

7-3-5 Error Code [1500]

1. Error code definition Refrigerant overcharge

2. Error definition and error detection method

An error can be detected based on the discharge temperature superheat.

- 1) If the formula " $TdSH \leq 10^{\circ}C [18^{\circ}F]$ " is satisfied during operation (first detection), the outdoor unit stops, goes into the 3-minute restart mode, and starts up in three minutes.
- 2) If the formula " $TdSH \leq 10^{\circ}C [18^{\circ}F]$ " is satisfied again within 30 minutes of the first stoppage of the outdoor unit (second detection), the unit comes to an abnormal stop, and the error code "1500" appears.
- 3) If the formula " $TdSH \leq 10^{\circ}C [18^{\circ}F]$ " is satisfied 30 minutes or more after the first stoppage of the outdoor unit, the same sequence as Item 1) above (first detection) is followed.
- 4) For 30 minutes after the stop of the outdoor unit, preliminary errors will be displayed on the LED display.

An error can be detected based on the compressor bottom SH (TH15 - Te) (Applicable to Ver. 7.11 or later)

- 5) If the formula " $compressor\ bottom\ SH\ (TH15 - Te) \leq 10^{\circ}C [18^{\circ}F]$ " is satisfied during operation (first detection), the outdoor unit stops, goes into the 3-minute restart mode, and starts up in three minutes.
- 6) If the formula " $compressor\ bottom\ SH\ (TH15 - Te) \leq 10^{\circ}C [18^{\circ}F]$ " is satisfied again within 40 minutes of the first stoppage of the outdoor unit (second detection), the unit comes to an abnormal stop, and the error code "1500" appears.
- 7) If the formula " $compressor\ bottom\ SH\ (TH15 - Te) \leq 10^{\circ}C [18^{\circ}F]$ " is satisfied 40 minutes or more after the first stoppage of the outdoor unit, the same sequence as Item 5) above (first detection) is followed.
- 8) For 40 minutes after the stop of the outdoor unit, preliminary errors will be displayed on the LED display.
- 9) If the formula " $compressor\ bottom\ SH\ (TH15 - Te) \leq 10^{\circ}C [18^{\circ}F]$ " is satisfied during the defrost operation and if the formula " $compressor\ bottom\ SH\ (TH15 - Te) \leq 10^{\circ}C [18^{\circ}F]$ " is also satisfied after the defrost operation, the same sequence as Item 5) above (first detection) is followed.

3. Cause, check method and remedy

Cause	Check method and remedy
(1) Overcharged refrigerant	Refer to the following page(s). [6-9 Evaluating and Adjusting Refrigerant Charge](page 179)
(2) Thermistor input circuit failure on the control board	Check the temperature and pressure readings on the sensor that are displayed on the LED monitor.
(3) Faulty mounting of thermistor (TH4)	Check the temperature reading on the thermistor that is displayed on the LED monitor.
(4) Faulty mounting of thermistor (TH15)	Check the temperature reading on the thermistor that is displayed on the LED monitor.
(5) Faulty mounting of thermistor (TH16, 17, 18)	Check the temperature reading on the thermistor that is displayed on the LED monitor. Check for proper tightening of the cable tie holding ACC HEATER KIT.