

4.3 Daikin Temperature Management System (optional)

DTMS function

This is a temperature control function to reduce power consumption. To conserve energy, this system controls the compressor's ON-OFF switching, High-Low switching for the evaporator fan speed while maintaining present temperature control

Control details

		DTMS
Chilled mode	Operating range	$-9.9^{\circ}\text{C} \leq \text{SP} \leq -2.6^{\circ}\text{C}$, $-1.0^{\circ}\text{C} \leq \text{SP} \leq +30.0^{\circ}\text{C}$ *2
	Temperature control range	Same as normal chilled operations *2 ($\text{SP}-0.5^{\circ}\text{C} \leq \text{SS} \leq \text{SP}+0.5^{\circ}\text{C}$)
	Compressor	ON-OFF operation *3
	Condenser fan motor	OFF when the compressor is OFF
	Evaporator fan motor	High-Low-Off switching operation *3
Frozen mode *1	Operating range	Whole frozen range ($-10.0^{\circ}\text{C} \geq \text{SP} \geq -30.0^{\circ}\text{C}$)
	Temperature control range	Same as normal frozen operations ($\text{SP} \leq \text{RS} \leq \text{SP}+1.0^{\circ}\text{C}$)
	Compressor	ON-OFF operation
	Condenser fan motor	OFF when the compressor is OFF
	Evaporator fan motor	High-Low switching

* 1 Energy-saving control applicable to the frozen mode in DTMS II

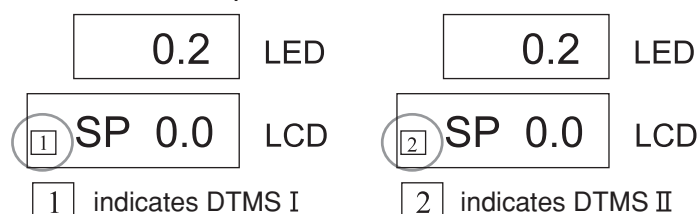
* 2 Operating range for DTMS I : $-1.0^{\circ}\text{C} \leq \text{SP} \leq +30.0^{\circ}\text{C}$

* 3 The unit operation is different from normal operation under DTMS operation.

Special instruction for DTMS function

1) "1" or "2" is displayed in LCD screen during DTMS operation

Example of screen indication



2) Operation control

DTMS is not activated for the following cases even if DTMS is set to ON (dFLt)

- | | |
|---------------------------------------|--|
| 1) During dehumidification operations | 7) During automatic PTI |
| 2) When USDA is set to ON | 8) During high-load operations (chilled mode only) |
| 3) During pull down operations | · When there is a huge gap between SS and RS |
| 4) During defrosting operations | · When the compressor's ON-OFF switching cycle becomes short |
| 5) During heating operations | |
| 6) Out of in-range | 9) When protection devices are activated |

3) Cancellation of DTMS operation

When DTMS function is unnecessary for some transportation, cancel the operation in accordance with the procedures described in the next page. But DTMS function is automatically switched to ON (dFLt) at the completion of the PTI mentioned below

- 1) When F-PTI is completed 2) When Chilled PTI is completed 3) When Frozen PTI is completed

Setting method for DTMS operation cancellation

- 1 Press and hold the **[M]** key until the DTMS setting screen is displayed
- 2 When the DTMS setting screen is displayed, select "oFF" using the **[△]** and **[▽]** keys and press the **[↵]** key to save setting
- 3 Press the **[M]** key to go back to the normal operation screen

