



ASHP models compatible with load management controllers

Air source heat pump (ASHP) performance in Minnesota's cold climate has greatly improved over the past decade with the rise of inverter-driven technology, boosting ASHP popularity among Minnesota homeowners. Special "dual fuel" electric rates and off-peak programs offered by [insert co-op name here] have also increased ASHP popularity. Participation in these utility programs can save homeowners hundreds of dollars each year¹ and can drive consumer purchasing decisions.

The key to unlocking this annual savings potential is for contractors and homeowners to work with their utility to connect a load management (LM) receiver to their qualifying dual fuel ASHP system. The receiver responds to signals from the utility to reduce the electric load when the cost of electricity is high. With the improved performance and expected lower outdoor temperature operation of today's ASHPs, several manufacturers have developed new instructions for connecting their ASHPs to utility load management receivers. It is important that contractors follow these instructions to ensure proper performance and prevent equipment damage.



Some ASHPs have integrated low voltage wiring options to connect to LM receivers. However, there are some ASHP models that are incompatible with the two-wire LM receivers, making them ineligible to participate in our dual fuel and off-peak rate programs.

A resource has been developed to assist members with identifying ASHP models that are compatible with our load management systems. This resource is accessible via the QR code below. This resource will help you:

1. Identify ASHP models that are compatible with two-wire relay-based load management system².
2. Access the ASHP manufacturers load management wiring instructions³.
3. Submit New ASHP Models – if you would like to submit additional ASHP models to the list, use the QR code below to access the "submit new data" section to review the process to submit new models.



¹Link to <https://www.mnashp.org/cost-of-heat-comparison>

²To be listed ASHP systems must provide manufacturer-issued wiring instructions for connection to two-wire relay-based utility demand response receivers and complete a field verification test by a technician from a participating utility confirming that the ASHP model responds to utility control signals in a way that meets or exceeds our load management program/rate eligibility requirements.

³For units that are not listed please work with one of our Energy Services Technicians and your installer/distributor to discuss compatibility before assuming that a non-listed ASHP model will be compatible with our load management receivers. Some non-listed ASHP models are capable of being wired successfully to participate in our load management rates and programs but lack the required manufacturer issued wiring instructions and therefore are not included in the linked list.



ASHPs can provide heat up to three times more efficiently than forced-air and electric-resistance heating systems.

ASHP models compatible with special rate and load management programs

SITUATION OVERVIEW

Whether you are building a new home or just replacing an older heating system selecting heating and cooling equipment for your home is a critical step in determining your future comfort and energy expenses. The good news is that **[insert your cooperatives name here]** is here to support you. We are a member-owned cooperative, so rest assured, we have your best interests in mind. One of the most economically beneficial heating and cooling system options for our members is pairing a fossil fuel fired furnace/boiler system with an air source heat pump (ASHP). These “dual fuel” or “hybrid” ASHP systems can provide a complete heating and cooling solution for your home. When paired with **[insert your cooperatives name here]** dual fuel rate, the system can provide space heating that is cost competitive with natural gas and provides significant financial savings when compared to a propane furnace paired with a traditional AC unit¹.



A resource has been developed to assist members with identifying ASHP models that are compatible with our load management systems. This resource is accessible via the QR code below. This resource will help you:

1. Identify ASHP models that are compatible with two-wire relay-based load management system².
2. Access the ASHP manufacturers load management wiring instructions³.
3. Submit New ASHP Models – if you would like to submit additional ASHP models to the list, use the QR code below to access the “submit new data” section to review the process to submit new models.



¹Link to <https://www.mnashp.org/cost-of-heat-comparison>

²To be listed ASHP systems must provide manufacturer-issued wiring instructions for connection to two-wire relay-based utility demand response receivers and complete a field verification test by a technician from a participating utility confirming that the ASHP model responds to utility control signals in a way that meets or exceeds our load management program/rate eligibility requirements.

³For units that are not listed please work with one of our Energy Services Technicians and your installer/distributor to discuss compatibility before assuming that a non-listed ASHP model will be compatible with our load management receivers. Some non-listed ASHP models are capable of being wired successfully to participate in our load management rates and programs but lack the required manufacturer issued wiring instructions and therefore are not included in the linked list.

CONTACT US

Your cooperative is available to assist you. To save energy and money, call **[local cooperative]** at: **XXX-XXX-XXXX**



ASHPs can provide heat up to three times more efficiently than forced-air and electric-resistance heating systems.