1. SAFETY WARNINGS

This instrument has been designed and tested according to IEC61010. Safety requirements for Electronic Measuring Apparatus, and delivered in the best condition after passing quality control tests. This instruction manual contains warnings and safety rules which have to be observed by the user to ensure safe operation of the instrument and to maintain it in safe condition. Therefore, read through these operating instructions before using the instrument.

1.1 WARNING
Read through and understand instructions contained in this manual before using the instrument.

1.2 WARNING
Keep the manual at hand to enable quick reference whenever necessary.

1.3 WARNING
The instrument is to be used only in its intended applications.

1.4 WARNING
Understand and follow all the safety instructions contained in the manual.

1.5 WARNING
It is essential that the above instructions are adhered to. Failure to follow the above instructions may cause injury, instrument damage and/or damage to equipment under test.

1.6 DANGER
Indicated for conditions and actions that are likely to cause serious or fatal injury.

1.7 WARNING
Indicated for conditions and actions that can cause serious or fatal injury.

1.8 CAUTION
Indicated for conditions and actions that can cause injury or instrument damage.

2. FEATURES

1. This is a Voltage Sensor designed for KEW6310 to measure AC voltage up to 600V.

2. Use with Power Quality Analyzer (KEW6310) enables flicker measurement according to IEC61010-4-15 (Flickermeter – Functional and design specifications).

3. Designed to following international safety standards: IEC61010-1 Measurement Category (CAT.) III 600V IEC61010-031 Requirements for hand-held probes

4. Internal differential amplifier is equipped, enabling floating voltage measurement.

3. SPECIFICATIONS

- Max. input voltage: AC600Vrms, 484V Peak
- Input system: Differential input (can measure floating voltages)
- Output voltage: AC200mV/AC600V (Output/input: 1mV/V)
- Measuring ranges and accuracy:
  - Measuring Range: 600V
  - Frequency range: 50Hz±10%
  - Accuracy: ±0.5%
- Temperature and Humidity Range: 0°C to 40°C, relative humidity 85% or less (without condensation)
- Operating Temperature and Humidity Ranges: 0-40°C, relative humidity 85% or less (without condensation)
- Storage Temperature and Humidity Ranges: -20-60°C, relative humidity 85% or less (without condensation)
- Power supply (supplied via output terminal)
  - DC: ±5V (Typ)
  - Input impedance: Approx.1MO
  - Output Impedance: Approx.10Ω
- Location for use: Altitude up to 2000m, Indoors
- Safety Standard: IEC61010-1:2001 Measurement Category (CAT.) III 600V Pollution Degree 2
- IEC61010-031:2003
- EN61326:2001 (EMC Standard)
- Withstand Voltage: AC5000Vrms (50KHz) for 1sec.
- Insulation Resistance: 50MΩ greater than 1000V
- Dimension & weight: 97 x 26 x 15 (excluding connectors)
- COM Cable length: Approx. 1m
- Output Cable length: Approx. 0.8m
- Input Connector: M9 DIN 8PIN
- Accessories: Instruction manual
- Option: 7197 (Male Alligator clip)

4. HOW TO USE SENSOR LAYOUT

1. Connect the Output connector to the Input terminal (A1) of the Power Quality Analyzer (KEW6310). This sensor operates only at A1 terminal. Do not use 2pcs or more of KEW6325F at the same time.

2. Clip the V and COM measuring terminals onto the conductor under test.

3. Start KEW6310 and select Flicker measurement at “Sensor menu”. Detailed operating instructions are given in the Instruction manual for KEW6310.

5. DIN Plug pin assignment

1. +DC power supply Pin (Pin 1)
2. -DC power supply Pin (-5V)
3. GND Pin
4. No use
5. Output signal Pin
6. Sensor recognition pin (Resistance between Pin 3 and Pin 6: 20kΩ)

*Above figure shows the pin assignment seeing the Clamp sensor from output connector part. The figure of the pin assignment of connection terminal is symmetrical to above figure.