7-7-2 Error Codes [5103, 5104, 5105, 5106, 5107]

1. Error code definition

Heat exchanger outlet temperature sensor (TH3) fault (Outdoor unit)

Discharge temperature sensor (TH4) fault (Outdoor unit)

Accumulator inlet temperature sensor (TH5) fault (Outdoor unit)

5106

Heat exchanger inlet temperature sensor (TH6) fault (Outdoor unit)

Outside temperature sensor (TH7) fault (Outdoor unit)

2. Error definition and error detection method

- •When a short (high temperature intake) or an open (low temperature intake) of the thermistor is detected (the first detection). the outdoor unit stops, turns to anti-restart mode for 3 minutes, and restarts when the detected temperature of the thermistor.
- •When a short or an open is detected again (the second detection) after the first restart of the outdoor unit, the outdoor unit stops, turns to anti-restart mode for 3 minutes, and restarts in 3 minutes when the detected temperature is within the normal
- •When a short or an open is detected again (the third detection) after the previous restart of the outdoor unit, the outdoor unit makes an error stop.
- •When a short or an open of the thermistor is detected just before the restart of the outdoor unit, the outdoor unit makes an error stop, and the error code "5102", "5103", "5104", "5105", "5106"or "5107" will appear.
 •During 3-minute antirestart mode, preliminary errors will be displayed on the LED display.
- •A short or an open described above is not detected for 10 minutes after the compressor start, during defrost mode, or for 3 minutes after defrost mode.

3. Cause, check method and remedy

Cause		Check method and remedy	
(1)	Thermistor failure	Check thermistor resistance.	
(2)	Pinched lead wire	Check for pinched lead wire.	
(3)	Torn wire coating	Check for wire coating.	
(4)	A pin on the male connector is missing or contact failure	Check connector.	
(5)	Disconnected wire	Check for wire.	
(6)	Thermistor input circuit failure on the control board	Check the intake temperature of the sensor with the LED monitor. When the temperature is far different from the actual temperature, replace the control board.	

<Reference>

Short detection Open detection

TH3	110 $^{\circ}$ C [230 $^{\circ}$ F] and above (0.4 k Ω and below)	-40 °C [-40° F] and below (130 k Ωand above)
TH4	240 $^{\circ}$ C [464 $^{\circ}$ F] and above (0.57 k Ω and below)	0 °C [32 °F] and below (698 k Ω and above)
TH5	70 $^{\circ}$ C [158 $^{\circ}$ F] and above (0.4 k Ω and below)	-40 °C [-40 °F] and below (130 k Ω and above)
TH6	70 $^{\circ}$ C [158 $^{\circ}$ F] and above (1.14 k Ω and below)	-40 $^{\circ}$ C [-40 $^{\circ}$ F] and below (130 k Ω and above)
TH7	110 °C [230 °F] and above (0.4 kO and below.)	-40 °C [-40 °F] and below (130 kO and above)