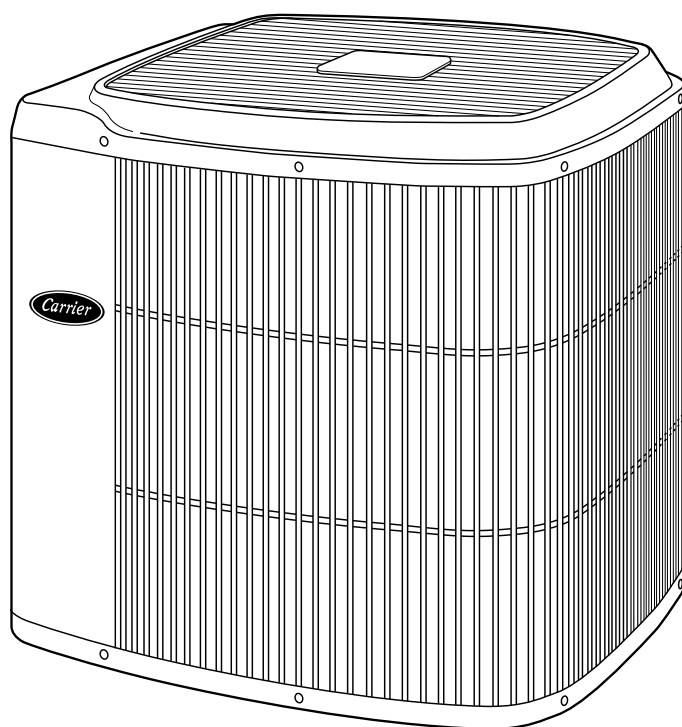




Product Data

38TUA (60 Hz) Air Conditioner

Sizes 024 thru 060



Model 38TUA Energy-Efficient Air Conditioner incorporates innovative technology to provide quiet, reliable summer cooling performance. Built into these units are the features most desired by homeowners today, including SEER ratings of up to 11.0 when used with components as designated by manufacturer. All models are listed with U.L., CSA, ARI, and CEC.

The Tech 2000 Silencer System features the InViroFlow design, energy-efficient fan and motor, and advanced sound hood.

InViroFlow Design for improved airflow pattern requiring less energy.

Energy-Efficient Fan and Fan Motor adds to quiet operation while moving air more efficiently.

Sound Hood to muffle noise from operation.

FEATURES/BENEFITS

Electrical Range — Units are offered in 208/230 volts single phase.

Wide Range of Sizes — Available in 6 nominal sizes from 024 through 060 to meet the needs of residential and light commercial applications.

Weather-Armor II Cabinet — Steel is protected with a heavy coating commonly called “galvanizing,” then coated with a layer of zinc phosphate. A coat of modified polyester powder coating is then applied and baked-on providing each unit with a hard, smooth finish that will last for many years.

All screws on cabinet exterior are coated for a long-lasting, rust-resistant, quality appearance.

Totally Enclosed Fan Motor — Means greater reliability under rain conditions, dependable performance

for many years. Permanent-split-capacitor-type motors provide more economical operation.

Unit Design — Copper tube and enhanced aluminum fin coil is designed for optimum heat transfer. Vertical air discharge carries sound and hot condenser air up and away from adjacent patio areas and foliage. New heat pump style drain pan for easy removal of water, dirt and leaves.

Application Versatility — The 38TUA can be combined with a wide

variety of evaporator coils and blower packages to provide quiet, dependable comfort. Unit can be installed on a roof or at ground level.

External Service Valves — Both service valves are brass, back seating type with sweat connections. Valves are externally located so refrigerant tube connections can be made quickly and easily. Each valve has a service port for ease of checking operating refrigerant pressures.

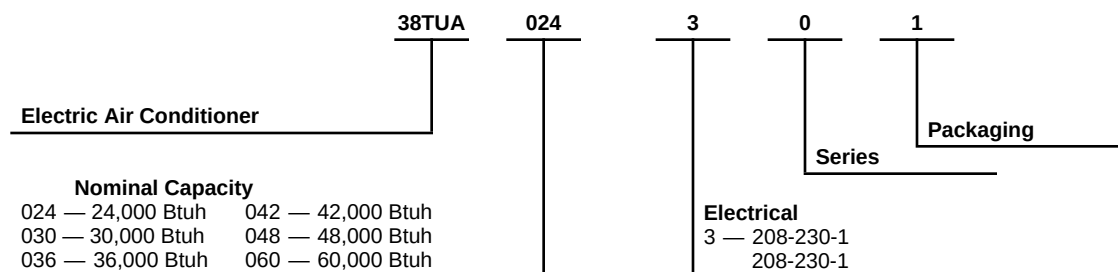
Easy Serviceability — One access panel provides access to electrical

control box and compressor. For improved serviceability each compressor is equipped with a compressor terminal plug (with the exception of the 048). Removal of top gives access to fan motor and coil.

Standard Features — All units are equipped with compressor sound hood and compressor short cycle protector.

Warranty — Standard 1 year on parts, with an additional 9 years on compressor.

Model number nomenclature



Physical data

UNIT SIZE	024	030	036	042	048	060
OPERATING WEIGHT	143	153	200	213	247	287
COMPRESSOR Manufacturer & Type	Copeland & Scroll		Millennium & Scroll		Copeland & Scroll	Millennium & Scroll
REFRIGERANT Control	22 AccuRater® (Bypass Type)					
Charge (lb)	4.48	5.47	5.53	6.68	6.34	11.15
COND FAN Air Discharge Air Qty (CFM)	Propeller Type, Direct Drive Vertical 1700 2000 3000 3400					
COND COIL Face Area (sq ft)	8.7	10.83	Copper Tube, Aluminum Plate Fin 12.0 15.2 18.3			
VALVE CONNECT (in. ID) Vapor Liquid	5/8		3/4	Sweat 3/8	7/8	
REFRIG TUBES* (in. OD) Vapor Liquid	5/8		3/4	Sweat 3/8	7/8	1-1/8

NOTE: See unit Installation Instructions for proper installation.

* Tube sizes are for runs up to 50 ft. For tube set over 50 ft consult Long-Line Application Guideline.

AccuRater® chart

UNIT SIZE-SERIES	PISTON* IDENTIFICATION NO.
024-0	59
030-0	63
036-0	73
042-0	78
048-0	84
060-0	98

* Piston listed is for any approved non-capillary tube coil combination. Piston is shipped with outdoor unit and must be installed in approved indoor coil.



CERTIFICATION APPLIES ONLY WHEN THE COMPLETE SYSTEM IS LISTED WITH ARI

Accessories

ORDERING NUMBER	DESCRIPTION
KAATD0101TDR	Time-Delay Relay — All Sizes
P251-0083 (RCD)	Low-Ambient Controller — All Sizes
KAAWS0101AAA	Winter Start Control* — All Sizes
KAAFT0101AAA	Evap Freeze Thermostat* — All Sizes
Standard	Cycle Protector
KSAHS0401AAA	Start Assist — Capacitor/Relay (Sizes 024, 030, 048)
KAACS0201PTC	Start Assist — PTC (Sizes 024, 030, 048, 060)
Standard	Start Assist — PTC (Sizes 036, 042)
Standard	Sound Hood
KAATX0301RPB	TXV Kit (RPB) (Size 024)
KAATX0401RPB	TXV Kit (RPB) (Size 030)
KAATX0501RPB	TXV Kit (RPB) (Sizes 036, 042)
KAATX0601RPB	TXV Kit (RPB) (Size 048)

* Use with low-ambient controller.

ORDERING NUMBER	DESCRIPTION
KAATX0701RPB	TXV Kit (RPB) (Size 060)
KAATX1001HSO	TXV Kit (Hard Shut-off) (Size 024)
KAATX1101HSO	TXV Kit (Hard Shut-off) (Size 030)
KAATX1201HSO	TXV Kit (Hard Shut-off) (Sizes 036, 042)
KAATX1301HSO	TXV Kit (Hard Shut-off) (Size 048)
KAATX1401HSO	TXV Kit (Hard Shut-off) (Size 060)
KAALP0101LPS	Low-Pressure Switch — All Sizes
KSAHI0101HPS	High-Pressure Switch — All Sizes
P502-8083S (RCD)	Filter Drier (Sizes 024-036)
P502-8163S (RCD)	Filter Drier (Sizes 042-060)
KAALS0101LLS	Liquid Solenoid Valve — All Sizes
KSASF0101AAA	Support Feet — All Sizes
KAACH1201AAA	Crankcase Heater — All Sizes

THERMOSTAT/SUBBASE PKG.	DESCRIPTION
HH07AT174	Automatic Changeover 1-Stage Heat/1-Stage Cool — °F
HH07AT184	Manual Changeover With Subbase 1-Stage Heat/1-Stage Cool — °F

Accessory Description and Usage

1. Time-Delay Relay

A SPST delay relay which briefly continues operation of the indoor blower motor to provide additional cooling after the compressor cycles off.

SUGGESTED USE: For improved efficiency ratings for certain combinations of indoor and outdoor units. (Refer to ARI Unitary Directory.)

2. Winter Start Control

A SPST delay relay which bypasses the low-pressure switch for approximately 3 minutes to permit start-up for cooling operation under low-load conditions.

SUGGESTED USE: All air conditioners which have low-pressure switch and where low-ambient controller has been added.

3. Evaporator Freeze Thermostat

A SPST temperature actuated switch which stops unit operation when evaporator reaches freeze-up conditions.

SUGGESTED USE: All units where low-ambient controller has been added.

4. Compressor Start Assist-Capacitor/Relay Type

Start capacitor and start relay gives “hard” boost to compressor motor at each start-up.

SUGGESTED USE: Installations where interconnecting tube length exceeds 50 ft.

Installations where outdoor design temperature exceeds 105°F (40.6°C)

Replacement installations with hard shut-off expansion valve on indoor coil.

5. Compressor Start Assist — PTC Type

Solid-state electrical device which gives a “soft” boost to the reciprocating compressor at each start-up.

SUGGESTED USE: Installations with marginal power supply.

Replacement installations with rapid pressure balance (RPB) expansion valve on indoor coil.

Replacement installations with undersized interconnecting refrigerant tubes.

6. Thermostatic Expansion Valve (TXV) Kit

A modulating flow control valve which meters refrigerant liquid flow rate into the evaporator in response to the superheat of the refrigerant gas leaving the evaporator. Kit includes valve, adapter tubes, and external equalizer tube. Both hard shut-off and RPB type valves are available.

SUGGESTED USE: For improved system performance in cooling mode for certain combinations of indoor and outdoor units. (Refer to ARI Unitary Directory.)

7. Low-Pressure Switch

Auto reset SPST switch activated by refrigerant pressure on low side of refrigerant circuit. Cycles compressor off if refrigerant pressure drops to about 27 psig. Prevents indoor coil freeze-up due to loss of indoor airflow. Also, provides additional protection against compressor damage due to loss of refrigerant charge.

SUGGESTED USE: Where indoor coil is exposed to “dirty” air.

All commercial installations.

8. High-Pressure Switch

Auto reset SPST switch activated by refrigerant pressure on high side of refrigerant circuit. Cycles compressor off if refrigerant pressure rises to about 425 psig. Provides additional protection against compressor damage due to loss of outdoor airflow.

SUGGESTED USE: Installations exposed to very “dirty” outdoor air.

Installations where condenser inlet air temperature exceeds 125°F (51.7°C).

9. Filter Drier

A device for removing contaminants from refrigerant circulating in an air conditioner; 1 direction flow for air conditioners.

SUGGESTED USE: All field-connected split-system air conditioners.

10. Liquid Solenoid Valve (LLS)

An electrically operated shut-off valve to be installed at the outdoor or indoor unit (depending on tubing configuration) and which stops and starts refrigerant liquid flow in response to compressor operation. Maintains a column of refrigerant liquid ready for action at next compressor operation cycle.

SUGGESTED USE: For improved system performance in air conditioners for certain combinations of indoor and outdoor units (refer to ARI Unitary Directory).

In certain long-line applications (refer to Long-Line Application Guideline).

11. Support Feet

Four stick-on plastic feet which raise the unit 4 in. above the mounting pad. This allows sand, dirt and other debris to be flushed from the unit base; minimizes corrosion.

SUGGESTED USE: Coastal installations.

Windy areas or where debris is normally circulating. Rooftop installations.

12. Crankcase Heater

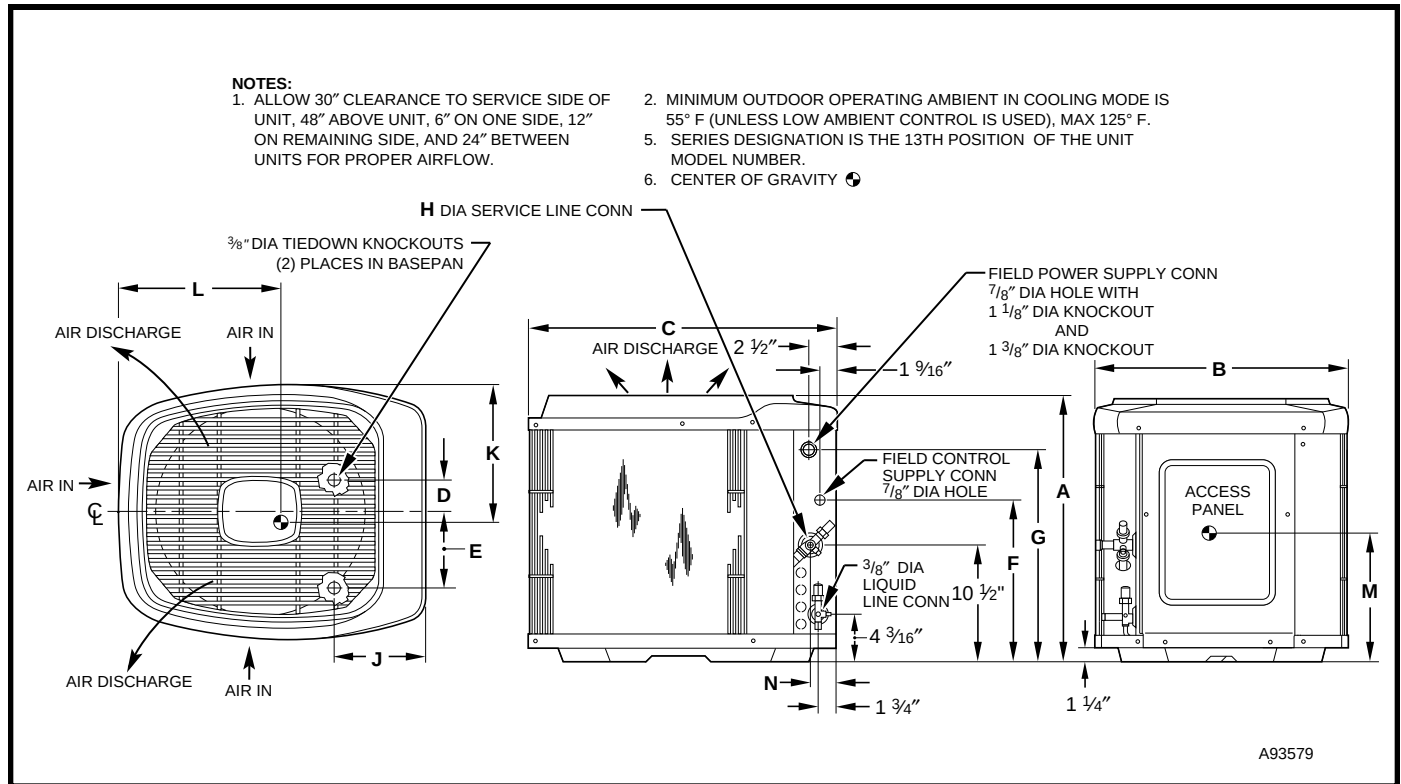
An electric resistance heater which mounts to the base of the compressor to keep the lubricant warm during off cycles. Improves compressor lubrication on restart and minimizes chance of refrigerant slugging. May or may not include a thermostat control.

SUGGESTED USE: When interconnecting tube length exceeds 50 ft.

When unit will be operated below 55°F (12.8°C) outdoor air temperature. (Use with low-ambient controller.)

All commercial installations.

Dimensions



UNIT SIZE	SERIES	A	B	C	D	E	F	G	H	J	K	L	M	N
		In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
024	0	27-13/16	22-1/2	27-1/2	2-13/16	6-15/16	21-1/2	27-7/8	5/8	8-3/16	12	14-5/8	11	2-3/8
030	0	33-13/16	22-1/2	27-1/2	2-13/16	6-15/16	21-1/2	27-7/8	5/8	8-3/16	11-1/2	14-3/8	13-1/2	2-3/8
036	0	27-13/16	30	34-15/16	4	9-3/4	15-1/2	21-7/8	3/4	8-3/16	16-1/4	10-3/16	11	2-15/16
042	0	33-13/16	30	34-15/16	4	9-3/4	21-1/2	27-7/8	7/8	8-3/16	16-1/2	10-9/16	13-1/2	2-15/16
048	0	33-13/16	30	34-15/16	4	9-3/4	21-1/2	27-7/8	7/8	8-3/16	16-7/8	10-3/16	13-1/2	2-15/16
060	0	39-13/16	30	34-15/16	4	9-3/4	27-1/2	33-7/8	7/8	8-3/16	16-3/4	10-7/16	15	2-15/16

Electrical data

UNIT SIZE-SERIES	V/PH	OPER VOLTS*		COMPR		FAN FLA	MCA	MIN WIRE SIZE 60°	MIN WIRE SIZE 75°	MAX LENGTH (FT) 60°±	MAX LENGTH (FT) 75°±	MAX FUSE† OR HACR TYPE CKT BKR AMPS
		Max	Min	LRA	RLA							
024-0	208/230/1	253	187	62.5	11.6	0.5	15.0	14	14	53	50	20
030-0				76.0	13.5	0.8	17.7	14	14	44	42	25
036-0				95.0	16.7	0.9	21.8	12	12	57	54	30
042-0				115.0	19.9	0.9	25.8	10	10	77	73	40
048-0	208-230/1	197		129.0	23.7	1.4	31.0	8	10	100	61	50
060-0				165.0	28.8	1.4	37.4	8	8	82	78	60

FLA — Full Load Amps

HACR — Heating, Air Conditioning, Refrigeration

LRA — Locked Rotor Amps

MCA — Minimum Circuit Amps

RLA — Rated Load Amps

* Permissible limits of the voltage range at which the unit will operate satisfactorily. Operation outside these limits may result in unit failure. If wire is applied at ambient greater than 30°C (86°F), consult Table 310-16 of the NEC (ANSI/NFPA 70).

The ampacity of nonmetallic-sheathed cable (NM), trade name ROMEX, shall be that of 60°C (140°F) conductors, per the NEC (ANSI/NFPA 70) Article 336-36.

All motors/compressors contain internal overload protection.

† Time-delay fuse.

‡ Length shown is as measured 1 way along wire path between unit and service panel for a voltage drop not to exceed 2 percent.

Performance data

UNIT SIZE	INDOOR MODEL	EVAP AIR CFM	TOT. CAP. BTUH	FACTORY- SUPPLIED ENHANCE- MENT	STANDARD RATING	FIELD-SUPPLIED ACCESSORY†		SOUND RATING (BELS)
						TDR	TXV	
024	CC5A/CD5A/CD5BA030†	800	23,600	None	10.70	11.00	11.00	7.2
	CC5A/CD5A/CD5BA024	800	23,400	None	10.50	11.00	11.00	7.2
	CC5A/CD5A/CD5BW030	800	23,400	None	10.70	11.00	11.00	7.2
	CA5A/CB5AA024	800	23,400	None	10.50	11.00	11.00	7.2
	CA5A/CB5AW030	800	23,000	None	10.70	11.00	11.00	7.2
	CB5AA030	800	23,000	None	10.70	11.00	11.00	7.2
	CD3(A,B)A024	800	23,400	None	10.50	11.00	11.00	7.2
	CD3(A,B)A030	800	23,400	None	10.70	11.00	11.00	7.2
	CE3AA024	800	23,400	None	10.70	11.00	11.00	7.2
	CE3AA030	800	23,600	None	11.00	11.10	11.00	7.2
	CF5AA024	800	23,400	None	10.70	11.00	11.00	7.2
	FA1ANA024	800	23,600	TDR	11.20	—	11.20	7.2
	FA1ANA030	800	23,400	TDR	11.00	—	11.00	7.2
	FA1BNA030	800	23,800	TDR	11.10	—	11.10	7.2
	FB(5,4)AN(A,F)024	800	23,400	TDR	11.00	—	11.00	7.2
	F(A,B)4ANF024	800	23,400	TDR	11.00	—	11.00	7.2
	F(A,B)4ANF030	800	23,800	TDR	11.50	—	11.50	7.2
	FB4AN(A,F)030	800	23,800	TDR	11.50	—	11.50	7.2
	FB5AN(A,F)030	800	23,400	TDR	11.00	—	11.00	7.2
	FB5BNA030	800	23,800	TDR	11.50	—	11.50	7.2
	FC4BNF024	800	23,600	TDR & TXV	11.10	—	—	7.2
	FC4BNF030	800	23,800	TDR & TXV	11.50	—	—	7.2
	FC4BNF033	800	24,200	TDR & TXV	11.50	—	—	7.2
	FD3ANA024	800	23,200	None	11.00	11.20	11.20	7.2
	FD3ANA030	800	23,800	None	11.00	11.30	11.30	7.2
	FF1ANA024	800	23,400	None	10.70	11.00	11.00	7.2
	FF1ANA030	800	24,000	None	11.00	11.30	11.30	7.2
	FG3AAA024	800	23,200	None	10.70	11.00	11.00	7.2
	FK4BNF001	790	24,800	TDR & TXV	12.50	—	—	7.2
	FK4BNF002	790	25,000	TDR & TXV	12.60	—	—	7.2
	FK4BNF003	730	25,000	TDR & TXV	13.00	—	—	7.2
	FK4BNF004	710	25,000	TDR & TXV	13.00	—	—	7.2
	FK4BNB005	795	25,000	TDR & TXV	13.50	—	—	7.2
	FK4ANF002	750	24,800	TDR & TXV	12.50	—	—	7.2
030	CC5A/CD5A/CD5BA036†	1000	29,000	None	10.70	11.00	11.00	7.4
	CC5A/CD5A/CD5BA030	1000	28,000	None	10.20	10.50	10.50	7.4
	CC5A/CD5A/CD5BW030	1000	28,000	None	10.20	10.50	10.50	7.4
	CA5A/CB5AW030	1000	28,000	None	10.20	10.50	10.50	7.4
	CA5A/CB5AA036	1000	28,600	None	10.50	11.00	11.00	7.4
	CD5A/CD5BW036	1000	29,000	None	10.50	11.00	11.00	7.4
	CB5AA030	1000	28,000	None	10.20	10.50	10.50	7.4
	CB5AW036	1000	28,600	None	10.50	11.00	11.00	7.4
	CD3(A,B)A030	1000	28,000	None	10.20	10.50	10.50	7.4
	CD3(A,B)A036	1000	29,000	None	10.70	11.00	11.00	7.4
	CE3AA030	1000	28,000	None	10.50	10.70	10.70	7.4
	CE3AA036	1000	28,400	None	10.50	11.00	11.00	7.4
	CF5AA036	1000	28,800	None	10.50	11.00	11.00	7.4
	FA1ANA030	1000	27,600	TDR	10.50	—	10.50	7.4
	FA1ANA036	1000	28,200	TDR	10.20	—	10.20	7.4
	FA1BNA030	1000	28,000	TDR	10.70	—	10.70	7.4
	FB4AN(A,F)030	900	27,800	TDR	11.00	—	11.00	7.4
	FB5BNA030	900	27,800	TDR	11.00	—	11.00	7.4
	F(A,B)4ANF030	900	27,800	TDR	11.00	—	11.00	7.4
	F(A,B)4ANF036	1000	28,600	TDR	10.70	—	10.70	7.4
	FB5AN(A,F)030	1000	27,600	TDR	10.70	—	10.70	7.4
	FB(5,4)AN(A,F)036	1000	28,600	TDR	10.70	—	10.70	7.4
	FC4BNF030	1000	28,000	TDR & TXV	10.80	—	—	7.4
	FC4BNF033	1000	29,000	TDR & TXV	11.00	—	—	7.4
	FC4BNF036	1000	28,800	TDR & TXV	10.70	—	—	7.4
	FD3ANA030	1000	28,200	None	10.20	10.50	10.50	7.4
	FF1ANA030	1000	28,200	None	10.50	10.80	10.80	7.4
	FG3AAA036	1000	28,800	None	10.50	11.00	11.00	7.4
	FK4BNB005	975	30,000	TDR & TXV	12.50	—	—	7.4
	FK4BNF001	990	28,200	TDR & TXV	11.50	—	—	7.4
	FK4BNF002	990	28,600	TDR & TXV	11.50	—	—	7.4
	FK4BNF003	905	29,200	TDR & TXV	12.00	—	—	7.4
	FK4BNF004	905	29,200	TDR & TXV	12.00	—	—	7.4
	FK4ANF002	750	28,000	TDR & TXV	11.50	—	—	7.4
	FK4ANF003	800	28,800	TDR & TXV	12.00	—	—	7.4
036	CC5A/CD5A/CD5BA042†	1200	35,000	None	11.00	11.20	11.20	7.6
	CC5A/CD5A/CD5BA036	1200	34,800	None	11.00	11.20	11.20	7.6
	CC5A/CD5A/CD5BA043	1200	34,600	None	11.00	11.20	11.20	7.6
	CC5A/CD5A/CD5BW042	1200	34,600	None	10.70	11.00	11.00	7.6
	CC5A/CD5A/CD5BW043	1200	34,600	None	11.00	11.00	11.00	7.6
	CA5A/CB5AA036	1200	35,000	None	10.70	11.00	11.00	7.6
	CA5A/CB5AA042	1200	35,000	None	10.70	11.00	11.00	7.6
	CA5A/CB5AW042	1200	35,000	None	10.70	11.00	11.00	7.6

See notes on pg. 8.

Performance data continued

UNIT SIZE	INDOOR MODEL	EVAP AIR CFM	TOT. CAP. BTUH	FACTORY-SUPPLIED ENHANCEMENT	STANDARD RATING	FIELD-SUPPLIED ACCESSORY†		SOUND RATING (BELS)
						TDR	TXV	
036	CB5AW036	1200	35,000	None	10.70	11.00	11.00	7.6
	CD5A/CD5BW036	1200	34,800	None	11.00	11.20	11.20	7.6
	CD3(A,B)A036	1200	34,800	None	11.00	11.20	11.20	7.6
	CD3(A,B)A042	1200	34,800	None	11.00	11.20	11.20	7.6
	CE3AA036	1200	34,200	None	10.70	11.00	11.00	7.6
	CE3AA042	1200	35,000	None	11.00	11.20	11.20	7.6
	CF5AA036	1200	34,600	None	11.00	11.20	11.20	7.6
	FA1ANA036	1200	34,200	TDR	10.80	—	10.80	7.6
	FB(5,4)AN(A,F)036	1200	34,200	TDR	10.80	—	10.80	7.6
	F(A,B)4ANF036	1200	34,200	TDR	10.80	—	10.80	7.6
	FB4AN(A,M,F)042	1200	34,800	TDR	11.00	—	11.00	7.6
	FB5AN(A,F)042	1200	34,800	TDR	11.00	—	11.00	7.6
	F(A,B)4AN(F,B)042	1200	34,800	TDR	11.00	—	11.00	7.6
	FC4BNF033	1200	34,800	TDR & TXV	11.00	—	—	7.6
	FC4BNF036	1200	34,200	TDR & TXV	10.80	—	—	7.6
	FC4BNF038	1200	36,000	TDR & TXV	11.30	—	—	7.6
	FC4BN(F,B)042	1200	34,800	TDR & TXV	11.00	—	—	7.6
	FC4BNB054	1200	36,600	TDR & TXV	11.80	—	—	7.6
	FG3AAA036	1200	34,200	None	10.70	11.00	11.00	7.6
	FK4BNF001	1190	34,000	TDR & TXV	11.20	—	—	7.6
	FK4BNF002	1190	34,400	TDR & TXV	11.20	—	—	7.6
	FK4BNF003	1200	34,800	TDR & TXV	12.00	—	—	7.6
	FK4BNF004	1095	34,600	TDR & TXV	12.00	—	—	7.6
	FK4BNB005	1150	36,000	TDR & TXV	12.50	—	—	7.6
	FK4BNB006	1125	36,000	TDR & TXV	13.00	—	—	7.6
	FK4ANF003	925	34,000	TDR & TXV	12.00	—	—	7.6
	FK4ANF004	950	34,600	TDR & TXV	12.20	—	—	7.6
042	CD5A/CD5BA048†	1400	41,000	None	10.70	11.00	11.00	7.6
	CC5A/CD5A/CD5BA042	1400	41,000	None	10.70	11.00	11.00	7.6
	CC5A/CD5A/CD5BA043	1400	40,500	None	10.70	11.00	11.00	7.6
	CC5A/CD5A/CD5BC048	1400	40,500	None	10.70	11.00	11.00	7.6
	CC5A/CD5A/CD5BW042	1400	40,500	None	10.70	11.00	11.00	7.6
	CC5A/CD5A/CD5BW043	1400	40,500	None	10.70	11.00	11.00	7.6
	CC5A/CD5A/CD5BW048	1400	41,000	None	10.70	11.00	11.00	7.6
	CA5A/CB5AA042	1400	41,000	None	10.70	11.00	11.00	7.6
	CA5A/CB5AW042	1400	40,500	None	10.70	11.00	11.00	7.6
	CB5AA048	1400	40,500	None	10.70	11.00	11.00	7.6
	CA5A/CB5AC048	1400	38,000	None	10.00	10.50	10.50	7.6
	CA5A/CB5AW048	1400	40,500	None	10.70	11.00	11.00	7.6
	CD3(A,B)A042	1400	41,000	None	10.70	11.00	11.00	7.6
	CD3(A,B)A048	1400	41,000	None	10.70	11.00	11.00	7.6
	CE3AA042	1400	41,000	None	10.70	11.00	11.00	7.6
	CE3AA048	1400	41,500	None	10.70	11.00	11.00	7.6
	CF5AA048	1400	41,000	None	10.70	11.00	11.00	7.6
	FB4AN(A,M,F)042	1400	40,500	TDR	11.00	—	11.00	7.6
	FB4AN(A,M,F)048	1400	41,500	TDR	11.10	—	11.10	7.6
	FB5AN(A,F)042	1400	40,500	TDR	11.00	—	11.00	7.6
	FB5AN(A,F)048	1400	41,500	TDR	11.10	—	11.10	7.6
	F(A,B)4AN(F,B)042	1400	40,500	TDR	11.00	—	11.00	7.6
	F(A,B)4AN(F,B)048	1400	41,500	TDR	11.10	—	11.10	7.6
	FC4BN(F,B)042	1400	40,500	TDR & TXV	11.00	—	—	7.6
	FC4BN(F,B)048	1400	41,000	TDR & TXV	11.00	—	—	7.6
	FC4BNB054	1400	42,500	TDR & TXV	11.50	—	—	7.6
	FG3AAA048	1400	41,000	None	10.70	11.00	11.00	7.6
	FK4BNF003	1250	41,000	TDR & TXV	12.00	—	—	7.6
	FK4BNB005	1335	42,500	TDR & TXV	12.20	—	—	7.6
	FK4BNB006	1315	42,500	TDR & TXV	12.50	—	—	7.6
	FK4ANF004	1100	40,500	TDR & TXV	11.80	—	—	7.6
	FK4ANF005	1100	41,500	TDR & TXV	12.00	—	—	7.6
048	CC5A/CD5A/CD5BA060†	1700	47,000	None	10.60	11.00	11.00	7.8
	CB5AA048	1700	47,000	None	10.20	10.70	10.70	7.8
	CA5A/CB5AC048	1500	44,000	None	10.50	10.80	10.80	7.8
	CA5A/CB5AW048	1700	47,000	None	10.00	10.50	10.50	7.8
	CA5A/CB5AW060	1700	46,500	None	10.70	11.00	11.00	7.8
	CA5A/CB5AA060	1700	45,500	None	10.50	11.00	11.00	7.8
	CD5A/CD5BA048	1700	46,500	None	10.50	11.00	11.00	7.8
	CD3(A,B)A048	1700	46,500	None	10.50	11.00	11.00	7.8
	CD3(A,B)A060	1700	47,000	None	10.60	11.00	11.00	7.8
	CC5A/CD5A/CD5BC048	1500	45,000	None	10.50	10.80	10.80	7.8
	CC5A/CD5A/CD5BW048	1700	46,000	None	10.50	11.00	11.00	7.8
	CC5A/CD5A/CD5BW060	1700	48,000	None	10.80	11.20	11.20	7.8
	CE3AA048	1600	46,500	None	10.70	11.00	11.00	7.8
	CE3AA060	1700	48,000	None	11.00	11.20	11.20	7.8
	CF5AA048	1500	47,000	None	10.70	11.20	11.20	7.8
	FB4AN(A,M,F)048	1700	46,500	TDR	11.00	—	11.00	7.8
	FB4AN(A,M,F)060	1700	48,000	TDR	11.00	—	11.00	7.8
	FB5AN(A,F)048	1700	46,500	TDR	11.00	—	11.00	7.8
	FB5AN(A,F)060	1700	48,000	TDR	11.00	—	11.00	7.8
	F(A,B)4AN(F,B)048	1700	46,500	TDR	11.00	—	11.00	7.8

See notes on pg. 8.

Performance data continued

UNIT SIZE	INDOOR MODEL	EVAP AIR CFM	TOT. CAP. BTUH	FACTORY-SUPPLIED ENHANCEMENT	STANDARD RATING	FIELD-SUPPLIED ACCESSORY†		SOUND RATING (BELS)
						TDR	TXV	
048	F(A,B)4AN(F,B)060	1700	48,000	TDR	11.00	—	11.00	7.8
	FB4AN(M,F)070	1700	48,000	TDR	11.50	—	11.50	7.8
	FB4ANB070	1700	48,000	TDR	11.50	—	11.50	7.8
	FC4BN(F,B)048	1700	47,000	TDR & TXV	11.00	—	—	7.8
	FC4BN(F,B)060	1700	48,000	TDR & TXV	11.00	—	—	7.8
	FC4BNB054	1700	48,000	TDR & TXV	11.50	—	—	7.8
	FC4BNB070	1700	48,000	TDR & TXV	11.50	—	—	7.8
	FG3AAA048	1700	46,000	None	10.50	10.80	10.80	7.8
	FG3AAA060	1700	48,000	None	10.70	11.00	11.00	7.8
	FK4BNB006	1500	48,500	TDR & TXV	12.50	—	—	7.8
	FK4ANF005	1250	48,000	TDR & TXV	12.10	—	—	7.8
	FK4ANF006	1650	48,500	TDR & TXV	12.10	—	—	7.8
060	CC5A/CD5A/CD5BW060†	2000	57,000	None	10.80	11.00	11.00	7.8
	CC5A/CD5A/CD5BA060	1800	55,000	None	10.60	11.00	11.00	7.8
	CA5A/CB5AA060	1800	56,000	None	10.60	11.00	11.00	7.8
	CA5A/CB5AW060	2000	57,000	None	10.70	11.00	11.00	7.8
	CD3(A,B)A060	1800	55,000	None	10.60	11.00	11.00	7.8
	CE3AA060	2000	58,000	None	10.80	11.20	11.20	7.8
	FB4AN(A,M,F)060	2000	58,000	TDR	10.70	—	10.70	7.8
	FB4AN(M,F)070	2000	59,000	TDR	11.00	—	11.00	7.8
	FB5AN(A,F)060	2000	58,000	TDR	10.70	—	10.70	7.8
	F(A,B)4AN(F,B)060	2000	58,000	TDR	10.70	—	10.70	7.8
	FB4ANB070	2000	59,000	TDR	11.00	—	11.00	7.8
	FC4BNB054	1700	58,000	TDR & TXV	11.30	—	—	7.8
	FC4BNB070	2000	59,000	TDR & TXV	11.00	—	—	7.8
	FC4BN(F,B)060	2000	57,500	TDR & TXV	10.70	—	—	7.8
	FG3AAA060	2000	57,000	None	10.70	11.00	11.00	7.8
	FK4BNB006	1775	58,500	TDR & TXV	11.70	—	—	7.8
	FK4ANF006	1800	58,500	TDR & TXV	11.50	—	—	7.8

† Tested Combination

NOTES:

1. Ratings are net values reflecting the effects of circulating fan motor heat. Supplemental electric heat is not included.
2. Tested outdoor/indoor combinations have been tested in accordance with DOE test procedures for central air conditioners. Ratings for other combinations are determined under DOE computer simulation procedures.
3. Determine actual CFM values obtainable for your system by referring to fan performance data in fan coil or furnace coil literature.

TDR.90 TABLE

METHOD	PART/MODEL NO.
Time-Delay Relay	KAATD0101TDR
Furnaces with TDR	58SSC/58DHC, 58SX, 58DX, 58SXB, 58GFA/DFA, 58PAP/RAP, 58RAV, 58EJA, 58MXA, 58MCA, 58MVP, 58TUA, 58TMA

NOTE: In most cases, only 1 of the above should be used to achieve TDR function. More than one of the methods listed above in a system may cause degradation in performance.

Detailed cooling capacities*

EVAPORATOR AIR		CONDENSER ENTERING AIR TEMPERATURES °F														
		75			85			95			105			115		
CFM	EWB	Capacity MBtuh†		Total System KW**	Capacity MBtuh†		Total System KW**	Capacity MBtuh†		Total System KW**	Capacity MBtuh†		Total System KW**	Capacity MBtuh†		Total System KW**
		Total	Sens‡		Total	Sens‡		Total	Sens‡		Total	Sens‡		Total	Sens‡	
38TUA024-30 Outdoor Section With CC5A/CD5A/CD5BA030 Indoor Section																
700	72	27.4	13.5	1.97	26.4	13.1	2.17	25.4	12.7	2.40	24.4	12.4	2.65	23.4	12.0	2.94
	67	25.1	17.1	1.95	24.2	16.7	2.14	23.2	16.3	2.36	22.3	15.9	2.61	21.4	15.5	2.89
	62	22.9	20.5	1.92	22.0	20.1	2.11	21.2	19.7	2.33	20.3	19.2	2.57	19.5	18.8	2.85
	57	21.8	21.8	1.91	21.1	21.1	2.09	20.5	20.5	2.31	19.8	19.8	2.55	19.1	19.1	2.83
800	72	27.9	14.1	2.02	26.9	13.7	2.22	25.8	13.3	2.45	24.7	12.9	2.70	23.7	12.6	2.99
	67	25.5	18.1	1.99	24.6	17.7	2.19	23.6	17.3	2.41	22.6	16.9	2.66	21.7	16.5	2.94
	62	23.3	21.8	1.97	22.4	21.3	2.16	21.6	20.9	2.37	20.7	20.4	2.62	19.9	19.8	2.90
	57	22.6	22.6	1.96	21.9	21.9	2.15	21.2	21.2	2.36	20.5	20.5	2.61	19.8	19.8	2.89
900	72	28.3	14.6	2.06	27.2	14.2	2.26	26.1	13.9	2.49	25.0	13.5	2.75	24.0	13.1	3.04
	67	25.9	19.0	2.04	24.9	18.6	2.23	23.9	18.2	2.45	22.9	17.9	2.71	21.9	17.5	2.99
	62	23.7	23.0	2.01	22.9	22.4	2.21	22.0	21.8	2.42	21.1	21.1	2.66	20.3	20.3	2.94
	57	23.3	23.3	2.00	22.6	22.6	2.20	21.8	21.8	2.41	21.1	21.1	2.66	20.3	20.3	2.94
Multipliers for Determining the Performance With Other Indoor Sections																
Indoor Section		Size	Cooling		Indoor Section	Size	Cooling									
			Capacity	Power			Capacity	Power								
CC5A/CD5A/CD5BA		024	0.99	1.00	FB4AN(A,F)		030	1.01	0.99							
		030	1.00	1.00	FB5BNA		030	1.01	0.99							
CC5A/CD5A/CD5BW		030	0.99	1.00	FB5AN(A,F)		030	0.99	1.00							
CA5A/CB5AA		024	0.99	1.01	FC4BNF		024	1.00	1.00							
CB5AA		030	0.97	0.98			030	1.01	0.99							
CA5A/CB5AW		030	0.97	0.98			033	1.03	1.00							
CD3(A,B)A		024	0.99	1.00	FD3ANA		024	0.98	0.98							
		030	0.99	1.00			030	1.01	1.00							
CE3AA		024	0.99	1.00	FF1ANA		024	0.99	1.01							
		030	1.00	1.00			030	1.02	1.01							
CF5AA		024	0.99	1.00	FG3AAA		024	0.98	1.00							
FA1ANA		024	1.00	0.99	FK4BNF		001	1.05	0.94							
		030	0.99	1.01			002	1.06	0.94							
FA1BNA		030	1.01	1.01			003	1.06	0.91							
FB(5,4)AN(A,F)		024	0.99	1.00			004	1.06	0.92							
F(A,B)4ANF		024	0.99	1.00	FK4BNB		005	1.06	0.92							
		030	1.01	0.99	FK4ANF		002	1.05	0.94							

See notes on pg. 14.

Detailed cooling capacities* continued

EVAPORATOR AIR		CONDENSER ENTERING AIR TEMPERATURES °F														
		75			85			95			105			115		
CFM	EWB	Capacity MBtuh†		Total System KW**	Capacity MBtuh†		Total System KW**	Capacity MBtuh†		Total System KW**	Capacity MBtuh†		Total System KW**	Capacity MBtuh†		Total System KW**
		Total	Sens‡		Total	Sens‡		Total	Sens‡		Total	Sens‡		Total	Sens‡	
38TUA030-30 Outdoor Section With CC5A/CD5A/CD5BA036 Indoor Section																
875	72	33.6	16.6	2.44	32.4	16.1	2.67	31.2	15.7	2.93	29.9	15.2	3.23	28.6	14.7	3.57
	67	30.8	21.0	2.39	29.7	20.5	2.62	28.5	20.0	2.88	27.3	19.6	3.18	26.1	19.1	3.51
	62	28.1	25.2	2.35	27.1	24.7	2.58	26.0	24.2	2.83	24.9	23.6	3.12	23.9	23.1	3.45
	57	26.9	26.9	2.33	26.0	26.0	2.56	25.2	25.2	2.81	24.3	24.3	3.10	23.4	23.4	3.43
1000	72	34.2	17.3	2.49	33.0	16.9	2.73	31.7	16.4	3.00	30.4	15.9	3.29	29.0	15.4	3.63
	67	31.4	22.3	2.45	30.2	21.8	2.68	29.0	21.3	2.94	27.8	20.8	3.24	26.5	20.3	3.57
	62	28.7	26.9	2.41	27.6	26.3	2.64	26.5	25.7	2.89	25.5	25.1	3.18	24.3	24.3	3.51
	57	27.9	27.9	2.39	27.0	27.0	2.62	26.1	26.1	2.88	25.2	25.2	3.17	24.3	24.3	3.50
1125	72	34.7	18.0	2.55	33.4	17.6	2.79	32.1	17.1	3.05	30.7	16.6	3.35	29.3	16.1	3.69
	67	31.8	23.5	2.51	30.6	23.0	2.74	29.4	22.5	3.00	28.1	22.0	3.30	26.8	21.5	3.63
	62	29.2	28.4	2.47	28.1	27.7	2.70	27.0	27.0	2.95	25.9	25.9	3.24	25.0	25.0	3.57
	57	28.8	28.8	2.46	27.9	27.9	2.69	26.9	26.9	2.94	26.0	26.0	3.24	25.0	25.0	3.57

Multipliers for Determining the Performance With Other Indoor Sections

Indoor Section	Size	Cooling		Indoor Section	Size	Cooling	
		Capacity	Power			Capacity	Power
CC5A/CD5A/CD5BA	030	0.97	0.99	F(A,B)4ANF	030	0.96	0.97
	036	1.00	1.00		036	0.99	1.01
CC5A/CD5A/CD5BW	030	0.97	0.99	FB5AN(A,F)	030	0.95	0.99
CB5AA	030	0.97	0.99	FB(5,4)AN(A,F)	036	0.99	1.01
CB5AW	036	0.99	0.99	FC4BNF	030	0.97	0.99
CA5A/CB5AW	030	0.97	0.99		033	1.00	1.00
CA5A/CB5AA	036	0.99	0.99		036	0.99	1.01
CD3(A,B)A	030	0.97	0.99	FD3ANA	030	0.97	1.01
	036	1.00	1.00	FF1ANA	030	0.97	1.00
CD5A/CD5BW	036	1.00	1.00	FG3AAA	036	0.99	1.00
CE3AA	030	0.97	1.00	FK4BNF	001	0.97	0.96
	036	0.98	1.00		002	0.99	0.96
CF5AA	036	0.99	1.00		003	1.01	0.92
FA1BNA	030	0.97	0.99		004	1.01	0.93
FA1ANA	030	0.95	0.99		005	1.03	0.93
	036	0.97	1.04	FK4ANF	002	0.97	0.91
FB4AN(A,F)	030	0.96	0.97		003	0.99	0.91
FB5BNA	030	0.96	0.97		—	—	—

See notes on pg. 14.

Detailed cooling capacities* continued

EVAPORATOR AIR		CONDENSER ENTERING AIR TEMPERATURES °F														
		75			85			95			105			115		
CFM	EWB	Capacity MBtuh†		Total System KW**	Capacity MBtuh†		Total System KW**	Capacity MBtuh†		Total System KW**	Capacity MBtuh†		Total System KW**	Capacity MBtuh†		Total System KW**
		Total	Sens‡		Total	Sens‡		Total	Sens‡		Total	Sens‡		Total	Sens‡	
38TUA036-30 Outdoor Section With CC5A/CD5A/CD5BA042 Indoor Section																
1050	72	40.8	20.0	2.93	39.2	19.5	3.20	37.6	18.9	3.49	36.0	18.3	3.81	34.1	17.6	4.14
	67	37.3	25.3	2.85	35.9	24.7	3.12	34.4	24.1	3.41	32.8	23.4	3.71	31.1	22.8	4.03
	62	34.1	30.4	2.79	32.8	29.7	3.04	31.4	29.0	3.32	29.9	28.3	3.62	28.4	27.5	3.92
	57	32.5	32.5	2.75	31.4	31.4	3.01	30.3	30.3	3.29	29.2	29.2	3.59	27.9	27.9	3.90
1200	72	41.5	20.9	3.00	39.9	20.4	3.28	38.3	19.8	3.57	36.5	19.1	3.89	34.7	18.5	4.22
	67	38.0	26.8	2.93	36.6	26.2	3.19	35.0	25.6	3.48	33.4	25.0	3.79	31.6	24.3	4.11
	62	34.8	32.4	2.86	33.4	31.7	3.12	32.0	30.9	3.40	30.5	30.0	3.70	29.0	29.0	4.00
	57	33.8	33.8	2.84	32.6	32.6	3.10	31.5	31.5	3.38	30.2	30.2	3.69	28.9	28.9	4.00
1350	72	42.1	21.8	3.07	40.5	21.2	3.35	38.8	20.6	3.65	37.0	20.0	3.96	35.0	19.3	4.30
	67	38.6	28.3	3.00	37.1	27.7	3.27	35.5	27.1	3.56	33.8	26.4	3.87	32.0	25.7	4.18
	62	35.4	34.2	2.93	34.0	33.4	3.19	32.6	32.4	3.48	31.2	31.2	3.78	29.8	29.8	4.10
	57	34.8	34.8	2.92	33.7	33.7	3.18	32.4	32.4	3.47	31.2	31.2	3.78	29.8	29.8	4.10

Multipliers for Determining the Performance With Other Indoor Sections

Indoor Section	Size	Cooling		Indoor Section	Size	Cooling	
		Capacity	Power			Capacity	Power
CC5A/CD5A/CD5BA	036	0.99	1.00	FB4AN(A,M,F)	042	0.99	1.01
	042	1.00	1.00	F(A,B)4AN(F,B)	042	0.99	1.01
	043	0.99	1.00	FB5AN(A,F)	042	0.99	1.01
CC5A/CD5A/CD5BW	042	0.99	1.00	FC4BNF	033	0.99	1.01
	043	0.99	1.00		036	0.98	1.02
CA5A/CB5AA	036	1.00	1.02		038	1.03	1.03
	042	1.00	1.01	FC4BN(F,B)	042	0.99	1.01
CA5A/CB5AW	042	1.00	1.01	FC4BNB	054	1.05	1.01
CD5A/CD5BW	036	0.99	1.00	FG3AAA	036	0.98	1.00
CB5AW	036	1.00	1.02	FK4BNF	001	0.97	0.98
CD3(A,B)A	036	0.99	1.00		002	0.98	0.98
	042	0.99	1.00		003	0.99	0.95
CE3AA	036	0.98	1.00		004	0.99	0.95
	042	1.00	1.00	FK4BNB	005	1.03	0.94
CF5AA	036	0.99	1.00		006	1.03	0.93
FA1ANA	036	0.98	1.02	FK4ANF	003	0.97	0.92
FB(5,4)AN(A,F)	036	0.98	1.02		004	0.99	0.92
F(A,B)4ANF	036	0.98	1.02	—	—	—	—

See notes on pg. 14.

Detailed cooling capacities* continued

EVAPORATOR AIR		CONDENSER ENTERING AIR TEMPERATURES °F														
		75			85			95			105			115		
CFM	EWB	Capacity MBtuh†		Total System KW**	Capacity MBtuh†		Total System KW**	Capacity MBtuh†		Total System KW**	Capacity MBtuh†		Total System KW**	Capacity MBtuh†		Total System KW**
		Total	Sens‡		Total	Sens‡		Total	Sens‡		Total	Sens‡		Total	Sens‡	
38TUA042-30 Outdoor Section With CD5A/CD5BA048 Indoor Section																
1225	72	47.7	23.3	3.44	45.9	22.6	3.77	44.1	21.9	4.13	42.1	21.2	4.51	40.1	20.4	4.92
	67	43.7	29.2	3.35	42.0	28.5	3.67	40.3	27.8	4.02	38.5	27.0	4.39	36.5	26.2	4.79
	62	39.8	35.0	3.27	38.3	34.3	3.59	36.7	33.5	3.92	35.0	32.6	4.28	33.2	31.7	4.66
	57	37.7	37.7	3.22	36.5	36.5	3.54	35.2	35.2	3.88	33.9	33.9	4.24	32.5	32.5	4.62
1400	72	48.6	24.2	3.53	46.7	23.5	3.86	44.8	22.8	4.22	42.8	22.1	4.60	40.6	21.3	5.01
	67	44.5	30.9	3.44	42.8	30.2	3.77	41.0	29.4	4.11	39.1	28.6	4.49	37.1	27.8	4.88
	62	40.6	37.2	3.36	39.1	36.4	3.67	37.4	35.6	4.02	35.7	34.6	4.38	33.9	33.5	4.76
	57	39.1	39.1	3.33	37.8	37.8	3.64	36.5	36.5	3.99	35.1	35.1	4.36	33.6	33.6	4.74
1575	72	49.3	25.1	3.61	47.4	24.5	3.95	45.4	23.7	4.31	43.3	23.0	4.69	41.1	22.2	5.10
	67	45.2	32.5	3.53	43.4	31.8	3.85	41.6	31.0	4.20	39.6	30.3	4.58	37.6	29.4	4.97
	62	41.3	39.3	3.44	39.7	38.4	3.76	38.0	37.4	4.10	36.3	36.2	4.47	34.6	34.6	4.85
	57	40.3	40.3	3.42	39.0	39.0	3.74	37.6	37.6	4.09	36.2	36.2	4.46	34.6	34.6	4.85

Multipliers for Determining the Performance With Other Indoor Sections

Indoor Section	Size	Cooling		Indoor Section	Size	Cooling	
		Capacity	Power			Capacity	Power
CC5A/CD5A/CD5BA	042	1.00	1.00	CF5AA	048	1.00	1.00
	043	0.99	1.00		042	0.99	1.01
CC5A/CD5A/CD5BC	048	0.99	1.00	FB4AN(A,M,F)	048	1.01	1.02
CC5A/CD5A/CD5BW	042	0.99	1.00		042	0.99	1.01
	043	0.99	1.00	FB5AN(A,F)	048	1.01	1.02
	048	1.00	1.00		042	0.99	1.01
CA5A/CB5AA	042	1.00	1.01	F(A,B)4AN(F,B)	042	0.99	1.01
CA5A/CB5AC	048	0.93	0.98		048	1.01	1.02
CA5A/CB5AW	042	0.99	1.00	FC4BN(F,B)	042	0.99	1.01
	048	0.99	0.99		048	1.00	1.02
CB5AA	048	0.99	0.99	FC4BNB	054	1.04	1.01
CD5A/CD5BA	048	1.00	1.00	FG3AAA	048	1.00	1.00
CD3(A,B)A	042	1.00	1.00	FK4BNF	003	1.00	0.94
	048	1.00	1.00		005	1.04	0.96
CE3AA	042	1.00	1.00	FK4BNB	006	1.04	0.95
	048	1.01	1.00		004	0.99	0.93
				FK4ANF	005	1.01	0.94

See notes on pg. 14.

Detailed cooling capacities* continued

EVAPORATOR AIR		CONDENSER ENTERING AIR TEMPERATURES °F																	
		75				85				95				105				115	
CFM	EWB	Capacity MBtuh†		Total System KW**	Capacity MBtuh†		Total System KW**	Capacity MBtuh†		Total System KW**	Capacity MBtuh†		Total System KW**	Capacity MBtuh†		Total System KW**			
		Total	Sens‡		Total	Sens‡		Total	Sens‡		Total	Sens‡		Total	Sens‡				
38TUA048-30 Outdoor Section With CC5A/CD5A/CD5BA060 Indoor Section																			
1500	72	54.4	26.4	3.94	52.4	25.7	4.42	50.3	24.9	4.96	48.0	24.0	5.55	45.6	23.2	6.19			
	67	50.1	33.3	3.92	48.3	32.5	4.41	46.3	31.7	4.94	44.2	30.8	5.53	42.0	29.9	6.16			
	62	45.9	40.0	3.89	44.2	39.1	4.37	42.3	38.2	4.90	40.4	37.2	5.47	38.4	36.2	6.11			
	57	43.2	43.2	3.88	41.9	41.9	4.36	40.5	40.5	4.88	39.0	39.0	5.47	37.4	37.4	6.09			
1700	72	55.2	27.4	4.02	53.1	26.6	4.50	51.0	25.8	5.04	48.6	25.0	5.63	46.2	24.1	6.27			
	67	51.0	35.0	4.00	49.1	34.2	4.48	47.0	33.4	5.01	44.8	32.5	5.60	42.6	31.6	6.24			
	62	46.7	42.3	3.96	44.9	41.4	4.44	43.0	40.4	4.97	41.0	39.3	5.55	39.0	38.1	6.18			
	57	44.8	44.8	3.95	43.3	43.3	4.43	41.8	41.8	4.97	40.2	40.2	5.55	38.5	38.5	6.18			
1800	72	55.6	27.9	4.06	53.4	27.1	4.54	51.2	26.3	5.08	48.9	25.4	5.67	46.4	24.6	6.31			
	67	51.3	35.9	4.04	49.4	35.1	4.52	47.3	34.2	5.05	45.1	33.4	5.64	42.8	32.4	6.28			
	62	47.0	43.4	4.00	45.2	42.4	4.48	43.3	41.4	5.01	41.3	40.2	5.59	39.3	38.9	6.22			
	57	45.4	45.4	4.00	44.0	44.0	4.48	42.4	42.4	5.01	40.8	40.8	5.59	39.1	39.1	6.23			
Multipliers for Determining the Performance With Other Indoor Sections																			
Indoor Section		Size	Cooling		Indoor Section	Size	Cooling												
			Capacity	Power			Capacity	Power											
CC5A/CD5A/CD5BA		060	1.00	1.00	FB4AN(A,M,F)		048	0.99	1.02										
CC5A/CD5A/CD5BC		048	0.96	0.98			060	1.02	1.03										
CC5A/CD5A/CD5BW		048	0.98	1.00			FB5AN(A,F)		048	0.99	1.02								
		060	1.02	1.00	060	1.02			1.03										
CA5A/CB5AA		060	0.97	0.98	F(A,B)4AN(F,B)		048	0.99	1.02										
CA5A/CB5AC		048	0.94	0.96			060	1.02	1.03										
CA5A/CB5AW		048	1.00	1.03	FB4AN(M,F)		070	1.02	1.02										
		060	0.99	0.98			070	1.02	1.02										
CD5A/CD5BA		048	0.99	1.00	FC4BN(F,B)		048	1.00	1.02										
CB5AA		048	1.00	1.03			060	1.02	1.03										
CD3(A,B)A		048	0.99	1.00	FC4BNB		054	1.02	1.01										
		060	1.00	1.00			070	1.02	1.02										
CE3AA		048	0.99	0.99	FG3AAA		048	0.98	1.00										
		060	1.02	1.00			060	1.02	1.00										
CF5AA		048	1.00	0.98	FK4BNB		006	1.03	0.95										
		—	—	—			FK4ANF		005	1.02	0.94								
									006	1.03	0.97								

See notes on pg. 14.

Detailed cooling capacities* continued

EVAPORATOR AIR		CONDENSER ENTERING AIR TEMPERATURES °F														
		75			85			95			105			115		
CFM	EWB	Capacity MBtuh†		Total System KW**	Capacity MBtuh†		Total System KW**	Capacity MBtuh†		Total System KW**	Capacity MBtuh†		Total System KW**	Capacity MBtuh†		Total System KW**
		Total	Sens‡		Total	Sens‡		Total	Sens‡		Total	Sens‡		Total	Sens‡	
38TUA060-30 Outdoor Section With CC5A/CD5A/CD5BW060 Indoor Section																
1750	72	65.9	32.1	4.80	63.6	31.2	5.24	61.2	30.3	5.74	58.6	29.4	6.27	56.1	28.4	6.84
	67	60.4	40.3	4.70	58.3	39.4	5.14	56.0	38.5	5.62	53.7	37.5	6.14	51.3	36.5	6.70
	62	55.2	48.4	4.62	53.2	47.4	5.05	51.2	46.4	5.51	49.0	45.3	6.02	46.7	44.2	6.56
	57	52.1	52.1	4.56	50.6	50.6	4.99	49.0	49.0	5.46	47.3	47.3	5.97	45.5	45.5	6.52
2000	72	67.2	33.4	4.92	64.7	32.5	5.36	62.3	31.6	5.86	59.6	30.7	6.39	56.9	29.7	6.97
	67	61.6	42.6	4.82	59.4	41.7	5.26	57.0	40.8	5.74	54.6	39.8	6.26	52.1	38.8	6.82
	62	56.3	51.5	4.73	54.3	50.4	5.16	52.1	49.3	5.63	49.9	48.1	6.14	47.6	46.8	6.69
	57	54.2	54.2	4.69	52.5	52.5	5.12	50.8	50.8	5.59	49.0	49.0	6.11	47.1	47.1	6.67
2250	72	68.1	34.7	5.03	65.6	33.8	5.48	63.1	32.9	5.98	60.3	31.9	6.51	57.5	31.0	7.09
	67	62.5	44.9	4.93	60.2	43.9	5.37	57.8	43.0	5.86	55.3	42.0	6.38	52.7	41.0	6.94
	62	57.2	54.3	4.84	55.1	53.1	5.27	52.9	51.9	5.74	50.7	50.4	6.25	48.4	48.4	6.80
	57	55.8	55.8	4.81	54.1	54.1	5.25	52.3	52.3	5.72	50.4	50.4	6.24	48.4	48.4	6.80

Multipliers for Determining the Performance With Other Indoor Sections

Indoor Section	Size	Cooling		Indoor Section	Size	Cooling	
		Capacity	Power			Capacity	Power
CC5A/CD5A/CD5BW	060	1.00	1.00	FB4AN(M,F)	070	1.04	1.02
CC5A/CD5A/CD5BA	060	0.96	0.98	FB4ANB	070	1.04	1.02
CA5A/CB5AA	060	0.98	0.99	FC4BNB	054	1.02	0.99
CA5A/CB5AW	060	1.00	1.00		070	1.04	1.02
CD3(A,B)A	060	0.96	0.98	FC4BN(F,B)	060	1.01	1.04
CE3AA	060	1.02	1.00	FG3AAA	060	1.00	1.00
FB4AN(A,M,F)	060	1.02	1.04	FK4BNB	006	1.03	0.97
FB5AN(A,F)	060	1.02	1.04	FK4ANF	006	1.03	0.99
F(A,B)4AN(F,B)	060	1.02	1.04		—	—	—

* Detailed cooling capacities are based on indoor and outdoor unit at the same elevation and connected by 25 ft (7.62m) of tubing. If other than 25 ft (7.62m) of tubing is used and/or indoor unit is located above outdoor unit, a slight variation in capacity may occur.

† Total and sensible capacities are net capacities. Blower motor heat has been subtracted.

‡ Sensible capacities shown are based on 80°F (27°C) entering air at the indoor coil. For sensible capacities at other than 80°F (27°C), deduct 835 Btuh (245 kw) per 1000 CFM (480 L/S) of indoor coil air for each degree below 80°F (27°C), or add 835 Btuh (235 kw) per 1000 CFM (480 L/S) of indoor coil air per degree above 80°F (27°C). When the required data falls between the published data, interpolation may be performed.

** System kw is total of indoor and outdoor unit kw's.

System Design

1. Intended for outdoor installation with free air inlet and outlet. Outdoor fan external static pressure available is less than 0.01-in. wc.
2. Minimum outdoor operating air temperature without low-ambient operation accessory is 55°F (12.8°C).
3. Maximum outdoor operating air temperature is 125°F (51.7°C).
4. For reliable operation, unit should be level in all horizontal planes.
5. Maximum elevation of indoor coil above or below base of outdoor unit is: indoor coil above = 50 ft indoor coil below = 150 ft. (See items 6 and 7 following.)
6. For interconnecting refrigerant tube lengths greater than 50 ft, consult Long-Line Application Guideline available from equipment distributor.
7. Crankcase heater required when interconnecting refrigerant tube length exceeds 50 ft.
8. Not more than 3 ft of refrigerant tube should be buried in the ground. If necessary to bury tubes under a sidewalk, provide a minimum 6-in. vertical rise to the valve connections at the unit.
9. Use only copper wire for electric connection at unit. Aluminum and clad aluminum are not acceptable for the type of connector provided.
10. Mixmatches of indoor coil capacity more than 1 size larger than outdoor unit capacity may result in inadequate indoor comfort.
11. Do not apply capillary tube indoor coils to these units.



Manufacturer reserves the right to discontinue, or change at any time, specifications or designs without notice and without incurring obligations.

Book	1	4	2
Tab	3a	2a	1a