

Title:	Alarm Settings Considerations			ID:
				332
Date in:	Response:	Model:	Author:	
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Q:

- 1) You hesitate to change FW to stop the small fan during the defrost cycle. Because the small fan is turning to have chamber ambient to be sensed by temperature sensor and RH sensor.
If the small fan is stopped, sensors might not get actual chamber ambient condition and might confuse the control.
- 2) The alarm trigger temperature shouldn't be too close to the control set point. It should be at least 10C. For example, if the control set temperature is -20C, the alarm trigger temperature should be -10C.
Setting the alarm trigger temperature too close to the control set point is meaningless - e.g. if the door of the unit is opened, the chamber temperature definitely rises tremendously.

Also, since the temperature goes down back to close to the control set point quite quickly, but the last 1-2C takes much longer time. From this reason, it is not good to set the alarm trigger temperature too close, such as 2-3 above the control set point.
- 3) To be safe, normal defrost cycle not to trigger alarm ; FW is changed not to trigger temperature alarm during the defrost cycle and 30 minutes after the defrost cycle.
- 4) FW is changed to maintain the alarm status, even though the chamber temperature returns to normal condition. The alarm status can be reset only manually by pushing the black button.

Please advise if there is discrepancy or mis-understanding.

A:

1. Correct
- 2a Correct, it certainly does not make sense to put the tolerances any closer than the climate change impact on a regular door access

- 2b The speed that the temperature reaches -20 get slower when getting close to -20°C (1/e curve)
- 3 Correct, the alarm monitoring is de-activated during defrost + 30 minutes
- 4 Correct