Letter:	**ST-009-2016**

Date: June 27, 2016

To: All Unitary Products Branch Service, Sales, and Training Managers
             All Unitary Products Distribution Service, Sales, and Training Managers

Subject: **Simplicity Smart Equipment Defrost Curves**

Product: Commercial Splits and Package Units

Summary: This letter is to inform the field of all the factory settings on the SSE defrost curve settings. We have received questions related to the different **curves** available and the difference between the defrost curves. Here is the information as requested.

The following is a description followed by a graphical depiction of the SSE defrost curves.

- Curve 1- Is the factory default for all commercial splits and a select few package units.
- Curve 2- In terms of initiating defrost is the least aggressive defrost profile.
- Curves 3, 4, 5 - Provide a more aggressive defrost initiation profile. Above an outdoor temperature of approximately 20 F, Curves 4 and 5 are most aggressive in initiating a defrost, whereas below an outdoor temperature of 20 F, curve 3 is most aggressive.
- Curve 6 is a modified curve selected for specific models listed in letter below.
- Curves 1, 2, 3 and 4 have a 40 minute defrost inhibit time.
- Curve 5 has a longer 60 minute defrost inhibit time.
- Curves 1,2,3,4 and 5 have a defrost terminate (coil) temperature of 40 F and a maximum defrost cycle time of 8 minutes.

Curve 6 default defrost initiation line is the same as curves 4 and 5. However…

- However, curve 6 has the following default values that differ from curves 4 and 5.
- Curve 6 default defrost terminate temperature is 50 F.
- Curve 6 default inhibit time is 30 minutes.
- Curve 6 default max defrost cycle time is 10 minutes.

SSE Defrost Initiation Curves
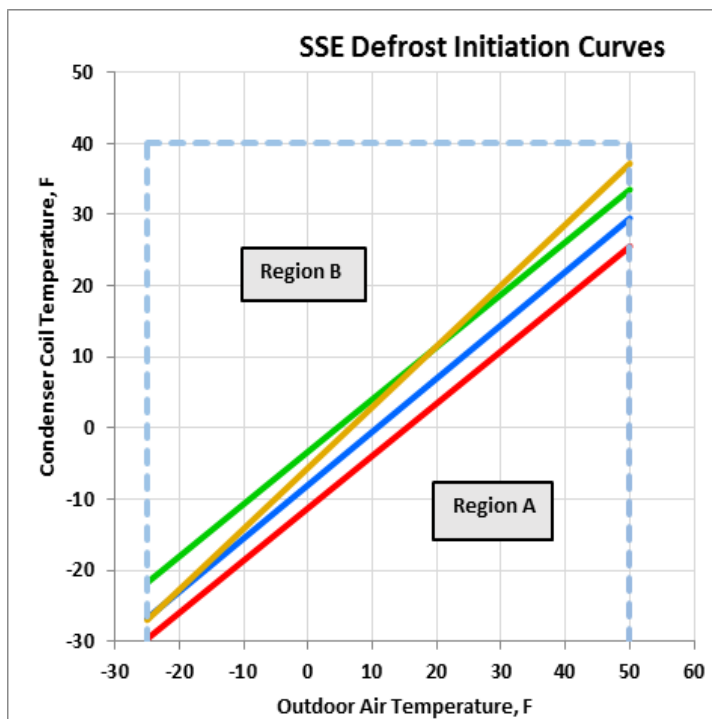
Region A; Warmer climates

Region B; Colder climates

▬	Curve1
▬	Curve 2
▬	Curve 3
▬	Curve 4, 5, *6
----	Inhibit
----	Min Inhibit
----	Max Inhibit

* Curve 6 is a modified curve based on different models and can vary slightly from the above curve setting in the chart.

All commercial splits and package units leave the factory set to Curve 1 with the exception of the models below:

XYE4	Curve 6
XYE5	Curve 6
XYE6	Curve 4
XP036, XA03	Curve 4
XP048, XA04	Curve 4
XP060, XA05	Curve 4
XN036, XT03	Curve 4
XN060, XT05	Curve 4

The factory defrost curve settings meet the HSPF rating and if factory curve setting is changed, it can affect the units efficiency rating and may not meet the HSPF rating listed in the technical guide. Defrost Curve 6 is a little complex as this curve is modified at the factory for specific models in order to meet the HSPF rating. There are 3 different Curve 6 scales. If the SSE control is replaced and a backup file is not retrieved from the existing SSE control you will lose the modified Curve 6 for that model and will result in loss of efficiency. In this case you would need the CSV file based on the serial # to get the modified Curve 6.

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