Heat Pumps

Scott Sigette – Devils Lake & Rugby EMR

Luke Meech – Program Manager

Heating and Cooling Rebate Requirements

Tier	Туре	Minnesota and	South Dakota	North Dakota		
		SEER2	HSPF2	HSPF	HSPF2	
Energy Star AC	-	≥ 15.2	-	-	-	
"Standard" Air-Source Heat Pump (ASHP)	Ductless/ Ducted	≥ 14.3	≥ 7.5	-	-	
Cold Climate (CCHP)	Ductless	≥ 16.0*	≥ 9.5*	≥ 10	≥ 9.5	
Cold Climate (CCHP)	Ducted	≥ 15.2*	≥ 8.1*	≥ 9	≥ 7.2	
		EER	COP**	COP**		
Air-to-Water (AWHP)	-	-	≥ 1.7	≥ 1.7		
Geothermal		EER	COP	EER	COP	
Water to air	Open Loop	21.1	4.1	1	-	
Water to air	Closed Loop	17.1	3.6	1	-	
Water to water	Open Loop	20.1	3.5	-	-	
Water to water	Closed Loop	16.1	3.1	-	-	
Direct exchange		16	3.6	1	-	
GHP single unit ≥ 6 tons		13	3.1	-	-	

^{*}Match SEER2 and HSPF2 requirements of federal tax credit 25C

^{**}COP at outdoor air temp of 5°F and water output of 110°F

Heating and Cooling Rebates

Tier	Туре	Minnesota	South Dakota	North Dakota		
Energy Star AC	-	\$100/unit	\$100/unit	-		
"Standard" Air-Source Heat Pump (ASHP)	Ductless/ Ducted	\$300/ton	\$300/ton	-		
Cold Climate (CCHP)	Ductless	\$600/ton	\$500/ton	\$400/ton**		
Cold Climate (CCHP)	Ducted	\$800/ton	\$700/ton	\$600/ton**		
Air-to-Water (AWHP)	-	\$800/ton	\$800/ton	\$400/ton**		
Geothermal – Residential	-	\$1,200/ton	\$1,100/ton	\$700/ton**		
Geothermal – Commercial	-	\$900/ton	\$900/ton	\$700/ton**		
Pre-Heating of Domestic Hot Water (20 ton limit)	AWHP/ Geothermal	\$200/ton (Bonus)	\$100/ton (Bonus)	-		
Quality Installation:						
Energy Star AC	-	\$50/unit	\$50/unit	-		
Heat Pump	-	\$200/ton	\$200/ton	-		
Energy Control:						
Cold Climate, AWHP*, Geothermal	Dual Fuel*, Deferred Load, RDC	\$40/ton	\$100/ton	Above Rebate Amounts**		

Fuel Switching – Natural Gas that is not end of life is now eligible for rebates. Previously not eligible in Minnesota.

^{*}AWHP – only eligible if installed on Dual Fuel

^{**}Must be served on controlled rate to be eligible for rebate

How do I find equipment that qualifies?

Resources for Contractors



https://ashp.neep.org



https://www.ahridirectory.org

Residential Heating and Cooling Rebates – Stacking Example



Stacking Rebates:	Minnesota	South Dakota	
Cold Climate – Ducted	\$800/ton	\$700/ton	
Quality Installation - Heat Pump	\$200/ton	\$200/ton	
Energy Control	\$40/ ton	\$100/ton	
Total Rebate	\$1,040/ton	\$1,000/ton	

Stacking Rebates:	Minnesota	South Dakota	
Geothermal	\$1,200/ton	\$1,100/ton	
Quality Installation - Heat Pump	\$200/ton	\$200/ton	
Pre-Heating DHW - Desuperheater	\$200/ton	\$100/ton	
Energy Control	\$40/ton	\$100/ton	
Total Rebate	\$1,640/ton	\$1,500/ton	

Residential Maintenance Tune-Up (MN/SD)



Air Conditioner - \$75/unit

Heat Pump - \$150/unit

Coil Cleaning, Refrigeration Charge Check, Air Filter Cleaning, Air flow measurement and correction will be included if not previously done by homeowner/contractor at equipment installation.

- *Customer can participate once every 10 years
- *One rebate allowed per residential account

Contractor Benefits:

- Great opportunity for getting customers thinking about their next heating and cooling options.
- Allows customer to start thinking about energy usage, rebates, tax credits, and budgeting for that next system.

Residential Smart Thermostat (MN/SD)



Cooling Only, Electric Heating/Delivered Fuels
Tier II - \$35 / \$100

Tier III- \$50 / \$150

Line Voltage (Main Heating of Home): Tier III - \$100

Example:

Customer requires two Line Voltage thermostats to serve home. Thermostat purchase cost is (\$75/each).

Customer would receive full \$100 rebate

Tier II – Wi-fi connected. Customer can change settings on phone or tablet.

Tier III – has additional energy saving features. Including geofencing, maintenance reminders, monthly reports, and setting recommendations.

Heating and Cooling 25C Tax Credit Requirements - North

Tier	Туре	SEER2	EER2	HSPF2	COP at 5°F*	Capacity Ratio^
Air-Source Heat Pump – CEE Tier 1	Ducted	≥ 15.2	≥ 10.0	≥ 8.1	≥ 1.75	≥ 58% at 17°F/47°F or ≥ 70% at 5°F/47°F
Air-Source Heat Pump – CEE Tier 2	Ductless	≥ 16.0	≥ 9.0	≥ 9.5	≥ 1.75	$\geq 58\%$ at $17^{\circ}F/47^{\circ}F$ or $\geq 70\%$ at $5^{\circ}F/47^{\circ}F$

^{^ 5°}F, 17°F and 47°F are rated capacity data points as determined per the Appendix M1 tests.

^{*} Starting January 1, 2024, COP at 5°F must be met using the Appendix M1 test method.

What if I don't have SEER2 and HSPF 2 ratings?



Certificate of Product Ratings

AHRI Certified Reference Number: 206900147 Date: 01-31-2024 Model Status: Production Stopped

AHRI Type: HRCU-A-CB (Split System: Heat Pump with Remote Outdoor Unit-Air-Source)

Outdoor Unit Brand Name: Bryant

Outdoor Unit Model Number (Condenser or Single Package): 38MARBQ30AA3

Indoor Unit Model Number (Evaporator and/or Air Handler): CNPV*3014AL*

Furnace Model Number: 8(0,1)*SA36045E14***

The manufacturer of this Bryant product is responsible for the rating of this system combination.

Rated as follows in accordance with the latest edition of AHRI 210/240 - 2017 with Addendum 1, Performance Rating of Unitary Air-Conditioning & Air-Source Heat Pump Equipment and subject to rating accuracy by AHRI-sponsored, independent, third party testing:

Cooling Capacity (A2) - Single or High Stage (95F), btuh: 28400

SEER: 15.50

EER (A2) - Single or High Stage (95F): 10.00

Heating Capacity (H12) - Single or High Stage (47F): 28400

HSPF (Region IV): 10.50



Send them in to verify they qualify

Tier	Туре	SEER	HSPF
Energy Star AC	-	≥ 16.0	-
"Standard" Air-Source Heat Pump (ASHP)	Ductless/ Ducted	≥ 14.3	≥ 7.9
Cold Climate (CCHP)	Ductless	≥ 16.0	≥ 10.0
Cold Climate (CCHP)	Ducted	≥ 16.0	≥ 9.6

THANK YOU!

