






4. Troubleshooting

4-1 Indoor Display Error and Check Method

■ Error detection and reoperation

- ◆ If error occurs during the operation, badness is indicated by LED flickering and all operation is stopped except LED.
- ◆ When reoperating by remote control and switch determine the error mode after normal operation.

■ Indoor unit LED lamp display at error detecting

| Error type | LED lamp display | | | | | Remarks |
|--|---|---|--|---|---|---------|
| | Operation | Defrost | Timer | Air flow | Filter | |
| |  |  |  |  |  | |
| Power reset | ● | X | X | X | X | |
| Error of temperature sensor in the indoor unit(Open/Short) | X | X | ● | X | X | |
| Error of heat exchanger sensor in the indoor unit | ● | X | ● | X | X | |
| Error of the outdoor temperature sensor Error of the condensor temperature sensor Error of the discharge temperature sensor | ● | X | X | ● | X | |
| 1. No communication for 2 minutes between indoor units (Communication error for more than 2 minutes) 2. Indoor unit receiving the communication error from outdoor unit 3. Outdoor unit tracking 3 minutes error 4. When sending the communication error from the outdoor unit, the mismatching of the communication numbers and installed numbers after completion of tracking (Communication error for more than 2 minutes) | X | X | ● | ● | X | |
| 1. Error of electronic expansion valve close 2. Error of electronic expansion valve open 3. 2'nd detection of high temperature cond 4. 2'nd detection of high temperature discharge 5. Error of reverse phase 6. Compressor down due to 6'th detection of freezing | X | X | ● | ● | ● | |
| Detection of the float switch | X | X | X | ● | ● | |
| Error of setting option switches for optional accessories | X | X | ● | X | ● | |
| EEPROM option error | ● | ● | ● | ● | ● | |

● : On, ◐ : Flickering, X: OFF

* If you turn off the air conditioner when the LED is flickering, the LED is also turned off.

4-1-1 Wired Remocon Error Display(COM2)

• If an error occurs,  is displayed on the wired remote controller.

If you would like to see an error code, press the Test button.

| Display | Explanation | Remark |
|---------|---|---|
| 101 | Indoor unit Communication Error | Communication Error |
| 102 | Indoor/Outdoor unit Communication Time Out Error 60 Packet Over data | |
| 201 | Indoor unit is not connected | |
| 203 | Communication Error between Outdoor Main and Inverter Micom (Occurred after 1 minute detection in Main and Inverter) | |
| 121 | Indoor Temp. Sensor(Open/Short Error) | Indoor Sensor Error |
| 122 | Indoor Unit Eva in Sensor(Open/Short Error) | |
| 128 | Indoor Unit Eva in Sensor Separation | |
| 221 | Outdoor Temp. Sensor Error(Open/Short Error) | Outdoor Sensor Error |
| 237 | COND Temp. Sensor Error(Open/Short Error) | |
| 251 | Inverter Compressor Discharge Temp. sensor Error(Open/Short Error) | |
| 425 | Power cable miss connection error | |
| 453 | Indoor Float Switch 2nd Detection | |
| 460 | Outdoor unit - indoor unit communication wire miss connection (Connected to Power terminal) | Self Diagnosys Error |
| 554 | Outdoor unit refrigerant Full leakage(Gas leak) | |
| 458 | Outdoor Fan 1 Error | |
| 475 | Outdoor Fan 2 Error | |
| 486 | Discharge over temperature | |
| 461 | [Inverter] Compressor starting error | Outdoor Unit Protetion Control Error |
| 462 | Primary Current Over Trip error | |
| 464 | [Inverter] IPM Over Current (O.C) | |
| 467 | [Inverter] Compressor Rotation error | |
| 468 | [Inverter] Current Sensor error | |
| 469 | [Inverter] DC LINK Sensor error | |
| 477 | [Inverter] EEPROM Read/Write Error | |

| Display | Explanation | Remark |
|----------------|---|--|
| 404 | [Inverter] Heatsink temperature over Error | Outdoor Unit Protection Control Error |
| 556 | Outdoor unit Capacity Setup option error | |
| 608 | Communication error between Indoor unit and wired remote control | Wired remote control error |
| 602 | Communication error between Master and Slave wired remote control | |
| 606 | COM1/COM2 Cross-installed error | |
| 8EA | Error of setting option for wired remote control COM2 | |

4-2 Outdoor LED Error Display and Check Method

| No. | LED Display | | | Explanation | Error Code |
|-----|-------------|-------|-----|---|---------------|
| | Yellow | Green | Red | | |
| 1 | ○ | ○ | ○ | Power off/VDD NG | - |
| 2 | ○ | ○ | ◎ | IPM Over Current(O.C) | 464 |
| 3 | ○ | ○ | ● | Abnormal Serial communication/ Power Cable Miss Connection | 203 |
| | ○ | ● | ● | | |
| 4 | ○ | ◎ | ○ | Compressor Starting error | 468 |
| 5 | ○ | ◎ | ● | Normal Operation | - |
| 6 | ○ | ● | ○ | Compressor Lock error | 473 |
| 7 | ○ | ● | ◎ | DC-Link voltage under/over error | 466 |
| 8 | ◎ | ○ | ◎ | Outdoor temperature sensor error | 228 |
| 9 | ◎ | ○ | ● | Discharge over temperature | 476 |
| 10 | ◎ | ◎ | ○ | Discharge temperature sensor error | 258 |
| 11 | ◎ | ◎ | ● | Current sensor error | 468 |
| 12 | ◎ | ● | ○ | Compressor Limit error | 465 |
| 13 | ◎ | ● | ◎ | Coil temperature sensor error | 230 |
| 14 | ◎ | ● | ● | 1min. Time out Communication | 202 |
| 15 | ● | ○ | ○ | Fan error | 458 (FAN1) |
| | | | | | 475 (FAN2) |
| 16 | ● | ○ | ◎ | OTP error | 478 |
| 17 | ● | ○ | ● | Compressor rotation error | 460 |
| 18 | ● | ◎ | ○ | Operation condition secession | 440 (Heating) |
| | | | | | 441 (Cooling) |
| 19 | ● | ◎ | ◎ | DC-Link voltage sensor error | 469 |
| 20 | ● | ◎ | ● | I_Trip error | 462 |
| 21 | ● | ● | ○ | GAS Leak error | 554 |
| 22 | ● | ● | ◎ | Power Cable miss connection | 425 |
| 23 | ● | ● | ● | Power ON reset(1sec) | - |
| 24 | ◎ | ○ | ○ | Capacity miss match | 556 |
| 25 | ○ | ◎ | ◎ | Test Operation at Cooling Mode | - |
| 26 | ◎ | ◎ | ◎ | Test Operation at Heating Mode | - |

● : LED ON, ○ : LED OFF, ◎ : LED BLINK

4-7 Main Part Inspection Method

| Part | Breakdown Inspection Method | | | | |
|--|---|--|------------|--------------------|-------------------|
| Indoor Unit Temperature Sensor | Measure sensor resistance with a multimeter | | | | |
| | Normal | At the normal temperature 37kΩ~8.3kΩ(-7°C~+30°C) | | | |
| | Abnormal | ∞,0Ω...Open or Short | | | |
| Indoor Unit BLDC FAN Motor | Measure terminal resistance with a multimeter | | | | |
| | Normal | At the normal temperature(10°C~30°C) | | | |
| | | wire | pin number | Resistance | Remark |
| | | RED - BLACK | 1-3 | over 1MΩ | +300V motor power |
| WHITE - BLACK | | 4-3 | 1KΩ ~ 2KΩ | +15V control power | |
| YELLOW - BLACK | 5-3 | 200KΩ ~ 300KΩ | control | | |
| BLUE - BLACK | 6-3 | 10KΩ ~ 50KΩ | pulse | | |
| Abnormal | ∞,0Ω...Open or Short | | | | |
| Outdoor Unit Outdoor Temperature Sensor & Cond Temperature Sensor | Measure sensor resistance with a multimeter | | | | |
| | Normal | At the normal temperature 37kΩ~8.3kΩ(-7°C~+30°C) see 12-2-6 and 12-2-8 | | | |
| | Abnormal | ∞,0Ω...Open or Short | | | |
| Outdoor Unit Discharge Temperature Sensor | Measure sensor resistance with a multimeter | | | | |
| | Normal | At the normal temperature 563kΩ~157kΩ(0°C~+30°C) see 12-2-7 | | | |
| | Abnormal | ∞,0Ω...Open or Short | | | |
| Outdoor Unit BLDC FAN MOTOR | Measure terminal resistance with a multimeter | | | | |
| | Normal | At the normal temperature(10°C~30°C) | | | |
| | | wire | pin number | Resistance | Remark |
| | | RED - BLACK | 1-3 | over 1MΩ | +300V motor power |
| WHITE - BLACK | | 4-3 | 1KΩ ~ 2KΩ | +15V control power | |
| YELLOW - BLACK | 5-3 | 200KΩ ~ 300KΩ | control | | |
| BLUE - BLACK | 6-3 | 10KΩ ~ 50KΩ | pulse | | |
| ORANGE - BLACK | 7-3 | 10KΩ ~ 50KΩ | reverse | | |
| Abnormal | 0Ω...Open or Short | | | | |
| Outdoor Unit 4way Valve Solenoid | Measure resistance with a multimeter | | | | |
| | Normal | At the normal temperature(10°C~30°C) 1.6KΩ±15% | | | |
| | Abnormal | ∞,0Ω...Open or Short | | | |