Component Names and Functions

- **Demand Alarm Lamp (Red)**: Comes on if the demand value exceeds the demand alarm point at any point in time other than the demand alarm mask time.
- **Pulse Output Lamp (Green)**: Comes on when the input is turned on in the pulse output mode and goes out when the output is turned off.
- **Communication Lamp (Green)**: Blinks while RS-485 or Ethernet communication is in progress.
- **Power Lamp (Green)**: Comes on and remains lit when the PR300 is turned on and operating normally. Blinks (5 times/second) if a communication error occurs, and continues to blink until the PR300 returns to normal.
- **Phase Indication Lamps (Red)**: Come on to notify the user of the voltage or current value being measured.
- **MAX and MIN Lamps (Red)**: Come on when the maximum or minimum measured value is displayed.
- **Operation Keys**: In the measured value display mode, this key is used for, for example, to switch the display pattern. Also used to set parameters on the Parameter screen.
- **Input Range Lamps (Green)**: The voltage range option set in the PR300 and the current range (rated input) option specified at the time of ordering turn on.
- **Unit Lamps (Red)**: Shows the unit symbol of a measured value for each measurement item. These unit symbols are shown in combination depending on the type of measured value.
- **VT Ratio Lamp (Red)**: Shows the unit symbol of the measured value for VT ratio.
- **Current Value Lamp (Red)**: Shows the unit symbol of the measured value for current value.
- **Demand Lamp (Red)**: Shows the unit symbol of the measured value for demand power or demand current (displayed only supported for a PR300 with the demand measuring function.)

### 1.1 Setting the Phase and Wire System

- **Initial Setup Operations**
  - **Power and Energy Meter**
  - **NOTE**
    - If you change the phase and wire system and the voltage range, all parameters other than those related to RS-485 and Ethernet communications are initialized (to factory-set values). Change the phase and wire system and the voltage range before setting parameters such as the VT and CT ratios.

1. **Set up the PR300 First**
   - **NOTE**
     - Pressing on once causes all digits of the setpoint to start blinking. Pressing again confirms the setpoint and returns to the Phase and Wire System screen.
     - The phase and wire system thus set is shown as the current value.

2. **Measured Value screen**
   - **STARTUP**
     - The PR300 shows the station number for about 5 seconds, then the Measured Value screen * appears.
   - **VT Ratio screen**
     - The parameter (VT ratio) appears.
   - **Simultaneously hold down and for at least 3 seconds.**
   - **Specification Change Confirmation screen**
     - The Specification Change Confirmation screen appears.
   - **Using or , show on**
   - **Setting completed.**

3. **Range of Phase and Wire System Options**
   - **Setpoint**
     - The phase and wire system thus set is shown as the current value.

Note

- **Single-phase three wire system is selected, the voltage range is fixed at 300V (between P0 and P1, P0 and P2). The voltage range cannot be selected.**
- **Three-phase four-wire system (2.5 element) can be used only when the voltage is in state of equilibrium. In addition, the phase and wire system cannot be changed.**
2. Setting the VT and CT Ratios

NOTE
Set the VT and CT ratios so that the value of “secondary rated power × VT ratio × CT ratio” is smaller than 10 GW. If this value exceeds 10 GW, the updated VT or CT ratio will not be incorporated but revert to the current value before change.

2.1 Setting the VT Ratio

This section explains how to set the VT ratio by taking as an example the case when the VT ratio is changed from the initial value (1) to 4. Prior to proceeding to the following steps, ensure that the PR300 is turned on, and the Measured Value screen is displayed.

Measured Value screen

The parameter \( \frac{V}{I} \) (VT ratio) appears.

Press \( \text{Hold down } \frac{V}{I} \) for at least 3 seconds.

CT Ratio screen

The parameter \( C \) (CT ratio) appears.

Press \( \text{Hold down } C \) for at least 3 seconds.

CT Ratio Setting screen

The screen changes to the one for setting the parameter \( C \). The lower display shows the current value and the decimal point blinks.

To move the decimal point, use the following keys:
- \( \text{To the right} \)
- \( \text{To the left} \)

Press \( \text{Press once.} \)

CT Ratio Setting screen

The screen changes to the one for setting the parameter \( C \), and the alterable digit blinks.

Using \( \text{or } \text{, change the setpoint.} \)

Press \( \text{Press twice to confirm the setpoint.} \)

CT Ratio Setting screen

Pressing \( \text{once again confirms the setpoint and returns to the CT Ratio screen.} \)

To re-set the parameter:
- Press any key other than \( \text{or } \text{ keys.} \)
- Press any key other than \( \text{ or } \text{ keys to start blinking. The PR300 returns to the initial setting screen.} \)

VT Ratio screen

The parameter \( \frac{V}{I} \) (VT ratio) appears.

Press \( \text{Hold down } \frac{V}{I} \) for at least 3 seconds.

CT Ratio screen

The parameter \( C \) (CT ratio) appears.

Press \( \text{Hold down } C \) for at least 3 seconds.

CT Ratio Setting screen

The screen changes to the one for setting the parameter \( C \). The lower display shows the current value and the decimal point blinks.

To move the decimal point, use the following keys:
- \( \text{To the right} \)
- \( \text{To the left} \)

Press \( \text{Press once.} \)

CT Ratio Setting screen

The screen changes to the one for setting the parameter \( C \), and the alterable digit blinks.

Using \( \text{or } \text{, change the setpoint.} \)

Press \( \text{Press twice to confirm the setpoint.} \)

CT Ratio Setting screen

Pressing \( \text{once again confirms the setpoint and returns to the CT Ratio screen.} \)

To re-set the parameter:
- Press any key other than \( \text{or } \text{ keys.} \)
- Press any key other than \( \text{ or } \text{ keys to start blinking. The PR300 returns to the initial setting screen.} \)

VT Ratio screen

The parameter \( \frac{V}{I} \) (VT ratio) appears.

Press \( \text{Hold down } \frac{V}{I} \) for at least 3 seconds.

CT Ratio screen

The parameter \( C \) (CT ratio) appears.

Press \( \text{Hold down } C \) for at least 3 seconds.

CT Ratio Setting screen

The screen changes to the one for setting the parameter \( C \). The lower display shows the current value and the decimal point blinks.

To move the decimal point, use the following keys:
- \( \text{To the right} \)
- \( \text{To the left} \)

Press \( \text{Press once.} \)

CT Ratio Setting screen

The screen changes to the one for setting the parameter \( C \), and the alterable digit blinks.

Using \( \text{or } \text{, change the setpoint.} \)

Press \( \text{Press twice to confirm the setpoint.} \)

CT Ratio Setting screen

Pressing \( \text{once again confirms the setpoint and returns to the CT Ratio screen.} \)

To re-set the parameter:
- Press any key other than \( \text{or } \text{ keys.} \)
- Press any key other than \( \text{ or } \text{ keys to start blinking. The PR300 returns to the initial setting screen.} \)

VT Ratio screen

The parameter \( \frac{V}{I} \) (VT ratio) appears.

Press \( \text{Hold down } \frac{V}{I} \) for at least 3 seconds.

CT Ratio screen

The parameter \( C \) (CT ratio) appears.

Press \( \text{Hold down } C \) for at least 3 seconds.

CT Ratio Setting screen

The screen changes to the one for setting the parameter \( C \). The lower display shows the current value and the decimal point blinks.

To move the decimal point, use the following keys:
- \( \text{To the right} \)
- \( \text{To the left} \)

Press \( \text{Press once.} \)

CT Ratio Setting screen

The screen changes to the one for setting the parameter \( C \), and the alterable digit blinks.

Using \( \text{or } \text{, change the setpoint.} \)

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CT Ratio Setting screen

Pressing \( \text{once again confirms the setpoint and returns to the CT Ratio screen.} \)

To re-set the parameter:
- Press any key other than \( \text{or } \text{ keys.} \)
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VT Ratio screen

The parameter \( \frac{V}{I} \) (VT ratio) appears.

Press \( \text{Hold down } \frac{V}{I} \) for at least 3 seconds.

CT Ratio screen

The parameter \( C \) (CT ratio) appears.

Press \( \text{Hold down } C \) for at least 3 seconds.

CT Ratio Setting screen

The screen changes to the one for setting the parameter \( C \). The lower display shows the current value and the decimal point blinks.

To move the decimal point, use the following keys:
- \( \text{To the right} \)
- \( \text{To the left} \)

Press \( \text{Press once.} \)

CT Ratio Setting screen

The screen changes to the one for setting the parameter \( C \), and the alterable digit blinks.

Using \( \text{or } \text{, change the setpoint.} \)

Press \( \text{Press twice to confirm the setpoint.} \)

CT Ratio Setting screen

Pressing \( \text{once again confirms the setpoint and returns to the CT Ratio screen.} \)

To re-set the parameter:
- Press any key other than \( \text{or } \text{ keys.} \)
- Press any key other than \( \text{ or } \text{ keys to start blinking. The PR300 returns to the initial setting screen.} \)