MAIN CONTROL BOX

WIRES FROM CONDENSER FAN MOTORS OR CONDENSER FAN V.F.D. ENCLOSURE

1U107 (MDM)

1U105 (MPM)

1U48 (RTM)

1U55 (IPCB)

1U52 (ECEM)

FOR MODULE DETAILS SEE SHEET 2

1U49 (SCM)

1U54 BNCM (LCI)

1U54 BNCM (TCI) OR 1U104 (BCI)

1U50 (HEAT)

FOR MODULE DETAILS SEE SHEET 2

1U51 (GBAS)

1U53 (VOM)

FOR MODULE DETAILS SEE SHEET 2

1U65 (HIM)

NOTE: CONNECTIONS SHOWN FROM VIEWING BACK OF 1U65

J2 1 2 3 — 403D 436D 436V

J1 1 2 3 — 406K 407K

1K7 — 19A 20A 21A 78A 36S 36T — 16A 17A 18A

1K8 — 79A 36T 22A W31 23A W32 24A W33 — 16B 17B 18B

1F1 1F2 1F3 — 1E 1AF 2E 2AF 3E 3AF — 16A 16B 18A 18B 17A 17B

1F74 1F73 1F72 — 3AF 376A 2AF 375A 375D 1AF 374B 374D

1TB10

B	427	12	C
B	426	11	C
W6	213	10	B
A	573	9	B
A.D.G.F	572	8	K
19 G.J	736	7	E.H.R
K.M	736	6	A
A	399	5	B
		4	
A	211	3	B
		2	
A	209	1	B

1TB9

	A.E		
F. G. J	407	C	K.L.M
B. C			D.P
F. G. J	406	B	K.L
B. C	406	A	D.P.M
	A.E		

1TB6

BL. BK.	36	12	A
	36	11	P.S
BY.BZ	36	10	AM
		9	
A.B	429	8	C
A.B	428	7	C
A.B	87	6	C.D.E
B	85	5	A
B	84	4	A
AA.AK	37	3	P
	37	2	G
AB. F	37	1	A.R

1CB8 — 85B 1N 2N 3N — 56A 57A 58A

1CB9 — 86A 1P 2P 3P — 59A 60A 61A

1U79 — CBL3U74-6

1U77 — CBL3U72-6 — 18

RACEWAY INTERCONNECT TO LOW SIDE OF UNIT

1F63 1F64 1F65 — 17 — 312A 312B 313A 313B 314A 314B — 1H 2H 3H

1T1 — 200V OR 575V/60HZ — 115V — X2 X1 — 34A 36A 36B — 1 — 375A 375B 376A H1 H2 LINE

1TB1 OR 1S14 — 1 2 3 — 1AA 2AA — LINE VOLTAGE — E HNPY W1 W2 W3

1TB7

A	35	12	B
A	398	11	B
A	442	10	B
A	441	9	B
A	433	8	B — 6
C	431	7	
D	436	6	A.B.R
F	436	5	G.J.K
E.M	636	4	C.P.Z.Y
A.B	404	3	C.E.M.L
J.K	403	2	F.G
A.B	403	1	D.E

1K3 — 76C 36P 36R 56A 56B 57A 57B 58A 429B — C AUX 1 NC — C AUX 2 NO — 56B 900A 4A 5A 6A 428B

1K5 — 77C 36R 59A 59B 60A 60B 61A 429C — C AUX 1 NC — C AUX 2 NO — 59B 901A 7B 8B 9B 428C

1F57 1F58 1F59 — 16 — 306A 306B 307A 307B 308A 308B — 1Y 2Y 3Y

1S1 — 35B 37A

1T2 1T4 1T3 — 230V/575V/60HZ 380V/415V/50HZ 736S — 374B.374C 375B.375C 374D 375D 374C 375C — 1NE 2AV LOAD — 436A 400A 736A 402A 636E 401A — 8

1F7 — SPLICE RED 35A — SPLICE BLK 34A

1F44 — 37G 209A

1S70 — 402A 400A 401A 403A 404A 572A

1TB8

		12	
AL. W5	36	11	AM .W7
W 11	115	10	A .W 16
W 10	114	9	A .W 15
W 9	113	8	A .W 14
W 13	112	7	A.W 42
	111	6	A.C — 2
W 8	110	5	A .W 12
M	37	4	P.E .AD .AJ
		3	
		2	
		1	

1S72 — 335A 333A 334A — 11

1S73 — 341A 339A 340A — 11

1F55 1F56 — 324A 326A 325A 327A

1S74 — 10 — 324A 325A 2AA 1AA

57B 57C 900A 900B — 60B 60C 901A 901B

1TB4 1TB5 1TB16 1TB17 — SEE DETAIL "1A" — 5

CUST GND

INSET "1D" — 1U79 CBL3U74-6 1U77 CBL3U72-6

WIRES FROM COMPR WINDING T-STATS. SATURATED COND TEMP SENSORS. HIGH & LOW PRESSURE CUTOUTS AND COMPR PROTECTION SWITCHES

WIRES FROM COMPRESSOR "1A"

WIRES FROM COMPRESSOR "1B"

CUSTOMER CONTROL WIRE ENTRY

CUSTOMER POWER WIRE POWER

IMPORTANT!
DO NOT ENERGIZE UNIT UNTIL CHECK-OUT AND START-UP PROCEDURE HAS BEEN COMPLETED.

NOTES:

1. 200V/60HZ OR 575V/60HZ TRANSFORMER (1T1) SHOWN. SEE DETAIL "1B" FOR OTHER VOLTAGE CONNECTIONS.
2. JUMPER (1TB8-5 & 1TB8-6) REQUIRED ONLY ON UNITS WITH 2-STAGE NATURAL GAS HEAT OR ELECTRIC HEAT OPTION.
4. 1TB8 AND ASSOCIATED WIRING REQUIRED WITH ALL HEATING OPTIONS.
5. 1TB17 AND ASSOCIATED WIRING REQUIRED WITH OPTIONAL GBAS (1U51).
6. WHEN HIGH DUCT TEMP T-STAT (3S16 - 3S17) IS ORDERED JUMPER IS REMOVED.
8. 230V/60HZ, 380V/50HZ, 415V/50HZ OR 575V/60HZ TRANSFORMERS SHOWN. SEE DETAIL "1C" FOR 200V/60HZ OR 460V/60HZ CONNECTIONS.
9. JUMPER INSTALLED ONLY ON UNITS WITHOUT ECONOMIZER OPTION.
10. 1F55, 1F56 ,1S74 AND ASSOCIATED WIRING USED ON CONVENIENCE OUTLET OPTION ONLY.
11. MANUAL BYPASS SWITCH AND ASSOCIATED WIRING OPTIONAL.
16. ON 1F57-1F59 FUSES USE WIRES 306B,307B & 308B ON SUPPLY VFD UNITS W/O BYPASS W/ LINE REACTOR OPTION ONLY. USE WIRES 306A,307A & 308A ON ALL OTHER SUPPLY VFD UNITS.
17. ON 1F63-1F65 FUSES USE WIRES 312B,313B & 314B ON EXHAUST VFD UNITS W/O BYPASS W/ LINE REACTOR OPTION ONLY. USE WIRES 312A,313A & 314A ON ALL OTHER EXHAUST VFD UNITS.
18. REFER TO INSET "1D" FOR ALTERNATE KEYPAD CONNECTION LAYOUT (1U79 & 1U77)
19. WIRES 736J, 736G & 572F USED WITH RETURN FAN OPTION ONLY.

DETAIL "1A"

1TB4

A	1	408	418	12	A
A	2	409	424	13	A
A	3	410	403	14	E
A	4	412	435	15	A
A	5	411	431	16	C
A	6	417	434	17	A
A	7	413	438	18	A
A	8	414	437	19	A
A	9	415	537	20	A
A	10	416	538	21	A
A	11	425	436	22	R

1TB5

A	1	489	475	12	A
A	2	490	476	13	A
A	3	523	528	14	A
A	4	524	529	15	A
A	5	525	530	16	A
A	6	526	531	17	A
A	7	527	532	18	A
A	8	549	533	19	A.B
A	9	550	534	20	A.B
9 A.B	10	427	443	21	A
A.B	11	426	444	22	A

1TB16

A	1	507	445	12	A
A	2	508	446	13	A
A	3	509	447	14	A
A	4	541	448	15	A
A	5	542	449	16	A
A	6	543	450	17	A
E.A	7	544	614	18	A
E.A	8	545	615	19	A
E.A	9	546	616	20	A
A	10	612		21	
A	11	613		22	

1TB17

A	1	485	496	12	A
A	2	486	497	13	A
A	3	487	498	14	A
A	4	488	499	15	A
A.B	5	535	500	16	A
B	6	535	501	17	A
A	7	491	502	18	A
A	8	492	503	19	A
A	9	493	504	20	A
A	10	494	505	21	A
A	11	495	506	22	A

DETAIL "1B"

375A 375B 376A — H1 H2 H3 H4 — LINE — 230V/60HZ 500VA/750VA/1000VA 1T1

375A 375B 376A — H1 H2 H3 H4 — LINE — 460V/60HZ 500VA/750VA/1000VA 1T1

230V/60HZ 250VA 376A; 460V/60HZ 250VA 376A; 375A 375B — H1 H2 H3 H4 — LINE — 230V OR 460V/60HZ 250VA 1T1

380V/50HZ 376A; 415V/50HZ 376A; 375A 375B — H1 H2 H3 — LINE — 380V OR 415V/50HZ 1T1

DETAIL "1C"

200V/460V/60HZ

736S — 374B.374C 375B.375C — 1NE 1T2 2AV LOAD — 436A 400A — 374D 375D — 1NE 1T4 2AV LOAD — 736A 402A — 374C 375C — 1NE 1T3 2AV LOAD — 636E 401A

⚠ WARNING
HAZARDOUS VOLTAGE!
DISCONNECT ALL ELECTRIC POWER, INCLUDING REMOTE DISCONNECTS, BEFORE SERVICING.
FAILURE TO DISCONNECT POWER BEFORE SERVICING CAN CAUSE SEVERE PERSONAL INJURY OR DEATH.

⚠ AVERTISSEMENT
VOLTAGE HASARDEUX!
DECONNECTEZ TOUTES LES SOURCES ELECTRIQUES INCLUANT LES DISJONCTEURS SITUES A DISTANCE AVANT D'EFFECTUER L'ENTRETIEN.
FAUTE DE DECONNECTEZ LA SOURCE ELECTRIQUE AVANT D'EFFECTUER L'ENTRETIEN PEUT ENTRAINER DES BLESSURES CORPORELLES SEVERES OU LA MORT.

⚠ CAUTION
USE COPPER CONDUCTORS ONLY!
UNIT TERMINALS ARE NOT DESIGNED TO ACCEPT OTHER TYPES OF CONDUCTORS.
FAILURE TO DO SO MAY CAUSE DAMAGE TO THE EQUIPMENT.

8.5 X 11 METAL PLATE

THIS DRAWING IS PROPRIETARY AND SHALL NOT BE COPIED OR ITS CONTENTS DISCLOSED TO OUTSIDE PARTIES WITHOUT THE CONSENT OF TRANE.

TRANE

DRAWN BY: T. DEPRIEST
REPLACES:
CAD SYSTEM USED: Pro/DETAIL
TRANE® DATE: 08/10/00
REVISION DATE: 22-OCT-08
SIMILAR TO: 2307-3984

FILE NUMBER: 2307-3985
DRAWING NUMBER: 2307-4611
SHEET: 1 OF 3
REV: C

ROOFTOP PACKAGED AIR CONDITIONER
CONNECTION WIRING DIAGRAM
CONTROL BOX AREA 1
30 TON S_HF
W/ SUPPLY & EXH/RTN FAN VARIABLE FREQUENCY DRIVES