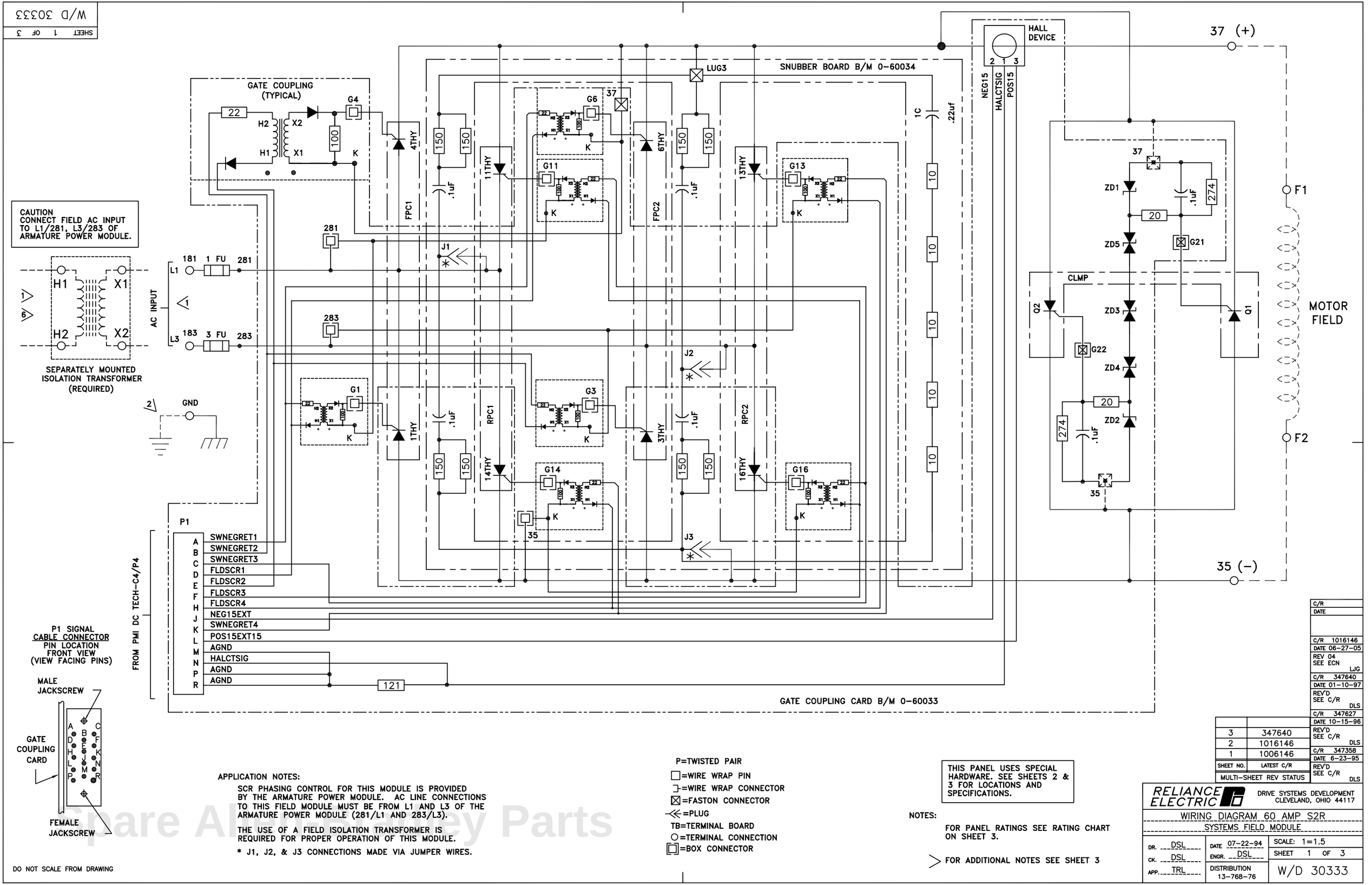
W/D 30333

SHEET 1 OF 3



C/R	
DATE	
C/R	1016146
DATE	06-27-05
REV 04 SEE ECN	LJG
C/R	347640
DATE	01-10-97
REV'D SEE C/R	DLS
C/R	347627
DATE	10-15-96
REV'D SEE C/R	DLS
C/R	347358
DATE	6-23-95
REV'D SEE C/R	DLS

SHEET NO.	LATEST C/R
3	347640
2	1016146
1	1006146

MULTI-SHEET REV STATUS

RELIANCE ELECTRIC

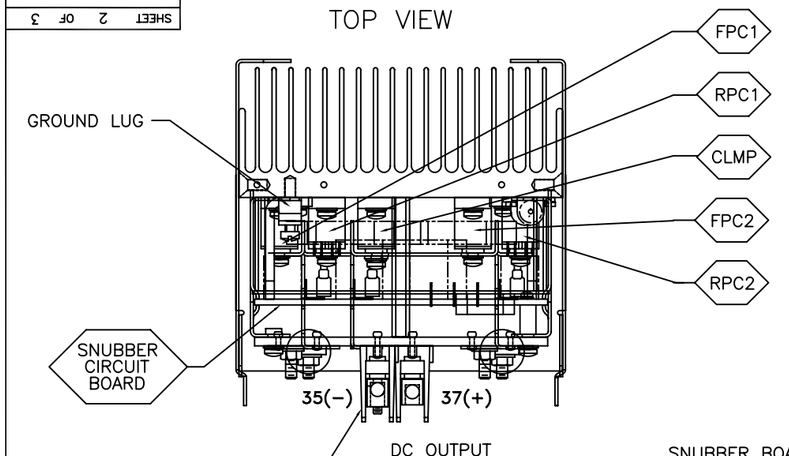
DRIVE SYSTEMS DEVELOPMENT
CLEVELAND, OHIO 44117

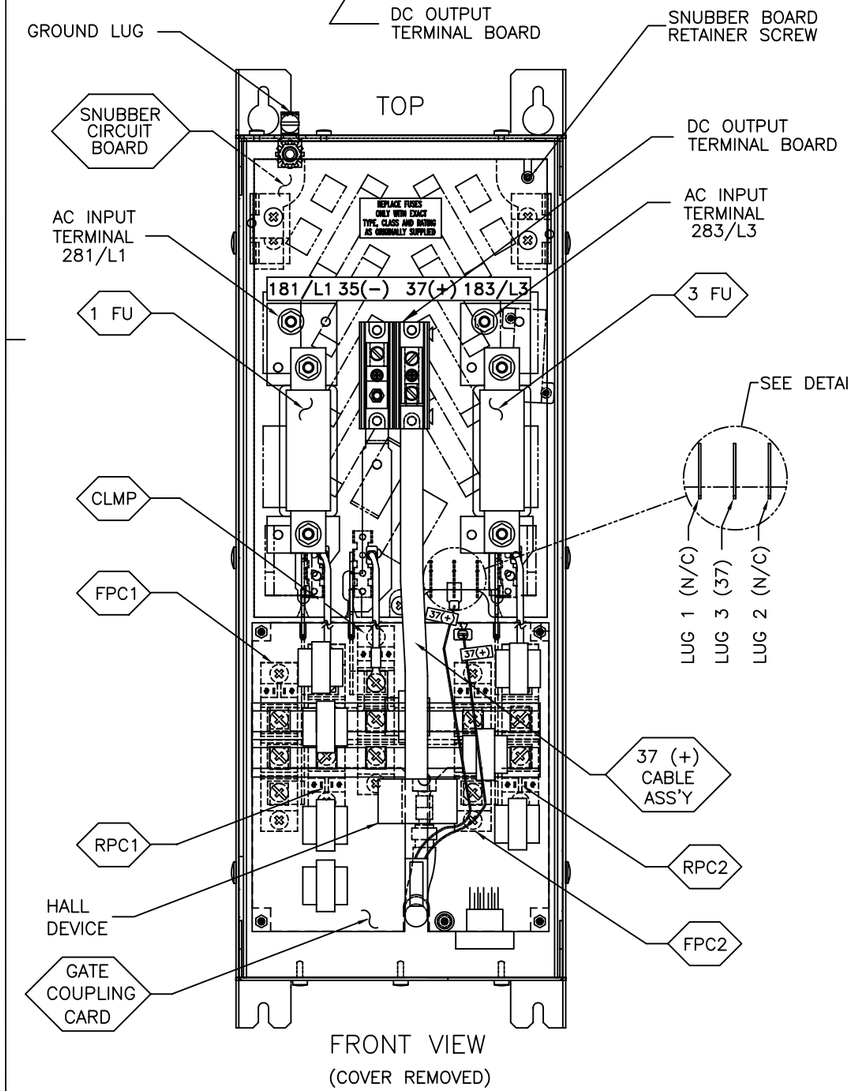
WIRING DIAGRAM 60 AMP S2R
SYSTEMS FIELD MODULE

DR. DSL	DATE 07-22-94	SCALE: 1=1.5	
CK. DSL	ENGR. DSL	SHEET 1 OF 3	
APP. TRL	DISTRIBUTION 13-768-76	W/D 30333	

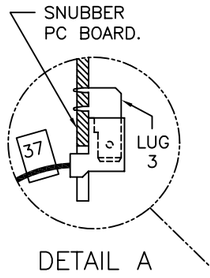
W/D 30333

SHEET 2 OF 3

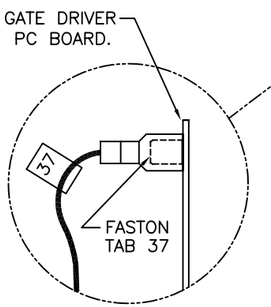




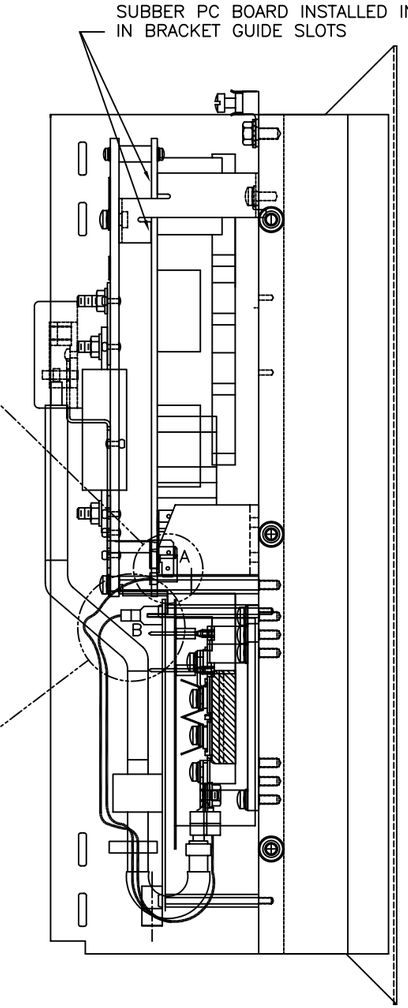
FRONT VIEW
(COVER REMOVED)



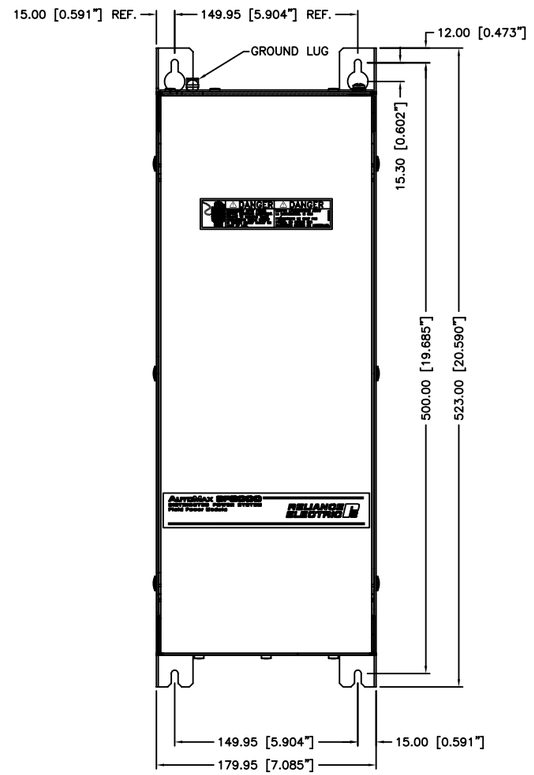
DETAIL A

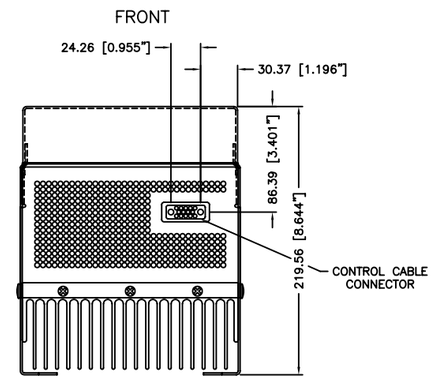


DETAIL B



RIGHT SIDE VIEW
(RT. SIDE, TOP AND BOTTOM REMOVED)





⬡ = REPLACEMENT PART, SEE SHT. 3

NOTES:
PRIMARY DIMENSIONS ARE SHOWN IN MILLIMETERS. ENGLISH EQUIVALENT DIMENSIONS [INCHES] ARE FOR REFERENCE ONLY.

C/R
DATE
C/R
DATE
C/R 1016146
DATE 06-27-05
REV 04 SEE ECN LJG
C/R 347640
DATE 01-10-97
REV'D SEE C/R DLS
C/R 347627
DATE 10-15-96
REV'D SEE C/R DLS

RELIANCE ELECTRIC
DRIVE SYSTEMS DEVELOPMENT
CLEVELAND, OHIO 44117

WIRING DIAGRAM 60 AMP S2R
SYSTEMS FIELD MODULE

DR. DSL	DATE 07-22-94	SCALE: 1=2.5
CK. DSL	ENGR. DSL	SHEET 2 OF 3
APP. TRL	DISTRIBUTION 13-768-76	W/D 30333

WIRING DIA. 30333	REF. ASS'Y. 805405-5	PANEL RATINGS <5				
		MAX RATED KW	1> AC INPUT 1Ø 50/60 HZ		DC OUTPUT	
			VOLTS	AMPS	VOLTS	AMPS
RE	R	24	460	66.6	400	60

REPLACEMENT PARTS TABLE <3						
LINE FUSE 1FU, 3FU	POWER CUBES <7 FPC1, FPC2 FPC1, FPC2 CLMP	POWER RESISTOR	GATE CPLG PC BOARD	SNUBBER PC BOARD	GATE PIN EXT'N	37 (+) CABLE ASS'Y
64676-130ASX 90 AMP, 700 VOLT (2) - USED	701819-201AW (5) - USED FPC1 - 1,4THY FPC2 - 3,6THY RPC1 - 11,14THY RPC1 - 13,16THY CLMP - Q1, Q2		B/M 0-60033	B/M 0-60034	615050-15R (10) - USED	805417-R
FIELD POWER MODULE TO PMI CABLE (REF): 612418-S, SPECIFY REQ'D LENGTH IN INCHES.						

SPECIAL CONNECTOR HARDWARE (METRIC)		
(FOR FUSES)	POWER CUBE MOUNTING SCREWS	POWER CUBE BUSBAR MOUNTING SCREWS
419063-201SJ, QTY. 4 (M6 X 1) NUT WITH CONICAL SPRING WASHER TORQUE=45 TO 55 IN. LBS.	419062-1PHH, QTY 10 (M5x0.8x12mm) P.H. WASHER SCREW TORQUE = 43 IN. LBS.	419062-1PHH, QTY 15 (M5x0.8x12mm) P.H. WASHER SCREW TORQUE = 26 IN. LBS.

NOTES:

WARNING

1> a) PHASE CONTROL FOR THIS MODULE IS DETERMINED BY THE ARMATURE POWER MODULE. CORRECT AC INPUT PHASING (L1 AND L3) MUST BE PROVIDED.

b) A FUSED DICONNECT OR CIRCUIT BREAKER MAY BE REQUIRED TO PROVIDE NEC OR CEC DISCONNECT AND OVERCURRENT PROTECTION FOR THE SEPARATELY MOUNTED ISOLATION TRANSFORMER.

c) MAXIMUM PERMISSIBLE AVAILABLE SYMMETRICAL RMS SHORT CIRCUIT POWER SUPPLY CAPACITY IS 12,000 AMPS.

2> FOR PROPER GROUNDING OF THIS ASSEMBLY, A GROUND WIRE MUST BE INSTALLED FROM THE GROUND LUG TO A PROPER PANEL GROUND.

3> CAUTION: FOR PROPER HARDWARE AND TORQUE SPEC. SEE SPECIAL CONNECTOR HARDWARE TABLE.

4> TIGHTEN UNTIL COMPRESSION WASHER IS FLAT, THEN BACK OFF 1/6 OF A TURN (1 FLAT OF A HEX).

5> FAN COOLING OF THIS ASSEMBLY IS NOT REQUIRED FOR THE CURRENT RATING SHOWN IN THE RATING TABLE.

6> THE USE OF A SEPARATELY MOUNTED FIELD ISOLATION TRANSFORMER IS REQUIRED FOR PROPER OPERATION OF THIS MODULE.

7> USE A NEW THERMO-PAD, P/N: 48525-19AA, OR THERMAL GREASE WHEN REPLACING ANY POWER CUBE.

DANGER
HIGH VOLTAGE PRESENT

EQUIPMENT IS AT LINE VOLTAGE WHEN A-C POWER IS CONNECTED TO THE POWER UNIT. ALL PHASES OF THE A-C POWER LINE MUST BE DISCONNECTED FROM THE POWER UNIT BEFORE IT IS SAFE TO TOUCH ANY INTERNAL PARTS OF THIS EQUIPMENT.

WARNING

PHASE CONTROL FOR THIS FIELD POWER MODULE IS DETERMINED BY THE ARMATURE POWER MODULE PMI. AC INPUT TO THE FIELD MODULE MUST BE CONNECTED TO POWER MODULE 281/L1 AND 283/L3, AS INDICATED ON THE WIRING DIAGRAM, SH. 1. IF THE FIELD POWER MODULE PHASING IS INCORRECT, DISCONNECT AC POWER AND PROPERLY CONNECT THE TWO AC INPUT LINES TO L1 AND L3 OF THE ARMATURE SUPPLY. SEE INSTRUCTION BOOK.

DANGER

DURING INITIAL START UP AND ADJUSTMENTS, BE PREPARED TO STOP DRIVE IN CASE INCORRECT SETUP IN FIELD OR TACHOMETER CAUSES UNCONTROLLED ACCELERATION OF THE MOTOR. IF THE DRIVE IS NOT SHUT DOWN IMMEDIATELY UNDER SUCH CIRCUMSTANCES, PERSONAL INJURY AND/OR MACHINE DAMAGE MAY RESULT.

START-UP CHECK LIST

WARNING

DANGEROUS VOLTAGES ARE PRESENT WHENEVER AC VOLTAGE IS PRESENT, WHETHER OR NOT THE PANEL IS OPERATING. DO NOT TOUCH ANY POWER CIRCUITS OR WIRING WHEN LINE VOLTAGE IS ON.

1. BEFORE AC POWER IS APPLIED
   1) CHECK POLARITY OF ARMATURE AND FIELD WIRING.

2. AFTER AC POWER IS APPLIED (BEFORE STARTING DRIVE)
   1) CHECK THAT AC LINE VOLTAGE IS WITHIN RATED INPUT VOLTAGE.
   2) CHECK THAT THE FIELD POWER MODULE PHASING IS CORRECT.
   3) CHECK THAT FIELD VOLTAGE IS PRESENT AT THE MOTOR TERMINALS.
   4) CHECK THAT THE FIELD CURRENT FEEDBACK IS CORRECT.

C/R	DATE
C/R	DATE
C/R	DATE
C/R 347640	DATE 01-10-97
REV'D SEE C/R	DLS
C/R 347627	DATE 10-15-96
REV'D SEE C/R	DLS

RELIANCE ELECTRIC — DRIVE SYSTEMS DEVELOPMENT CLEVELAND, OHIO 44117

WIRING DIAGRAM 60 AMP S2R
SYSTEMS FIELD MODULE

DR. DSL	DATE 07-22-94	SCALE: 1=2
CK. DSL	ENGR. DSL	SHEET 3 OF 3
APP. TRL	DISTRIBUTION 13-768-76	W/D 30333