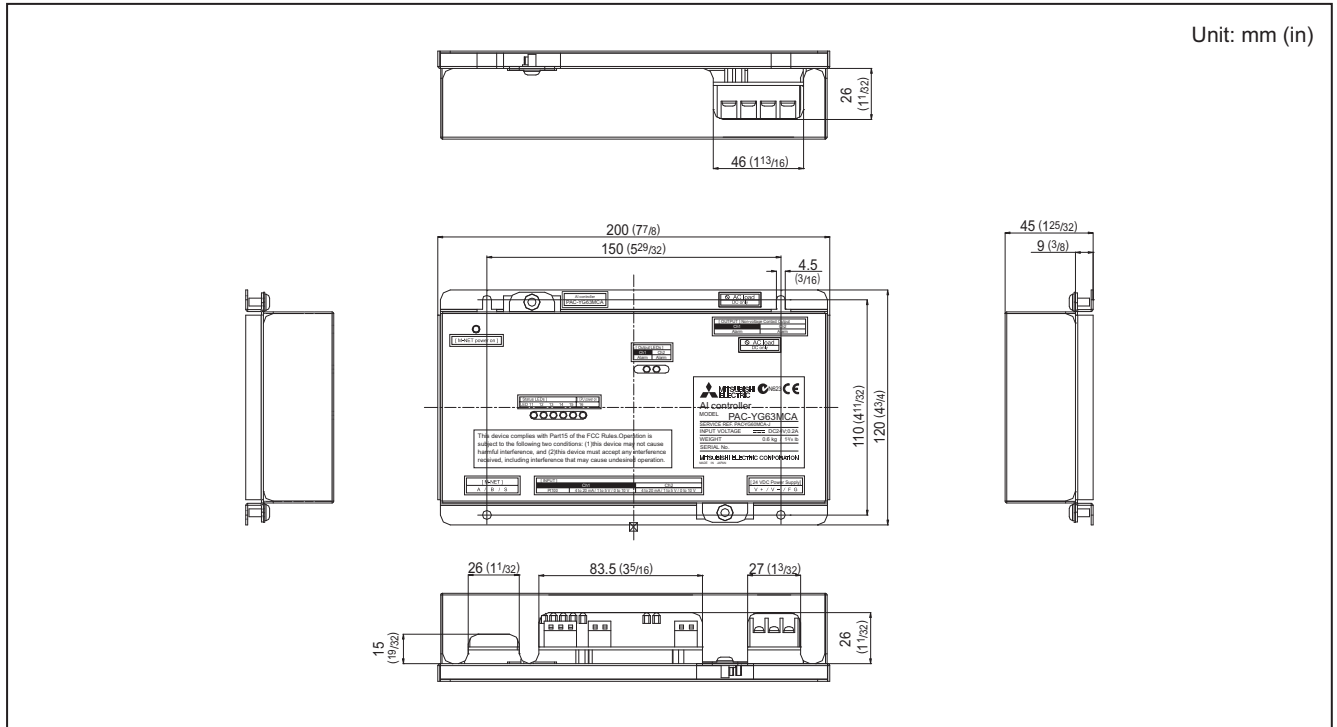


3-11. AI controller [PAC-YG63MCA]

The AI controller measures temperature and humidity; it also has an alarm capability if the measurement data exceeds defined setpoints. Historical measurement data can be displayed via only the AE-C400E/EW-C50E LCD. Temperature and humidity can be displayed on the AE-C400E LCD. Furthermore, an alarm can be output if measurement data exceeds a preset upper or lower limit. The AI controller also features a function that interlocks M-NET devices for indoor units, etc.

External Dimensions



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.
- Do not use this device in disaster prevention security or "critical to life" applications.

1. Specifications

(1). Device Specifications

Item	Description							
Power Supply	24 VDC ± 10%: 5 W					Screw terminal block (M3) (*5)		
Interface	M-NET communication		17 to 30 VDC (*1)			Screw terminal block (M3) (*5)		
	Input (*2)	Ch	Sensor	Measurement target	Measurement range	Measurement error	External connection method	
			Ch1	Pt100 (3-wire system)	Temperature	-30 to 60°C [-22 to 140°F]	$\pm 0.3\%FS \pm 0.1^\circ C (0.18^\circ F)$ [at 25°C(77°F)] ^(*3)	Screwless terminal block (3 poles)
		Analog		4 to 20 mADC	Temperature/humidity	(Set by system controller)	$\pm 0.5\%FS \pm 0.1^\circ C (0.18^\circ F)$ $\pm 0.5\%FS \pm 0.1\%RH$ [at 25°C(77°F)] ^(*3)	Screwless terminal block (2 poles)
				1 to 5 VDC				
		0 to 10 VDC						
Ch2	Analog	4 to 20 mADC	Temperature/humidity	(Set by system controller)	$\pm 0.5\%FS \pm 0.1^\circ C (0.18^\circ F)$ $\pm 0.5\%FS \pm 0.1\%RH$ [at 25°C(77°F)] ^(*3)	Screwless terminal block (2 poles)		
		1 to 5 VDC						
0 to 10 VDC								
Output	Upper/lower limit alarm interlock output (non-voltage contact)		Applied load MAX: 24 VDC, 5 W MIN: 5 VDC, 2 mW * AC loads cannot be connected.			Screw terminal block (M3.5) (*5)		
Interlock Function	Interlock M-NET devices according to measurement data values. (*4)							
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 / 77/8 (W) × 43/4 (H) × 125/32 (D) in							
Weight	0.6 kg / 13/8 lb							
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 supply unit for the transmission line or an outdoor unit. Furthermore, the power consumption factor of the M-NET circuitry of this unit is "1/4".

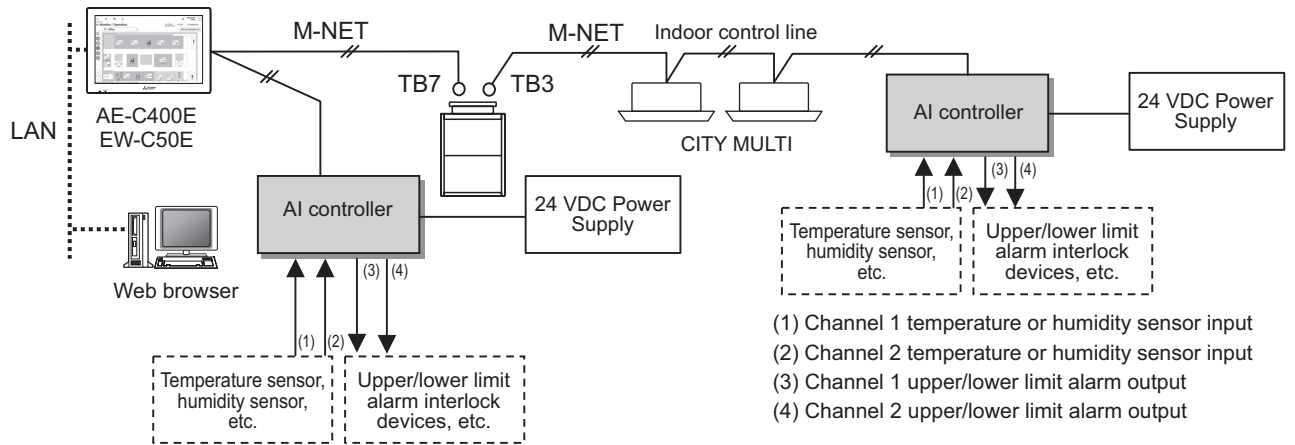
*2: Configure the dip switch settings for the analog input method to use.

*3: The measurement error for the system includes the measurement error for this unit, sensor, and wiring.

a%FS (full scale) = a% × [(measurement range's upper limit value) - [lower limit value]]

*4: Settings for the interlock function are performed from the Maintenance Tool. For details, refer to the operation manual for the Maintenance Tool.

*5: M3 and M3.5 are sizes 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>

Maximum of 50 units per AE-C400E/EW-C50E

However, the number of units that can be connected to a AE-C400E/EW-C50E is up to 50 including this device, an indoor unit, LOSSNAY unit, etc.

NOTE

- For the shield ground of the M-NET centralized control line, 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 the M-NET transmission line of this device to the M-NET indoor control line, use grounding at the TB3 for each outdoor unit system.
- 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 AI controller cannot be set and monitored from the system controller.
- The sensor connected to the AI controller can only be monitored from AE-C400E/EW-C50E LCD.
 The sensor can be monitored from the AE-C400E LCD.