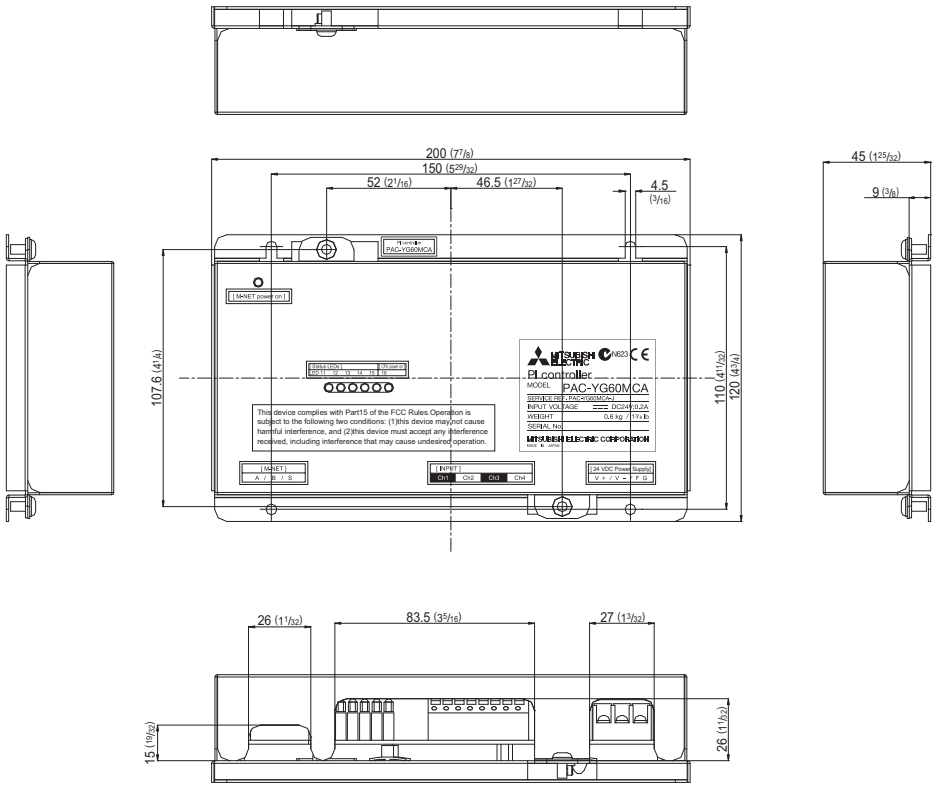
3-9. PI controller [PAC-YG60MCA]

The PI controller counts pulses from a power meter, gas meter, water meter, and calorimeter.
Combining the use of the AE-C400E and EW-C50E allows for calculating the charges for each unit and performing peak-cut (e.g., demand control) operation.
The meters can be monitored on AE-C400E LCD.

External Dimensions

Unit: mm (in)



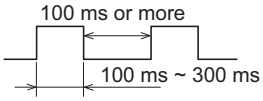
⚠CAUTION

Usage Restrictions

- Mitsubishi Electric does not take financial responsibility for damages caused by issues beyond our control or special circumstances (predicable or unpredictable); and secondary or accidental damages, and damages to other objects. We also do not take financial responsibility for opportunities lost as a result of device failure, or electrical power failure at the end-user site.
  Mitsubishi Electric does not take financial responsibility caused by end-users' requests including, but not limited to, device testing, startup, readjustment, and replacement.
- Because the PI controller only counts pulses, accuracy and performance of pulse conversion depend on the meter.
  Mitsubishi Electric does not take financial responsibility for damages caused by issues beyond our control or special circumstances (predicable or unpredictable); and secondary or accidental damages and damages to other object.
- Depending on each country's laws and regulations, etc., there may be cases these measured charges cannot be used for certificate of transaction.

1.Specifications

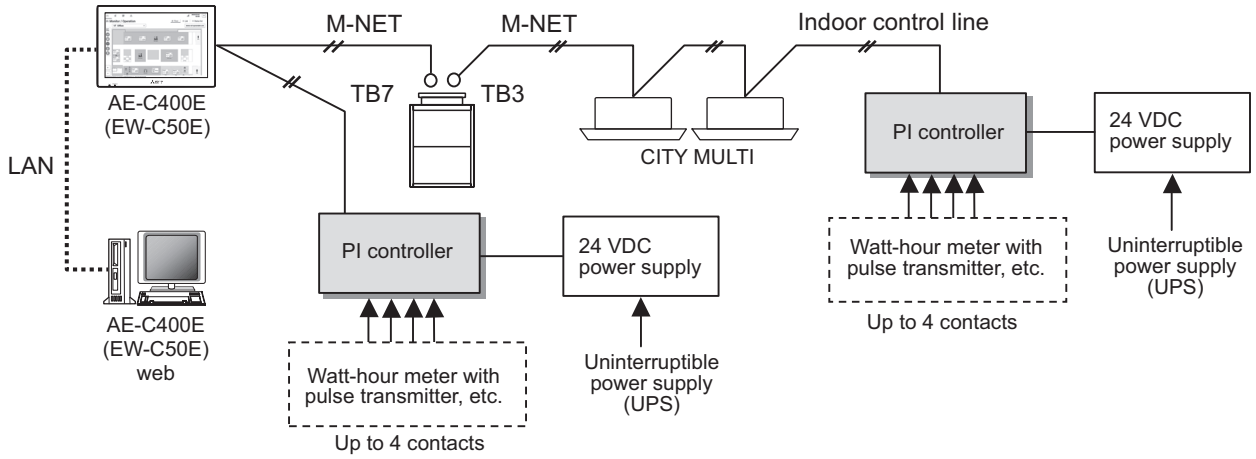
(1). Device Specifications

Item	Rating and Specification		
Power Supply	24 VDC ±10%: 5 W		Screw terminal block (M3)(*3)
Interface	M-NET communication	17 to 30 VDC (*1)	Screw terminal block (M3)(*3)
	Non-voltage a-contact input	Number of contacts: 4 Pulse signal: a-contact Pulse width: 100 ms to 300 ms (Idle period until next pulse: 100 ms or more)  Rated voltage: 24 VDC Rated current: 1 mA or less (*2)	Screwless terminal block
Environment Conditions	Temperature	Operating temperature range	0 to 40°C [32°F to 104°F]
		Storage temperature range	-20 to 60°C [-4°F to 140°F]
	Humidity	30 to 90%RH (no condensation)	
Dimensions	200 (W) × 120 (H) × 45 (D) mm / 7 7/8 (W) × 4 3/4 (H) × 1 25/32 (D) in		
Weight	0.6 kg / 1 3/8 lbs		
Time Backup During Power Failure	In the event of power failure or shut-off, the internal capacitor will continue to track time for approximately one week. (The internal capacitor takes about 24 hours to fully charge; a replacement battery is not necessary.)		
Installation Environment	Inside the metal control board (indoors) * Use this product in a hotel, a business office environment or similar environment.		

*1: Supply electric power from a power unit for the transmission line or an outdoor unit. Furthermore, the power consumption factor of the M-NET circuitry of this device is "1/4".

*2: Supply electric power from the main unit to the contacts of the meters.

*3: M3 is the size of the screw on the terminal block (ISO metric screw thread). The number indicates the screw diameter (mm).



*This figure omits the power supply line and only shows the transmission line.

<Restrictions>

The maximum settable total number of built-in PI controllers and PI controllers (PAC-YG60MCA) for each AE-C400E/EW-C50E is 15.
The number of units that can be connected to one AE-C400E/EW-C50E is up to 50 including this device, indoor units, LOSSNAY units, etc.

NOTE	• For the shield ground of the M-NET centralized control line for central control, use single-point grounding at the power unit for the transmission line. However, when supplying electric power to the M-NET centralized control line from the R410A-Series outdoor unit*1 without using a power supply unit for the transmission line, use single-point grounding at the TB7 of that outdoor unit. *1 : Except PUMY model. Furthermore, when connecting this device to the M-NET indoor control line, use grounding at the TB3 for each outdoor unit system. • Connecting an Uninterruptible power supply (UPS) to the 24 VDC power supply is recommended in order to prevent the loss of pulse data in the event of a power failure. If a UPS cannot be connected, try to make the AC power supply to the 24 VDC power supply as much same as the AC power supply line to the meters. • This device does not support level meters. To use a level meter, incorporate a Converter circuit externally and convert to pulse input. • If the M-NET transmission line of this device is connected to an M-NET indoor control line and the outdoor unit is down because, for example, the power supply is interrupted for servicing or there is a failure, the PI controller cannot be controlled from the system controller.