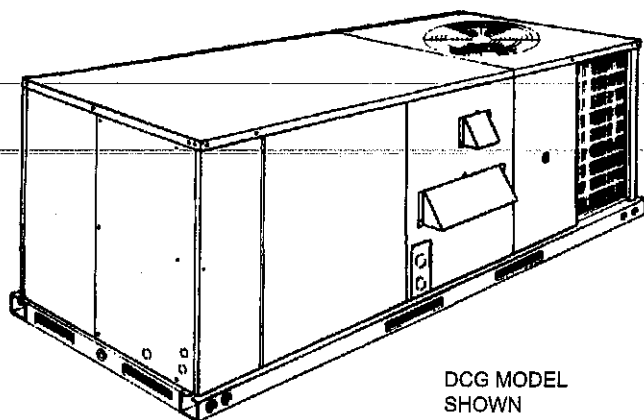




SINGLE PACKAGE AIR-COOLED AIR CONDITIONERS

D3CE 036, 048, 060 & 076
D5CG 036, 048, 060 & 076
3, 4, 5 AND 6 NOMINAL TONS



DCG MODEL
SHOWN

SUNLINE 2000™ (WORLD 50 HZ)



DESCRIPTION

YORK Sunline 2000 units are convertible single package air conditioners with a common cabinet and a common roof curb for the 3, 4, 5 and 6 ton sizes. The units were designed for residential and light commercial applications. They can easily be installed on a roof curb, slab, roof jack or frame.

All units are self-contained and assembled on rigid full perimeter base rails with fork lift slots on three sides and holes for overhead rigging. Every unit is completely piped, wired, charged and tested at the factory to provide for a quick and easy field installation.

The units are available in cooling only, and cooling with gas heat. Electric heaters are available as field-installed accessories.

Both bottom and side duct connections are available without having to swap panels. The installer removes the duct covers for the desired configuration. Economizers may be used on either bottom and side duct applications with no modifications required.

These units are designed and manufactured under ISO 9002 Quality System Certification.

FEATURES

COMMON FOOTPRINT/COMMON CABINET -- All model sizes and configurations share a common cabinet and a common roof curb. The installer has the flexibility of setting one curb and placing the proper tonnage unit on that curb after the internal load has been determined. Selection of gas or electric heat can be made after the curb has been set.

HIGH EFFICIENCY -- All units have a high cooling efficiency, and gas / electric models have a minimum AFUE of 79%.

CONVERTIBLE AIRFLOW DESIGN -- Both the side and bottom duct openings are covered when they leave the factory. If a side supply / side return is desired, remove the two side duct covers from the outside of the unit and discard them. If a bottom supply / bottom return is desired, remove the two knockout panels from the base of the unit and discard them. No panel

cutting or swapping is required. Convertible airflow design allows maximum field flexibility and minimum inventory.

FIELD-INSTALLED ACCESSORIES -- Accessories were designed for quick and easy installation. The motorized damper and economizers slide in, and electrical connections are made by modular plugs. Electric heaters mount easily, and knockouts are provided in the internal partitions to connect the elements to the control box single point kit.

The 356mm (14in.) high roof curb is shipped knocked down. An insulated deck is not required because the bottom of the unit is insulated.

WIDE RANGE OF INDOOR AIRFLOWS -- All 3, and 4--ton models operate over a wide range of design conditions with a 3--speed direct--drive fan motor. Belt--drive blowers are standard on all 5 and 6 ton models.

FULL PERIMETER BASE RAILS -- The permanently attached base rails provide a solid foundation for the entire unit and protect the unit during shipment. The rails provide fork lift access from three sides, and rigging holes are also provided so that an overhead crane can be used to place the units on a roof.

SYSTEM PROTECTION -- Crankcase heat and internal overload protection are standard on all compressors. Every unit has a liquid line filter--drier, high and low pressure switches and a suction line freezestat to protect all system components. All units provide cooling at ambient temperatures down to 7°C (45°F).

UTILITY CONNECTIONS MADE EASY -- Gas and electric utility knockouts are provided in the unit base as well as the side of the unit. A clearly identified location is provided to mount a field supplied electrical disconnect switch. Utility connections can be made quickly and with a minimum amount of field labor.

SIMPLE CONTROL CIRCUIT -- A low voltage printed circuit board contains a compressor lockout indicator light and a low voltage terminal strip. An additional set of pin connectors is also provided to simplify the field interface of external controls.

Cont'd.

Physical Data

ZF036-076 Physical Data

NEW

Component	Models							
	ZF036		ZF048		ZF060		ZF076	
Nominal Tonnage	3.0		4.0		5.0		6.3	
ARI COOLING PERFORMANCE								
Gross Capacity @ ARI A point (Btu)	36400		51300		60400		72600	
ARI net capacity (Btu)	35200		47000		57800		69100	
EER (Net)	11.5		11.5		11.5		10.9	
SEER	13.0		13.0		13.0		-	
Nominal CFM	1200		1600		2000		2500	
System power (KW)	4.2		4.2		4.9		6.3	
Refrigerant type	R-410A		R-410A		R-410A		R-410A	
Refrigerant charge (lb-oz)								
System 1	4-12		5-4		5-4		6-8	
ARI HEATING PERFORMANCE								
Heating model	N04	N08	N06	N10	N08	N10	N08	N10
Heat input (K Btu)	50	100	75	125	100	125	100	125
Heat output (K Btu)	40	80	60	100	80	100	80	100
AFUE %	80.9	80.5	80.9	80.3	80.5	80.3	80.5	80.3
Steady state efficiency (%)	-	-	-	-	-	-	-	-
No. burners	2	4	3	5	4	5	4	5
No. stages	1	1	1	1	1	1	1	1
Temperature Rise Range (°F)	15-45	45-75	25-70	45-75	25-55	35-75	25-55	30-75
Gas Limit Setting (°F) - Direct Drive	240	170	210	165	-	-	-	-
Gas Limit Setting (°F) - Belt Drive	-	-	-	-	210	210	210	210
Gas piping connecting (in.)	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
DIMENSIONS (inches)								
Length	82 1/4		82 1/4		82 1/4		82 1/4	
Width	44 7/8		44 7/8		44 7/8		44 7/8	
Height	32 5/8		32 5/8		32 5/8		32 5/8	
OPERATING WT. (lbs.)	468		541		569		640	
COMPRESSORS								
Type	Recip		Recip		Scroll		Scroll	
Quantity	1		1		1		1	
Unit Capacity Steps (%)	100		100		100		100	
CONDENSER COIL DATA								
Face area (Sq. Ft.)	16.3		16.3		16.3		16.3	
Rows	1		1		1		1	
Fins per inch	23		23		23		23	
Tube diameter (in./mm)	0.71 / 18		0.71 / 18		0.71 / 18		1.0 / 25.4	
Circuitry Type	2-pass Microchannel		2-pass Microchannel		2-pass Microchannel		2-pass Microchannel	
EVAPORATOR COIL DATA								
Face area (Sq. Ft.)	5.06		5.06		5.06		5.06	
Rows	3		4		4		4	
Fins per inch	13		13		13		13	
Tube diameter	0.375		0.375		0.375		0.375	
Circuitry Type	Intertwined		Intertwined		Intertwined		Intertwined	
Refrigerant control	Fixed Orifice		Fixed Orifice		Fixed Orifice		Fixed Orifice	

PHYSICAL DATA - BASIC UNITS

Existing

Model (DCE/DCG)		036	048	060	076
Evaporator blower	Centrifugal Blower (Dia. x Wd. mm (in.))	12 x 10 (305 x 254)	12 x 10 (305 x 254)	12 x 10 (305 x 254)	12 x 11 (305 x 279)
	Fan Motor Hp (direct-drive)	$\frac{1}{3}$	$\frac{3}{4}$	-	-
	Fan Motor Hp (belt-drive)	-	-	1.5	1.5
Evaporator coil	Rows Deep	3	3	3	3
	Fins Per 25mm (1in.)	13	13	13	13
	Face Area (m ² /ft ²)	0.33 / 3.6	0.40 / 4.3	0.57 / 5.1	0.57 / 5.1
Condenser fan	Propeller Dia. (mm/in.)	610 / 24	610 / 24	610 / 24	610 / 24
	Fan Motor HP	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$
	Nom. CFM Total	4,500	4,500	4,500	4,500
Condenser coil	Rows Deep	1	1	1	2
	Fins Per 25mm (1in.)	16	19	22	16
	Face Area (m ² /ft ²)	1.60 / 17.1	1.60 / 17.1	1.60 / 17.1	1.55 / 16.7
Air filters (see Note)	Quantity Per Unit (14" X 20" X 1")	2	2	2	2
	quantity Per Unit (14" X 25" X 1")	1	1	1	1
	total Face Area (m ² /ft ²)	0.59 / 6.3	0.59 / 6.3	0.59 / 6.3	0.59 / 6.3
Charge	Refrigerant-22 (kg/lbs./oz.)	2.72 (6/0)	3.0 (6/10)	3.3 (7/4)	4.9 (10/12)

NOTE: Filter racks are adapted for 25mm (1") or 50mm (2") thick filters.

COMPONENT WEIGHTS (kg/lbs)

COMPONENT			MODELS DCE & DCG			
			036	048	060	076
Basic Unit	DCE (Cooling only)		250 / 550	268 / 590	286 / 630	313 / 690
	DCG (Gas / Electric)	41 Mbh	277 / 610	-	-	-
		62 Mbh	-	295 / 650	-	-
		82 Mbh	-	-	313 / 690	338 / 745
		103 Mbh	-	-	-	-
Options and Accessories	Economizer		23 / 50			
	Motorized Outdoor Air Damper		22 / 48			
	Electric Heat (Nominal KW) (DCE only)	5 - 7 KW	8 / 18			
		10 - 15 KW	10 / 23			
		20 - 30 KW	13 / 28			
	Roof Mounting Curb		42 / 92			
	Relief / Fixed Air Damper		5 / 10			