



# MULTI COMPRESSOR CONDENSING UNITS

## PRODUCT DATA & SPECIFICATIONS

Bulletin T40-TF-PDS-12

1089341

## Outdoor Multiple Compressor Air Cooled Condensing Units

1/2 to 10 HP Compressors  
Hermetic, Scroll & Semi-Hermetic  
Compressor (max. 40HP total)

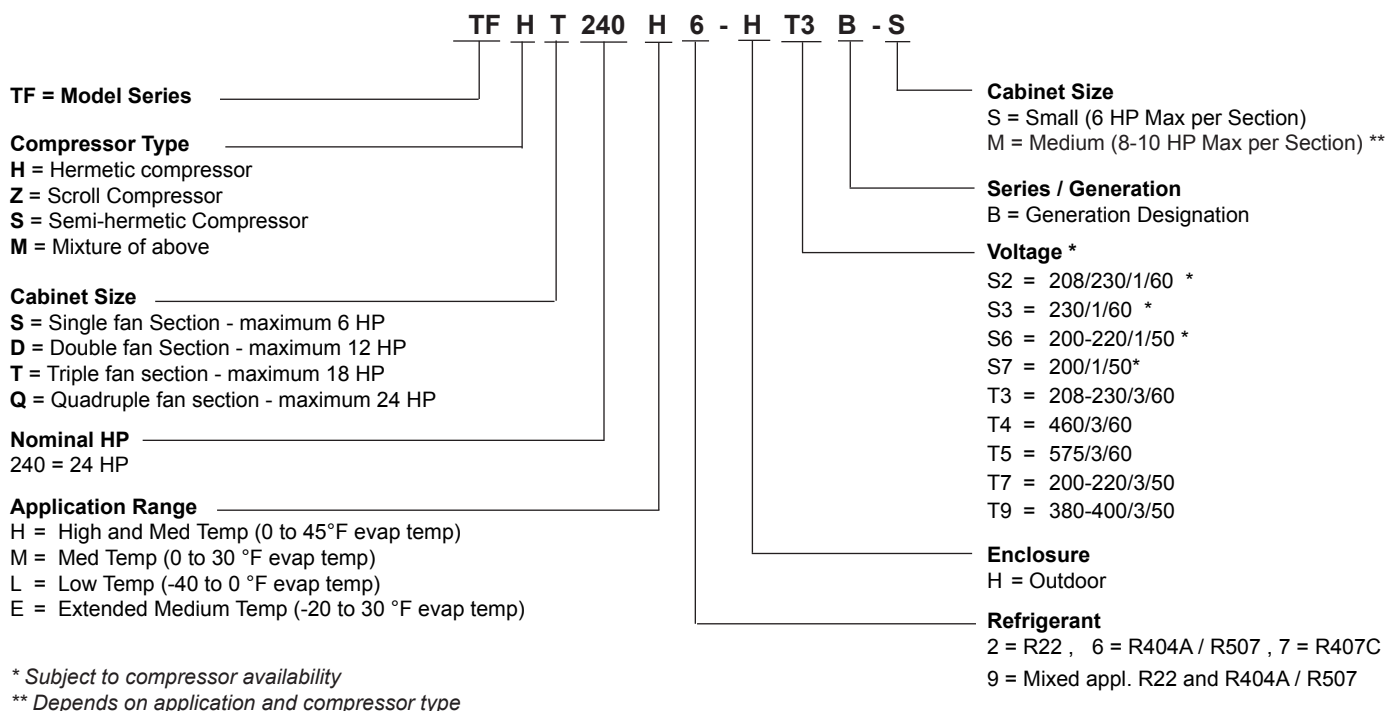
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# NOMENCLATURE



## SELECTION PROCESS

### 1) Select Compressor Models:

Select your compressor models (Capacity and HP) using the compressor specifications on pages 4 thru 7. This can be a combination of:

- any refrigerant (R22 or R404A)
  - any application (High, Medium or Low Temperature)
  - any type of compressor (Hermetic, Scroll or Semi-Hermetic)
- Make note of the points indicated in the table for each compressor.

### 2) Select the Cabinet:

Select the cabinet using the following guidelines:

- Maximum 6 points per fan section for small size.  
Maximum 9 points per fan section for medium size.
- Maximum 3 compressors per fan section. Based on 95° F (35° C) design ambient.
- Maximum 4 fan sections.

### 3) Select the Unit Model Number:

Refer to the nomenclature chart above.

See page 17 for a Specification and Submittal Drawing Worksheet

Consult factory for any special requirements.

## STANDARD FEATURES

- Total system flexibility using multiple compressor models and applications on a common chassis.
- Up to four fan section cabinet choices of either Hermetic, Scroll or Semi-Hermetic multiple compressors, with maximum three compressors per fan section.
- Small Cabinet: Compressor sizes available ranging from 1/2 through 6 HP to a maximum total of 6 HP per Fan section and 24 HP per unit. (Based on 95°F design Ambient)
- Medium Cabinet: Compressor sizes available ranging from 1/2 through 8-10\* HP to a maximum total of 8 HP per fan section and 40\* HP per unit. (Based on 95°F design Ambient)
- Semi-hermetic use suction and discharge vibration eliminators and spring mounts.
- High efficiency enhanced tube and fin on both indoor or outdoor condenser design using high efficiency PSC fan motors
- Outdoor unit uses weather-resistant housing with hinged hood, weatherproof electrical panel and fixed head pressure flooding valve
- Each compressor includes main power fuse block, contactor, fixed high and low pressure control oil pressure control (where applicable) and fused control circuit
- Compressor circuit breaker (per compressor)
- Single Point Main electrical panel with non-fused disconnect. (Single point dependant on evaporator voltage)
- Includes liquid line drier and sightglass

\* Depends on application and compressor type

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## OPTIONAL COMPONENTS (Factory mounted)

- Sealed Suction Filter
- Suction accumulator \*\*
- Discharge line check valve
- Receiver Inlet ball valve
- Heated and insulated receiver
- Field piping connections at left or right side
- Flex hoses for pressure controls
- Voltage /Phase monitor
- Main disconnect fusing
- Compressor anti short cycle time delay relay
- Current sensing relay -for use with Oil control (where applicable)
- Sentronic oil pressure control (where applicable)
- OMB oil level Control (where applicable)
- Air or Electric Defrost Kits
- Pumpdown toggle switch
- Liquid Line solenoid valve-with standard 230V coil (shipped loose)
- Spare condenser circuit for remote ice machine

\*\* for semi-hermetic compressors- maximum one suction accumulator per fan section

**OTHER OPTIONS AVAILABLE UPON REQUEST.  
CONSULT FACTORY FOR DETAILS**

## H2 - High/Medium Temperature - R22

NOMINAL COMPRESSOR HP	POINTS	COPELAND MODEL	NOMINAL CAPACITY - BTU/H (WATTS)*		FIELD CONNECTIONS		RECEIVER (90% Lbs)	
			25 °F (-3.9 °C)	40 °F (7.2 °C)	SUCTION	LIQUID	STANDARD	OVERSIZE
1/2	1	ART82-C1	5970 (1749)	8300 (2431)	1/2	3/8	6	12.5
3/4	1	RS64C2	8090 (2370)	10800 (3163)	5/8	3/8	6	12.5
1	1	RS70C1	8870 (2598)	12200 (3573)	5/8	3/8	6	12.5
1 1/2	2	CR18KQ	13000 (3808)	18600 (5448)	5/8	3/8	12.5	16
2	2	CR24KQ	16100 (4716)	22300 (6532)	5/8	3/8	12.5	16
2 1/2	2.5	CR32KQ	21800 (6385)	29400 (8611)	7/8	3/8	16	34.5
3	3.5	CR37KQ	26600 (7791)	36400 (10662)	7/8	1/2	24.7	34.5
3 1/2	3.5	CR41KQ	29300 (8582)	40100 (11745)	7/8	1/2	24.7	34.5
4	4	CR53KQ	36200 (10603)	49000 (14352)	1 1/8	1/2	24.7	34.5
5	5	CRN5-0500	43900 (12858)	59000 (17281)	1 1/8	1/2	24.7	34.5

## E6 - Extended Medium Temperature - R404A

NOMINAL COMPRESSOR HP	POINTS	COPELAND MODEL	NOMINAL CAPACITY - BTU/H (WATTS) *		FIELD CONNECTIONS		RECEIVER (90% Lbs)	
			-10 °F (-23.3 °C)	25 °F (-3.9 °C)	SUCTION	LIQUID	STANDARD	OVERSIZE
1/2	1	RST45C1E	2740 (803)	6310 (1848)	5/8	3/8	5.4	11.3
3/4	1	RST55C1E	3330 (975)	7340 (2150)	5/8	3/8	5.4	11.3
3/4 +	1	RST64C1E	4030 (1180)	8610 (2522)	5/8	3/8	5.4	11.3
1	1	RS70C1E	4010 (1175)	9490 (2780)	5/8	3/8	5.4	11.3
1 1/2	2	CS10K6E	5350 (1567)	15200 (4452)	5/8	3/8	11.3	14.4
2	2	CS12K6E	6310 (1848)	17400 (5096)	5/8	3/8	11.3	14.4
2 1/2	2.5	CS14K6E	8070 (2364)	20300 (5946)	7/8	1/2	14.4	21.5
3	3.5	CS18K6E	10160 (2976)	27700 (8113)	7/8	1/2	21.5	31
3 1/2	3.5	CS20K6E	11680 (3421)	30800 (9021)	7/8	1/2	21.5	31
4	4.5	CS27K6E	14900 (4364)	37900 (11101)	7/8	1/2	21.5	31
5	5	CS33K6E	18100 (5301)	43700 (12800)	7/8	1/2	21.5	31

## L6 - Low Temperature - R404A

NOMINAL COMPRESSOR HP	POINTS	COPELAND MODEL	NOMINAL CAPACITY - BTU/H (WATTS) *		FIELD CONNECTIONS		RECEIVER (90% Lbs)	
			-20 °F (-28.9 °C)	-10 °F (-23.3 °C)	SUCTION	LIQUID	STANDARD	OVERSIZE
1/2	1	AFT22C1E	2090 (612)	2730 (800)	1/2	3/8	5.4	11.3
3/4	1	AFT26C1E	2550 (747)	3380 (990)	1/2	3/8	5.4	11.3
1	1	CF04K6E	3710 (1087)	5150 (1508)	5/8	3/8	5.4	11.3
2	2	CF06K6E	5910 (1731)	8100 (2372)	7/8	3/8	11.3	14.4
2 1/2	2.5	CF09K6E	9100 (2665)	12500 (3661)	7/8	3/8	11.3	14.4
3	3	CF12K6E	11600 (3398)	15200 (4452)	7/8	1/2	14.4	21.5

\* At 95 °F (35 °C) Ambient  
Refer to Bulletin T40-TEH-PDS-60 for further capacity data.

**H2 - High/Medium Temperature - R22**

NOMINAL COMPRESSOR HP	POINTS	COPELAND MODEL	NOMINAL CAPACITY - BTU/H (WATTS) *		FIELD CONNECTIONS		RECEIVER (90% Lbs)	
			25 °F (-3.9 °C)	40 °F (7.2 °C)	SUCTION	LIQUID	STANDARD	OVERSIZE
2	2	ZB15KCE	18200(5331)	23800(6971)	7/8	3/8	13	16
2 1/2	2.5	ZB19KCE	20700(6063)	27200(7967)	7/8	3/8	16	24.7
3	3.5	ZB21KCE	27400(8025)	36200(10603)	1 1/8	1/2	24.7	34.5
3 1/2	3.5	ZB26KCE	31300(9168)	41000(12009)	1 1/8	1/2	24.7	34.5
4	4	ZB30KCE	36000(10544)	47100(13796)	1 1/8	1/2	24.7	34.5
5	5	ZB38KCE	44400(13005)	58200(17047)	1 1/8	3/4	62	34.5
6	6	ZB45KCE	53900(15787)	71000(20796)	1 1/8	5/8	34.5	50
6.5	7	ZB50KCE	58400(17105)	77800 (22788)	1 1/8	5/8	34.5	62
7	8	ZB58KCE	65100(19068)	86100 (25219)	1 3/8	5/8	62	87
7.5 +	9	ZB66KCE	77100(22583)	101800 (29817)	1 3/8	5/8	62	87

**M6 - Medium Temperature - R404A**

NOMINAL COMPRESSOR HP	POINTS	COPELAND MODEL	NOMINAL CAPACITY - BTU/H (WATTS) *		FIELD CONNECTIONS		RECEIVER (90% Lbs)	
			5 °F (-15 °C)	25 °F (-3.9 °C)	SUCTION	LIQUID	STANDARD	OVERSIZE
1	1.5	ZB10KCE	8340 (2443)	12200 (3573)	5/8	3/8	11.3	14.4
1.1	2	ZB11KCE	9150 (2680)	13400 (3925)	7/8	3/8	11.3	14.4
1.5	2	ZB13KCE	10900 (3193)	16300 (4774)	7/8	3/8	11.3	14.4
2	2	ZB15KCE	12600 (3691)	18200 (5331)	7/8	3/8	11.3	14.4
2 1/2	2.5	ZB19KCE	15700 (4599)	24600 (7205)	7/8	1/2	14.4	21.5
3	3.5	ZB21KCE	19500 (5712)	28400 (8318)	1 1/8	1/2	21.5	31
3 1/2	3.5	ZB26KCE	22400 (6561)	35300 (10339)	1 1/8	1/2	21.5	31
4	4	ZB30KCE	24800 (7264)	39500 (11570)	1 1/8	1/2	21.5	31
5	5	ZB38KCE	31500 (9226)	49300 (14440)	1 1/8	1/2	31	54
6	6	ZB45KCE	38100 (11159)	60100 (17603)	1 3/8	5/8	31	54
6.5	7	ZB50KCE	40700 (11921)	59800 (17515)	1 3/8	5/8	31	54
7	8	ZB58KCE	43700 (12800)	63900 (18716)	1 3/8	5/8	54	76
7.5 +	9	ZB66KCE	54900 (16080)	79400 (23256)	1 3/8	5/8	54	76

**L6 - Low Temperature - R404A**

NOMINAL COMPRESSOR HP	POINTS	COPELAND MODEL	NOMINAL CAPACITY - BTU/H (WATTS) *		FIELD CONNECTIONS		RECEIVER (90% Lbs)	
			-20 °F (-28.9 °C)	-10 °F (-23.3 °C)	SUCTION	LIQUID	STANDARD	OVERSIZE
2	2	ZF06K4E	7800 (2285)	9600 (2812)	7/8	3/8	11.3	14.4
2 1/2	2.5	ZF08K4E	9900 (2900)	12200 (3573)	7/8	3/8	14.4	21.5
3	3	ZF09K4E	11000 (3222)	13500 (3954)	7/8	3/8	14.4	21.5
3 1/2	3	ZF11K4E	13300 (3896)	16300 (4774)	1 1/8	1/2	14.4	21.5
4 1/2	4	ZF13K4E	15400 (4511)	19200 (5624)	1 1/8	1/2	21.5	31
5 1/2	4	ZF15K4E	18800 (5507)	23100 (6766)	1 1/8	1/2	21.5	31
6	5	ZF18K4E	22800 (6678)	28000 (8201)	1 3/8	1/2	31	54
7 1/2	6	ZF24K4E	27900 (8172)	31100 (9109)	1 3/8	5/8	54	76
10	8	ZF33K4E	38100 (11159)	42400 (12419)	1 3/8	5/8	54	76

\* At 95 °F (35 °C) Ambient  
Refer to Bulletin T40-TEZ-PDS-60 for further capacity data.

**H2 - High/Medium Temperature - R22**

NOMINAL COMPRESSOR HP	POINTS	COPELAND MODEL	NOMINAL CAPACITY - BTU/H (WATTS) *		FIELD CONNECTIONS		RECEIVER (90% Lbs)	
			25 °F (-3.9 °C)	40 °F (7.2 °C)	SUCTION	LIQUID	STANDARD	OVERSIZE
3/4	1	KAN-0075	6920 (2027)	9420 (2759)	1/2	3/8	6	12.5
1	1.5	KAR-0100	9530 (2791)	12800 (3749)	5/8	3/8	6	12.5
1 1/2	2	KAG-0150	12000 (3515)	16500 (4833)	7/8	3/8	16	24.7
2	2	KAK-0200	16600 (4862)	22400 (6561)	7/8	1/2	16	24.7
3	3.5	ERF-0310	27110 (7941)	36650 (10735)	1 1/8	1/2	24.7	34.5
5	5.5	2DC3-0500	44280 (12970)	60330 (17671)	1 3/8	5/8	34.5	50
5+	6	2DD3-0500	50650 (14835)	68350 (20020)	1 3/8	5/8	34.5	50
7 1/2	8	2DL3R78KE	62010 (18163)	82390 (24132)	1 3/8	5/8	62	87
7 3/4	9	2DA3R89KE	68890 (20178)	90580 (26531)	1 3/8	5/8	62	87
8+	9	3DA3R10ME	86500 (25336)	114200 (33449)	1 3/8	5/8	62	87

**M2 - Medium Temperature - R22**

NOMINAL COMPRESSOR HP	POINTS	COPELAND MODEL	NOMINAL CAPACITY - BTU/H (WATTS) *		FIELD CONNECTIONS		RECEIVER (90% Lbs)	
			15 °F (-9.4 °C)	25 °F (-3.9 °C)	SUCTION	LIQUID	STANDARD	OVERSIZE
3/4	1	KAE-0075	6050 (1772)	7560 (2214)	5/8	3/8	6	12.5
1	1.5	KAM-0100	8450 (2475)	10600 (3105)	5/8	3/8	6	12.5
2	2	ERC-0200	14300 (4188)	18300 (5360)	7/8	1/2	16	24.7

**M6 - Medium Temperature - R404A**

NOMINAL COMPRESSOR HP	POINTS	COPELAND MODEL	NOMINAL CAPACITY - BTU/H (WATTS) *		FIELD CONNECTION		RECEIVER (90% Lbs)	
			5 °F (-15 °C)	25 °F (-3.9 °C)	SUCTION	LIQUID	STANDARD	OVERSIZE
3/4	1	KAN-007E	4100 (1201)	6550 (1918)	1/2	3/8	5.2	11.3
1	1.5	KAR-010E	6300 (1845)	9360 (2742)	5/8	3/8	5.2	11.3
1 1/2	2	KAG-010E	7800 (2285)	11200 (3280)	5/8	3/8	11.3	14.4
2	2	KAK-020E	10200 (2988)	15400 (4511)	7/8	1/2	14.4	21.5
2 +	2.5	ERC-021E	12700 (3720)	19400 (5682)	7/8	1/2	14.4	21.5
3	3.5	ERF-031E	18700 (5477)	28360 (8307)	7/8	1/2	21.5	31
5	5.5	2DC3R53KE	29110 (8526)	45240 (13251)	1 1/8	5/8	31	54
5	6	2DD3R63KE	34540 (10117)	52880 (15489)	1 1/8	5/8	31	54
7 1/2	8	2DL3R78KE	41720 (12220)	62190 (18215)	1 3/8	5/8	54	76
7 1/2	9	2DA3R89KE	48040 (14071)	69480 (20351)	1 3/8	5/8	54	76
7 1/2	9	3DA3R10ME	57900 (16959)	85500 (25043)	1 3/8	5/8	54	76

\* At 95 °F (35 °C) Ambient  
Refer to Bulletin T40-TES-PDS-60 for further capacity data.

**L6 - Low Temperature - R404A**

NOMINAL COMPRESSOR HP	POINTS	COPELAND MODEL	NOMINAL CAPACITY - BTU/H (WATTS) *		FIELD CONNECTIONS		RECEIVER (90% Lbs)	
			-20 °F (-28.9 °C)	-10 °F (-23.3 °C)	SUCTION	LIQUID	STANDARD	OVERSIZE
1/2	1	KAN-005E	1960 (574)	2750 (805)	1/2	3/8	5.2	11.3
3/4	1	KAM-007E	3440 (1008)	4580 (1341)	5/8	3/8	5.2	11.3
1	1	KAJ-010E	4460 (1306)	5760 (1687)	7/8	3/8	5.2	11.3
1 1/2	1.5	KAL-015E	6910 (2024)	8960 (2624)	7/8	3/8	14.4	21.5
2	2	EAD-020E	7590 (2223)	10100 (2958)	7/8	3/8	14.4	21.5
2	2	EAV-020E	8770 (2569)	11400 (3339)	7/8	1/2	14.4	21.5
3	3	LAH-031E	13920 (4077)	18630 (5457)	1 1/8	1/2	21.5	31
3.1	3.5	LAC-032E	17140 (5020)	- -	1 1/8	1/2	21.5	31
3 1/2	4	2DF3F16KE	18780 (5501)	24080 (7053)	1 1/8	1/2	21.5	31
4+	5	2DL3F20KE	23110 (6769)	29510 (8643)	1 1/8	1/2	21.5	31
6	6	2DB3F25KE	28840 (8447)	36760 (10767)	1 3/8	5/8	31	44
6	6.5	3DA3F28KE	31980 (9367)	40480 (11857)	1 3/8	5/8	31	54
7 1/2	8	3DB3F33KE	37120 (10872)	46550 (13634)	1 3/8	5/8	54	76
9	9	3DF3-090E	46200 (13532)	58500 (17135)	1 3/8	5/8	54	76

\* At 95 °F (35 °C) Ambient  
Refer to Bulletin T40-TEs-PDS-60 for further capacity data.



**H2 - High/Medium Temperature - R22**

NOMINAL COMPRESSOR HP	COMPRESSOR MODEL	208/230-1-60		208/230-3-60		460-3-60		575-3-60	
		RLA	LRA	RLA	LRA	RLA	LRA	RLA	LRA
1/2	ART82-C1	5.3	30	-	-	-	-	-	-
3/4	RS64C2	6.9	37	-	-	-	-	-	-
1	RS70C1	6.3	34.2	4.2	31	2.6	15	-	-
1 1/2	CR18KQ	8.1	41	5.4	49	3.1	23	-	-
2	CR24KQ	12.2	70.5	6.7	51	3.3	25	-	-
2 1/2	CR32KQ	15.3	83	8.8	63	4.6	32	-	-
3	CR37KQ	16.7	100	9.9	85	5	39	-	-
3 1/2	CR41KQ	17.4	109.6	11.8	80	5.3	42	-	-
4	CR53KQ	26	140	16.3	107	8.1	55	-	-
5	CRN5-0500	30.8	142	19.2	130	8.7	65	7.1	52

**E6 - Extended Medium Temperature - R404A**

NOMINAL COMPRESSOR HP	COMPRESSOR MODEL	208/230-1-60		208/230-3-60		460-3-60		575-3-60	
		RLA	LRA	RLA	LRA	RLA	LRA	RLA	LRA
1/2	RST45C1E	4.6	26.5	-	-	-	-	-	-
3/4	RST55C1E	6.1	33.7	-	-	-	-	-	-
3/4 +	RST64C1E	8	43	-	-	-	-	-	-
1	RS70C1E	6.3	34.2	4.2	31	2.6	15	-	-
1 1/2	CS10K6E	9.8	56	6.7	51	3.2	25	-	-
2	CS12K6E	9.8	56	6.7	51	-	-	-	-
2 1/2	CS14K6E	11.2	61	8.2	55	4.2	28	-	-
3	CS18K6E	14.4	82	7.9	65.5	4.2	33	-	-
3 1/2	CS20K6E	16.7	96	10.2	75	4.6	40	-	-
4	CS27K6E	21.5	95.4	14	82	7.6	41	-	-
5	CS33K6E	27.6	125	16.8	102	8.8	48	-	-

**L6 - Low Temperature - R404A**

NOMINAL COMPRESSOR HP	COMPRESSOR MODEL	208/230-1-60		208/230-3-60		460-3-60		575-3-60	
		RLA	LRA	RLA	LRA	RLA	LRA	RLA	LRA
1/2	AFT22C1E	3.3	32.5	-	-	-	-	-	-
3/4	AFT26C1E	4.1	32.2	-	-	-	-	-	-
1	CF04K6E	9.9	59.2	6.1	52	3.3	26	-	-
2	CF06K6E	10.3	59.2	6.3	52	3.7	25.4	-	-
2 1/2	CF09K6E	15	87	9.2	72.2	4.9	35.8	-	-
3	CF12K6E	18.4	105	11	85	5.9	42	-	-



**H2 - High/Medium Temperature - R22 / M6 - Medium Temperature - R404A**

NOMINAL COMPRESSOR HP	COMPRESSOR MODEL	208/230-1-60		208/230-3-60		460-3-60		575-3-60	
		RLA	LRA	RLA	LRA	RLA	LRA	RLA	LRA
1	ZB10KCE	10	41	-	-	-	-	-	-
1.1	ZB11KCE	10	45	-	-	-	-	-	-
1.5	ZB13KCE	12.9	54	-	-	-	-	-	-
2	ZB15KCE	15.7	61	8.9	55	5	27	-	-
2 1/2	ZB19KCE	17.9	73	10	63	5	31	-	-
3	ZB21KCE	20.7	100	12.1	77	6.1	39	5	31
3 1/2	ZB26KCE	20.7	127	13.9	88	7.1	44	5	34
4	ZB30KCE	26.8	132	15.7	115	7.5	47.5	6	38
5	ZB38KCE	31.1	175	22.1	115	9.6	63	7.7	50
6	ZB45KCE	-	-	22.5	156	11.5	70	9.2	56
6.5	ZB50KCE	-	-	28.6	196	15	100	11.1	90
7	ZB58KCE	-	-	32.1	195	16.4	95	12.9	80
7 1/2	ZB66KCE	-	-	33.6	225	17.5	114	13.5	80

**L6 - Low Temperature - R404A**

NOMINAL COMPRESSOR HP	COMPRESSOR MODEL	208/230-1-60		208/230-3-60		460-3-60		575-3-60	
		RLA	LRA	RLA	LRA	RLA	LRA	RLA	LRA
2	ZF06K4E	13.6	61	9.3	55	4.3	27	-	-
2 1/2	ZF08K4E	16.4	73	9.7	63	5	39	4	24
3	ZF09K4E	16.4	88	11.1	77	5.7	39	4.3	31
3 1/2	ZF11K4E	20.7	109	13.6	88	7.1	44	5	34
4 1/2	ZF13K4E	26.8	129	15	99	8.2	49.5	8.2	40
5 1/2	ZF15K4E	31.8	169	21.4	123	9.6	62	7.9	50
6	ZF18K4E	-	-	23.9	156	9.3	70	7.9	54
7 1/2	ZF24K4E	-	-	30	189	15.7	94	8.9	74
10	ZF33K4E	-	-	43.6	278	21.1	127	16.1	100

**ELECTRICAL DATA -  
SEMI-HERMETIC COMPRESSOR  
(RLA/LRA)**

**H2 - High/Medium Temperature - R22**

NOMINAL COMPRESSOR HP	COMPRESSOR MODEL	208/230-1-60		208/230-3-60		460-3-60		575-3-60	
		RLA	LRA	RLA	LRA	RLA	LRA	RLA	LRA
3/4	KAN-0075	6.1	36	3.5	19.9	-	-	-	-
1	KAR-0100	7.4	40	4.3	27	2.2	13.5	-	-
1 1/2	KAG-0150	9.6	55	5.5	35.5	2.5	18.2	-	-
2	KAK-0200	10.6	55	6.8	50	3	25	-	-
3	ERF-0310	17	86	11.7	82	6.4	41	-	-
5	2DC3R53KE	29.9	125	22.3	120	10.4	60	7.7	49
5	2DD3R63KE	-	-	22.3	120	10.5	60	7.9	49
7 1/2	2DL3R78KE	-	-	31.6	169	13.8	85	13.2	67
7 3/4	2DA3R89KE	-	-	32	169	14.1	85	13.3	67
8	3DA3R10ME	-	-	41	215	20	106	16.5	84

**M2 - Medium Temperature - R22**

NOMINAL COMPRESSOR HP	COMPRESSOR MODEL	208/230-1-60		208/230-3-60		460-3-60		575-3-60	
		RLA	LRA	RLA	LRA	RLA	LRA	RLA	LRA
3/4	KAE-0075	5.4	36	3.4	19.9	-	-	-	-
1	KAM-0100	7.5	40	4.5	27	2.2	13.5	-	-
2	ERC-0200	10.9	58	6.8	46	3.6	23	3.2	20

**M6 - Medium Temperature - R404A**

NOMINAL COMPRESSOR HP	COMPRESSOR MODEL	208/230-1-60		208/230-3-60		460-3-60		575-3-60	
		RLA	LRA	RLA	LRA	RLA	LRA	RLA	LRA
3/4	KAN-007E	5.4	36	3	19.9	-	-	-	-
1	KAR-010E	7.4	40	4.3	27	2	15	-	-
1 1/2	KAG-010E	7.5	40	4.3	27	2.2	15	-	-
2	KAK-020E	10.6	55	6.8	50	3	25	-	-
2.1	ERC-021E	-	-	8.8	46	3.5	23	3.1	20
3	ERF-031E	17	86	12.4	82	5.8	41	-	-
5	2DC3R53KE	-	-	22.3	120	10.4	60	7.7	49
5	2DD3R63KE	-	-	22.3	120	10.5	60	7.9	49
7 1/2	2DL3R78KE	-	-	31.6	169	13.8	85	13.2	67
7 3/4	2DA3R89KE	-	-	32	169	14.1	85	13.3	67
8	3DA3R10ME	-	-	41	215	20	106	16.5	84

**ELECTRICAL DATA -  
SEMI-HERMETIC COMPRESSOR  
(RLA/LRA) (cont'd)**

**L6 - Low Temperature - R404A**

NOMINAL COMPRESSOR HP	COMPRESSOR MODEL	208/230-1-60		208/230-3-60		460-3-60		575-3-60	
		RLA	LRA	RLA	LRA	RLA	LRA	RLA	LRA
1/2	KAN-005E	3.6	24	2.2	13.2	-	-	-	-
3/4	KAM-007E	5.6	36	3.2	19.9	-	-	-	-
1	KAJ-010E	6.9	40	4.6	27	2.1	15	-	-
1 1/2	KAL-015E	9.9	55	6.6	50	3.4	25	-	-
2	EAD-020E	10	58	6.8	46	-	-	-	-
2	EAV-020E	14.7	102	7.4	50	3.9	26.6	3.1	20
3	LAH-031E	16.7	105	12.8	112	6	56	4.1	30
3.1	LAC-032E	15.5	105	12.8	112	6	56	-	-
3 1/2	2DF3F16KE	25.8	125	16.8	102	8.1	52	6.7	41
4	2DL3F20KE	-	-	26.3	161	10.2	60	7.7	49
6	2DB3F25KE	-	-	28.2	161	13.3	80	9.6	63
6	3DA3F28KE	-	-	30.3	150	13.7	77	10.5	62
7 1/2	3DB3F33KE	-	-	31.5	161	16.1	83	11	67
9	3DF3-090E	-	-	37	215	16.7	106	15.7	84

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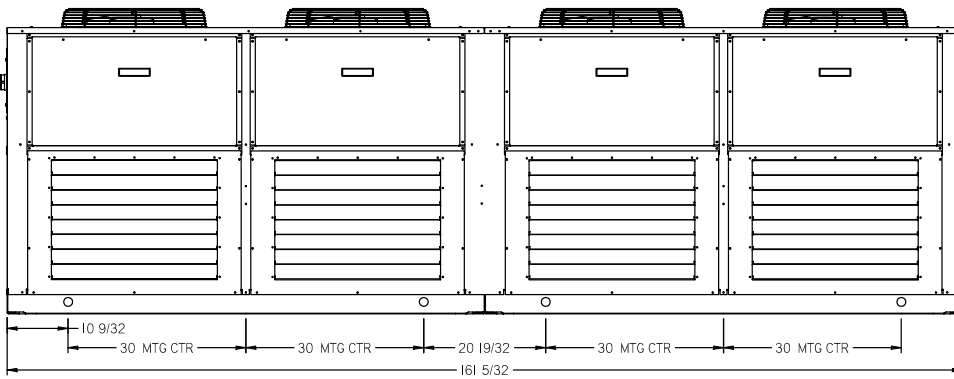
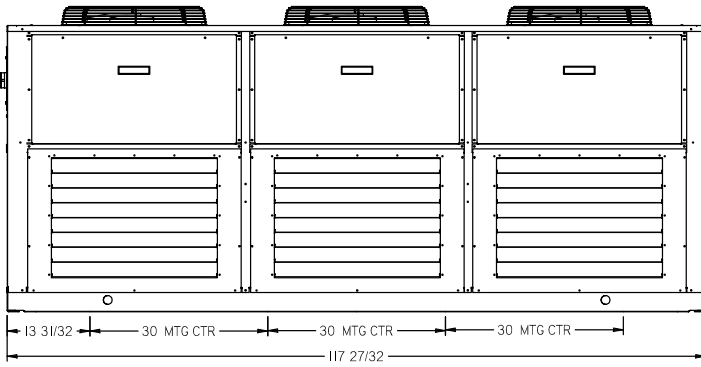
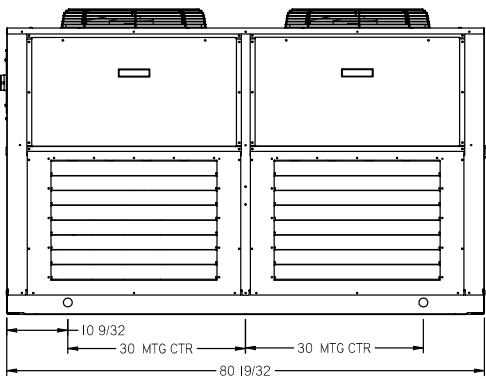
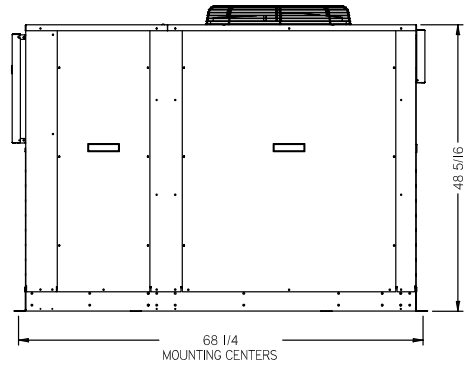
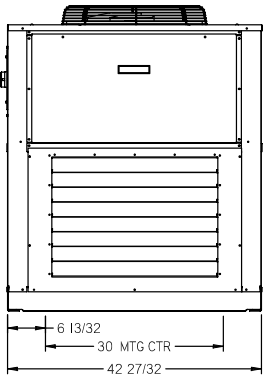


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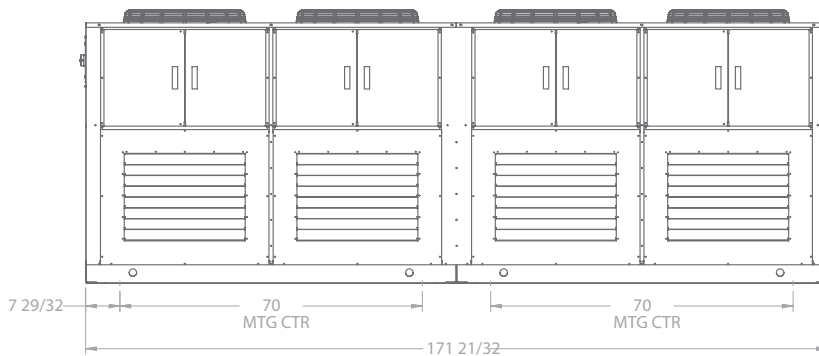
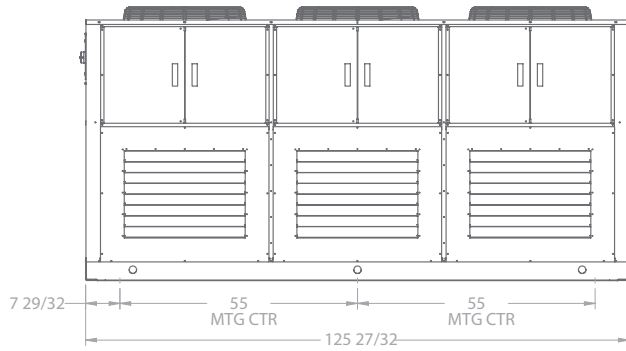
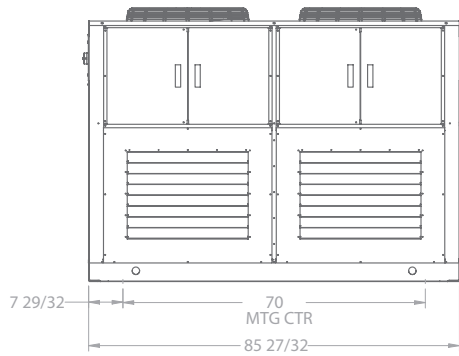
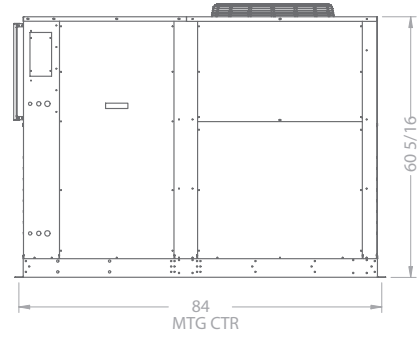
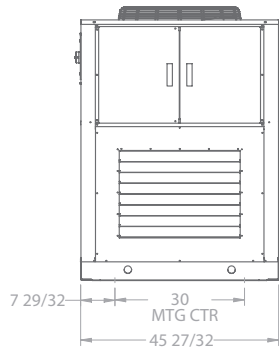
**STANDARD PSC MOTOR (FLA) DATA**

UNIT VOLTAGE	TOTAL FAN FLA (Small Cabinet)				TOTAL FAN FLA (Medium Cabinet)			
	1 FAN	2 FAN	3 FAN	4 FAN	1 FAN	2 FAN	3 FAN	4 FAN
208/230-1-60	2.1	4.2	6.3	8.4	3.6	7.2	10.8	14.4
208/230-3-60	2.1	4.2	6.3	8.4	3.6	7.2	10.8	14.4
460-3-60	1.1	2.2	3.3	4.4	1.7	3.4	5.1	6.8
575-3-60	0.9	1.8	2.7	3.6	1.4	2.8	4.2	5.6

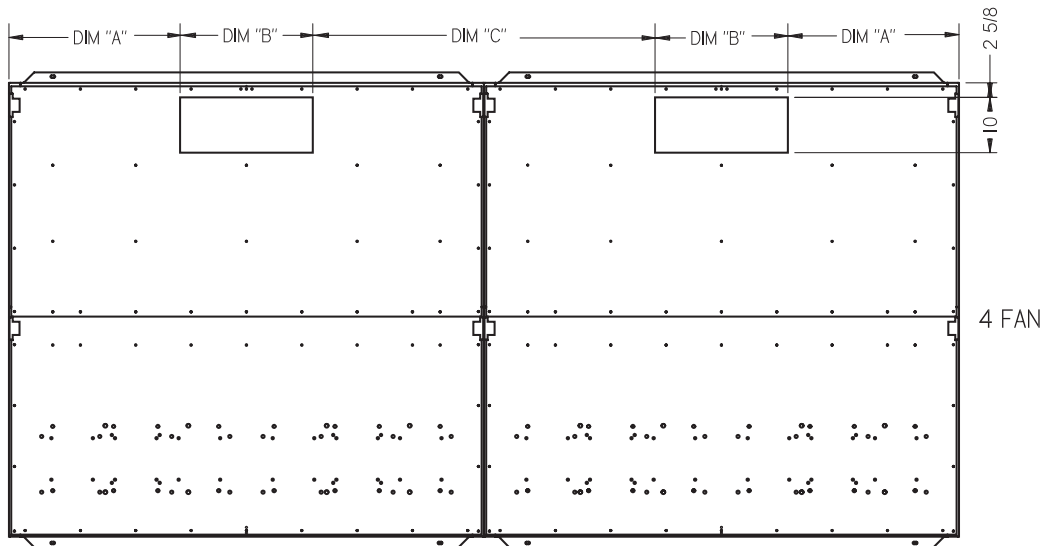
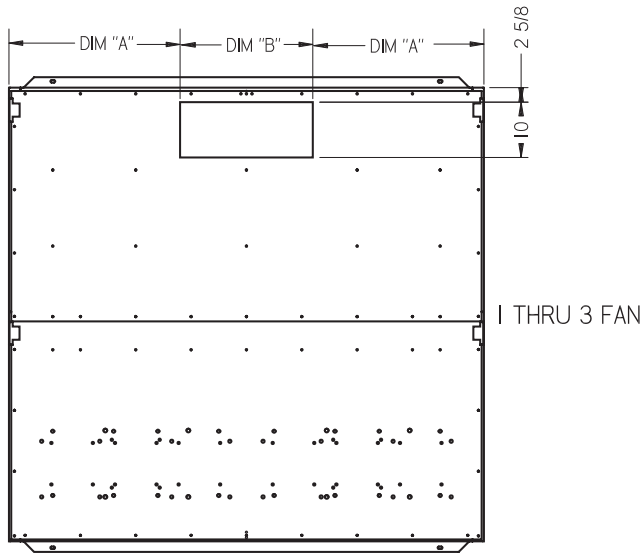
# DIMENSIONAL DATA - Small Chassis



# DIMENSIONAL DATA - Medium Chassis



# DIMENSIONS - PITCH POCKET



## SMALL CHASSIS

	DIM "A"	DIM "B"	DIM "C"
1 FAN WIDE	15 13/32"	12"	N/A
2 FANS WIDE	28 9/32"	24"	N/A
3 FANS WIDE	44 5/32"	30"	N/A
4 FANS WIDE	29 9/32"	24"	56 19/32"

## MEDIUM CHASSIS

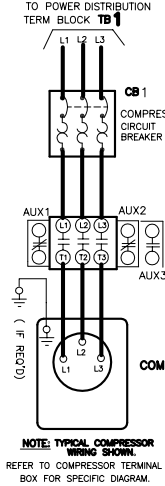
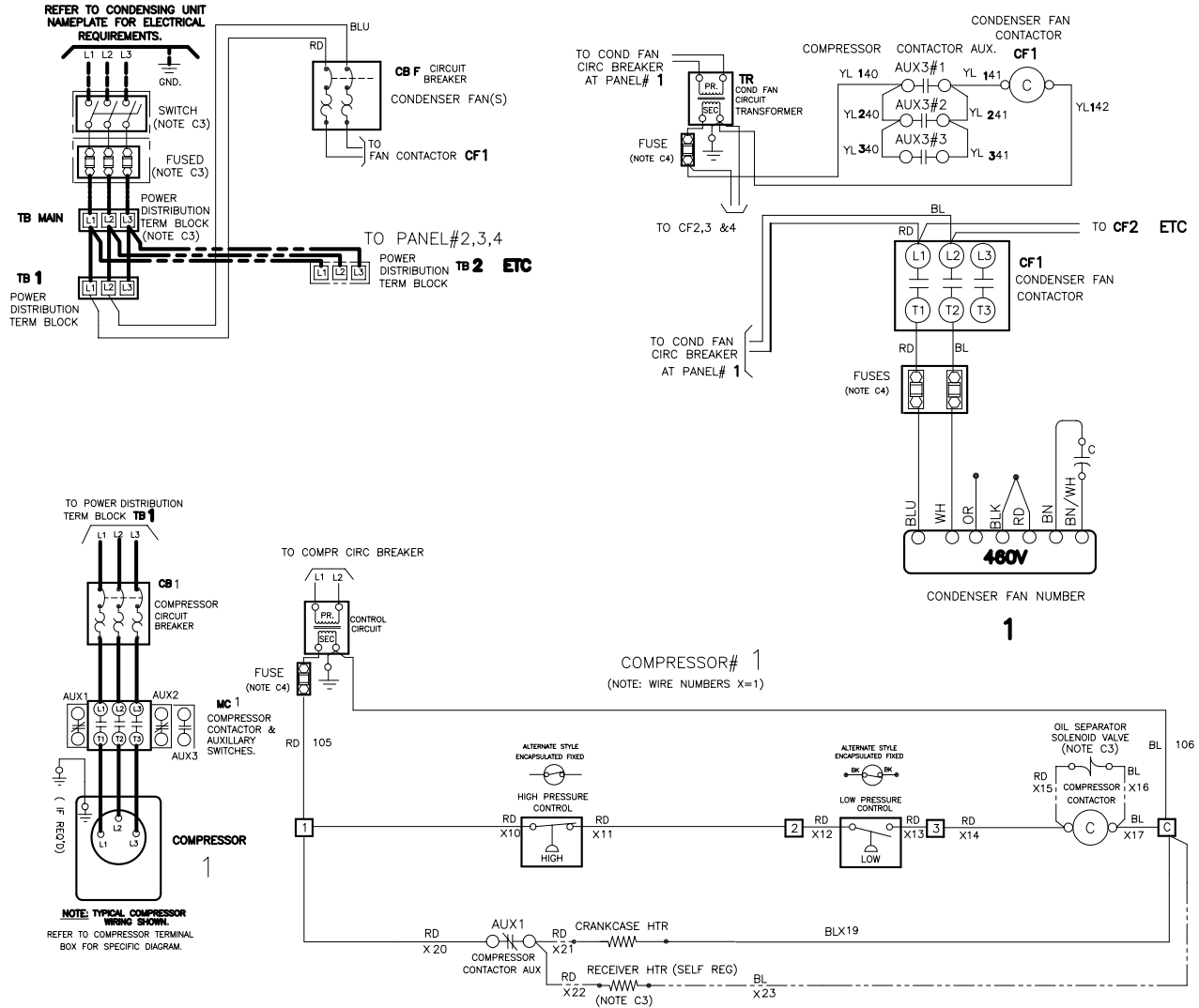
	DIM "A"	DIM "B"	DIM "C"
1 FAN WIDE	16 29/32"	12"	N/A
2 FANS WIDE	30 29/32"	24"	N/A
3 FANS WIDE	47 29/32"	30"	N/A
4 FANS WIDE	30 29/32"	24"	61 27/32"

# WIRING DIAGRAM

## CONDENSING UNIT WIRING DIAGRAM PANEL#1

COMPRESSOR#  
1 2 3

- 460-3-60Hz  
- 230V CONTROL CIRCUIT



COMPRESSOR# 2 (NOTE: WIRE NUMBERS X=2) AND 3 (NOTE: WIRE NUMBERS X=3)  
ALL WIRED SIMILAR TO COMPRESSOR#1

NOTES	
C1. USE COPPER CONDUCTORS ONLY	
C2. USE 75°C WIRE (OR HIGHER)	
C3. OPTIONAL COMPONENT	
C4. ALL FUSES TO BE CLASS CC OR J AND VOLTAGE RATED EQUAL (OR HIGHER) THAN OPERATING VOLTAGE	
<b>CONDUCTORS/WIRING</b>	
—————	FACTORY WIRING
- - - - -	OPTIONAL WIRING
- · - · -	WIRING BY OTHERS
ALL FIELD WIRING MUST BE DONE IN COMPLIANCE WITH ALL APPLICABLE LOCAL AND NATIONAL CODES.	
REVISIONS	DIAGRAM NUMBER
DATE	LTR
APR2/08	A
T4A1A-	
P.1 OF 2	



# WIRING DIAGRAM

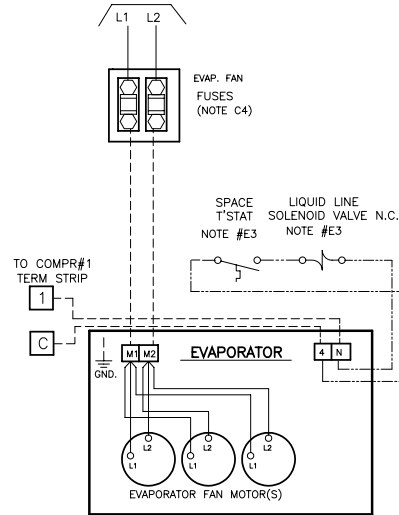
CONDENSING UNIT WIRING DIAGRAM PANEL #1

COMPRESSOR#  
1 2 3

- 460-3-60Hz  
- 230V CONTROL CIRCUIT

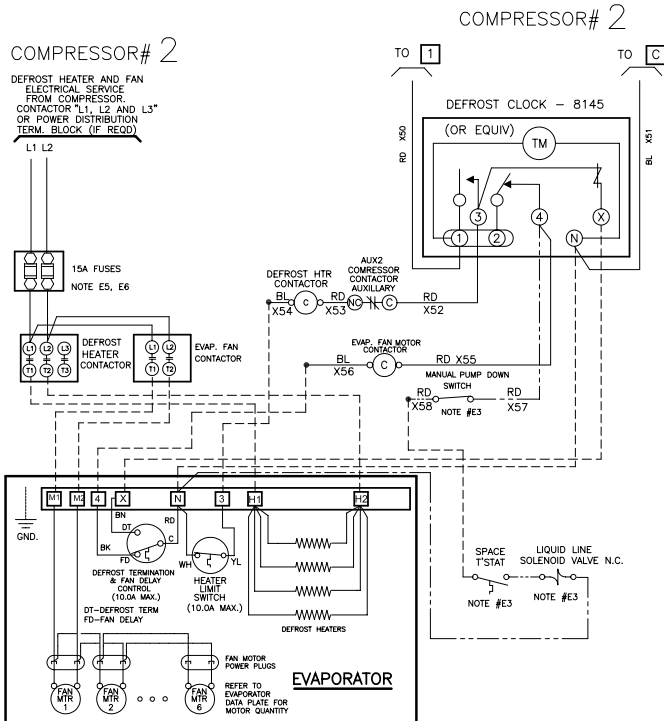
## EVAPORATOR # 1

FAN MOTOR  
ELECTRICAL SERVICE  
FROM COMPRESSOR CONTACTOR  
"L1, AND L2"



## EVAPORATOR # 2

(NOTE: WIRE NUMBERS X=2)



## EVAPORATOR # 3

(NOTE: WIRE NUMBERS X=3)

ALL WIRED SIMILAR TO EVAP #1 OR #2

### NOTES

- C1. USE COPPER CONDUCTORS ONLY
- C2. USE 75°C WIRE (OR HIGHER)
- C3. OPTIONAL COMPONENT
- C4. ALL FUSES TO BE CLASS CC OR J AND VOLTAGE RATED EQUAL (OR HIGHER) THAN OPERATING VOLTAGE

#### CONDUCTORS/WIRING

- FACTORY WIRING
- OPTIONAL WIRING
- WIRING BY OTHERS

ALL FIELD WIRING MUST BE DONE IN COMPLIANCE WITH ALL APPLICABLE LOCAL AND NATIONAL CODES.

REVISIONS		DIAGRAM NUMBER	
DATE	LTR	<b>T4A1A-</b>	<b>P.2 OF 2</b>
APR2/08	A		



# MULTI-COMPRESSOR AIR COOLED CONDENSING UNIT SPECIFICATION AND SUBMITTAL DRAWING WORKSHEET

Date: \_\_\_\_\_ \* Unit Model \_\_\_\_\_ Unit Voltage: \_\_\_\_\_  
 Revision: \_\_\_\_\_ Number: \_\_\_\_\_ MCA: \_\_\_\_\_  
 Level: \_\_\_\_\_ Project: \_\_\_\_\_ MOP: \_\_\_\_\_

ITEM	DESCRIPTION	ROOM	COMPRESSOR DATA										EVAPORATOR COILS					
			COMPRESSOR MANUFACTURER	QTY.	MODEL	HP	REF. TYPE	SST	BTUH	VOLTAGE	RLA	DEFROST	QTY.	COIL MODEL	FAN MOTORS VOLTAGE	FLA	DEFROST HEATERS VOLTAGE	AMPS
1																		
2																		
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		
11																		
12																		

ITEM	DESCRIPTION	RECEIVER CAPACITY		FIELD CONNECTIONS	
		LBS @ 90%	SUCTION	LIQUID	
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					

CONDENSER MOTOR AND BLADE DATA			
FAN QTY.	HP (each)	VOLTAGE	BLADE DIA.
1/3			22"

**UNIT DIMENSIONS AND WEIGHT**

Depth: \_\_\_\_\_ Width: \_\_\_\_\_  
 Height: \_\_\_\_\_ Est. Weight (lbs.): \_\_\_\_\_



MCA = Minimum Circuit Ampacity  
 MOP = Maximum Overcurrent Protection  
 \* Unit Model Number subject to change

# NOTES

## FINISHED GOODS WARRANTY

The terms and conditions as described below in the General Warranty Policy cover all products manufactured by National Refrigeration.

### GENERAL WARRANTY POLICY

Subject to the terms and conditions hereof, the Company warrants all Products, including Service Parts, manufactured by the Company to be free of defects in material or workmanship, under normal use and application for a period of one (1) year from the original date of installation, or eighteen (18) months from the date of shipment from the Company, whichever occurs first. Any replacement part(s) so supplied will be warranted for the balance of the product's original warranty. The part(s) to be replaced must be made available in exchange for the replacement part(s) and reasonable proof of the original installation date of the product must be presented in order to establish the effective date of the warranty, failing which, the effective date will be based upon the date of manufacture plus thirty (30) days. Any labour, material, refrigerant, transportation, freight or other charges incurred in connection with the performance of this warranty will be the responsibility of the owner at the current rates and prices then in effect. This warranty may be transferred to a subsequent owner of the product.

### THIS WARRANTY DOES NOT COVER

(a) Damages caused by accident, abuse, negligence, misuse, riot, fire, flood, or Acts of God (b) damages caused by operating the product in a corrosive atmosphere (c) damages caused by any unauthorized alteration or repair of the system affecting the product's reliability or performance (d) damages caused by improper matching or application of the product or the product's components (e) damages caused by failing to provide routine and proper maintenance or service to the product (f) expenses incurred for the erecting, disconnecting, or dismantling the product (g) parts used in connection with normal maintenance, such as filters or belts (h) products no longer at the site of the original installation (i) products installed or operated other than in accordance with the printed instructions, with the local installation or building codes and with good trade practices (j) products lost or stolen.

**No one is authorized to change this WARRANTY** or to create for or on behalf of the Company any other obligation or liability in connection with the Product(s). There is no other representation, warranty or condition in any respect, expressed or implied, made by or binding upon the Company other than the above or as provided by provincial or state law and which cannot be limited or excluded by such law, nor will we be liable in any way for incidental, consequential, or special damages however caused.

The provisions of this additional written warranty are in addition to and not a modification of or subtraction from the statutory warranties and other rights and remedies provided by Federal, Provincial or State laws.

## PROJECT INFORMATION

System	
Model Number	Date of Start-Up
Serial Number	Service Contractor
Refrigerant	Phone
Electrical Supply	Fax

**“AS BUILT” SERVICE PARTS LIST**

**Service Parts List  
Label  
To Be Attached  
HERE**



**NATIONAL REFRIGERATION & AIR CONDITIONING CANADA CORP.**  
159 Roy Blvd. Brantford Ontario, Canada N3R 7K1  
PHONE: (519) 751-0444 800-463-9517 FAX (519) 753-1140