

NEW CONSTRUCTION

ADDITIONAL PROGRAM INFORMATION

A1 Efficient Air Conditioning and Heat Pump Units

To qualify for this incentive, units must meet the efficiency requirements as indicated in the **A1/A2 HVAC Efficiency Requirements & Incentive Level** worksheet.

A2 Efficient Variable Refrigerant Flow (VRF) Units

To qualify for this incentive, units must meet the efficiency requirements as indicated in the **A1/A2 HVAC Efficiency Requirements & Incentive Level** worksheet.

A3 Efficient Chillers

To qualify for this incentive, units must meet the efficiency requirements as indicated in the **A3 Chiller Efficiency Requirements & Incentive Level** worksheet.

C1 Energy Management Control Systems

This incentive is intended to promote control systems capable of specific features and functions that result in energy savings. Energy Management Controls Systems must be installed and programmed to meet the requirements as indicated in **C1 Energy Management Controls Requirements** to qualify.

C3 HVAC Variable Speed Drives

This incentive goes toward variable speed drives installed on motors 5 horsepower (hp) or larger that result in energy savings. The incentive is \$60 per hp for variable speed control on heating, ventilation and air conditioning (HVAC) motors operating chilled water pumps, condenser water pumps, and cooling tower fans. An incentive of \$100 per hp is available for variable speed control on HVAC motors operating supply, return, outside or make-up air fans and hot water pumps. The motors must be at least 5 hp or larger and operate at least 2,000 hours per year. Systems of motors that are individually less than 5 hp are eligible provided 1) they are controlled by a common variable-frequency drive (VFD), and 2) the aggregate horsepower of motors controlled by a single VFD is greater than 5 hp. The variable speed drive must be installed in accordance with Institute of Electrical and Electronic Engineers (IEEE) Standard 519 and Idaho Power Rule K requirements.

R1 Head Pressure Controls

An incentive of \$40 per compressor horsepower is available for refrigeration systems having compressors with motors rated 1 hp or larger with head pressure controls. Floating-head pressure controls take advantage of low outside air temperatures to reduce the amount of work for the compressor by allowing the head pressure to drop and rise along with outdoor conditions. Dropping the head pressure during low outdoor ambient temperature conditions (less than 70 degrees Fahrenheit [°F]) reduces compressor energy consumption and overall runtime. A head pressure control valve (flood-back control valve) must be installed to lower minimum condensing head pressure from fixed position (180 pounds per square inch gage [psig] for R-22; 210 psig for R-404a) to a saturated pressure equivalent to 70°F or less. Either a balanced-port or electronic expansion valve sized to meet the load requirement at a 70°F condensing temperature must be installed. Alternatively, a device may be installed to supplement refrigeration feed to each evaporator attached to a condenser that is reducing head pressure.

R2 Floating Suction Controls

An incentive of \$10 per compressor horsepower is available for refrigeration systems having compressors with motors rated 1 hp or larger with floating suction controls. Floating suction pressure requires controls to reset refrigeration system target suction temperature based on refrigerated display case or walk-in temperature, rather than operating at a fixed suction temperature setpoint. This reduces compressor energy consumption and overall runtime.

R3 Efficient Condensers

An incentive of \$20 per ton of refrigeration is available for efficient air and evaporative cooled refrigeration condensers. Efficient condensers must have head pressure controls, staged or variable speed drive controlled fans and operate with subcooling of 5°F or more at design conditions. Condensers must have a temperature difference (TD) of 8°F or less for low-temp systems, 13°F or less for med-temp systems and 18°F or less for evaporative condensers.

CA2 No-loss Condensate Drain

Compressed air causes the system to build up condensate that needs to be drained occasionally. Typical drains use high pressure to exhaust the condensate out, but they also exhaust some compressed air. The no-loss condensate drain is used instead of an open tube with ball valve and limits the amount of air waste. The no-loss condensate drain monitors the amount of condensate present and then exhausts only the condensate without wasting any compressed air.

CA4 Cycling Refrigerated Compressed Air Dryer

The air dryer in a compressed air cycle prevents excess condensate from forming in the compressed air supply lines, which can damage the system if not controlled. An incentive is provided for an efficient air dryer that cycles on and off based on the part load demand (versus a typical dryer that remains on the entire time).