



TRANE™

Date:04-03-96

HERMETIC CENTRIFUGAL LIQUID CHILLER

CENTRAVAC®  
UCP2 SCHEMATIC WIRING  
LEGEND

DRAWING NUMBER

2307-5216

REV

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DEVICE DESIGNATION	DESCRIPTION	LINE NUMBER
1CB1	CIRCUIT BREAKER - STARTER	19
1CB2	CIRCUIT BREAKER - PURGE	65
1CB3	CIRCUIT BREAKER - UNIT CONTROL	145
1F2	OIL PUMP FUSE	167
1T1	CONTROL POWER TRANSFORMER	122
1TB1	CONTROL PANEL TERM BLOCK	
1U1	CHILLER MODULE	PAGE 4
1U10	LO MODULE	PAGE 5
1U2	CIRCUIT MODULE	PAGE 3
1U3	STEPPER MODULE	PAGE 3
1U4	CLEAR LANGUAGE DISPLAY	PAGE 3
1U5	OPTIONS MODULE	PAGE 5
1U7	PRINTER COM MODULE	PAGE 4
1U8	TRACER COM 3 MODULE	PAGE 4
1U9	IPC BUFFER MODULE	PAGE 4
1U11	TRACER COM 4 MODULE	PAGE 4
2BP1,2,3	BY-PASS CONTACTOR	3,6,9
2CB1	CIRCUIT BREAKER (SHUNT TRIP)	30
2F1,2,3	PRIMARY STARTER FUSING	3,6,10
2F4	SECONDARY CONTROL POWER FUSE	13
2K1	START CONTACTOR	27
2K2	RUN CONTACTOR	30
2K3	SHORTING CONTACTOR	33
2K4	TRANSITION CONTACTOR	36
2R1	HEAT SINK TEMP SENSOR	32
2T1,2,3	CURRENT TRANSFORMERS	2,5,8
2T4	24V POWER SUPPLY	14
2T5	CONTROL POWER TRANSFORMER	12
2T6,7,8	POTENTIAL TRANSFORMER (OPT)	18,20,22
2TB1	CONTROL TERM STRIP	
2TB2	IPC TERM STRIP	
2TB3	LINE TERMINAL BLOCK	
2U2	STARTER CONTROL	
2U1	STARTER MODULE	PAGE 1
3B5	PURGE RFGT COMPRESSOR	78
3B6	PURGE PUMP-OUT COMPRESSOR	80
3L1	TANK VALVE SOLENOID	76
3L3	EXHAUST VALVE SOLENOID	74
3R3	COND. RFGT. PRESS.	165
3R12	RFGT COMP SUCTION TEMP	75
3S1	COND HIGH PRESS SWITCH	19
3S2	SERVICE PUMPOUT SWITCH	79
3S3	LIQUID LEVEL SENSOR	77
3T1	PURGE POWER SUPPLY TRANS	68
3U1	PURGE MODULE	PAGE 2
4B1	COMPRESSOR MOTOR	5
4B12	FREE COOLING ACTUATOR	266
4B13	FREE COOLING ACTUATOR	274
4B1R2,3,4	MOTOR WINDING TEMP	150-155
4B2	STEPPER MOTOR VANE ACTUATOR	133
4B3	OIL PUMP MOTOR	169
4B3	DUAL FILTER TRANSFER VALVE	162
4B4	DUAL FILTER TRANSFER VALVE	163
4B5	HOT GAS BY-PASS VALVE	251
4C1	CAPACITOR - OIL PUMP	166
4R1	OIL TANK HEATER	165
4R8	OIL PUMP STARTER RELAY	169
4L1	VENT LINE SOLENOID	157
4L2	EVAP WTR PRESS. SOLENOID	211
4L3	COND WTR PRESS. SOLENOID	213
4R1	OIL SUMP PRESS.	170
4R2	OIL PUMP DISCHARGE PRESS.	175
4R3	EVAP ENT & LVN WTR PRESS.	232
4R4	COND ENT & LVN WTR PRESS.	237
4R11	SAT COND TEMP (RETROFIT ONLY)	73
4R11	EVAP ENTERING WATER TEMP.	209
4R111	AUX HEAT REC ENT TEMP.	258
4R112	AUX HEAT REC LVN TEMP.	260
4R12	EVAP LEAVING WATER TEMP.	211
4R13	COND ENTERING WATER TEMP.	213
4R14	COND LEAVING WATER TEMP.	215
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4R16	DISCHARGE TEMP.	134
4R17	BEARING TEMP 1	136
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4R19	SAT. COND. RFGT. TEMP.	142
4S1	DUAL FILTER SWITCH	162
5DS1	ALARM LIGHT (LATCHING)	225
5DS2	ALARM LIGHT (NON-LATCHING)	229
5DS3	PUMP-OUT RUNNING (TRACER) RELAY	84
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5K2	COND WTR PUMP RELAY	219
5K3	COMP RUNNING RELAY	222
5K4	ALARM RELAY	224
5K5	LIMIT WARNING RELAY	227
5K6	ICE MAKING RELAY	260
5K7	HEAD RELIEF REQUEST RELAY	262
5K8	MAXIMUM CAPACITY RELAY	264
5K9	TRACER CONTROLLED RELAY	270
5R11	TRACER TEMP. SENSOR	272
5S1	CHILLED WATER FLOW SWITCH	231
5S2	COND WATER FLOW SWITCH	232
5S3	EXTERNAL AUTO STOP	217
5S4	EMERGENCY STOP	219
5S5	HEAT PUMP CONTROL	225
5S6	EXT FREE COOLING	262
5S7	ICE MAKING	264
5U1	REFRIGERENT MONITOR	280

PREFIX CODE  
 1= MAIN CONTROL PANEL  
 2= STARTER CONTROL  
 3= PURGE  
 4= UNIT MOUNTED DEVICE  
 5= PROVIDED BY OTHERS  
 DASHED LINES INDICATE WIRING BY OTHERS

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**WARNING**  
 HAZARDOUS VOLTAGE  
 DISCONNECT ALL ELECTRIC POWER BEFORE SERVICING. FAILURE TO DISCONNECT POWER BEFORE SERVICING CAN CAUSE SEVERE PERSONAL INJURY OR DEATH.

**AVERTISSEMENT**  
 VOLTAGE HAZARDEUX  
 DECONNECTEZ TOUTES LES SOURCES ELECTRIQUES INCLUANT LES DISCONNECTEURS AVANT D'EFFECTUER L'ENTRETIEN. FAUTE DE DECONNECTER 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.

LEGEND