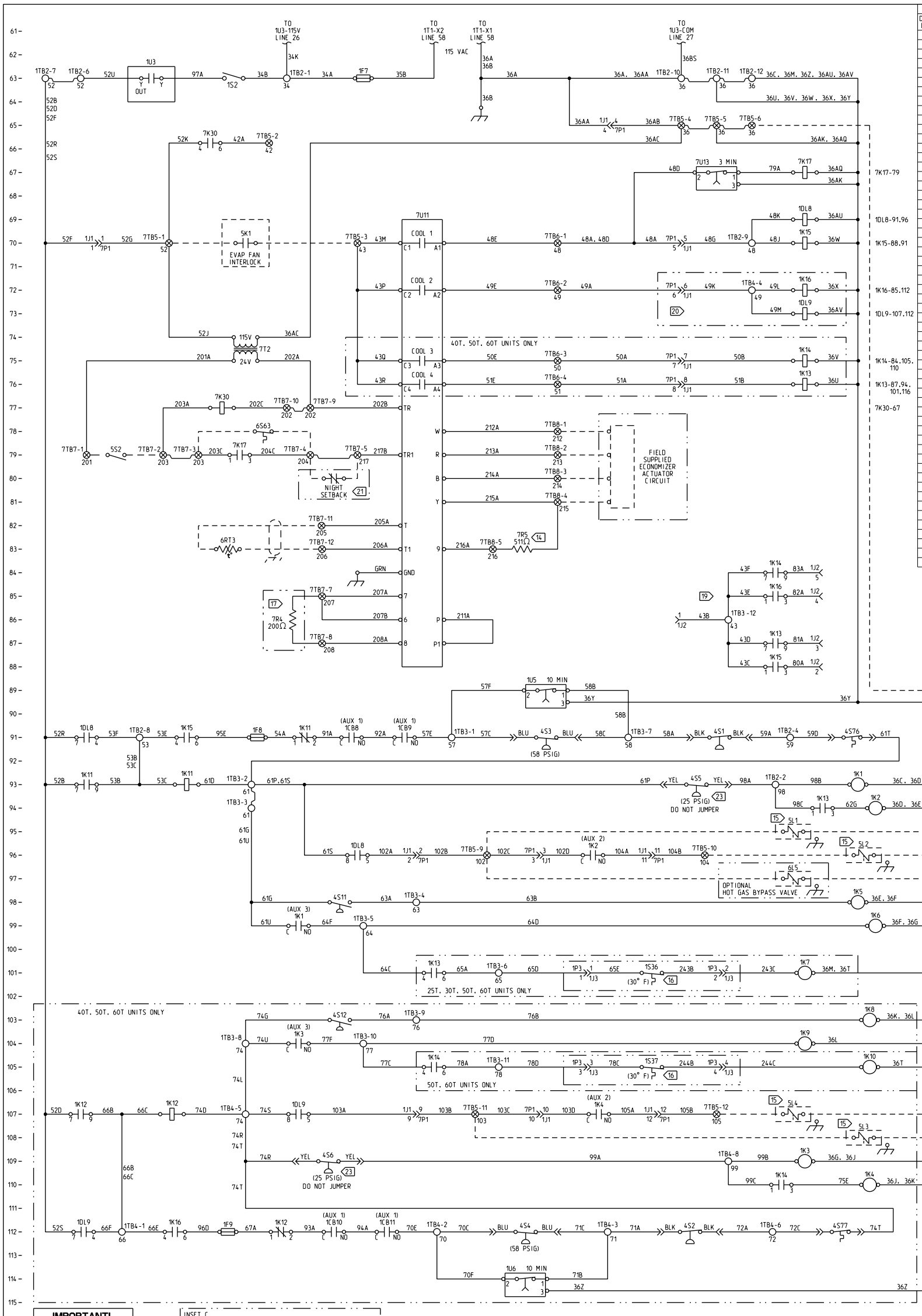

LEGEND		
DEVICE DESIG	DESCRIPTION	LINE NUMBER
1CB10	CIRCUIT BREAKER - COMPRESSOR	112
1CB11	CIRCUIT BREAKER - COMPRESSOR	112
1CB8	CIRCUIT BREAKER - COMPRESSOR	91
1CB9	CIRCUIT BREAKER - COMPRESSOR	91
1DL8	RELAY - TIME DELAY	69.91.96
1DL9	RELAY - TIME DELAY	73.107.112
1F7	FUSE - CONTROL CIRCUIT	63
1F8	FUSE - COMPRESSOR PROTECTION	91
1F9	FUSE - COMPRESSOR PROTECTION	112
1K1	CONTACTOR - COMPRESSOR	93.99
1K10	CONTACTOR - CONDENSOR FAN	105
1K11	RELAY - RESET	91.93
1K12	RELAY - RESET	107.112
1K13	RELAY - COOLING	76.87.94.101.116
1K14	RELAY - COOLING	75.84.105.110
1K15	RELAY - COOLING	70.88.91
1K16	RELAY - COOLING	72.85.112
1K2	CONTACTOR - COMPRESSOR	94.96
1K3	CONTACTOR - COMPRESSOR	104.109
1K4	CONTACTOR - COMPRESSOR	107.110
1K5	CONTACTOR - CONDENSOR FAN	98
1K6	CONTACTOR - CONDENSOR FAN	99
1K7	CONTACTOR - CONDENSOR FAN	101
1K8	CONTACTOR - CONDENSOR FAN	103
1K9	CONTACTOR - CONDENSOR FAN	104
1S2	SWITCH - CONTROL CIRCUIT	63
1S36	SWITCH - LOW AMBIENT T-STAT	101
1S37	SWITCH - LOW AMBIENT T-STAT	105
1U3	PHASE MONITOR	63
1U5	TIMER - LOW PRESSURE	89
1U6	TIMER - LOW PRESSURE	114
4S1	SWITCH - HIGH PRESSURE CUTOUT	91
4S11	SWITCH - FAN PRESSURE	98
4S12	SWITCH - FAN PRESSURE	103
4S2	SWITCH - HIGH PRESSURE CUTOUT	112
4S3	SWITCH - LOW PRESSURE CUTOUT	91
4S4	SWITCH - LOW PRESSURE CUTOUT	112
4S5	SWITCH - COMPR PROTECTION	93
4S6	SWITCH - COMPR PROTECTION	109
4S76	SWITCH - DISCHARGE TEMP LIMIT	91
4S77	SWITCH - COMPR DISCHARGE TEMP	112
5K1	STARTER - EVAP FAN	70
5L1	SOLENOID - ISOLATION LIQUID	95
5L2	SOLENOID - UNLOADING LIQUID	96
5L3	SOLENOID - ISOLATION LIQUID	108
5L4	SOLENOID - UNLOADING LIQUID	107
5S2	SWITCH - SYSTEM CONTROL	79
6L5	SOLENOID - HOT GAS BYPASS	97
6RT3	SENSOR - DISCHARGE AIR	83
6S63	SWITCH - SUCTION LINE T-STAT	78
7K17	RELAY - COMPRESSOR FIX ON	67.79
7K30	RELAY - EVAPORATOR FAN	66.77
7R4	RESISTOR - STAGE	86
7R5	RESISTOR - LESS ECONOMIZER	83
7T2	TRANSFORMER - 24V CONTROL	74
7U11	CONTROLLER - DISCHARGE AIR	70
7U13	TIMER - COMPRESSOR FIXED ON	67

DEVICE PREFIX LOCATION CODE	
AREA	LOCATION
1	INSIDE UNIT CONTROL BOX
2	FAN SECTION
3	COMPRESSOR SECTION
4	EXTERNAL MOUNTED COMPONENTS
5	CUSTOMER OR FIELD PROVIDED
6	SHIP W/ FIELD INSTALLED DEVICE
7	OPTIONAL CONTROL PLATE

TERMINAL BLOCKS	
DEVICE DESIG	DESCRIPTION
1TB2	POWER
1TB3	CONTROLS
1TB4	CONTROLS
7TB5	CUSTOMER CONN
7TB6	CUSTOMER CONN
7TB7	CUSTOMER CONN
7TB8	CUSTOMER CONN

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

INSET C
LINE 72 49A 7P1 6 1J1 49B 1K13 36U 1K13-87.95.101

CAUTION	PRECAUCIÓN	ATTENTION
USE COPPER CONDUCTORS ONLY!	N'UTILISER QUE DES CONDUCTEURS EN CUIVRE!	¡UTILICE ÚNICAMENTE CONDUCTORES DE COBRE!
UNIT TERMINALS ARE NOT DESIGNED TO ACCEPT OTHER TYPES OF CONDUCTORS.	LES BORNES DE L'UNITÉ NE SONT PAS CONÇUES POUR RECEVOIR D'AUTRES TYPES DE CONDUCTEURS.	LAS TERMINALES DE LA UNIDAD NO ESTÁN DISEÑADAS PARA ACEPTAR OTROS TIPOS DE CONDUCTORES.
FAILURE TO DO SO MAY CAUSE DAMAGE TO THE EQUIPMENT.	L'UTILISATION DE TOUT AUTRE CONDUCTEUR PEUT ENDOMMAGER L'ÉQUIPEMENT.	SI NO LO HACE, PUEDE OCASIONAR DAÑO AL EQUIPO.

NOTES:

14 REMOVE RESISTOR 7R5 FROM 7TB8-4 AND 7TB8-5. LINE 83. WHEN FIELD SUPPLIED ECONOMIZER IS REQUIRED.

15 ISOLATION LIQUID SOLENOID VALVES (5L1,5L3) ARE REQUIRED FOR CHARGE ISOLATION (PROVIDED & INSTALLED BY THE FIELD). ISOLATION LIQUID SOLENOID VALVES (5L2,5L4), IF APPLICABLE, ARE PROVIDED & INSTALLED BY THE FIELD.

16 1S36,1S37 AND ASSOCIATED WIRING ARE USED WITH LOW AMBIENT OPTION ONLY. ON UNITS WITHOUT LOW AMBIENT OPTION, CONNECT JACK 1J3-2 TO PLUG 1P3-1 AND JACK 1J3-4 TO PLUG 1P3-3.

17 RESISTOR 7R4, 200Ω, AS SHOWN IS FOR 20 THRU 30 TON UNITS. RESISTOR IS 402Ω FOR 40 THRU 60 TON UNITS.

19 CONNECTIONS TO 1J2 AND 1K13 - 1K16 ARE FOR "NO SYSTEM CONTROLS" OPTIONS. CONNECTIONS ARE NOT USED ON ALL OTHER CONTROL OPTIONS.

20 COOL-2 CIRCUIT AS SHOWN IS FOR 40 THRU 60 TON UNITS. SEE INSET "C" FOR 20 THRU 30 TON CIRCUIT VARIATION.

21 FIELD TO REMOVE JUMPER (7TB7-4 AND 5) AND PROVIDE A CONTACT CLOSURE WHEN NIGHT SETBACK IS REQUIRED.

23 CAUTION!! DO NOT JUMPER ACROSS SWITCH UNDER ANY CIRCUMSTANCE. 4S5 & 4S6 ARE COMPRESSOR PROTECTION SWITCHES USED FOR COMPRESSOR PROTECTION WHEN A NO REFRIGERANT FLOW CONDITION EXISTS (25 PSIG).

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

TRANE

DRAWN BY: D. SHANNON
REPLACES: 2307-9119-E
CAD SYSTEM USED: Pro/DIAGRAM
TRANE® DATE: 3-28-11
REVISION DATE: --
SIMILAR TO: --

FILE NUMBER:

SPLIT SYSTEM CONDENSING UNIT
DIAGRAM
SCHEMATIC W/ VARIABLE AIR VOLUME CONTROLS
RA 20-60 TON
SCHEMATIC 2 OF 2

DRAWING NUMBER: 2307-9210
SHEET: 1 OF 1
REV: A