# HVAC CHECK CHILLER/UNITARY

Install a high-efficiency chiller or rooftop unit and save up to 25 percent annually of your cooling costs and earn rebates from \$46 to \$15,750 per system.

A more efficient AC and water- or air-cooled electric chiller will make your business environment more comfortable, while saving energy and money.

Your cooling system can be one of the biggest drains on your business's finances. Installing a more efficient unitary AC or water- or air-cooled chiller can keep your business cooler while using less energy – and money – and it could also qualify you for an installation incentive from Duke Energy of up to \$150 per kilowatt (kW) reduced, up to a maximum of \$75,000.

The first step is to call us for a free Business Energy Check. During the check, you'll receive helpful energy-saving recommendations. If an HVAC upgrade is recommended for your business during that process, you may also qualify for an incentive to help offset the installation cost of more energy-efficient cooling equipment.

#### Saving with an HVAC upgrade:

- More efficient equipment
- Long-term energy efficiency
- More comfortable business environment
- More productive employees
- Incentives from Duke Energy to offset cost of more efficient equipment

Take control of your energy costs today. Call your Duke Energy Advisor to schedule a Business Energy Check.

#### Incentive and savings examples:

A large retailer installing 10 15-ton rooftop units could save \$4,681 annually and earn a rebate of \$2,610. (Assumes 10.7 EER Orlando location, 78degrees F summer, 70 degrees F winter, 10 cents kWh).

An office facility replacing a 300-ton centrifugal water-cooled chiller could save \$3,505 annually and earn a rebate of \$1,392. (Assumes 0.6 kW/ton Orlando location, 78 degrees F summer, 70 degrees F winter, 10 cents per kilowatt-hour).

## Energy Efficiency for Business



### Incentive requirements:

1. Call Duke Energy for a required, FREE Business Energy Check.

(Exception: In emergency cases you may have HVAC equipment installed prior to an audit, but an audit must be completed within 30 days of the emergency installation.)

- 2. You must provide copies of invoices, an itemized inventory of equipment installed and Air-Conditioning, Heating, and Refrigeration Institute (AHRI) certified efficiency data at Standard Rating Conditions.
- Air conditioners and air-cooled and water-cooled electric chillers: Cooling load calculations must be performed if the capacity of the high-efficiency unit differs from that of the original unit or if the high-efficiency unit is adding cooling to previously unconditioned space.

All required documentation must be submitted to your Energy Advisor within one year of the date of the invoice or Certificate of Occupancy.

Other requirements do apply.

Contact your Duke Energy Advisor for further details.



### HVAC CHECK CHILLER/UNITARY

New Construction					
Unitary AC and Heat Pumps > 65,000 Btu/h					
Equipment Type and Size Range	2010 State Energy Code Standard	Minimum Efficiency Eligible for Incentive /COP	Incentive Range		
Air-Cooled AC and Heat Pumps					
65,000–135,000 Btu/h	11.20 EER	11.90 EER/3.48 COP	\$46—\$96		
135,001-240,000 Btu/h	11.00 EER	11.69 EER/3.42 COP	\$97—\$174		
240,001-760,000 Btu/h	10.00 EER	10.63 EER/3.27 COP	\$192-\$607		
Over 760,000 Btu/h	9.70 EER	10.31 EER/3.13 COP	\$626—\$900		
Water-Cooled AC and Heat Pumps					
65,000–135,000 Btu/h	11.5 EER <sup>a</sup>	12.5 EERª/4.56 COP	\$75—\$155		
Over 135,000 Btu/h	11 EER	12 EER/4.38 COP	\$170-\$266		

<sup>a</sup> Water-cooled EER is at Standard Rating of 85 degrees F entering water.

Air-Cooled and Water-Cooled Electric Chillers (AHRI 550/590 Test Standards)					
Equipment Type and Size Range	2010 State Energy Code Standard	Minimum Efficiency Eligible for Incentive	Incentive Range		
	Water-Cooled Centrifugal Chillers				
Under 300 tons	0.634 kW/ton (EER 18.93)	0.594 kW/ton (EER 20.20)	\$900—\$1,800		
300–600 tons	0.576 kW/ton (EER 20.83)	0.540 kW/ton (EER 22.22)	\$1,626\$5,040		
Over 600 tons	0.570 kW/ton (EER 21.05)	0.534 kW/ton (EER 22.47)	\$3,236-\$15,750		
	Water-Cooled Positive Displacement Chillers				
Under 150 tons	0.775 kW/ton (EER 15.48)	0.727 kW/ton (EER 16.51)	\$720-\$1,230		
150–300 tons	0.680 kW/ton (EER 17.65)	0.638 kW/ton (EER 18.81)	\$945—\$2,250		
Over 300 tons	0.620 kW/ton (EER 19.36)	0.581 kW/ton (EER 20.65)	\$1,767—\$8,775		
Any size	EER 9.56 (EER 10.16)	1.18 kW/ton	\$540\$1,620		

Contact your Duke Energy Advisor for further details.

### 877.372.8477 or fl.bec@duke-energy.com

### Energy Efficiency for Business

Unitary AC and Heat Pumps > 65,000 Btu/h					
Equipment Type and Size Range	State Energy Code Standard	Minimum Efficiency Eligible for Incentive /COP	Incentive Range		
	Air-Cooled AC and	Heat Pumps			
65,000–135,000 Btu/h	10.3 EER	11.2 EER/3.45 COP	\$69-\$184		
135,001-240,000 Btu/h	9.7 EER	10.6 EER/3.27 COP	\$159-\$340		
240,001-760,000 Btu/h	9.5 EER	10.4 EER/3.21 COP	\$296-\$1,029		
Over 760,000 Btu/h	9.2 EER	10 EER/3.09 COP	\$893-\$1,287		
	Water-Cooled AC an	d Heat Pumps			
65,000–135,000 Btu/h	11.5 EER <sup>a</sup>	12.5 EERª/4.56 COP	\$68-\$166		
Over 135,000 Btu/h	11 EER	12 EER/4.38 COP	\$153-\$634		

r Cooled and Water Cooled Electric Chillers

Retrofit

<sup>a</sup> Water-cooled EER is at Standard Rating of 85 degrees F entering water.

Air-Cooled and Water-Cooled Electric Chillers (AHRI 550/590 Test Standards)					
Equipment Type and Size Range	State Energy Code Standard	Minimum Efficiency Eligible for Incentive	Incentive Range		
	Water-Cooled Centrifugal Chillers				
Under 150 tons	0.70 kW/ton (5.0 COP)	0.65 kW/ton (5.4 COP)	\$750—\$2,235		
150–300 tons	0.63 kW/ton (5.5 COP)	0.60 kW/ton (5.9 COP)	\$680—\$2,250		
Over 300 tons	0.58 kW/ton (6.1 COP)	0.56 kW/ton (6.3 COP)	\$903—\$4,500		
	Water-Cooled Scroll or Screw Chillers				
Under 150 tons	0.79 kW/ton (4.5 COP)	0.74 kW/ton (4.75 COP)	\$750—\$1,118		
150–300 tons	0.72 kW/ton (4.9 COP)	0.67 kW/ton (5.25 COP)	\$1,132-\$3,150		
Over 300 tons	0.64 kW/ton (5.5 COP)	0.60 kW/ton (5.9 COP)	\$1,806—\$6,750		
Air-Cooled Electric Chillers					
Any size	1.26 kW/ton (2.8 COP)	1.17 kW/ton (3.0 COP)	\$608—\$2,025		

