

PTCS Lockouts and Balance Points: Reference Guide

Importance of Lockouts

- Lockout controls minimize use of strip heat, maximizing energy savings.
- Incorrect lockout settings result in the majority of inspection failures.



Auxiliary (Strip) Heat Lockout

PTCS Spec: Set auxiliary heat lockout to 35°F or lower.
Controlled through:

- Thermostat connected to Wi-Fi weather station.
- Thermostat paired with outdoor temperature sensor.
- Outdoor unit control board or mechanical lockout.

Note:
Set auxiliary (strip) heat lockout at or below 35°F.

Compressor Lockout

While not required by the PTCS Spec, they should be disengaged to let the compressor run at all outdoor temps.

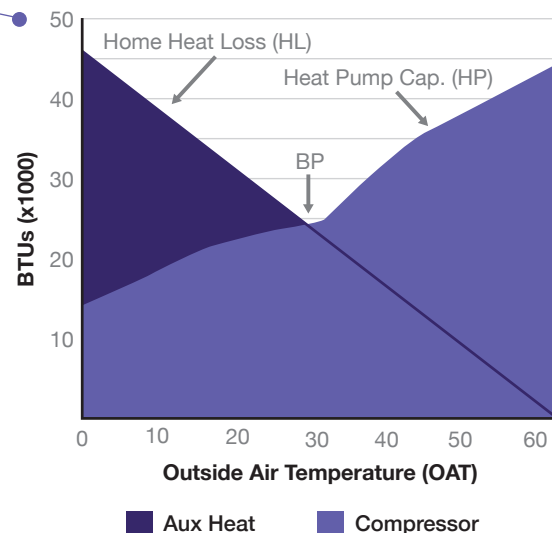
Note:
Let the compressor run at all outdoor temperatures.

Balance Point

If system is not sized correctly, you run into comfort issues when strip heat is locked out.

- Balance point can be no greater than 30°F.
- Heat pump capacity drops at colder temperatures.

Note: Some manufacturers use different terminology for lockouts, such as “high balance point” referring to the strip heat lockout temperature or “low balance point” referring to the compressor lockout temperature.



PTCS Resources

For more information on the PTCS program visit:

PTCS Online School: clearesult.moodle.school

PTCS Registry: ptcs.bpa.gov

YouTube: youtube.com/user/BPATraining/videos

Contact PTCS at
ResHVAC@bpa.gov or 1.800.941.3867