000V AC for one minute
<b>Dimensions</b>	106 (L) × 75 (W) × 40 (D) mm
<b>Weight</b>	Approx. 350g
<b>Cord</b>	1.5m each of red (R), white (S) and blue (T) cord
<b>Fuse</b>	0.5A/250V (Model 8031F only)
<b>Accessories</b>	Instruction Manual/Carrying Case

## OPERATING INSTRUCTIONS

- Connect colour 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.
- Press the push switch button located on top of the unit. Keep this button pressed during phase sequence or open phase check. When the push switch button is released it immediately goes off.
- 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 White alligator clip is connected.
Open phase check lamp "T" is not on	→	Open phase on terminal where Blue alligator clips in connected.

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

- 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, White and Blue alligator clips are connected.