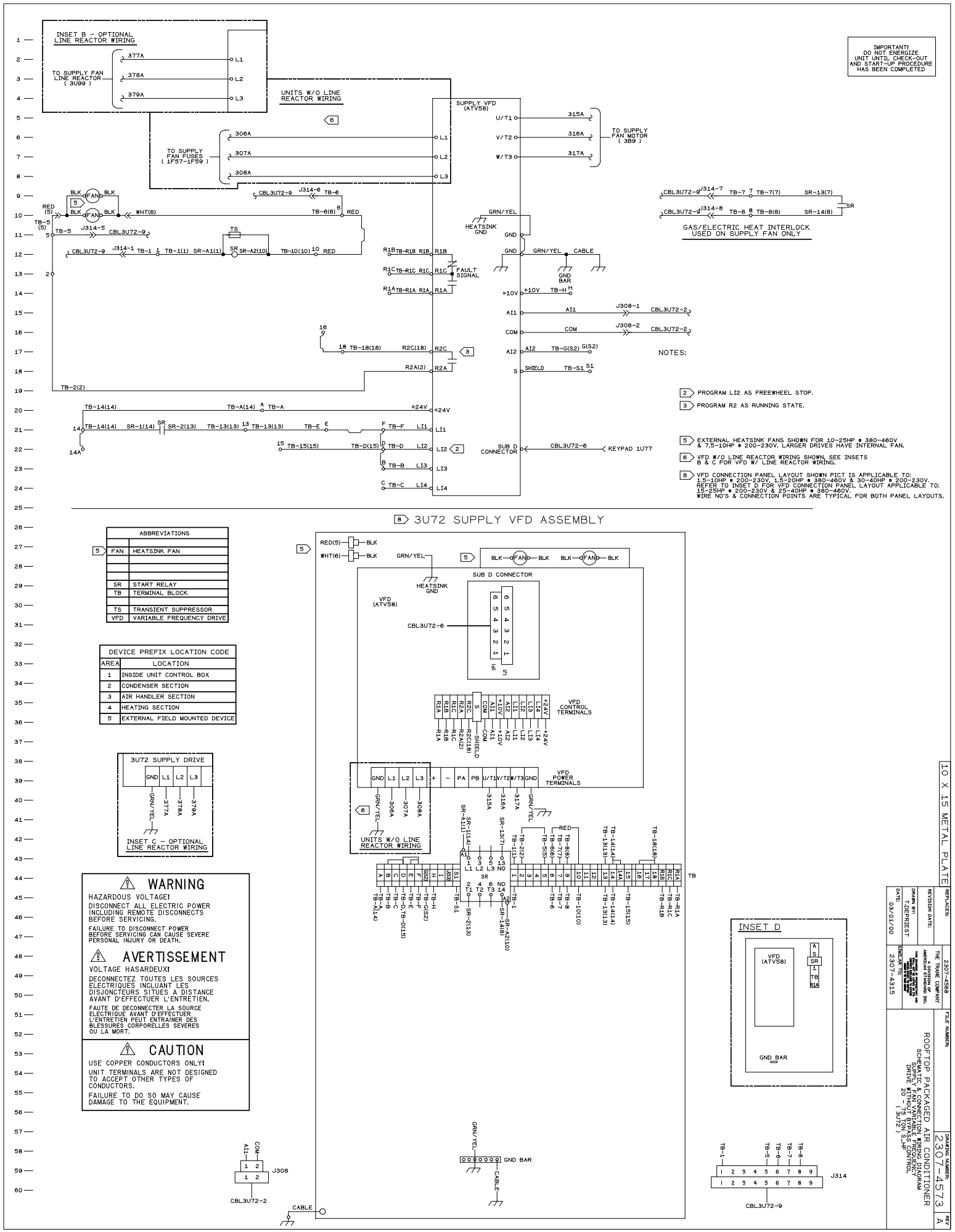
INSET B - OPTIONAL LINE REACTOR WIRING
TO SUPPLY FAN LINE REACTOR (3U99)
377A
378A
379A
L1
L2
L3
UNITS W/O LINE REACTOR WIRING
TO SUPPLY FAN FUSES (1F57-1F59)
306A
307A
308A
SUPPLY VFD (ATV58)
U/T1
V/T2
W/T3
315A
316A
317A
TO SUPPLY FAN MOTOR (3B9)
IMPORTANT! DO NOT ENERGIZE UNIT UNTIL CHECK-OUT AND START-UP PROCEDURE HAS BEEN COMPLETED
GAS/ELECTRIC HEAT INTERLOCK USED ON SUPPLY FAN ONLY
HEATSINK GND
GND
GND BAR
CABLE
FAULT SIGNAL
+10V
AI1
AI2
COM
S
SHIELD
SUB D CONNECTOR
CBL3U72-6
KEYPAD 1U77
+24V
LI1
LI2
LI3
LI4
NOTES:
2 PROGRAM LI2 AS FREEWHEEL STOP.
3 PROGRAM R2 AS RUNNING STATE.
5 EXTERNAL HEATSINK FANS SHOWN FOR 10-25HP • 380-460V & 7.5-10HP • 200-230V. LARGER DRIVES HAVE INTERNAL FAN.
6 VFD W/O LINE REACTOR WIRING SHOWN, SEE INSETS B & C FOR VFD W/ LINE REACTOR WIRING.
8 VFD CONNECTION PANEL LAYOUT SHOWN PICT IS APPLICABLE TO: 1.5-10HP • 200-230V, 1.5-20HP • 380-460V & 30-40HP • 200-230V. REFER TO INSET D FOR VFD CONNECTION PANEL LAYOUT APPLICABLE TO: 15-25HP • 200-230V & 25-40HP • 380-460V. WIRE NO'S & CONNECTION POINTS ARE TYPICAL FOR BOTH PANEL LAYOUTS.
8 3U72 SUPPLY VFD ASSEMBLY
ABBREVIATIONS
FAN HEATSINK FAN
SR START RELAY
TB TERMINAL BLOCK
TS TRANSIENT SUPPRESSOR
VFD VARIABLE FREQUENCY DRIVE
DEVICE PREFIX LOCATION CODE
AREA LOCATION
1 INSIDE UNIT CONTROL BOX
2 CONDENSER SECTION
3 AIR HANDLER SECTION
4 HEATING SECTION
5 EXTERNAL FIELD MOUNTED DEVICE
3U72 SUPPLY DRIVE
GND L1 L2 L3
INSET C - OPTIONAL LINE REACTOR WIRING
SUB D CONNECTOR
VFD (ATV58)
VFD CONTROL TERMINALS
VFD POWER TERMINALS
UNITS W/O LINE REACTOR WIRING
TB
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 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.
INSET D
VFD (ATV58)
GND BAR
J308
J314
CBL3U72-2
CBL3U72-9
10 X 15 METAL PLATE
REPLACES:
REVISION DATE:
DRAWN BY: D.DEPRIEST
DATE: 03/01/00
2307-4598
THE TRANE COMPANY
AMERICAN STANDARD INC.
SINGER TRC
2307-4315
FILE NUMBER:
ROOFTOP PACKAGED AIR CONDITIONER
SCHEMATIC & CONNECTION WIRING DIAGRAM
VARIABLE FREQUENCY DRIVE WITHOUT BYPASS CONTROL
20 - 75 TON S-HF
(3U72)
DRAWING NUMBER:
2307-4573
REV
A