

Convertible, Dual-Compressor, 6¹/₂ to 12¹/₂-Ton Single Package (60 Hz)

7¹/₂ to 12¹/₂-Ton Single Package (50 Hz)

YORK[®]

PREDATOR[™]

Commercial Package Units



Cooling Only
Cooling with
Electric Heat
Cooling with
Gas Heat

 **YORK[®]**

Heating and Air Conditioning

Advanced Design

Meets Demanding Requirements

Contractors searching for value in an advanced rooftop for light commercial applications will find it in the YORK® Predator™ line. These convertible, single package air-conditioning and gas/electric-heating rooftops offer dual-circuit reliability, convenient installation, improved IAQ, competitive performance, hassle-free serviceability, and flexible configuration.

Valuable Features, Greater

Flexibility

For dual-circuit reliability, all units have two compressors with independent refrigeration circuits.

For convenient installation, units are easily installed on a roof curb, slab, roof rack, or frame. They are self-contained in a cabinet sized to a common footprint, installed on a common-sized roof curb, and assembled on a rigid full perimeter base rail allowing for 3-way forklift access and overhead rigging. Every unit is completely charged, wired, piped, and tested at the factory to provide for a quick and easy installation.

For improved IAQ, foil-faced insulation is used throughout the unit.

For competitive performance, all standard efficiency units have a minimum 9.0 EER; high efficiency units can reach 11.5 EER; gas/electric units offer 80% Steady State Efficiencies and employ electronic spark ignition and power vented combustion.

For hassle-free serviceability, the motor and blower slide out as a common assembly. Speedy access is provided through hinged, “tool-less” panels, which allow quick inspection of components and areas, including the control box, compressors, filters, indoor motor and blower, and the heating section.

All unit components are covered by a one-year limited warranty. Compressors and electric heaters are covered by five-year warranties. Aluminized steel heat exchangers are covered by a 10-year warranty; optional stainless steel heat exchangers are also covered by a 10-year warranty.

For flexible configuration, all units are convertible for down and side discharge airflow applications. Economizers may be used in either side or down discharge applications. Units can be specified for cooling only, cooling with electric heat, and cooling with gas heat. Electric heaters are only available as field-installed accessories.

Service Friendly

Indoor airflow components are easily reached to simplify maintenance and adjustment, thanks to the common, slide-out motor and blower assembly and hinged, “tool-less” access panel design.

Access panels have been placed in both condenser section walls. Rotation of the cover allows easy access to the condenser coils for cleaning or inspection.

Unit control board and ignition control board both use flash codes to aid in diagnosing malfunctions. Unique alarm codes quickly identify the source of the unit alarm.

Standard, common filter sizes eliminate confusion when filters need replacing.

Non-corrosive, slide-out drain pan permits easy cleaning. The drain pan can be reversed to facilitate easy condensate piping. The drain pan also features a large slope to ensure proper drainage.

Balanced Heating

The Predator offers “Ultimate Heating Comfort” with a balance between first and second stage gas heating.

The first stage of a Predator unit provides 60% of the heating capacity and 40% heating capacity on second stage. Balanced heating allows the unit to better maintain desired temperatures when operating gas heat.



PREDATOR™

Convertible Airflow Design

The convertible airflow design of Predator units allows maximum field flexibility and minimum inventory. The side duct openings are covered when they leave the factory. If a side supply/return is desired, the installer simply removes the two side duct covers from the outside of the unit and installs them over the down shot openings. No panel cutting is required.

All indoor fan motors are belt-drive providing maximum flexibility to handle most airflow requirements. Factory installed alternate indoor fan motors are available on most models for high static applications. With the optional indoor fan motor, all units can supply nominal airflow at a minimum of 1.5-inch ESP.

Easy Installation and Utility Connection

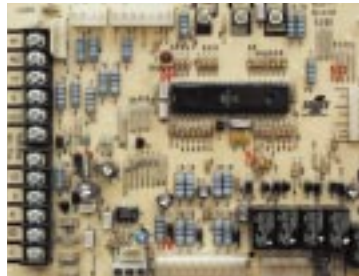
Utility connections can be made with minimum field labor. Gas and electric knockouts are supplied in the unit bottom, as well as the side of the unit. A clearly identified location is provided to mount a field-supplied electrical disconnect switch.

All units are shipped with 2-inch throw-away filters installed.

Advanced Controls

While competitive units require added controls and options, Predator rooftops provide a high level of control by including these features as standard in our SureSense™ control board:

Integrated low-ambient control allows operation in cooling mode down to 0°F outdoor ambient without additional assistance. Optionally, the control board can be programmed to lock out the compressors when the outdoor air temperature is low or when free cooling is available.



Anti-short-cycle delay aids compressor life and reliability. Compressor life is also ensured by programmable minimum run times.

Fan-on and fan-off delays are fully programmable. Furthermore, heating and cooling fan delay times are independent of one another. All units are programmed with default values based on cooling and heat configuration.

Control board monitors high and low-pressure switches, freezestats, gas valve (if applicable), and temperature limit switches on gas and electric heat units.

Alarms include ignition failure, compressor lockouts, repeated limit switch trips, and fan switch overloads. To minimize nuisance service calls, a “three times, you’re out” philosophy means switches and freezestats must trip three times within two hours before the associated compressor will be locked out. Each alarm energizes a trouble light on the thermostat (if so equipped) and flashes an alarm code on the control board LED. The five most recent alarms are stored in memory for later review.

Non-volatile memory stores programmed values and alarms if power is lost.

System Protection

Suction line freezestats are supplied on all units to protect against the loss of charge and the occurrence of coil frosting. Crankcase heaters and internal compressor protection are standard on all compressors. Every unit has solid-core liquid line filter-driers and high and low pressure switches.

Reliability that Earns the Industry’s Best Warranty

During assembly, all Predator units undergo computer automated testing to confirm refrigerant charge, unit run amperage, and 100% functionality of all components.

On-site durability is ensured by a lifetime-grade powder paint verified to withstand a 750-hour salt spray test.

All unit components are covered by a one-year limited warranty. Compressors and electric heaters are covered by five-year warranties. Aluminized steel heat exchangers are covered by a 10-year warranty; optional stainless steel heat exchangers are covered by a 10-year warranty.

Unit Voltage Limitations

Power Rating	Minimum	Maximum
208/230-3-60	187	253
460-3-60	414	506
575-3-60	518	630
380/415-3-50	342	456

Predator Performance Ratings

* STANDARD EFFICIENCY DM MODELS (60 Hz)

Size (Tons)	Model	ARI Ratings			CFM	Sound Rating (dB)	Nominal Electric Heat Capacity (kW)	Gas Heat Capacity			Unit Dimen. (in.)	Curb Dimen. (in.)	Approx. Operating Wt. (lbs.)
		MBH	EER	IPLV				Input (MBH)	Output (MBH)	Seasonal Efficiency (%)			
078 (6½)	Cooling only	77	9.0	9.45	2600	84	—	—	—	50½H x 59W x 89D	50½W x 80%D	1041	
	Electric Heat						9, 18, 24, 34	—	—			1061	
	Gas Heat						—	120	96			80	1099
	Gas Heat						—	180	144			80	1099
090 (7½)	Cooling only	86	9.0	10.15	3000	84	—	—	—	50½H x 59W x 89D	50½W x 80%D	1051	
	Electric Heat						9, 18, 24, 34	—	—			1071	
	Gas Heat						—	120	96			80	1103
	Gas Heat						—	180	144			80	1103
102 (8½)	Cooling only	98	9.0	9.35	3000	90	—	—	—	50½H x 59W x 89D	50½W x 80%D	1084	
	Electric Heat						9, 18, 24, 34	—	—			1104	
	Gas Heat						—	120	96			80	1173
	Gas Heat						—	180	144			80	1173
120 (10)	Cooling only	120	9.0	9.10	4000	90	—	—	—	50½H x 59W x 89D	50½W x 80%D	1116	
	Electric Heat						18, 24, 34, 54	—	—			1136	
	Gas Heat						—	180	144			80	1206
	Gas Heat						—	240	192			80	1206
150 (12½)	Cooling only	140	9.0	9.25	4500	90	—	—	—	50½H x 59W x 89D	50½W x 80%D	1195	
	Electric Heat						18, 24, 34, 54	—	—			1215	
	Gas Heat						—	180	144			80	1285
	Gas Heat						—	240	192			80	1285

* See 50 Hz Tech Guide Form 036-21044-001 for pertinent data.

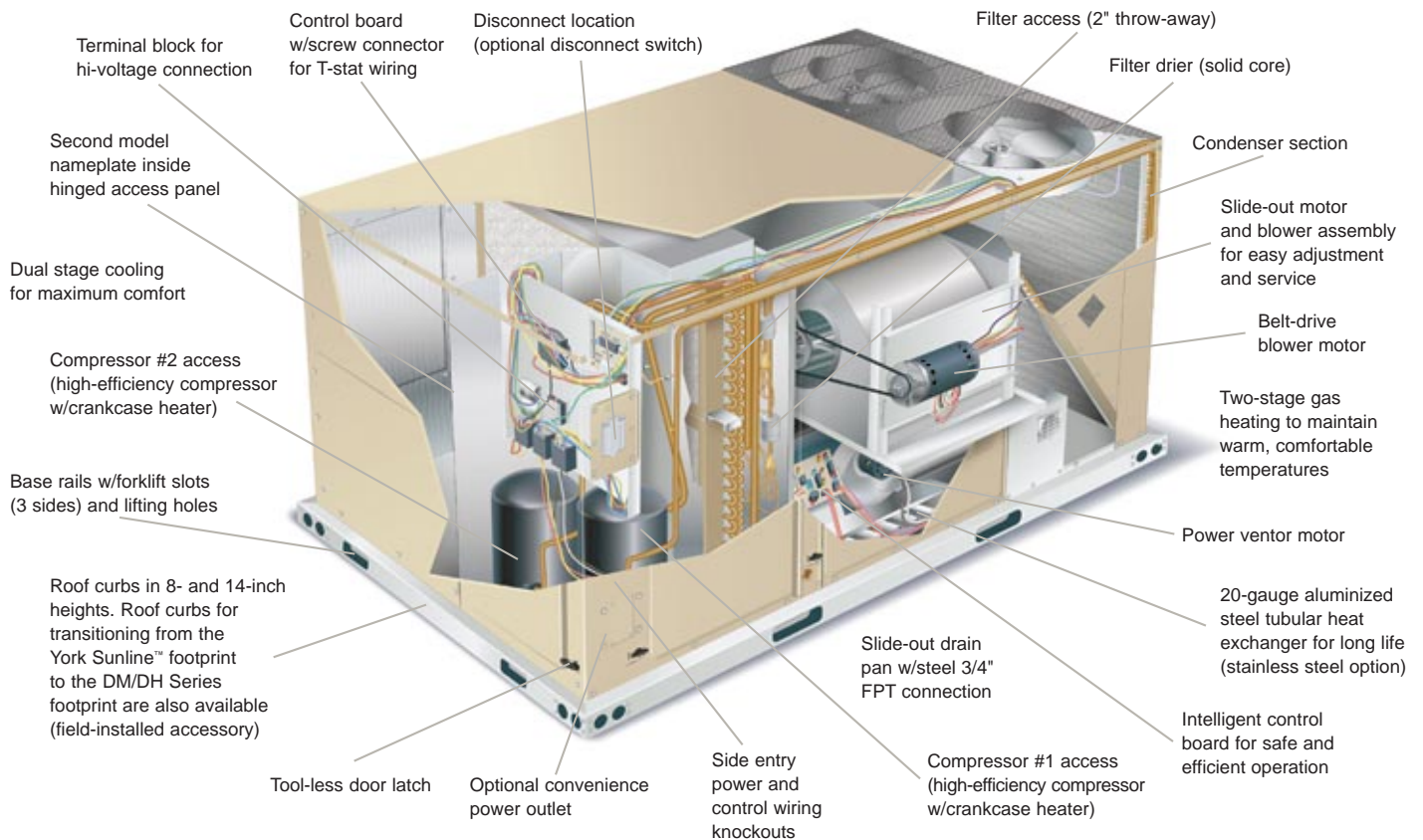
HIGH EFFICIENCY DH MODELS (60 Hz only)

Size (Tons)	Model	ARI Ratings			CFM	Sound Rating (dB)	Nominal Electric Heat Capacity (kW)	Gas Heat Capacity			Unit Dimen. (in.)	Curb Dimen. (in.)	Approx. Operating Wt. (lbs.)
		MBH	EER	IPLV				Input (MBH)	Output (MBH)	Seasonal Efficiency (%)			
078 (6½)	Cooling only	75	11.5	11.95	2600	84	—	—	—	50½H x 59W x 89D	50½W x 80%D	1041	
	Electric Heat						9, 18, 24, 34	—	—			1061	
	Gas Heat						—	120	96			80	1099
	Gas Heat						—	180	144			80	1099
090 (7½)	Cooling only	91	11.5	11.89	3400	84	—	—	—	50½H x 59W x 89D	50½W x 80%D	1051	
	Electric Heat						9, 18, 24, 34	—	—			1071	
	Gas Heat						—	120	96			80	1103
	Gas Heat						—	180	144			80	1103
102 (8½)	Cooling only	99	11.5	12.50	3400	84	—	—	—	50½H x 59W x 89D	50½W x 80%D	1084	
	Electric Heat						9, 18, 24, 34	—	—			1104	
	Gas Heat						—	120	96			80	1173
	Gas Heat						—	180	144			80	1173
120 (10)	Cooling only	115	11.0	11.70	3840	90	—	—	—	50½H x 59W x 89D	50½W x 80%D	1116	
	Electric Heat						18, 24, 34, 54	—	—			1136	
	Gas Heat						—	180	144			80	1206
	Gas Heat						—	240	192			80	1206
150 (12½)	Cooling only	146	10.0	10.70	4100	90	—	—	—	50½H x 59W x 89D	50½W x 80%D	1195	
	Electric Heat						18, 24, 34, 54	—	—			1215	
	Gas Heat						—	180	144			80	1285
	Gas Heat						—	240	192			80	1285

The Predator™ Package

6½ to 12½-Ton Packaged Units (60 Hz)

7½ to 12½-Ton Packaged Units (50 Hz)



A Wide Range of Options

The YORK Predator line also offers many valuable equipment options and accessories:

-60°F gas heat kit for gas heating in low ambient temperatures (field-installed accessory)

BAS option, consult the factory for availability

Dirty filter switch (factory-installed option)

Disconnect switch (factory-installed option)

Economizer available as a single enthalpy input. Exhaust options include barometric relief and power exhaust (available as factory-installed option or field-installed accessory)

Electric heaters in 9kW to 54kW in voltages of base units. Carries a five-year parts warranty (field-installed accessory)

Gas piping kit contains all necessary pipe fittings for bottom supply gas piping with external shut-off (field-installed accessory)

Sub zero low ambient kit maintains stable cooling when outdoor temperature is between 0°F and -20°F (field-installed accessory)

Motorized or manual outdoor air dampers (field-installed accessories)

Phase monitors protect unit from phase imbalance, phase drop, and reversed phase rotation (field-installed accessory; factory-installed standard on units with scroll compressors)

Smoke detector (factory-installed option or field-installed accessory)

Stainless steel heat exchanger for all gas heat units with 10-year parts warranty (factory-installed option)

Technicoat condenser coil coating for corrosion protection in harsh environments (factory-installed option)

Thermostat for 24-volt or electro-mechanical operation for two-stage heat/two-stage cool or two-stage cooling only configurations

Note: Not all listed options available on 50 Hz export models.

At York® Heating and Air Conditioning, We Provide Comfort Where You Live, Work, and Play

When it's time to heat or cool your personal "Landmark," the YORK name assures you of the highest standards of design and manufacture. York is the only Fortune 500 company focused solely on heating, ventilation, air conditioning, and refrigeration. That gives us unique insight into designing products that meet your exact requirements. We're finding solutions to today's most critical concerns — energy efficiency, refrigerant alternatives, and indoor air quality — to improve the indoor and outdoor environment.



Count on York to deliver a wide range of product choices for residential and light commercial applications. Our offering includes heat pumps, split-system air conditioners, gas furnaces, air-handling units, and controls — plus chillers and ventilation equipment for larger projects. We're leading the way in developing efficient and environmentally sound choices for home and businesses. Let us create the environment of success for you.



Heating and Air Conditioning

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