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ADVANCED HEAT PUMPS: CONNECTED COMMISSIONING

When it comes to installing residential heat pumps, some systems are equipped with connected commissioning, which can verify proper installation and help maximize energy savings.

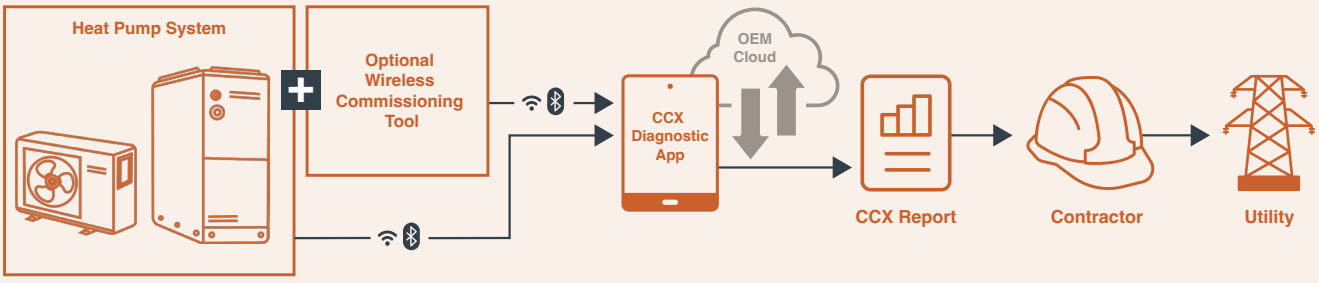
WHAT IS IT?

Connected commissioning guides contactors through system set up to ensure proper installation and configuration, and verifies the system is installed with the proper refrigerant charge, airflow, and controls.

More than a decade of utility program delivery for residential heat pump rebates highlighted several opportunities for performance improvements and energy savings during the installation process. Connected commissioning provides feedback to the contractor during installation to avoid common savings losses.

HOW IT WORKS

Connected commissioning uses embedded sensors to confirm the refrigerant charge, airflow, and controls are configured to the manufacturer specifications. The connected commissioning report verifies the equipment was installed correctly and provides a snapshot of the equipment.



POTENTIAL SAVINGS

Connected commissioning has an energy savings potential of 9% annually*, based on commissioning fault impact research and field studies.

Fault Name	Estimated Savings[1,2]	Likelihood of Error[3]
Verified indoor airflow	5%	33%
Verified refrigerant charge	10%	28%
Appropriate auxiliary heat control settings	8%	57%

[1] U.S. Department of Energy, National Institute of Standards and Technology, **Sensitivity Analysis of Installation Faults on Heat Pump Performance**. 2014.
[2] Bonneville Power Administration, Ben Larson research memo. 2026.
[3] Bonneville Power Administration; **Air Source Heat Pump Commissioning, Controls, and Sizing Baseline Field Study Report**. December 2019.
* Potential energy savings calculated by multiplying estimated savings by likelihood of error.

To find more resources, visit **BetterBuiltNW.com/advanced-heat-pumps**

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