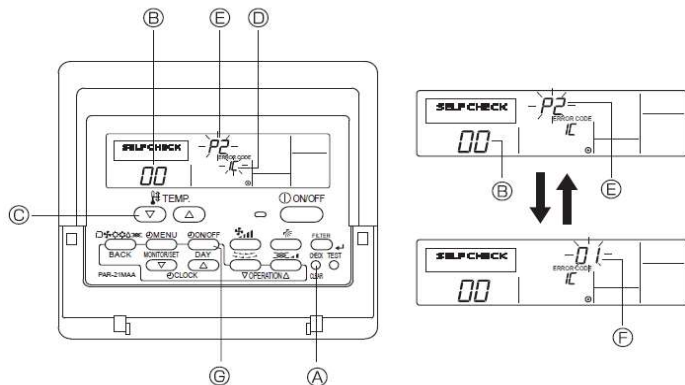


# Mr. SLIM - Indoor Unit

<Malfunction-diagnosis method at maintenance service>

Description

## Wired remote controller



- ① Turn on the power.
- ② Press the [CHECK] button twice.
- ③ Set address with [TEMP] button if system control is used.
- ④ Press the [ON/OFF] button to stop the self-check.

(A) CHECK button

(B) Address

(C) TEMP. button

(D) IC : Indoor unit

OC: Outdoor unit

(E) Check code ( ---- : No trouble generated in the past  
FFFF : No corresponding unit )

(F) Unit No.

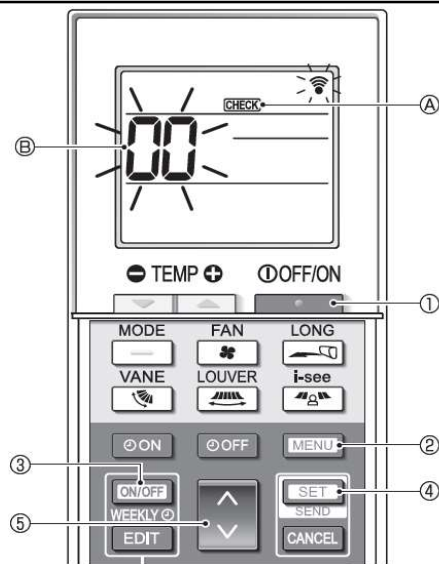
(G) Timer ON/OFF button

<To cancel check code>

① Display the check code at the self-check result display screen.

② The address for self-check will blink when the (G) ON/OFF button is pressed twice within 3 seconds.

## Wireless remote controller



### [Procedure]

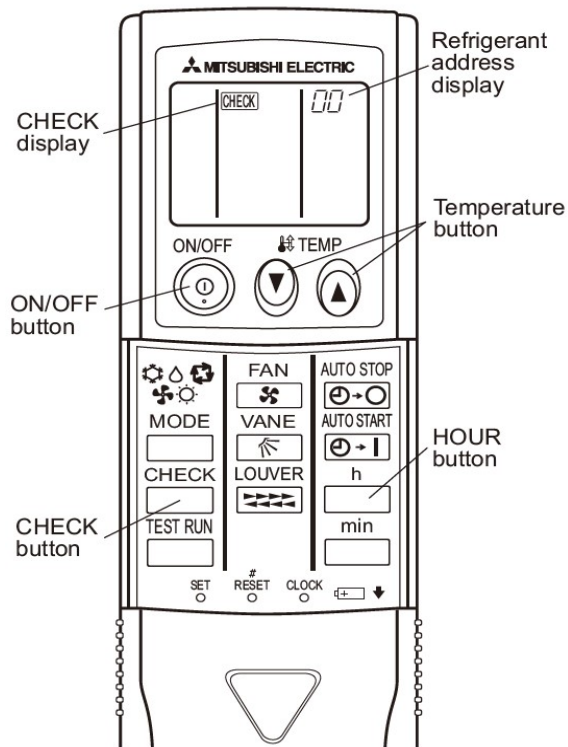
1. Press the (A) button ① to stop the air conditioner.
  - If the weekly timer is enabled (WEEKLY is on), press the (ON/OFF WEEKLY) button ③ to disable it (WEEKLY is off).
2. Press the (MENU) button ② for 5 seconds.
  - (CHECK) (A) comes on and the unit enters the self-check mode.
3. Press the (DOWN) button ⑤ to select the refrigerant address (M-NET address) (B) of the indoor unit for which you want to perform the self-check.
4. Press the (SET) button ④.
  - If an error is detected, the check code is indicated by the number of beeps from the indoor unit and the number of blinks of the OPERATION INDICATOR lamp.
5. Press the (A) button ①.
  - (CHECK) (A) and the refrigerant address (M-NET address) (B) go off and the self-check is completed.

# Mr. SLIM - Indoor Unit



<Malfunction-diagnosis method at maintenance service>

Description

## Wireless remote controller



### [Procedure]

- (1) Press the CHECK button twice.
  - "CHECK" lights, and refrigerant address "00" flashes.
  - Check that the remote controller's display has stopped before continuing.
- (2) Press the temperature   buttons.
  - Select the refrigerant address of the indoor unit for the self-diagnosis.

Note: Set refrigerant address using the outdoor unit's DIP switch (SW1).  
(For more information, see the outdoor unit installation manual.)
- (3) Point the remote controller at the sensor on the indoor unit and press the HOUR button.
  - If an air conditioner error occurs, the indoor unit's sensor emits an intermittent buzzer sound, the operation light flashes, and the error code is output.  
(It takes 3 seconds at most for error code to appear.)
- (4) Point the remote controller at the sensor on the indoor unit and press the ON/OFF button.
  - The check mode is cancelled.

# Mr. SLIM - Indoor Unit

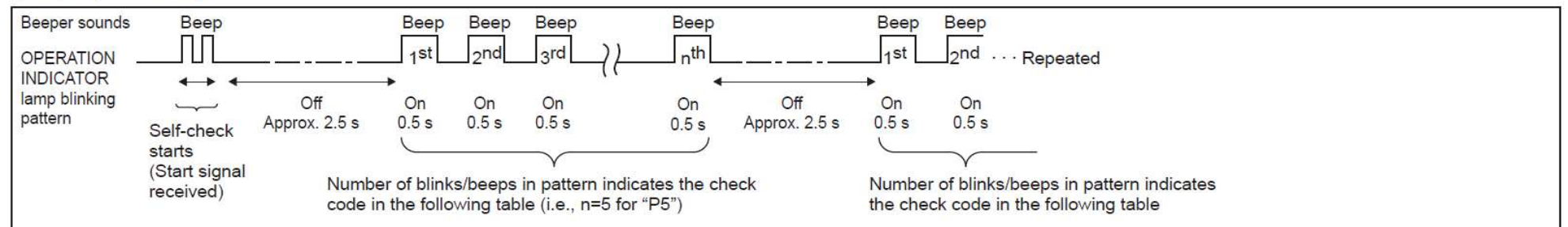
# PLY-ZM50EA / PLY-M60, 80, 100, 125EA / PEY-M50, 60, 80, 100, 125JAL / PCY-M125KAL

Wireless R/C	Wired R/C	Description
Beeper sounds/OPERATION INDICATOR lamp blinks (Number of times)	Check code	

## [Output pattern A] Errors detected by indoor unit

1	P1	Intake sensor error
2	P2	Pipe (TH2) sensor error
	P9	Pipe (TH5) sensor error
3	E6, E7	Indoor/outdoor unit communication error
4	P4	Float switch connector open
5	P5	Drain pump error
	PA	Forced compressor error (due to water leakage abnormality)
6	P6	Freeze (during cooling operation)/Overheat protection operation (during heating operation)
7	EE	Combination error between indoor and outdoor unit
8	P8	Pipe temperature error
9	E4, E5	Communication error between wired remote controller and indoor unit
10	-	-
11	PB(Pb)	Indoor unit fan motor error
12	FB(Fb)	Indoor unit control system error (memory error, etc.)
14	PL	Refrigerant circuit abnormal
-	E0, E3	Remote controller transmission error
-	E1, E2	Remote controller control board error

## [Output pattern A]



# Mr. SLIM - Indoor Unit

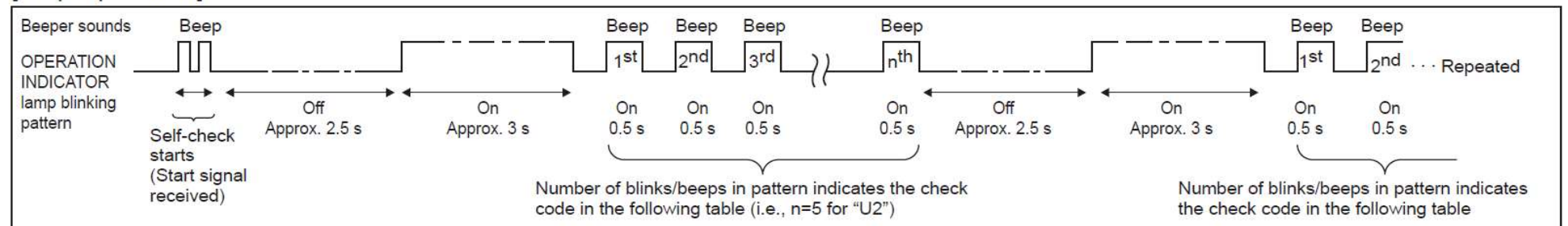
# PLY-ZM50EA / PLY-M60, 80, 100, 125EA / PEY-M50, 60, 80, 100, 125JAL / PCY-M125KAL

Wireless R/C	Wired R/C	Description
Beeper sounds/OPERATION INDICATOR lamp blinks (Number of times)	Check code	

### [Output pattern B] Errors detected by unit other than indoor unit (Outdoor unit, etc.)

1	E9	Indoor/outdoor unit communication error
2	UP	Compressor overcurrent interruption
3	U3, U4	Open/short of outdoor unit thermistors
4	UF	Compressor overcurrent interruption (When compressor locked)
5	U2	Abnormal high discharging temperature/49C worked/insufficient refrigerant
6	U1, Ud	Abnormal high pressure (63H worked)/Overheat protection operation
7	U5	Abnormal temperature of heat sink
8	U8	Outdoor unit fan protection stop
9	U6	Compressor overcurrent interruption/Abnormal of power module
10	U7	Abnormality of super heat due to low discharge temperature
11	U9, UH	Abnormality such as overvoltage or voltage shortage and abnormal synchronous signal to main circuit/Current sensor error
12	-	-
13	-	-
14	Others	Other errors (Refer to the technical manual for the outdoor unit.)

### [Output pattern B]



Mr. SLIM - Outdoor Unit				SUY-KA50, 60, 80, 100VA / SUY-ZM50VA / SUY-M60, 80, 100VA	
No.	Symptom	LED indication	Check code	Description	
1	Outdoor unit does not operate	1-time flash every 2.5 seconds	UP	Outdoor power system <ul style="list-style-type: none"> <li>Reconnect connector of compressor.</li> <li>Check inverter/compressor.</li> <li>Check stop valve.</li> </ul>	
2			U3 / U4	Outdoor thermistors <ul style="list-style-type: none"> <li>Check outdoor thermistors</li> </ul>	
3			FC	Outdoor control system <ul style="list-style-type: none"> <li>Replace inverter P.C. board.</li> </ul>	
4		OFF	E6	Compressor protector opens <ul style="list-style-type: none"> <li>Check of compressor protector</li> </ul>	
5		6-time flash 2.5 seconds OFF	E8 / E9	Serial signal <ul style="list-style-type: none"> <li>Check of indoor/outdoor connecting wire.</li> <li>Replace indoor or outdoor P.C. board if abnormality is displayed again.</li> </ul>	
6		11-time flash 2.5 seconds OFF	UE	Stop valve/ Closed valve <ul style="list-style-type: none"> <li>Check stop valve.</li> </ul>	

Mr. SLIM - Outdoor Unit				SUY-KA50, 60, 80, 100VA / SUY-ZM50VA / SUY-M60, 80, 100VA	
No.	Symptom	LED indication	Check code	Description	
7	Outdoor unit stops and restarts 3 minutes later' is repeated.	2-time flash 2.5 seconds OFF		Overcurrent protection <ul style="list-style-type: none"> <li>■ Reconnect connector of compressor.</li> <li>■ Check inverter/ compressor.</li> <li>■ Check stop valve.</li> </ul>	
8		3-time flash 2.5 seconds OFF		Discharge temperature overheat protection <ul style="list-style-type: none"> <li>■ Check refrigerant circuit and refrigerant amount.</li> <li>■ Check of LEV.</li> </ul>	
9		4-time flash 2.5 seconds OFF		Fin temperature /P.C. board temperature thermistor overheat protection <ul style="list-style-type: none"> <li>■ Check around outdoor unit.</li> <li>■ Check outdoor unit air passage.</li> <li>■ Check of outdoor fan motor.</li> </ul>	
10		5-time flash 2.5 seconds OFF		High pressure protection <ul style="list-style-type: none"> <li>■ Check refrigerant circuit and refrigerant amount.</li> <li>■ Check stop valve.</li> </ul>	
11		8-time flash 2.5 seconds OFF		Compressor synchronous abnormality <ul style="list-style-type: none"> <li>■ Reconnect connector of compressor.</li> <li>■ Check inverter/ compressor.</li> </ul>	
12		10-time flash 2.5 seconds OFF		Outdoor fan motor <ul style="list-style-type: none"> <li>■ Check of outdoor fan motor.</li> <li>■ Check of inverter P.C. board.</li> </ul>	
13		12-time flash 2.5 seconds OFF		Each phase current of compressor <ul style="list-style-type: none"> <li>■ Check inverter/ compressor.</li> </ul>	
14		13-time flash 2.5 seconds OFF		DC voltage <ul style="list-style-type: none"> <li>■ Check inverter/ compressor.</li> </ul>	

Mr. SLIM - Outdoor Unit				SUY-KA50, 60, 80, 100VA / SUY-ZM50VA / SUY-M60, 80, 100VA	
No.	Symptom	LED indication	Check code	Description	
15	Outdoor unit operates.	1-time flash 2.5 seconds OFF		Frequency drop by current protection Frequency drop by defrosting in COOL mode The unit is normal, but check the following.	
16		3-time flash 2.5 seconds OFF		<ul style="list-style-type: none"> <li>▪ Check if indoor filters are clogged.</li> <li>▪ Check if refrigerant is short.</li> <li>▪ Check if indoor/outdoor unit air circulation is short cycled.</li> </ul>	
17		4-time flash 2.5 seconds OFF		Frequency drop by discharge temperature protection <ul style="list-style-type: none"> <li>▪ Check refrigerant circuit and refrigerant amount.</li> <li>▪ Check of LEV.</li> <li>▪ Check of outdoor thermistors.</li> </ul>	
18		7-time flash 2.5 seconds OFF		Low discharge temperature protection <ul style="list-style-type: none"> <li>▪ Check of LEV.</li> <li>▪ Check refrigerant circuit and refrigerant amount.</li> </ul>	
19		8-time flash 2.5 seconds OFF		(SA18/24, SM13/18/24) PAM protection PAM: Pulse Amplitude Modulation (SA30/36, SM30) Zero cross detecting circuit This is not malfunction. PAM protection will be activated in the following cases: 1. Instantaneous power voltage drop. (Short time power failure) 2. When the power supply voltage is high.	
20		9-time flash 2.5 seconds OFF		Inverter check mode <ul style="list-style-type: none"> <li>▪ Check if the connector of the compressor is correctly connected.</li> <li>▪ Check inverter/compressor.</li> </ul>	

Mr. SLIM - Outdoor Unit				PUY-P42, 48, 125VKA.TH / PUY-M125VKA-SG	
No.	Check code	Indication		Description	
		LED1 (Green)	LED2 (Red)		
1	F5	1 time blinking	2 time blinking	Connector (63H/TRS) is open	<ul style="list-style-type: none"> <li>▪ Check if conenctor (63H/TRS) on the outdoor controller board is not disconnected.</li> <li>▪ Check continuity of pressure switch (63H/TRS) by tester.</li> </ul>
2	-	2 time blinking	1 time blinking	Miswiring of indoor/ outdoor unit connecting wire, excessive number of indoor units (4 units or more) Miswiring of indoor/outdoor unit connecting wire (converse wiring or disconnection) Startup time over	<ul style="list-style-type: none"> <li>▪ Check if indoor/outdoor connecting wire is connected correctly.</li> <li>▪ Check if 4 or more indoor units are connected to outdoor unit.</li> <li>▪ Check if noise entered into indoor/outdoor connecting wire or power supply.</li> <li>▪ Re-check error by turning off power, and on again.</li> </ul>
3	E6 / E7		2 time blinking	Indoor/outdoor unit communication error (signal receiving error) is detected by indoor unit. Indoor/outdoor unit communication error (transmitting error) is detected by indoor unit. Indoor/outdoor unit communication error (signal receiving error) is detected by outdoor unit. Indoor/outdoor unit communication error (transmitting error) is detected by outdoor unit.	<ul style="list-style-type: none"> <li>▪ Check if indoor/outdoor connecting wire is connected correctly.</li> <li>▪ Check if noise entered into indoor/outdoor connecting wire or power supply.</li> <li>▪ Check if noise entered into indoor/outdoor controller board.</li> <li>▪ Re-check error by turning off power, and on again.</li> </ul>
4	E0 / E3 / E4 / E5		3 time blinking	Remote controller signal receiving error is detected by remote controller. Remote controller transmitting error is detected by remote controller. Remote controller signal receiving error is detected by indoor unit. Remote controller transmitting error is detected by indoor unit.	<ul style="list-style-type: none"> <li>▪ Check if connecting wire of indoor unit or remote controller is connected correctly.</li> <li>▪ Check if noise entered into transmission wire of remote controller.</li> <li>▪ Re-check error by turning off power, and on again.</li> </ul>
5	EF		4 time blinking	Check code is not defined.	<ul style="list-style-type: none"> <li>▪ Check if remote controller is MA remote controller(PAR-21MAA).</li> <li>▪ Check if noise entered into transmission wire of remote controller.</li> <li>▪ Check if noise entered into indoor/outdoor connecting wire.</li> <li>▪ Re-check error by turning off power, and on again.</li> </ul>



Mr. SLIM - Outdoor Unit				PUY-P42, 48, 125VKA.TH / PUY-M125VKA-SG	
No.	Check code	Indication		Description	
		LED1 (Green)	LED2 (Red)		
6	PL	2 time blinking	4 time blinking	Check code is not defined. <ul style="list-style-type: none"> <li>Check refrigerant pipes for disconnection or leakage.</li> <li>After the recovery of refrigerant, vacuum dry the whole refrigerant circuit.</li> <li>Check refrigerant circuit for operation.</li> </ul>	
7	Ed / A0~A8		5 time blinking	Serial communication error <Communication between outdoor controller board and outdoor power board> <Communication between outdoor controller board and M-NET P.C. board> Communication error of M-NET system <ul style="list-style-type: none"> <li>Check if connector (CN4) on outdoor controller board and outdoor power board is not disconnected.</li> <li>Check if there is poor connection of connector on outdoor controller board(CNMNT and CNVMNT).</li> <li>Check M-NET communication signal.</li> </ul>	
8	U2 / U7	3 time blinking	1 time blinking	Abnormality of comp. surface thermistor(TH32/33) and discharge temperature (TH4) Abnormality of superheat due to low discharge temperature <ul style="list-style-type: none"> <li>Check if stop valves are open.</li> <li>Check if connectors (TH4, TH32/33, LEV-A, and LEV-B) on outdoor controller board are not disconnected.</li> <li>Check if unit is filled with specified amount of refrigerant.</li> <li>Measure resistance values among terminals on indoor valve and outdoor linear expansion valve using a tester.</li> </ul>	
9	U1		2 time blinking	Abnormal high pressure (High pressure switch 63H/TRS operated.) <ul style="list-style-type: none"> <li>Check if indoor/outdoor units have a short cycle on their air ducts.</li> <li>Check if connector (63H/TRS) on outdoor controller board is not disconnected.</li> <li>Check if heat exchanger and filter is not dirty.</li> <li>Measure resistance values among terminals on linear expansion valve using a tester.</li> </ul>	
10	U8 / Ud		3 time blinking	Abnormality of outdoor fan motor rotational speed Protection from overheat operation(TH3) <ul style="list-style-type: none"> <li>Check the outdoor fan motor.</li> <li>Check if connector (TH3) on outdoor controller board is disconnected.</li> </ul>	

Mr. SLIM - Outdoor Unit				PUY-P42, 48, 125VKA.TH / PUY-M125VKA-SG	
No.	Check code	Indication		Description	
		LED1 (Green)	LED2 (Red)		
11	UF / UP / UH / U6	3 time blinking	4 time blinking	Compressor overcurrent breaking(Start-up locked) Compressor overcurrent breaking Abnormality of current sensor (P.B.) Abnormality of power module <ul style="list-style-type: none"> <li>▪ Check if stop valves are open.</li> <li>▪ Check looseness, disconnection, and converse connection of compressor wiring.</li> <li>▪ Measure resistance values among terminals on compressor using a tester.</li> <li>▪ Check if outdoor unit has a short cycle on its air duct.</li> </ul>	
12	U3 / U4		5 time blinking	Open/short of discharge thermistor (TH4) and comp. surface thermistor (TH32/33) Open/short of outdoor thermistors (TH3, TH6, TH7 and TH8) <ul style="list-style-type: none"> <li>▪ Check if connectors(TH3,TH4,TH6 ,TH7, TH8 and TH32/33) on outdoor controller board and connector (CN6) on outdoor power board are disconnected.</li> <li>▪ Measure resistance value of outdoor thermistors.</li> </ul>	
13	U5		6 time blinking	Abnormality of heatsink temperature <ul style="list-style-type: none"> <li>▪ Check if indoor/outdoor units have a short cycle on their air ducts.</li> <li>▪ Measure resistance value of outdoor thermistor(TH8).</li> </ul>	
14	U9		7 time blinking	Abnormality of voltage <ul style="list-style-type: none"> <li>▪ Check looseness, disconnection, and converse connection of compressor wiring.</li> <li>▪ Measure resistance value among terminals on compressor using a tester.</li> <li>▪ Check if power supply voltage decreases.</li> <li>▪ Check the wiring of CN52C.</li> </ul>	
15	P1 / P2 / P9	4 time blinking	1 time blinking	Abnormality of room temperature thermistor (TH1) Abnormality of pipe temperature thermistor /Liquid (TH2) Abnormality of pipe temperature thermistor/Condenser-Evaporator <ul style="list-style-type: none"> <li>▪ Check if connectors (CN20, CN21, CN29 and CN44) on indoor controller board are not disconnected.</li> <li>▪ Measure resistance value of indoor thermistors.</li> </ul>	

Mr. SLIM - Outdoor Unit				PUY-P42, 48, 125VKA.TH / PUY-M125VKA-SG	
No.	Check code	Indication		Description	
		LED1 (Green)	LED2 (Red)		
16	P4 / P5	4 time blinking	2 time blinking	Abnormality of drain sensor (DS) Float switch(FS) connector open Indoor drain overflow protection <ul style="list-style-type: none"> <li>▪ Check if connector (CN31)(CN4F) on indoor controller board is not disconnected.</li> <li>▪ Measure resistance value of indoor thermistors.</li> <li>▪ Measure resistance value among terminals on drain pump using a tester.</li> <li>▪ Check if drain pump works.</li> <li>▪ Check drain function.</li> </ul>	
17	P6		3 time blinking	Freezing (cooling) <ul style="list-style-type: none"> <li>▪ Check if indoor unit has a short cycle on its air duct.</li> <li>▪ Check if heat exchanger and filter is not dirty.</li> <li>▪ Measure resistance value on indoor and outdoor fan motors.</li> <li>▪ Check if the inside of refrigerant piping is not clogged.</li> </ul>	
18	P8		4 time blinking	Abnormality of pipe temperature <ul style="list-style-type: none"> <li>▪ Check if indoor thermistors(TH2 and TH5) are not disconnected from holder.</li> <li>▪ Check if stop valve is open.</li> <li>▪ Check converse connection of extension pipe. (on plural units connection)</li> <li>▪ Check if indoor/outdoor connecting wire is connected correctly. (on plural units connection)</li> </ul>	