



DLFCAB / DLCCAR / DLFCHB / DLCCHR
High Wall Ductless Split System
Sizes 09 to 36

PRODUCT DATA

INDUSTRY LEADING FEATURES / BENEFITS

A PERFECT BALANCE BETWEEN BUDGET LIMITS, ENERGY SAVINGS AND COMFORT.

The DLFCAB/DLCCAR/DLFCHB/DLCCHR series ductless split systems are a matched combination of an outdoor condensing unit and an indoor fan coil unit connected only by refrigerant tubing and wires. The fan coil is mounted on the wall, near the ceiling. This selection of fan coils permits creative solutions to design problems such as:

- Add-ons to current space (an office or family room addition)
- Special space requirements
- When changes in the load cannot be handled by the existing system
- When adding air conditioning to spaces that are heated by hydronic or electric heat and have no ductwork
- Historical renovations or any application where preserving the look of the original structure is essential.

The ideal compliment to your ducted system when it is impractical or prohibitively expensive to use ductwork.

These compact indoor fan coil units take up very little space in the room and do not obstruct windows. The fan coils are attractively styled to blend with most room decors. Advanced system components incorporate innovative technology to provide reliable cooling performance at low sound levels.



LOW SOUND LEVELS

When noise is a concern, the ductless split systems are the answer.

The indoor units are whisper quiet. There are no compressors indoors, either in the conditioned space or directly over it, and there is none of the noise usually generated by air being forced through ductwork.

When sound ordinances and proximity to neighbors demand quiet operation, the DLFCAB/DLCCAR/DLFCHB/DLCCHR unit is the right choice. The advanced, horizontal airflow design distributes air more evenly over the coil.

SECURE OPERATION

If security is an issue, outdoor and indoor units are connected only by refrigerant piping and wiring to prevent intruders from crawling through ductwork. In addition, since DLFCAB/DLCCAR/DLFCHB/DLCCHR units can be installed close to an outside wall, coils are protected from vandals and severe weather.

FAST INSTALLATION

This compact ductless split system is simple to install. A mounting bracket is standard with the indoor units and only wire and piping need to be run between indoor and outdoor units.

These units are fast and easy to install ensuring minimal disruption to customers in the home or workplace. This makes the DLFCAB/DLCCAR/DLFCHB/DLCCHR ductless split systems the equipment of choice, especially in retrofit situations.

SIMPLE SERVICING AND MAINTAINENCE

Removing the top panel on outdoor units provides immediate access to the control compartment, providing a service technician access to check unit operation. In addition, the draw-thru design of the outdoor section means that dirt accumulates on the outside surface of the coil. Coils can be cleaned quickly from the inside using a pressure hose and detergent.

On all indoor units, service and maintenance expense is reduced due to easy-to-use cleanable filters. In addition, these high wall systems have extensive self-diagnostics to assist in troubleshooting.

BUILT-IN RELIABILITY

Ductless split system indoor and outdoor units are designed to provide years of trouble-free operation.

The high wall indoor units include protection against freeze-up and high evaporator temperatures on heat pumps. The condensing units on heat pumps are protected by a three minute time delay before the compressor starts the overcurrent protection and the high temperature protection.

INDIVIDUAL ROOM COMFORT

Maximum comfort is provided because each space can be controlled individually based on usage pattern. The air sweep feature provided permits optimal room air mixing to eliminate hot and cold spots for occupant comfort. In addition, year-round comfort can be provided with heat pumps.

ECONOMICAL OPERATION

The ductless split system design allows individual room heating or cooling when required. There is no need to run large supply air fans or chilled water pumps to handle a few spaces with unique load patterns. In addition, because air is moved only in the space required, no energy is wasted moving air through ducts.

EASY-TO-USE CONTROLS

The high wall units have microprocessor-based controls to provide the ultimate in comfort and efficiency. The user friendly wireless remote control provides the interface between user and the unit.

ACCESSORIES

Customizing these ductless split systems to your application is easily accomplished.

Adding a condensate pump accessory (field supplied) to the high wall fan coil provides installation flexibility.

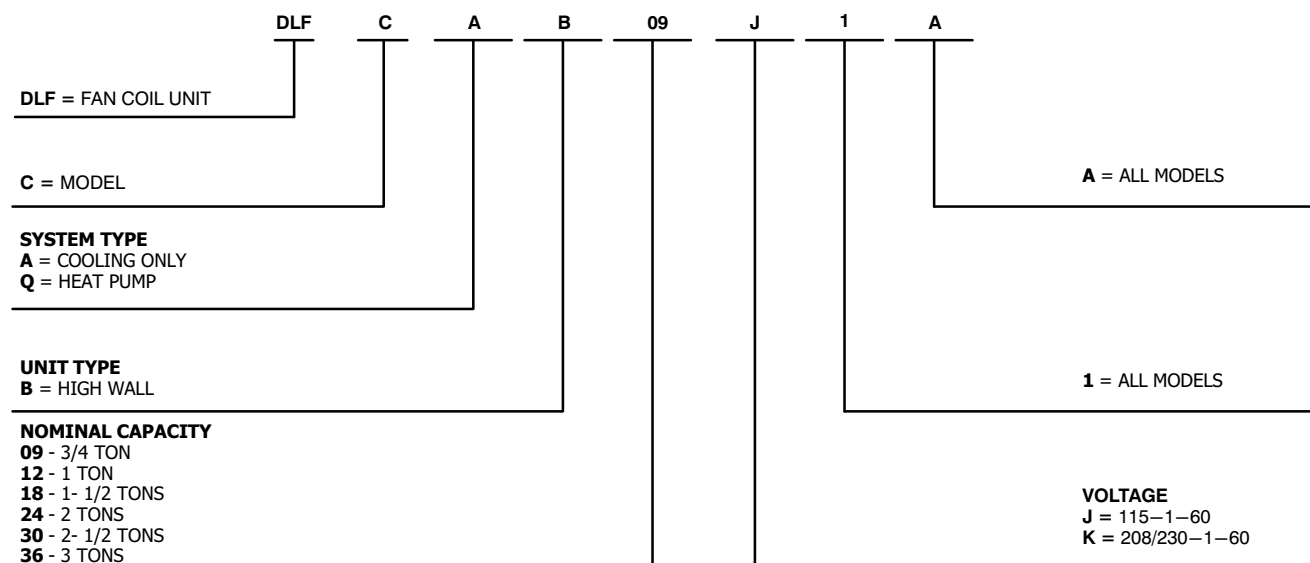
OPTIONAL WIRED CONTROLLER

AGENCY LISTINGS

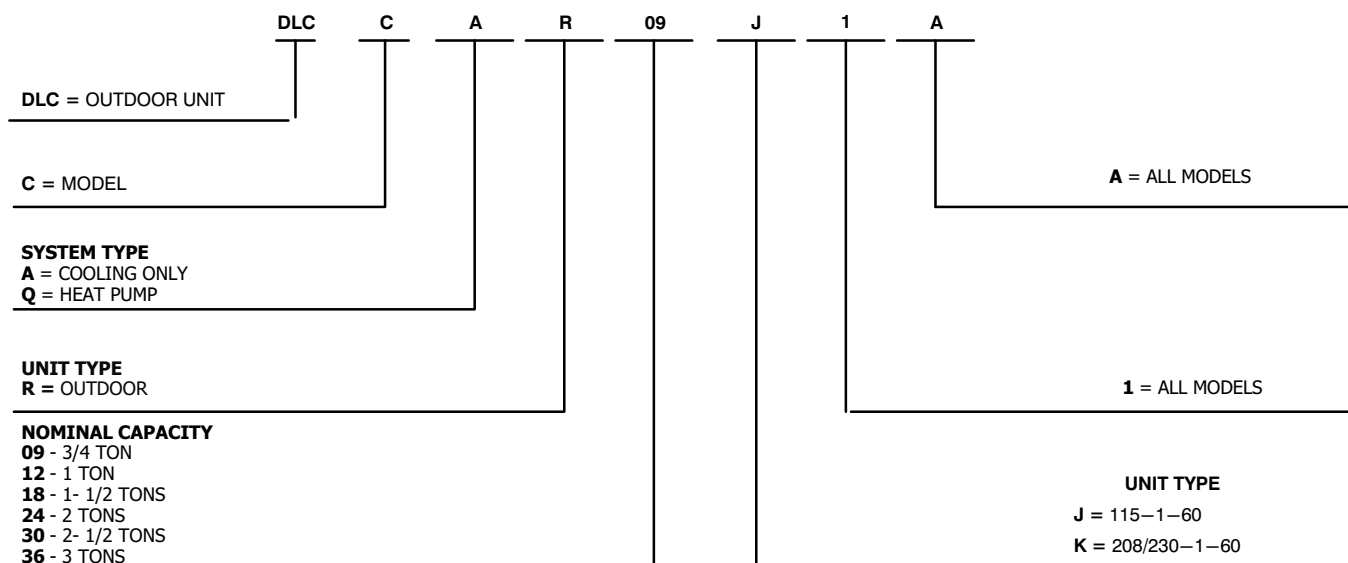
All systems are listed with AHRI (Air Conditioning, Heating & Refrigeration Institute), and ETL.

MODEL NUMBER NOMENCLATURE

INDOOR UNIT



OUTDOOR UNIT



Use of the AHRI Certified TM Mark indicates a manufacturer's participation in the program. For verification of certification for individual products, go to www.ahridirectory.org.



STANDARD FEATURES AND ACCESSORIES

Ease Of Installation		
Mounting Brackets		S
Low Voltage Controls		S
Comfort Features		
Microprocessor Controls		S
Automatic Vertical Air Swing		S
Air Direction Control		S
Auto Restart Function		S
Cold Blow Protection On Heat Pumps		S
Freeze Protection Mode On Heat Pumps		S
Turbo Mode		S
Silence Mode		S
Auto Changeover On Heat Pumps		S
46°F Heating Mode (Heating Setback)		S
I FEEL Function		S
Energy Saving Features		
Sleep Mode		S
Stop/Start Timer		S
Safety And Reliability		
3 Minute Time Delay For Compressor		S
Over Current Protection For Compressor		S
Indoor Coil Freeze Protection		S
Indoor Coil High Temp Protection in Heating Mode		S
Condenser High Temp Protection in Cooling Mode		S
Ease Of Service And Maintenance		
Cleanable Filters		S
Diagnostics		S
Liquid Line Pressure Taps		S
Application Flexibility		
Condensate Pumps (Field Supplied)		A
Crankcase Heater		S
Base pan Heater (Heat Pump Models)		S

Legend

S Standard
A Accessory

ACCESSORIES		
Ordering No.	Description	For Models
KSACN0201AAA	Wired Remote Control	All Systems

INDOOR UNITS

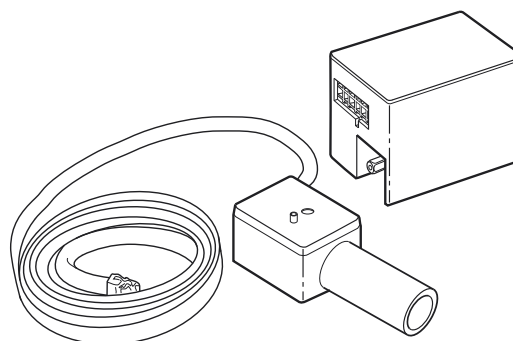


Fig. 1 — Condensate Pump Accessory

On high wall fan coils, the condensate pump has a lift capability of 12 ft. (3.6 m) on the discharge side with the pump mounted in the fan coil or 6 ft. (1.8 m) on the suction side if the pump is remote mounted. The pump is recommended when adequate drain line pitch cannot be provided, or when the condensate must move up to exit.

OUTDOOR UNITS

Crankcase Heater

Standard on all unit sizes. Heater clamps around compressor oil stump.

FACTORY INSTALLED BASEPAN HEATER (Heat Pump Models)

DIMENSIONS – INDOOR

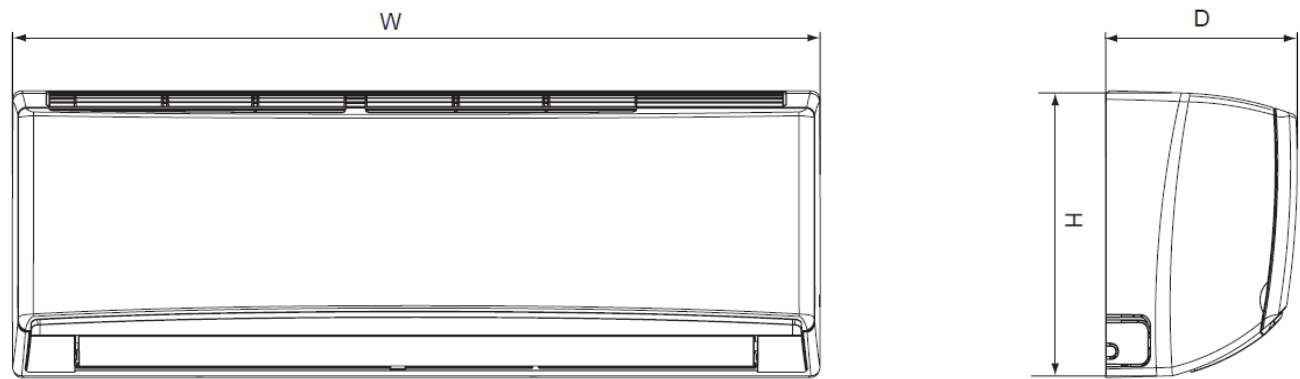


Fig. 2 – Indoor Unit Dimensions

SYSTEM SIZE		9K	12K	9K	12K	18K	24K	30K	36K
Voltage		115/1/60	115/1/60	208/230–1–60	208/230–1–60	208/230–1–60	208/230–1–60	208/230–1–60	208/230–1–60
Height (H)	in	11.4	11.4	11.4	11.4	11.8	12.8	12.8	12.8
Width (W)	in	33.3	33.3	33.3	33.3	38.2	42.4	53.1	53.1
Depth (D)	in	8.2	8.2	8.2	8.2	8.8	9.7	10	10
Weight—Net	lbs	23.2	23.2	22.1	22.1	27.6	34.2	41.9	41.9

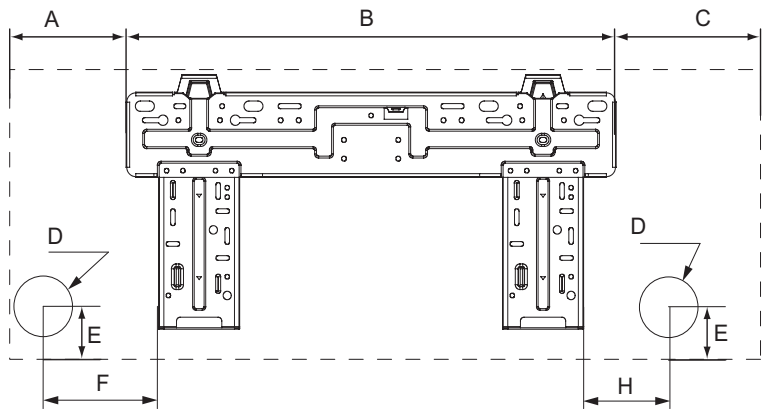


Fig. 3 – Indoor Mounting Plate

SYSTEMS SIZE		9K	12K	9K	12K	18K	24K	30K	36K
Voltage		115/1/60	115/1/60	208/230–1–60	208/230–1–60	208/230–1–60	208/230–1–60	208/230–1–60	208/230–1–60
A	in	4.7	4.7	4.7	4.7	4.0	8.1	13.8	13.8
B	in	21.3	21.3	21.3	21.3	27.0	27.0	29.4	29.4
C	in	7.3	7.3	7.3	7.3	7.2	7.3	10.0	10.0
D	in	2.2	2.2	2.2	2.2	2.2	2.8	2.8	2.8
E	in	1.4	1.4	1.4	1.4	1.5	1.7	1.6	1.6
F	in	5.0	5.0	5.0	5.0	7.5	6.0	11.6	11.6
H	in	3.3	3.3	3.3	3.3	5.5	3.1	3.5	3.5

DIMENSIONS – OUTDOOR

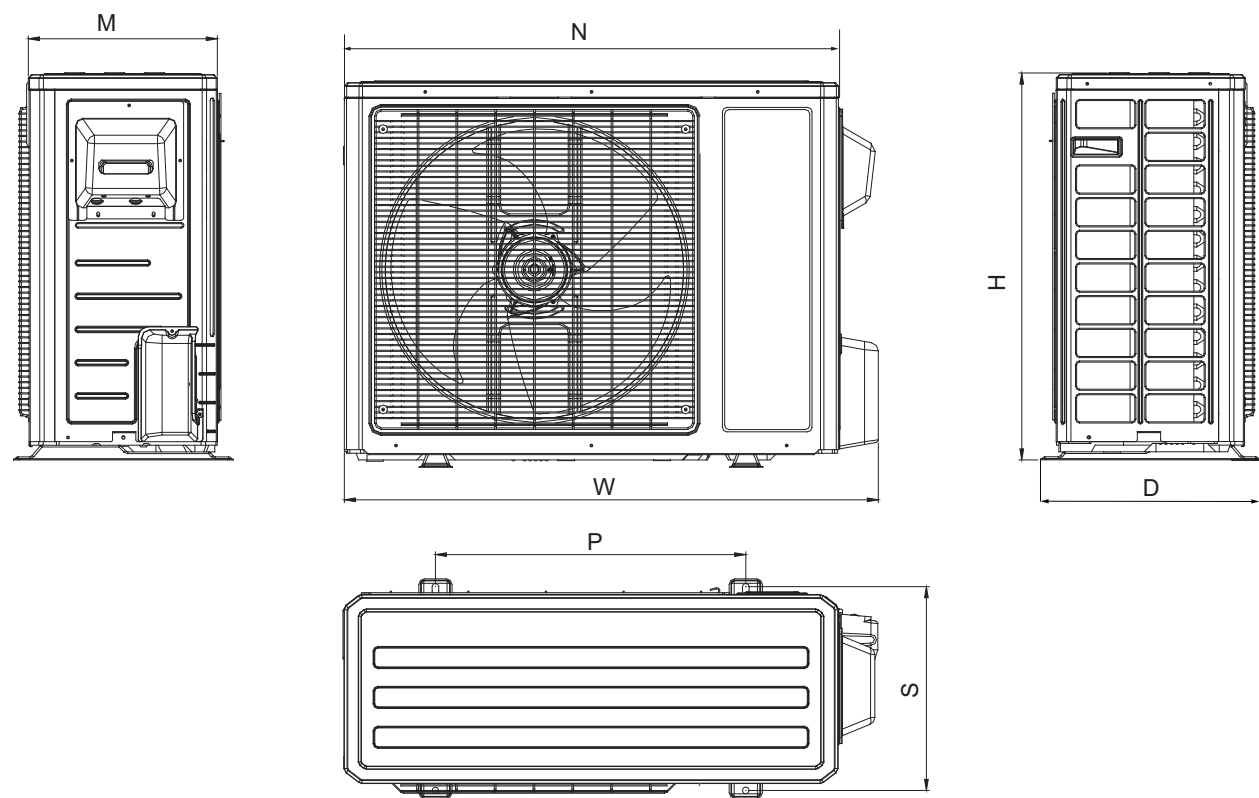


Fig. 4 – Outdoor Unit

SYSTEM SIZE		9K	12K	9K	12K	18K	24K	30K	36K
Voltage		115/1/60	115/1/60	208/230–1–60	208/230–1–60	208/230–1–60	208/230–1–60	208/230–1–60	208/230–1–60
Height (H)	in	21.3	23.3	21.3	23.3	27.6	31.1	31.1	31.1
Width (W)	in	33.4	33.4	33.4	33.4	37.6	38.6	38.6	38.6
Depth (D)	in	12.6	12.6	12.6	12.6	15.6	16.8	16.8	16.8
M	in	10.0	10.0	10.0	10.0	13.4	14.6	14.6	14.6
N	in	30.0	30.0	30.0	30.0	35.0	36.2	36.2	36.2
P	in	21.3	21.3	21.3	21.3	22.0	24.0	24.0	24.0
S	in	11.3	11.3	11.3	11.3	14.3	15.6	15.6	15.6
NET Weight Cooling Only	lbs	62.8	73.9	72.8	80.5	113.6	147.7	152.1	154.4
NET Weight Heat Pump	lbs	71.7	77.2	78.3	86	114.7	142.2	154.4	161

CLEARANCES – INDOOR

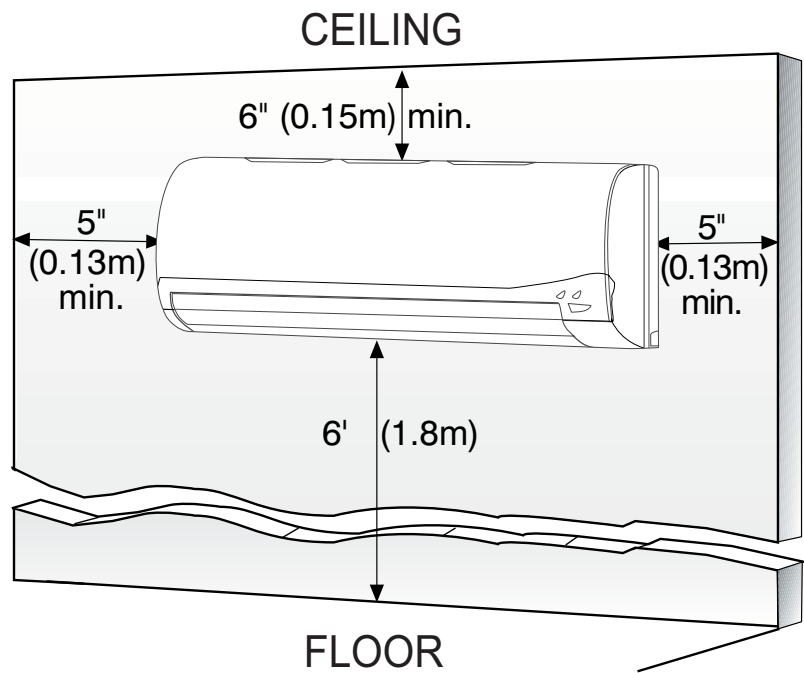


Fig. 5 – Indoor Unit Clearance

CLEARANCES – OUTDOOR

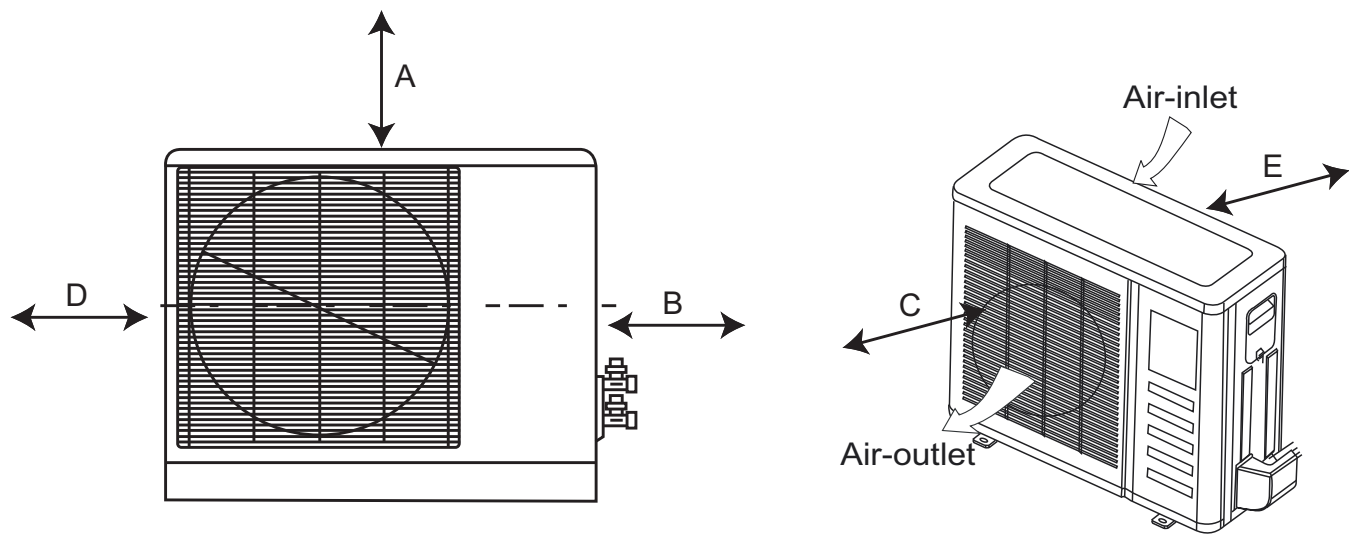


Fig. 6 – Clearances Outdoor

UNIT	MINIMUM VALUE in. (mm)
A	24 (609)
B	24 (609)
C	24 (609)
D	4 (101)
E	4 (101)

SPECIFICATIONS – COOLING ONLY MODELS

COOLING ONLY										
System	SIZE		9	12	9	12	18	24	30	36
	Outdoor Model		DLCCAR09J1A	DLCCAR12J1A	DLCCAR09K1A	DLCCAR12K1A	DLCCAR18K1A	DLCCAR24K1A	DLCCAR30K1A	DLCCAR36K1A
	Indoor Model		DLFCAB09J1A	DLFCAB12J1A	DLFCAB09K1A	DLFCAB12K1A	DLFCAB18K1A	DLFCAB24K1A	DLFCAB30K1A	DLFCAB36K1A
	Energy Star		YES	YES	YES	YES	YES	YES	NO	NO
Performance	Cooling Rated Capacity	Btu/h	9,000	12,000	9,000	12,000	18,000	22,000	28,000	33,600
	Cooling Cap. Range Min	Btu/h	2,764	3,514	3,100	3,100	6,800	6,800	9,485	7,404
	Cooling Cap. Range Max	Btu/h	10,918	14,569	9,600	13,000	20,000	29,700	30,026	35,997
	SEER		23.0	22.0	23.0	22.0	20.0	20.0	18.0	18.0
	EER		13.0	13.0	14.0	13.0	13.0	13.3	10.4	8.2
Controls	Wireless Remote Controller (°F/°C Convertible)		Standard							
	Wired Remote Controller (°F/°C Convertible)		Optional							
Operating Range	Cooling Outdoor DB Min – Max	°F	0~115	0~115	0~115	0~115	0~115	0~115	0~115	0~115
	Cooling Indoor DB Min–Max	°F	64~95	64~95	64~95	64~95	64~95	64~95	64~95	64~95
Piping	Total Piping Length	Ft.	49	66	49	66	82	82	98	98
	Piping Lift*	Ft.	33	33	33	33	33	33	33	33
	Pipe Connection Size–Liquid	In.	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
	Pipe Connection Size–Suction	In.	3/8	1/2	3/8	1/2	5/8	5/8	5/8	5/8
Refrigerant	Type		R–410A	R–410A	R–410A	R–410A	R–410A	R–410A	R–410A	R–410A
	Design Pressure	PSIG	550	550	550	550	550	550	550	550
	Metering Device		EXV	EXV	EXV	EXV	EXV	EXV	EXV	EXV
	Charge	Lb.	2.6	3.0	2.9	3.0	3.5	5.1	5.3	5.3
Outdoor Coil	Face Area	Sq. Ft.	5.0	5.0	5.0	5.0	8.4	7.2	7.7	7.7
	No. Rows		2	2	2	2	2	3	2	2
	Fins per inch		18	18	18	18	18	17	18	18
	Circuits		2	2	2	2	3	3	5	5
Indoor Coil	Face Area (sq. ft.)	Sq. Ft.	.1	2.1	2.1	2.1	2.3	3.1	4.4	4.4
	No. Rows		2	2	2	2	2	2	2	2
	Fins per inch		18	18	18	18	17	18	18	18
	Circuits		3	3	3	3	4	6	6	6
Compressor	Type		Rotary	Rotary	Swing	Swing	Rotary	Rotary	Rotary	Rotary
	Model		QXA–A091zE190	QXA–A091zE190	1GDY23AXD	1GDY23AXD	QXA–B141zF030A	QXAS–D23zX090	QXAS–D23zX090	TNB306FPGMC
	Oil Type		FVC68D or RB 68EP	FVC68D or RB 68EP	DAPHNE FVC50K	DAPHNE FVC50K	RB68EP	RB68EP	PVE	FV50S
	Oil Charge	Fl. Oz.	9.47	9.47	12.68	12.68	13.69	32.12	32.12	29.42
	Rated Current	RLA	8.63	12.5	6.6	6.6	12.08	14.67	13.45	17.5
Electrical	Voltage, Phase, Cycle	V/Ph/Hz	115–1–60	115–1–60	208/230–1–60	208/230–1–60	208/230–1–60	208/230–1–60	208/230–1–60	208/230–1–60
	Power Supply		Indoor unit powered from outdoor unit							
	MCA	A.	12	17	9	9	16	20	20	24
	MOCP – Fuse Rating	A.	20	25	15	15	25	30	30	40
Outdoor	Unit Width	In.	33.4	33.4	33.4	33.4	37.6	38.6	38.6	38.6
	Unit Height	In.	21.3	23.3	21.3	23.3	27.6	31.1	31.1	31.1
	Unit Depth	In.	12.6	12.6	12.6	12.6	15.6	16.8	16.8	16.8
	Net Weight	Lbs.	62.8	73.9	72.8	80.5	113.6	147.7	152.1	154.4
	Airflow	CFM	850	850	900	900	800	820	795	890
	Sound Pressure	dB(A)	53	53	53	54	55	59	62	65
Indoor	Unit Width	In.	33.3	33.3	33.3	33.3	38.2	42.4	53.1	53.1
	Unit Height	In.	11.4	11.4	11.4	11.4	11.8	12.8	12.8	12.8
	Unit Depth	In.	8.2	8.2	8.2	8.2	8.8	9.7	10.0	10.0
	Net Weight (lbs.)	Lbs.	23.2	23.2	22.1	22.1	27.6	34.2	41.9	41.9
	Number of Fan Speeds		4	4	4	4	4	4	4	4
	Airflow (lowest to highest)	CFM	171/241/288/377	171/241/288/400	171/241/288/377	171/241/288/400	335/412/488/559	530/589/647/706	412/530/618/706	412/530/647/736
	Sound Pressure (lowest to highest)	dB(A)	26/32/38/43	28/34/40/45	29/35/39/43	29/35/39/45	39/40/43/47	36/40/44/48	37/41/45/51	37/44/49/54
	Air throw Data	Ft.	30.5	30.5	30.5	30.5	32.5	36.3	36.3	36.3

* Condensing unit above or below indoor unit.

SPECIFICATIONS – HEAT PUMP MODELS

HEAT PUMP										
System	SIZE		9	12	9	12	18	24	30	36
	Outdoor Model		DLCCHR09J1A	DLCCHR12J1A	DLCCHR09K1A	DLCCHR12K1A	DLCCHR18K1A	DLCCHR24K1A	DLCCHR30K1A	DLCCHR36K1A
	Indoor Model		DLFCHB09J1A	DLFCHB12J1A	DLFCHB09K1A	DLFCHB12K1A	DLFCHB18K1A	DLFCHB24K1A	DLFCHB30K1A	DLFCHB36K1A
Performance	Energy Star		YES	YES	YES	YES	YES	YES	NO	NO
	Cooling Rated Capacity	Btu/h	9,000	12,000	9,000	12,000	18,000	22,000	28,000	33,600
	Cooling Cap. Range Min	Btu/h	2,764	3,514	3,100	3,100	6,800	6,824	9,485	7,404
	Cooling Cap. Range Max	Btu/h	10,918	14,569	9,600	13,000	20,000	27,296	30,026	35,997
	SEER		23.0	22.0	23.0	22.0	20.0	20.0	18.0	18.0
	EER		12.9	12.5	14.3	12.5	12.5	12.5	10.4	8.2
	Heating Rated Capacity	Btu/h	9,900	12,200	11,000	13,000	19,800	23,000	28,400	34,600
	Heating Cap. Range Min	Btu/h	2,081	2,764	1,911	2,400	7,340	6,824	9,997	14,979
	Heating Cap. Range Max	Btu/h	13,989	16,582	12,000	14,000	23,500	30,708	32,994	35,997
	HSPF		10.5	10.2	10.5	10.1	10.0	10.0	9.0	9.0
	Max Rated Heating Capacity @ 47F	Btu/h	12,011	12,349	12,246	13,130	22,701	22,486	30,754	33,698
	Max Rated Heating Capacity @ 17F	Btu/h	7,554	10,349	7,776	10,953	23,694	23,452	22,605	26,096
	Maximum Rated Heating Capacity @ 5F	Btu/h	8,817	8,612	9,172	8,800	19,081	18,862	19,794	22,353
	COP @ 47F	W/W	3.55	3.45	3.51	3.55	3.53	3.46	3.02	2.42
	COP @ 17F	W/W	2.80	2.15	2.76	2.39	1.91	1.88	2.08	1.91
	COP @ 5F	W/W	2.08	1.86	1.97	2.02	1.70	1.67	1.86	1.77
Controls	Wireless Remote Controller (°F/°C Convertible)		Standard							
	Wired Remote Controller (°F/°C Convertible)		Optional							
	Cooling Outdoor DB Min–Max	°F	0~ 115	0~ 115	0~ 115	0~ 115	0~ 115	0~ 115	0~ 115	0~ 115
Operating Range	Heating Outdoor DB Min–Max	°F	0~ 75	0~ 75	0~ 75	0~ 75	0~ 75	0~ 75	0~ 75	0~ 75
	Cooling Indoor DB Min–Max	°F	64~ 95	64~ 95	64~ 95	64~ 95	64~ 95	64~ 95	64~ 95	64~ 95
	Heating Indoor DB Min –Max	°F	32~ 86	32~ 86	32~ 86	32~ 86	32~ 86	32~ 86	32~ 86	32~ 86
Piping	Total Piping Length	Ft.	49	66	49	66	82	82	98	98
	Piping Lift*	Ft.	33	33	33	33	33	33	33	33
	Pipe Connection Size: Liquid	In.	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
	Pipe Connection Size: Suction	In.	3/8	1/2	3/8	1/2	5/8	5/8	5/8	5/8
Refrigerant	Type		R–410A	R–410A	R–410A	R–410A	R–410A	R–410A	R–410A	R–410A
	Design Pressure	PSIG	550	550	550	550	550	550	550	550
	Metering Device		EXV	EXV	EXV	EXV	EXV	EXV	EXV	EXV
	Charge	Lb.	2.6	2.9	2.9	2.9	3.7	4.9	5.3	5.7
Outdoor Coil	Face Area	Sq. Ft.	5.0	5.0	5.0	5.0	8.4	7.2	7.7	7.7
	No. Rows		2	2	2	2	3	2	2	2
	Fins per inch		18	18	18	18	18	18	18	18
	Circuits		2	2	2	2	3	2	5	5
Indoor Coil	Face Area	Sq. Ft.	.1	2.1	2.1	2.1	2.3	3.1	4.4	4.4
	No. Rows		2	2	2	2	2	2	2	2
	Fins per inch		18	18	18	18	18	17	18	18
	Circuits		3	3	3	3	4	6	6	6
Compressor	Type		Rotary	Rotary	Swing	Swing	Rotary	Rotary	Rotary	Rotary
	Model		QXA–A091zE190	QXA–A091zE190	1GDY23AXD	1GDY23AXD	QXA–B141zF030A	QXAS–D23zX090	QXAS–D23zX090	TNB306FPGMC
	Oil Type		FVC68D or RB 68EP	FVC68D or RB 68EP	DAPHNE FVC50K	DAPHNE FVC50K	RB68EP	RB68EP	PVE	FV50S
	Oil Charge	Fl. Oz.	9.47	9.47	12.68	12.68	13.69	32.12	32.12	29.42
	Rated Current	RLA	8.63	12.5	6.6	6.6	12.08	14.67	13.45	17.5
Electrical	Voltage, Phase, Cycle	V/Ph/Hz	115–1–60	115–1–60	208/230–1–60	208/230–1–60	208/230–1–60	208/230–1–60	208/230–1–600	208/230–1–60
	Power Supply		Indoor unit powered from outdoor unit							
	MCA	A.	12	17	9	9	16	20	20	24
	MOCP–Fuse Rating	A.	20	25	15	15	25	30	30	40
Outdoor	Unit Width	In.	33.4	33.4	33.4	33.4	37.6	38.6	38.6	38.6
	Unit Height	In.	21.3	23.3	21.3	23.3	27.6	31.1	31.1	31.1
	Unit Depth	In.	12.6	12.6	12.6	12.6	15.6	16.8	16.8	16.8
	Net Weight	Lbs.	71.7	77.2	78.3	86.0	114.7	142.2	154.4	161.0
	Airflow	CFM	850	850	900	900	800	820	795	890
	Sound Pressure	dB(A)	53	53	53	54	55	59	62	65
Indoor	Unit Width	In.	33.3	33.3	33.3	33.3	38.2	42.4	53.1	53.1
	Unit Height	In.	11.4	11.4	11.4	11.4	11.8	12.8	12.8	12.8
	Unit Depth	In.	8.2	8.2	8.2	8.2	8.8	9.7	10.0	10.0
	Net Weight	Lbs.	23.2	23.2	22.1	22.1	27.6	34.2	41.9	41.9
	Number of Fan Speeds		4	4	4	4	4	4	4	4
	Airflow (lowest to highest)	CFM	171/241/288/377	171/241/288/400	171/241/288/377	171/241/288/400	335/412/488/559	530/589/647/706	412/530/618/706	412/530/647/736
	Sound Pressure (lowest to highest)	dB(A)	26/32/38/43	28/34/40/45	29/35/39/43	29/35/39/45	39/40/43/47	36/40/44/48	37/41/45/51	37/44/49/54
	Air throw Data	Ft.	30.5	30.5	30.5	30.5	32.5	36.3	36.3	36.3

* Condensing unit above or below indoor unit

COOLING PERFORMANCE DATA DLFCAB / DLCCAR (COOLING ONLY)

MODEL	INDOOR CONDITIONS			OUTDOOR CONDITIONS (DB)													
	DB	WB		5F (-15C)	14F (-10C)	23F (-5C)	32F (0C)	41F (5C)	50F (10C)	59F (15C)	68F (20C)	77F (25C)	86F (30C)	95F (35C)	104F (40C)	113F (45C)	122F (50C)
09 (115V)	65F(18C)	55F(13C)	TC	5.25	5.29	5.86	7.11	8.11	8.00	7.80	7.59	7.38	7.16	6.97	6.78	6.41	6.22
			SC	4.11	4.15	4.59	5.57	6.36	6.28	6.11	5.95	5.79	5.61	5.47	5.32	5.03	4.88
			Input	0.30	0.30	0.34	0.50	0.52	0.54	0.58	0.60	0.62	0.63	0.64	0.65	0.65	0.66
	68F(20C)	57F(14C)	TC	5.75	5.90	6.30	7.64	8.65	8.55	8.34	8.13	7.92	7.69	7.51	7.32	6.94	6.76
			SC	4.51	4.62	4.94	5.99	6.78	6.70	6.54	6.37	6.21	6.03	5.89	5.74	5.45	5.30
			Input	0.31	0.31	0.35	0.52	0.53	0.56	0.60	0.62	0.64	0.65	0.66	0.67	0.67	0.68
	73F(23C)	61F(16C)	TC	6.07	6.23	6.74	8.17	9.19	9.09	8.88	8.67	8.46	8.23	8.04	7.85	7.48	7.21
			SC	4.76	4.88	5.28	6.41	7.21	7.13	6.96	6.80	6.63	6.45	6.31	6.16	5.87	5.65
			Input	0.32	0.32	0.36	0.53	0.55	0.57	0.61	0.64	0.66	0.67	0.68	0.69	0.70	0.70
	79F(26C)	64F(18C)	TC	6.48	6.65	7.17	8.70	9.55	9.46	9.28	9.10	8.92	8.76	8.58	8.39	8.02	7.75
			SC	5.09	5.22	5.63	6.82	7.49	7.42	7.28	7.14	7.00	6.88	6.73	6.58	6.29	6.08
			Input	0.33	0.32	0.37	0.55	0.57	0.59	0.63	0.66	0.68	0.69	0.70	0.71	0.72	0.72
	80F(27C)	67F(19C)	TC	6.85	7.11	7.72	8.95	9.82	9.73	9.64	9.46	9.28	9.01	8.89	8.78	8.40	8.11
			SC	5.38	5.58	6.05	7.02	7.70	7.63	7.56	7.42	7.28	7.07	6.98	6.88	6.59	6.36
			Input	0.34	0.34	0.33	0.39	0.57	0.58	0.61	0.65	0.68	0.70	0.71	0.72	0.73	0.74
	82F(28C)	68F(20C)	TC	6.91	7.18	7.79	9.03	9.91	9.82	9.73	9.54	9.36	9.09	8.97	8.85	8.48	8.18
			SC	5.42	5.63	6.11	7.08	7.77	7.70	7.63	7.49	7.34	7.13	7.04	6.95	6.65	6.42
			Input	0.34	0.34	0.34	0.39	0.57	0.59	0.61	0.66	0.68	0.71	0.72	0.73	0.74	0.74
	86F(30C)	72F(22C)	TC	7.13	7.41	8.05	9.77	10.54	10.41	10.27	10.14	10.00	9.84	9.65	9.46	9.09	8.78
			SC	5.59	5.81	6.32	7.66	8.27	8.16	8.06	7.95	7.84	7.71	7.57	7.42	7.13	6.89
			Input	0.35	0.35	0.40	0.59	0.61	0.63	0.68	0.71	0.73	0.74	0.75	0.76	0.77	0.77
	90F(32C)	75F(24C)	TC	7.72	7.92	8.49	10.30	11.26	11.17	10.99	10.83	10.61	10.37	10.18	10.00	9.62	9.28
			SC	6.06	6.21	6.66	8.08	8.83	8.76	8.62	8.49	8.32	8.13	7.99	7.84	7.55	7.28
			Input	0.36	0.36	0.41	0.61	0.63	0.65	0.70	0.73	0.75	0.76	0.77	0.78	0.79	0.80
12 (115V)	65F(18C)	55F(13C)	TC	6.99	7.05	7.80	9.46	10.80	10.66	10.38	10.11	9.83	9.53	9.28	9.03	8.53	8.28
			SC	5.48	5.53	6.12	7.42	8.47	8.36	8.14	7.93	7.71	7.48	7.28	7.08	6.69	6.49
			Input	0.41	0.41	0.41	0.47	0.69	0.71	0.74	0.79	0.83	0.85	0.86	0.88	0.90	0.91
	68F(20C)	57F(14C)	TC	7.66	7.85	8.39	10.17	11.52	11.38	11.10	10.82	10.55	10.24	10.00	9.75	9.25	9.00
			SC	6.00	6.16	6.58	7.98	9.04	8.93	8.71	8.49	8.27	8.03	7.84	7.65	7.25	7.06
			Input	0.42	0.42	0.42	0.48	0.71	0.73	0.76	0.82	0.85	0.88	0.89	0.91	0.92	0.93
	73F(23C)	61F(16C)	TC	8.09	8.29	8.97	10.88	12.24	12.11	11.82	11.54	11.26	10.96	10.71	10.46	9.96	9.60
			SC	6.34	6.50	7.04	8.53	9.60	9.50	9.27	9.06	8.83	8.59	8.40	8.20	7.81	7.53
			Input	0.43	0.43	0.43	0.50	0.73	0.75	0.79	0.84	0.88	0.90	0.92	0.93	0.95	0.96
	79F(26C)	64F(18C)	TC	8.64	8.86	9.56	11.59	12.72	12.60	12.36	12.12	11.88	11.67	11.42	11.17	10.68	10.32
			SC	6.77	6.95	7.50	9.09	9.98	9.88	9.70	9.51	9.32	9.16	8.96	8.76	8.37	8.10
			Input	0.44	0.45	0.44	0.51	0.76	0.78	0.81	0.87	0.90	0.93	0.95	0.96	0.98	0.99
	80F(27C)	67F(19C)	TC	9.13	9.48	10.28	11.92	13.08	12.96	12.84	12.60	12.36	12.00	11.84	11.69	11.19	10.80
			SC	7.16	7.43	8.06	9.34	10.26	10.17	10.07	9.88	9.70	9.41	9.29	9.17	8.78	8.47
			Input	0.46	0.46	0.46	0.53	0.78	0.80	0.84	0.89	0.93	0.96	0.98	0.99	1.01	1.02
	82F(28C)	68F(20C)	TC	9.51	9.87	10.71	12.41	13.63	13.50	13.38	13.13	12.88	12.50	12.34	12.18	11.66	11.25
			SC	7.46	7.74	8.40	9.73	10.69	10.59	10.49	10.29	10.10	9.80	9.68	9.55	9.14	8.82
			Input	0.47	0.47	0.46	0.53	0.79	0.81	0.84	0.90	0.94	0.97	0.98	1.00	1.02	1.03
	86F(30C)	72F(22C)	TC	9.50	9.86	10.72	13.01	14.04	13.86	13.68	13.50	13.32	13.10	12.85	12.60	12.10	11.70
			SC	7.45	7.74	8.41	10.20	11.01	10.87	10.73	10.59	10.45	10.28	10.08	9.88	9.49	9.18
			Input	0.48	0.48	0.48	0.55	0.81	0.83	0.87	0.93	0.97	1.00	1.01	1.03	1.05	1.06
	90F(32C)	75F(24C)	TC	10.29	10.55	11.31	13.72	15.00	14.88	14.64	14.42	14.13	13.81	13.56	13.32	12.82	12.36
			SC	8.07	8.27	8.87	10.76	11.77	11.67	11.48	11.31	11.09	10.83	10.64	10.44	10.05	9.70
			Input	0.49	0.49	0.49	0.57	0.83	0.86	0.90	0.96	1.00	1.03	1.05	1.06	1.08	1.09
09 (208-230V)	65F(18C)	55F(13C)	TC	5.25	5.29	5.86	7.11	8.11	8.00	7.80	7.59	7.38	7.16	6.97	6.78	6.41	6.22
			SC	4.11	4.15	4.59	5.57	6.36	6.28	6.11	5.95	5.79	5.61	5.47	5.32	5.03	4.88
			Input	0.27	0.27	0.27	0.31	0.45	0.46	0.49	0.52	0.54	0.56	0.57	0.58	0.58	0.59
	68F(20C)	57F(14C)	TC	5.75	5.90	6.30	7.64	8.65	8.55	8.34	8.13	7.92	7.69	7.51	7.32	6.94	6.76
			SC	4.51	4.62	4.94	5.99	6.78	6.70	6.54	6.37	6.21	6.03	5.89	5.74	5.45	5.30
			Input	0.28	0.28	0.28	0.32	0.47	0.48	0.50	0.54	0.56	0.58	0.58	0.59	0.60	0.61
	73F(23C)	61F(16C)	TC	6.07	6.23	6.74	8.17	9.19	9.09	8.88	8.67	8.46	8.23	8.04	7.85	7.48	7.21
			SC	4.76	4.88	5.28	6.41	7.21	7.13	6.96	6.80	6.63	6.45	6.31	6.16	5.87	5.65
			Input	0.28	0.28	0.28	0.33	0.48	0.49	0.52	0.55	0.58	0.59	0.60	0.61	0.62	0.63
	79F(26C)	64F(18C)	TC	6.48	6.65	7.17	8.70	9.55	9.46	9.28	9.10	8.92	8.76	8.58	8.39	8.02	7.75
			SC	5.09	5.22	5.63	6.82	7.49	7.42	7.28	7.14	7.00	6.88	6.73	6.58	6.29	6.08
			Input	0.29	0.29	0.29	0.34	0.50	0.51	0.53	0.57	0.59	0.61	0.62	0.63	0.64	0.64
	80F(27C)	67F(19C)	TC	6.85	7.11	7.72	8.95	9.82	9.73	9.64	9.46	9.28	9.01	8.89	8.78	8.40	8.11
			SC	5.38	5.58	6.05	7.02	7.70	7.63	7.56	7.42	7.28	7.07	6.98	6.88	6.59	6.36
			Input	0.30	0.30	0.30	0.35	0.51	0.53	0.55	0.59	0.61	0.63	0.64	0.65	0.66	0.67
	82F(28C)	68F(20C)	TC	6.91	7.18	7.79	9.03	9.91	9.82	9.73	9.54	9.36	9.09	8.97	8.85	8.48	8.18
			SC	5.42	5.63	6.11	7.08	7.77	7.70	7.63	7.49	7.34	7.13	7.04	6.95	6.65	6.42
			Input	0.30	0.30	0.30	0.35	0.51	0.53	0.55	0.59	0.62	0.64	0.65	0.66	0.66	0.67
	86F(30C)	72F(22C)	TC	7.13	7.41	8.05	9.77	10.54	10.41	10.27	10.14	10.00	9.84	9.65	9.46	9.09	8.78
			SC	5.59	5.81	6.32	7.66	8.27	8.16	8.06	7.95	7.84	7.71	7.57	7.42	7.13	6.89
			Input	0.32	0.32	0.31	0.36	0.53	0.55	0.57	0.61	0.64	0.66	0.67	0.68	0.68	0.69
	90F(32C)	75F(24C)	TC	7.72	7.92	8.49	10.30	11.26	11.17	10.99	10.83	10.61	10.37	10.18	10.00	9.62	9.28
			SC	6.06	6.21	6.66	8.08	8.83	8.76	8.62	8.49	8.32	8.13	7.99	7.84	7.55	7.28
			Input	0.32	0.32	0.32	0.37	0.55	0.56	0.59	0.63	0.66	0.67	0.69	0.70	0.71	0.71

COOLING PERFORMANCE DATA DLFCAB / DLCCAR (COOLING ONLY)(CONT)

MODEL	INDOOR CONDITIONS			OUTDOOR CONDITIONS (DB)													
	DB	WB		5F (-15C)	14F (-10C)	23F (-5C)	32F (0C)	41F (5C)	50F (10C)	59F (15C)	68F (20C)	77F (25C)	86F (30C)	95F (35C)	104F (40C)	113F (45C)	122F (50C)
12 (208-230V)	65F(18C)	55F(13C)	TC	6.99	7.05	7.80	9.46	10.80	10.66	10.38	10.11	9.83	9.53	9.28	9.03	8.53	8.28
			SC	5.48	5.53	6.12	7.42	8.47	8.36	8.14	7.93	7.71	7.48	7.28	7.08	6.69	6.49
			Input	0.41	0.41	0.41	0.47	0.69	0.71	0.74	0.79	0.83	0.85	0.86	0.88	0.90	0.91
	68F(20C)	57F(14C)	TC	7.66	7.85	8.39	10.17	11.52	11.38	11.10	10.82	10.55	10.24	10.00	9.75	9.25	9.00
			SC	6.00	6.16	6.58	7.98	9.04	8.93	8.71	8.49	8.27	8.03	7.84	7.65	7.25	7.06
			Input	0.42	0.42	0.42	0.48	0.71	0.73	0.76	0.82	0.85	0.88	0.89	0.91	0.92	0.93
	73F(23C)	61F(16C)	TC	8.09	8.29	8.97	10.88	12.24	12.11	11.82	11.54	11.26	10.96	10.71	10.46	9.96	9.60
			SC	6.34	6.50	7.04	8.53	9.60	9.50	9.27	9.06	8.83	8.59	8.40	8.20	7.81	7.53
			Input	0.43	0.43	0.43	0.50	0.73	0.75	0.79	0.84	0.88	0.90	0.92	0.93	0.95	0.96
	79F(26C)	64F(18C)	TC	8.64	8.86	9.56	11.59	12.72	12.60	12.36	12.12	11.88	11.67	11.42	11.17	10.68	10.32
			SC	6.77	6.95	7.50	9.09	9.98	9.88	9.70	9.51	9.32	9.16	8.96	8.76	8.37	8.10
			Input	0.44	0.45	0.44	0.51	0.76	0.78	0.81	0.87	0.90	0.93	0.95	0.96	0.98	0.99
	80F(27C)	67F(19C)	TC	9.13	9.48	10.28	11.92	13.08	12.96	12.84	12.60	12.36	12.00	11.84	11.69	11.19	10.80
			SC	7.16	7.43	8.06	9.34	10.26	10.17	10.07	9.88	9.70	9.41	9.29	9.17	8.78	8.47
			Input	0.46	0.46	0.46	0.53	0.78	0.80	0.84	0.89	0.93	0.96	0.98	0.99	1.01	1.02
	82F(28C)	68F(20C)	TC	9.51	9.87	10.71	12.41	13.63	13.50	13.38	13.13	12.88	12.50	12.34	12.18	11.66	11.25
			SC	7.46	7.74	8.40	9.73	10.69	10.59	10.49	10.29	10.10	9.80	9.68	9.55	9.14	8.82
			Input	0.47	0.47	0.46	0.53	0.79	0.81	0.84	0.90	0.94	0.97	0.98	1.00	1.02	1.03
	86F(30C)	72F(22C)	TC	9.50	9.86	10.72	13.01	14.04	13.86	13.68	13.50	13.32	13.10	12.85	12.60	12.10	11.70
			SC	7.45	7.74	8.41	10.20	11.01	10.87	10.73	10.59	10.45	10.28	10.08	9.88	9.49	9.18
			Input	0.48	0.48	0.48	0.55	0.81	0.83	0.87	0.93	0.97	1.00	1.01	1.03	1.05	1.06
	90F(32C)	75F(24C)	TC	10.29	10.55	11.31	13.72	15.00	14.88	14.64	14.42	14.13	13.81	13.56	13.32	12.82	12.36
			SC	8.07	8.27	8.87	10.76	11.77	11.67	11.48	11.31	11.09	10.83	10.64	10.44	10.05	9.70
			Input	0.49	0.49	0.49	0.57	0.83	0.86	0.90	0.96	1.00	1.03	1.05	1.06	1.08	1.09
18 (208-230V)	65F(18C)	55F(13C)	TC	10.48	10.57	11.71	14.20	16.20	15.99	15.58	15.16	14.74	14.30	13.92	13.55	12.80	12.42
			SC	8.22	8.29	9.18	11.13	12.71	12.54	12.22	11.89	11.57	11.21	10.92	10.62	10.04	9.74
			Input	1.02	1.03	1.07	1.08	1.10	1.13	1.18	1.20	1.25	1.28	1.31	1.33	1.34	1.35
	68F(20C)	57F(14C)	TC	11.48	11.78	12.58	15.26	17.28	17.08	16.66	16.24	15.82	15.37	14.99	14.62	13.87	13.50
			SC	9.01	9.24	9.87	11.97	13.55	13.39	13.06	12.73	12.41	12.05	11.76	11.47	10.88	10.59
			Input	1.05	1.07	1.08	1.11	1.13	1.15	1.20	1.23	1.27	1.30	1.32	1.34	1.37	1.38
	73F(23C)	61F(16C)	TC	12.13	12.44	13.46	16.32	18.36	18.16	17.74	17.32	16.90	16.44	16.06	15.69	14.94	14.40
			SC	9.51	9.75	10.56	12.80	14.40	14.25	13.91	13.58	13.25	12.89	12.60	12.31	11.72	11.29
			Input	1.08	1.09	1.12	1.15	1.18	1.22	1.29	1.32	1.39	1.43	1.44	1.45	1.47	1.48
	79F(26C)	64F(18C)	TC	12.95	13.28	14.33	17.38	19.08	18.90	18.54	18.18	17.82	17.51	17.14	16.76	16.01	15.48
			SC	10.16	10.42	11.24	13.63	14.96	14.82	14.54	14.26	13.98	13.74	13.44	13.15	12.56	12.14
			Input	1.10	1.11	1.15	1.19	1.20	1.25	1.32	1.37	1.43	1.48	1.49	1.51	1.52	1.52
	80F(27C)	67F(19C)	TC	13.69	14.21	15.42	17.87	19.62	19.44	19.26	18.90	18.54	18.00	17.77	17.53	16.79	16.20
			SC	10.74	11.15	12.09	14.01	15.39	15.25	15.11	14.82	14.54	14.12	13.94	13.75	13.16	12.71
			Input	1.11	1.12	1.17	1.19	1.21	1.26	1.33	1.38	1.44	1.48	1.50	1.52	1.53	1.53
	82F(28C)	68F(20C)	TC	14.07	14.61	15.85	18.37	20.17	19.98	19.80	19.43	19.06	18.50	18.26	18.02	17.25	16.65
			SC	11.04	11.46	12.43	14.40	15.82	15.67	15.53	15.23	14.95	14.51	14.32	14.14	13.53	13.06
			Input	1.12	1.14	1.18	1.21	1.24	1.28	1.35	1.41	1.46	1.50	1.53	1.54	1.54	1.54
	86F(30C)	72F(22C)	TC	14.24	14.80	16.09	19.51	21.06	20.79	20.52	20.25	19.98	19.65	19.28	18.90	18.16	17.55
			SC	11.17	11.61	12.62	15.30	16.52	16.31	16.09	15.88	15.67	15.41	15.12	14.82	14.24	13.77
			Input	1.14	1.15	1.20	1.22	1.24	1.29	1.37	1.42	1.48	1.52	1.53	1.55	1.55	1.56
	90F(32C)	75F(24C)	TC	15.43	15.82	16.96	20.57	22.50	22.32	21.96	21.63	21.20	20.72	20.35	19.97	19.22	18.54
			SC	12.10	12.41	13.30	16.14	17.65	17.50	17.22	16.96	16.63	16.25	15.96	15.66	15.08	14.54
			Input	1.15	1.16	1.22	1.23	1.26	1.32	1.37	1.43	1.49	1.53	1.55	1.56	1.56	1.57
24 (208-230V)	65F(18C)	55F(13C)	TC	10.87	13.04	14.56	15.07	15.60	16.14	17.66	20.15	19.89	18.86	17.79	16.85	15.92	15.45
			SC	8.52	10.22	11.42	11.81	12.23	12.66	13.85	15.81	15.60	14.79	13.95	13.21	12.49	12.12
			Input	0.81	0.75	0.75	0.77	0.80	0.83	0.86	1.26	1.30	1.45	1.56	1.61	1.64	1.66
	68F(20C)	57F(14C)	TC	11.90	14.28	15.65	16.20	16.77	17.35	18.98	21.49	21.24	20.20	19.11	18.19	17.26	16.79
			SC	9.34	11.20	12.28	12.71	13.15	13.61	14.89	16.86	16.66	15.84	14.99	14.27	13.53	13.17
			Input	0.83	0.77	0.77	0.79	0.82	0.85	0.89	1.30	1.34	1.50	1.61	1.66	1.70	1.71
	73F(23C)	61F(16C)	TC	12.58	15.09	16.74	17.33	17.93	18.56	20.30	22.84	22.59	21.54	20.45	19.52	18.58	17.91
			SC	9.86	11.83	13.13	13.59	14.07	14.56	15.92	17.91	17.72	16.90	16.03	15.31	14.58	14.05
			Input	0.86	0.79	0.79	0.81	0.83	0.87	0.91	1.34	1.38	1.54	1.65	1.71	1.75	1.77
	79F(26C)	64F(18C)	TC	13.43	16.11	17.83	18.45	19.10	19.77	21.62	23.73	23.51	22.61	21.78	20.85	19.92	19.26
			SC	10.53	12.64	13.99	14.47	14.98	15.51	16.96	18.61	18.44	17.74	17.08	16.35	15.62	15.10
			Input	0.89	0.82	0.82	0.85	0.88	0.90	0.94	1.38	1.43	1.59	1.71	1.77	1.80	1.82
	80F(27C)	67F(19C)	TC	14.19	17.03	19.18	19.85	20.55	21.27	22.23	24.41	24.18	23.51	22.39	21.81	20.88	20.15
			SC	11.13	13.36	15.04	15.57	16.12	16.68	17.43	19.14	18.97	18.44	17.56	17.11	16.37	15.81
			Input	0.92	0.84	0.84	0.87	0.90	0.93	0.97	1.43	1.47	1.64	1.76	1.82	1.86	1.88
	82F(28C)	68F(20C)	TC	14.62	17.54	19.76	20.45	21.16	21.90	22.90	25.14	24.91	24.21	23.06	22.46	21.51	20.76
			SC	11.40	13.68	15.41	15.95	16.51	17.09	17.86	19.61	19.43	18.89	17.99	17.52	16.78	16.19
			Input	0.94	0.86	0.85	0.90	0.92	0.95	1.00	1.46	1.50	1.67	1.79	1.84	1.89	1.90
	86F(30C)	72F(22C)	TC	14.76	17.72	20.01	20.71	21.43	22.18	24.27	26.20	25.86	25.19	24.44	23.51	22.58	21.83
			SC	11.58	13.89	15.69	16.24	16.81	17.40	19.04	20.55	20.28	19.75	19.17	18.44	17.71	17.12
			Input	0.96	0.88	0.87	0.91	0.94	0.98	1.01	1.48	1.53	1.70	1.83	1.89	1.93	1.95
	90F(32C)	75F(24C)	TC	16.00	19.20	21.10	21.84	22.60	23.39	25.59	27.99	27.76	26.91	25.77	24.85	23.91	23.06
			SC	12.54	15.05	16.55	17.13	17.73	18.35	20.07	21.95	21.77	21.10	20.21	19.48	18.76	18.09
	Input	0.99	0.90	0.90	0.93	0.97	0.99	1.04	1.53	1.57	1.75	1.88	1.95	1.99	2.01		

COOLING PERFORMANCE DATA DLFCAB / DLCCAR (COOLING ONLY)(CONT)

MODEL	INDOOR CONDITIONS			OUTDOOR CONDITIONS (DB)													
	DB	WB		5F (-15C)	14F (-10C)	23F (-5C)	32F (0C)	41F (5C)	50F (10C)	59F (15C)	68F (20C)	77F (25C)	86F (30C)	95F (35C)	104F (40C)	113F (45C)	122F (50C)
30 (208-230V)	65F(18C)	55F(13C)	TC	13.91	16.69	18.64	19.39	20.16	20.97	22.61	25.80	25.46	24.15	22.77	21.58	20.38	19.19
			SC	11.90	13.09	14.61	15.20	15.81	16.44	17.73	20.24	19.98	18.93	17.86	16.92	15.99	15.05
			Input	1.24	1.14	1.14	1.19	1.23	1.27	1.31	1.94	1.99	2.22	2.39	2.47	2.52	2.55
	68F(20C)	57F(14C)	TC	16.63	18.29	20.04	20.84	21.67	22.54	24.30	27.52	27.19	25.86	24.47	23.29	22.09	20.85
			SC	13.04	14.34	15.72	16.35	17.00	17.68	19.06	21.58	21.33	20.28	19.19	18.26	17.32	16.35
			Input	1.28	1.18	1.18	1.21	1.26	1.31	1.36	2.00	2.05	2.30	2.47	2.55	2.60	2.63
	73F(23C)	61F(16C)	TC	17.56	19.32	21.43	22.29	23.18	24.11	25.99	29.24	28.92	27.58	26.18	24.99	23.79	22.24
			SC	13.77	15.15	16.81	17.48	18.18	18.91	20.38	22.93	22.69	21.63	20.53	19.60	18.66	17.44
			Input	1.32	1.22	1.22	1.26	1.30	1.35	1.40	2.06	2.12	2.37	2.54	2.63	2.68	2.71
	79F(26C)	64F(18C)	TC	19.62	21.59	24.31	25.28	26.29	27.35	28.18	30.93	30.65	29.80	28.38	27.64	26.47	24.77
			SC	15.39	16.93	19.07	19.83	20.62	21.45	22.10	24.26	24.04	23.37	22.26	21.68	20.75	19.43
			Input	1.36	1.25	1.25	1.30	1.35	1.40	1.44	2.12	2.19	2.44	2.62	2.71	2.76	2.79
	80F(27C)	67F(19C)	TC	19.82	21.80	24.56	25.54	26.56	27.62	28.46	31.24	30.96	30.10	28.67	27.92	26.73	25.02
			SC	15.55	17.10	19.26	20.03	20.83	21.66	22.32	24.51	24.28	23.61	22.48	21.90	20.96	19.63
			Input	1.41	1.30	1.29	1.33	1.38	1.44	1.49	2.19	2.25	2.51	2.70	2.79	2.85	2.88
	82F(28C)	68F(20C)	TC	20.12	22.13	25.05	26.05	27.09	28.18	29.03	31.87	31.58	30.70	29.24	28.48	27.27	25.53
			SC	15.78	17.36	19.55	20.33	21.14	21.99	22.65	24.87	24.65	23.96	22.82	22.23	21.28	19.92
			Input	1.43	1.32	1.31	1.35	1.40	1.46	1.51	2.21	2.27	2.53	2.72	2.81	2.87	2.90
	86F(30C)	72F(22C)	TC	20.62	22.68	25.62	26.64	27.71	28.82	31.07	33.54	33.11	32.25	31.29	30.10	28.91	27.11
			SC	16.17	17.79	20.09	20.90	21.73	22.60	24.37	26.31	25.97	25.29	24.54	23.61	22.68	21.26
			Input	1.47	1.35	1.34	1.39	1.43	1.49	1.55	2.28	2.34	2.61	2.81	2.90	2.96	2.99
	90F(32C)	75F(24C)	TC	22.34	24.58	27.01	28.09	29.22	30.38	32.76	35.83	35.54	34.45	32.99	31.81	30.61	28.64
			SC	17.52	19.27	21.19	22.03	22.91	23.83	25.70	28.11	27.87	27.01	25.88	24.94	24.01	22.47
			Input	1.51	1.39	1.38	1.43	1.48	1.52	1.59	2.34	2.41	2.69	2.89	2.99	3.05	3.08
36 (208-230V)	65F(18C)	55F(13C)	TC	17.85	18.99	21.21	22.27	23.38	24.55	25.72	29.35	28.97	27.47	25.90	24.54	23.18	22.05
			SC	13.99	14.88	16.62	17.46	18.33	19.24	20.17	23.02	22.72	21.53	20.31	19.24	18.19	17.30
			Input	1.89	1.74	1.74	1.79	1.86	1.93	2.00	2.94	3.02	3.38	3.64	3.74	3.83	3.87
	68F(20C)	57F(14C)	TC	19.56	20.80	22.79	23.93	25.13	26.38	27.64	31.30	30.93	29.41	27.84	26.49	25.13	23.97
			SC	15.34	16.32	17.88	18.77	19.71	20.70	21.68	24.55	24.26	23.06	21.83	20.77	19.71	18.79
			Input	1.94	1.79	1.79	1.86	1.93	2.00	2.06	3.03	3.12	3.49	3.74	3.87	3.95	3.99
	73F(23C)	61F(16C)	TC	20.66	21.98	24.38	25.60	26.88	28.22	29.56	33.26	32.90	31.37	29.78	28.42	27.06	25.56
			SC	16.20	17.23	19.12	20.08	21.08	22.14	23.19	26.08	25.81	24.61	23.35	22.29	21.23	20.05
			Input	2.00	1.85	1.85	1.91	1.98	2.05	2.12	3.13	3.21	3.59	3.85	3.99	4.07	4.11
	79F(26C)	64F(18C)	TC	23.08	24.56	27.65	29.04	30.49	32.01	32.05	35.19	34.86	33.89	32.28	31.44	30.11	28.47
			SC	18.10	19.26	21.69	22.77	23.91	25.11	25.13	27.60	27.35	26.58	25.32	24.66	23.61	22.33
			Input	2.07	1.90	1.90	1.97	2.05	2.12	2.19	3.23	3.32	3.70	3.98	4.11	4.20	4.24
	80F(27C)	67F(19C)	TC	23.31	24.80	27.93	29.33	30.80	32.34	32.38	35.54	35.22	34.24	32.61	31.76	30.41	28.76
			SC	18.29	19.45	21.91	23.00	24.15	25.36	25.39	27.88	27.62	26.85	25.57	24.91	23.85	22.56
			Input	2.15	1.97	1.95	2.02	2.10	2.27	2.26	3.32	3.42	3.81	4.10	4.24	4.33	4.37
	82F(28C)	68F(20C)	TC	23.66	25.18	28.35	29.77	31.26	32.82	32.86	36.07	35.74	34.75	33.10	32.24	30.87	29.19
			SC	18.56	19.75	22.24	23.35	24.52	25.74	25.77	28.29	28.04	27.25	25.96	25.29	24.20	22.90
			Input	2.17	1.99	1.98	2.04	2.11	2.30	2.28	3.35	3.45	3.84	4.13	4.27	4.37	4.40
	86F(30C)	72F(22C)	TC	24.25	25.80	29.14	30.60	32.13	33.73	35.35	38.15	37.66	36.68	35.60	34.24	32.89	31.16
			SC	19.02	20.24	22.86	24.00	25.20	26.46	27.72	29.92	29.54	28.77	27.92	26.85	25.79	24.44
			Input	2.24	2.05	2.04	2.12	2.20	2.27	2.35	3.46	3.55	3.96	4.26	4.40	4.50	4.54
	90F(32C)	75F(24C)	TC	26.28	27.96	30.73	32.26	33.88	35.57	37.27	40.76	40.43	39.18	37.53	36.18	34.82	32.91
			SC	20.60	21.92	24.10	25.30	26.57	27.90	29.23	31.97	31.71	30.73	29.44	28.37	27.31	25.82
			Input	2.30	2.10	2.09	2.18	2.27	2.35	2.42	3.55	3.66	4.09	4.39	4.54	4.63	4.67

LEGEND

DB— DRY BULB

WB — WET BULB

TC — TOTAL NET CAPACITY (1000 Btu/hour)

SC — SENSIBLE CAPACITY (1000 Btu/hour)

INPUT — TOTAL POWER (Kw)

COOLING PERFORMANCE DATA DLFCHB / DLCCHR (HEAT PUMP)

MODEL	INDOOR CONDITIONS			OUTDOOR CONDITIONS (DB)													
	DB	WB		5F (-15C)	14F (-10C)	23F (-5C)	32F (0C)	41F (5C)	50F (10C)	59F (15C)	68F (20C)	77F (25C)	86F (30C)	95F (35C)	104F (40C)	113F (45C)	122F (50C)
09 (115V)	65F(18C)	55F(13C)	TC	5.25	5.29	5.86	7.11	8.11	8.00	7.80	7.59	7.38	7.16	6.97	6.78	6.41	6.22
			SC	4.11	4.15	4.59	5.57	6.36	6.28	6.11	5.95	5.79	5.61	5.47	5.32	5.03	4.88
			Input	0.30	0.30	0.34	0.50	0.52	0.54	0.58	0.60	0.62	0.63	0.64	0.65	0.65	0.66
	68F(20C)	57F(14C)	TC	5.75	5.90	6.30	7.64	8.65	8.55	8.34	8.13	7.92	7.69	7.51	7.32	6.94	6.76
			SC	4.51	4.62	4.94	5.99	6.78	6.70	6.54	6.37	6.21	6.03	5.89	5.74	5.45	5.30
			Input	0.31	0.31	0.35	0.52	0.53	0.56	0.60	0.62	0.64	0.65	0.66	0.67	0.67	0.68
	73F(23C)	61F(16C)	TC	6.07	6.23	6.74	8.17	9.19	9.09	8.88	8.67	8.46	8.23	8.04	7.85	7.48	7.21
			SC	4.76	4.88	5.28	6.41	7.21	7.13	6.96	6.80	6.63	6.45	6.31	6.16	5.87	5.65
			Input	0.32	0.32	0.36	0.53	0.55	0.57	0.61	0.64	0.66	0.67	0.68	0.69	0.70	0.70
	79F(26C)	64F(18C)	TC	6.48	6.65	7.17	8.70	9.55	9.46	9.28	9.10	8.92	8.76	8.58	8.39	8.02	7.75
			SC	5.09	5.22	5.63	6.82	7.49	7.42	7.28	7.14	7.00	6.88	6.73	6.58	6.29	6.08
			Input	0.33	0.32	0.37	0.55	0.57	0.59	0.63	0.66	0.68	0.69	0.70	0.71	0.72	0.72
	80F(27C)	67F(19C)	TC	6.85	7.11	7.72	8.95	9.82	9.73	9.64	9.46	9.28	9.01	8.89	8.78	8.40	8.11
			SC	5.38	5.58	6.05	7.02	7.70	7.63	7.56	7.42	7.28	7.07	6.98	6.88	6.59	6.36
			Input	0.34	0.34	0.33	0.39	0.57	0.58	0.61	0.65	0.68	0.70	0.71	0.72	0.73	0.74
	82F(28C)	68F(20C)	TC	6.91	7.18	7.79	9.03	9.91	9.82	9.73	9.54	9.36	9.09	8.97	8.85	8.48	8.18
			SC	5.42	5.63	6.11	7.08	7.77	7.70	7.63	7.49	7.34	7.13	7.04	6.95	6.65	6.42
			Input	0.34	0.34	0.34	0.39	0.57	0.59	0.61	0.66	0.68	0.71	0.72	0.73	0.74	0.74
	86F(30C)	72F(22C)	TC	7.13	7.41	8.05	9.77	10.54	10.41	10.27	10.14	10.00	9.84	9.65	9.46	9.09	8.78
			SC	5.59	5.81	6.32	7.66	8.27	8.16	8.06	7.95	7.84	7.71	7.57	7.42	7.13	6.89
			Input	0.35	0.35	0.40	0.59	0.61	0.63	0.68	0.71	0.73	0.74	0.75	0.76	0.77	0.77
	90F(32C)	75F(24C)	TC	7.72	7.92	8.49	10.30	11.26	11.17	10.99	10.83	10.61	10.37	10.18	10.00	9.62	9.28
			SC	6.06	6.21	6.66	8.08	8.83	8.76	8.62	8.49	8.32	8.13	7.99	7.84	7.55	7.28
			Input	0.36	0.36	0.41	0.61	0.63	0.65	0.70	0.73	0.75	0.76	0.77	0.78	0.79	0.80
12 (115V)	65F(18C)	55F(13C)	TC	6.99	7.05	7.80	9.46	10.80	10.66	10.38	10.11	9.83	9.53	9.28	9.03	8.53	8.28
			SC	5.48	5.53	6.12	7.42	8.47	8.36	8.14	7.93	7.71	7.48	7.28	7.08	6.69	6.49
			Input	0.41	0.41	0.41	0.47	0.69	0.71	0.74	0.79	0.83	0.85	0.86	0.88	0.90	0.91
	68F(20C)	57F(14C)	TC	7.66	7.85	8.39	10.17	11.52	11.38	11.10	10.82	10.55	10.24	10.00	9.75	9.25	9.00
			SC	6.00	6.16	6.58	7.98	9.04	8.93	8.71	8.49	8.27	8.03	7.84	7.65	7.25	7.06
			Input	0.42	0.42	0.42	0.48	0.71	0.73	0.76	0.82	0.85	0.88	0.89	0.91	0.92	0.93
	73F(23C)	61F(16C)	TC	8.09	8.29	8.97	10.88	12.24	12.11	11.82	11.54	11.26	10.96	10.71	10.46	9.96	9.60
			SC	6.34	6.50	7.04	8.53	9.60	9.50	9.27	9.06	8.83	8.59	8.40	8.20	7.81	7.53
			Input	0.43	0.43	0.43	0.50	0.73	0.75	0.79	0.84	0.88	0.90	0.92	0.93	0.95	0.96
	79F(26C)	64F(18C)	TC	8.64	8.86	9.56	11.59	12.72	12.60	12.36	12.12	11.88	11.67	11.42	11.17	10.68	10.32
			SC	6.77	6.95	7.50	9.09	9.98	9.88	9.70	9.51	9.32	9.16	8.96	8.76	8.37	8.10
			Input	0.44	0.45	0.44	0.51	0.76	0.78	0.81	0.87	0.90	0.93	0.95	0.96	0.98	0.99
	80F(27C)	67F(19C)	TC	9.13	9.48	10.28	11.92	13.08	12.96	12.84	12.60	12.36	12.00	11.84	11.69	11.19	10.80
			SC	7.16	7.43	8.06	9.34	10.26	10.17	10.07	9.88	9.70	9.41	9.29	9.17	8.78	8.47
			Input	0.46	0.46	0.46	0.53	0.78	0.80	0.84	0.89	0.93	0.96	0.98	0.99	1.01	1.02
	82F(28C)	68F(20C)	TC	9.51	9.87	10.71	12.41	13.63	13.50	13.38	13.13	12.88	12.50	12.34	12.18	11.66	11.25
			SC	7.46	7.74	8.40	9.73	10.69	10.59	10.49	10.29	10.10	9.80	9.68	9.55	9.14	8.82
			Input	0.47	0.47	0.46	0.53	0.79	0.81	0.84	0.90	0.94	0.97	0.98	1.00	1.02	1.03
	86F(30C)	72F(22C)	TC	9.50	9.86	10.72	13.01	14.04	13.86	13.68	13.50	13.32	13.10	12.85	12.60	12.10	11.70
			SC	7.45	7.74	8.41	10.20	11.01	10.87	10.73	10.59	10.45	10.28	10.08	9.88	9.49	9.18
			Input	0.48	0.48	0.48	0.55	0.81	0.83	0.87	0.93	0.97	1.00	1.01	1.03	1.05	1.06
	90F(32C)	75F(24C)	TC	10.29	10.55	11.31	13.72	15.00	14.88	14.64	14.42	14.13	13.81	13.56	13.32	12.82	12.36
			SC	8.07	8.27	8.87	10.76	11.77	11.67	11.48	11.31	11.09	10.83	10.64	10.44	10.05	9.70
			Input	0.49	0.49	0.49	0.57	0.83	0.86	0.90	0.96	1.00	1.03	1.05	1.06	1.08	1.09
09 (208-230V)	65F(18C)	55F(13C)	TC	5.25	5.29	5.86	7.11	8.11	8.00	7.80	7.59	7.38	7.16	6.97	6.78	6.41	6.22
			SC	4.11	4.15	4.59	5.57	6.36	6.28	6.11	5.95	5.79	5.61	5.47	5.32	5.03	4.88
			Input	0.27	0.27	0.27	0.31	0.45	0.46	0.49	0.52	0.54	0.56	0.57	0.58	0.58	0.59
	68F(20C)	57F(14C)	TC	5.75	5.90	6.30	7.64	8.65	8.55	8.34	8.13	7.92	7.69	7.51	7.32	6.94	6.76
			SC	4.51	4.62	4.94	5.99	6.78	6.70	6.54	6.37	6.21	6.03	5.89	5.74	5.45	5.30
			Input	0.28	0.28	0.28	0.32	0.47	0.48	0.50	0.54	0.56	0.58	0.58	0.59	0.60	0.61
	73F(23C)	61F(16C)	TC	6.07	6.23	6.74	8.17	9.19	9.09	8.88	8.67	8.46	8.23	8.04	7.85	7.48	7.21
			SC	4.76	4.88	5.28	6.41	7.21	7.13	6.96	6.80	6.63	6.45	6.31	6.16	5.87	5.65
			Input	0.28	0.28	0.28	0.33	0.48	0.49	0.52	0.55	0.58	0.59	0.60	0.61	0.62	0.63
	79F(26C)	64F(18C)	TC	6.48	6.65	7.17	8.70	9.55	9.46	9.28	9.10	8.92	8.76	8.58	8.39	8.02	7.75
			SC	5.09	5.22	5.63	6.82	7.49	7.42	7.28	7.14	7.00	6.88	6.73	6.58	6.29	6.08
			Input	0.29	0.29	0.29	0.34	0.50	0.51	0.53	0.57	0.59	0.61	0.62	0.63	0.64	0.64
	80F(27C)	67F(19C)	TC	6.85	7.11	7.72	8.95	9.82	9.73	9.64	9.46	9.28	9.01	8.89	8.78	8.40	8.11
			SC	5.38	5.58	6.05	7.02	7.70	7.63	7.56	7.42	7.28	7.07	6.98	6.88	6.59	6.36
			Input	0.30	0.30	0.30	0.35	0.51	0.53	0.55	0.59	0.61	0.63	0.64	0.65	0.66	0.67
	82F(28C)	68F(20C)	TC	6.91	7.18	7.79	9.03	9.91	9.82	9.73	9.54	9.36	9.09	8.97	8.85	8.48	8.18
			SC	5.42	5.63	6.11	7.08	7.77	7.70	7.63	7.49	7.34	7.13	7.04	6.95	6.65	6.42
			Input	0.30	0.30	0.30	0.35	0.51	0.53	0.55	0.59	0.62	0.64	0.65	0.66	0.66	0.67
	86F(30C)	72F(22C)	TC	7.13	7.41	8.05	9.77	10.54	10.41	10.27	10.14	10.00	9.84	9.65	9.46	9.09	8.78
			SC	5.59	5.81	6.32	7.66	8.27	8.16	8.06	7.95	7.84	7.71	7.57	7.42	7.13	6.89
			Input	0.32	0.32	0.31	0.36	0.53	0.55	0.57	0.61	0.64	0.66	0.67	0.68	0.68	0.69
	90F(32C)	75F(24C)	TC	7.72	7.92	8.49	10.30	11.26	11.17	10.99	10.83	10.61	10.37	10.18	10.00	9.62	9.28
			SC	6.06	6.21	6.66	8.08	8.83	8.76	8.62	8.49	8.32	8.13	7.99	7.84	7.55	7.28
			Input	0.32	0.32	0.32	0.37	0.55	0.56	0.59	0.63	0.66	0.67	0.69	0.70	0.71	0.71

COOLING PERFORMANCE DATA DLFCHB / DLCCHR (HEAT PUMP)(CONT)

MODEL	INDOOR CONDITIONS			OUTDOOR CONDITIONS (DB)													
	DB	WB		5F (-15C)	14F (-10C)	23F (-5C)	32F (0C)	41F (5C)	50F (10C)	59F (15C)	68F (20C)	77F (25C)	86F (30C)	95F (35C)	104F (40C)	113F (45C)	122F (50C)
12 (208-230V)	65F(18C)	55F(13C)	TC	6.99	7.05	7.80	9.46	10.80	10.66	10.38	10.11	9.83	9.53	9.28	9.03	8.53	8.28
			SC	5.48	5.53	6.12	7.42	8.47	8.36	8.14	7.93	7.71	7.48	7.28	7.08	6.69	6.49
			Input	0.41	0.41	0.41	0.47	0.69	0.71	0.74	0.79	0.83	0.85	0.86	0.88	0.90	0.91
	68F(20C)	57F(14C)	TC	7.66	7.85	8.39	10.17	11.52	11.38	11.10	10.82	10.55	10.24	10.00	9.75	9.25	9.00
			SC	6.00	6.16	6.58	7.98	9.04	8.93	8.71	8.49	8.27	8.03	7.84	7.65	7.25	7.06
			Input	0.42	0.42	0.42	0.48	0.71	0.73	0.76	0.82	0.85	0.88	0.89	0.91	0.92	0.93
	73F(23C)	61F(16C)	TC	8.09	8.29	8.97	10.88	12.24	12.11	11.82	11.54	11.26	10.96	10.71	10.46	9.96	9.60
			SC	6.34	6.50	7.04	8.53	9.60	9.50	9.27	9.06	8.83	8.59	8.40	8.20	7.81	7.53
			Input	0.43	0.43	0.43	0.50	0.73	0.75	0.79	0.84	0.88	0.90	0.92	0.93	0.95	0.96
	79F(26C)	64F(18C)	TC	8.64	8.86	9.56	11.59	12.72	12.60	12.36	12.12	11.88	11.67	11.42	11.17	10.68	10.32
			SC	6.77	6.95	7.50	9.09	9.98	9.88	9.70	9.51	9.32	9.16	8.96	8.76	8.37	8.10
			Input	0.44	0.45	0.44	0.51	0.76	0.78	0.81	0.87	0.90	0.93	0.95	0.96	0.98	0.99
	80F(27C)	67F(19C)	TC	9.13	9.48	10.28	11.92	13.08	12.96	12.84	12.60	12.36	12.00	11.84	11.69	11.19	10.80
			SC	7.16	7.43	8.06	9.34	10.26	10.17	10.07	9.88	9.70	9.41	9.29	9.17	8.78	8.47
			Input	0.46	0.46	0.46	0.53	0.78	0.80	0.84	0.89	0.93	0.96	0.98	0.99	1.01	1.02
	82F(28C)	68F(20C)	TC	9.51	9.87	10.71	12.41	13.63	13.50	13.38	13.13	12.88	12.50	12.34	12.18	11.66	11.25
			SC	7.46	7.74	8.40	9.73	10.69	10.59	10.49	10.29	10.10	9.80	9.68	9.55	9.14	8.82
			Input	0.47	0.47	0.46	0.53	0.79	0.81	0.84	0.90	0.94	0.97	0.98	1.00	1.02	1.03
	86F(30C)	72F(22C)	TC	9.50	9.86	10.72	13.01	14.04	13.86	13.68	13.50	13.32	13.10	12.85	12.60	12.10	11.70
			SC	7.45	7.74	8.41	10.20	11.01	10.87	10.73	10.59	10.45	10.28	10.08	9.88	9.49	9.18
			Input	0.48	0.48	0.48	0.55	0.81	0.83	0.87	0.93	0.97	1.00	1.01	1.03	1.05	1.06
	90F(32C)	75F(24C)	TC	10.29	10.55	11.31	13.72	15.00	14.88	14.64	14.42	14.13	13.81	13.56	13.32	12.82	12.36
			SC	8.07	8.27	8.87	10.76	11.77	11.67	11.48	11.31	11.09	10.83	10.64	10.44	10.05	9.70
			Input	0.49	0.49	0.49	0.57	0.83	0.86	0.90	0.96	1.00	1.03	1.05	1.06	1.08	1.09
18 (208-230V)	65F(18C)	55F(13C)	TC	10.48	10.57	11.71	14.20	16.20	15.99	15.58	15.16	14.74	14.30	13.92	13.55	12.80	12.42
			SC	8.22	8.29	9.18	11.13	12.71	12.54	12.22	11.89	11.57	11.21	10.92	10.62	10.04	9.74
			Input	1.02	1.03	1.07	1.08	1.10	1.13	1.18	1.20	1.25	1.28	1.31	1.33	1.34	1.35
	68F(20C)	57F(14C)	TC	11.48	11.78	12.58	15.26	17.28	17.08	16.66	16.24	15.82	15.37	14.99	14.62	13.87	13.50
			SC	9.01	9.24	9.87	11.97	13.55	13.39	13.06	12.73	12.41	12.05	11.76	11.47	10.88	10.59
			Input	1.05	1.07	1.08	1.11	1.13	1.15	1.20	1.23	1.27	1.30	1.32	1.34	1.37	1.38
	73F(23C)	61F(16C)	TC	12.13	12.44	13.46	16.32	18.36	18.16	17.74	17.32	16.90	16.44	16.06	15.69	14.94	14.40
			SC	9.51	9.75	10.56	12.80	14.40	14.25	13.91	13.58	13.25	12.89	12.60	12.31	11.72	11.29
			Input	1.08	1.09	1.12	1.15	1.18	1.22	1.29	1.32	1.39	1.43	1.44	1.45	1.47	1.48
	79F(26C)	64F(18C)	TC	12.95	13.28	14.33	17.38	19.08	18.90	18.54	18.18	17.82	17.51	17.14	16.76	16.01	15.48
			SC	10.16	10.42	11.24	13.63	14.96	14.82	14.54	14.26	13.98	13.74	13.44	13.15	12.56	12.14
			Input	1.10	1.11	1.15	1.19	1.20	1.25	1.32	1.37	1.43	1.48	1.49	1.51	1.52	1.52
	80F(27C)	67F(19C)	TC	13.69	14.21	15.42	17.87	19.62	19.44	19.26	18.90	18.54	18.00	17.77	17.53	16.79	16.20
			SC	10.74	11.15	12.09	14.01	15.39	15.25	15.11	14.82	14.54	14.12	13.94	13.75	13.16	12.71
			Input	1.11	1.12	1.17	1.19	1.21	1.26	1.33	1.38	1.44	1.48	1.50	1.52	1.53	1.53
	82F(28C)	68F(20C)	TC	14.07	14.61	15.85	18.37	20.17	19.98	19.80	19.43	19.06	18.50	18.26	18.02	17.25	16.65
			SC	11.04	11.46	12.43	14.40	15.82	15.67	15.53	15.23	14.95	14.51	14.32	14.14	13.53	13.06
			Input	1.12	1.14	1.18	1.21	1.24	1.28	1.35	1.41	1.46	1.50	1.53	1.54	1.54	1.54
	86F(30C)	72F(22C)	TC	14.24	14.80	16.09	19.51	21.06	20.79	20.52	20.25	19.98	19.65	19.28	18.90	18.16	17.55
			SC	11.17	11.61	12.62	15.30	16.52	16.31	16.09	15.88	15.67	15.41	15.12	14.82	14.24	13.77
			Input	1.14	1.15	1.20	1.22	1.24	1.29	1.37	1.42	1.48	1.52	1.53	1.55	1.55	1.56
	90F(32C)	75F(24C)	TC	15.43	15.82	16.96	20.57	22.50	22.32	21.96	21.63	21.20	20.72	20.35	19.97	19.22	18.54
			SC	12.10	12.41	13.30	16.14	17.65	17.50	17.22	16.96	16.63	16.25	15.96	15.66	15.08	14.54
			Input	1.15	1.16	1.22	1.23	1.26	1.32	1.37	1.43	1.49	1.53	1.55	1.56	1.56	1.57
24 (208-230V)	65F(18C)	55F(13C)	TC	10.87	13.04	14.56	15.07	15.60	16.14	17.66	20.15	19.89	18.86	17.79	16.85	15.92	15.45
			SC	8.52	10.22	11.42	11.81	12.23	12.66	13.85	15.81	15.60	14.79	13.95	13.21	12.49	12.12
			Input	0.81	0.75	0.75	0.77	0.80	0.83	0.86	1.26	1.30	1.45	1.56	1.61	1.64	1.66
	68F(20C)	57F(14C)	TC	11.90	14.28	15.65	16.20	16.77	17.35	18.98	21.49	21.24	20.20	19.11	18.19	17.26	16.79
			SC	9.34	11.20	12.28	12.71	13.15	13.61	14.89	16.86	16.66	15.84	14.99	14.27	13.53	13.17
			Input	0.83	0.77	0.77	0.79	0.82	0.85	0.89	1.30	1.34	1.50	1.61	1.66	1.70	1.71
	73F(23C)	61F(16C)	TC	12.58	15.09	16.74	17.33	17.93	18.56	20.30	22.84	22.59	21.54	20.45	19.52	18.58	17.91
			SC	9.86	11.83	13.13	13.59	14.07	14.56	15.92	17.91	17.72	16.90	16.03	15.31	14.58	14.05
			Input	0.86	0.79	0.79	0.81	0.83	0.87	0.91	1.34	1.38	1.54	1.65	1.71	1.75	1.77
	79F(26C)	64F(18C)	TC	13.43	16.11	17.83	18.45	19.10	19.77	21.62	23.73	23.51	22.61	21.78	20.85	19.92	19.26
			SC	10.53	12.64	13.99	14.47	14.98	15.51	16.96	18.61	18.44	17.74	17.08	16.35	15.62	15.10
			Input	0.89	0.82	0.82	0.85	0.88	0.90	0.94	1.38	1.43	1.59	1.71	1.77	1.80	1.82
	80F(27C)	67F(19C)	TC	14.19	17.03	19.18	19.85	20.55	21.27	22.23	24.41	24.18	23.51	22.39	21.81	20.88	20.15
			SC	11.13	13.36	15.04	15.57	16.12	16.68	17.43	19.14	18.97	18.44	17.56	17.11	16.37	15.81
			Input	0.92	0.84	0.84	0.87	0.90	0.93	0.97	1.43	1.47	1.64	1.76	1.82	1.86	1.88
	82F(28C)	68F(20C)	TC	14.62	17.54	19.76	20.45	21.16	21.90	22.90	25.14	24.91	24.21	23.06	22.46	21.51	20.76
			SC	11.40	13.68	15.41	15.95	16.51	17.09	17.86	19.61	19.43	18.89	17.99	17.52	16.78	16.19
			Input	0.94	0.86	0.85	0.90	0.92	0.95	1.00	1.46	1.50	1.67	1.79	1.84	1.89	1.90
	86F(30C)	72F(22C)	TC	14.76	17.72	20.01	20.71	21.43	22.18	24.27	26.20	25.86	25.19	24.44	23.51	22.58	21.83
			SC	11.58	13.89	15.69	16.24	16.81	17.40	19.04	20.55	20.28	19.75	19.17	18.44	17.71	17.12
			Input	0.96	0.88	0.87	0.91	0.94	0.98	1.01	1.48	1.53	1.70	1.83	1.89	1.93	1.95
	90F(32C)	75F(24C)	TC	16.00	19.20	21.10	21.84	22.60	23.39	25.59	27.99	27.76	26.91	25.77	24.85	23.91	23.06
			SC	12.54	15.05	16.55	17.13	17.73	18.35	20.07	21.95	21.77	21.10	20.21	19.48	18.76	18.09
			Input	0.99	0.90	0.90	0.93	0.97	0.99	1.04	1.53	1.57	1.75	1.88	1.95	1.99	2.01

COOLING PERFORMANCE DATA DLFCHB / DLCCHR (HEAT PUMP)(CONT)

MODEL	INDOOR CONDITIONS			OUTDOOR CONDITIONS (DB)													
	DB	WB		5F (-15C)	14F (-10C)	23F (-5C)	32F (0C)	41F (5C)	50F (10C)	59F (15C)	68F (20C)	77F (25C)	86F (30C)	95F (35C)	104F (40C)	113F (45C)	122F (50C)
30 (208-230V)	65F(18C)	55F(13C)	TC	13.91	16.69	18.64	19.39	20.16	20.97	22.61	25.80	25.46	24.15	22.77	21.58	20.38	19.19
			SC	11.90	13.09	14.61	15.20	15.81	16.44	17.73	20.24	19.98	18.93	17.86	16.92	15.99	15.05
			Input	1.24	1.14	1.14	1.19	1.23	1.27	1.31	1.94	1.99	2.22	2.39	2.47	2.52	2.55
	68F(20C)	57F(14C)	TC	16.63	18.29	20.04	20.84	21.67	22.54	24.30	27.52	27.19	25.86	24.47	23.29	22.09	20.85
			SC	13.04	14.34	15.72	16.35	17.00	17.68	19.06	21.58	21.33	20.28	19.19	18.26	17.32	16.35
			Input	1.28	1.18	1.18	1.21	1.26	1.31	1.36	2.00	2.05	2.30	2.47	2.55	2.60	2.63
	73F(23C)	61F(16C)	TC	17.56	19.32	21.43	22.29	23.18	24.11	25.99	29.24	28.92	27.58	26.18	24.99	23.79	22.24
			SC	13.77	15.15	16.81	17.48	18.18	18.91	20.38	22.93	22.69	21.63	20.53	19.60	18.66	17.44
			Input	1.32	1.22	1.22	1.26	1.30	1.35	1.40	2.06	2.12	2.37	2.54	2.63	2.68	2.71
	79F(26C)	64F(18C)	TC	19.62	21.59	24.31	25.28	26.29	27.35	28.18	30.93	30.65	29.80	28.38	27.64	26.47	24.77
			SC	15.39	16.93	19.07	19.83	20.62	21.45	22.10	24.26	24.04	23.37	22.26	21.68	20.75	19.43
			Input	1.36	1.25	1.25	1.30	1.35	1.40	1.44	2.12	2.19	2.44	2.62	2.71	2.76	2.79
	80F(27C)	67F(19C)	TC	19.82	21.80	24.56	25.54	26.56	27.62	28.46	31.24	30.96	30.10	28.67	27.92	26.73	25.02
			SC	15.55	17.10	19.26	20.03	20.83	21.66	22.32	24.51	24.28	23.61	22.48	21.90	20.96	19.63
			Input	1.41	1.30	1.29	1.33	1.38	1.44	1.49	2.19	2.25	2.51	2.70	2.79	2.85	2.88
	82F(28C)	68F(20C)	TC	20.12	22.13	25.05	26.05	27.09	28.18	29.03	31.87	31.58	30.70	29.24	28.48	27.27	25.53
			SC	15.78	17.36	19.55	20.33	21.14	21.99	22.65	24.87	24.65	23.96	22.82	22.23	21.28	19.92
			Input	1.43	1.32	1.31	1.35	1.40	1.46	1.51	2.21	2.27	2.53	2.72	2.81	2.87	2.90
	86F(30C)	72F(22C)	TC	20.62	22.68	25.62	26.64	27.71	28.82	31.07	33.54	33.11	32.25	31.29	30.10	28.91	27.11
			SC	16.17	17.79	20.09	20.90	21.73	22.60	24.37	26.31	25.97	25.29	24.54	23.61	22.68	21.26
			Input	1.47	1.35	1.34	1.39	1.43	1.49	1.55	2.28	2.34	2.61	2.81	2.90	2.96	2.99
	90F(32C)	75F(24C)	TC	22.34	24.58	27.01	28.09	29.22	30.38	32.76	35.83	35.54	34.45	32.99	31.81	30.61	28.64
			SC	17.52	19.27	21.19	22.03	22.91	23.83	25.70	28.11	27.87	27.01	25.88	24.94	24.01	22.47
			Input	1.51	1.39	1.38	1.43	1.48	1.52	1.59	2.34	2.41	2.69	2.89	2.99	3.05	3.08
65F(18C)	55F(13C)	TC	17.85	18.99	21.21	22.27	23.38	24.55	25.72	29.35	28.97	27.47	25.90	24.54	23.18	22.05	
		SC	13.99	14.88	16.62	17.46	18.33	19.24	20.17	23.02	22.72	21.53	20.31	19.24	18.19	17.30	
		Input	1.89	1.74	1.74	1.79	1.86	1.93	2.00	2.94	3.02	3.38	3.64	3.74	3.83	3.87	
68F(20C)	57F(14C)	TC	19.56	20.80	22.79	23.93	25.13	26.38	27.64	31.30	30.93	29.41	27.84	26.49	25.13	23.97	
		SC	15.34	16.32	17.88	18.77	19.71	20.70	21.68	24.55	24.26	23.06	21.83	20.77	19.71	18.79	
		Input	1.94	1.79	1.79	1.86	1.93	2.00	2.06	3.03	3.12	3.49	3.74	3.87	3.95	3.99	
73F(23C)	61F(16C)	TC	20.66	21.98	24.38	25.60	26.88	28.22	29.56	33.26	32.90	31.37	29.78	28.42	27.06	25.56	
		SC	16.20	17.23	19.12	20.08	21.08	22.14	23.19	26.08	25.81	24.61	23.35	22.29	21.23	20.05	
		Input	2.00	1.85	1.85	1.91	1.98	2.05	2.12	3.13	3.21	3.59	3.85	3.99	4.07	4.11	
79F(26C)	64F(18C)	TC	23.08	24.56	27.65	29.04	30.49	32.01	32.05	35.19	34.86	33.89	32.28	31.44	30.11	28.47	
		SC	18.10	19.26	21.69	22.77	23.91	25.11	25.13	27.60	27.35	26.58	25.32	24.66	23.61	22.33	
		Input	2.07	1.90	1.90	1.97	2.05	2.12	2.19	3.23	3.32	3.70	3.98	4.11	4.20	4.24	
80F(27C)	67F(19C)	TC	23.31	24.80	27.93	29.33	30.80	32.34	32.38	35.54	35.22	34.24	32.61	31.76	30.41	28.76	
		SC	18.29	19.45	21.91	23.00	24.15	25.36	25.39	27.88	27.62	26.85	25.57	24.91	23.85	22.56	
		Input	2.15	1.97	1.95	2.02	2.10	2.27	2.26	3.32	3.42	3.81	4.10	4.24	4.33	4.37	
82F(28C)	68F(20C)	TC	23.66	25.18	28.35	29.77	31.26	32.82	32.86	36.07	35.74	34.75	33.10	32.24	30.87	29.19	
		SC	18.56	19.75	22.24	23.35	24.52	25.74	25.77	28.29	28.04	27.25	25.96	25.29	24.20	22.90	
		Input	2.17	1.99	1.98	2.04	2.11	2.30	2.28	3.35	3.45	3.84	4.13	4.27	4.37	4.40	
86F(30C)	72F(22C)	TC	24.25	25.80	29.14	30.60	32.13	33.73	35.35	38.15	37.66	36.68	35.60	34.24	32.89	31.16	
		SC	19.02	20.24	22.86	24.00	25.20	26.46	27.72	29.92	29.54	28.77	27.92	26.85	25.79	24.44	
		Input	2.24	2.05	2.04	2.12	2.20	2.27	2.35	3.46	3.55	3.96	4.26	4.40	4.50	4.54	
90F(32C)	75F(24C)	TC	26.28	27.96	30.73	32.26	33.88	35.57	37.27	40.76	40.43	39.18	37.53	36.18	34.82	32.91	
		SC	20.60	21.92	24.10	25.30	26.57	27.90	29.23	31.97	31.71	30.73	29.44	28.37	27.31	25.82	
		Input	2.30	2.10	2.09	2.18	2.27	2.35	2.42	3.55	3.66	4.09	4.39	4.54	4.63	4.67	

LEGEND

DB – DRY BULB

WB – WET BULB

TC – TOTAL NET CAPACITY (1000 Btu/hour)

SC – SENSIBLE CAPACITY (1000 Btu/hour)

INPUT – TOTAL POWER (Kw)

HEATING PERFORMANCE DATA DLFCHB / DLCCHR (HEAT PUMP)

MODEL	INDOOR CONDITIONS			OUTDOOR CONDITIONS (DB)																	
	DB	WB		-4F (-20C)	0F (-18)	5F (-15)	10F (-12.2)	16F (-9)	19F (-7)	24F (-5)	32F (0)	41F (5)	43F (6)	47F (8)	53F (12)	59F (15)	64F (18)	70F (21)	75F (24)	78F (26C)	
09 (115V)	65F(18C)	55F(13C)	TC	5.35	5.79	6.11	6.37	6.56	6.69	7.41	8.25	9.22	9.46	10.42	10.52	10.76	10.99	11.20	11.35	11.46	
			Input	0.58	0.63	0.66	0.68	0.69	0.71	0.73	0.79	0.84	0.86	0.88	0.89	0.90	0.91	0.93	0.94	0.95	
			COP	2.72	2.69	2.71	2.74	2.79	2.77	2.96	3.05	3.20	3.23	3.47	3.47	3.52	3.53	3.54	3.53	3.54	
	68F(20C)	57F(14C)	TC	5.19	5.63	5.94	6.18	6.37	6.50	7.22	8.06	9.02	9.26	10.10	10.20	10.44	10.66	10.86	11.01	11.11	
			Input	0.59	0.65	0.67	0.69	0.70	0.72	0.75	0.81	0.86	0.88	0.90	0.91	0.91	0.93	0.95	0.96	0.97	
			COP	2.59	2.56	2.58	2.61	2.65	2.63	2.82	2.92	3.07	3.10	3.30	3.30	3.34	3.35	3.36	3.36	3.36	
	73F(23C)	61F(16C)	TC	5.14	5.57	5.88	6.13	6.31	6.43	7.16	8.00	8.96	9.20	10.00	10.10	10.33	10.55	10.75	10.90	11.00	
			Input	0.60	0.66	0.69	0.71	0.72	0.74	0.76	0.83	0.88	0.89	0.92	0.92	0.93	0.95	0.97	0.98	0.99	
			COP	2.52	2.48	2.51	2.53	2.58	2.55	2.74	2.83	2.98	3.01	3.20	3.20	3.24	3.25	3.26	3.26	3.26	
	79F(26C)	64F(18C)	TC	5.10	5.52	5.83	6.07	6.25	6.29	7.01	7.86	8.82	9.06	9.90	10.00	10.23	10.44	10.64	10.79	10.89	
			Input	0.61	0.67	0.70	0.72	0.73	0.75	0.78	0.84	0.89	0.91	0.93	0.94	0.95	0.97	0.98	1.00	1.01	
			COP	2.45	2.42	2.44	2.47	2.51	2.46	2.64	2.74	2.89	2.92	3.12	3.12	3.16	3.17	3.18	3.17	3.17	
	80F(27C)	67F(19C)	TC	5.06	5.48	5.78	6.02	6.21	6.33	7.05	7.89	8.85	9.09	9.83	9.92	10.15	10.36	10.56	10.71	10.81	
			Input	0.62	0.68	0.71	0.73	0.74	0.76	0.79	0.85	0.90	0.92	0.94	0.95	0.96	0.98	0.99	1.01	1.02	
			COP	2.41	2.37	2.40	2.42	2.47	2.44	2.63	2.72	2.87	2.90	3.06	3.06	3.10	3.11	3.12	3.11	3.11	
	82F(28C)	68F(20C)	TC	4.97	5.38	5.67	5.91	6.09	6.20	6.93	7.77	8.73	8.97	9.63	9.72	9.94	10.16	10.35	10.49	10.59	
			Input	0.62	0.68	0.72	0.74	0.75	0.77	0.79	0.86	0.91	0.93	0.95	0.96	0.97	0.99	1.00	1.02	1.03	
			COP	2.33	2.30	2.32	2.35	2.39	2.37	2.55	2.65	2.80	2.83	2.96	2.97	3.00	3.01	3.02	3.02	3.02	
	86F(30C)	72F(22C)	TC	4.85	5.26	5.54	5.78	5.95	6.06	6.79	7.63	8.59	8.83	9.40	9.49	9.71	9.92	10.10	10.24	10.34	
			Input	0.64	0.71	0.74	0.76	0.77	0.79	0.82	0.89	0.94	0.96	0.98	0.99	1.00	1.02	1.03	1.05	1.06	
			COP	2.22	2.18	2.21	2.23	2.27	2.25	2.43	2.53	2.67	2.70	2.81	2.81	2.85	2.85	2.86	2.86	2.86	
12 (115V)	65F(18C)	55F(13C)	TC	6.59	7.14	7.53	7.85	8.09	8.24	9.13	10.17	11.36	11.65	12.84	12.97	13.26	13.54	13.80	13.99	14.12	
			Input	0.61	0.67	0.70	0.72	0.73	0.75	0.78	0.85	0.90	0.91	0.94	0.94	0.95	0.97	0.99	1.00	1.01	
			COP	3.15	3.11	3.14	3.18	3.23	3.20	3.42	3.53	3.70	3.73	4.02	4.02	4.07	4.08	4.10	4.09	4.09	
	68F(20C)	57F(14C)	TC	6.40	6.93	7.32	7.62	7.85	8.01	8.89	9.93	11.12	11.41	12.45	12.57	12.86	13.13	13.38	13.57	13.69	
			Input	0.63	0.69	0.72	0.74	0.75	0.77	0.80	0.86	0.92	0.93	0.95	0.96	0.97	0.99	1.01	1.02	1.03	
			COP	3.00	2.96	2.99	3.02	3.07	3.05	3.27	3.37	3.55	3.58	3.82	3.82	3.87	3.88	3.89	3.89	3.89	
	73F(23C)	61F(16C)	TC	6.34	6.87	7.25	7.55	7.78	7.93	8.82	9.86	11.04	11.34	12.32	12.44	12.73	13.00	13.24	13.43	13.55	
			Input	0.64	0.70	0.73	0.75	0.76	0.79	0.81	0.88	0.94	0.95	0.97	0.98	0.99	1.01	1.03	1.04	1.05	
			COP	2.91	2.87	2.90	2.93	2.98	2.96	3.17	3.28	3.45	3.49	3.71	3.71	3.76	3.76	3.78	3.77	3.77	
	79F(26C)	64F(18C)	TC	6.28	6.81	7.18	7.48	7.70	7.75	8.64	9.68	10.87	11.16	12.20	12.32	12.60	12.87	13.12	13.30	13.42	
			Input	0.65	0.71	0.74	0.77	0.78	0.80	0.83	0.89	0.95	0.97	0.99	1.00	1.01	1.03	1.04	1.06	1.07	
			COP	2.84	2.80	2.83	2.86	2.91	2.84	3.06	3.17	3.35	3.38	3.61	3.61	3.66	3.67	3.68	3.67	3.68	
	80F(27C)	67F(19C)	TC	6.23	6.76	7.13	7.42	7.65	7.80	8.68	9.72	10.91	11.20	12.11	12.23	12.51	12.77	13.02	13.20	13.32	
			Input	0.66	0.72	0.75	0.78	0.78	0.81	0.84	0.90	0.96	0.98	1.00	1.01	1.02	1.04	1.06	1.07	1.08	
			COP	2.79	2.75	2.77	2.81	2.85	2.83	3.04	3.15	3.32	3.35	3.54	3.54	3.59	3.60	3.61	3.60	3.61	
	82F(28C)	68F(20C)	TC	6.12	6.63	6.99	7.28	7.50	7.64	8.54	9.57	10.76	11.06	11.86	11.98	12.25	12.52	12.75	12.93	13.05	
			Input	0.66	0.73	0.76	0.78	0.79	0.82	0.85	0.91	0.97	0.99	1.01	1.02	1.03	1.05	1.07	1.08	1.09	
			COP	2.70	2.66	2.69	2.72	2.77	2.74	2.96	3.07	3.24	3.27	3.43	3.43	3.48	3.49	3.50	3.49	3.49	
	86F(30C)	72F(22C)	TC	5.98	6.48	6.83	7.12	7.33	7.47	8.36	9.40	10.59	10.88	11.58	11.70	11.96	12.22	12.45	12.62	12.74	
			Input	0.68	0.75	0.78	0.81	0.82	0.84	0.87	0.94	1.00	1.02	1.04	1.05	1.06	1.08	1.10	1.12	1.13	
			COP	2.57	2.53	2.55	2.58	2.63	2.60	2.81	2.92	3.09	3.13	3.25	3.25	3.30	3.30	3.32	3.31	3.31	
09 (208-230V)	65F(18C)	55F(13C)	TC	5.94	6.44	6.79	7.08	7.29	7.43	8.24	9.17	10.24	10.51	11.57	11.69	11.96	12.21	12.44	12.62	12.73	
			Input	0.63	0.69	0.72	0.75	0.76	0.78	0.81	0.87	0.93	0.94	0.96	0.97	0.98	1.00	1.02	1.03	1.04	
			COP	2.76	2.72	2.75	2.78	2.83	2.80	3.00	3.09	3.24	3.27	3.52	3.52	3.57	3.57	3.59	3.58	3.58	
	68F(20C)	57F(14C)	TC	5.77	6.25	6.60	6.87	7.08	7.22	8.02	8.95	10.02	10.29	11.22	11.34	11.59	11.84	12.07	12.23	12.35	
			Input	0.64	0.71	0.74	0.76	0.77	0.79	0.82	0.89	0.95	0.96	0.98	0.99	1.00	1.02	1.04	1.05	1.06	
			COP	2.63	2.59	2.61	2.64	2.69	2.67	2.86	2.95	3.11	3.14	3.34	3.34	3.39	3.40	3.41	3.40	3.40	
	73F(23C)	61F(16C)	TC	5.72	6.19	6.53	6.81	7.01	7.15	7.95	8.89	9.96	10.22	11.11	11.22	11.48	11.72	11.94	12.11	12.22	
			Input	0.66	0.72	0.75	0.78	0.79	0.81	0.84	0.91	0.96	0.98	1.00	1.01	1.02	1.04	1.06	1.07	1.08	
			COP	2.55	2.51	2.54	2.57	2.61	2.59	2.78	2.87	3.02	3.05	3.24	3.24	3.29	3.29	3.30	3.30	3.30	
	79F(26C)	64F(18C)	TC	5.66	6.14	6.47	6.74	6.94	6.99	7.79	8.73	9.80	10.07	11.00	11.11	11.36	11.61	11.83	11.99	12.10	
			Input	0.67	0.73	0.77	0.79	0.80	0.82	0.85	0.92	0.98	1.00	1.02	1.03	1.04	1.06	1.08	1.09	1.10	
			COP	2.48	2.45	2.47	2.50	2.54	2.49	2.68	2.78	2.93	2.96	3.16	3.16	3.20	3.21	3.22	3.22	3.22	
	80F(27C)	67F(19C)	TC	5.62	6.09	6.42	6.69	6.90	7.03	7.83	8.77	9.84	10.10	10.92	11.02	11.28	11.52	11.74	11.90	12.01	
			Input	0.68	0.74	0.78	0.80	0.81	0.83	0.86	0.93	0.99	1.01	1.03	1.04	1.05	1.07	1.09	1.10	1.11	
			COP	2.44	2.40	2.43	2.46	2.50	2.48	2.66	2.76	2.91	2.94	3.10	3.10	3.14	3.15	3.16	3.15	3.16	
	82F(28C)	68F(20C)	TC	5.52	5.97	6.30	6.57	6.76	6.89	7.70	8.63	9.70	9.97	10.70	10.80	11.05	11.29	11.50	11.66	11.77	
			Input	0.68	0.75	0.78	0.81	0.82	0.84	0.87	0.94	1.00	1.02	1.04	1.05	1.06	1.08	1.10	1.12	1.13	
			COP	2.37	2.33	2.35	2.38	2.42	2.40	2.59	2.68	2.83	2.86	3.00	3.00	3.04	3.05	3.06	3.06	3.06	
	86F(30C)	72F(22C)	TC	5.39	5.84	6.16	6.42	6.61	6.74	7.54	8.48	9.55	9.81	10.44	10.55	10.79	11.02	11.23	11.38	11.49	
			Input	0.70	0.77	0.81	0.83	0.84	0.87	0.90	0.97	1.03	1.05	1.07	1.09	1.10	1.12	1.13	1.15	1.16	
			COP	2.25	2.21	2.23	2.26	2.30	2.28	2.46	2.56	2.71	2.74	2.85	2.85	2.88	2.89	2.90	2.90	2.90	
65F(18C)	55F(13C)	TC	7.02	7.61	8.03	8.36	8.62	8.78													

HEATING PERFORMANCE DATA DLFCHB / DLCCHR (HEAT PUMP)(CONT)

MODEL	INDOOR CONDITIONS			OUTDOOR CONDITIONS (DB)																
	DB	WB		-4F (-20C)	0F (-18)	5F (-15)	10F (-12.2)	16F (-9)	19F (-7)	24F (-5)	32F (0)	41F (5)	43F (6)	47F (8)	53F (12)	59F (15)	64F (18)	70F (21)	75F (24)	78F (26C)
18 (208-230V)	65F(18C)	55F(13C)	TC	10.69	11.59	12.23	12.74	13.12	13.38	14.83	16.51	18.43	18.92	20.83	21.04	21.52	21.98	22.40	22.71	22.92
			Input	1.49	1.51	1.55	1.58	1.62	1.64	1.67	1.71	1.76	1.78	1.80	1.82	1.83	1.84	1.85	1.86	1.87
			COP	2.11	2.25	2.32	2.37	2.37	2.40	2.61	2.83	3.07	3.12	3.39	3.39	3.45	3.51	3.56	3.58	3.59
	68F(20C)	57F(14C)	TC	10.39	11.26	11.87	12.37	12.74	12.99	14.44	16.12	18.04	18.53	20.20	20.41	20.87	21.32	21.72	22.02	22.23
			Input	1.50	1.52	1.56	1.59	1.63	1.65	1.68	1.72	1.77	1.79	1.81	1.84	1.84	1.85	1.86	1.87	1.88
			COP	2.03	2.16	2.23	2.28	2.28	2.31	2.51	2.74	2.98	3.03	3.26	3.26	3.32	3.37	3.42	3.45	3.46
	73F(23C)	61F(16C)	TC	10.29	11.15	11.76	12.25	12.62	12.86	14.31	15.99	17.92	18.40	20.00	20.20	20.66	21.10	21.50	21.80	22.00
			Input	1.52	1.54	1.58	1.61	1.65	1.67	1.70	1.74	1.79	1.81	1.83	1.86	1.86	1.87	1.88	1.89	1.90
			COP	1.98	2.12	2.18	2.23	2.24	2.26	2.46	2.69	2.93	2.97	3.19	3.19	3.25	3.30	3.35	3.38	3.39
	79F(26C)	64F(18C)	TC	10.19	11.04	11.65	12.13	12.50	12.58	14.02	15.71	17.63	18.12	19.80	20.00	20.46	20.89	21.29	21.58	21.78
			Input	1.55	1.57	1.61	1.64	1.68	1.70	1.73	1.77	1.82	1.84	1.86	1.88	1.89	1.90	1.91	1.92	1.93
			COP	1.93	2.06	2.12	2.17	2.18	2.17	2.38	2.60	2.84	2.89	3.12	3.11	3.17	3.22	3.27	3.30	3.31
	80F(27C)	67F(19C)	TC	10.12	10.96	11.56	12.05	12.41	12.65	14.10	15.78	17.71	18.19	19.65	19.84	20.30	20.73	21.12	21.41	21.61
			Input	1.58	1.60	1.64	1.67	1.70	1.72	1.76	1.80	1.85	1.87	1.89	1.91	1.92	1.93	1.94	1.95	1.96
			COP	1.88	2.01	2.07	2.12	2.13	2.15	2.35	2.57	2.81	2.85	3.05	3.04	3.10	3.15	3.20	3.22	3.23
	82F(28C)	68F(20C)	TC	9.93	10.75	11.35	11.82	12.17	12.41	13.85	15.54	17.46	17.94	19.26	19.45	19.89	20.31	20.70	20.99	21.18
			Input	1.61	1.63	1.67	1.70	1.74	1.76	1.79	1.83	1.88	1.90	1.92	1.94	1.95	1.96	1.97	1.98	1.99
			COP	1.81	1.93	1.99	2.04	2.05	2.07	2.27	2.49	2.72	2.77	2.94	2.93	2.99	3.04	3.08	3.11	3.12
	86F(30C)	72F(22C)	TC	9.71	10.51	11.09	11.55	11.90	12.13	13.58	15.26	17.18	17.67	18.80	18.98	19.42	19.83	20.21	20.49	20.68
			Input	1.63	1.66	1.69	1.72	1.76	1.78	1.90	1.86	1.90	1.93	1.96	1.97	1.98	1.99	1.99	2.00	2.00
			COP	1.74	1.86	1.92	1.96	1.98	1.99	2.09	2.41	2.64	2.69	2.82	2.82	2.88	2.93	2.97	3.00	3.02
24 (208-230V)	65F(18C)	55F(13C)	TC	13.19	14.29	15.08	15.71	16.18	16.50	18.33	20.47	22.91	23.53	23.76	24.00	24.54	25.07	25.54	25.90	26.14
			Input	1.26	1.39	1.45	1.49	1.51	1.56	1.61	1.74	1.85	1.89	1.93	1.95	1.97	2.00	2.03	2.07	2.08
			COP	3.06	3.02	3.05	3.08	3.14	3.11	3.33	3.44	3.62	3.66	3.61	3.61	3.66	3.67	3.68	3.67	3.67
	68F(20C)	57F(14C)	TC	13.07	14.16	14.94	15.56	16.03	16.34	18.18	20.31	22.76	23.37	23.52	23.75	24.29	24.81	25.28	25.63	25.87
			Input	1.29	1.42	1.48	1.52	1.54	1.59	1.64	1.78	1.89	1.92	1.97	1.99	2.01	2.04	2.08	2.11	2.13
			COP	2.97	2.93	2.96	2.99	3.04	3.02	3.24	3.35	3.52	3.56	3.50	3.50	3.55	3.56	3.57	3.56	3.56
	73F(23C)	61F(16C)	TC	12.85	13.92	14.69	15.30	15.76	16.07	17.90	20.04	22.49	23.09	23.11	23.33	23.87	24.37	24.84	25.18	25.41
			Input	1.32	1.46	1.52	1.57	1.59	1.63	1.69	1.83	1.94	1.98	2.02	2.04	2.06	2.10	2.13	2.17	2.19
			COP	2.84	2.80	2.83	2.86	2.91	2.89	3.10	3.21	3.39	3.42	3.35	3.35	3.39	3.40	3.41	3.41	3.41
	79F(26C)	64F(18C)	TC	12.59	13.65	14.39	14.99	15.45	15.75	17.54	19.64	22.04	22.63	22.65	22.87	23.39	23.89	24.34	24.68	24.91
			Input	1.34	1.47	1.54	1.58	1.60	1.65	1.71	1.85	1.97	2.00	2.05	2.07	2.09	2.13	2.16	2.19	2.21
			COP	2.75	2.72	2.74	2.77	2.82	2.80	3.01	3.11	3.28	3.32	3.24	3.24	3.29	3.29	3.30	3.30	3.30
	80F(27C)	67F(19C)	TC	12.46	13.51	14.25	14.84	15.29	15.59	17.37	19.44	21.82	22.41	22.42	22.64	23.15	23.65	24.10	24.43	24.66
			Input	1.35	1.48	1.55	1.60	1.62	1.66	1.72	1.86	1.98	2.01	2.06	2.08	2.10	2.14	2.17	2.20	2.22
			COP	2.70	2.67	2.69	2.73	2.77	2.75	2.96	3.06	3.23	3.26	3.19	3.19	3.23	3.24	3.25	3.25	3.25
	82F(28C)	68F(20C)	TC	12.34	13.37	14.11	14.70	15.14	15.43	17.19	19.25	21.60	22.18	22.20	22.41	22.92	23.41	23.86	24.19	24.41
			Input	1.37	1.50	1.56	1.61	1.63	1.68	1.74	1.87	1.99	2.03	2.07	2.09	2.11	2.15	2.18	2.22	2.24
			COP	2.65	2.62	2.64	2.67	2.72	2.70	2.90	3.01	3.18	3.21	3.14	3.14	3.18	3.19	3.20	3.20	3.20
	86F(30C)	72F(22C)	TC	12.33	13.35	14.08	14.67	15.11	15.40	17.24	19.38	21.82	22.43	22.10	22.32	22.83	23.32	23.76	24.09	24.32
			Input	1.38	1.52	1.58	1.63	1.65	1.70	1.76	1.90	2.03	2.06	2.11	2.13	2.15	2.19	2.22	2.26	2.28
			COP	2.62	2.58	2.60	2.63	2.68	2.65	2.87	2.98	3.16	3.19	3.07	3.07	3.11	3.12	3.13	3.13	3.13
30 (208-230V)	65F(18C)	55F(13C)	TC	16.14	17.49	18.45	19.22	19.79	20.19	22.43	25.04	28.03	28.78	31.39	31.70	32.42	33.12	33.74	34.21	34.53
			Input	1.77	1.94	2.03	2.09	2.12	2.18	2.26	2.44	2.60	2.64	2.70	2.73	2.75	2.80	2.85	2.89	2.92
			COP	2.67	2.64	2.66	2.69	2.74	2.72	2.91	3.01	3.16	3.20	3.41	3.41	3.45	3.46	3.47	3.47	3.47
	68F(20C)	57F(14C)	TC	15.99	17.32	18.27	19.03	19.61	19.99	22.23	24.85	27.84	28.59	31.07	31.38	32.10	32.78	33.39	33.87	34.17
			Input	1.80	1.98	2.07	2.13	2.16	2.22	2.30	2.49	2.65	2.69	2.76	2.78	2.81	2.86	2.91	2.95	2.98
			COP	2.60	2.56	2.59	2.61	2.66	2.64	2.83	2.93	3.08	3.11	3.30	3.30	3.35	3.36	3.37	3.36	3.36
	73F(23C)	61F(16C)	TC	15.72	17.03	17.97	18.72	19.28	19.66	21.90	24.51	27.51	28.25	30.53	30.83	31.53	32.20	32.82	33.27	33.58
			Input	1.85	2.04	2.13	2.19	2.22	2.28	2.37	2.56	2.72	2.77	2.83	2.86	2.89	2.94	2.99	3.03	3.06
			COP	2.48	2.45	2.47	2.50	2.54	2.52	2.71	2.81	2.96	2.99	3.16	3.16	3.20	3.21	3.22	3.21	3.21
	79F(26C)	64F(18C)	TC	15.27	17.04	17.98	18.73	19.29	19.66	21.95	24.62	27.67	28.43	30.51	30.82	31.51	32.19	32.80	33.26	33.56
			Input	1.88	2.06	2.15	2.22	2.25	2.31	2.39	2.59	2.75	2.80	2.86	2.89	2.92	2.98	3.02	3.07	3.10
			COP	2.39	2.42	2.45	2.47	2.52	2.49	2.69	2.79	2.94	2.98	3.12	3.12	3.16	3.17	3.18	3.18	3.18
	80F(27C)	67F(19C)	TC	15.26	17.18	18.13	18.88	19.44	19.82	22.13	24.82	27.89	28.66	30.76	31.06	31.77	32.45	33.06	33.52	33.83
			Input	1.89	2.07	2.16	2.23	2.26	2.32	2.40	2.60	2.77	2.81	2.88	2.90	2.93	2.99	3.03	3.08	3.11
			COP	2.37	2.43	2.45	2.48	2.52	2.50	2.70	2.80	2.96	2.99	3.13	3.13	3.17	3.18	3.19	3.19	3.19
	82F(28C)	68F(20C)	TC	15.20	16.49	17.40	18.12	18.66	19.02	21.24	23.82	26.78	27.52	29.53	29.82	30.49	31.15	31.74	32.18	32.48
			Input	1.91	2.09	2.19	2.25	2.28	2.34	2.43	2.62	2.79	2.83	2.90	2.92	2.95	3.01	3.05	3.10	3.13
			COP	2.33	2.31	2.33	2.36	2.40	2.38	2.57	2.66	2.82	2.85	2.99	2.99	3.03	3.03	3.04	3.04	3.04
	86F(30C)	72F(22C)	TC	15.08	16.33	17.23	17.95	18.49	18.84	21.09	23.71	26.69	27.44	29.20	29.49	30.17	30.81	31.40	31.83	32.13
			Input	1.93	2.12	2.22	2.28	2.31	2.38	2.47	2.67	2.84	2.88	2.95	2.98	3.01				

APPLICATION DATA

UNIT SELECTION

Select equipment that either matches or supports slightly more than the anticipated peak load. Doing so provides better humidity control, fewer unit cycles, and less part-load operation. For units used in spaces with high sensible loads, base equipment selection on unit sensible load, not on total anticipated load. Adjust for anticipated room wet bulb temperature to avoid under-sizing equipment.

UNIT MOUNTING (INDOOR)

Refer to the unit's installation instructions for further details.

Unit leveling – For reliable operation, units should be level in all planes.

Clearance – Provide adequate clearance for airflow (see Fig. 5).

Unit location – Select a location which provides the best air circulation for the room.

These units should be positioned as high as possible on the wall for the best air circulation. The unit return and discharge should not be obstructed by furniture, curtains, or anything which may cause unit short cycling or air recirculation. Place the unit in the middle of the selected wall (if possible). Use an outside wall, if available, to make piping easier, and place the unit so it faces the normal location of the room occupants.

UNIT MOUNTING (OUTDOOR)

Refer to the unit's Installation Instructions for further details.

Unit leveling – For reliable operation, units should be level in all planes.

Clearance – Minimum clearance (see Fig. 6), must be provided for airflow. The condensing units are designed for free-blow application. Air inlets and outlets should not be restricted.

Unit location – A location which is convenient to the installation and not exposed to strong wind. A location that can bear the weight of outdoor unit and where the outdoor unit can be mounted in a level position. Do not install the indoor or outdoor units in a location with special environmental conditions. For those applications, contact your sales representative.

MOUNTING TEMPLATE

Refer to the unit's installation instructions for further details. The fan coil units are furnished with mounting to mark the location of the wiring and refrigeration line hole locations.

SUPPORT

Adequate support must be provided to support the weight of all fan coils. Refer to the *Physical Data* section for fan coil weights, and the base unit dimensional drawings for the location of mounting brackets.

OPERATING RANGE Min / Max °F (°C)		
	Cooling	Heating
Outdoor DB	0 / 115 (–18 / 46)	0 / 75 (–18 / 24)
Indoor DB	64 / 95 (18 / 35)	32 / 86 (0 / 30)
Indoor WB	55 / 88 (13 / 31)	

NON-OPERATING TEMPERATURE RANGE Min / Max °F (°C)	
Indoor/Outdoor DB	32 / 86 (0 / 30)

NOTE: Reference the product installation instructions for more information.

METERING DEVICES

The outdoor unit has an electronic expansion valve to manage the refrigerant flow of the connected fan coil.

DRAIN CONNECTIONS

Install the drains in accordance with local sanitation codes. If adequate gravity drainage cannot be provided, the unit should be equipped with an accessory condensate pump. Refer to the physical dimension tables for drain sizes.

NOTE: High wall fan coil units have internal condensate traps. A trap is not required. Drain connections may be routed through alternate locations on most fan coils (see Fig. 7).

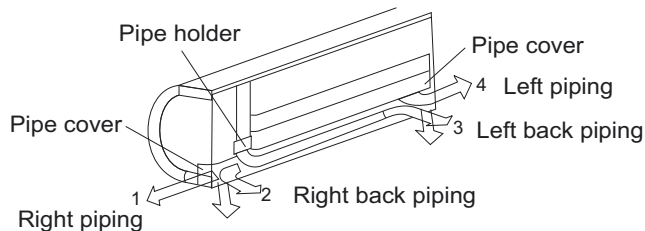


Fig. 7 – Piping Locations

REFRIGERANT LINES

General Refrigerant Line Sizing:

1. The ductless units are shipped with a full charge of R410A refrigerant. All charges, line sizing, and capacities are based on runs of 25 ft. (7.6 m). For runs over 25 ft. (7.6 m), consult the *Long-Line Applications* section on this page for proper charge adjustments.
2. Refrigerant lines should not be buried in the ground. If it is necessary to bury the lines, not more than 36-in (914 mm) should be buried. Provide a minimum 6-in (152 mm) vertical rise to the service valves to prevent refrigerant migration.
3. Both lines must be insulated. Use a minimum of 1/2-in. (12.7 mm) thick insulation. Closed-cell insulation is recommended in all long-line applications.
4. Special consideration should be given to isolating interconnecting tubing from the building structure. Isolate the tubing so that vibration or noise is not transmitted into the structure.

Long Line Applications

1. No change in line sizing is required.
2. Add refrigerant per the following additional charge table.

ADDITIONAL CHARGE TABLE

	TOTAL LINE LENGTH ft		ADDITIONAL CHARGE, oz/ft. ft (m)				
	Min	Max	10 - 25 (3 - 8)	>25 - 50 (8 - 15)	>50 - 66 (15 - 20)	>66 - 82 (20 - 25)	>82 - 99 (25 - 30)
9 (115V)	10	66	None	0.215	0.215		
12 (115V)							
9 (208/230V)		50		0.215			
12 (208/230V)							
18				0.215	0.215	0.215	
24		82		0.538	0.538	0.538	
30							
36		99		0.538	0.538	0.538	0.538

WIRING

All wires must be sized per NEC (National Electrical Code) or CEC (Canadian Electrical Code) and local codes. Use the Electrical Data table MCA (minimum circuit amps) and MOCP (maximum over current protection) to correctly size the wires and the disconnect fuse or breakers respectively.

Per caution note, only Stranded copper conductors with a 600 volt rating and double insulated copper wire must be used.

NOTE: The use of BX cable is **not** recommended.

Recommended Connection Method for Power and Communication Wiring – Power and Communication Wiring:

The main power is supplied to the outdoor unit. The field supplied 14/3 power/communication wiring from the outdoor unit to the indoor unit consists of four (4) wires and provides the power for the indoor unit. Two wires are high voltage AC power, one is communication wiring and the other is a ground wire.

Recommended Connection Method for Power and Communication Wiring (To minimize communication wiring interference)

Power Wiring:

The main power is supplied to the outdoor unit. The field supplied power wiring from the outdoor unit to the indoor unit consists of three (3) wires and provides the power for the indoor unit. Two wires are high voltage AC power and one is a ground wire.

To minimize voltage drop, the factory recommended wire size is 14/2 stranded with a ground.

Communication Wiring:

A separate shielded stranded copper conductor only, with a minimum 600 volt rating and double insulated copper wire, must be used as the communication wire from the outdoor unit to the indoor unit.

Please use a separate shielded 16GA stranded control wire.



CAUTION

EQUIPMENT DAMAGE HAZARD

Failure to follow this caution may result in equipment damage or improper operation.

- Wires should be sized based on NEC and local codes.
- Use copper conductors only with a 600 volt rating and double insulated copper wire.



CAUTION

EQUIPMENT DAMAGE HAZARD

Failure to follow this caution may result in equipment damage or improper operation.

- Be sure to comply with local codes while running wire from indoor unit to outdoor unit.
- Every wire must be connected firmly. Loose wiring may cause terminal to overheat or result in unit malfunction. A fire hazard may also exist. Ensure all wiring is connected tight.
- No wire should be allowed to touch refrigerant tubing, compressor or any moving parts.
- Disconnecting means must be provided and shall be located within sight and readily accessible from the air conditioner.
- Connecting cable with conduit shall be routed through hole in the conduit panel.

CONTROL SYSTEM

The ductless unit is equipped with a microprocessor control to perform two functions:

1. Provide safety for the system
2. Control the system and provide optimum levels of comfort and efficiency.

The main microprocessor is located on the control board of the fan coil unit (outdoor units have a microprocessor also) with thermistors located in the fan coil air inlet and on the indoor coil.

Heat pump units have a thermistor on the outdoor coil. These thermistors monitor the system operation to maintain the unit within acceptable parameters and control the operating mode.

WIRELESS REMOTE CONTROL

1. A wireless remote control is supplied for system operation of all high wall units.
2. Each battery– operated wireless (infrared) remote control may be used to control more than one unit.



Fig. 8 – Wireless Remote Control

WIRED REMOTE CONTROL (OPTIONAL)

P/N KSACN0201AAA

1. Optional wired remote controller used for system operation of all high-wall units.
2. Kit includes a wired remote controller and a connecting cable.
3. Connect with wire terminal between remote controller and indoor unit.
4. Display in °F or °C and temperature increments every 1°F or every 1°C.



Fig. 9 – Wired Remote Controller

AIR FLOW DATA

SYSTEM SIZE			9K	12K	9K	12K	18K	24K	30K	36K
V—Ph—Hz			115—1—60		208/230—1—60					
Cooling Only	Indoor (CFM)	Hi	377	400	377	400	559	706	706	736
		Mid—Hi	288	288	288	288	488	647	618	647
		Mid—Lo	241	241	241	241	412	589	530	530
		Lo	171	171	171	171	335	530	412	412
	Outdoor (CFM)	—	1059	1177	1059	1177	1833	1386	2354	2590
Heat Pump	Indoor (CFM)	Hi	377	400	377	400	559	706	706	736
		Mid—Hi	288	288	288	288	488	647	618	647
		Mid—Lo	241	241	241	241	412	589	530	530
		Lo	171	171	171	171	335	530	412	412
	Outdoor (CFM)	—	1059	1177	1059	1177	1833	2354	2354	2590

AIR THROW DATA

SYSTEM SIZE		9K	12K	9K	12K	18K	24K	30K	36K
V—Ph—Hz		115—1—60		208/230—1—60					
Approximate Air Throw (Cooling)	ft	30.5	30.5	30.5	30.5	32.5	36.3	36.3	36.3
	m	8	8	8	8	8.5	9.5	9.5	9.5
Approximate Air Throw (Heating)	ft	34.3	34.3	34.3	34.3	36.3	36.3	36.3	36.3
	m	9	9	9	9	9.5	9.5	9.5	9.5

SOUND PRESSURE

SYSTEM SIZE			9K	12K	9K	12K	18K	24K	30K	36K
V—Ph—Hz			115—1—60		208/230—1—60					
Indoor Cooling Operation Sound Pressure	Hi	dB (A)	43	45	43	45	47	48	51	54
	Mid—Hi	dB (A)	38	40	39	39	43	44	45	49
	Mid—Lo	dB (A)	32	34	35	35	40	40	41	44
	Lo	dB (A)	26	28	29	29	39	36	37	37
Indoor Heating Operation Sound Pressure	Hi	dB (A)	43	45	43	45	47	48	56	56
	Mid—Hi	dB (A)	38	40	39	39	43	44	53	53
	Mid—Lo	dB (A)	32	34	35	35	40	40	46	46
	Lo	dB (A)	26	28	29	29	39	36	41	41
Outdoor Sound Pressure	—	dB (A)	53	53	53	54	55	59	62	65

ELECTRICAL DATA

UNIT SIZE	OPER VOLTAGE MAX/MIN*	COMPRESSOR		OUTDOOR FAN				INDOOR FAN				MCA	MAX FUSE CB AMP
		V/PH/HZ	RLA	V/PH/HZ	FLA	HP	W	V/PH/HZ	FLA	HP	W		
9K	127/104	115—1—60	8.63	115—1—60	0.55	0.04	30	115—1—60	0.32	0.054	20	12	20
12K			12.5		0.55	0.04	30		0.32	0.054	40	17	25
9K	253/187	208/230V—1—60	6.6	208/230V—1—60	0.36	0.04	30	208/230V—1—60	0.09	0.054	20	9	15
12K			6.6		0.36	0.04	30		0.09	0.054	20	9	15
18K			12.08		0.49	0.08	60		0.24	0.08	60	16	25
24K			14.67		0.65	0.1234	92		0.38	0.08	70	20	30
30K			13.45		0.45	0.1610	120		0.4	0.09	70	20	30
36K			17.5		0.73	0.2280	170		0.4	0.09	70	24	40

*Permissible limits of the voltage range at which the unit will operate satisfactorily

LEGEND

FLA — Full Load Amps

LRA — Locked Rotor Amps

MCA — Minimum Circuit Amps

RLA — Rated Load Amps

MOTOR AND FAN SPECIFICATIONS

INDOOR FAN MOTOR

SYSTEM SIZE		9K	12K	9K	12K	18K	24K	30K	36K
V—Ph—Hz		115—1—60		208/230—1—60					
Model	---	FN40A—ZL	FN40A—ZL	FN20V—ZL	FN20V—ZL	FN60B—ZL	FN60B—ZL	FN70A—ZL	FN70A—ZL
Type (AC/DC)	---	DC	DC	DC	DC	DC	DC	DC	DC
Phase	---	1	1	1	1	1	1	1	1
FLA	A	0.32	0.32	0.09	0.09	0.24	0.38	0.4	0.4
Rated Current	A	0.32	0.32	0.09	0.09	0.24	0.38	0.4	0.4
Insulation Class	---	E	E	E	E	E	E	E	E
Safe Class	---	IP20	IP20	IP20	IP20	IP20	IP20	IP20	IP20
Output	W	20	40	20	20	60	70	70	70
Rated HP	HP	0.054	0.054	0.054	0.054	0.08	0.08	0.09	0.09
Rated RPM	rev/min	/	/	/	/	1400	1300	1350	1400

OUTDOOR FAN MOTOR

SYSTEM SIZE		9K	12K	9K	12K	18K	24K	30K	36K
V—Ph—Hz		115—1—60		208/230—1—60					
Model	---	FW30J—ZL	FW30J—ZL	FW30J—ZL	FW30J—ZL	LW60M—ZL	LW92K—ZL	SWZ150A	SWZ150F
Type (AC/DC)	---	DC	DC	DC	DC	DC	DC	DC	DC
Phase	---	1	1	1	1	1	1	1	1
FLA	A	0.55	0.55	0.36	0.36	0.49	0.65	0.45	0.73
Rated Current	A	0.55	0.55	0.36	0.36	0.49	0.65	0.45	0.73
Insulation Class	---	E	E	E	E	E	E	E	E
Safe Cass	---	IP24	IP24	IP24	IP24	IP24	IP24	IP24	IP24
Output	W	30	30	30	30	60	92	120	170
Rated HP	HP	0.04	0.04	0.04	0.04	0.08	0.1234	0.1610	0.2280
Speed	rev/ min	850	850	900	900	800	820	795	890
Rated RPM	rev/ min	850	850	900	900	800	820	795	890

WIRING DIAGRAMS INDOOR UNIT

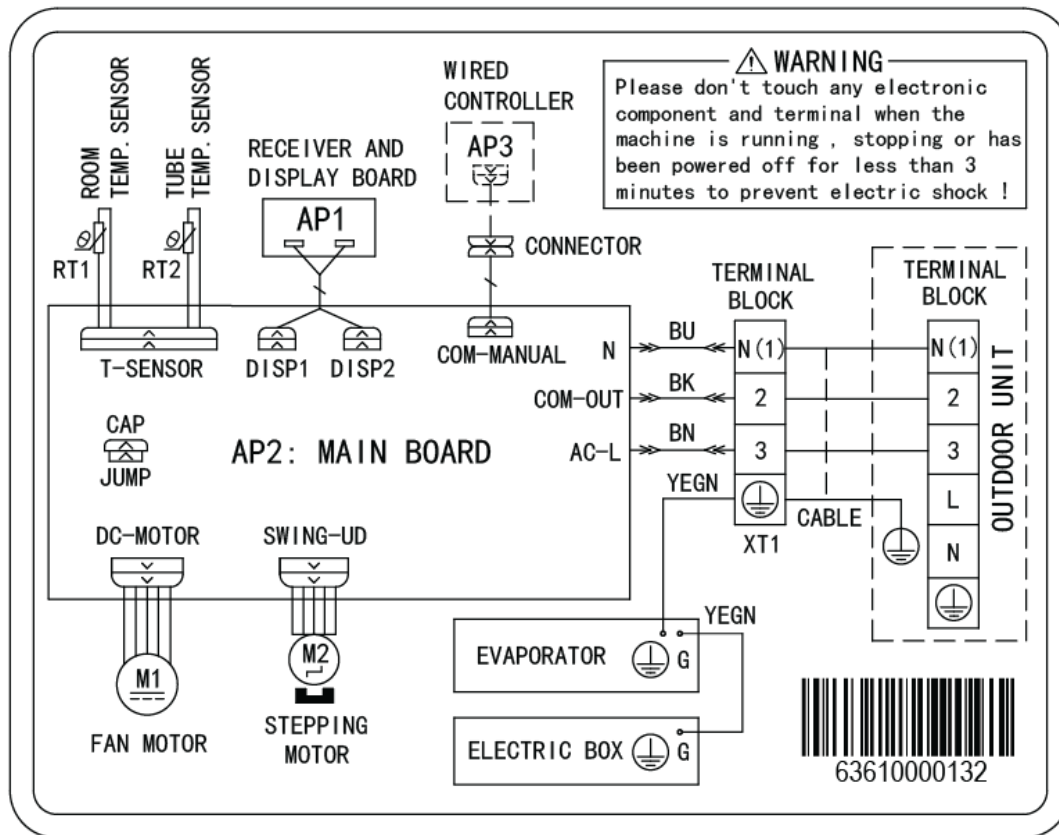


Fig. 10 — Indoor Unit sizes 09 – 12 115V

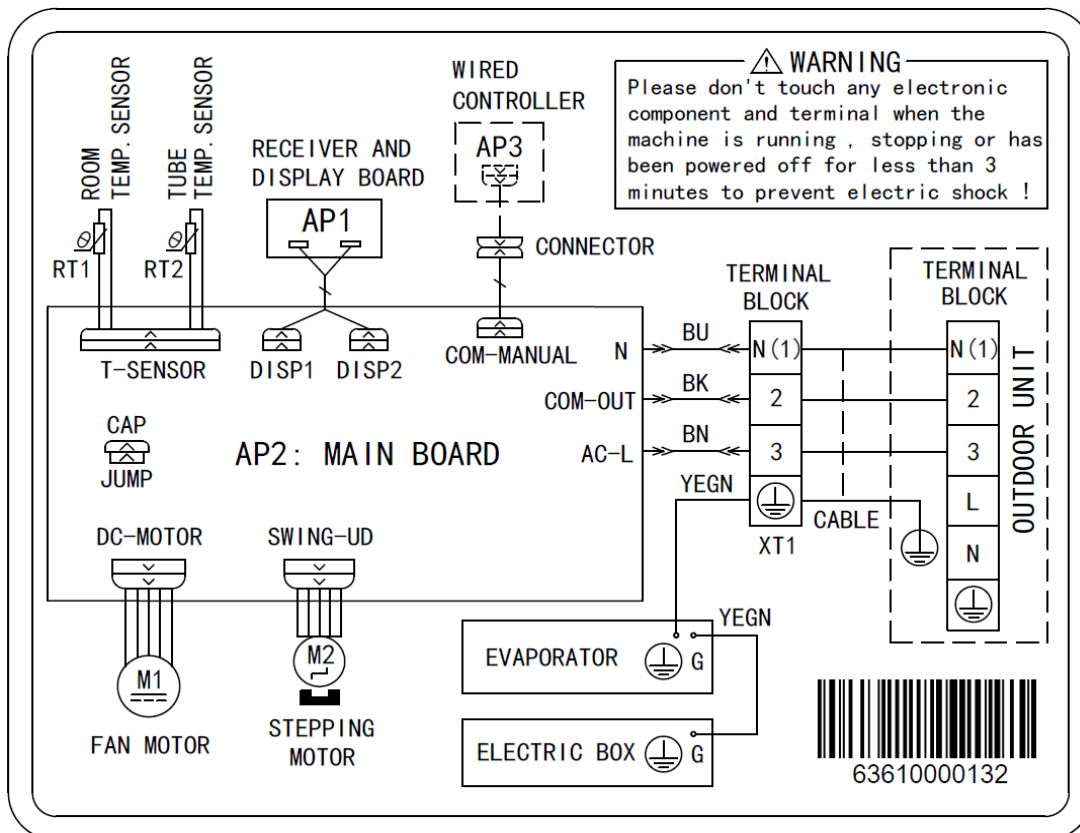


Fig. 11 — Indoor Unit sizes 09 – 12 208/230V

WIRING DIAGRAMS INDOOR UNIT (CONT)

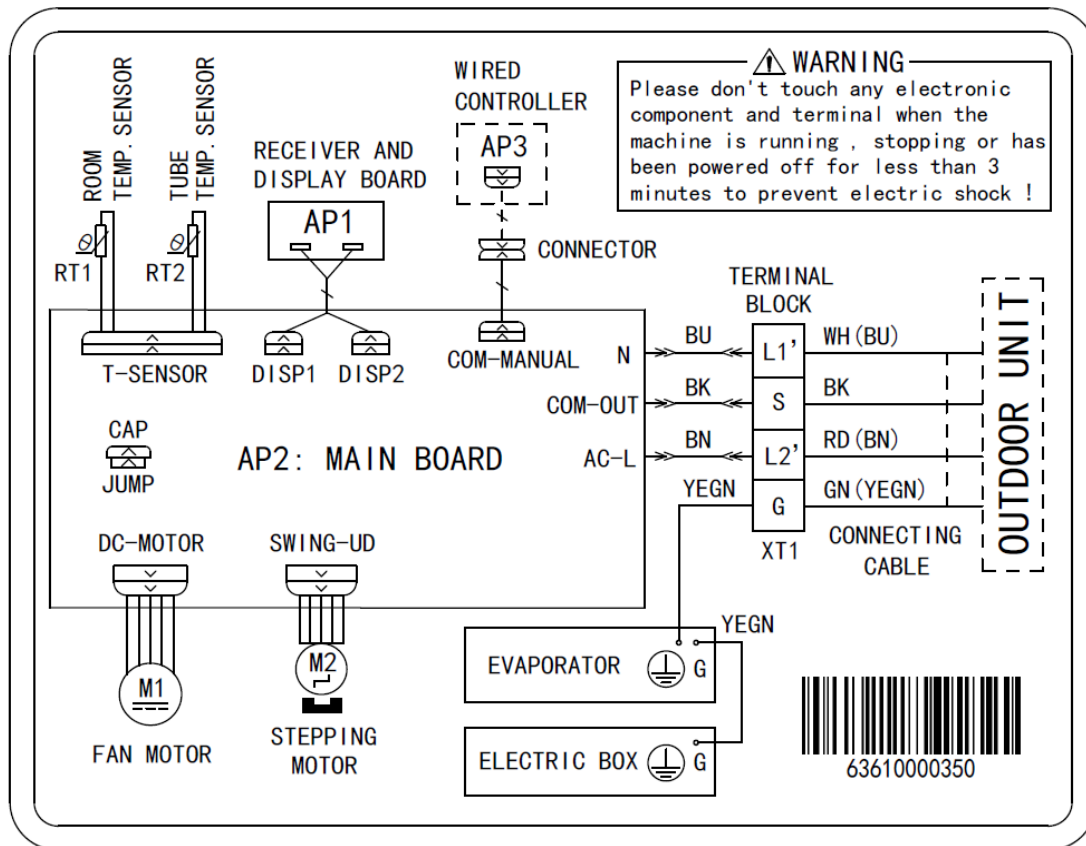


Fig. 12 — Indoor Unit sizes 18 – 24 208/230V

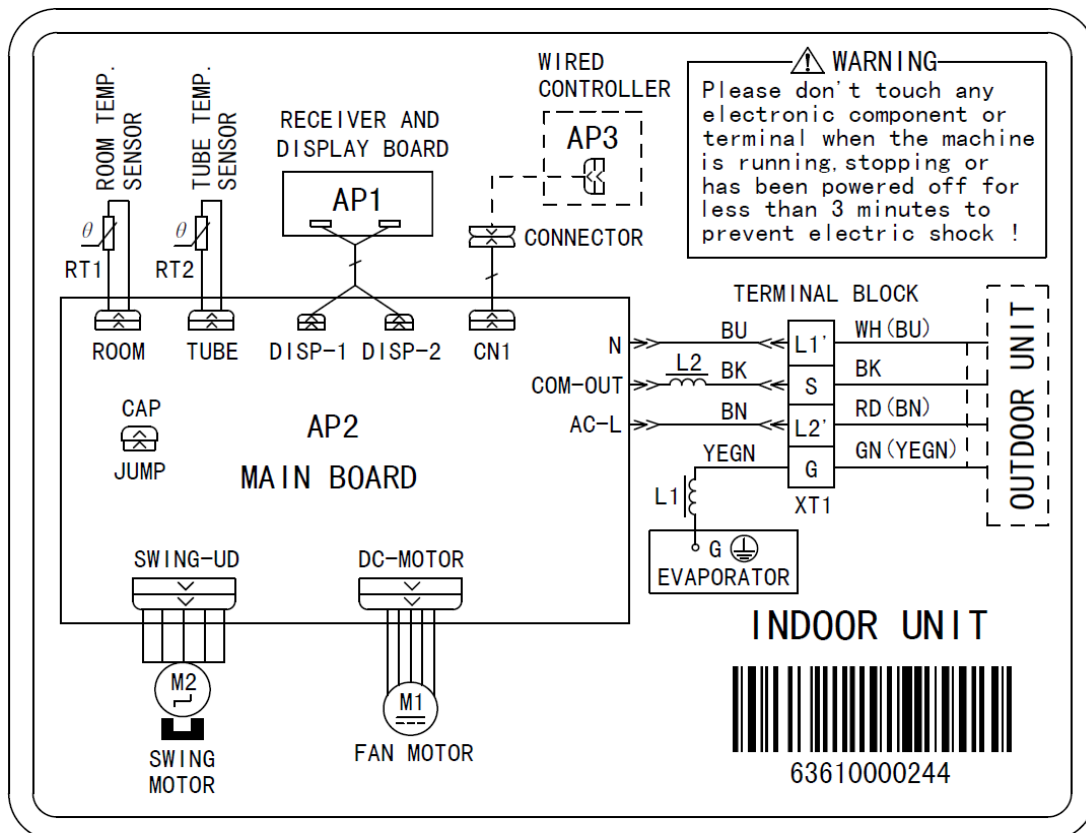


Fig. 13 — Indoor Unit sizes 30 – 36 208/230V

WIRING DIAGRAMS

OUTDOOR UNIT

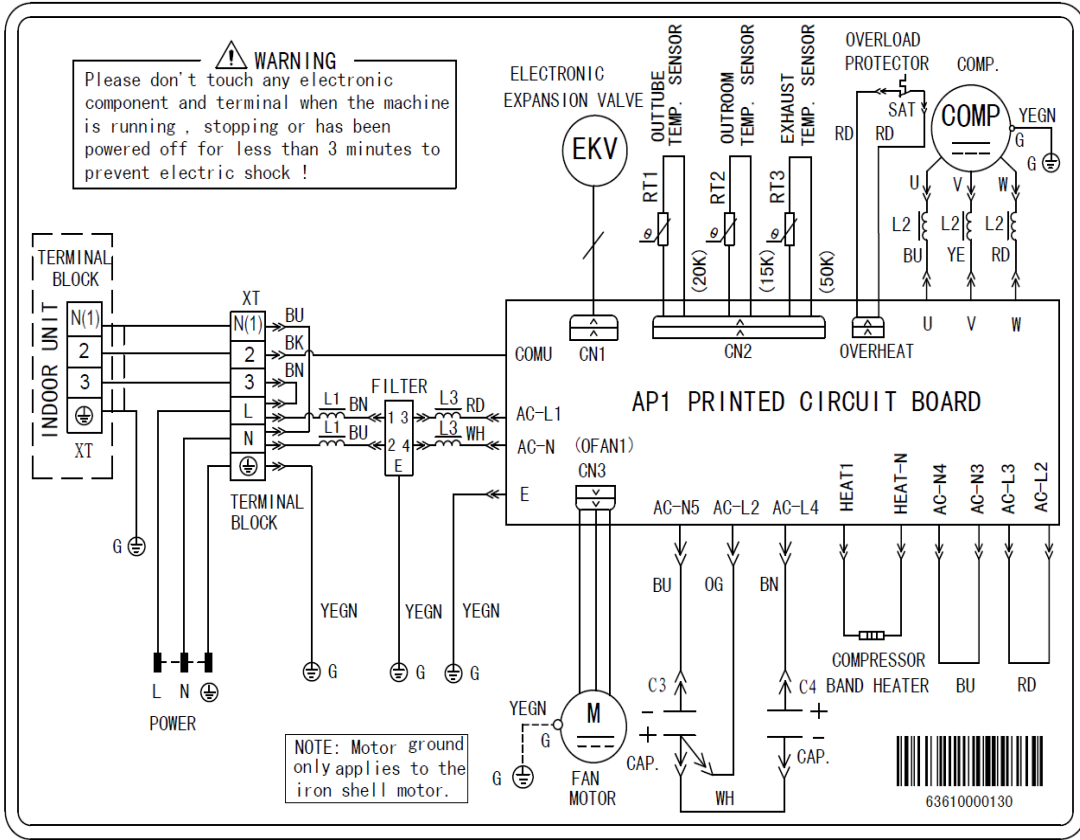


Fig. 14 – Outdoor Unit sizes 09 – 12 115V

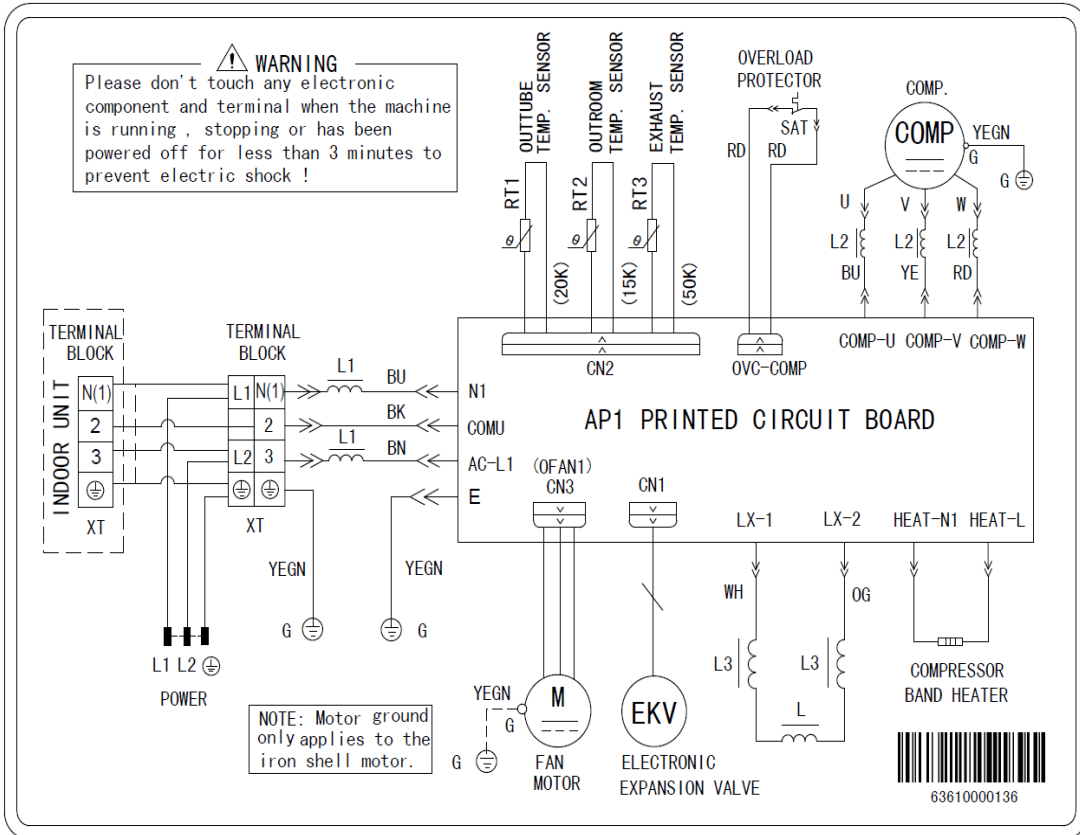


Fig. 15 — Outdoor Unit sizes 09 – 12 208/230V

WIRING DIAGRAMS

OUTDOOR UNIT (CONT)

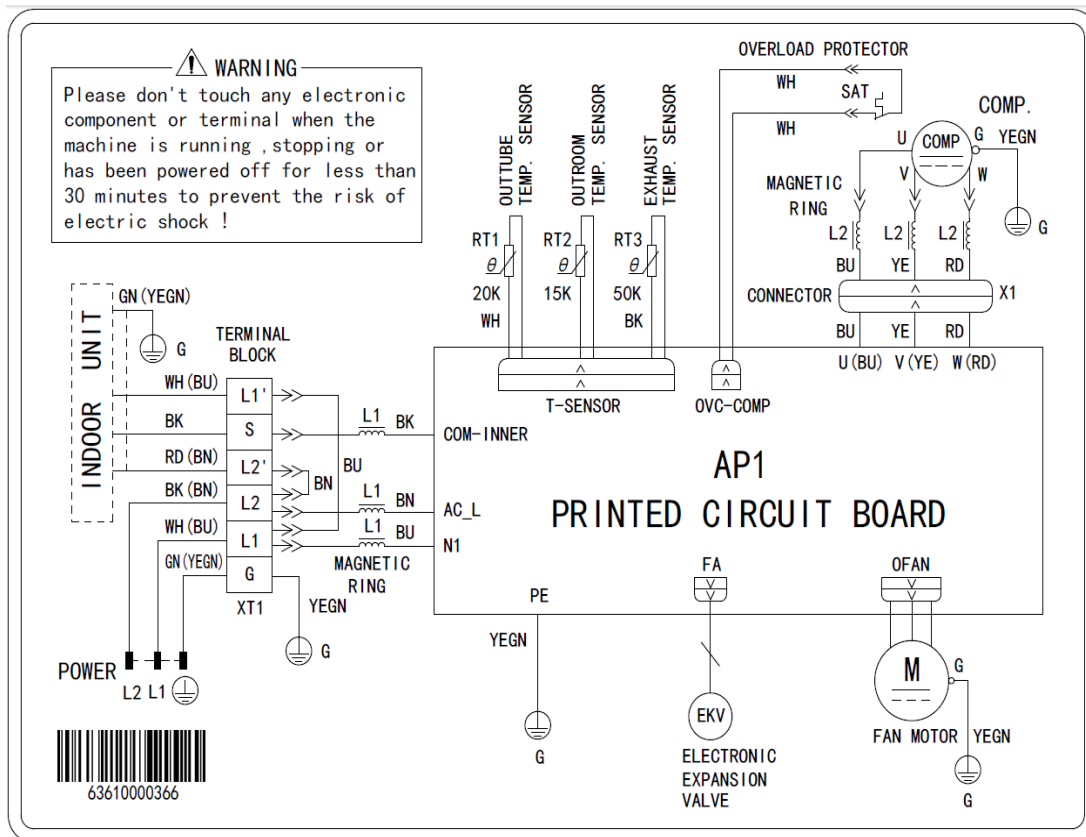


Fig. 16 – Outdoor Unit size 18 208/230V

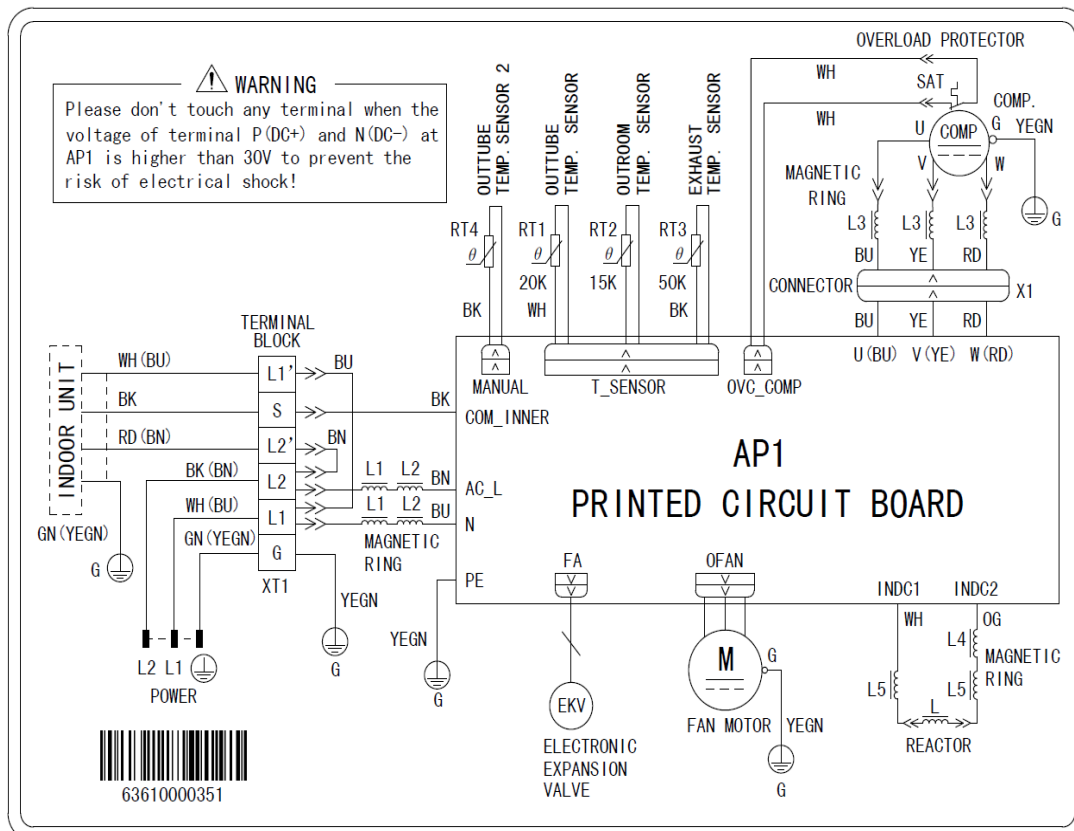


Fig. 17 – Outdoor Unit size 24 208/230V

WIRING DIAGRAMS

OUTDOOR UNIT (CONT)

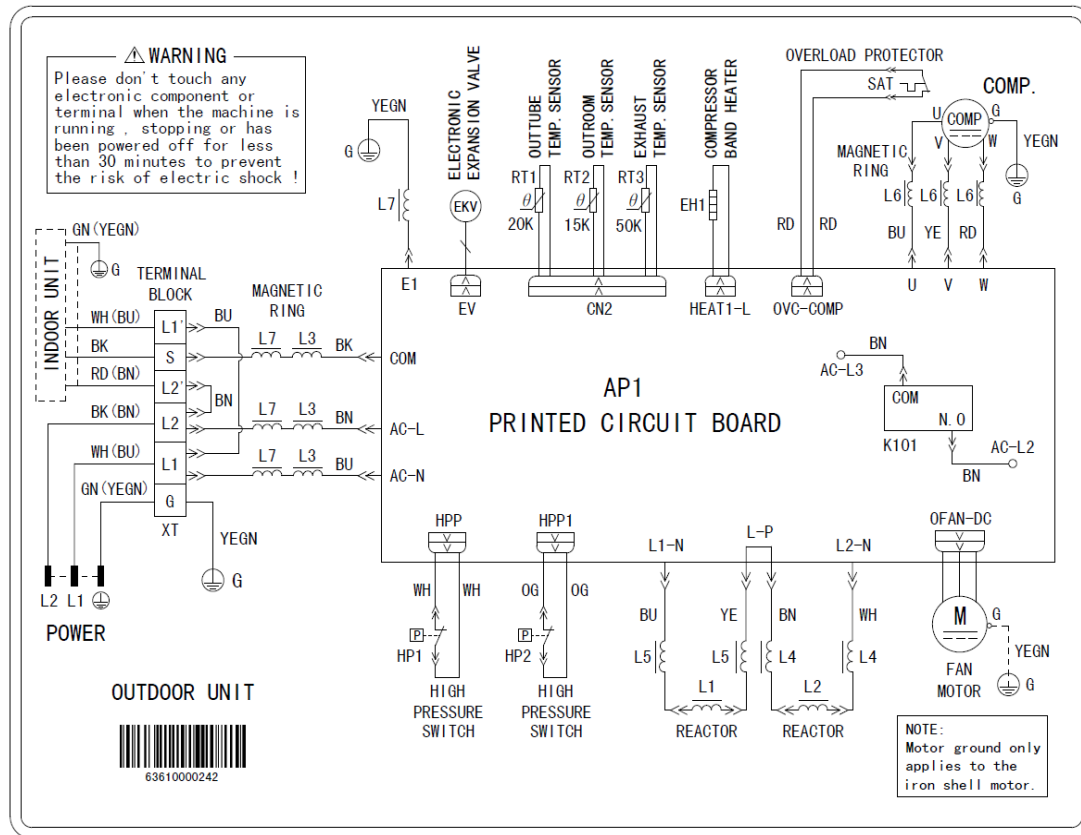


Fig. 18 — Outdoor Unit sizes 30 - 36 208/230V

GUIDE SPECIFICATIONS

INDOOR WALL-MOUNTED DUCTLESS UNITS

Size Range: 3/4 to 3 Ton Nominal Cooling and Heating Capacity
Model Number: DLFCAB / DLFCHB

PART 1 – GENERAL

1.01 System Description

Indoor, wall-mounted, direct-expansion fan coils are matched with the heat pump outdoor unit.

1.02 Agency Listings

Unit shall be rated per AHRI Standards 210/240 and listed in the AHRI directory as a matched system.

1.03 Delivery, Storage, And Handling

Units shall be stored and handled per the unit manufacturer's recommendations.

PART 2 – PRODUCTS

2.01 Equipment

A. General:

Indoor, direct-expansion, wall-mounted fan coil. The unit shall be complete with cooling/heating coil, fan, fan motor, piping connectors, electrical controls, microprocessor control system, and an integral temperature sensing. The unit shall be furnished with integral wall mounting bracket and mounting hardware.

B. Unit Cabinet:

Cabinet discharge and inlet grilles shall be attractively styled, high-impact polystyrene. The cabinet shall be fully insulated for improved thermal and acoustic performance.

C. Fans:

1. The fan shall be the tangential direct-drive blower type with an air intake at the top of the unit and a discharge at the bottom front. An automatic, motor-driven vertical air sweep shall be provided standard.
2. The air sweep operation shall be user selectable. The vertical air sweep may be adjusted (using the remote control) and the horizontal air direction may be set manually.

D. Coil:

The coil shall be a copper tube with aluminum fins and galvanized steel tube sheets. The fins shall be bonded to the tubes by mechanical expansion and blue hydrophilic pre-coated (heat pump models). A drip pan, under the coil, shall have a drain connection for a hose attachment to remove condensate. The condensate pan shall have internal trap.

E. Motors:

Motors shall be open drip-proof, permanently lubricated ball bearing with inherent overload protection. Fan motors shall be 4-speed.

F. Controls:

The controls will consist of a microprocessor-based control system which controls the space temperature, determines the optimum fan speed, and runs self diagnostics. The temperature control range shall be from 62°F to 86°F (17°C to 30°C) in increments of 1°F or 1°C, and have 46°F Heating Mode (Heating Setback). The wireless remote controller has the ability to act as the temperature sensing location for room comfort.

The unit shall have the following functions as a minimum:

1. An automatic restart after power failure at the same operating conditions as at failure.
2. A timer function to provide a minimum 24-hour timer cycle for system Auto Start/Stop.
3. Temperature-sensing controls shall sense return air temperature.
4. Indoor coil freeze protection.
5. Wireless infrared remote control to enter set points and operating conditions.
6. Automatic air sweep control to provide on or off activation of air sweep louvers.
7. Dehumidification mode shall provide increased latent removal capability by modulating system operation and set point temperature.
8. Fan-only operation to provide room air circulation when no cooling is required.
9. Diagnostics shall provide continuous checks of unit operation and warn of possible malfunctions. Error messages shall be displayed at the unit.
10. Fan speed control shall be user-selectable: High to Low, or microprocessor controlled automatic operation during all operating modes.
11. Automatic heating-to-cooling changeover in heat pump mode. Control shall include deadband to prevent rapid mode cycling between heating and cooling.
12. Indoor coil high temperature protection shall be provided to detect excessive indoor discharge temperature when unit is in heat pump mode.

G. Filters:

Unit shall have filter track with factory-supplied cleanable filters.

H. Electrical Requirements:

Indoor fan motor to operate on 115V on model sizes 9-12 and on 208/230V on model sizes 9-36, power is supplied from outdoor unit.

I. Operating Characteristics:

The Ductless system shall have a minimum SEER (Seasonal Energy Efficiency Ratio) and HSPF at AHRI conditions, as listed on the specification table.

J. Refrigerant Lines:

All units should have refrigerant lines that can be oriented to connect from the left, right or back of unit. Both refrigerant lines need to be insulated.

K. Special Features (Field Installed):

1. Condensate Pump:
 - The condensate pump shall remove condensate from the drain pan when gravity drainage cannot be used. The pump shall be designed for quiet operation. The pump shall consist of two parts: an internal reservoir/sensor assembly, and a remote sound-shielded pump assembly. A liquid level sensor in the reservoir shall stop the cooling operation if the liquid level in the reservoir is unacceptable.

HORIZONTAL DISCHARGE OUTDOOR UNITS

Size Range: 3/4 to 3 Ton Nominal Cooling and Heating Capacity

Model Number: DLCCAR / DLCCHR

PART 1 – GENERAL

1.01 System Description

- A. Outdoor air-cooled split system compressor sections suitable for on-the-ground, rooftop, wall hung or balcony mounting. Units consist of a rotary compressor, an air-cooled coil, propeller-type draw-through outdoor fan, reversing valve (HP), accumulator (HP units), metering device(s), and a control box. Units discharge air horizontally as shown on the contract drawings. Units function as the outdoor component, an air-to-air cooling only, or heat pump system.
- B. Units should be used in a refrigeration circuit matched to ductless cooling only or heat pump fan coil units.

1.02 Agency Listings

- A. Unit construction complies with ANSI/ASHRAE 15, latest revision, and with the NEC.
- B. Units should be evaluated in accordance with UL standard 1995.
- C. Units are listed in the CEC directory.
- D. Unit cabinet is capable of withstanding a 500-hour salt spray test per Federal Test Standard No. 141 (method 6061).
- E. Air-cooled condenser coils are leak tested at 550 psig.

1.03 Delivery, Storage, And Handling

Units are shipped in one piece and are stored and handled per the unit's manufacturer's recommendations.

PART 2 – PRODUCTS

2.01 Equipment

A. General:

Factory assembled, single piece, air-cooled outdoor unit. Contained within the unit enclosure is all the factory wiring, piping, controls, and the compressor.

B. Unit Cabinet:

- 1. Unit cabinet is constructed of galvanized steel, bonderized and coated with a baked enamel finish on both the inside and outside.
- 2. Unit access panels are removable with minimal screws and provides full access to the compressor, fan, and control components.
- 3. Outdoor compartment is isolated and has an acoustic lining to assure quiet operation.

C. Fans:

- 1. Outdoor fans are the direct-drive propeller type, and discharges air horizontally. Fans draw air through the outdoor coil.
- 2. Outdoor fan motors are totally enclosed, single phase motors with class E insulation and permanently lubricated ball bearings. The motor is protected by internal thermal overload protection.
- 3. Shaft has an inherent corrosion resistance.

- 4. Fan blades are non-metallic and shall be statically and dynamically balanced.
- 5. Outdoor fan openings are equipped with a PVC metal/mesh coated protection grille over the fan.

D. Compressor:

- 1. The compressor is the fully hermetic rotary type.
- 2. The compressor is equipped with an oil system, operating oil charge, and a motor. Internal overloads protect the compressor from overtemperature and overcurrent.
- 3. The motor is NEMA rated class E, suitable for operation in a refrigerant atmosphere.
- 4. The compressor assembly is installed on rubber vibration isolators.
- 5. The compressors are single phase.

E. Outdoor Coil:

The coil is constructed of aluminum fins (blue hydrophilic pre-coated on heat pump models) mechanically bonded to seamless copper tubes, which are cleaned, dehydrated, and sealed.

F. Refrigeration Components:

The refrigerant circuit components include a brass external liquid line service valve with service gage port connections, a suction line service valve with service gage connection port, service gage port connections on compressor suction and discharge lines with Schrader type fittings with brass caps, accumulator, reversing valve.

G. Controls and Safeties:

Operating controls and safeties are factory selected, assembled, and tested. The minimum control functions include the following:

- 1. Controls:
 - a. A time delay control sequence is provided standard through the fan coil board.
 - b. Automatic outdoor fan motor protection.
- 2. Safeties:
 - a. System diagnostics.
 - b. Compressor motor current and temperature overload protection.
 - c. Outdoor fan failure protection.

H. Electrical Requirements:

- 1. The unit operates single-phase, 60 Hz power at 115V on model sizes 9-12 and on 208/230V on model sizes 9-36.
- 2. The unit electrical power is a single point connection.
- 3. The unit control voltage to the indoor fan coil is 0-15V DC.
- 4. All power and control wiring must be installed per NEC and all local electrical codes.
- 5. The unit has high and low voltage terminal block connections.