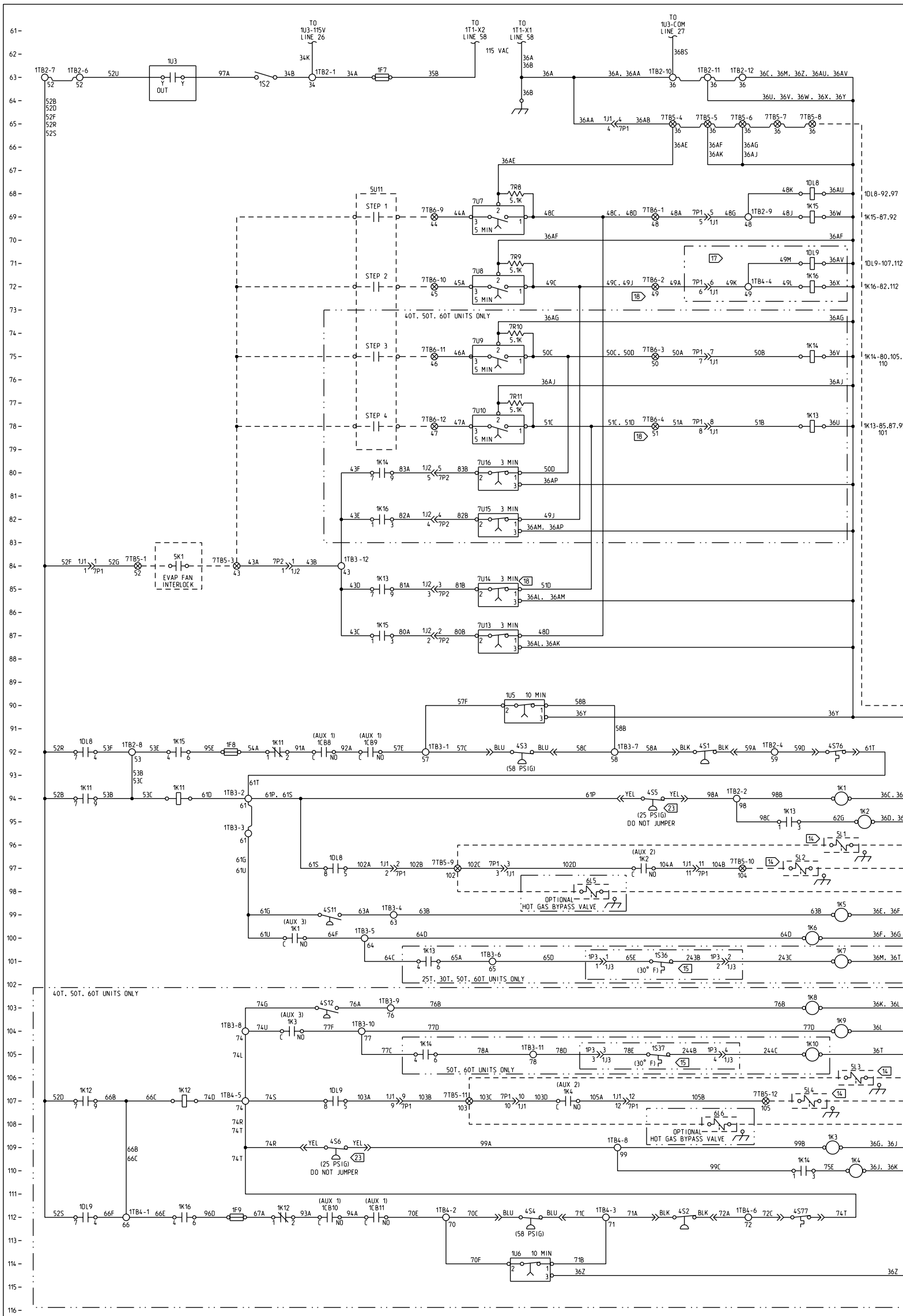
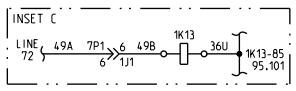
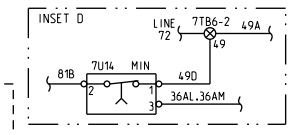


LEGEND		
DEVICE DESIG	DESCRIPTION	LINE NUMBER
1CB10	CIRCUIT BREAKER - COMPRESSOR	112
1CB11	CIRCUIT BREAKER - COMPRESSOR	112
1CB8	CIRCUIT BREAKER - COMPRESSOR	92
1CB9	CIRCUIT BREAKER - COMPRESSOR	92
1DL8	RELAY - TIME DELAY	68.92.97
1DL9	RELAY - TIME DELAY	71.107.112
1F7	FUSE - CONTROL CIRCUIT	63
1F8	FUSE - COMPRESSOR PROTECTION	92
1F9	FUSE - COMPRESSOR PROTECTION	112
1K1	CONTACTOR - COMPRESSOR	94.100
1K10	CONTACTOR - CONDENSOR FAN	105
1K11	RELAY - RESET	92.94
1K12	RELAY - RESET	107.112
1K13	RELAY - COOLING	78.85.87.95.101
1K14	RELAY - COOLING	75.80.105.110
1K15	RELAY - COOLING	69.87.92
1K16	RELAY - COOLING	72.82.112
1K2	CONTACTOR - COMPRESSOR	95.97
1K3	CONTACTOR - COMPRESSOR	104.109
1K4	CONTACTOR - COMPRESSOR	107.110
1K5	CONTACTOR - CONDENSOR FAN	99
1K6	CONTACTOR - CONDENSOR FAN	100
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	90
1U6	TIMER - LOW PRESSURE	114
4S1	SWITCH - HIGH PRESSURE CUTOUT	92
4S11	SWITCH - FAN PRESSURE	99
4S12	SWITCH - FAN PRESSURE	103
4S2	SWITCH - HIGH PRESSURE CUTOUT	112
4S3	SWITCH - LOW PRESSURE CUTOUT	92
4S4	SWITCH - LOW PRESSURE CUTOUT	112
4S5	SWITCH - COMPR PROTECTION	94
4S6	SWITCH - COMPR PROTECTION	109
4S76	SWITCH - DISCHARGE TEMP LIMIT	92
4S77	SWITCH - DISCHARGE TEMP LIMIT	112
5K1	STARTER - EVAPORATOR FAN	84
5L1	SOLENOID - ISOLATION LIQUID	96
5L2	SOLENOID - UNLOADING LIQUID	97
5L3	SOLENOID - ISOLATION LIQUID	106
5L4	SOLENOID - UNLOADING LIQUID	107
5U11	CONTROLLER - 4 STEP	69
6L5	SOLENOID - HOT GAS BYPASS	98
6L6	SOLENOID - HOT GAS BYPASS	108
7R10	RESISTOR - TIME DELAY	74
7R11	RESISTOR - TIME DELAY	77
7R8	RESISTOR - TIME DELAY	68
7R9	RESISTOR - TIME DELAY	71
7U10	TIMER - COMPRESSOR FIXED OFF	78
7U13	TIMER - COMPRESSOR FIXED ON	87
7U14	TIMER - COMPRESSOR FIXED ON	85.90
7U15	TIMER - COMPRESSOR FIXED ON	82
7U16	TIMER - COMPRESSOR FIXED ON	80
7U7	TIMER - COMPRESSOR FIXED OFF	69
7U8	TIMER - COMPRESSOR FIXED OFF	72
7U9	TIMER - COMPRESSOR FIXED OFF	75

INSET C



INSET D



IMPORTANT!

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

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

NOTES:

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

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

18 CONNECTION VARIATION TO COMPRESSOR FIXED ON TIMER (7U14) IS AS FOLLOWS:
20 - 30 TON UNITS -- USE WIRE NO. "49D"(SEE INSET "D")
40 - 60 TON UNITS -- USE WIRE NO. "51D"

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).

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.

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: 2307-9117-E
CAD SYSTEM USED: Pro/DIAGRAM
TRANE® DATE: 3-28-11
REVISION DATE: --
SIMILAR TO: --

FILE NUMBER:

SPLIT SYSTEM CONDENSING UNIT
DIAGRAM
SCHEMATIC W/ NO SYSTEM CONTROLS
RA 20-60 TON
SCHEMATIC 2 OF 2

DRAWING NUMBER: 2307-9208
SHEET: 1 OF 1
REV: A