



TRANSICOLD

Container Refrigeration Unit

Models
69NT40-511-1
to
69NT40-511-199
and
69NT40-521

**DUE TO THE LARGE NUMBER OF SCHEMATIC
DIAGRAMS CONTAINED IN THIS BOOK, THE
BOOK IS PRESENTED AS TWO FILES.
REFER TO FILE T268-TEXT FOR THE TABLE
OF CONTENTS, CHAPTERS 1 THROUGH 6
AND INDEX.**

**OPERATION
AND SERVICE**



TRANSCOLD

**OPERATION AND
SERVICE MANUAL**

CONTAINER REFRIGERATION UNIT

**MODELS
69NT40-511-1
to
69NT40-511-199
and
69NT40-521**



SECTION 7

ELECTRICAL WIRING SCHEMATIC AND DIAGRAMS

7.1 INTRODUCTION

This section contains Electrical Schematics and Wiring Diagrams covering the Models listed in Table 1-1. The following general safety notices supplement the specific warnings and cautions appearing elsewhere in this manual. They are recommended precautions that must be understood and applied during operation and maintenance of the equipment covered herein.

WARNING

It has been determined that pressurized, air-rich mixtures of refrigerants and air can undergo combustion when exposed to an ignition source.

WARNING

Beware of unannounced starting of the evaporator and condenser fans. Do not open the condenser fan grille before turning power OFF and disconnecting power plug.

WARNING

Make sure power to the unit is OFF and power plug disconnected before removing capacitor(s).

WARNING

Do not attempt to remove power plug(s) before turning OFF start-stop switch (ST), unit circuit breaker(s) and external power source.

Make sure the power plugs are clean and dry before connecting to any power receptacle.

WARNING

Make sure power to the unit is OFF and power plug disconnected before replacing the compressor.

WARNING

Before disassembly of the compressor make sure to relieve the internal pressure very carefully by slightly loosening the bolts on both service valve flanges/blank valve pads, then lightly tapping sides of the valve flanges/pads with a hammer to break the seal.

CAUTION

Use only Carrier Transicold approved Polyol Ester Oil (POE) - Castrol-Icematic SW20 compressor oil with R-134a. Buy in quantities of one quart or smaller. When using this hygroscopic oil, immediately reseal. Do not leave container of oil open or contamination will occur.

WARNING

Do not attempt to do service work on the Controller/DataCORDER module. Breaking of the warranty seal will void the warranty.

CAUTION

Remove the Controller/DataCORDER module and unplug all wire harness connectors before performing any arc welding on any part of the container.

Do not remove wire harnesses from module unless you are grounded to the unit frame with a static safe wrist strap.

NOTE

To avoid damage to the earth's ozone layer, use a refrigerant recovery system whenever removing refrigerant. When working with refrigerants you must comply with all local government environmental laws. In the U.S.A., refer to EPA section 608.

LEGEND

<u>ZONE</u>	<u>SYMBOL</u>	<u>DESCRIPTION</u>
C19	AMBS	— AMBIENT SENSOR
J1	CB1	— CIRCUIT BREAKER 460V
D1	CB2	— CIRCUIT BREAKER 230V (AUTO TRANS OPTION)
M9, P6	CF	— CONDENSER FAN CONTACTOR
A3	CI	— COMMUNICATIONS INTERFACE MODULE (OPTION)
M7, P1	CH	— COMPRESSOR CONTACTOR (HIGH SPEED)
M6	C-L	— COOL LIGHT (OPTION)
L9, M8, P3	CL	— COMPRESSOR CONTACTOR (LOW SPEED)
H10, T6	CM	— CONDENSER FAN MOTOR
E7, T1	CP	— COMPRESSOR MOTOR
A20	CPDS	— COMPRESSOR DISCHARGE SENSOR (TEMP.)
C20	CPSS	— COMPRESSOR SUCTION SENSOR (TEMP.)
G20	CPT	— CONDENSER PRESSURE TRANSDUCER
M1	CS	— CURRENT SENSOR
T4	DHBL	— DEFROST HEATER - BOTTOM LEFT
T4	DHBR	— DEFROST HEATER - BOTTOM RIGHT
T4	DHTL	— DEFROST HEATER - TOP LEFT
R4	DHTR	— DEFROST HEATER - TOP RIGHT
M15	DL	— DEFROST LIGHT (OPTION)
R4	DPH	— DRAIN PAN HEATER
J20	DPT	— DISCHARGE PRESSURE TRANSDUCER (OPTION)
C20	DTS	— DEFROST TEMPERATURE SENSOR
D1	DVM	— DUAL VOLTAGE MODULE (OPTIONAL)
E1	DVR	— DUAL VOLTAGE RECEPTACLE (OPTIONAL)
L12, M11, P8	EF	— EVAPORATOR FAN CONTACTOR (HIGH SPEED)
G11, H11, T9, T11	EM	— EVAPORATOR FAN MOTOR
M12, R9	ES	— EVAPORATOR FAN CONTACTOR (LOW SPEED)
C6, D18, E18, G5	F	— FUSE
	FLA	— FULL LOAD AMPS
H7	HPS	— HIGH PRESSURE SWITCH
M13, P4	HR	— HEATER CONTACTOR
F20	HS	— HUMIDITY SENSOR
F13	HTT	— HEAT TERMINATION THERMOSTAT
M20	IC	— INTERROGATOR CONNECTOR (OPTION)
E7, F11, H10, H11	IP	— INTERNAL PROTECTOR
M14	IRL	— IN-RANGE LIGHT (OPTION)
B16	KP	— KEYPAD CONNECTOR
E16	MDS	— MANUAL DEFROST SWITCH
D20, L20, M20, P20	PR	— PROBE RECEPTACLE (USDA OPTION)
L6, L14, L16	RM	— REMOTE MONITORING RECEPTACLE (OPTION)
K20	RRS	— RETURN RECORDER SENSOR (OPTION)
B20	RTS	— RETURN TEMPERATURE SENSOR
L9, R2	SC	— COMPRESSOR CONTACTOR (SHORTING)
E20	SMV	— SUCTION MODULATION VALVE
H20	SPT	— SUCTION PRESSURE TRANSDUCER (OPTION)
K20	SRS	— SUPPLY RECORDER SENSOR (OPTION)
H15	SSV	— SUCTION SOLENOID VALVE
K4	ST	— START-STOP SWITCH
A20	STS	— SUPPLY TEMPERATURE SENSOR
K7	TC	— CONTROLLER RELAY (COOLING)
D5	TCC	— TRANSFRESH COMMUNICATIONS CONNECTOR (OPTION)
K8	TD	— CONTROLLER RELAY (LOW SPEED COMPRESSOR)
K11	TE	— CONTROLLER RELAY (HIGH SPEED EVAPORATOR FANS)
G5	TFC	— TRANSFRESH CONTROLLER (OPTION)
K13	TH	— CONTROLLER RELAY (HEATING)
K16	TI	— INRANGE RELAY
K14	TF	— DEFROST RELAY
K10	TN	— CONTROLLER RELAY (CONDENSER FAN)
D17, F15, G10, J7, } J10, J11, J13, M16 }	TP	— TEST POINT
M3	TR	— TRANSFORMER
D1	TRANS	— TRANSFORMER AUTO 230/460 (OPTION)
E5, F5	TRC	— TRANSFRESH REAR CONNECTOR (OPTION)
E15	TS	— CONTROLLER RELAY (SUCTION SOLENOID VALVE)
K9	TT	— CONTROLLER RELAY (COMPRESSOR SHORTING)
K12	TV	— CONTROLLER RELAY (LOW SPEED EVAPORATOR FANS)
E10	WP	— WATER PRESSURE SWITCH (OPTION)

**Figure 7-1. Electrical Schematic - See Model Chart
(Sheet 1 of 2)**

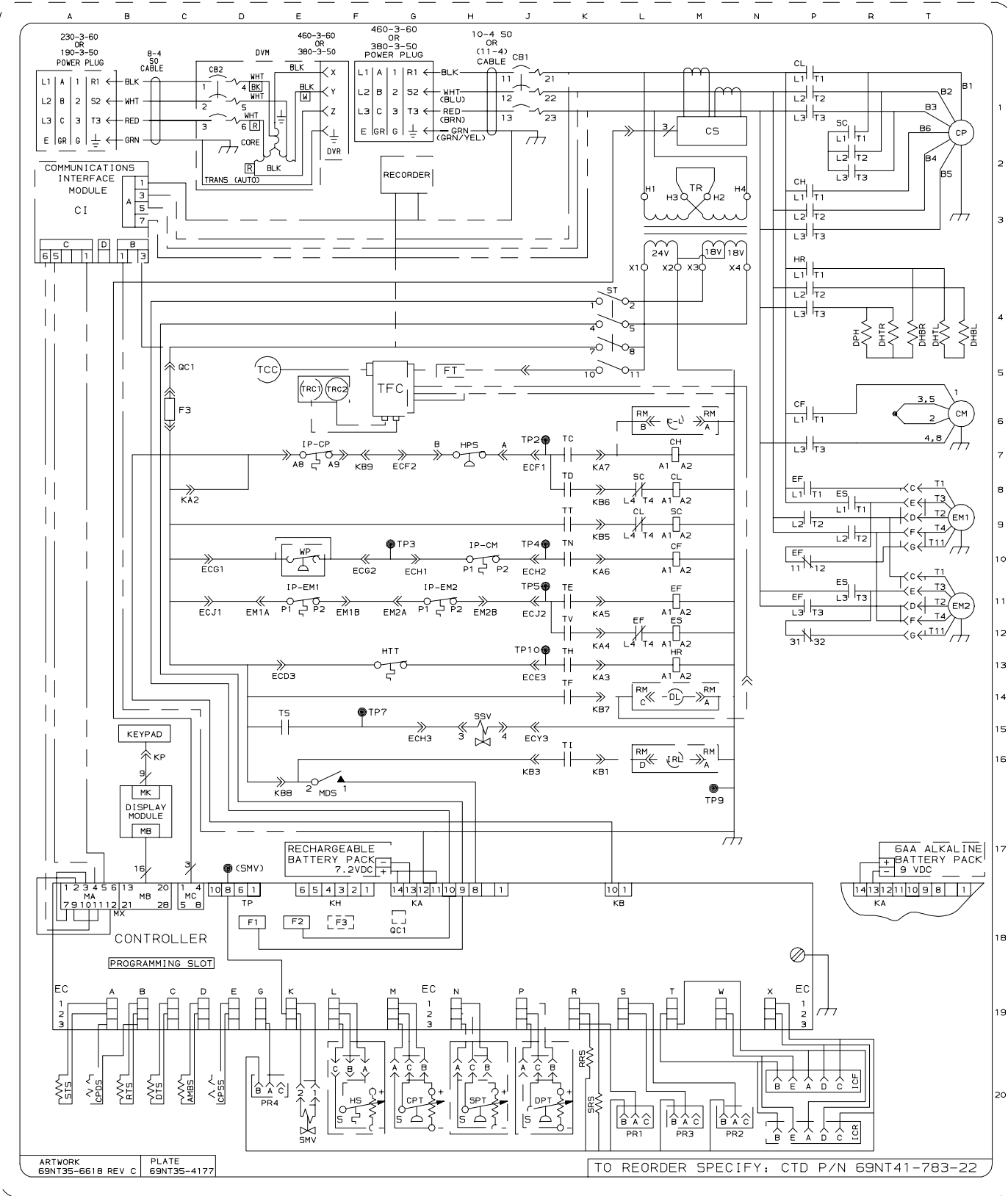


Figure 7-1. Electrical Schematic - See Model Chart (Sheet 2 of 2)

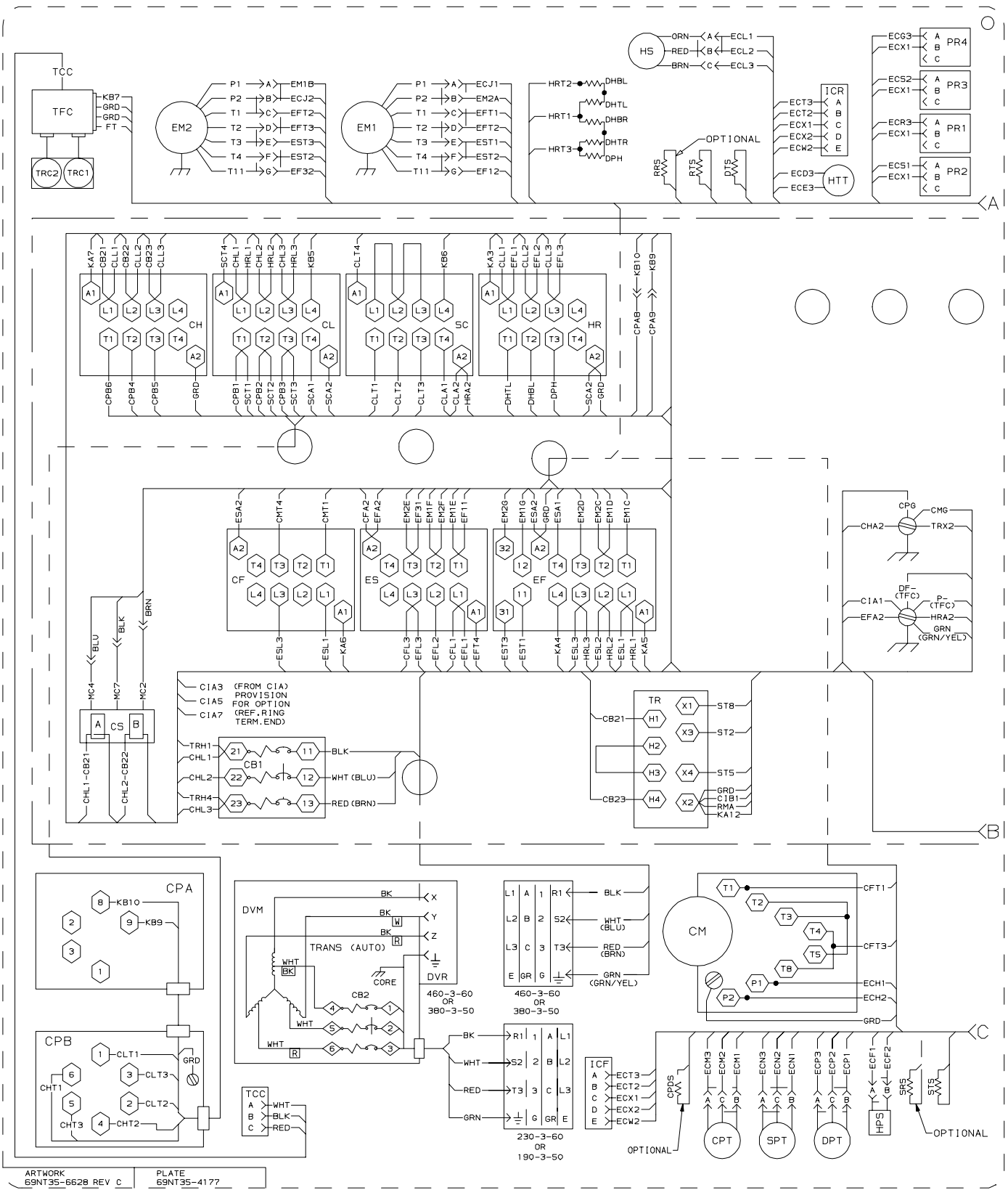
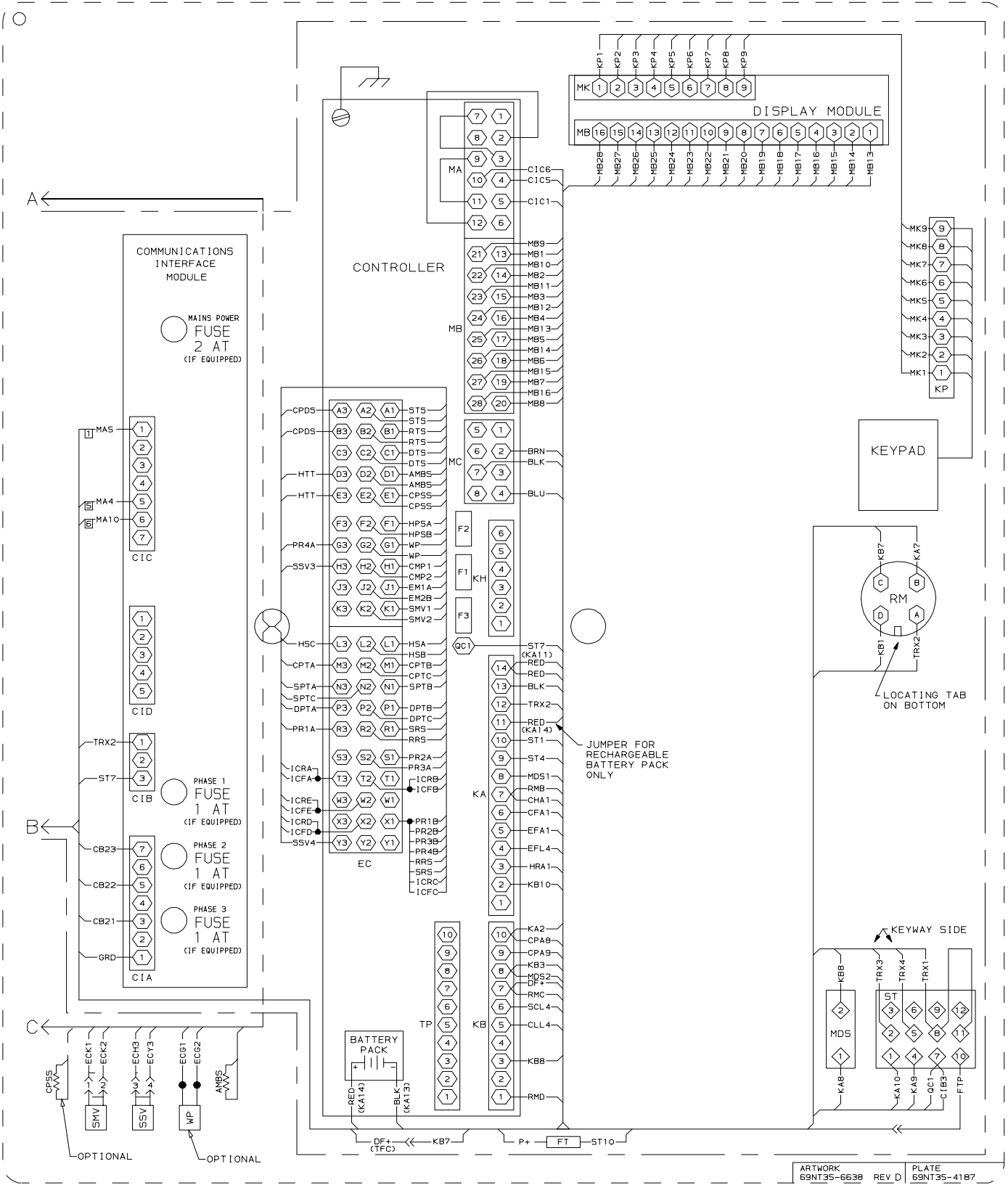


Figure 7-2. Electrical Wiring Diagram - See Model Chart
(Sheet 1 of 2)



ARTWORK 69NT35-6638 REV D PLATE 69NT35-4187

Figure 7-2. Electrical Wiring Diagram - See Model Chart (Sheet 2 of 2)

LEGEND		
<u>ZONE</u>	<u>SYMBOL</u>	<u>DESCRIPTION</u>
C19	AMBS	— AMBIENT SENSOR
J1	CB1	— CIRCUIT BREAKER 460V
D1	CB2	— CIRCUIT BREAKER 230V (AUTO TRANS OPTION)
M9,P4	CF	— CONDENSER FAN CONTACTOR
A3	CI	— COMMUNICATIONS INTERFACE MODULE (OPTION)
M7,P1	CH	— COMPRESSOR CONTACTOR
M6	C-L	— COOL LIGHT (OPTION)
H10,T4	CM	— CONDENSER FAN MOTOR
E7,T1	CP	— COMPRESSOR MOTOR
A20	CPDS	— COMPRESSOR DISCHARGE SENSOR (TEMP.)
C20	CPSS	— COMPRESSOR SUCTION SENSOR (TEMP.)
G20	CPT	— CONDENSER PRESSURE TRANSDUCER
M1	CS	— CURRENT SENSOR
T3	DHBL	— DEFROST HEATER - BOTTOM LEFT
T3	DHBR	— DEFROST HEATER - BOTTOM RIGHT
T3	DHTL	— DEFROST HEATER - TOP LEFT
R3	DHTR	— DEFROST HEATER - TOP RIGHT
M15	DL	— DEFROST LIGHT (OPTION)
R3	DPH	— DRAIN PAN HEATER
J20	DPT	— DISCHARGE PRESSURE TRANSDUCER (OPTION)
C20	DTS	— DEFROST TEMPERATURE SENSOR
D1	DVM	— DUAL VOLTAGE MODULE (OPTIONAL)
E1	DVR	— DUAL VOLTAGE RECEPTACLE (OPTIONAL)
L12,M11,P6	EF	— EVAPORATOR FAN CONTACTOR (HIGH SPEED)
G11,H11,T6,T9	EM	— EVAPORATOR FAN MOTOR
M12,R6	ES	— EVAPORATOR FAN CONTACTOR (LOW SPEED)
C6,D18,E18,G5	F	— FUSE
	FLA	— FULL LOAD AMPS
H7	HPS	— HIGH PRESSURE SWITCH
M13,P2	HR	— HEATER CONTACTOR
F20	HS	— HUMIDITY SENSOR
F13	HTT	— HEAT TERMINATION THERMOSTAT
M20	IC	— INTERROGATOR CONNECTOR (OPTION)
E7,F11,H10,H11	IP	— INTERNAL PROTECTOR
M14	IRL	— IN-RANGE LIGHT (OPTION)
B16	KP	— KEYPAD CONNECTOR
E16	MDS	— MANUAL DEFROST SWITCH
D20,L20,M20,P20	PR	— PROBE RECEPTACLE (USDA OPTION)
L6,L14,L16	RM	— REMOTE MONITORING RECEPTACLE (OPTION)
K20	RRS	— RETURN RECORDER SENSOR (OPTION)
B20	RTS	— RETURN TEMPERATURE SENSOR
E20	SMV	— SUCTION MODULATION VALVE
H20	SPT	— SUCTION PRESSURE TRANSDUCER (OPTION)
K20	SRS	— SUPPLY RECORDER SENSOR (OPTION)
H15	SSV	— SUCTION SOLENOID VALVE
K4	ST	— START-STOP SWITCH
A20	STS	— SUPPLY TEMPERATURE SENSOR
K7	TC	— CONTROLLER RELAY (COOLING)
D5	TCC	— TRANSFRESH COMMUNICATIONS CONNECTOR (OPTION)
K8	TD	— CONTROLLER RELAY (LOW SPEED COMPRESSOR)
K11	TE	— CONTROLLER RELAY (HIGH SPEED EVAPORATOR FANS)
G5	TFC	— TRANSFRESH CONTROLLER (OPTION)
K13	TH	— CONTROLLER RELAY (HEATING)
K16	TI	— INRANGE RELAY
K14	TF	— DEFROST RELAY
K10	TN	— CONTROLLER RELAY (CONDENSER FAN)
D17,F15,G10,J7, } J10,J11,J13,M16 }	TP	— TEST POINT
M3	TR	— TRANSFORMER
D1	TRANS	— TRANSFORMER AUTO 230/460 (OPTION)
E5,F5	TRC	— TRANSFRESH REAR CONNECTOR (OPTION)
E15	TS	— CONTROLLER RELAY (SUCTION SOLENOID VALVE)
K9	TT	— CONTROLLER RELAY (COMPRESSOR SHORTING)
K12	TV	— CONTROLLER RELAY (LOW SPEED EVAPORATOR FANS)
E10	WP	— WATER PRESSURE SWITCH (OPTION)

**Figure 7-3. Electrical Schematic - See Model Chart
(Sheet 1 of 2)**

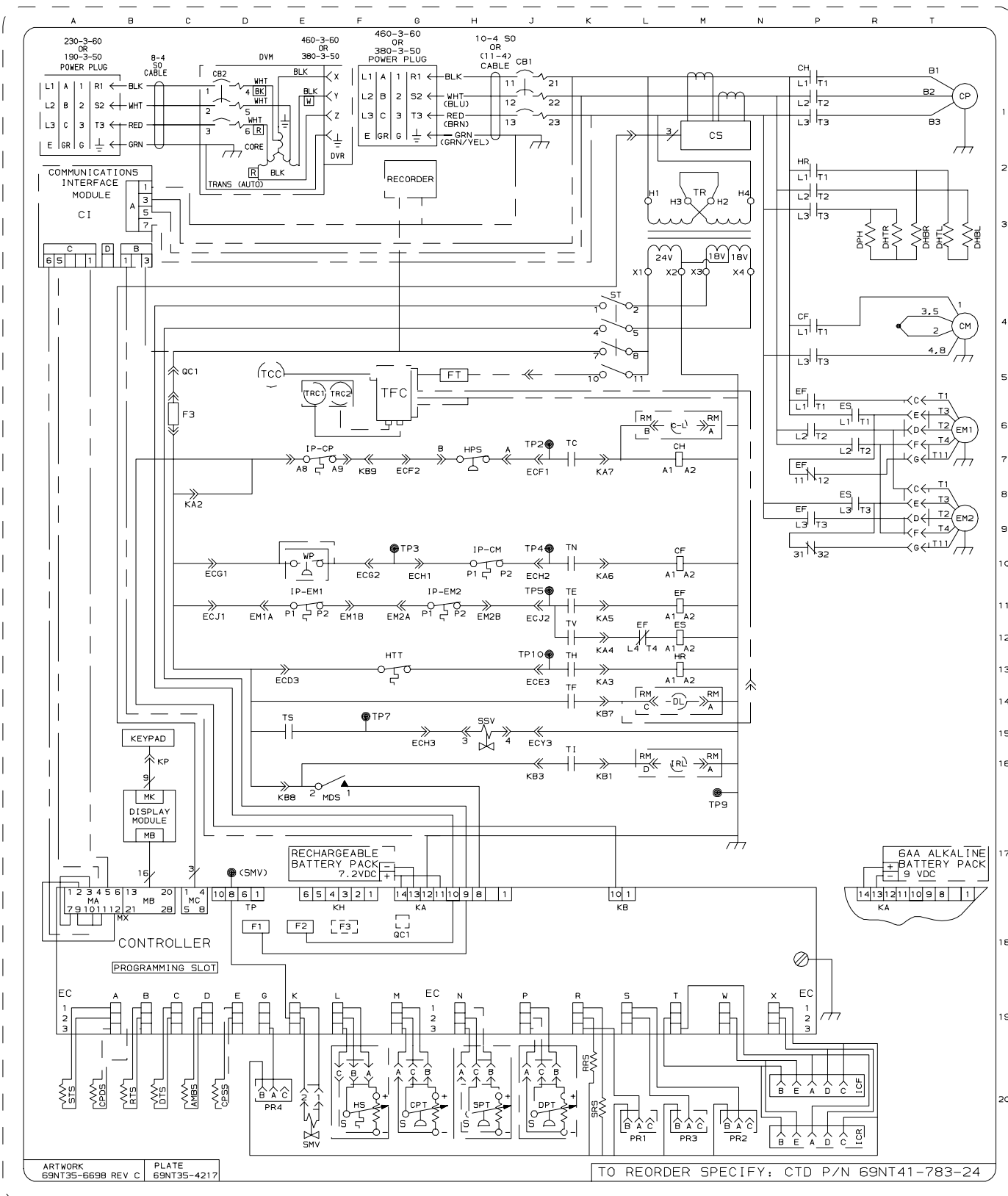


Figure 7-3. Electrical Schematic - See Model Chart (Sheet 2 of 2)

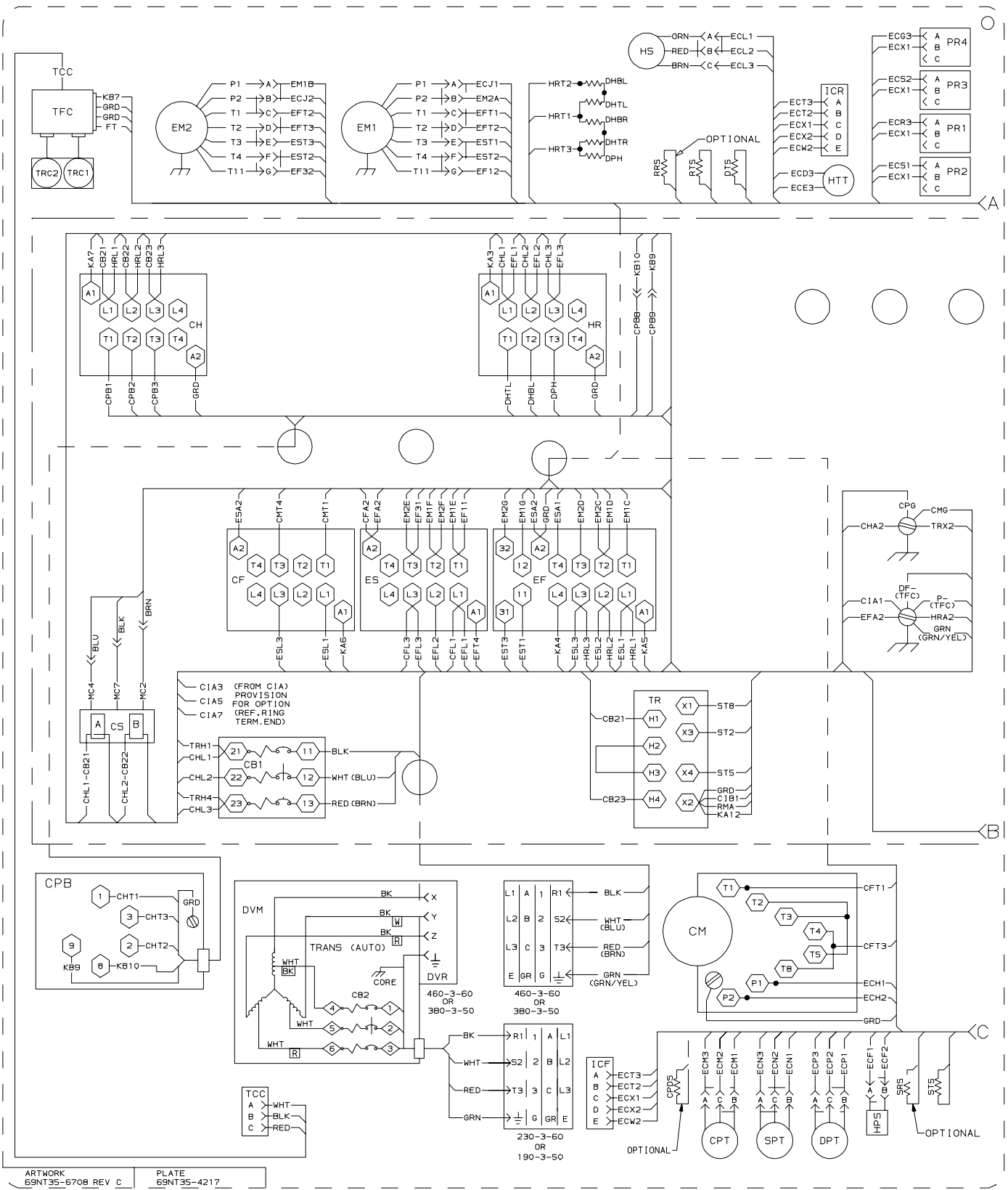
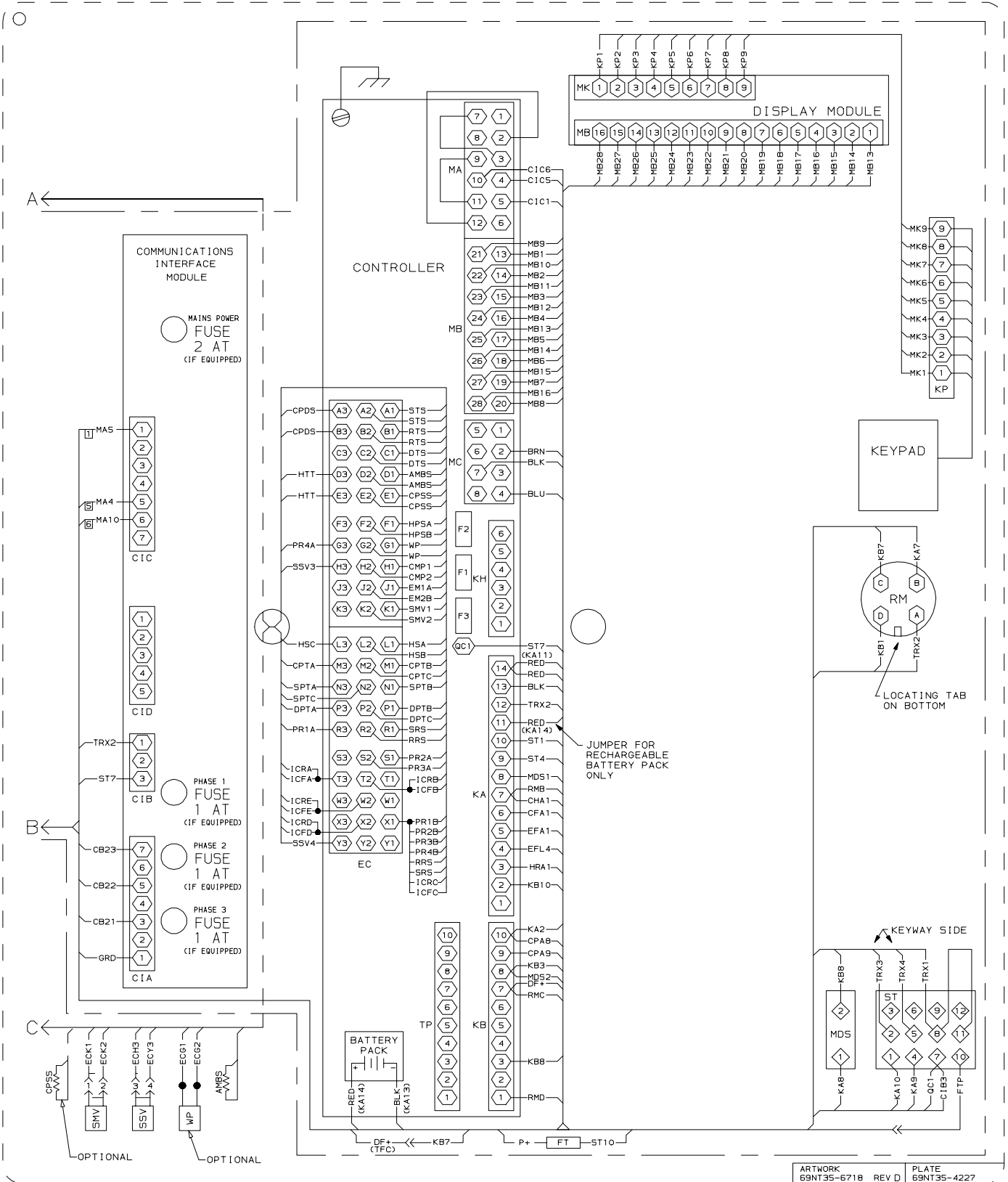


Figure 7-4. Electrical Wiring Diagram - See Model Chart
(Sheet 1 of 2)



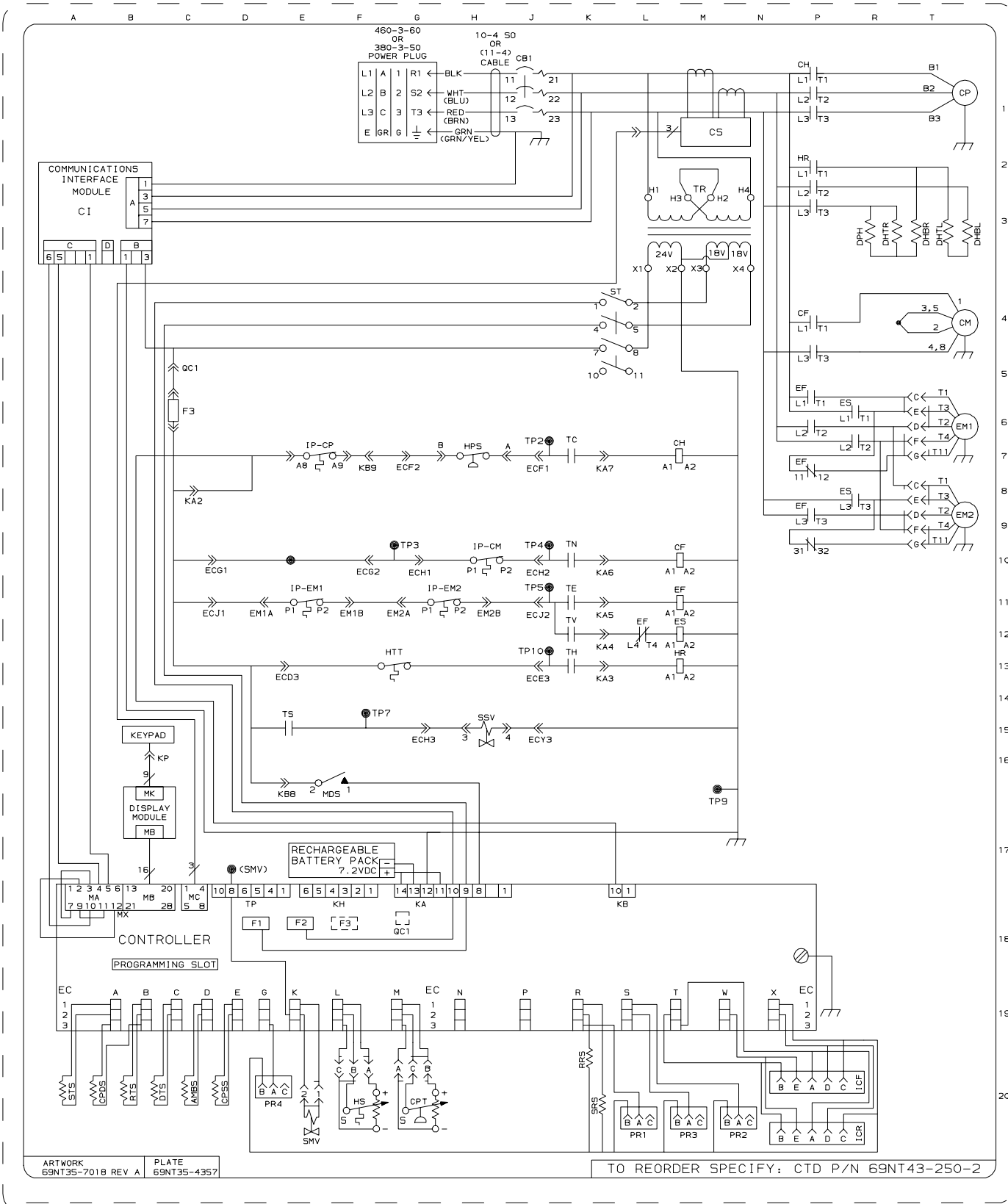
ARTWORK 69NT35-6718 REV D PLATE 69NT35-4227

Figure 7-4. Electrical Wiring Diagram - See Model Chart (Sheet 2 of 2)

LEGEND

<u>ZONE</u>	<u>SYMBOL</u>	<u>DESCRIPTION</u>
C20	AMBS	— AMBIENT SENSOR
J1	CB1	— CIRCUIT BREAKER 460V
M10, P4	CF	— CONDENSER FAN CONTACTOR
M7, P1	CH	— COMPRESSOR CONTACTOR
A3	CI	— COMMUNICATIONS INTERFACE MODULE
H10, T4	CM	— CONDENSER FAN MOTOR
E7, T1	CP	— COMPRESSOR MOTOR
B20	CPDS	— COMPRESSOR DISCHARGE SENSOR (TEMP.)
D20	CPSS	— COMPRESSOR SUCTION SENSOR (TEMP.)
G20	CPT	— CONDENSER PRESSURE TRANSDUCER
M1	CS	— CURRENT SENSOR
T3	DHBL	— DEFROST HEATER - BOTTOM LEFT
T3	DHBR	— DEFROST HEATER - BOTTOM RIGHT
T3	DHTL	— DEFROST HEATER - TOP LEFT
R3	DHTR	— DEFROST HEATER - TOP RIGHT
R3	DPH	— DRAIN PAN HEATER
C20	DTS	— DEFROST TEMPERATURE SENSOR
L12, M11, P6	EF	— EVAPORATOR FAN CONTACTOR (HIGH SPEED)
E11, G11, T6, T9	EM	— EVAPORATOR FAN MOTOR
M12, R6	ES	— EVAPORATOR FAN CONTACTOR (LOW SPEED)
C6, D18, E18	F	— FUSE
	FLA	— FULL LOAD AMPS
H7	HPS	— HIGH PRESSURE SWITCH
M13, P2	HR	— HEATER CONTACTOR
F20	HS	— HUMIDITY SENSOR
G13	HTT	— HEAT TERMINATION THERMOSTAT
P20	IC	— INTERROGATOR CONNECTOR
E7, E11, G11, H10	IP	— INTERNAL PROTECTOR
B16	KP	— KEYPAD CONNECTOR
F16	MDS	— MANUAL DEFROST SWITCH
D20, L20, M20, N20	PR	— PROBE RECEPTACLE (USDA OPTION)
K20	RRS	— RETURN RECORDER SENSOR
B20	RTS	— RETURN TEMPERATURE SENSOR
E20	SMV	— SUCTION MODULATION VALVE
K20	SRS	— SUPPLY RECORDER SENSOR
H15	SSV	— SUCTION SOLENOID VALVE
K4	ST	— START-STOP SWITCH
A20	STS	— SUPPLY TEMPERATURE SENSOR
K7	TC	— CONTROLLER RELAY (COOLING)
K11	TE	— CONTROLLER RELAY (HIGH SPEED EVAPORATOR FANS)
K13	TH	— CONTROLLER RELAY (HEATING)
K10	TN	— CONTROLLER RELAY (CONDENSER FAN)
D17, F15, G10, J7, } J10, J11, J13, M16 }	TP	— TEST POINT
M3	TR	— TRANSFORMER
E15	TS	— CONTROLLER RELAY (SUCTION SOLENOID VALVE)
K12	TV	— CONTROLLER RELAY (LOW SPEED EVAPORATOR FANS)

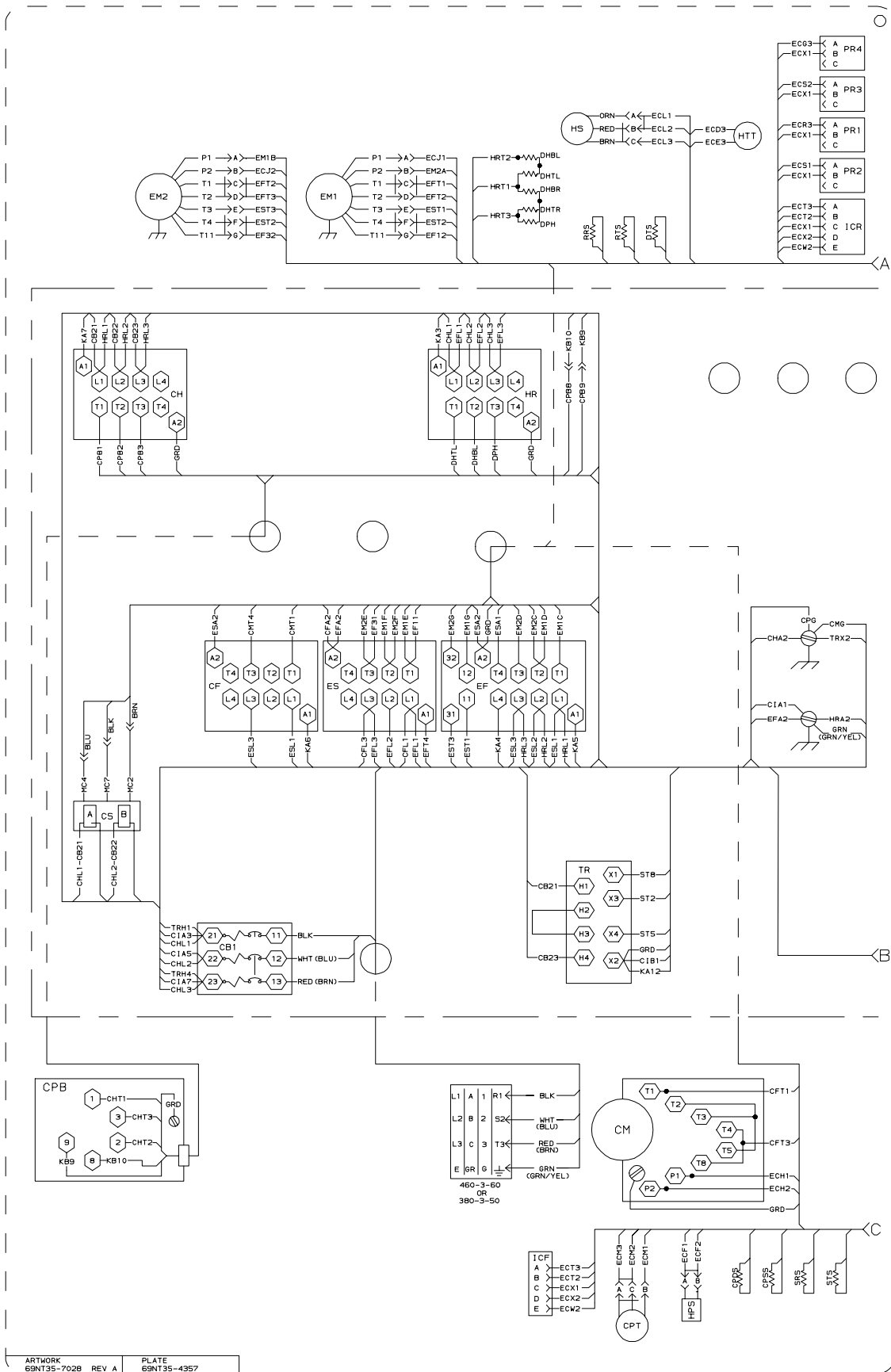
**Figure 7-5. Electrical Schematic - See Model Chart
(Sheet 1 of 2)**



ARTWORK 69NT35-701B REV A PLATE 69NT35-4357

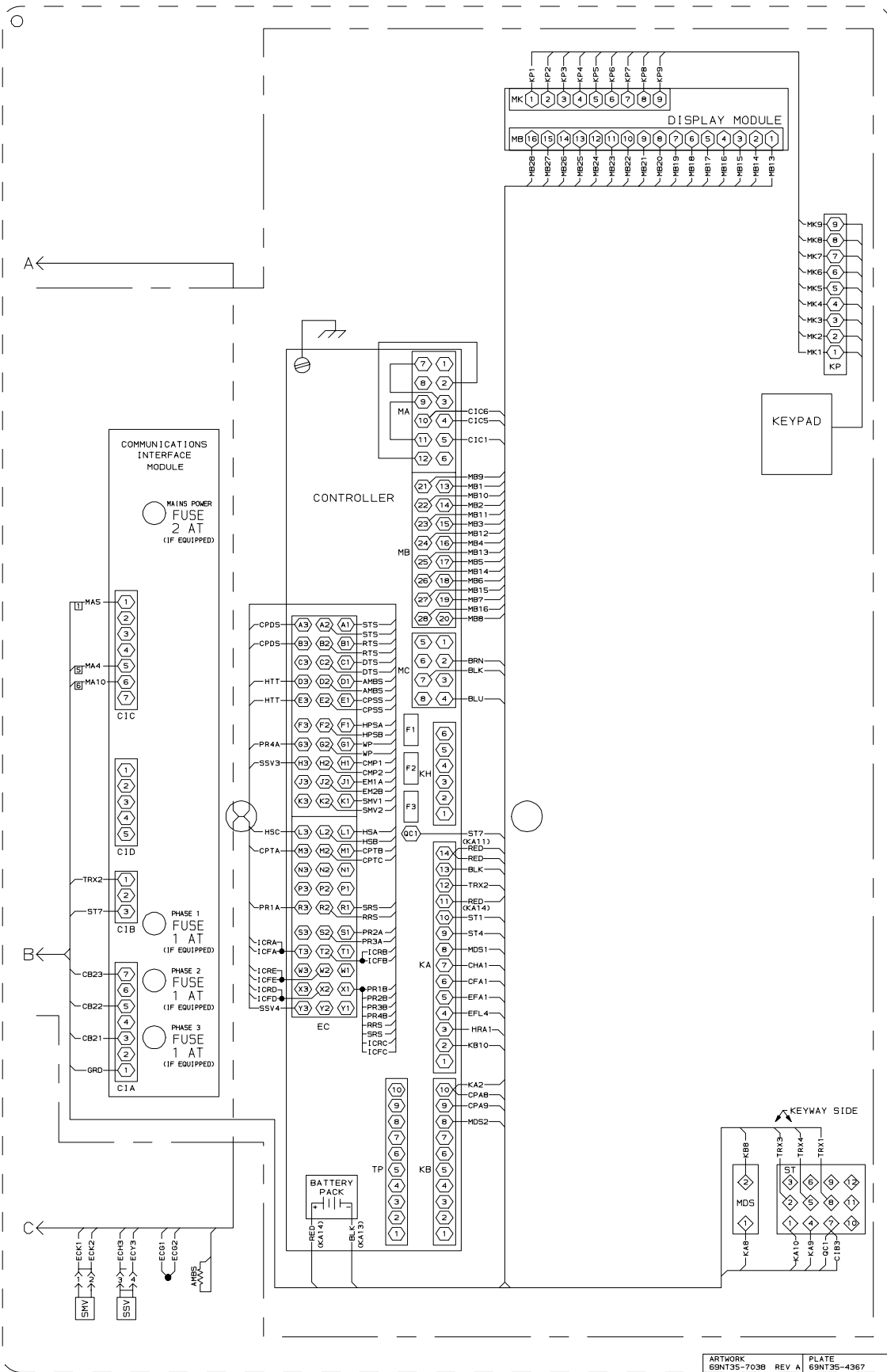
TO REORDER SPECIFY: CTD P/N 69NT43-250-2

Figure 7-5. Electrical Schematic - See Model Chart (Sheet 2 of 2)



ARTWORK 69N135-7028 REV A PLATE 69N135-4357

Figure 7-6. Electrical Wiring Diagram - See Model Chart (Sheet 1 of 2)



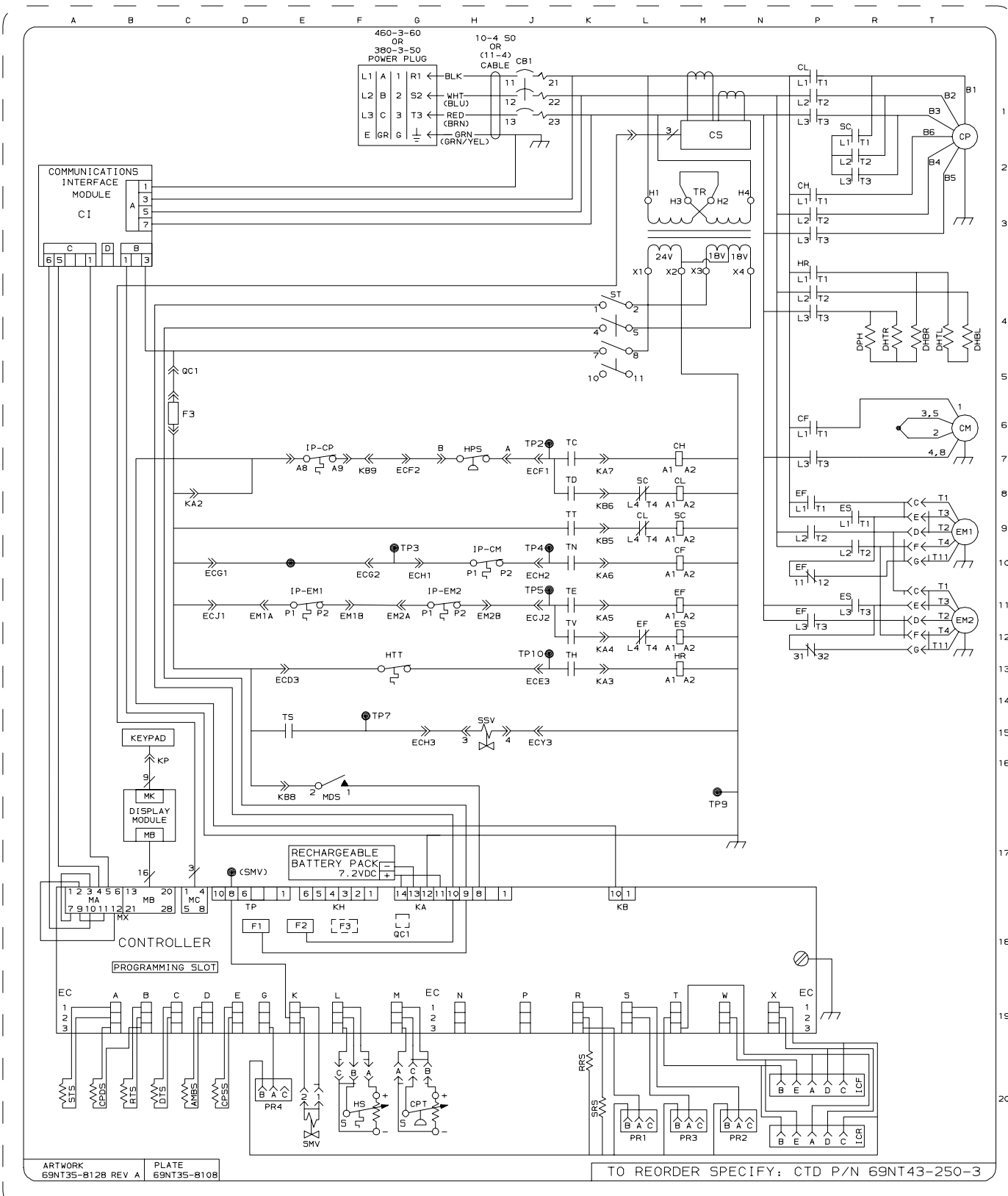
ARTWORK 69NT35-7038 REV A PLATE 69NT35-4367

Figure 7-6. Electrical Wiring Diagram - See Model Chart (Sheet 2 of 2)

LEGEND

<u>ZONE</u>	<u>SYMBOL</u>	<u>DESCRIPTION</u>
C20	AMBS	— AMBIENT SENSOR
J1	CB1	— CIRCUIT BREAKER 460V
M10, P6	CF	— CONDENSER FAN CONTACTOR
M7, P1	CH	— COMPRESSOR CONTACTOR
A3	CI	— COMMUNICATIONS INTERFACE MODULE
P1, L9, M8	CL	— COMPRESSOR CONTACTOR (LOW SPEED)
H10, T6	CM	— CONDENSER FAN MOTOR
E7, T1	CP	— COMPRESSOR MOTOR
B20	CPDS	— COMPRESSOR DISCHARGE SENSOR (TEMP.)
D20	CPSS	— COMPRESSOR SUCTION SENSOR (TEMP.)
G20	CPT	— CONDENSER PRESSURE TRANSDUCER
M1	CS	— CURRENT SENSOR
T4	DHBL	— DEFROST HEATER - BOTTOM LEFT
T4	DHBR	— DEFROST HEATER - BOTTOM RIGHT
T4	DHTL	— DEFROST HEATER - TOP LEFT
R4	DHTR	— DEFROST HEATER - TOP RIGHT
R4	DPH	— DRAIN PAN HEATER
C20	DTS	— DEFROST TEMPERATURE SENSOR
L12, M11, P9	EF	— EVAPORATOR FAN CONTACTOR (HIGH SPEED)
E11, G11, T9, T11	EM	— EVAPORATOR FAN MOTOR
M12, R9	ES	— EVAPORATOR FAN CONTACTOR (LOW SPEED)
C6, D18, E18	F	— FUSE
	FLA	— FULL LOAD AMPS
H7	HPS	— HIGH PRESSURE SWITCH
M13, P4	HR	— HEATER CONTACTOR
F20	HS	— HUMIDITY SENSOR
G13	HTT	— HEAT TERMINATION THERMOSTAT
P20	IC	— INTERROGATOR CONNECTOR
E7, E11, G11, H10	IP	— INTERNAL PROTECTOR
B16	KP	— KEYPAD CONNECTOR
F16	MDS	— MANUAL DEFROST SWITCH
D20, L20, M20, N20	PR	— PROBE RECEPTACLE (USDA OPTION)
K20	RRS	— RETURN RECORDER SENSOR
B20	RTS	— RETURN TEMPERATURE SENSOR
R2, L8, M9	SC	— COMPRESSOR CONTACTOR (SHORTING)
E20	SMV	— SUCTION MODULATION VALVE
K20	SRS	— SUPPLY RECORDER SENSOR
H15	SSV	— SUCTION SOLENOID VALVE
K4	ST	— START-STOP SWITCH
A20	STS	— SUPPLY TEMPERATURE SENSOR
K7	TC	— CONTROLLER RELAY (COOLING)
K8	TD	— CONTROLLER RELAY (LOW SPEED COMPRESSOR)
K11	TE	— CONTROLLER RELAY (HIGH SPEED EVAPORATOR FANS)
K13	TH	— CONTROLLER RELAY (HEATING)
K10	TN	— CONTROLLER RELAY (CONDENSER FAN)
D17, F15, G10, J7, } J10, J11, J13, M16 }	TP	— TEST POINT
M3	TR	— TRANSFORMER
K9	TT	— CONTROLLER RELAY (COMPRESSOR SHORTING)
E15	TS	— CONTROLLER RELAY (SUCTION SOLENOID VALVE)
K12	TV	— CONTROLLER RELAY (LOW SPEED EVAPORATOR FANS)

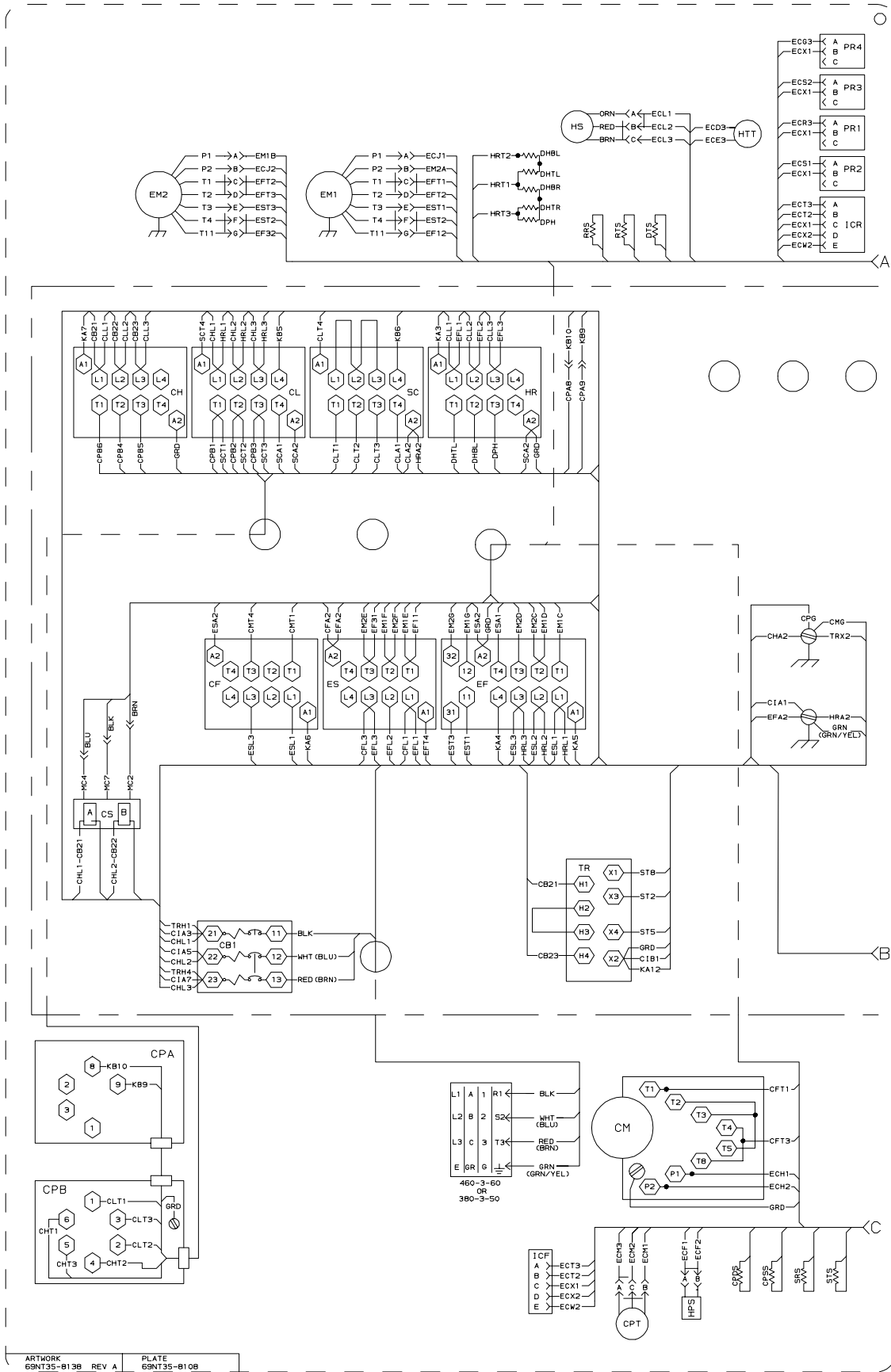
**Figure 7-7. Electrical Schematic - See Model Chart
(Sheet 1 of 2)**



ARTWORK 69NT35-8128 REV A PLATE 69NT35-8108

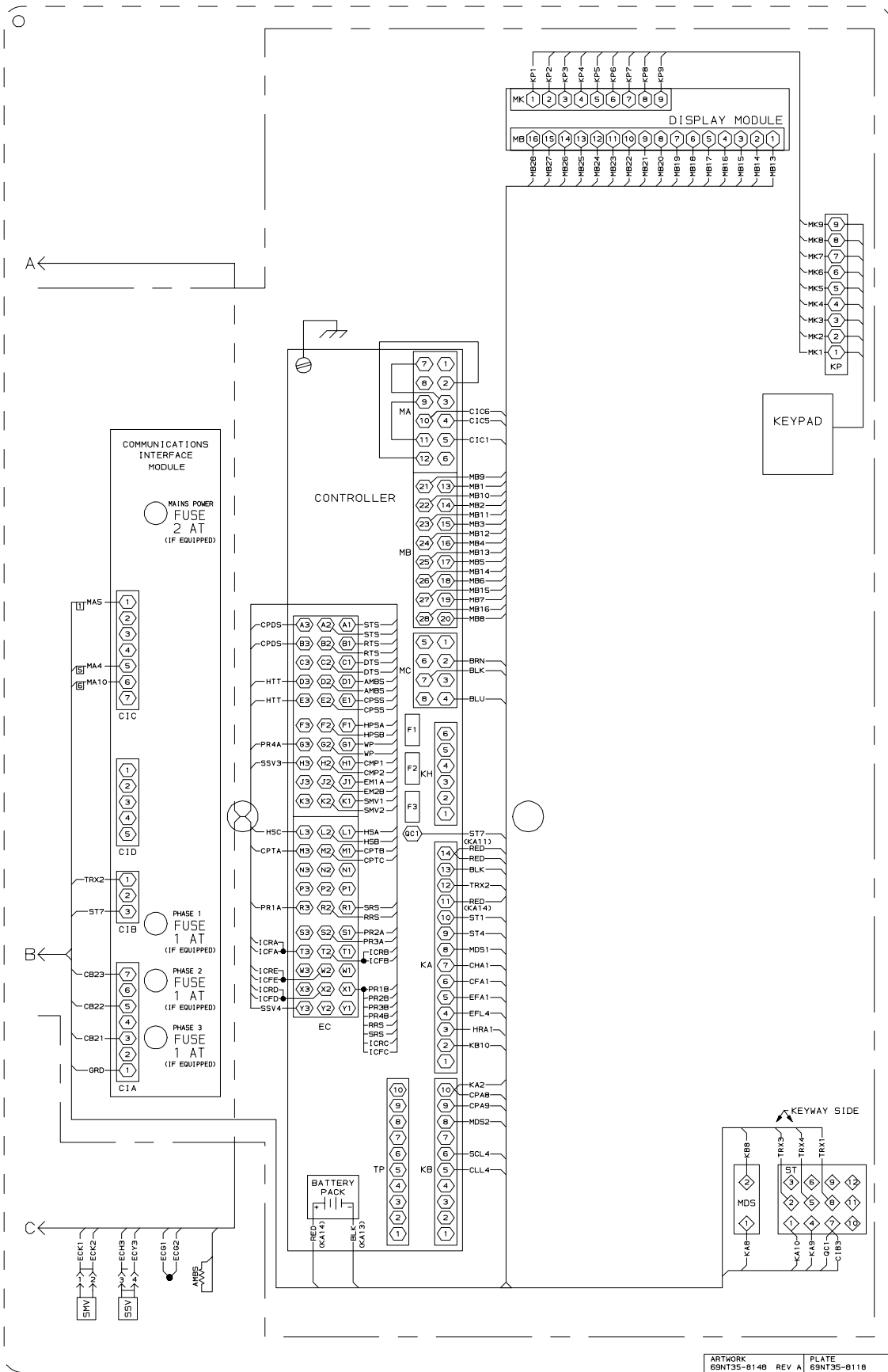
TO REORDER SPECIFY: CTD P/N 69NT43-250-3

Figure 7-7. Electrical Schematic - See Model Chart (Sheet 2 of 2)



ARTWORK 69NT35-8138 REV A PLATE 69NT35-8108

Figure 7-8. Electrical Wiring Diagram - See Model Chart (Sheet 1 of 2)

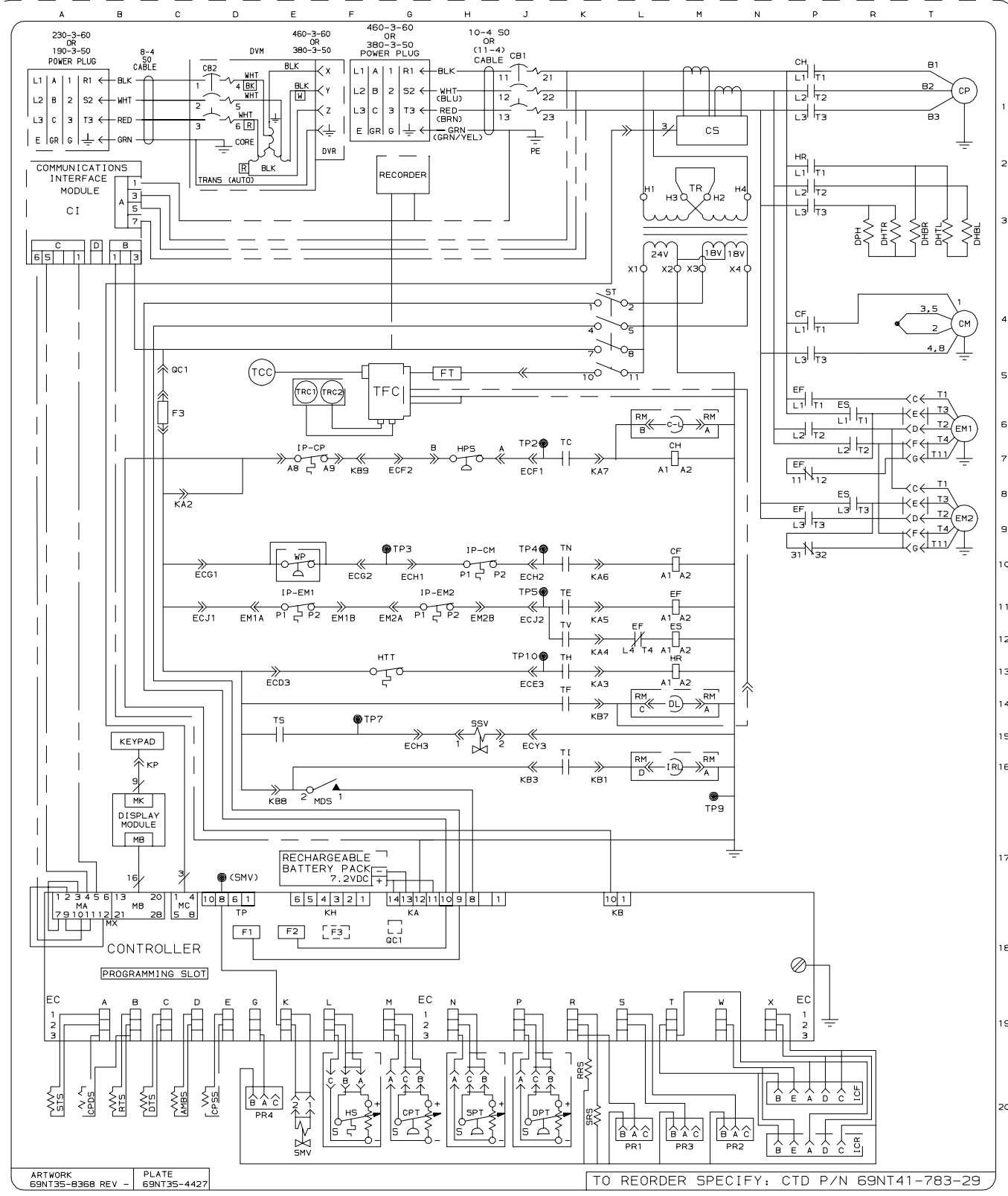


ARTWORK 69NT35-8148 REV A PLATE 69NT35-8118

Figure 7-8. Electrical Wiring Diagram - See Model Chart (Sheet 2 of 2)

LEGEND		
<u>ZONE</u>	<u>SYMBOL</u>	<u>DESCRIPTION</u>
C19	AMBS	— AMBIENT SENSOR
J1	CB1	— CIRCUIT BREAKER 460V
D1	CB2	— CIRCUIT BREAKER 230V (AUTO TRANS OPTION)
M9,P4	CF	— CONDENSER FAN CONTACTOR
A3	CI	— COMMUNICATIONS INTERFACE MODULE (OPTION)
M7,P1	CH	— COMPRESSOR CONTACTOR
M6	C-L	— COOL LIGHT (OPTION)
H10,T4	CM	— CONDENSER FAN MOTOR
E7,T1	CP	— COMPRESSOR MOTOR
A20	CPDS	— COMPRESSOR DISCHARGE SENSOR (TEMP.)
C20	CPSS	— COMPRESSOR SUCTION SENSOR (TEMP.)
G20	CPT	— CONDENSER PRESSURE TRANSDUCER
M1	CS	— CURRENT SENSOR
T3	DHBL	— DEFROST HEATER - BOTTOM LEFT
T3	DHBR	— DEFROST HEATER - BOTTOM RIGHT
T3	DHTL	— DEFROST HEATER - TOP LEFT
R3	DHTR	— DEFROST HEATER - TOP RIGHT
M15	DL	— DEFROST LIGHT (OPTION)
R3	DPH	— DRAIN PAN HEATER
J20	DPT	— DISCHARGE PRESSURE TRANSDUCER (OPTION)
C20	DTS	— DEFROST TEMPERATURE SENSOR
D1	DVM	— DUAL VOLTAGE MODULE (OPTIONAL)
E1	DVR	— DUAL VOLTAGE RECEPTACLE (OPTIONAL)
L12,M11,P6	EF	— EVAPORATOR FAN CONTACTOR (HIGH SPEED)
G11,H11,T6,T9	EM	— EVAPORATOR FAN MOTOR
M12,R6	ES	— EVAPORATOR FAN CONTACTOR (LOW SPEED)
C6,D18,E18,G5	F	— FUSE
	FLA	— FULL LOAD AMPS
H7	HPS	— HIGH PRESSURE SWITCH
M13,P2	HR	— HEATER CONTACTOR
F20	HS	— HUMIDITY SENSOR
F13	HTT	— HEAT TERMINATION THERMOSTAT
M20	IC	— INTERROGATOR CONNECTOR (OPTION)
E7,F11,H10,H11	IP	— INTERNAL PROTECTOR
M14	IRL	— IN-RANGE LIGHT (OPTION)
B16	KP	— KEYPAD CONNECTOR
E16	MDS	— MANUAL DEFROST SWITCH
D20,L20,M20,P20	PR	— PROBE RECEPTACLE (USDA OPTION)
L6,L14,L16	RM	— REMOTE MONITORING RECEPTACLE (OPTION)
K20	RRS	— RETURN RECORDER SENSOR (OPTION)
B20	RTS	— RETURN TEMPERATURE SENSOR
E20	SMV	— SUCTION MODULATION VALVE
H20	SPT	— SUCTION PRESSURE TRANSDUCER (OPTION)
K20	SRS	— SUPPLY RECORDER SENSOR (OPTION)
H15	SSV	— SUCTION SOLENOID VALVE
K4	ST	— START-STOP SWITCH
A20	STS	— SUPPLY TEMPERATURE SENSOR
K7	TC	— CONTROLLER RELAY (COOLING)
D5	TCC	— TRANSFRESH COMMUNICATIONS CONNECTOR (OPTION)
K8	TD	— CONTROLLER RELAY (LOW SPEED COMPRESSOR)
K11	TE	— CONTROLLER RELAY (HIGH SPEED EVAPORATOR FANS)
G5	TFC	— TRANSFRESH CONTROLLER (OPTION)
K13	TH	— CONTROLLER RELAY (HEATING)
K16	TI	— INRANGE RELAY
K14	TF	— DEFROST RELAY
K10	TN	— CONTROLLER RELAY (CONDENSER FAN)
D17,F15,G10,J7, } J10,J11,J13,M16 }	TP	— TEST POINT
M3	TR	— TRANSFORMER
D1	TRANS	— TRANSFORMER AUTO 230/460 (OPTION)
E5,F5	TRC	— TRANSFRESH REAR CONNECTOR (OPTION)
E15	TS	— CONTROLLER RELAY (SUCTION SOLENOID VALVE)
K9	TT	— CONTROLLER RELAY (COMPRESSOR SHORTING)
K12	TV	— CONTROLLER RELAY (LOW SPEED EVAPORATOR FANS)
E10	WP	— WATER PRESSURE SWITCH (OPTION)

**Figure 7-9. Electrical Schematic - See Model Chart
(Sheet 1 of 2)**



ARTWORK 69NT35-6368 REV - PLATE 69NT35-4427

TO REORDER SPECIFY: CTD P/N 69NT41-783-29

Figure 7-9. Electrical Schematic - See Model Chart (Sheet 2 of 2)

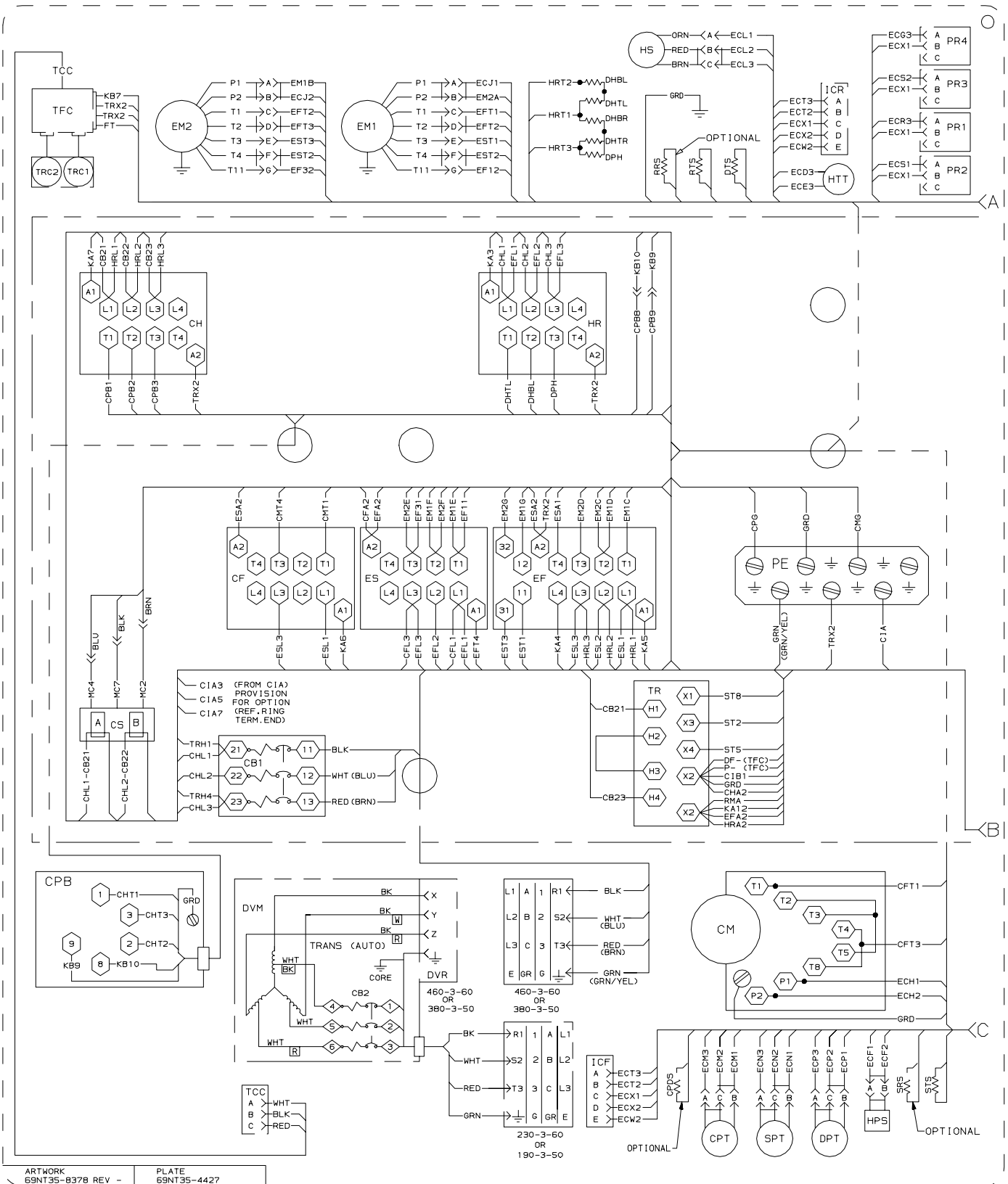
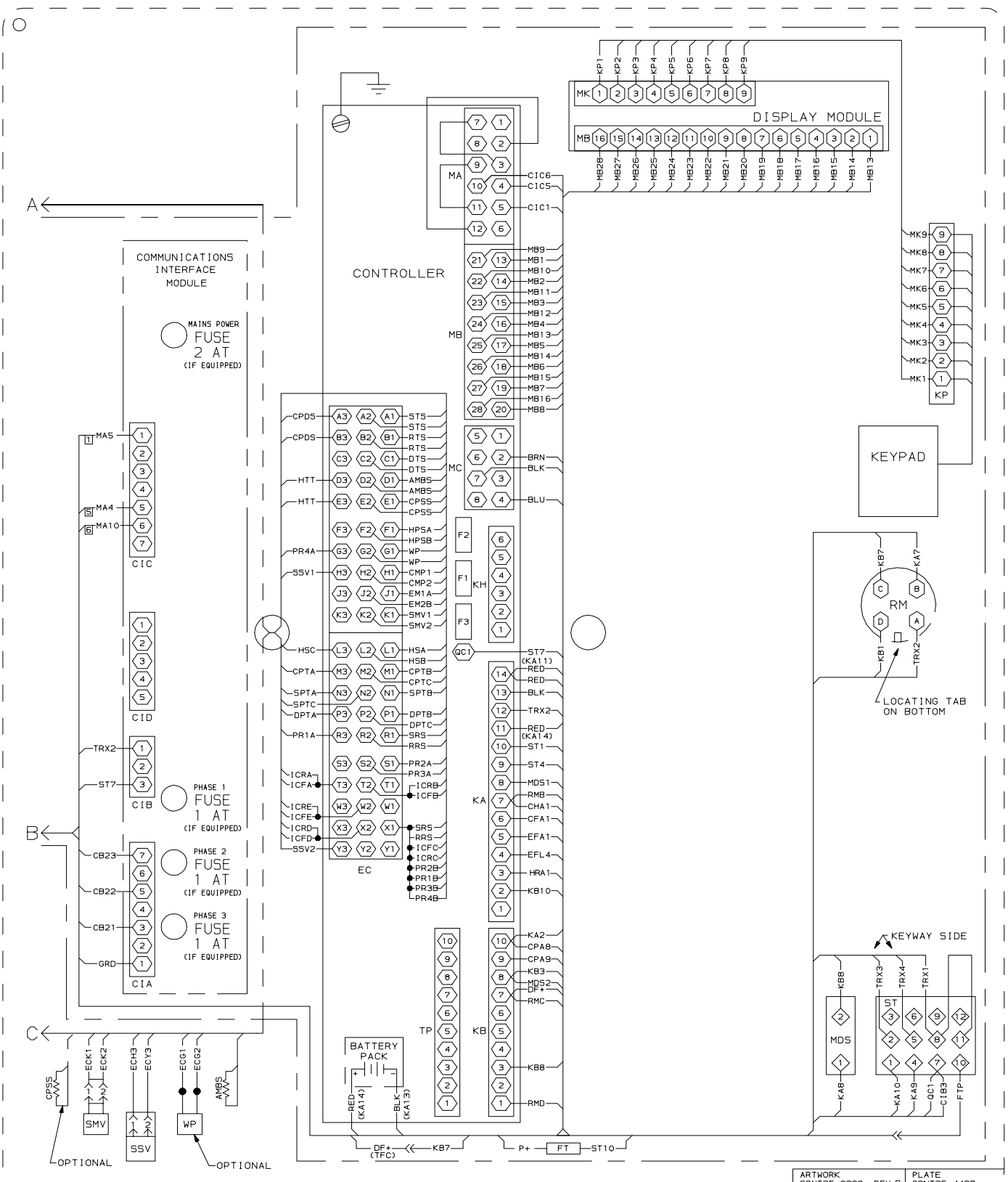


Figure 7-10. Electrical Wiring Diagram - See Model Chart (Sheet 1 of 2)



ARTWORK 69NT35-8388 REV B PLATE 69NT35-4437

Figure 7-10. Electrical Wiring Diagram - See Model Chart (Sheet 2 of 2)

LEGEND

<u>ZONE</u>	<u>SYMBOL</u>	<u>DESCRIPTION</u>
C20	AMBS	— AMBIENT SENSOR
J1	CB1	— CIRCUIT BREAKER 460V
M10, P4	CF	— CONDENSER FAN CONTACTOR
M7, P1	CH	— COMPRESSOR CONTACTOR
A3	CI	— COMMUNICATIONS INTERFACE MODULE
H10, T4	CM	— CONDENSER FAN MOTOR
E7, T1	CP	— COMPRESSOR MOTOR
B20	CPDS	— COMPRESSOR DISCHARGE SENSOR (TEMP.)
D20	CPSS	— COMPRESSOR SUCTION SENSOR (TEMP.)
G20	CPT	— CONDENSER PRESSURE TRANSDUCER
M1	CS	— CURRENT SENSOR
T3	DHBL	— DEFROST HEATER - BOTTOM LEFT
T3	DHBR	— DEFROST HEATER - BOTTOM RIGHT
T3	DHTL	— DEFROST HEATER - TOP LEFT
R3	DHTR	— DEFROST HEATER - TOP RIGHT
R3	DPH	— DRAIN PAN HEATER
C20	DTS	— DEFROST TEMPERATURE SENSOR
L12, M11, P6	EF	— EVAPORATOR FAN CONTACTOR (HIGH SPEED)
E11, G11, T6, T9	EM	— EVAPORATOR FAN MOTOR
M12, R6	ES	— EVAPORATOR FAN CONTACTOR (LOW SPEED)
C6, D18, E18	F	— FUSE
	FLA	— FULL LOAD AMPS
H7	HPS	— HIGH PRESSURE SWITCH
M13, P2	HR	— HEATER CONTACTOR
F20	HS	— HUMIDITY SENSOR
G13	HTT	— HEAT TERMINATION THERMOSTAT
P20	IC	— INTERROGATOR CONNECTOR
E7, E11, G11, H10	IP	— INTERNAL PROTECTOR
B16	KP	— KEYPAD CONNECTOR
F16	MDS	— MANUAL DEFROST SWITCH
D20, L20, M20, N20	PR	— PROBE RECEPTACLE (USDA OPTION)
K20	RRS	— RETURN RECORDER SENSOR
B20	RTS	— RETURN TEMPERATURE SENSOR
E20	SMV	— SUCTION MODULATION VALVE
K20	SRS	— SUPPLY RECORDER SENSOR
H15	SSV	— SUCTION SOLENOID VALVE
K4	ST	— START-STOP SWITCH
A20	STS	— SUPPLY TEMPERATURE SENSOR
K7	TC	— CONTROLLER RELAY (COOLING)
K11	TE	— CONTROLLER RELAY (HIGH SPEED EVAPORATOR FANS)
K13	TH	— CONTROLLER RELAY (HEATING)
K10	TN	— CONTROLLER RELAY (CONDENSER FAN)
D17, F15, G10, J7, } J10, J11, J13, M16 }	TP	— TEST POINT
M3	TR	— TRANSFORMER
E15	TS	— CONTROLLER RELAY (SUCTION SOLENOID VALVE)
K12	TV	— CONTROLLER RELAY (LOW SPEED EVAPORATOR FANS)

**Figure 7-11. Electrical Schematic - See Model Chart
(Sheet 1 of 2)**

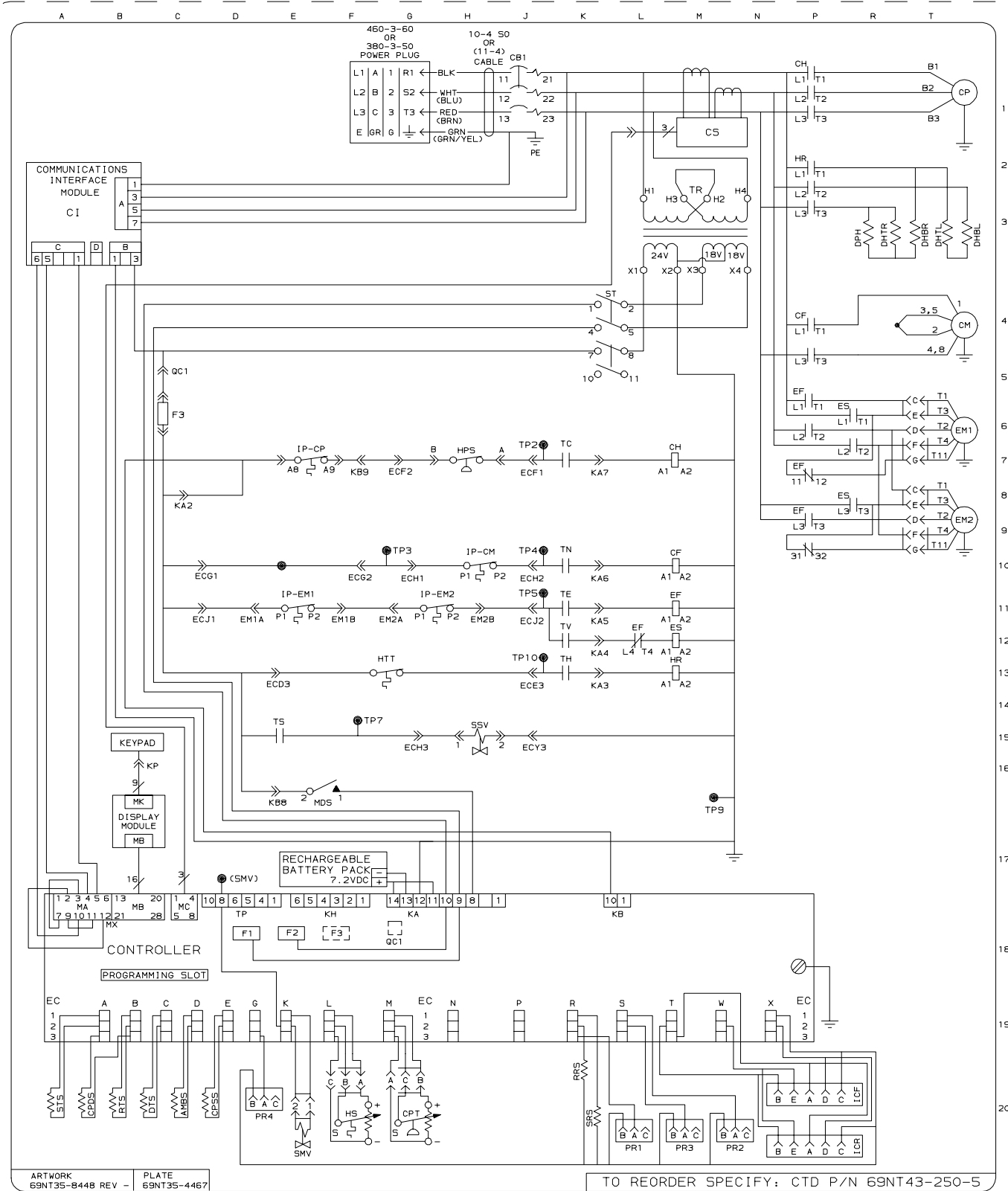


Figure 7-11. Electrical Schematic - See Model Chart
(Sheet 2 of 2)

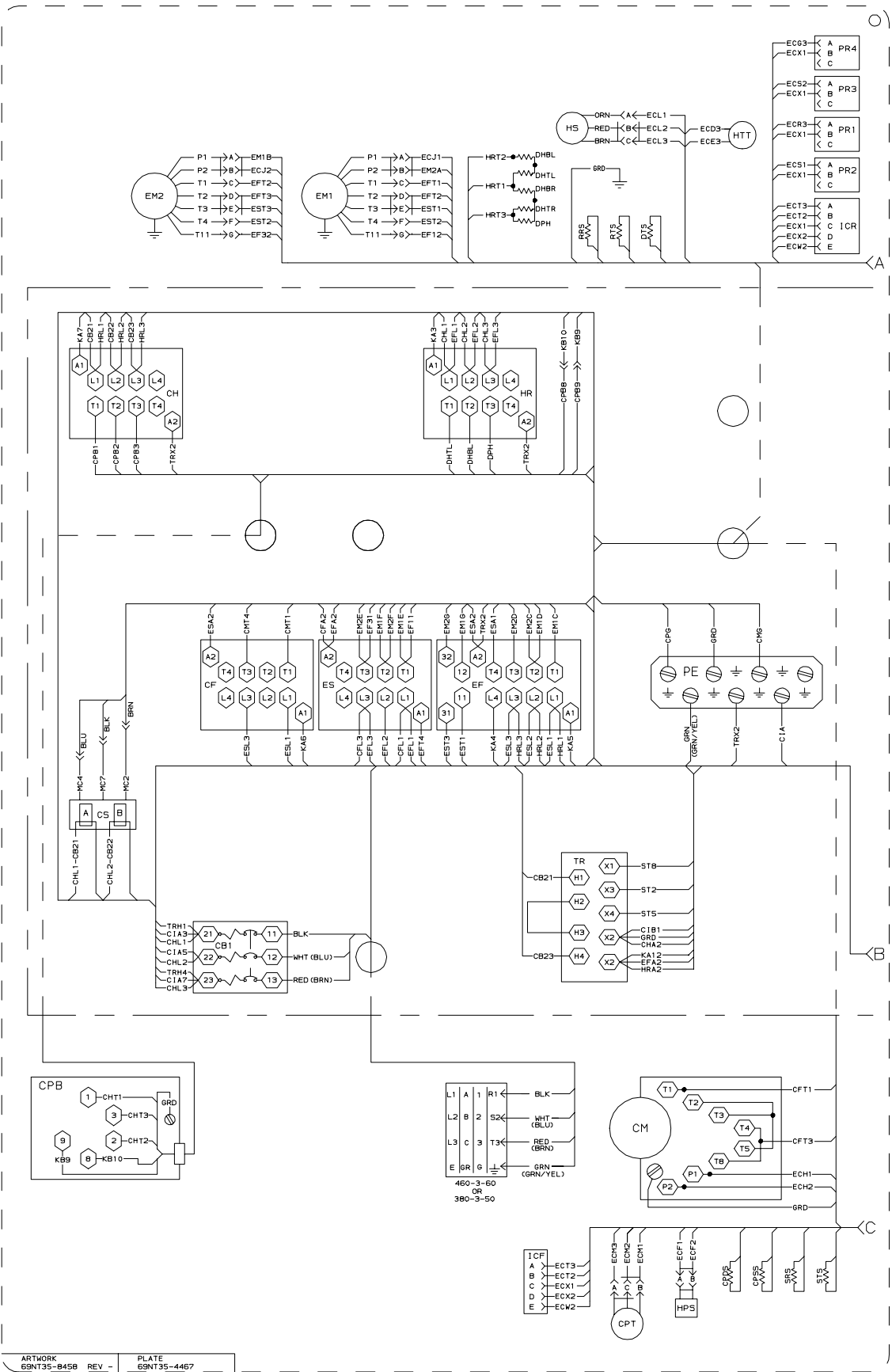
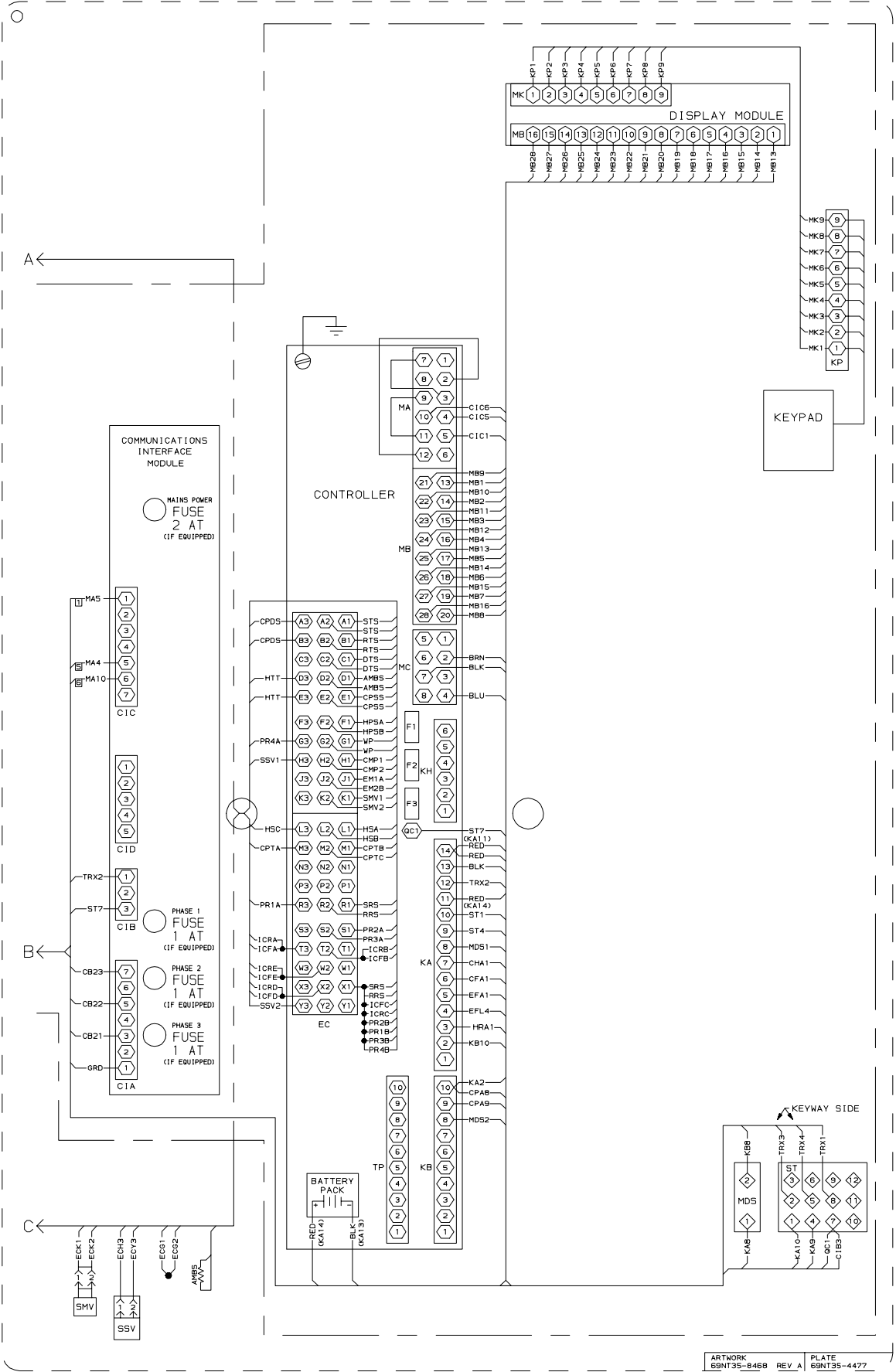


Figure 7-12. Electrical Wiring Diagram - See Model Chart (Sheet 1 of 2)

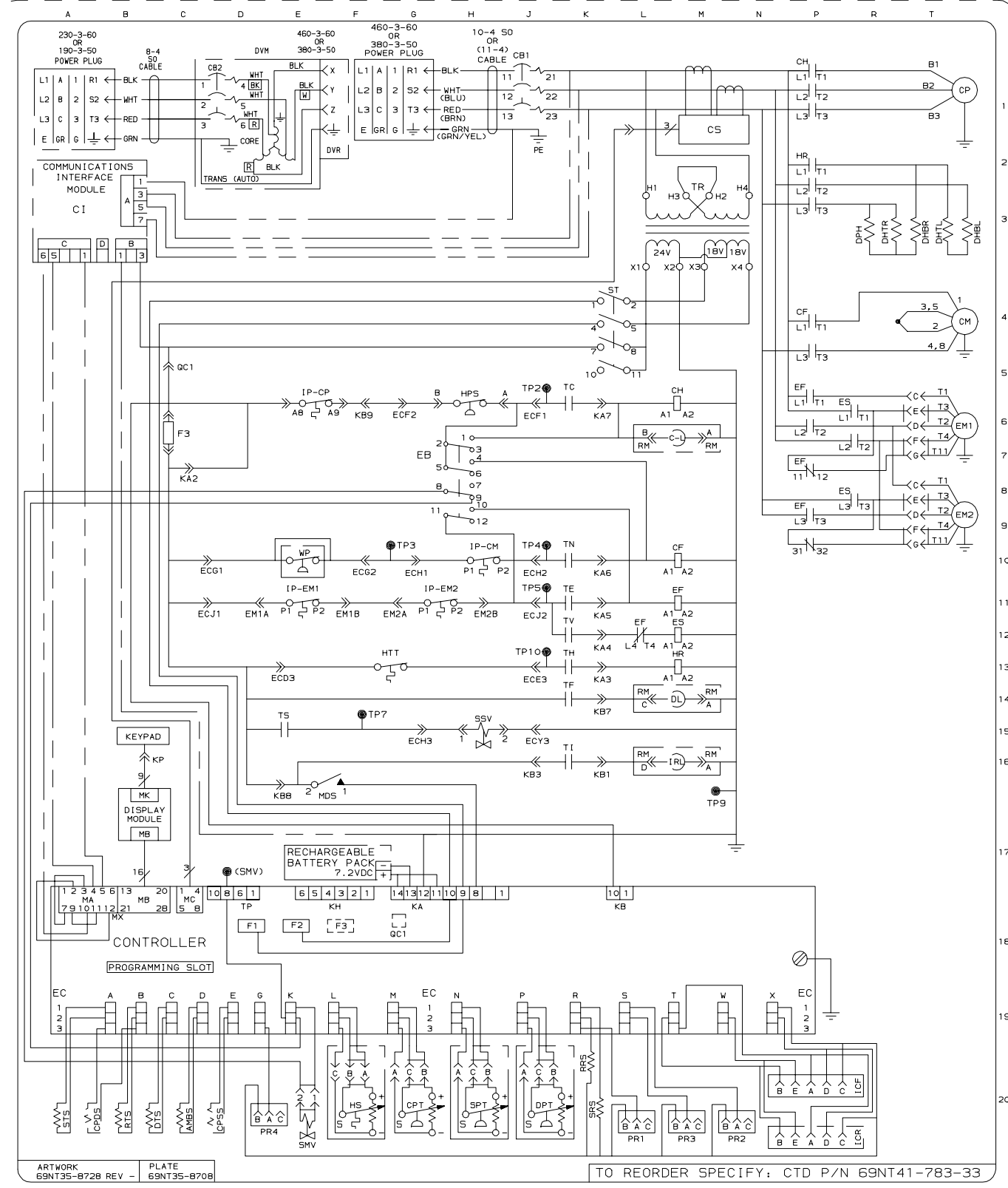


ARTWORK 69NT35-8468 REV A PLATE 69NT35-4477

Figure 7-12. Electrical Wiring Diagram - See Model Chart (Sheet 2 of 2)

		LEGEND	
<u>ZONE</u>	<u>SYMBOL</u>	<u>DESCRIPTION</u>	
C19	AMBS	—	AMBIENT SENSOR
J1	CB1	—	CIRCUIT BREAKER 460V
D1	CB2	—	CIRCUIT BREAKER 230V (AUTO TRANS OPTION)
M9,P4	CF	—	CONDENSER FAN CONTACTOR
A3	CI	—	COMMUNICATIONS INTERFACE MODULE (OPTION)
M5,P1	CH	—	COMPRESSOR CONTACTOR
M6	C-L	—	COOL LIGHT (OPTION)
H10,T4	CM	—	CONDENSER FAN MOTOR
E7,T1	CP	—	COMPRESSOR MOTOR
A20	CPDS	—	COMPRESSOR DISCHARGE SENSOR (TEMP.)
C20	CPSS	—	COMPRESSOR SUCTION SENSOR (TEMP.)
G20	CPT	—	CONDENSER PRESSURE TRANSDUCER
M1	CS	—	CURRENT SENSOR
T3	DHBL	—	DEFROST HEATER - BOTTOM LEFT
T3	DHBR	—	DEFROST HEATER - BOTTOM RIGHT
T3	DHTL	—	DEFROST HEATER - TOP LEFT
R3	DHTR	—	DEFROST HEATER - TOP RIGHT
M15	DL	—	DEFROST LIGHT (OPTION)
R3	DPH	—	DRAIN PAN HEATER
J20	DPT	—	DISCHARGE PRESSURE TRANSDUCER (OPTION)
C20	DTS	—	DEFROST TEMPERATURE SENSOR
D1	DVM	—	DUAL VOLTAGE MODULE (OPTIONAL)
E1	DVR	—	DUAL VOLTAGE RECEPTACLE (OPTIONAL)
H7	EB	—	EMERGENCY (CONTROLLER) BYPASS SWITCH
L12,M11,P6	EF	—	EVAPORATOR FAN CONTACTOR (HIGH SPEED)
G11,H11,T6,T9	EM	—	EVAPORATOR FAN MOTOR
M12,R6	ES	—	EVAPORATOR FAN CONTACTOR (LOW SPEED)
C6,D18,E18	F	—	FUSE
	FLA	—	FULL LOAD AMPS
H5	HPS	—	HIGH PRESSURE SWITCH
M13,P2	HR	—	HEATER CONTACTOR
F20	HS	—	HUMIDITY SENSOR (OPTION)
F13	HTT	—	HEAT TERMINATION THERMOSTAT
M20	IC	—	INTERROGATOR CONNECTOR (OPTION)
E5,F11,H10,H11	IP	—	INTERNAL PROTECTOR
M14	IRL	—	IN-RANGE LIGHT (OPTION)
B16	KP	—	KEYPAD CONNECTOR
E16	MDS	—	MANUAL DEFROST SWITCH
D20,L20,M20,P20	PR	—	PROBE RECEPTACLE (USDA OPTION)
L6,L14,L16	RM	—	REMOTE MONITORING RECEPTACLE (OPTION)
K20	RRS	—	RETURN RECORDER SENSOR (OPTION)
B20	RTS	—	RETURN TEMPERATURE SENSOR
E20	SMV	—	SUCTION MODULATION VALVE
H20	SPT	—	SUCTION PRESSURE TRANSDUCER (OPTION)
K20	SRS	—	SUPPLY RECORDER SENSOR (OPTION)
H15	SSV	—	SUCTION SOLENOID VALVE
K4	ST	—	START-STOP SWITCH
A20	STS	—	SUPPLY TEMPERATURE SENSOR
K5	TC	—	CONTROLLER RELAY (COOLING)
K8	TD	—	CONTROLLER RELAY (LOW SPEED COMPRESSOR)
K11	TE	—	CONTROLLER RELAY (HIGH SPEED EVAPORATOR FANS)
K13	TH	—	CONTROLLER RELAY (HEATING)
K16	TI	—	INRANGE RELAY
K14	TF	—	DEFROST RELAY
K10	TN	—	CONTROLLER RELAY (CONDENSER FAN)
D17,F15,G10,J7, } J10,J11,J13,M16 }	TP	—	TEST POINT
M3	TR	—	TRANSFORMER
D1	TRANS	—	TRANSFORMER AUTO 230/460 (OPTION)
E5,F5	TRC	—	TRANSFRESH REAR CONNECTOR (OPTION)
E15	TS	—	CONTROLLER RELAY (SUCTION SOLENOID VALVE)
K9	TT	—	CONTROLLER RELAY (COMPRESSOR SHORTING)
K12	TV	—	CONTROLLER RELAY (LOW SPEED EVAPORATOR FANS)
E10	WP	—	WATER PRESSURE SWITCH (OPTION)

**Figure 7-13. Electrical Schematic - See Model Chart
(Sheet 1 of 2)**



ARTWORK 69NT35-8728 REV - PLATE 69NT35-8708

TO REORDER SPECIFY: CTD P/N 69NT41-783-33

Figure 7-13. Electrical Schematic - See Model Chart (Sheet 2 of 2)

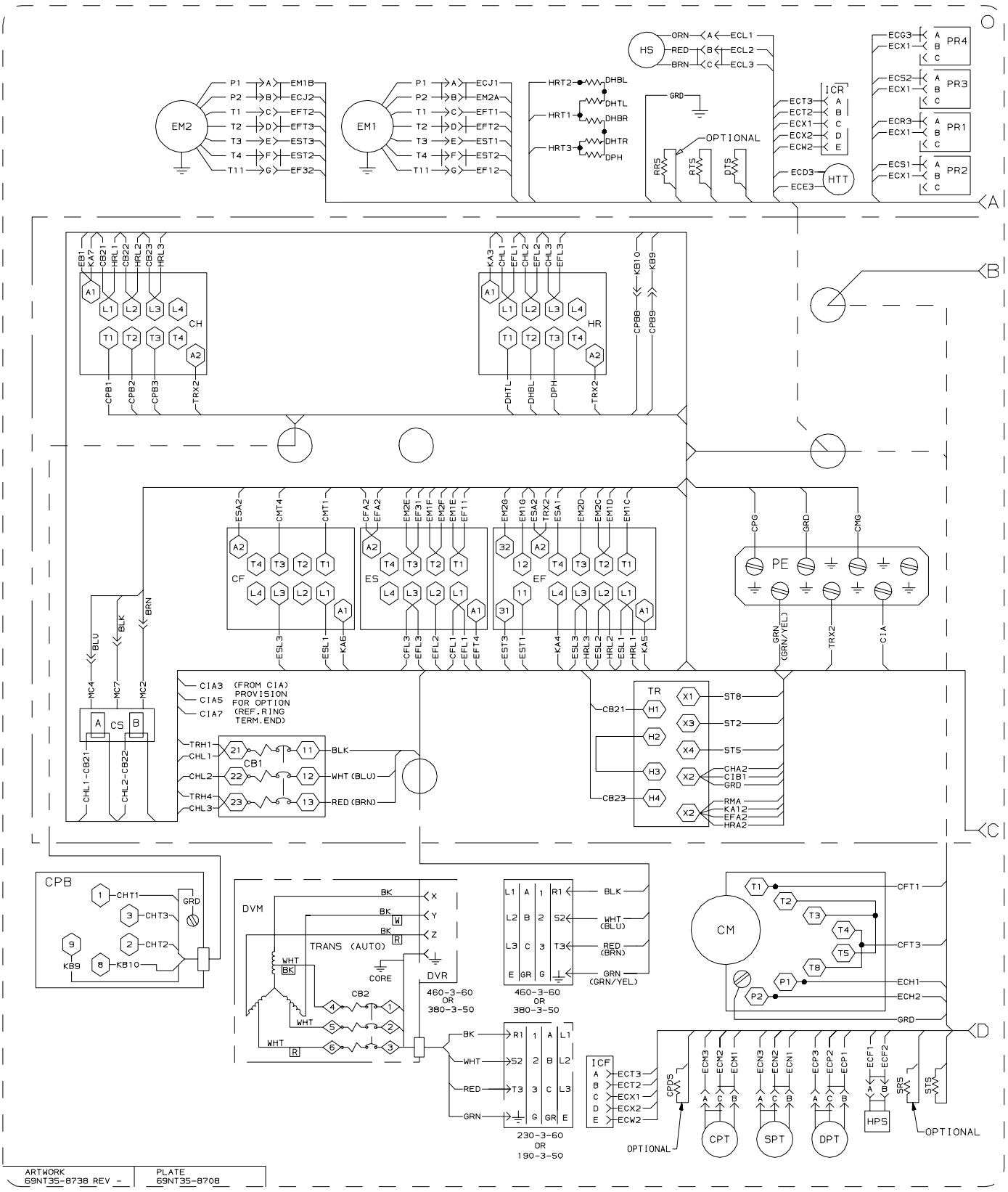
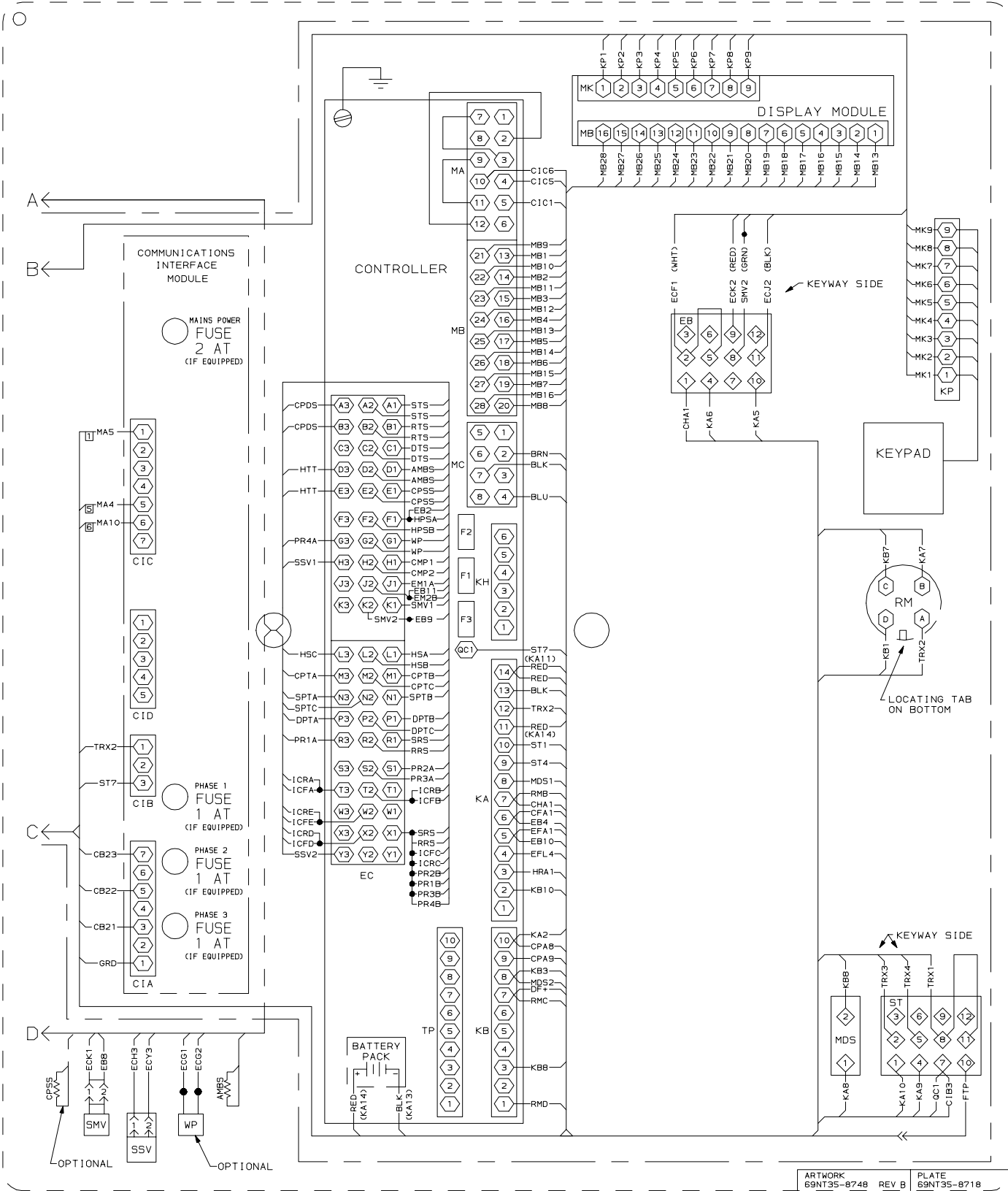


Figure 7-14. Electrical Wiring Diagram - See Model Chart (Sheet 1 of 2)



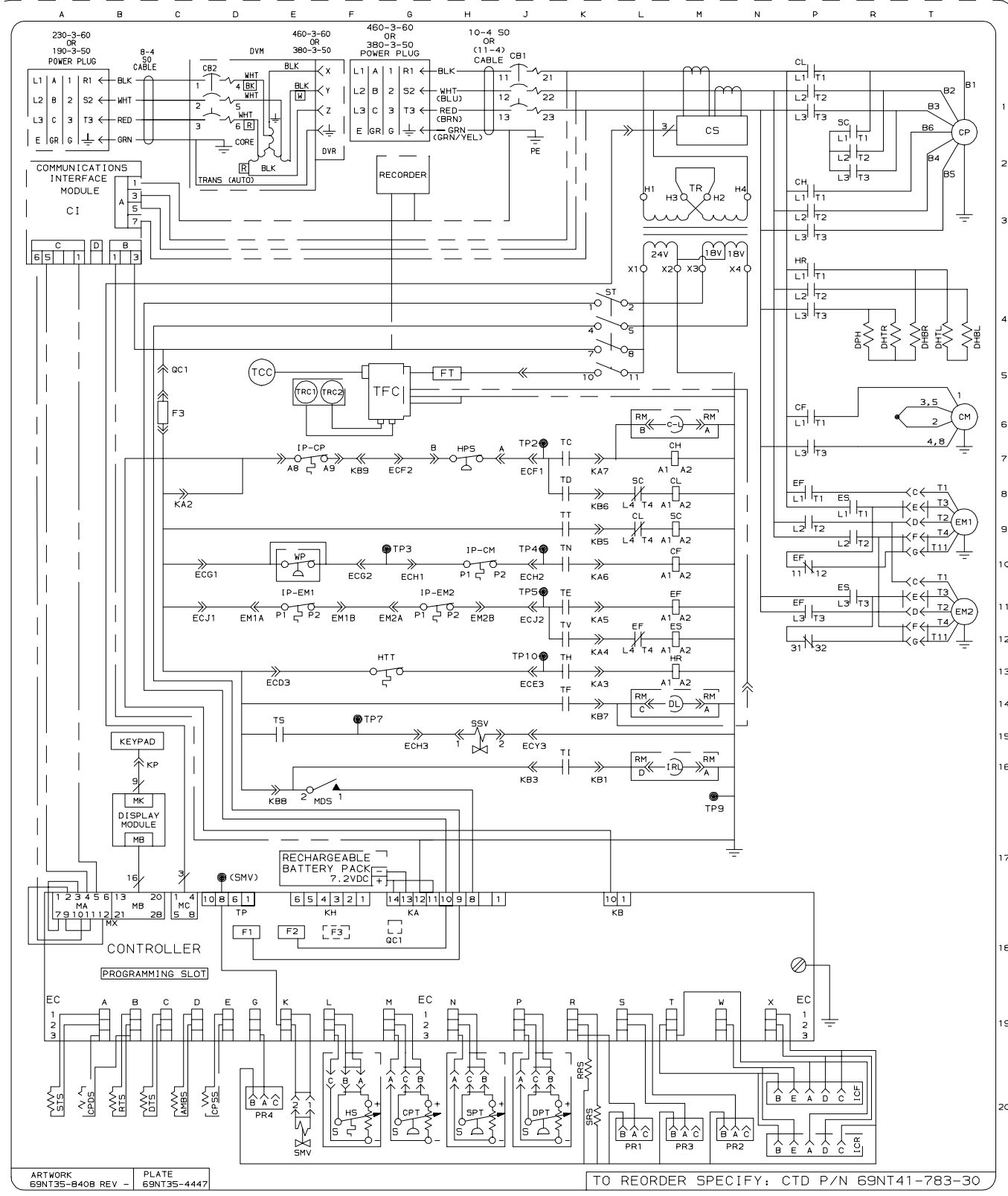
ARTWORK 69NT35-8748 REV B PLATE 69NT35-8718

Figure 7-14. Electrical Wiring Diagram - See Model Chart (Sheet 2 of 2)

LEGEND

<u>ZONE</u>	<u>SYMBOL</u>	<u>DESCRIPTION</u>
C19	AMBS	— AMBIENT SENSOR
J1	CB1	— CIRCUIT BREAKER 460V
D1	CB2	— CIRCUIT BREAKER 230V (AUTO TRANS OPTION)
M9, P6	CF	— CONDENSER FAN CONTACTOR
A3	CI	— COMMUNICATIONS INTERFACE MODULE (OPTION)
M7, P1	CH	— COMPRESSOR CONTACTOR (HIGH SPEED)
M6	C-L	— COOL LIGHT (OPTION)
L9, M8, P3	CL	— COMPRESSOR CONTACTOR (LOW SPEED)
H10, T6	CM	— CONDENSER FAN MOTOR
E7, T1	CP	— COMPRESSOR MOTOR
A20	CPDS	— COMPRESSOR DISCHARGE SENSOR (TEMP.)
C20	CPSS	— COMPRESSOR SUCTION SENSOR (TEMP.)
G20	CPT	— CONDENSER PRESSURE TRANSDUCER
M1	CS	— CURRENT SENSOR
T4	DHBL	— DEFROST HEATER - BOTTOM LEFT
T4	DHBR	— DEFROST HEATER - BOTTOM RIGHT
T4	DHTL	— DEFROST HEATER - TOP LEFT
R4	DHTR	— DEFROST HEATER - TOP RIGHT
M15	DL	— DEFROST LIGHT (OPTION)
R4	DPH	— DRAIN PAN HEATER
J20	DPT	— DISCHARGE PRESSURE TRANSDUCER (OPTION)
C20	DTS	— DEFROST TEMPERATURE SENSOR
D1	DVM	— DUAL VOLTAGE MODULE (OPTIONAL)
E1	DVR	— DUAL VOLTAGE RECEPTACLE (OPTIONAL)
L12, M11, P8	EF	— EVAPORATOR FAN CONTACTOR (HIGH SPEED)
G11, H11, T9, T11	EM	— EVAPORATOR FAN MOTOR
M12, R9	ES	— EVAPORATOR FAN CONTACTOR (LOW SPEED)
C6, D18, E18, G5	F	— FUSE
	FLA	— FULL LOAD AMPS
H7	HPS	— HIGH PRESSURE SWITCH
M13, P4	HR	— HEATER CONTACTOR
F20	HS	— HUMIDITY SENSOR
F13	HTT	— HEAT TERMINATION THERMOSTAT
M20	IC	— INTERROGATOR CONNECTOR (OPTION)
E7, F11, H10, H11	IP	— INTERNAL PROTECTOR
M14	IRL	— IN-RANGE LIGHT (OPTION)
B16	KP	— KEYPAD CONNECTOR
E16	MDS	— MANUAL DEFROST SWITCH
D20, L20, M20, P20	PR	— PROBE RECEPTACLE (USDA OPTION)
L6, L14, L16	RM	— REMOTE MONITORING RECEPTACLE (OPTION)
K20	RRS	— RETURN RECORDER SENSOR (OPTION)
B20	RTS	— RETURN TEMPERATURE SENSOR
L9, R2	SC	— COMPRESSOR CONTACTOR (SHORTING)
E20	SMV	— SUCTION MODULATION VALVE
H20	SPT	— SUCTION PRESSURE TRANSDUCER (OPTION)
K20	SRS	— SUPPLY RECORDER SENSOR (OPTION)
H15	SSV	— SUCTION SOLENOID VALVE
K4	ST	— START-STOP SWITCH
A20	STS	— SUPPLY TEMPERATURE SENSOR
K7	TC	— CONTROLLER RELAY (COOLING)
D5	TCC	— TRANSFRESH COMMUNICATIONS CONNECTOR (OPTION)
K8	TD	— CONTROLLER RELAY (LOW SPEED COMPRESSOR)
K11	TE	— CONTROLLER RELAY (HIGH SPEED EVAPORATOR FANS)
G5	TFC	— TRANSFRESH CONTROLLER (OPTION)
K13	TH	— CONTROLLER RELAY (HEATING)
K16	TI	— INRANGE RELAY
K14	TF	— DEFROST RELAY
K10	TN	— CONTROLLER RELAY (CONDENSER FAN)
D17, F15, G10, J7, } J10, J11, J13, M16 }	TP	— TEST POINT
M3	TR	— TRANSFORMER
D1	TRANS	— TRANSFORMER AUTO 230/460 (OPTION)
E5, F5	TRC	— TRANSFRESH REAR CONNECTOR (OPTION)
E15	TS	— CONTROLLER RELAY (SUCTION SOLENOID VALVE)
K9	TT	— CONTROLLER RELAY (COMPRESSOR SHORTING)
K12	TV	— CONTROLLER RELAY (LOW SPEED EVAPORATOR FANS)
E10	WP	— WATER PRESSURE SWITCH (OPTION)

**Figure 7-15. Electrical Schematic - See Model Chart
(Sheet 1 of 2)**



ARTWORK 69NT35-6408 REV - PLATE 69NT35-4447

TO REORDER SPECIFY: CTD P/N 69NT41-783-30

Figure 7-15. Electrical Schematic - See Model Chart (Sheet 2 of 2)

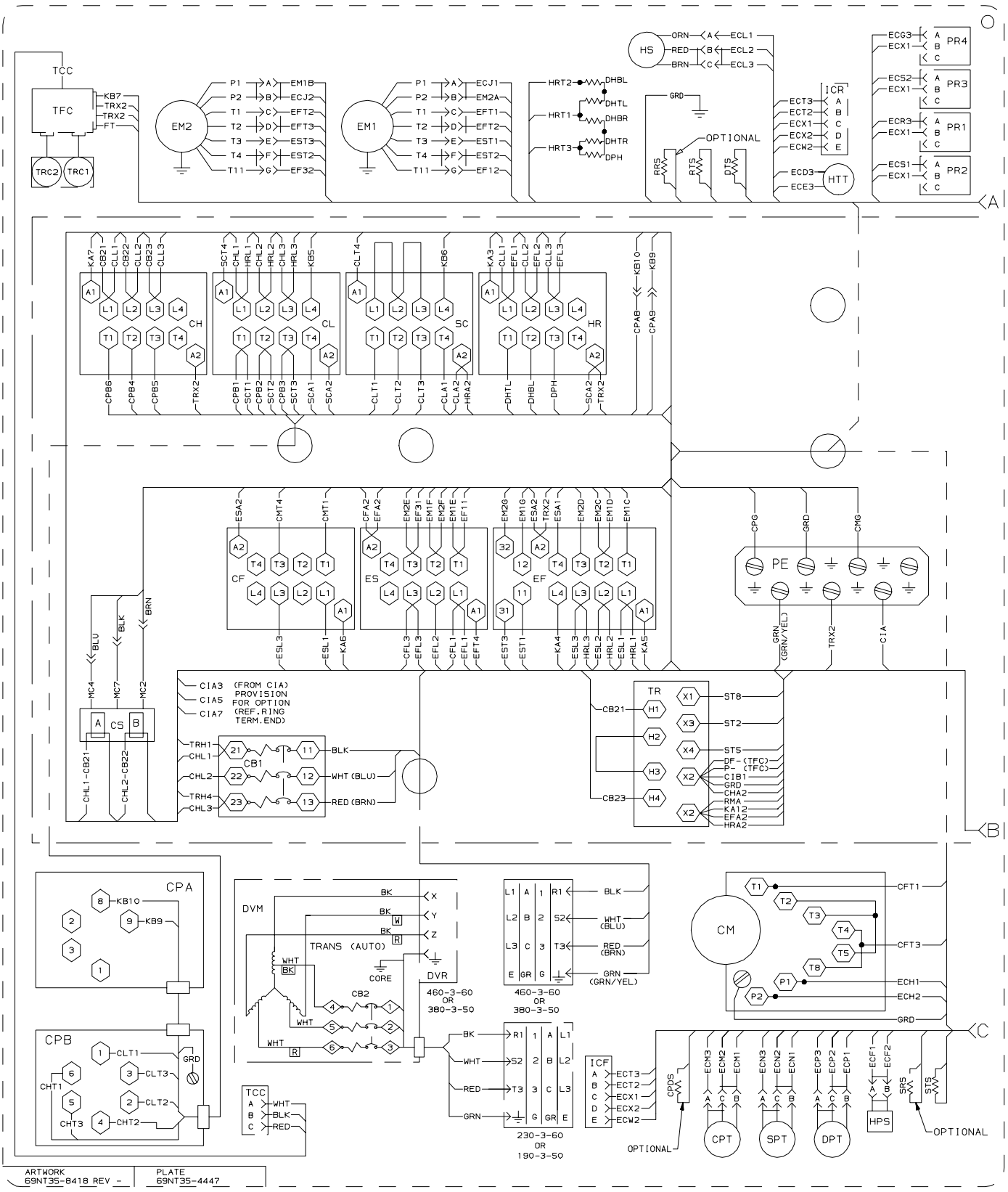
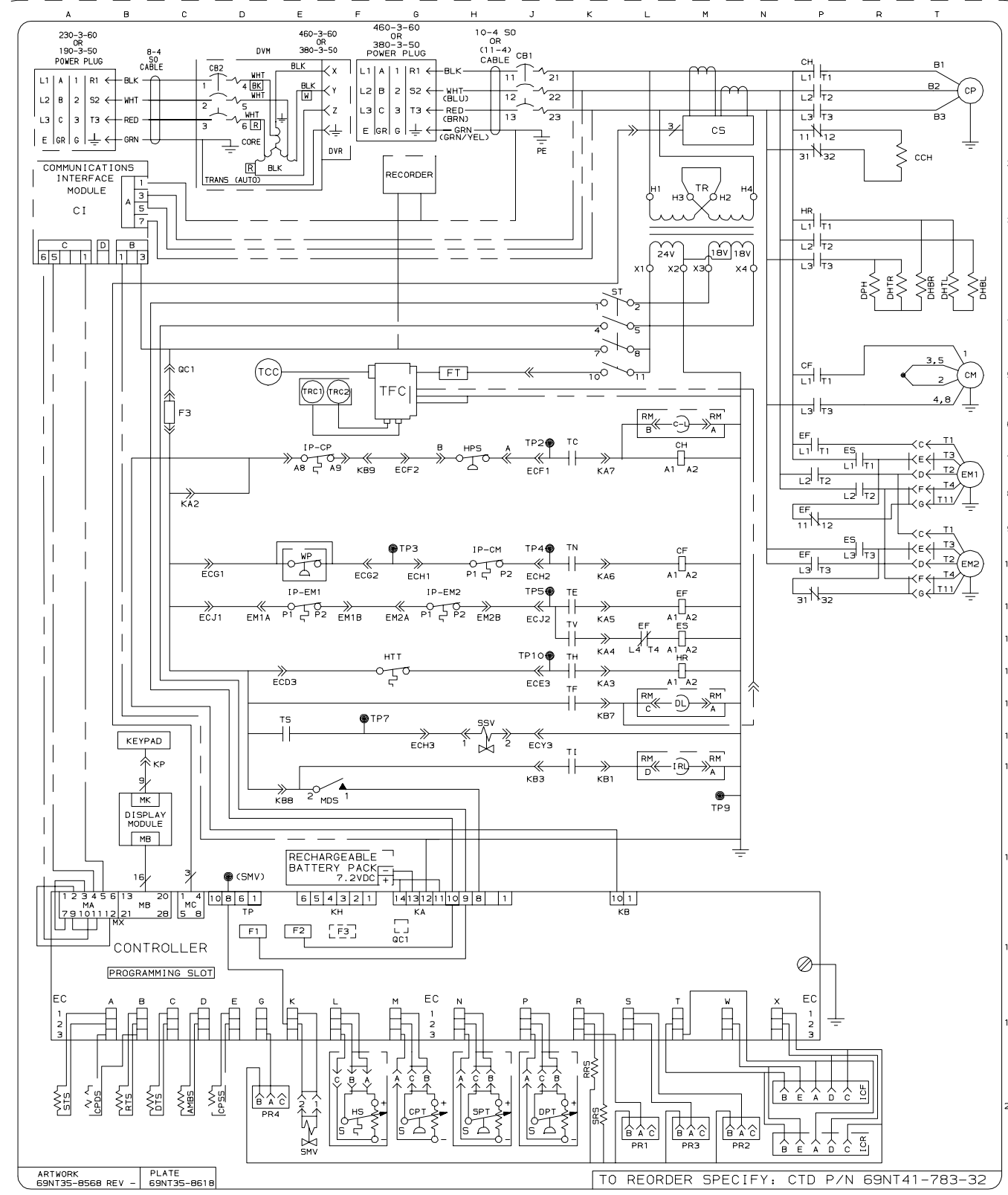


Figure 7-16. Electrical Wiring Diagram - See Model Chart (Sheet 1 of 2)

LEGEND		
<u>ZONE</u>	<u>SYMBOL</u>	<u>DESCRIPTION</u>
C19	AMBS	— AMBIENT SENSOR
J1	CB1	— CIRCUIT BREAKER 460V
D1	CB2	— CIRCUIT BREAKER 230V (AUTO TRANS OPTION)
R2	CCH	— COMPRESSOR CRANKCASE HEATER
M9,P5	CF	— CONDENSER FAN CONTACTOR
A3	CI	— COMMUNICATIONS INTERFACE MODULE (OPTION)
M7,P1	CH	— COMPRESSOR CONTACTOR
M6	C-L	— COOL LIGHT (OPTION)
H10,T5	CM	— CONDENSER FAN MOTOR
E7,T1	CP	— COMPRESSOR MOTOR
A20	CPDS	— COMPRESSOR DISCHARGE SENSOR (TEMP.)
C20	CPSS	— COMPRESSOR SUCTION SENSOR (TEMP.)
G20	CPT	— CONDENSER PRESSURE TRANSDUCER
M1	CS	— CURRENT SENSOR
T4	DHBL	— DEFROST HEATER - BOTTOM LEFT
T4	DHBR	— DEFROST HEATER - BOTTOM RIGHT
T4	DHTL	— DEFROST HEATER - TOP LEFT
R4	DHTR	— DEFROST HEATER - TOP RIGHT
M15	DL	— DEFROST LIGHT (OPTION)
R4	DPH	— DRAIN PAN HEATER
J20	DPT	— DISCHARGE PRESSURE TRANSDUCER (OPTION)
C20	DTS	— DEFROST TEMPERATURE SENSOR
D1	DVM	— DUAL VOLTAGE MODULE (OPTIONAL)
E1	DVR	— DUAL VOLTAGE RECEPTACLE (OPTIONAL)
L12,M11,P7	EF	— EVAPORATOR FAN CONTACTOR (HIGH SPEED)
G11,H11,T7,T10	EM	— EVAPORATOR FAN MOTOR
M12,R7	ES	— EVAPORATOR FAN CONTACTOR (LOW SPEED)
C6,D18,E18,G5	F	— FUSE
	FLA	— FULL LOAD AMPS
H7	HPS	— HIGH PRESSURE SWITCH
M13,P3	HR	— HEATER CONTACTOR
F20	HS	— HUMIDITY SENSOR
F13	HTT	— HEAT TERMINATION THERMOSTAT
M20	IC	— INTERROGATOR CONNECTOR (OPTION)
E7,F11,H10,H11	IP	— INTERNAL PROTECTOR
M14	IRL	— IN-RANGE LIGHT (OPTION)
B16	KP	— KEYPAD CONNECTOR
E16	MDS	— MANUAL DEFROST SWITCH
D20,L20,M20,P20	PR	— PROBE RECEPTACLE (USDA OPTION)
L6,L14,L16	RM	— REMOTE MONITORING RECEPTACLE (OPTION)
K20	RRS	— RETURN RECORDER SENSOR (OPTION)
B20	RTS	— RETURN TEMPERATURE SENSOR
E20	SMV	— SUCTION MODULATION VALVE
H20	SPT	— SUCTION PRESSURE TRANSDUCER (OPTION)
K20	SRS	— SUPPLY RECORDER SENSOR (OPTION)
H15	SSV	— SUCTION SOLENOID VALVE
K4	ST	— START-STOP SWITCH
A20	STS	— SUPPLY TEMPERATURE SENSOR
K7	TC	— CONTROLLER RELAY (COOLING)
D5	TCC	— TRANSFRESH COMMUNICATIONS CONNECTOR (OPTION)
K8	TD	— CONTROLLER RELAY (LOW SPEED COMPRESSOR)
K11	TE	— CONTROLLER RELAY (HIGH SPEED EVAPORATOR FANS)
G5	TFC	— TRANSFRESH CONTROLLER (OPTION)
K13	TH	— CONTROLLER RELAY (HEATING)
K16	TI	— INRANGE RELAY
K14	TF	— DEFROST RELAY
K10	TN	— CONTROLLER RELAY (CONDENSER FAN)
D17,F15,G10,J7,J10,J11,J13,M16	TP	— TEST POINT
M3	TR	— TRANSFORMER
D1	TRANS	— TRANSFORMER AUTO 230/460 (OPTION)
E5,F5	TRC	— TRANSFRESH REAR CONNECTOR (OPTION)
E15	TS	— CONTROLLER RELAY (SUCTION SOLENOID VALVE)
K9	TT	— CONTROLLER RELAY (COMPRESSOR SHORTING)
K12	TV	— CONTROLLER RELAY (LOW SPEED EVAPORATOR FANS)
E10	WP	— WATER PRESSURE SWITCH (OPTION)

**Figure 7-17. Electrical Schematic - See Model Chart
(Sheet 1 of 2)**



ARTWORK 69NT35-8568 REV - PLATE 69NT35-8618

TO REORDER SPECIFY: CTD P/N 69NT41-783-32

Figure 7-17. Electrical Schematic - See Model Chart (Sheet 2 of 2)

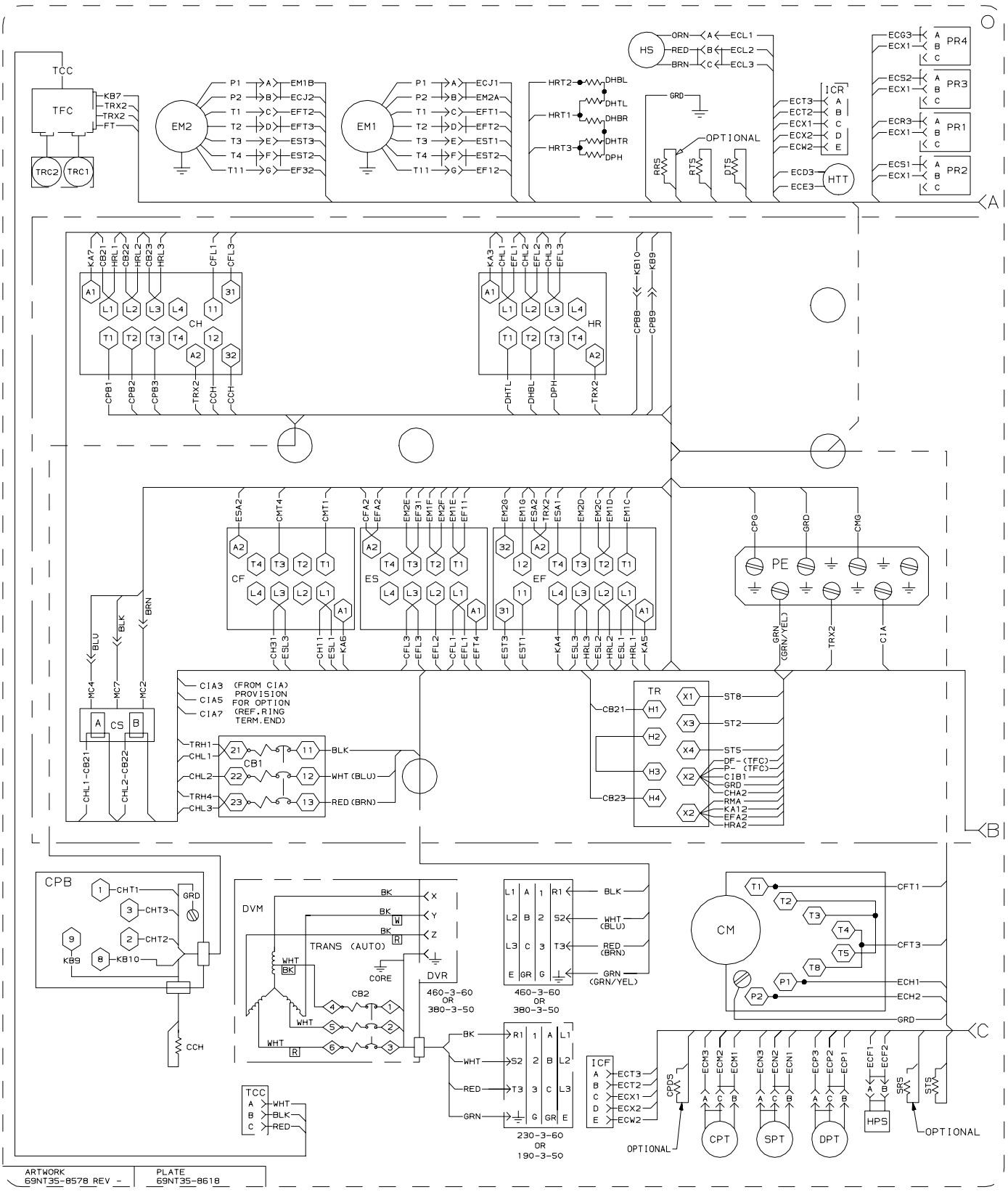


Figure 7-18. Electrical Wiring Diagram - See Model Chart (Sheet 1 of 2)

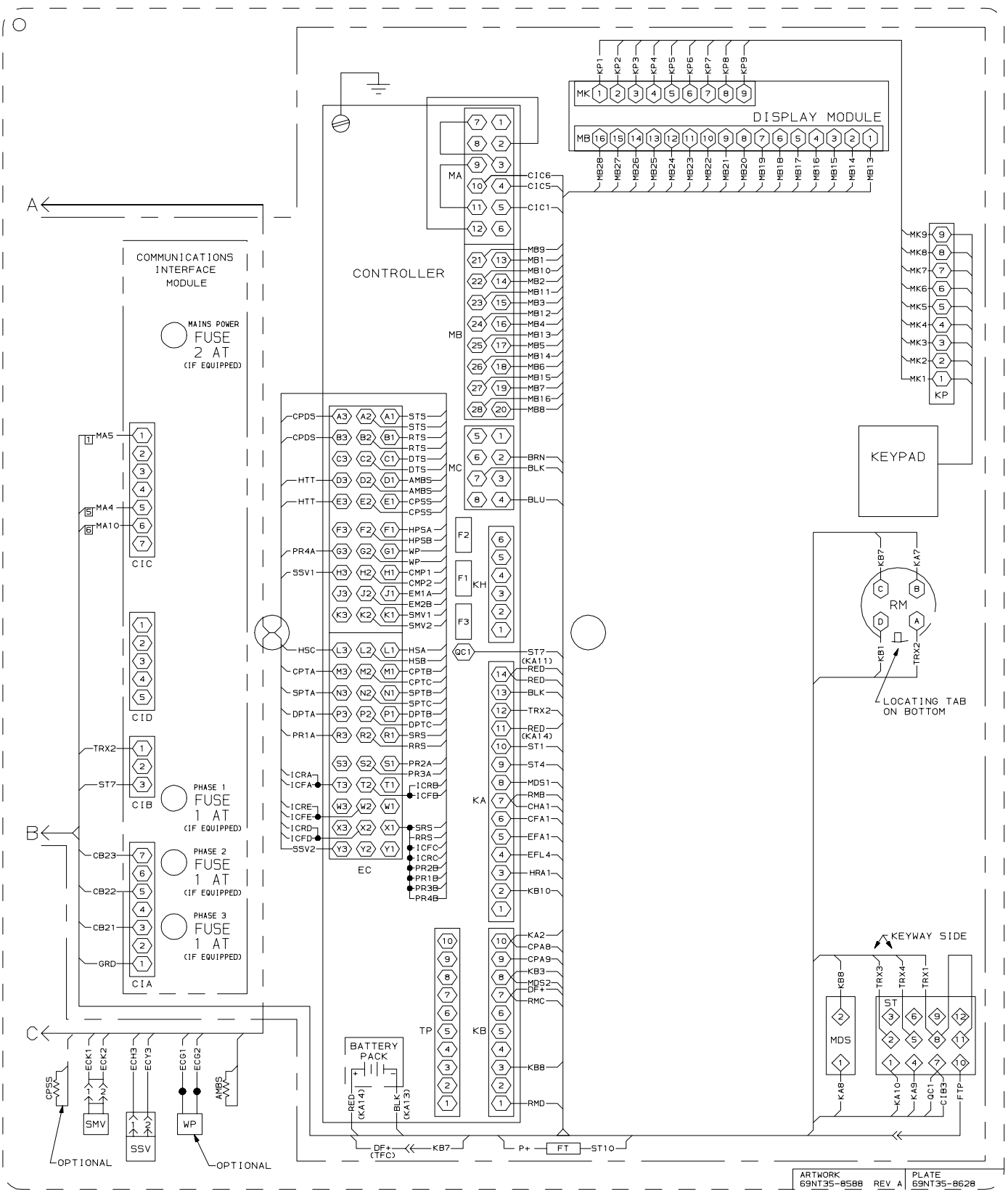


Figure 7-18. Electrical Wiring Diagram - See Model Chart (Sheet 2 of 2)

ARTWORK 69NT35-8588 REV A PLATE 69NT35-8628

LEGEND		
<u>ZONE</u>	<u>SYMBOL</u>	<u>DESCRIPTION</u>
C19	AMBS	— AMBIENT SENSOR
J1	CB1	— CIRCUIT BREAKER 460V
D1	CB2	— OPTIONAL CIRCUIT BREAKER 230V (DVM OPTION) TERMINAL BLOCK WHEN CB2 NOT PRESENT
M9, P4	CF	— CONDENSER FAN CONTACTOR
A3	CI	— COMMUNICATIONS INTERFACE MODULE (OPTION)
M7, P1	CH	— COMPRESSOR CONTACTOR
M6	C-L	— COOL LIGHT (OPTION)
H10, T4	CM	— CONDENSER FAN MOTOR
E7, T1	CP	— COMPRESSOR MOTOR
A20	CPDS	— COMPRESSOR DISCHARGE SENSOR (TEMP.)
C20	CPSS	— COMPRESSOR SUCTION SENSOR (TEMP.)
G20	CPT	— CONDENSER PRESSURE TRANSDUCER
G2	CR	— CHART RECORDER (OPTION)
M1	CS	— CURRENT SENSOR
T3	DHBL	— DEFROST HEATER - BOTTOM LEFT
T3	DHBR	— DEFROST HEATER - BOTTOM RIGHT
T3	DHTL	— DEFROST HEATER - TOP LEFT
R3	DHTR	— DEFROST HEATER - TOP RIGHT
M15	DL	— DEFROST LIGHT (OPTION)
R3	DPH	— DRAIN PAN HEATER
J20	DPT	— DISCHARGE PRESSURE TRANSDUCER (OPTION)
C20	DTS	— DEFROST TEMPERATURE SENSOR
D1	DVM	— DUAL VOLTAGE MODULE (OPTIONAL)
E1	DVR	— DUAL VOLTAGE RECEPTACLE (OPTIONAL)
L12, M11, P6	EF	— EVAPORATOR FAN CONTACTOR (HIGH SPEED)
G11, H11, T6, T9	EM	— EVAPORATOR FAN MOTOR
M12, R6	ES	— EVAPORATOR FAN CONTACTOR (LOW SPEED)
C6, D18, E18, G5	F	— FUSE
	FLA	— FULL LOAD AMPS
H7	HPS	— HIGH PRESSURE SWITCH
M13, P2	HR	— HEATER CONTACTOR
F20	HS	— HUMIDITY SENSOR
F13	HTT	— HEAT TERMINATION THERMOSTAT
M20	IC	— INTERROGATOR CONNECTOR (OPTION)
E7, F11, H10, H11	IP	— INTERNAL PROTECTOR
M14	IRL	— IN-RANGE LIGHT (OPTION)
B16	KP	— KEYPAD CONNECTOR
E16	MDS	— MANUAL DEFROST SWITCH
D20, L20, M20, P20	PR	— PROBE RECEPTACLE (USDA OPTION)
L6, L14, L16	RM	— REMOTE MONITORING RECEPTACLE (OPTION)
K20	RRS	— RETURN RECORDER SENSOR (OPTION)
B20	RTS	— RETURN TEMPERATURE SENSOR
E20	SMV	— SUCTION MODULATION VALVE
H20	SPT	— SUCTION PRESSURE TRANSDUCER (OPTION)
K20	SRS	— SUPPLY RECORDER SENSOR (OPTION)
H15	SSV	— SUCTION SOLENOID VALVE
K4	ST	— START-STOP SWITCH
A20	STS	— SUPPLY TEMPERATURE SENSOR
K7	TC	— CONTROLLER RELAY (COOLING)
D5	TCC	— TRANSFRESH COMMUNICATIONS CONNECTOR (OPTION)
K8	TD	— CONTROLLER RELAY (LOW SPEED COMPRESSOR)
K11	TE	— CONTROLLER RELAY (HIGH SPEED EVAPORATOR FANS)
G5	TFC	— TRANSFRESH CONTROLLER (OPTION)
K13	TH	— CONTROLLER RELAY (HEATING)
K16	TI	— INRANGE RELAY
K14	TF	— DEFROST RELAY
K10	TN	— CONTROLLER RELAY (CONDENSER FAN)
D17, F15, G10, J7, \	TP	— TEST POINT
J10, J11, J13, M16		
M3	TR	— TRANSFORMER
D1	TRANS	— TRANSFORMER AUTO 230/460 (OPTION)
E5, F5	TRC	— TRANSFRESH REAR CONNECTOR (OPTION)
E15	TS	— CONTROLLER RELAY (SUCTION SOLENOID VALVE)
K9	TT	— CONTROLLER RELAY (COMPRESSOR SHORTING)
K12	TV	— CONTROLLER RELAY (LOW SPEED EVAPORATOR FANS)
E10	WP	— WATER PRESSURE SWITCH (OPTION)

**Figure 7-19. Electrical Schematic - See Model Chart
(Sheet 1 of 2)**

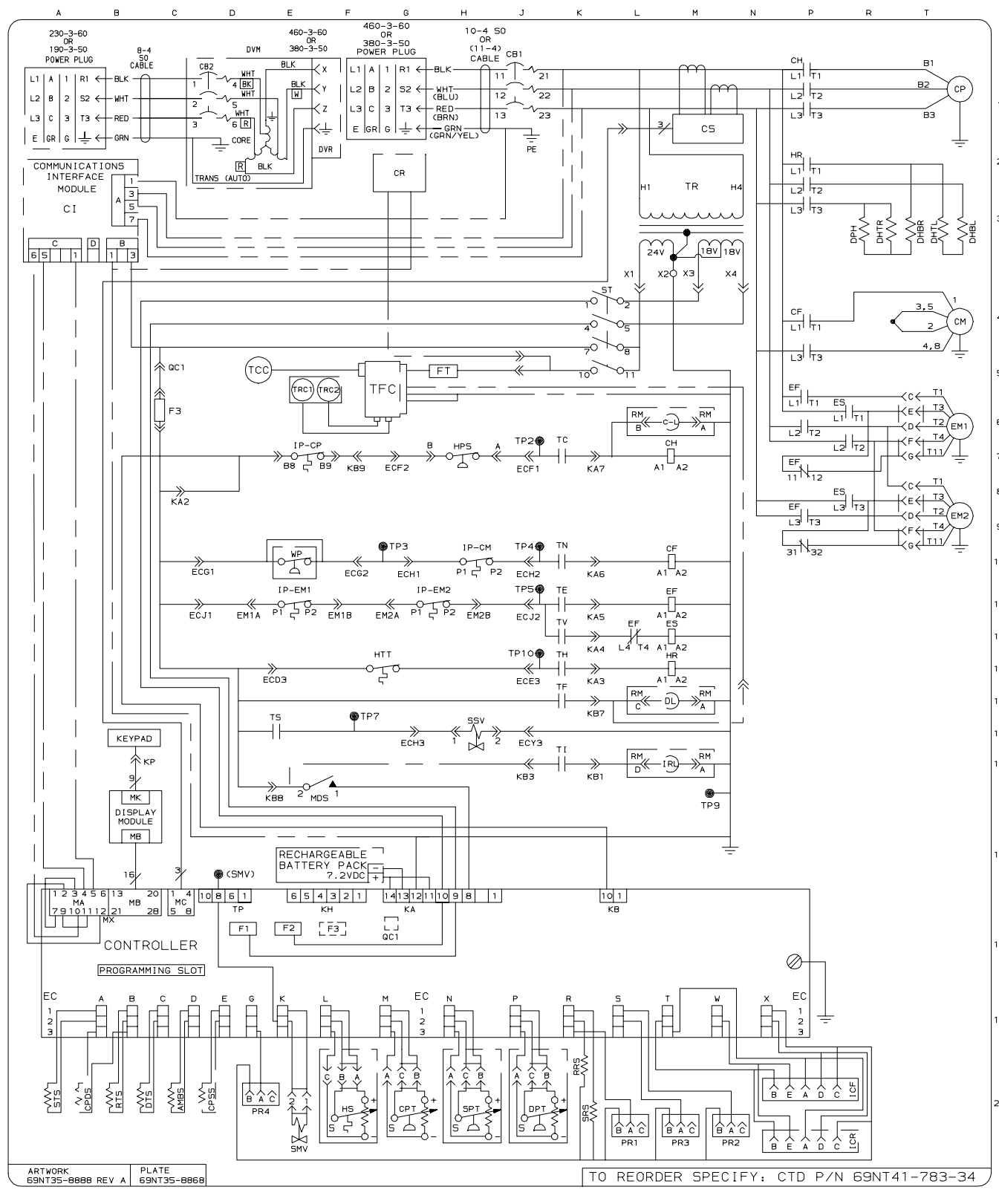


Figure 7-19. Electrical Schematic - See Model Chart (Sheet 2 of 2)

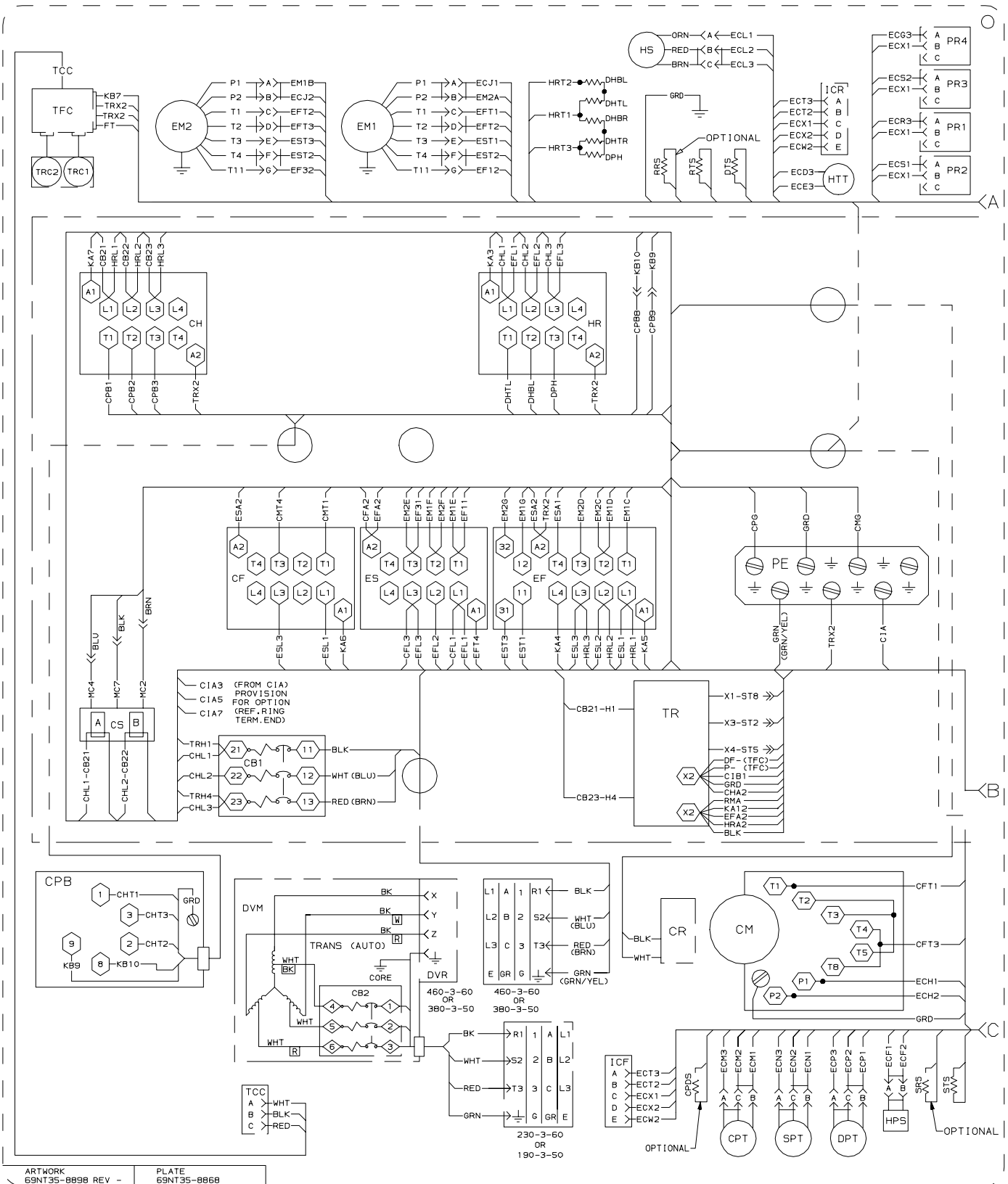
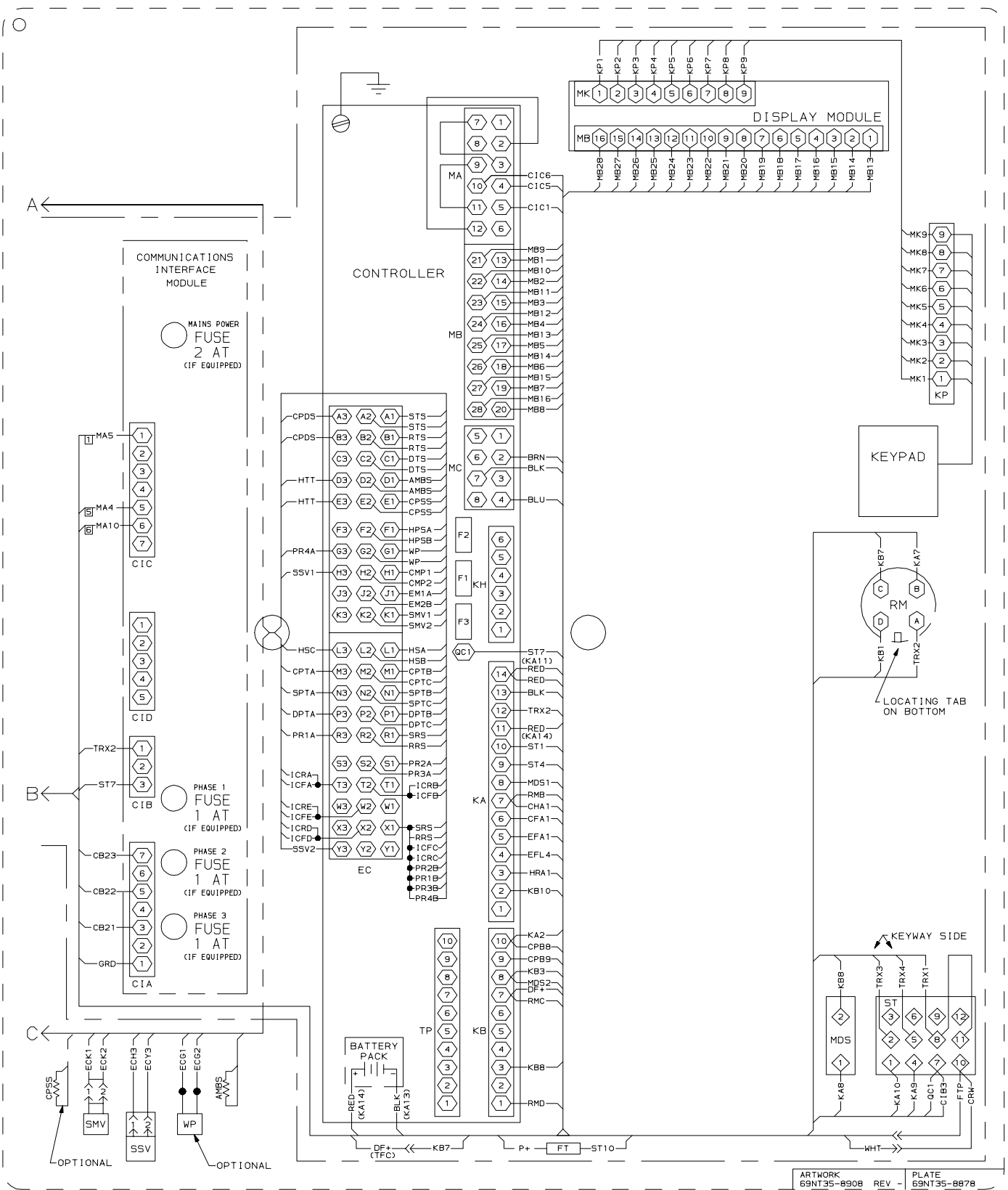


Figure 7-20. Electrical Wiring Diagram - See Model Chart (Sheet 1 of 2)



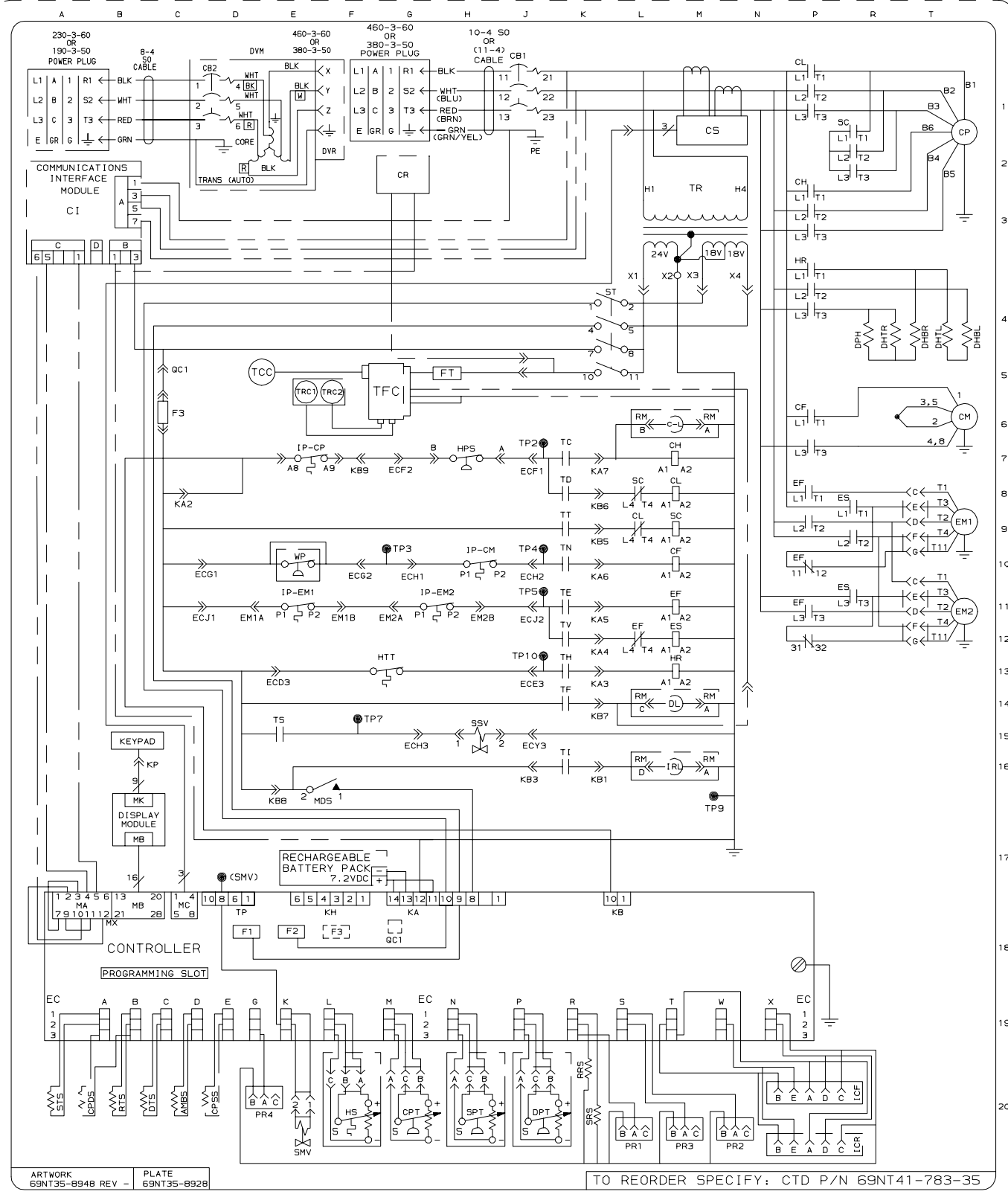
ARTWORK 69NT35-8908 REV - PLATE 69NT35-8878

Figure 7-20. Electrical Wiring Diagram - See Model Chart (Sheet 2 of 2)

LEGEND

<u>ZONE</u>	<u>SYMBOL</u>	<u>DESCRIPTION</u>
C19	AMBS	— AMBIENT SENSOR
J1	CB1	— CIRCUIT BREAKER 460V
D1	CB2	— OPTIONAL CIRCUIT BREAKER 230V (DVM OPTION) TERMINAL BLOCK WHEN CB2 NOT PRESENT
M9, P6	CF	— CONDENSER FAN CONTACTOR
A3	C1	— COMMUNICATIONS INTERFACE MODULE (OPTION)
M7, P1	CH	— COMPRESSOR CONTACTOR (HIGH SPEED)
M6	C-L	— COOL LIGHT (OPTION)
L9, M8, P3	CL	— COMPRESSOR CONTACTOR (LOW SPEED)
H10, T6	CM	— CONDENSER FAN MOTOR
E7, T1	CP	— COMPRESSOR MOTOR
A20	CPDS	— COMPRESSOR DISCHARGE SENSOR (TEMP.)
C20	CPSS	— COMPRESSOR SUCTION SENSOR (TEMP.)
G20	CPT	— CONDENSER PRESSURE TRANSDUCER
G2	CR	— CHART RECORDER (OPTION)
M1	CS	— CURRENT SENSOR
T4	DHBL	— DEFROST HEATER - BOTTOM LEFT
T4	DHBR	— DEFROST HEATER - BOTTOM RIGHT
T4	DHTL	— DEFROST HEATER - TOP LEFT
R4	DHTR	— DEFROST HEATER - TOP RIGHT
M15	DL	— DEFROST LIGHT (OPTION)
R4	DPH	— DRAIN PAN HEATER
J20	DPT	— DISCHARGE PRESSURE TRANSDUCER (OPTION)
C20	DTS	— DEFROST TEMPERATURE SENSOR
D1	DVM	— DUAL VOLTAGE MODULE (OPTIONAL)
E1	DVR	— DUAL VOLTAGE RECEPTACLE (OPTIONAL)
L12, M11, P8	EF	— EVAPORATOR FAN CONTACTOR (HIGH SPEED)
G11, H11, T9, T11	EM	— EVAPORATOR FAN MOTOR
M12, R9	ES	— EVAPORATOR FAN CONTACTOR (LOW SPEED)
C6, D18, E18, G5	F	— FUSE
H7	FLA	— FULL LOAD AMPS
M13, P4	HPS	— HIGH PRESSURE SWITCH
F20	HR	— HEATER CONTACTOR
F13	HS	— HUMIDITY SENSOR
M20	HTT	— HEAT TERMINATION THERMOSTAT
E7, F11, H10, H11	HTT	— HEAT TERMINATION THERMOSTAT
M14	IC	— INTERROGATOR CONNECTOR (OPTION)
B16	IP	— INTERNAL PROTECTOR
E16	IRL	— IN-RANGE LIGHT (OPTION)
D20, L20, M20, P20	KP	— KEYPAD CONNECTOR
L6, L14, L16	MDS	— MANUAL DEFROST SWITCH
K20	PR	— PROBE RECEPTACLE (USDA OPTION)
B20	RM	— REMOTE MONITORING RECEPTACLE (OPTION)
L9, R2	RMS	— RETURN RECORDER SENSOR (OPTION)
E20	RTS	— RETURN TEMPERATURE SENSOR
H20	SC	— COMPRESSOR CONTACTOR (SHORTING)
K20	SMV	— SUCTION MODULATION VALVE
H15	SPT	— SUCTION PRESSURE TRANSDUCER (OPTION)
K4	SRS	— SUPPLY RECORDER SENSOR (OPTION)
A20	SSV	— SUCTION SOLENOID VALVE
K7	ST	— START-STOP SWITCH
D5	STS	— SUPPLY TEMPERATURE SENSOR
K8	TC	— CONTROLLER RELAY (COOLING)
K11	TCC	— TRANSFRESH COMMUNICATIONS CONNECTOR (OPTION)
G5	TD	— CONTROLLER RELAY (LOW SPEED COMPRESSOR)
K13	TE	— CONTROLLER RELAY (HIGH SPEED EVAPORATOR FANS)
K16	TFC	— TRANSFRESH CONTROLLER (OPTION)
K14	TH	— CONTROLLER RELAY (HEATING)
K10	TI	— INRANGE RELAY
D17, F15, G10, J7, } J10, J11, J13, M16 }	TF	— DEFROST RELAY
M3	TN	— CONTROLLER RELAY (CONDENSER FAN)
D1	TP	— TEST POINT
E5, F5	TR	— TRANSFORMER
E15	TRANS	— TRANSFORMER AUTO 230/460 (OPTION)
K9	TRC	— TRANSFRESH REAR CONNECTOR (OPTION)
K12	TS	— CONTROLLER RELAY (SUCTION SOLENOID VALVE)
E10	TT	— CONTROLLER RELAY (COMPRESSOR SHORTING)
	TV	— CONTROLLER RELAY (LOW SPEED EVAPORATOR FANS)
	WP	— WATER PRESSURE SWITCH (OPTION)

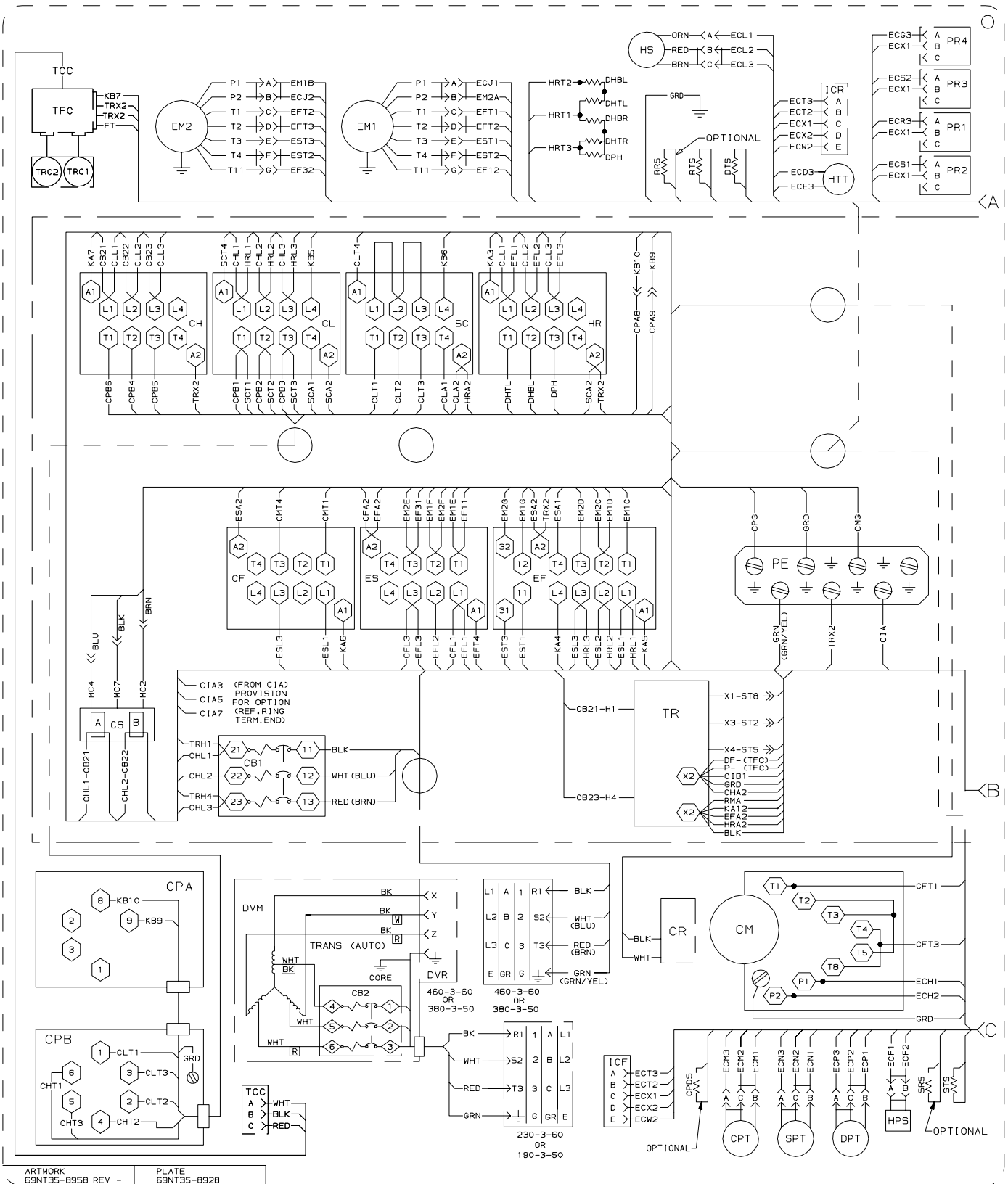
**Figure 7-21. Electrical Schematic - See Model Chart
(Sheet 1 of 2)**



ARTWORK 69NT35-8948 REV - PLATE 69NT35-8928

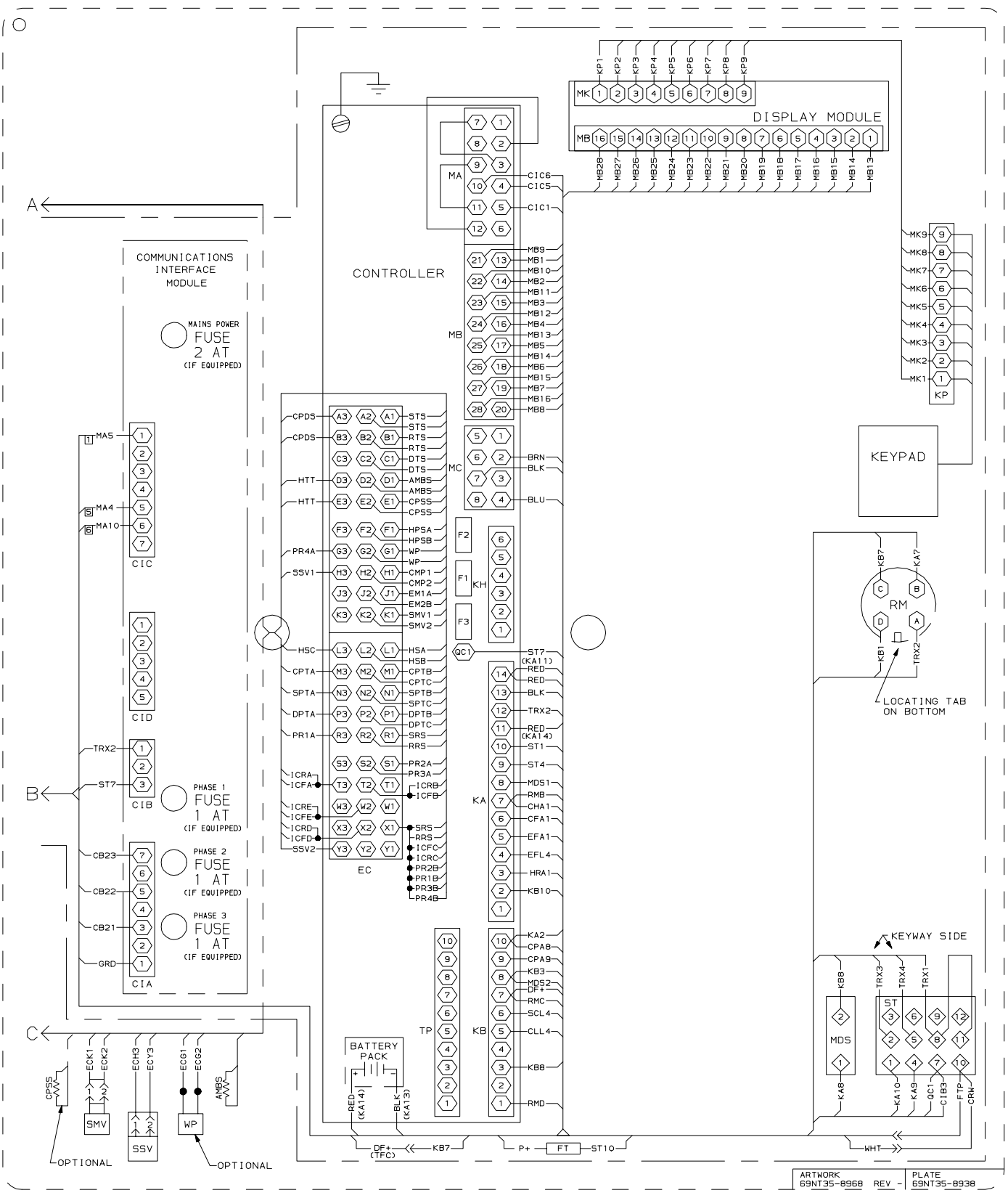
TO REORDER SPECIFY: CTD P/N 69NT41-783-35

Figure 7-21. Electrical Schematic - See Model Chart (Sheet 2 of 2)



ARTWORK 69NT35-8958 REV - PLATE 69NT35-8928

Figure 7-22. Electrical Wiring Diagram - See Model Chart (Sheet 1 of 2)

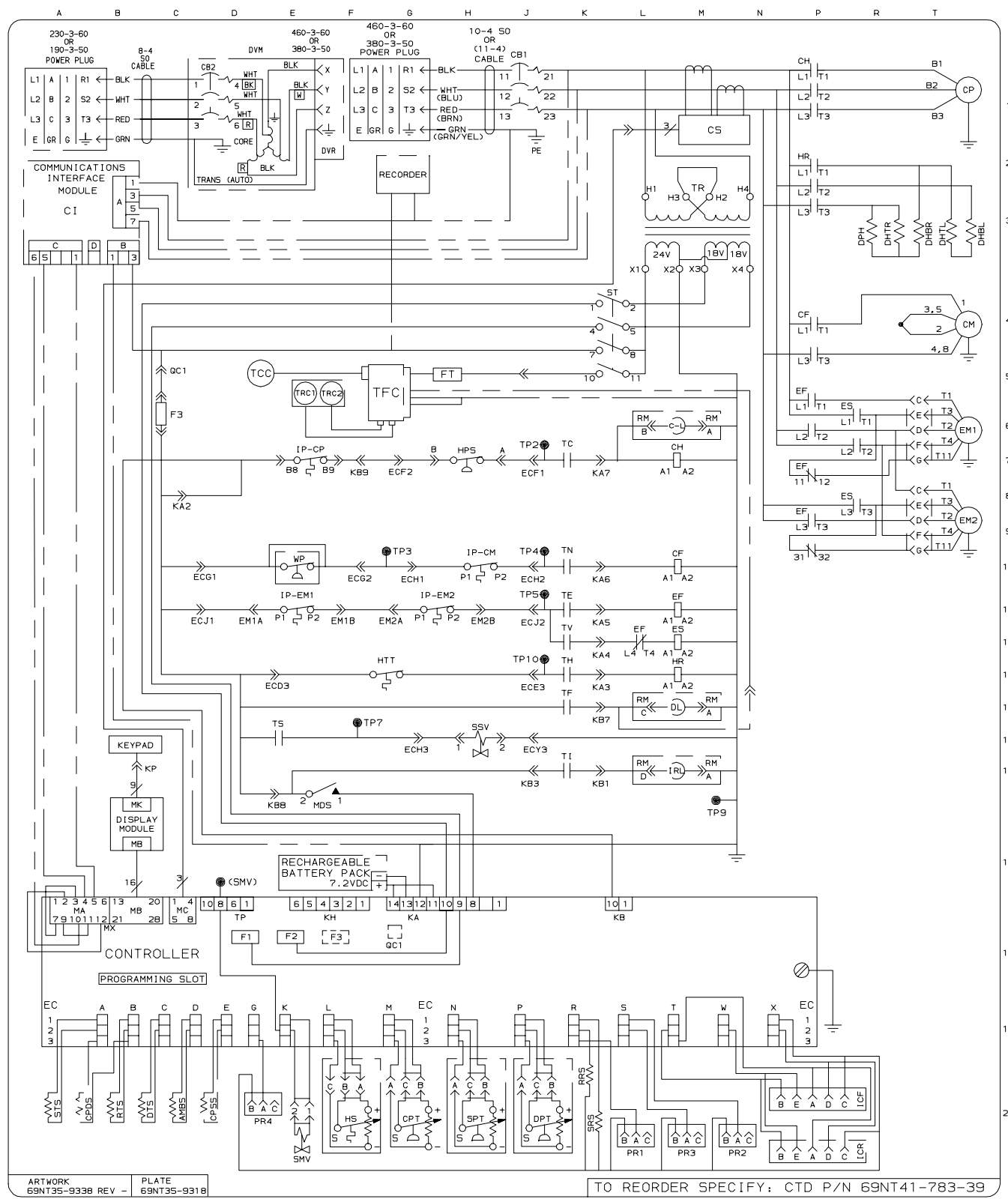


ARTWORK 69NT35-8968 REV - PLATE 69NT35-8938

Figure 7-22. Electrical Wiring Diagram - See Model Chart (Sheet 2 of 2)

LEGEND		
<u>ZONE</u>	<u>SYMBOL</u>	<u>DESCRIPTION</u>
C19	AMBS	— AMBIENT SENSOR
J1	CB1	— CIRCUIT BREAKER 460V
D1	CB2	— CIRCUIT BREAKER 230V (AUTO TRANS OPTION)
M9,P4	CF	— CONDENSER FAN CONTACTOR
A3	CI	— COMMUNICATIONS INTERFACE MODULE (OPTION)
M7,P1	CH	— COMPRESSOR CONTACTOR
M6	C-L	— COOL LIGHT (OPTION)
H10,T4	CM	— CONDENSER FAN MOTOR
E7,T1	CP	— COMPRESSOR MOTOR
A20	CPDS	— COMPRESSOR DISCHARGE SENSOR (TEMP.)
C20	CPSS	— COMPRESSOR SUCTION SENSOR (TEMP.)
G20	CPT	— CONDENSER PRESSURE TRANSDUCER
M1	CS	— CURRENT SENSOR
T3	DHBL	— DEFROST HEATER - BOTTOM LEFT
T3	DHBR	— DEFROST HEATER - BOTTOM RIGHT
T3	DHTL	— DEFROST HEATER - TOP LEFT
R3	DHTR	— DEFROST HEATER - TOP RIGHT
M15	DL	— DEFROST LIGHT (OPTION)
R3	DPH	— DRAIN PAN HEATER
J20	DPT	— DISCHARGE PRESSURE TRANSDUCER (OPTION)
C20	DTS	— DEFROST TEMPERATURE SENSOR
D1	DVM	— DUAL VOLTAGE MODULE (OPTIONAL)
E1	DVR	— DUAL VOLTAGE RECEPTACLE (OPTIONAL)
L12,M11,P6	EF	— EVAPORATOR FAN CONTACTOR (HIGH SPEED)
G11,H11,T6,T9	EM	— EVAPORATOR FAN MOTOR
M12,R6	ES	— EVAPORATOR FAN CONTACTOR (LOW SPEED)
C6,D18,E18,G5	F	— FUSE
	FLA	— FULL LOAD AMPS
H7	HPS	— HIGH PRESSURE SWITCH
M13,P2	HR	— HEATER CONTACTOR
F20	HS	— HUMIDITY SENSOR
F13	HTT	— HEAT TERMINATION THERMOSTAT
M20	IC	— INTERROGATOR CONNECTOR (OPTION)
E7,F11,H10,H11	IP	— INTERNAL PROTECTOR
M14	IRL	— IN-RANGE LIGHT (OPTION)
B16	KP	— KEYPAD CONNECTOR
E16	MDS	— MANUAL DEFROST SWITCH
D20,L20,M20,P20	PR	— PROBE RECEPTACLE (USDA OPTION)
L6,L14,L16	RM	— REMOTE MONITORING RECEPTACLE (OPTION)
K20	RRS	— RETURN RECORDER SENSOR (OPTION)
B20	RTS	— RETURN TEMPERATURE SENSOR
E20	SMV	— SUCTION MODULATION VALVE
H20	SPT	— SUCTION PRESSURE TRANSDUCER (OPTION)
K20	SRS	— SUPPLY RECORDER SENSOR (OPTION)
H15	SSV	— SUCTION SOLENOID VALVE
K4	ST	— START-STOP SWITCH
A20	STS	— SUPPLY TEMPERATURE SENSOR
K7	TC	— CONTROLLER RELAY (COOLING)
D5	TCC	— TRANSFRESH COMMUNICATIONS CONNECTOR (OPTION)
K8	TD	— CONTROLLER RELAY (LOW SPEED COMPRESSOR)
K11	TE	— CONTROLLER RELAY (HIGH SPEED EVAPORATOR FANS)
G5	TFC	— TRANSFRESH CONTROLLER (OPTION)
K13	TH	— CONTROLLER RELAY (HEATING)
K16	TI	— INRANGE RELAY
K14	TF	— DEFROST RELAY
K10	TN	— CONTROLLER RELAY (CONDENSER FAN)
D17,F15,G10,J7, } J10,J11,J13,M16 }	TP	— TEST POINT
M3	TR	— TRANSFORMER
D1	TRANS	— TRANSFORMER AUTO 230/460 (OPTION)
E5,F5	TRC	— TRANSFRESH REAR CONNECTOR (OPTION)
E15	TS	— CONTROLLER RELAY (SUCTION SOLENOID VALVE)
K9	TT	— CONTROLLER RELAY (COMPRESSOR SHORTING)
K12	TV	— CONTROLLER RELAY (LOW SPEED EVAPORATOR FANS)
E10	WP	— WATER PRESSURE SWITCH (OPTION)

**Figure 7-23. Electrical Schematic - See Model Chart
(Sheet 1 of 2)**



ARTWORK 69NT35-9338 REV - PLATE 69NT35-9318

TO REORDER SPECIFY: CTD P/N 69NT41-783-39

Figure 7-23. Electrical Schematic - See Model Chart (Sheet 2 of 2)

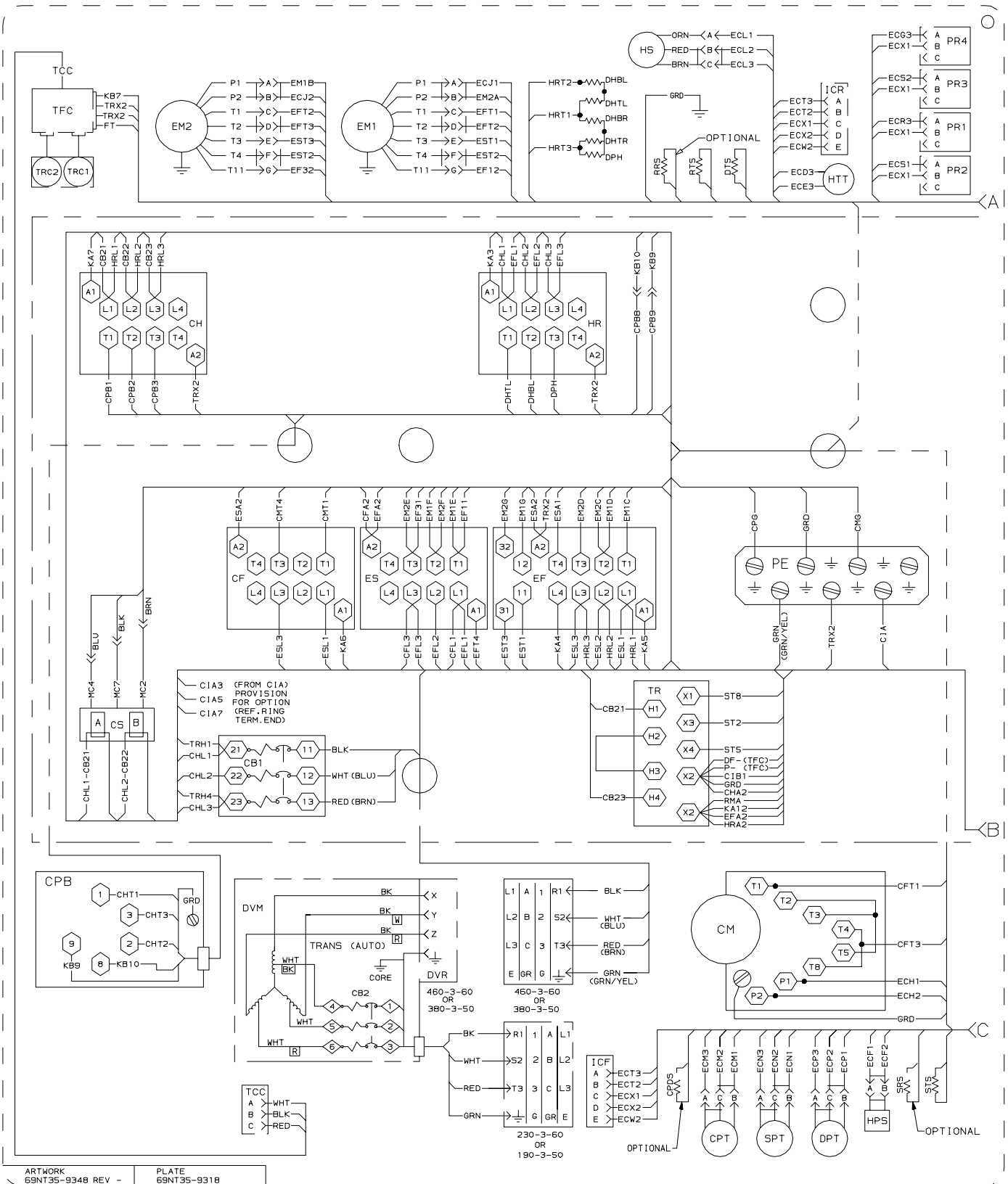
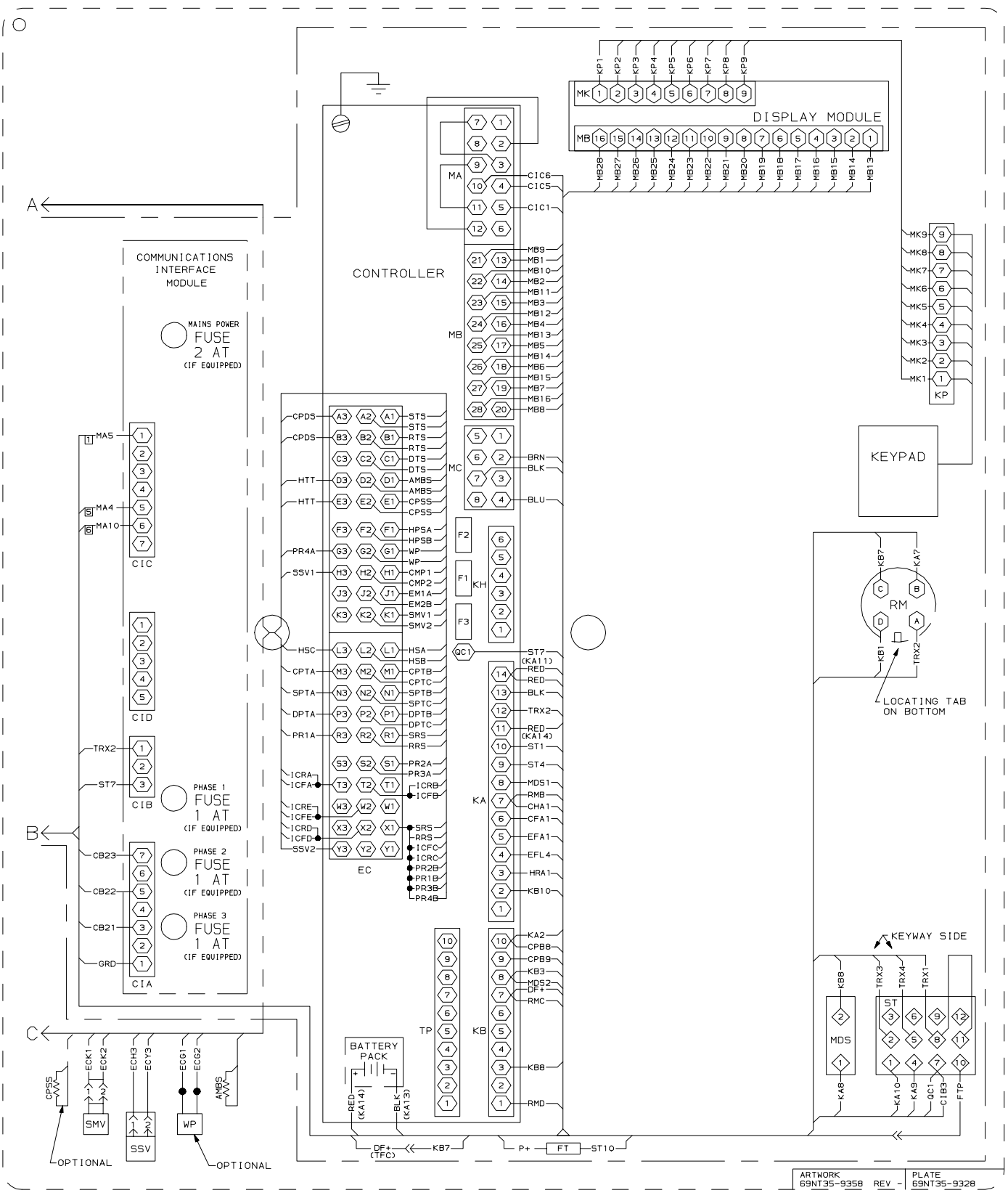


Figure 7-24. Electrical Wiring Diagram - See Model Chart (Sheet 1 of 2)

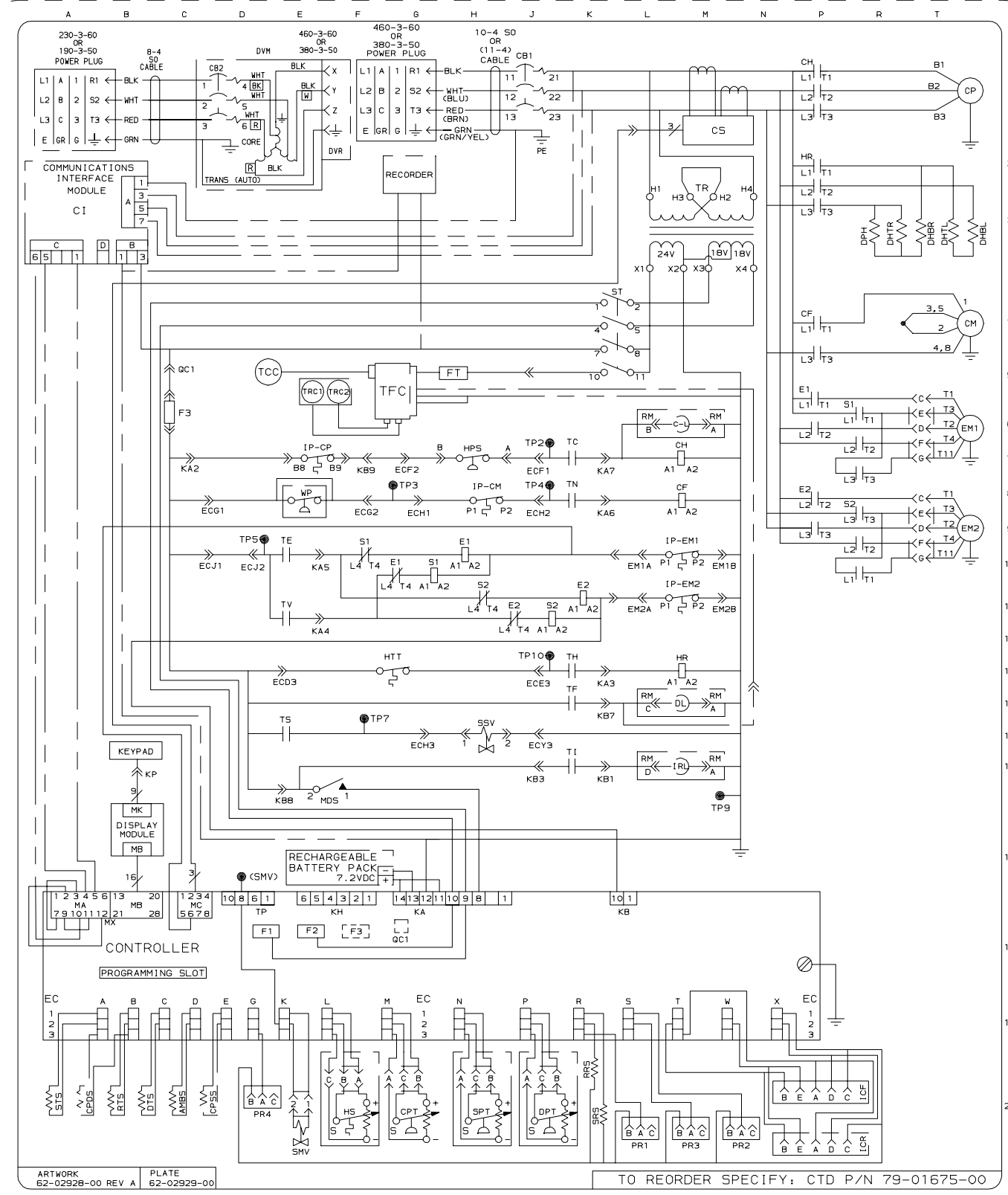


ARTWORK 69NT35-9358 REV - PLATE 69NT35-9328

Figure 7-24. Electrical Wiring Diagram - See Model Chart (Sheet 2 of 2)

LEGEND		
<u>ZONE</u>	<u>SYMBOL</u>	<u>DISCRIPTION</u>
C19	AMBS	— AMBIENT SENSOR
J1	CB1	— CIRCUIT BREAKER 460V
D1	CB2	— CIRCUIT BREAKER 230V (AUTO TRANS OPTION)
M8, P4	CF	— CONDENSER FAN CONTACTOR
A3	CI	— COMMUNICATIONS INTERFACE MODULE (OPTION)
M7, P1	CH	— COMPRESSOR CONTACTOR
M6	C-L	— COOL LIGHT (OPTION)
H8, T4	CM	— CONDENSER FAN MOTOR
E7, T1	CP	— COMPRESSOR MOTOR
A20	CPDS	— COMPRESSOR DISCHARGE SENSOR (TEMP.)
C20	CPSS	— COMPRESSOR SUCTION SENSOR (TEMP.)
G20	CPT	— CONDENSER PRESSURE TRANSDUCER
M1	CS	— CURRENT SENSOR
T3	DHBL	— DEFROST HEATER - BOTTOM LEFT
T3	DHBR	— DEFROST HEATER - BOTTOM RIGHT
T3	DHTL	— DEFROST HEATER - TOP LEFT
R3	DHTR	— DEFROST HEATER - TOP RIGHT
M15	DL	— DEFROST LIGHT (OPTION)
R3	DPH	— DRAIN PAN HEATER
J20	DPT	— DISCHARGE PRESSURE TRANSDUCER (OPTION)
C20	DTS	— DEFROST TEMPERATURE SENSOR
D1	DVM	— DUAL VOLTAGE MODULE (OPTIONAL)
E1	DVR	— DUAL VOLTAGE RECEPTACLE (OPTIONAL)
G10, H10, J11, K11, P6, P9	} E	— EVAPORATOR FAN CONTACTOR (HIGH SPEED)
M10, M11, T6, T9	EM	— EVAPORATOR FAN MOTOR
C6, D18, E18, G5	F	— FUSE
	FLA	— FULL LOAD AMPS
H7	HPS	— HIGH PRESSURE SWITCH
M13, P2	HR	— HEATER CONTACTOR
F20	HS	— HUMIDITY SENSOR
F13	HTT	— HEAT TERMINATION THERMOSTAT
M20	IC	— INTERROGATOR CONNECTOR (OPTION)
E7, H8, M10, M11	IP	— INTERNAL PROTECTOR
M14	IRL	— IN-RANGE LIGHT (OPTION)
B16	KP	— KEYPAD CONNECTOR
E16	MDS	— MANUAL DEFROST SWITCH
D20, L20, M20, P20	PR	— PROBE RECEPTACLE (USDA OPTION)
L6, L14, L16	RM	— REMOTE MONITORING RECEPTACLE (OPTION)
K20	RRS	— RETURN RECORDER SENSOR (OPTION)
B20	RTS	— RETURN TEMPERATURE SENSOR
F10, G10, H11, J11, R6, R9	} S	— EVAPORATOR FAN CONTACTOR (LOW SPEED)
E20	SMV	— SUCTION MODULATION VALVE
H20	SPT	— SUCTION PRESSURE TRANSDUCER (OPTION)
K20	SRS	— SUPPLY RECORDER SENSOR (OPTION)
H15	SSV	— SUCTION SOLENOID VALVE
K4	ST	— START-STOP SWITCH
A20	STS	— SUPPLY TEMPERATURE SENSOR
K7	TC	— CONTROLLER RELAY (COOLING)
D5	TCC	— TRANSFRESH COMMUNICATIONS CONNECTOR (OPTION)
K8	TD	— CONTROLLER RELAY (LOW SPEED COMPRESSOR)
E10	TE	— CONTROLLER RELAY (HIGH SPEED EVAPORATOR FANS)
G5	TFC	— TRANSFRESH CONTROLLER (OPTION)
K13	TH	— CONTROLLER RELAY (HEATING)
K16	TI	— INRANGE RELAY
K14	TF	— DEFROST RELAY
K8	TN	— CONTROLLER RELAY (CONDENSER FAN)
D9, D17, F15, G10, J7, J10, J13, M16	} TP	— TEST POINT
M3	TR	— TRANSFORMER
D1	TRANS	— TRANSFORMER AUTO 230/460 (OPTION)
E5, F5	TRC	— TRANSFRESH REAR CONNECTOR (OPTION)
E15	TS	— CONTROLLER RELAY (SUCTION SOLENOID VALVE)
K9	TT	— CONTROLLER RELAY (COMPRESSOR SHORTING)
E11	TV	— CONTROLLER RELAY (LOW SPEED EVAPORATOR FANS)
E8	WP	— WATER PRESSURE SWITCH (OPTION)

**Figure 7-25. Electrical Schematic - See Model Chart
(Sheet 1 of 2)**



ARTWORK 62-02929-00 REV A PLATE 62-02929-00

TO REORDER SPECIFY: CTD P/N 79-01675-00

Figure 7-25. Electrical Schematic - See Model Chart (Sheet 2 of 2)

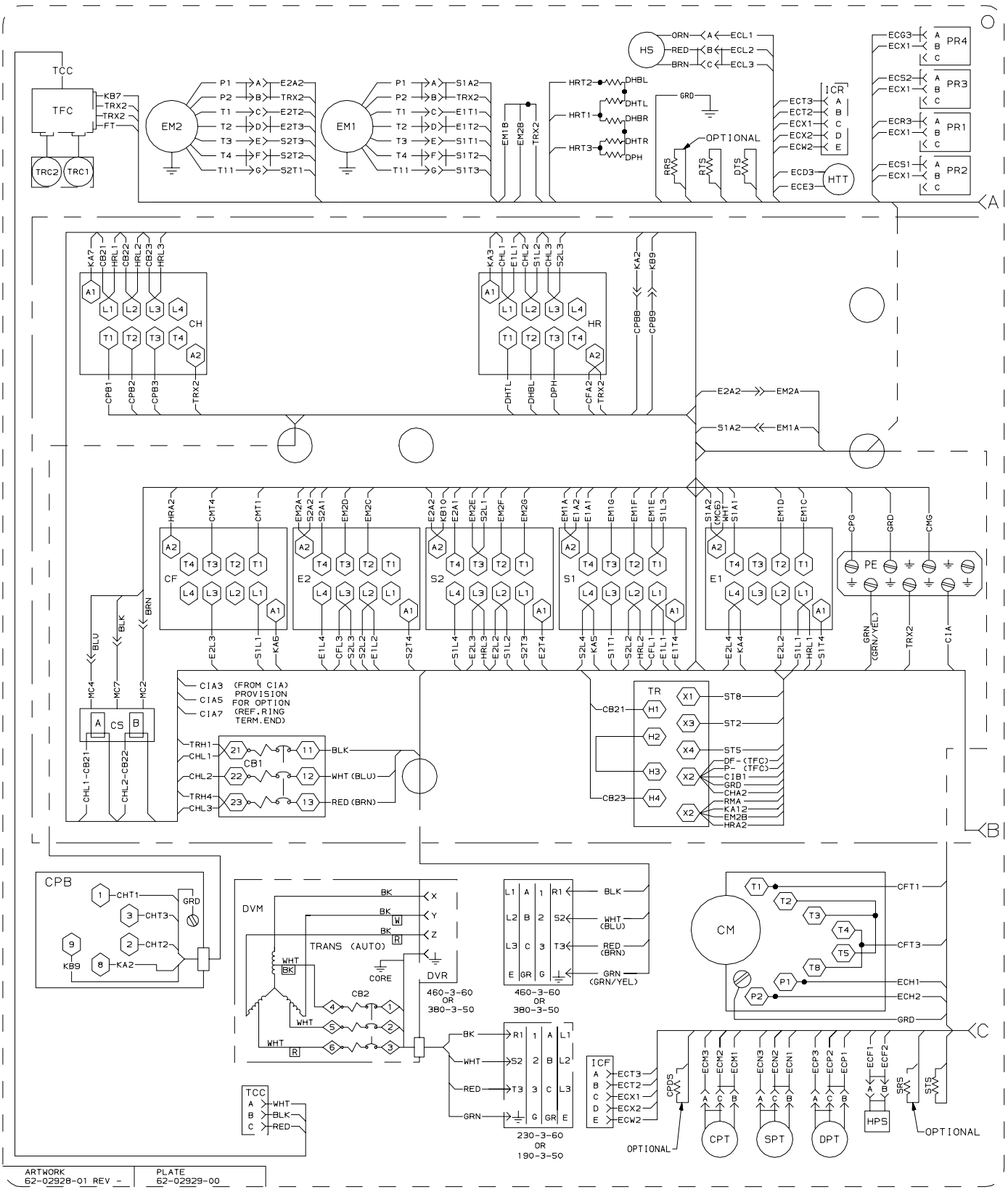
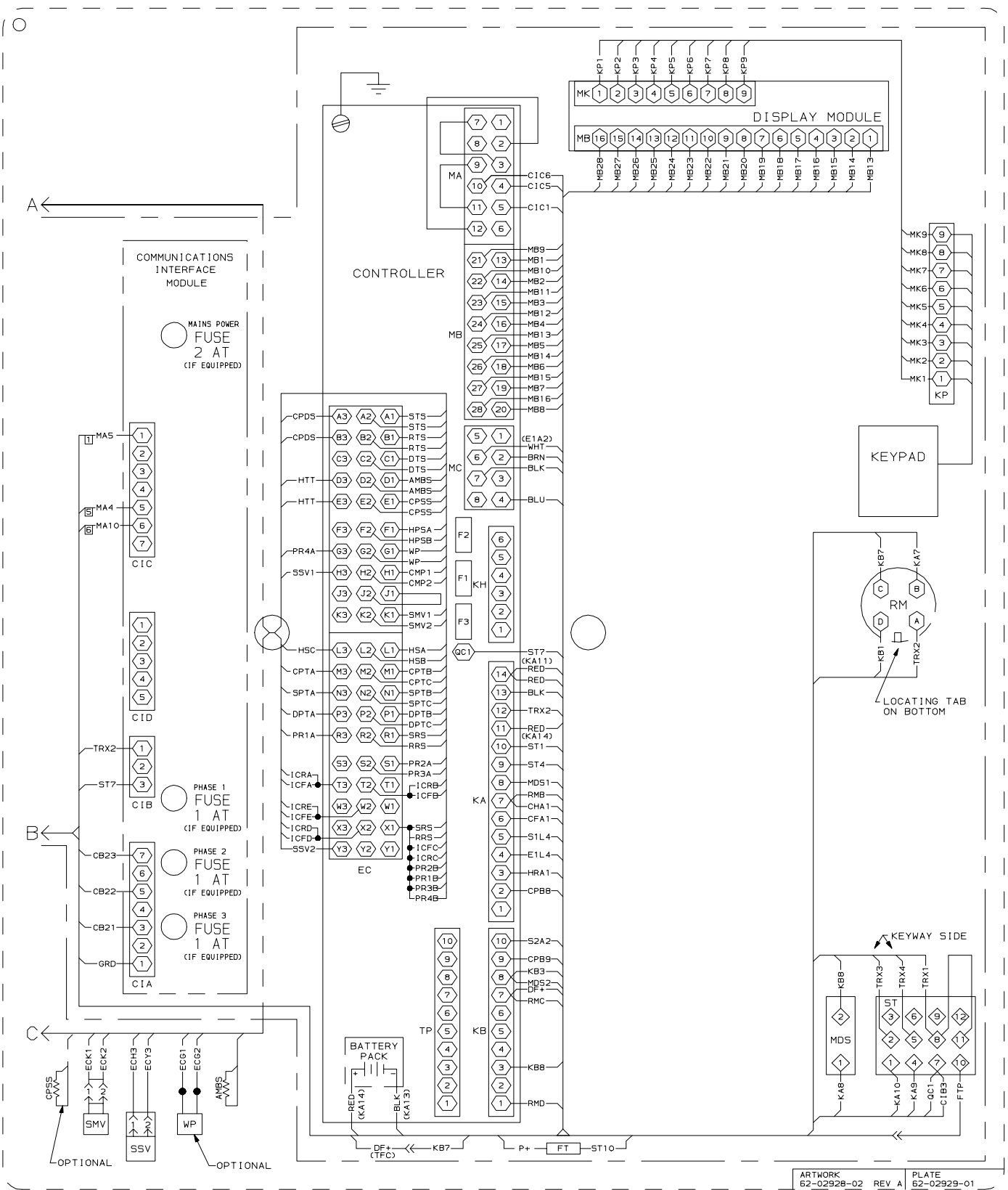


Figure 7-26. Electrical Wiring Diagram - See Model Chart (Sheet 1 of 2)

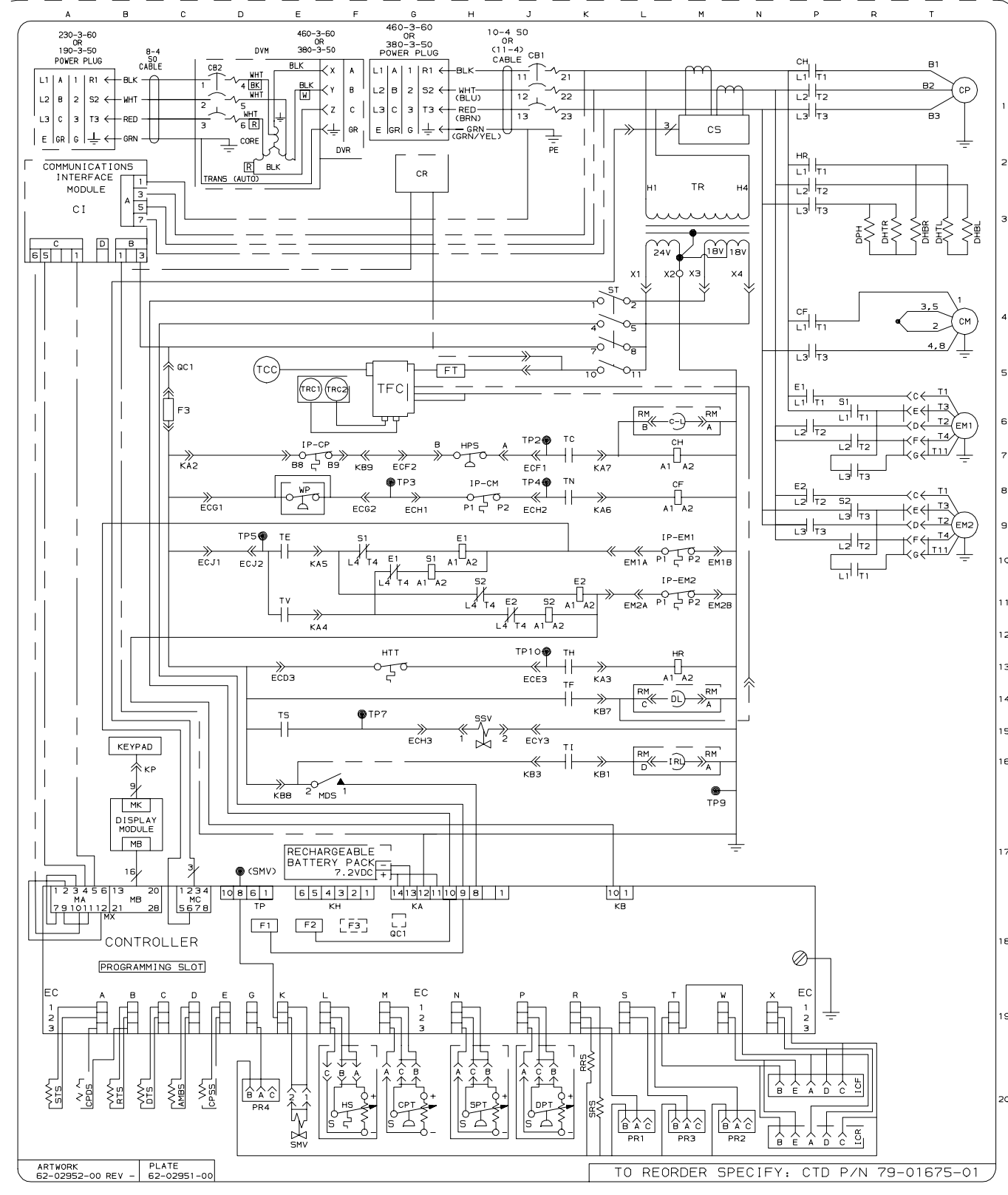


ARTWORK 62-02928-02 REV A PLATE 62-02929-01

Figure 7-26. Electrical Wiring Diagram - See Model Chart (Sheet 2 of 2)

<u>ZONE</u>	<u>SYMBOL</u>	<u>LEGEND</u> <u>DISCUPTION</u>
C19	AMBS	— AMBIENT SENSOR
J1	CB1	— CIRCUIT BREAKER 460V
D1	CB2	— CIRCUIT BREAKER 230V (AUTO TRANS OPTION)
M8, P4	CF	— CONDENSER FAN CONTACTOR
A3	CI	— COMMUNICATIONS INTERFACE MODULE (OPTION)
M7, P1	CH	— COMPRESSOR CONTACTOR
M6	C-L	— COOL LIGHT (OPTION)
H8, T4	CM	— CONDENSER FAN MOTOR
E7, T1	CP	— COMPRESSOR MOTOR
A20	CPDS	— COMPRESSOR DISCHARGE SENSOR (TEMP.)
C20	CPSS	— COMPRESSOR SUCTION SENSOR (TEMP.)
G20	CPT	— CONDENSER PRESSURE TRANSDUCER
G2	CR	— CHART RECORDER (OPTIONAL)
M1	CS	— CURRENT SENSOR
T3	DHBL	— DEFROST HEATER - BOTTOM LEFT
T3	DHBR	— DEFROST HEATER - BOTTOM RIGHT
T3	DHTL	— DEFROST HEATER - TOP LEFT
R3	DHTR	— DEFROST HEATER - TOP RIGHT
M15	DL	— DEFROST LIGHT (OPTION)
R3	DPH	— DRAIN PAN HEATER
J20	DPT	— DISCHARGE PRESSURE TRANSDUCER (OPTION)
C20	DTS	— DEFROST TEMPERATURE SENSOR
D1	DVM	— DUAL VOLTAGE MODULE (OPTIONAL)
E1	DVR	— DUAL VOLTAGE RECEPTACLE (OPTIONAL)
G10, H10, J11, K11, P6, P9	} E	— EVAPORATOR FAN CONTACTOR (HIGH SPEED)
M10, M11, T6, T9	EM	— EVAPORATOR FAN MOTOR
C6, D18, E18, G5	F	— FUSE
	FLA	— FULL LOAD AMPS
H7	HPS	— HIGH PRESSURE SWITCH
M13, P2	HR	— HEATER CONTACTOR
F20	HS	— HUMIDITY SENSOR
F13	HTT	— HEAT TERMINATION THERMOSTAT
M20	IC	— INTERROGATOR CONNECTOR (OPTION)
E7, H8, M10, M11	IP	— INTERNAL PROTECTOR
M14	IRL	— IN-RANGE LIGHT (OPTION)
B16	KP	— KEYPAD CONNECTOR
E16	MDS	— MANUAL DEFROST SWITCH
D20, L20, M20, P20	PR	— PROBE RECEPTACLE (USDA OPTION)
L6, L14, L16	RM	— REMOTE MONITORING RECEPTACLE (OPTION)
K20	RRS	— RETURN RECORDER SENSOR (OPTION)
B20	RTS	— RETURN TEMPERATURE SENSOR
F10, G10, H11, J11, R6, R9	} S	— EVAPORATOR FAN CONTACTOR (LOW SPEED)
E20	SMV	— SUCTION MODULATION VALVE
H20	SPT	— SUCTION PRESSURE TRANSDUCER (OPTION)
K20	SRS	— SUPPLY RECORDER SENSOR (OPTION)
H15	SSV	— SUCTION SOLENOID VALVE
K4	ST	— START-STOP SWITCH
A20	STS	— SUPPLY TEMPERATURE SENSOR
K7	TC	— CONTROLLER RELAY (COOLING)
D5	TCC	— TRANSFRESH COMMUNICATIONS CONNECTOR (OPTION)
K8	TD	— CONTROLLER RELAY (LOW SPEED COMPRESSOR)
E10	TE	— CONTROLLER RELAY (HIGH SPEED EVAPORATOR FANS)
G5	TFC	— TRANSFRESH CONTROLLER (OPTION)
K13	TH	— CONTROLLER RELAY (HEATING)
K16	TI	— INRANGE RELAY
K14	TF	— DEFROST RELAY
K8	TN	— CONTROLLER RELAY (CONDENSER FAN)
D9, D17, F15, G10, J7, J10, J13, M16	} TP	— TEST POINT
M3	TR	— TRANSFORMER
D1	TRANS	— TRANSFORMER AUTO 230/460 (OPTION)
E5, F5	TRC	— TRANSFRESH REAR CONNECTOR (OPTION)
E15	TS	— CONTROLLER RELAY (SUCTION SOLENOID VALVE)
K9	TT	— CONTROLLER RELAY (COMPRESSOR SHORTING)
E11	TV	— CONTROLLER RELAY (LOW SPEED EVAPORATOR FANS)
E8	WP	— WATER PRESSURE SWITCH (OPTION)

**Figure 7-27. Electrical Schematic - See Model Chart
(Sheet 1 of 2)**



ARTWORK 62-02952-00 REV - PLATE 62-02951-00

TO REORDER SPECIFY: CTD P/N 79-01675-01

Figure 7-27. Electrical Schematic - See Model Chart (Sheet 2 of 2)

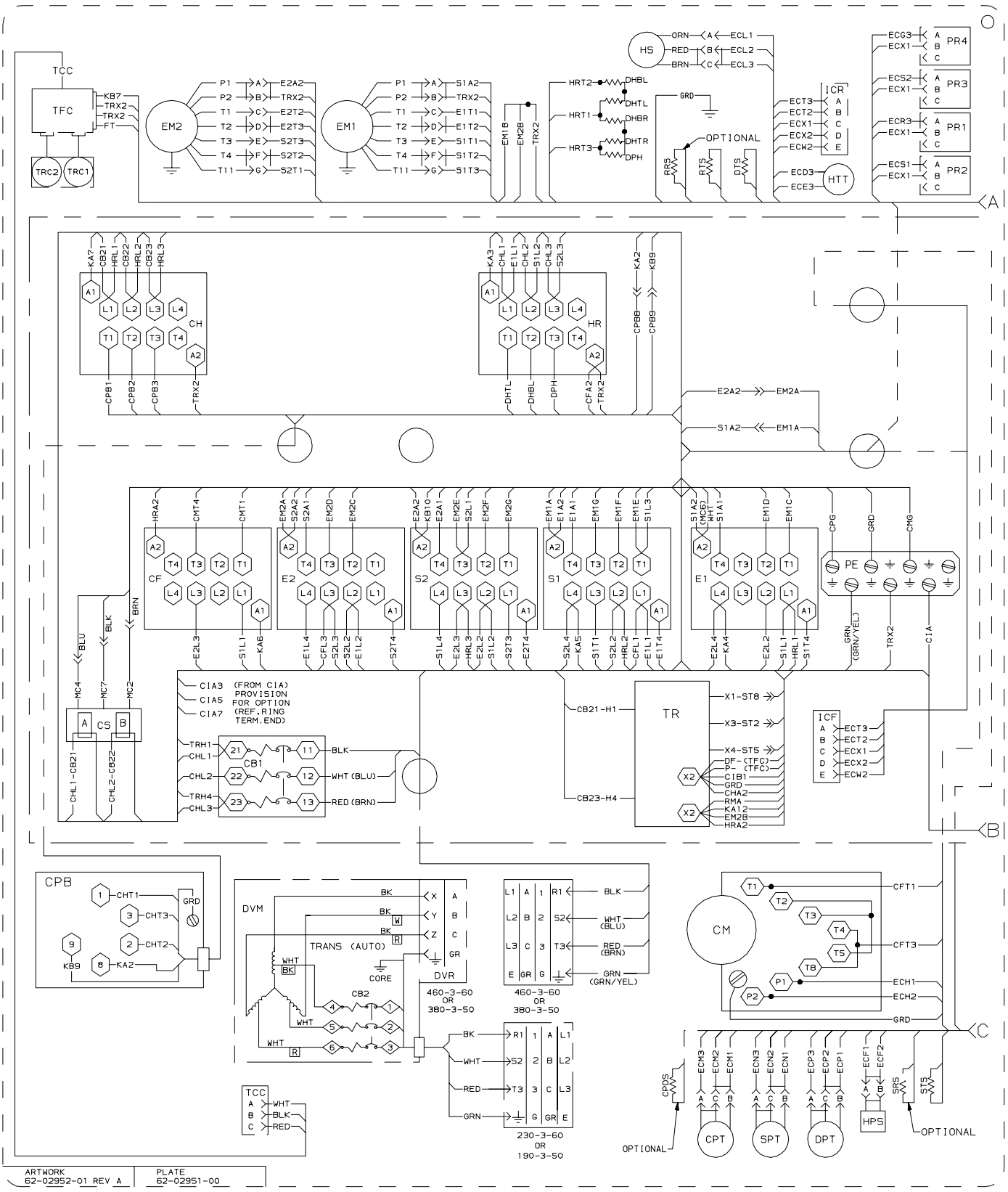
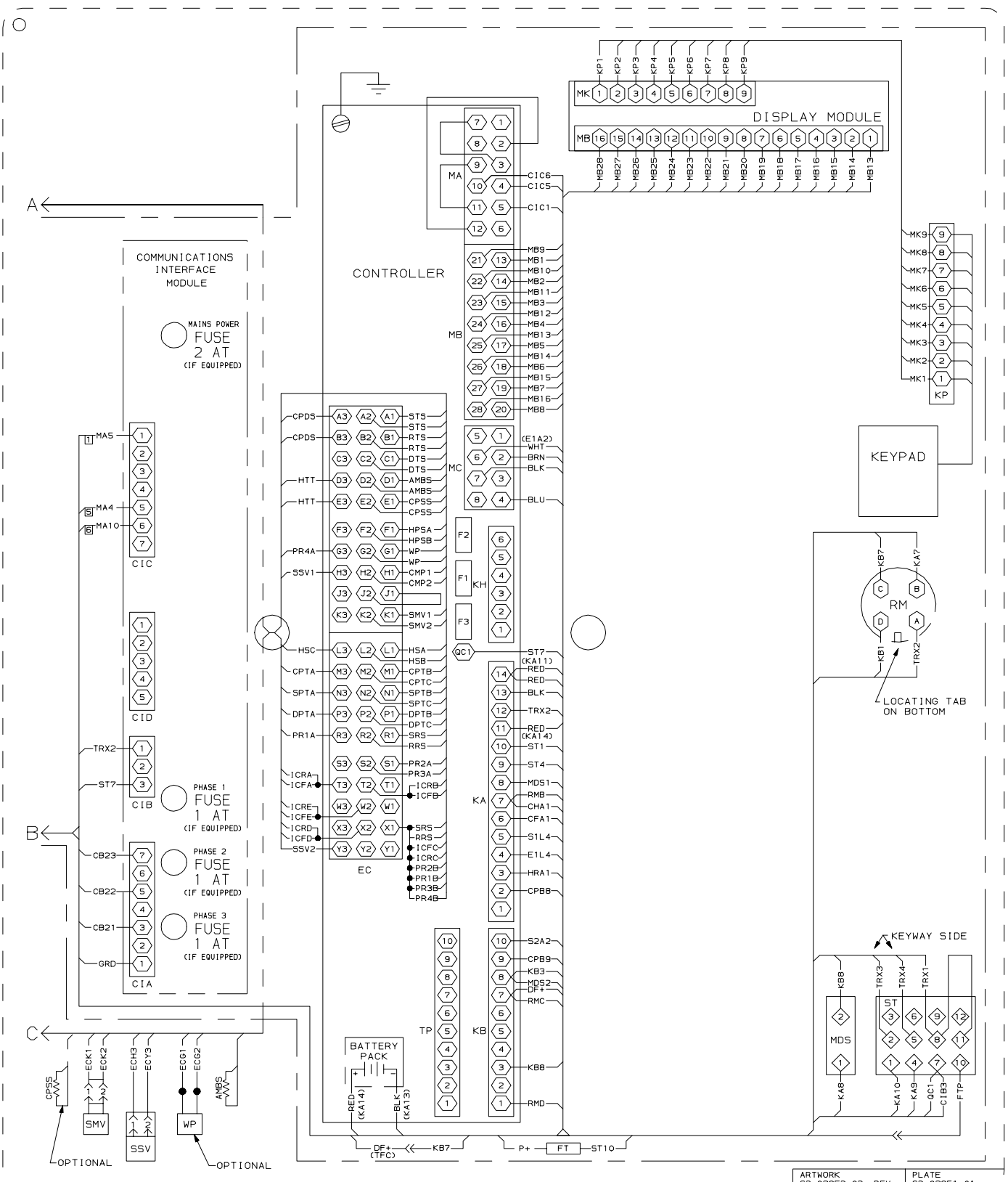


Figure 7-28. Electrical Wiring Diagram - See Model Chart (Sheet 1 of 2)

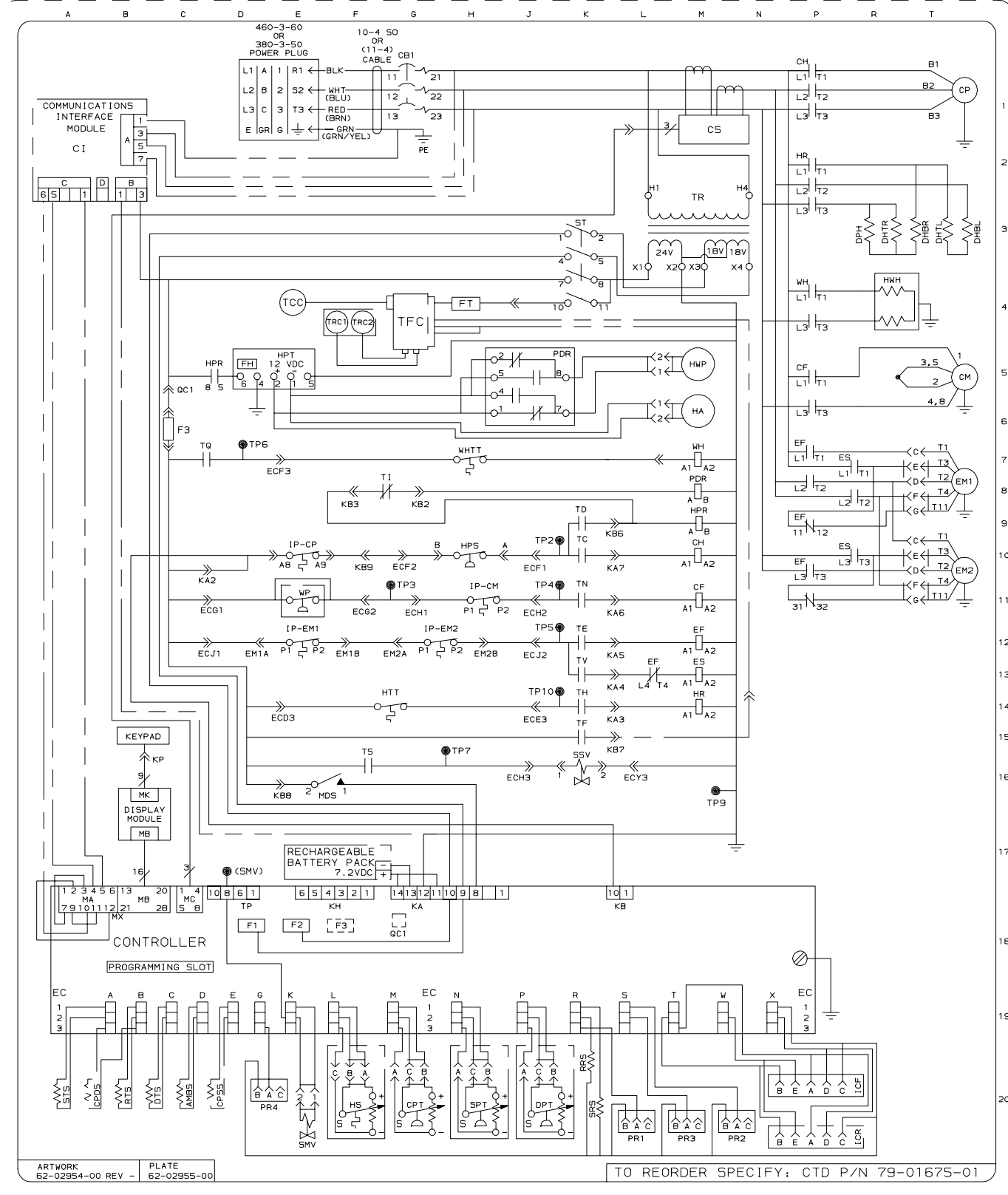


ARTWORK 62-02952-02 REV. PLATE 62-02951-01

Figure 7-28. Electrical Wiring Diagram - See Model Chart (Sheet 2 of 2)

<u>ZONE</u>	<u>SYMBOL</u>	<u>LEGEND</u> <u>DESCRIPTION</u>
C20	AMBS	— AMBIENT SENSOR
G1	CB1	— CIRCUIT BREAKER 460V
M11,P5	CF	— CONDENSER FAN CONTACTOR
M10,P1	CH	— COMPRESSOR CONTACTOR
A2	CI	— COMMUNICATIONS INTERFACE MODULE (OPTION)
H11,T5	CM	— CONDENSER FAN MOTOR
E10,T1	CP	— COMPRESSOR MOTOR
A20	CPDS	— COMPRESSOR DISCHARGE SENSOR (TEMP.)
C20	CPSS	— COMPRESSOR SUCTION SENSOR (TEMP.)
G20	CPT	— CONDENSER PRESSURE TRANSDUCER
M1	CS	— CURRENT SENSOR
T3	DHBL	— DEFROST HEATER - BOTTOM LEFT
T3	DHBR	— DEFROST HEATER - BOTTOM RIGHT
T3	DHTL	— DEFROST HEATER - TOP LEFT
R3	DHTR	— DEFROST HEATER - TOP RIGHT
R3	DPH	— DRAIN PAN HEATER
J20	DPT	— DISCHARGE PRESSURE TRANSDUCER (OPTION)
C20	DTS	— DEFROST TEMPERATURE SENSOR
M12,P7,P9,P10	EF	— EVAPORATOR FAN CONTACTOR (HIGH SPEED)
E12,H12,T8,T10	EM	— EVAPORATOR FAN MOTOR
M13,R7,R10	ES	— EVAPORATOR FAN CONTACTOR (LOW SPEED)
C6,D5,D18,E6 E18,F18,H4	}F	— FUSE
M6	FLA	— FULL LOAD AMPS
D5,M9	HA	— HUMIDITY ATOMIZER
H10	HPR	— HUMIDITY POWER RELAY
H10	HPS	— HIGH PRESSURE SWITCH
E5	HPT	— HUMIDITY POWER TRANSFORMER
M14,P2	HR	— HEATER CONTACTOR
F20	HS	— HUMIDITY SENSOR
G14	HTT	— HEAT TERMINATION THERMOSTAT
R4	HWH	— HUMIDITY WATER HEATER
M5	HWP	— HUMIDITY WATER PUMP
P20	IC	— INTERROGATOR CONNECTOR (OPTION)
E10,E12,H11,H12	IP	— INTERNAL PROTECTOR
B16	KP	— KEYPAD CONNECTOR
E16	MDS	— MANUAL DEFROST SWITCH
J5,M8	PDR	— PUMP DIRECTION RELAY
	PE	— PRIMARY EARTH
D20,L20,M20,N20	PR	— PROBE RECEPTACLE (USDA OPTION)
K20	RRS	— RETURN RECORDER SENSOR (OPTION)
B20	RTS	— RETURN TEMPERATURE SENSOR
E20	SMV	— SUCTION MODULATION VALVE
H20	SPT	— SUCTION PRESSURE TRANSDUCER (OPTION)
K20	SRS	— SUPPLY RECORDER SENSOR (OPTION)
K16	SSV	— SUCTION SOLENOID VALVE
K3	ST	— START-STOP SWITCH
A20	STS	— SUPPLY TEMPERATURE SENSOR
K10	TC	— CONTROLLER RELAY (COOLING)
E4	TCC	— TRANSFRESH COMMUNICATIONS CONNECTOR (OPTION)
K9	TD	— CONTROLLER RELAY (WATER PUMP / ATOMIZER)
K12	TE	— CONTROLLER RELAY (HIGH SPEED EVAPORATOR FANS)
K15	TF	— CONTROLLER RELAY (TRANSFRESH)
G4	TFC	— TRANSFRESH CONTROLLER (OPTION)
K14	TH	— CONTROLLER RELAY (HEATING)
G8	TI	— CONTROLLER RELAY (WATER PUMP REVERSE)
K11	TN	— CONTROLLER RELAY (CONDENSER FAN)
D7,D17,G11, H16,J10,J11 J12,J14,M16	}TP	— TEST POINT
C7	TQ	— CONTROLLER RELAY (WATER TANK HEATER)
M3	TR	— TRANSFORMER
F4	TRC	— TRANSFRESH REAR CONNECTOR (OPTION)
F16	TS	— CONTROLLER RELAY (SSV, BYPASS VALVE)
K13	TV	— CONTROLLER RELAY (LOW SPEED EVAPORATOR FANS)
M7,P4	WH	— HUMIDITY WATER HEATER CONTACTOR
H7	WHTT	— WATER HEATER TERMINATION THERMOSTAT
E11	WP	— WATER PRESSURE SWITCH (OPTION)

**Figure 7-29. Electrical Schematic - See Model Chart
(Sheet 1 of 2)**



ARTWORK 62-02954-00 REV - PLATE 62-02955-00

TO REORDER SPECIFY: CTD P/N 79-01675-01

Figure 7-29. Electrical Schematic - See Model Chart (Sheet 2 of 2)

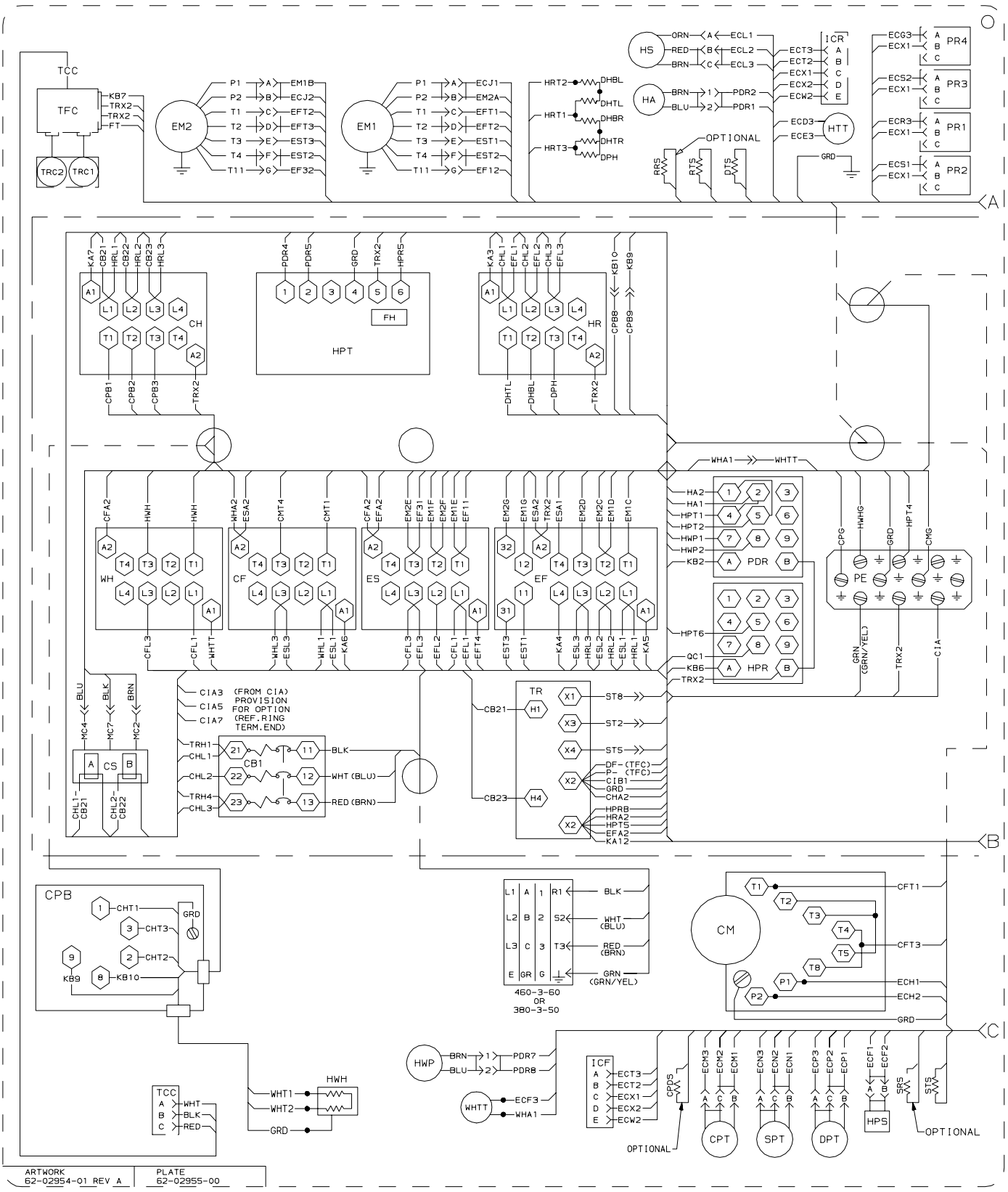
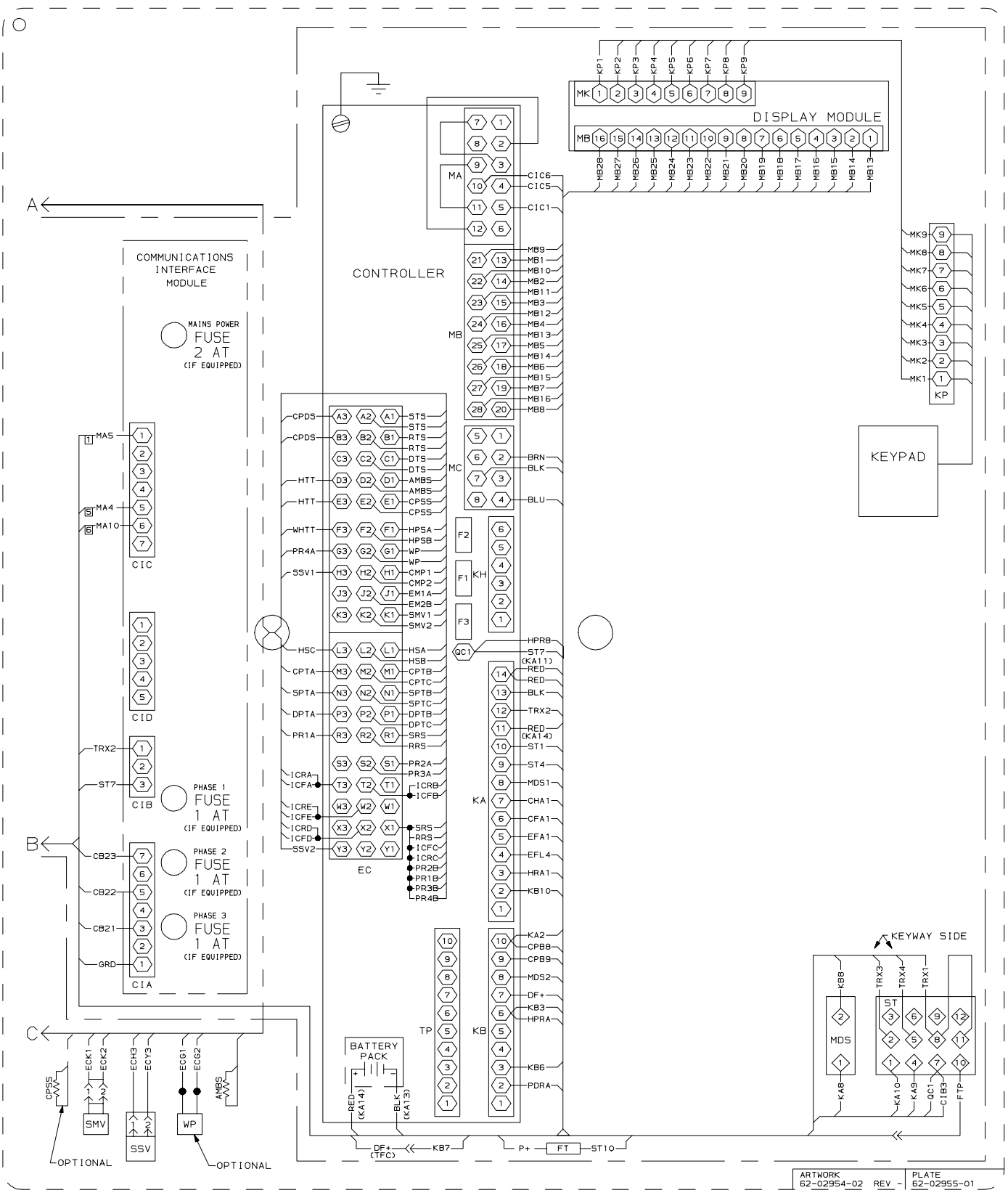


Figure 7-30. Electrical Wiring Diagram - See Model Chart (Sheet 1 of 2)

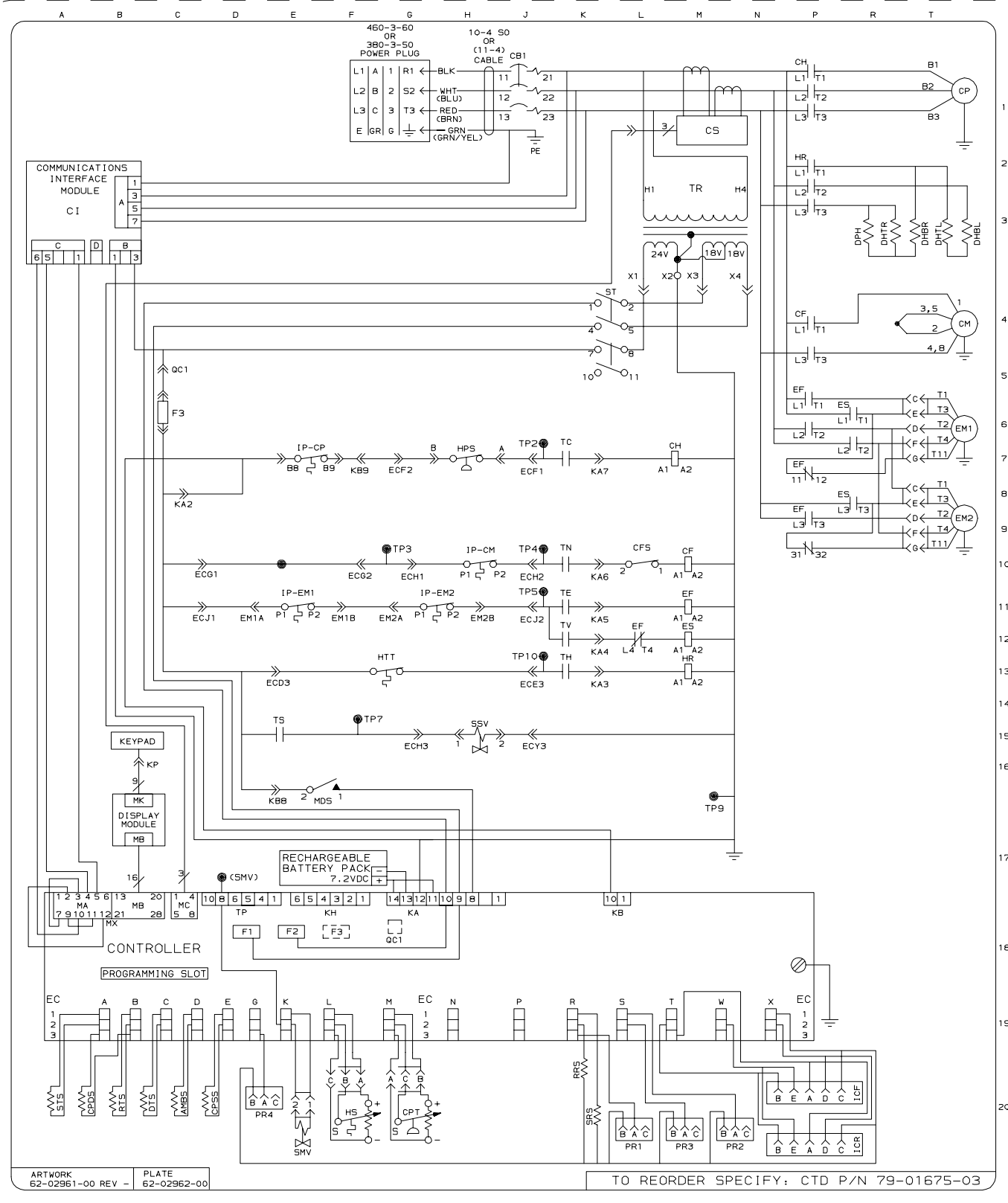


ARTWORK 62-02954-02 REV - PLATE 62-02955-01

Figure 7-30. Electrical Wiring Diagram - See Model Chart (Sheet 2 of 2)

<u>ZONE</u>	<u>SYMBOL</u>	<u>DESCRIPTION</u>
C20	AMBS	— AMBIENT SENSOR
J1	CB1	— CIRCUIT BREAKER 460V
M10, P4	CF	— CONDENSER FAN CONTACTOR
L10	CFS	— CONDENSER FAN SWITCH
M7, P1	CH	— COMPRESSOR CONTACTOR
A3	CI	— COMMUNICATIONS INTERFACE MODULE
H10, T4	CM	— CONDENSER FAN MOTOR
E7, T1	CP	— COMPRESSOR MOTOR
B20	CPDS	— COMPRESSOR DISCHARGE SENSOR (TEMP.)
D20	CPSS	— COMPRESSOR SUCTION SENSOR (TEMP.)
G20	CPT	— CONDENSER PRESSURE TRANSDUCER
M1	CS	— CURRENT SENSOR
T3	DHBL	— DEFROST HEATER - BOTTOM LEFT
T3	DHBR	— DEFROST HEATER - BOTTOM RIGHT
T3	DHTL	— DEFROST HEATER - TOP LEFT
R3	DHTR	— DEFROST HEATER - TOP RIGHT
R3	DPH	— DRAIN PAN HEATER
C20	DTS	— DEFROST TEMPERATURE SENSOR
L12, M11, P6	EF	— EVAPORATOR FAN CONTACTOR (HIGH SPEED)
E11, G11, T6, T9	EM	— EVAPORATOR FAN MOTOR
M12, R6	ES	— EVAPORATOR FAN CONTACTOR (LOW SPEED)
C6, D18, E18	F	— FUSE
	FLA	— FULL LOAD AMPS
H7	HPS	— HIGH PRESSURE SWITCH
M13, P2	HR	— HEATER CONTACTOR
F20	HS	— HUMIDITY SENSOR
G13	HTT	— HEAT TERMINATION THERMOSTAT
P20	IC	— INTERROGATOR CONNECTOR
E7, E11, G11, H10	IP	— INTERNAL PROTECTOR
B16	KP	— KEYPAD CONNECTOR
F16	MDS	— MANUAL DEFROST SWITCH
D20, L20, M20, N20	PR	— PROBE RECEPTACLE (USDA OPTION)
K20	RRS	— RETURN RECORDER SENSOR
B20	RTS	— RETURN TEMPERATURE SENSOR
E20	SMV	— SUCTION MODULATION VALVE
K20	SRS	— SUPPLY RECORDER SENSOR
H15	SSV	— SUCTION SOLENOID VALVE
K4	ST	— START-STOP SWITCH
A20	STS	— SUPPLY TEMPERATURE SENSOR
K7	TC	— CONTROLLER RELAY (COOLING)
K11	TE	— CONTROLLER RELAY (HIGH SPEED EVAPORATOR FANS)
K13	TH	— CONTROLLER RELAY (HEATING)
K10	TN	— CONTROLLER RELAY (CONDENSER FAN)
D17, F15, G10, J7, } J10, J11, J13, M16 }	TP	— TEST POINT
M3	TR	— TRANSFORMER
E15	TS	— CONTROLLER RELAY (SUCTION SOLENOID VALVE)
K12	TV	— CONTROLLER RELAY (LOW SPEED EVAPORATOR FANS)

**Figure 7-31. Electrical Schematic - See Model Chart
(Sheet 1 of 2)**



ARTWORK 62-02961-00 REV - PLATE 62-02962-00

TO REORDER SPECIFY: CTD P/N 79-01675-03

Figure 7-31. Electrical Schematic - See Model Chart (Sheet 2 of 2)

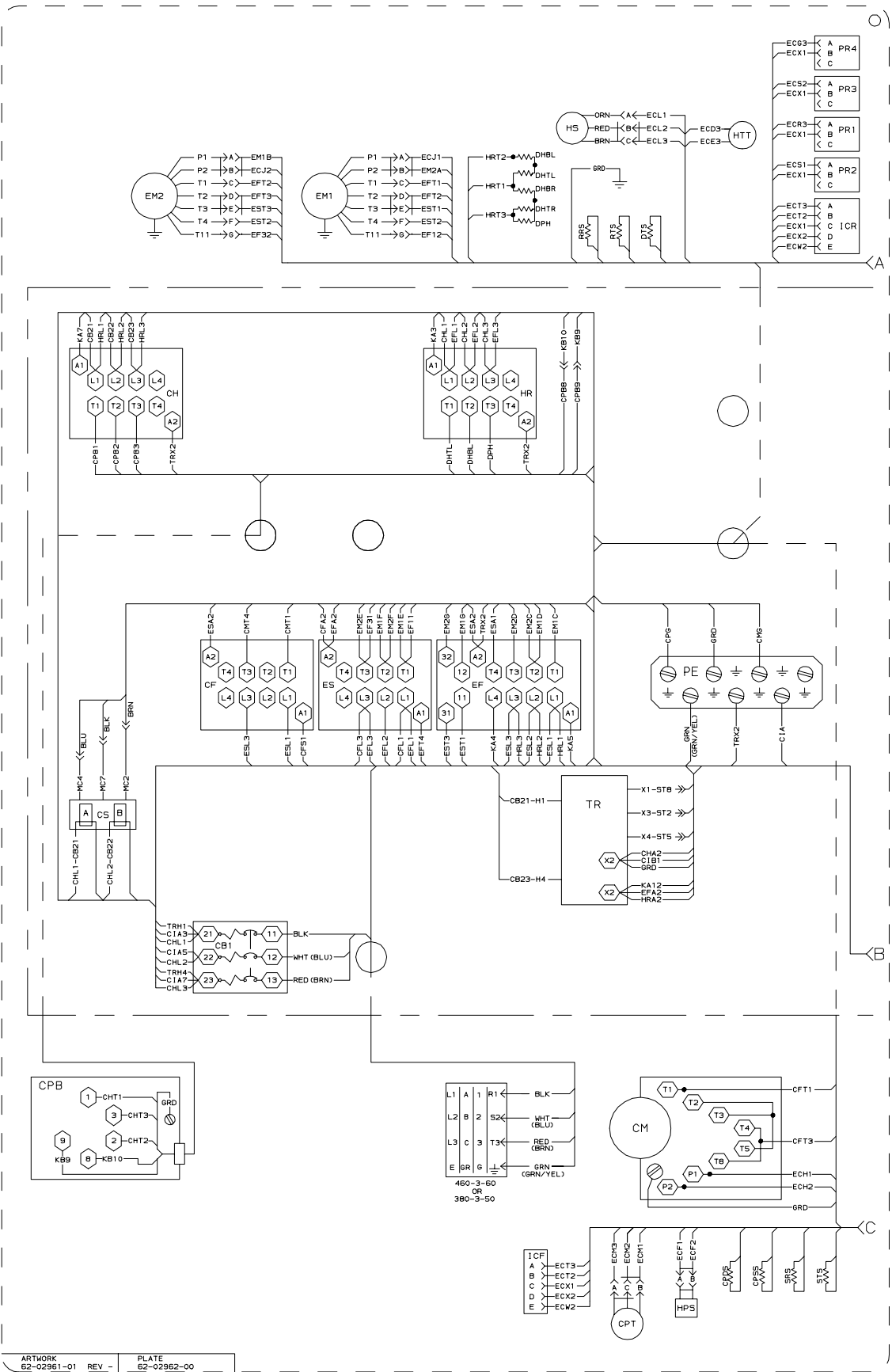
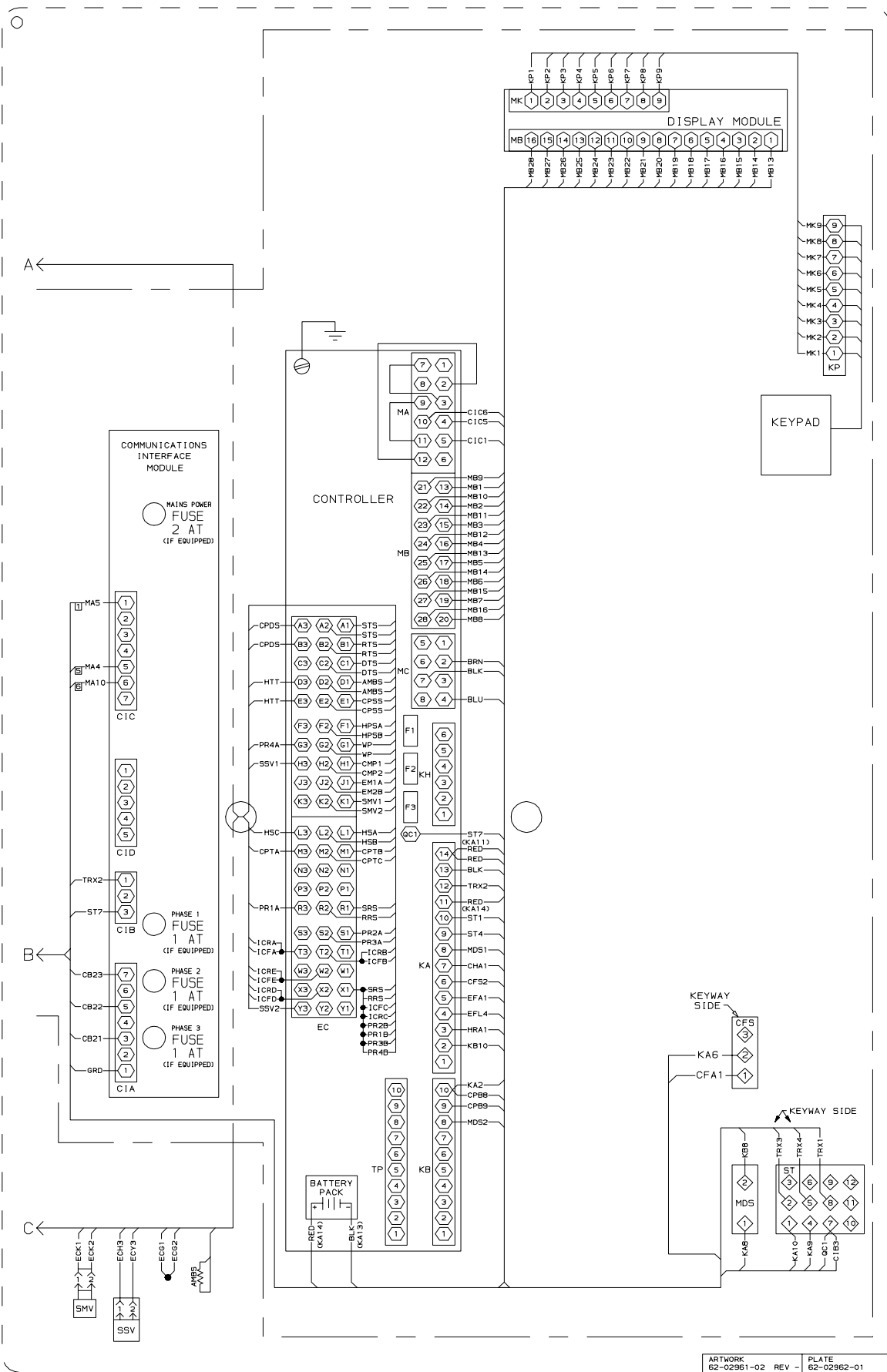


Figure 7-32. Electrical Wiring Diagram - See Model Chart (Sheet 1 of 2)

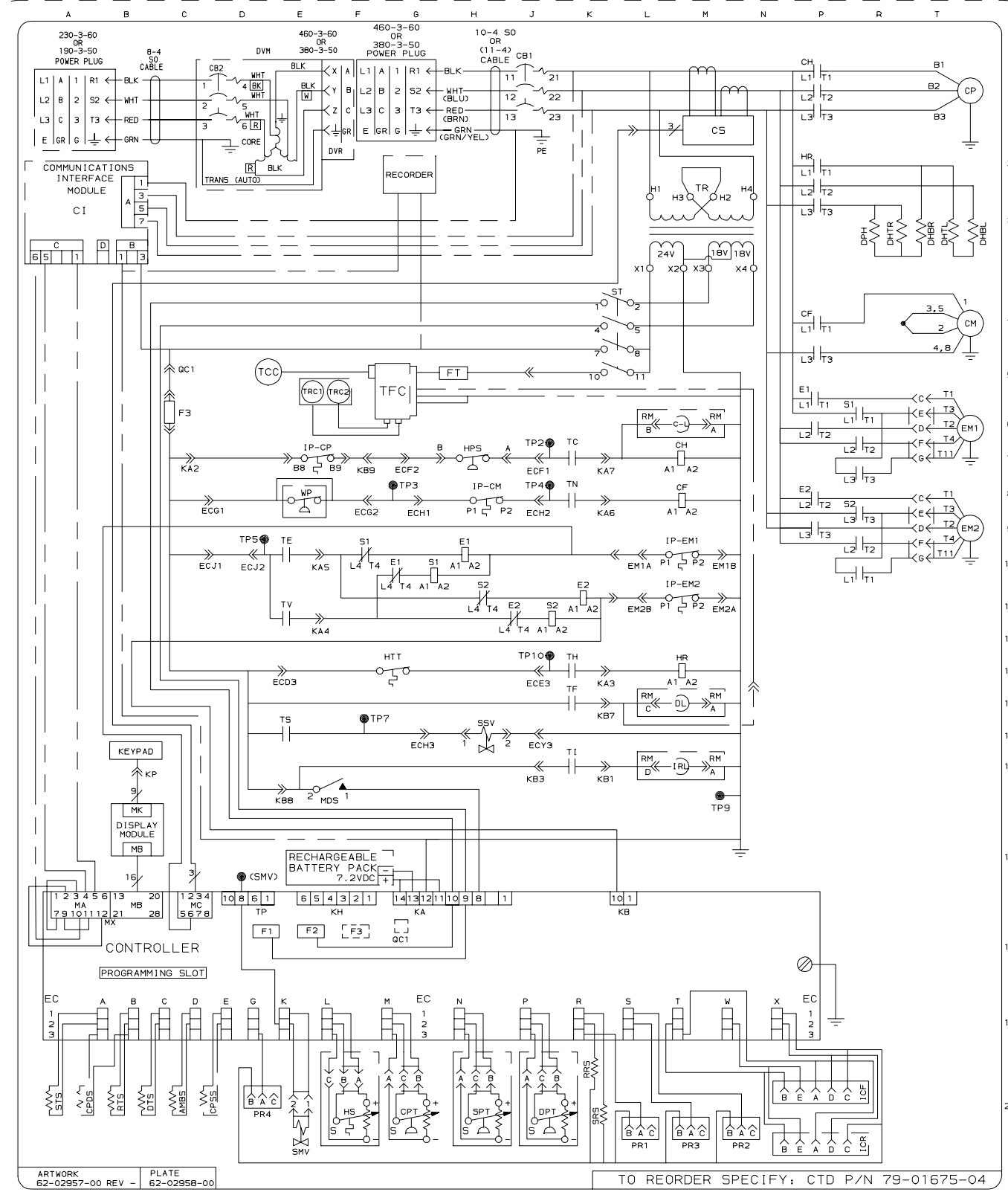


ARTWORK 62-02961-02 REV - PLATE 62-02962-01

Figure 7-32. Electrical Wiring Diagram - See Model Chart (Sheet 2 of 2)

		LEGEND	
<u>ZONE</u>	<u>SYMBOL</u>	<u>DISCRIPTION</u>	
C19	AMBS	—	AMBIENT SENSOR
J1	CB1	—	CIRCUIT BREAKER 460V
D1	CB2	—	CIRCUIT BREAKER 230V (AUTO TRANS OPTION)
M8, P4	CF	—	CONDENSER FAN CONTACTOR
A3	CI	—	COMMUNICATIONS INTERFACE MODULE (OPTION)
M7, P1	CH	—	COMPRESSOR CONTACTOR
M6	C-L	—	COOL LIGHT (OPTION)
H8, T4	CM	—	CONDENSER FAN MOTOR
E7, T1	CP	—	COMPRESSOR MOTOR
A20	CPDS	—	COMPRESSOR DISCHARGE SENSOR (TEMP.)
C20	CPSS	—	COMPRESSOR SUCTION SENSOR (TEMP.)
G20	CPT	—	CONDENSER PRESSURE TRANSDUCER
M1	CS	—	CURRENT SENSOR
T3	DHBL	—	DEFROST HEATER - BOTTOM LEFT
T3	DHBR	—	DEFROST HEATER - BOTTOM RIGHT
T3	DHTL	—	DEFROST HEATER - TOP LEFT
R3	DHTR	—	DEFROST HEATER - TOP RIGHT
M15	DL	—	DEFROST LIGHT (OPTION)
R3	DPH	—	DRAIN PAN HEATER
J20	DPT	—	DISCHARGE PRESSURE TRANSDUCER (OPTION)
C20	DTS	—	DEFROST TEMPERATURE SENSOR
D1	DVM	—	DUAL VOLTAGE MODULE (OPTIONAL)
E1	DVR	—	DUAL VOLTAGE RECEPTACLE (OPTIONAL)
G10, H10, J11, K11, } P6, P9	E	—	EVAPORATOR FAN CONTACTOR (HIGH SPEED)
M10, M11, T6, T9	EM	—	EVAPORATOR FAN MOTOR
C6, D18, E18, G5	F	—	FUSE
	FLA	—	FULL LOAD AMPS
H7	HPS	—	HIGH PRESSURE SWITCH
M13, P2	HR	—	HEATER CONTACTOR
F20	HS	—	HUMIDITY SENSOR
F13	HTT	—	HEAT TERMINATION THERMOSTAT
M20	IC	—	INTERROGATOR CONNECTOR (OPTION)
E7, H8, M10, M11	IP	—	INTERNAL PROTECTOR
M14	IRL	—	IN-RANGE LIGHT (OPTION)
B16	KP	—	KEYPAD CONNECTOR
E16	MDS	—	MANUAL DEFROST SWITCH
D20, L20, M20, P20	PR	—	PROBE RECEPTACLE (USDA OPTION)
L6, L14, L16	RM	—	REMOTE MONITORING RECEPTACLE (OPTION)
K20	RRS	—	RETURN RECORDER SENSOR (OPTION)
B20	RTS	—	RETURN TEMPERATURE SENSOR
F10, G10, H11, J11, } R6, R9	S	—	EVAPORATOR FAN CONTACTOR (LOW SPEED)
E20	SMV	—	SUCTION MODULATION VALVE
H20	SPT	—	SUCTION PRESSURE TRANSDUCER (OPTION)
K20	SRS	—	SUPPLY RECORDER SENSOR (OPTION)
H15	SSV	—	SUCTION SOLENOID VALVE
K4	ST	—	START-STOP SWITCH
A20	STS	—	SUPPLY TEMPERATURE SENSOR
K7	TC	—	CONTROLLER RELAY (COOLING)
D5	TCC	—	TRANSFRESH COMMUNICATIONS CONNECTOR (OPTION)
E10	TE	—	CONTROLLER RELAY (HIGH SPEED EVAPORATOR FANS)
G5	TFC	—	TRANSFRESH CONTROLLER (OPTION)
K13	TH	—	CONTROLLER RELAY (HEATING)
K16	TI	—	INRANGE RELAY
K14	TF	—	DEFROST RELAY
K8	TN	—	CONTROLLER RELAY (CONDENSER FAN)
D9, D17, F15, G10, } J7, J10, J13, M16	TP	—	TEST POINT
M3	TR	—	TRANSFORMER
D1	TRANS	—	TRANSFORMER AUTO 230/460 (OPTION)
E5, F5	TRC	—	TRANSFRESH REAR CONNECTOR (OPTION)
E15	TS	—	CONTROLLER RELAY (SUCTION SOLENOID VALVE)
E11	TV	—	CONTROLLER RELAY (LOW SPEED EVAPORATOR FANS)
E8	WP	—	WATER PRESSURE SWITCH (OPTION)

**Figure 7-33. Electrical Schematic - See Model Chart
(Sheet 1 of 2)**



ARTWORK 62-02957-00 REV - PLATE 62-02958-00

TO REORDER SPECIFY: CTD P/N 79-01675-04

Figure 7-33. Electrical Schematic - See Model Chart (Sheet 2 of 2)

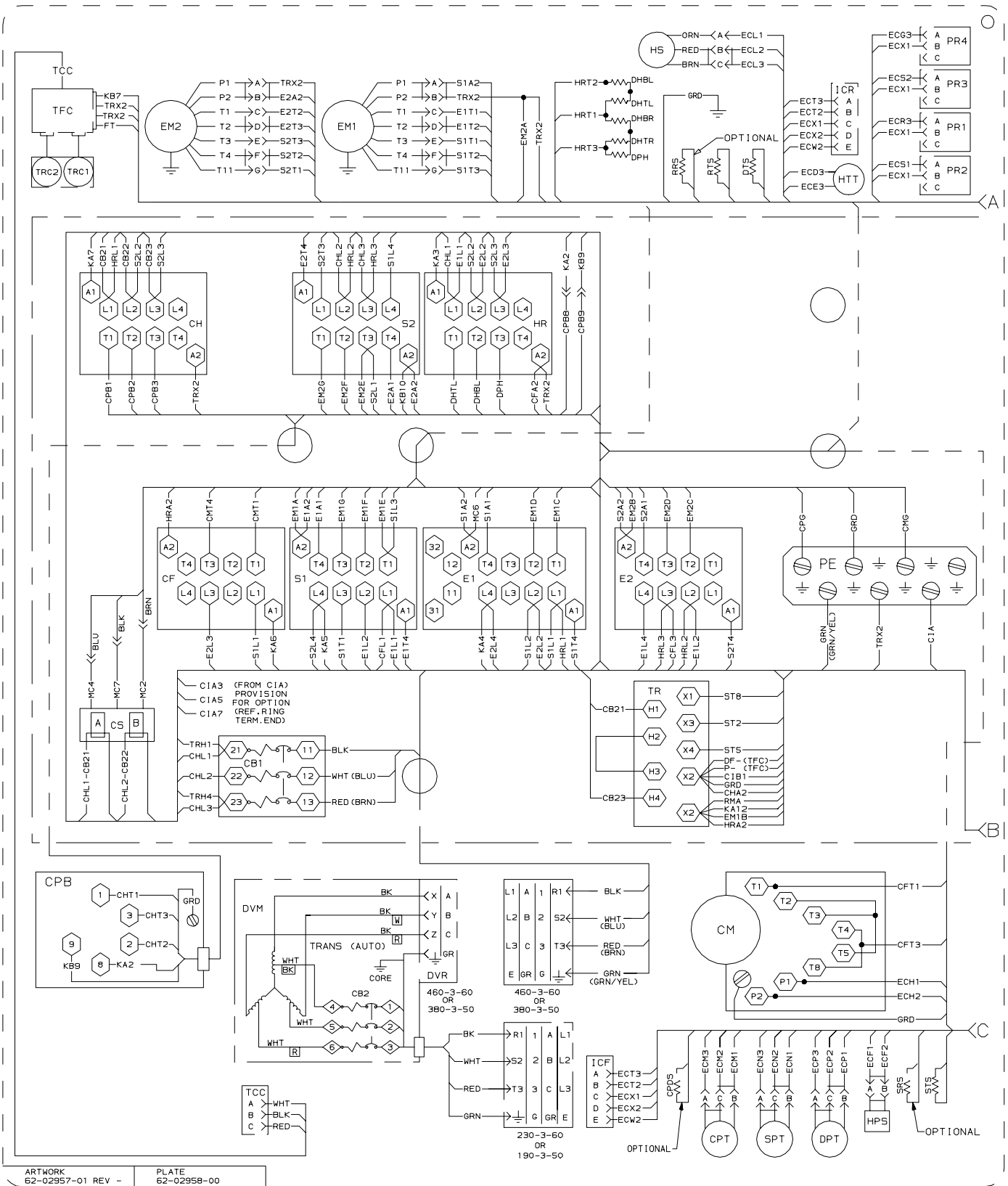
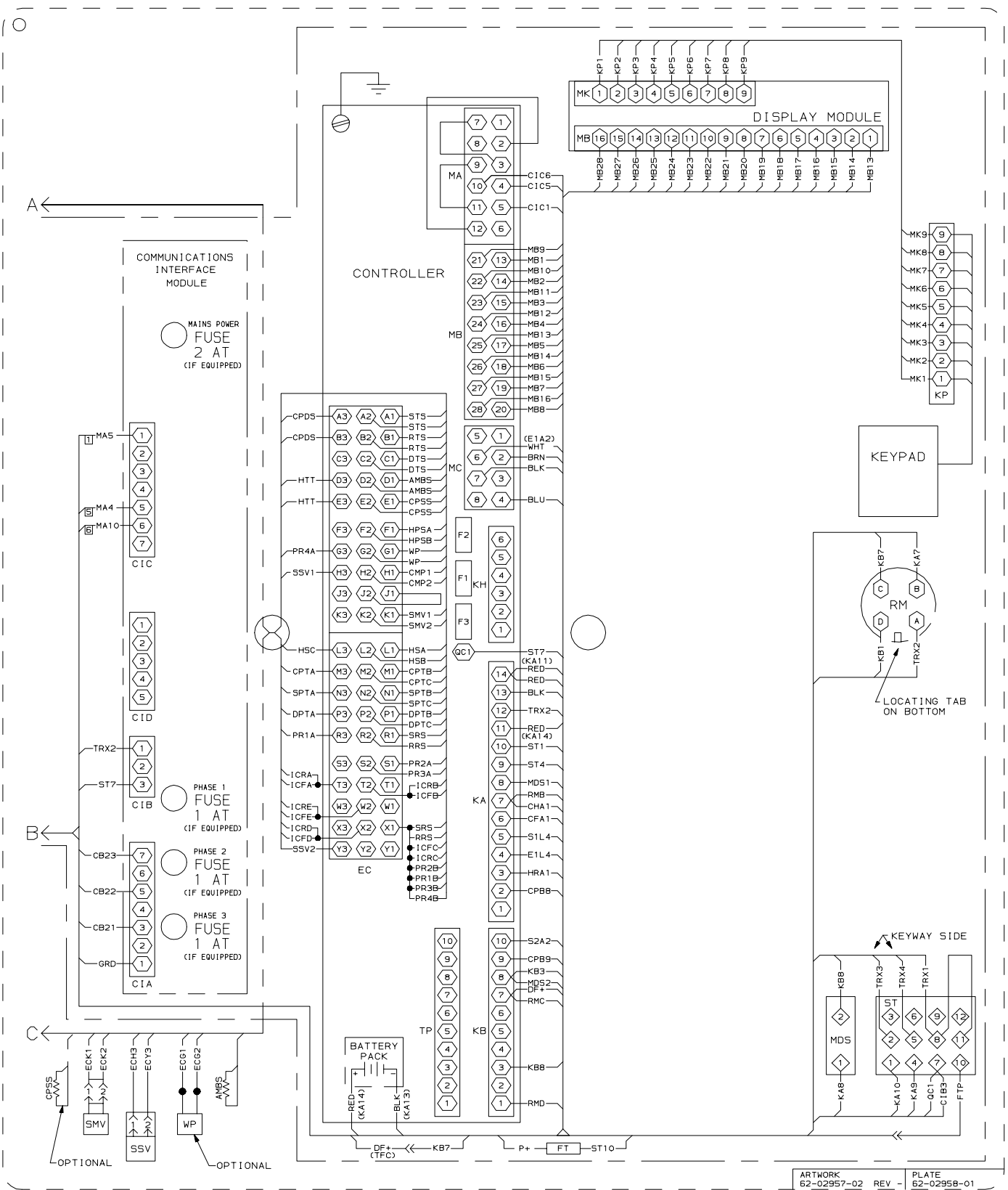


Figure 7-34. Electrical Wiring Diagram - See Model Chart (Sheet 1 of 2)



ARTWORK 62-02957-02 REV - PLATE 62-02958-01

Figure 7-34. Electrical Wiring Diagram - See Model Chart (Sheet 2 of 2)

LEGEND		
<u>ZONE</u>	<u>SYMBOL</u>	<u>DISCRIPTION</u>
C19	AMBS	— AMBIENT SENSOR
J1	CB1	— CIRCUIT BREAKER 460V
D1	CB2	— CIRCUIT BREAKER 230V (AUTO TRANS OPTION)
M8, P4	CF	— CONDENSER FAN CONTACTOR
A3	CI	— COMMUNICATIONS INTERFACE MODULE (OPTION)
M7, P1	CH	— COMPRESSOR CONTACTOR
M6	C-L	— COOL LIGHT (OPTION)
H8, T4	CM	— CONDENSER FAN MOTOR
E7, T1	CP	— COMPRESSOR MOTOR
A20	CPDS	— COMPRESSOR DISCHARGE SENSOR (TEMP.)
C20	CPSS	— COMPRESSOR SUCTION SENSOR (TEMP.)
G20	CPT	— CONDENSER PRESSURE TRANSDUCER
M1	CS	— CURRENT SENSOR
T3	DHBL	— DEFROST HEATER - BOTTOM LEFT
T3	DHBR	— DEFROST HEATER - BOTTOM RIGHT
T3	DHTL	— DEFROST HEATER - TOP LEFT
R3	DHTR	— DEFROST HEATER - TOP RIGHT
M15	DL	— DEFROST LIGHT (OPTION)
R3	DPH	— DRAIN PAN HEATER
J20	DPT	— DISCHARGE PRESSURE TRANSDUCER (OPTION)
C20	DTS	— DEFROST TEMPERATURE SENSOR
D1	DVM	— DUAL VOLTAGE MODULE (OPTIONAL)
E1	DVR	— DUAL VOLTAGE RECEPTACLE (OPTIONAL)
G10, H10, J11, K11, P6, P9	} E	— EVAPORATOR FAN CONTACTOR (HIGH SPEED)
M10, M11, T6, T9	EM	— EVAPORATOR FAN MOTOR
C6, D18, E18, G5	F	— FUSE
	FLA	— FULL LOAD AMPS
H7	HPS	— HIGH PRESSURE SWITCH
M13, P2	HR	— HEATER CONTACTOR
F20	HS	— HUMIDITY SENSOR
F13	HTT	— HEAT TERMINATION THERMOSTAT
M20	IC	— INTERROGATOR CONNECTOR (OPTION)
E7, H8, M10, M11	IP	— INTERNAL PROTECTOR
M14	IRL	— IN-RANGE LIGHT (OPTION)
B16	KP	— KEYPAD CONNECTOR
E16	MDS	— MANUAL DEFROST SWITCH
D20, L20, M20, P20	PR	— PROBE RECEPTACLE (USDA OPTION)
L6, L14, L16	RM	— REMOTE MONITORING RECEPTACLE (OPTION)
K20	RRS	— RETURN RECORDER SENSOR (OPTION)
B20	RTS	— RETURN TEMPERATURE SENSOR
F10, G10, H11, J11, R6, R9	} S	— EVAPORATOR FAN CONTACTOR (LOW SPEED)
E20	SMV	— SUCTION MODULATION VALVE
H20	SPT	— SUCTION PRESSURE TRANSDUCER (OPTION)
K20	SRS	— SUPPLY RECORDER SENSOR (OPTION)
H15	SSV	— SUCTION SOLENOID VALVE
K4	ST	— START-STOP SWITCH
A20	STS	— SUPPLY TEMPERATURE SENSOR
K7	TC	— CONTROLLER RELAY (COOLING)
D5	TCC	— TRANSFRESH COMMUNICATIONS CONNECTOR (OPTION)
E10	TE	— CONTROLLER RELAY (HIGH SPEED EVAPORATOR FANS)
G5	TFC	— TRANSFRESH CONTROLLER (OPTION)
K13	TH	— CONTROLLER RELAY (HEATING)
K16	TI	— INRANGE RELAY
K14	TF	— DEFROST RELAY
K8	TN	— CONTROLLER RELAY (CONDENSER FAN)
D9, D17, F15, G10, J7, J10, J13, M16	} TP	— TEST POINT
M3	TR	— TRANSFORMER
D1	TRANS	— TRANSFORMER AUTO 230/460 (OPTION)
E5, F5	TRC	— TRANSFRESH REAR CONNECTOR (OPTION)
E15	TS	— CONTROLLER RELAY (SUCTION SOLENOID VALVE)
E11	TV	— CONTROLLER RELAY (LOW SPEED EVAPORATOR FANS)
E8	WP	— WATER PRESSURE SWITCH (OPTION)

**Figure 7-35. Electrical Schematic - See Model Chart
(Sheet 1 of 2)**

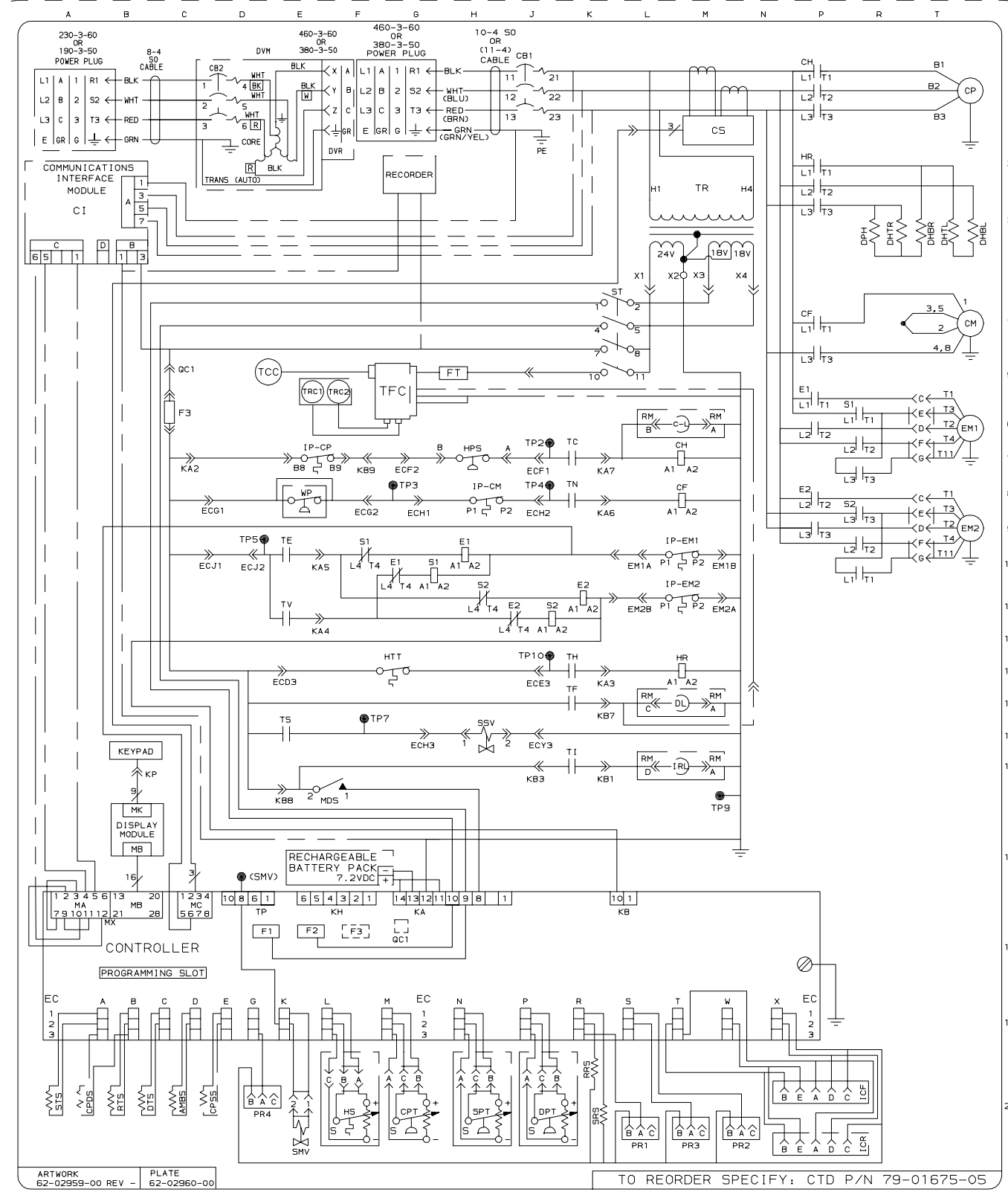


Figure 7-35. Electrical Schematic - See Model Chart (Sheet 2 of 2)

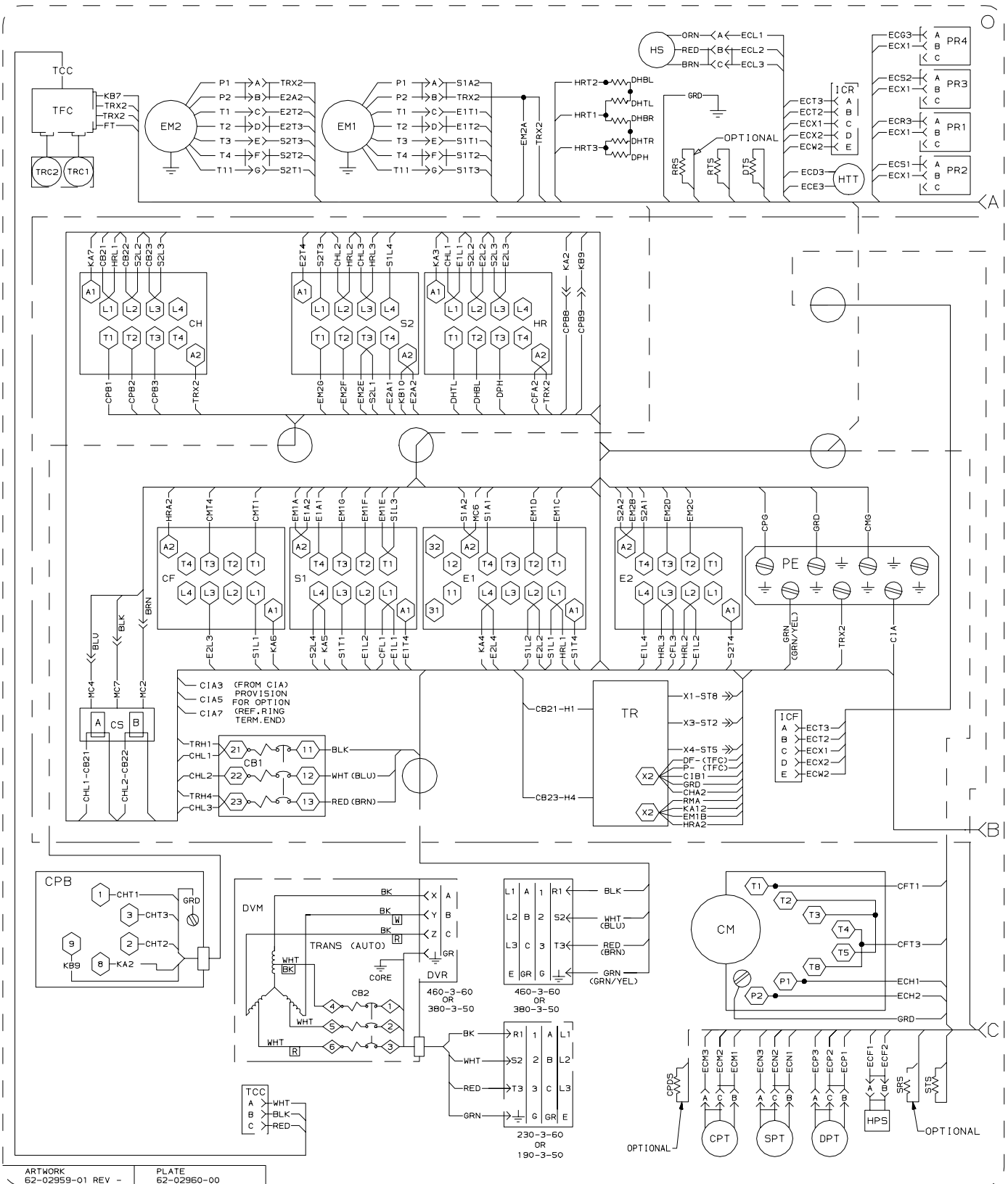
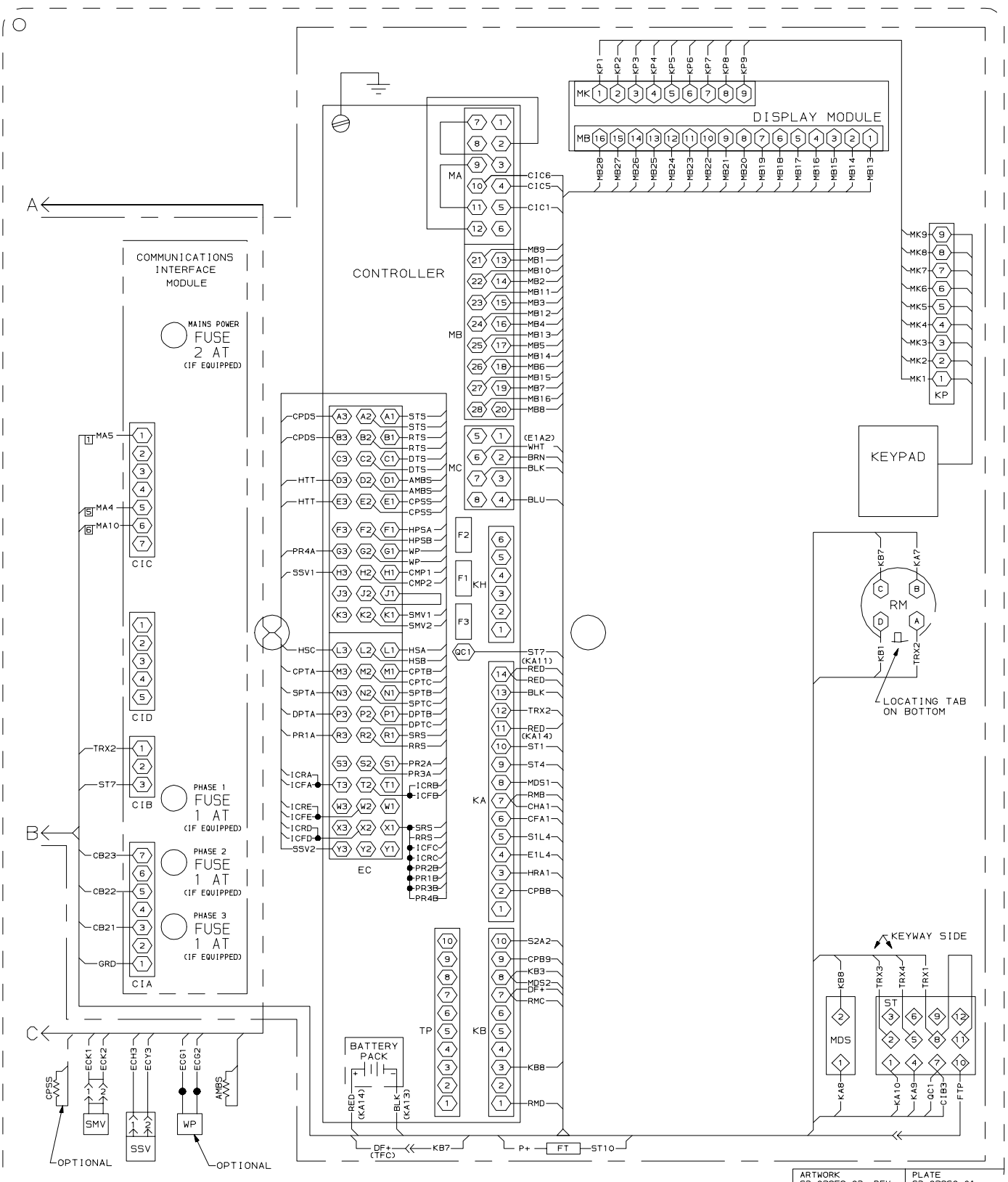


Figure 7-36. Electrical Wiring Diagram - See Model Chart (Sheet 1 of 2)

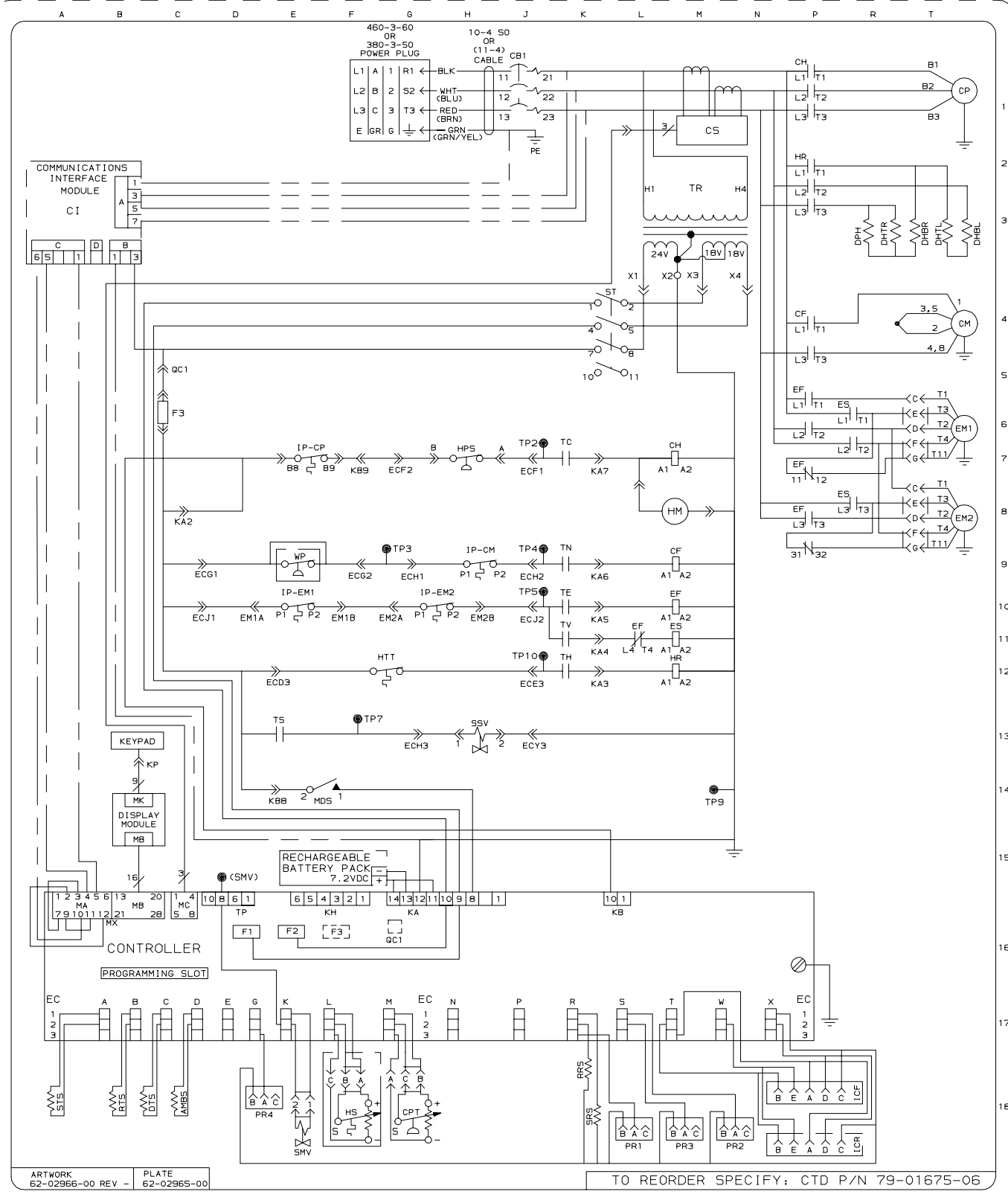


ARTWORK 62-02959-02 REV - PLATE 62-02960-01

Figure 7-36. Electrical Wiring Diagram - See Model Chart (Sheet 2 of 2)

<u>ZONE</u>	<u>SYMBOL</u>	<u>LEGEND DESCRIPTION</u>
C18	AMBS	— AMBIENT SENSOR
J1	CB1	— CIRCUIT BREAKER 460V
M9, P4	CF	— CONDENSER FAN CONTACTOR
A3	CI	— COMMUNICATIONS INTERFACE MODULE (OPTION)
M7, P1	CH	— COMPRESSOR CONTACTOR
H9, T4	CM	— CONDENSER FAN MOTOR
E7, T1	CP	— COMPRESSOR MOTOR
G18	CPT	— CONDENSER PRESSURE TRANSDUCER
M1	CS	— CURRENT SENSOR
T3	DHBL	— DEFROST HEATER - BOTTOM LEFT
T3	DHBR	— DEFROST HEATER - BOTTOM RIGHT
T3	DHTL	— DEFROST HEATER - TOP LEFT
R3	DHTR	— DEFROST HEATER - TOP RIGHT
R3	DPH	— DRAIN PAN HEATER
C18	DTS	— DEFROST TEMPERATURE SENSOR
L11, M10, P5, P7	EF	— EVAPORATOR FAN CONTACTOR (HIGH SPEED)
E10, H10, T6, T8	EM	— EVAPORATOR FAN MOTOR
M11, R6, R8	ES	— EVAPORATOR FAN CONTACTOR (LOW SPEED)
C6, D16, E16	F	— FUSE
	FLA	— FULL LOAD AMPS
M8	HM	— HOUR METER
H7	HPS	— HIGH PRESSURE SWITCH
M12, P2	HR	— HEATER CONTACTOR
F18	HS	— HUMIDITY SENSOR
G12	HTT	— HEAT TERMINATION THERMOSTAT
P18	IC	— INTERROGATOR CONNECTOR (OPTION)
E7, E10, H9, H10	IP	— INTERNAL PROTECTOR
B13	KP	— KEYPAD CONNECTOR
E14	MDS	— MANUAL DEFROST SWITCH
D18, L18, M18, P18	PR	— PROBE RECEPTACLE (USDA OPTION)
K18	RRS	— RETURN RECORDER SENSOR (OPTION)
B18	RTS	— RETURN TEMPERATURE SENSOR
E18	SMV	— SUCTION MODULATION VALVE
K18	SRS	— SUPPLY RECORDER SENSOR (OPTION)
H13	SSV	— SUCTION SOLENOID VALVE
K4	ST	— START-STOP SWITCH
A18	STS	— SUPPLY TEMPERATURE SENSOR
K7	TC	— CONTROLLER RELAY (COOLING)
K10	TE	— CONTROLLER RELAY (HIGH SPEED EVAPORATOR FANS)
K12	TH	— CONTROLLER RELAY (HEATING)
K9	TN	— CONTROLLER RELAY (CONDENSER FAN)
D15, F13, G9, J7 } J9, J10, J12, H14 }	TP	— TEST POINT
M3	TR	— TRANSFORMER
E13	TS	— CONTROLLER RELAY (SUCTION SOLENOID VALVE)
K11	TV	— CONTROLLER RELAY (LOW SPEED EVAPORATOR FANS)
E9	WP	— WATER PRESSURE SWITCH (OPTION)

**Figure 7-37. Electrical Schematic - See Model Chart
(Sheet 1 of 2)**



ARTWORK 62-02956-00 REV - PLATE 62-02965-00

TO REORDER SPECIFY: CTD P/N 79-01675-06

Figure 7-37. Electrical Schematic - See Model Chart (Sheet 2 of 2)

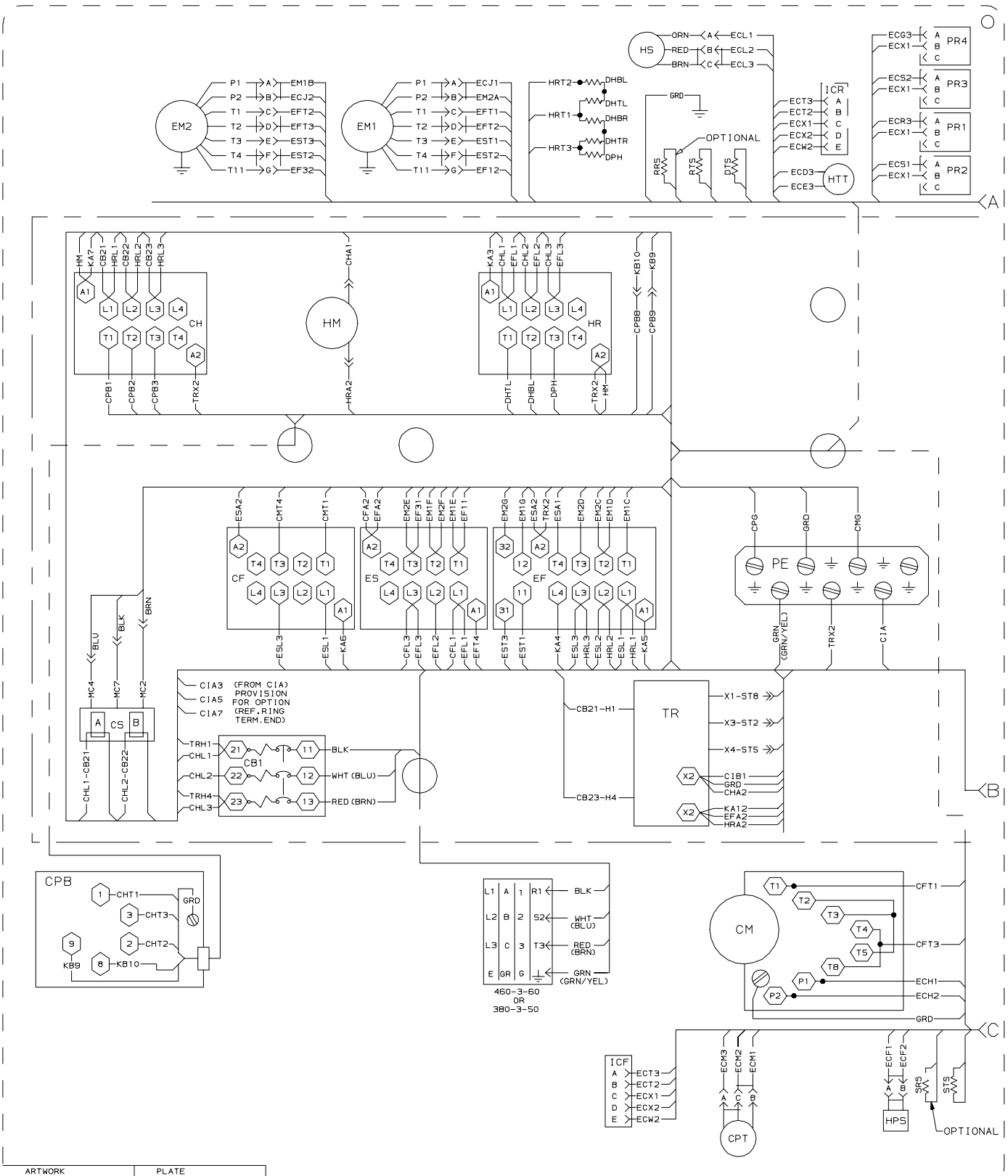


Figure 7-38. Electrical Wiring Diagram - See Model Chart
(Sheet 1 of 2)

LEGEND		
<u>ZONE</u>	<u>SYMBOL</u>	<u>DESCRIPTION</u>
C19	AMBS	— AMBIENT SENSOR
J1	CB1	— CIRCUIT BREAKER 460V
D1	CB2	— OPTIONAL CIRCUIT BREAKER 230V (DVM OPTION) TERMINAL BLOCK WHEN CB2 NOT PRESENT
M9,P4	CF	— CONDENSER FAN CONTACTOR
M7,P1	CH	— COMPRESSOR CONTACTOR
M6	C-L	— COOL LIGHT (OPTION)
H10,T4	CM	— CONDENSER FAN MOTOR
E7,T1	CP	— COMPRESSOR MOTOR
G20	CPT	— CONDENSER PRESSURE TRANSDUCER
M1	CS	— CURRENT SENSOR
T3	DHBL	— DEFROST HEATER - BOTTOM LEFT
T3	DHBR	— DEFROST HEATER - BOTTOM RIGHT
T3	DHTL	— DEFROST HEATER - TOP LEFT
R3	DHTR	— DEFROST HEATER - TOP RIGHT
M15	DL	— DEFROST LIGHT (OPTION)
R3	DPH	— DRAIN PAN HEATER
J20	DPT	— DISCHARGE PRESSURE TRANSDUCER (OPTION)
C20	DTS	— DEFROST TEMPERATURE SENSOR
D1	DVM	— DUAL VOLTAGE MODULE (OPTIONAL)
E1	DVR	— DUAL VOLTAGE RECEPTACLE (OPTIONAL)
L12,M11,P6	EF	— EVAPORATOR FAN CONTACTOR (HIGH SPEED)
G11,H11,T6,T9	EM	— EVAPORATOR FAN MOTOR
M12,R6	ES	— EVAPORATOR FAN CONTACTOR (LOW SPEED)
C6,D18,E18	F	— FUSE
	FLA	— FULL LOAD AMPS
H7	HPS	— HIGH PRESSURE SWITCH
M13,P2	HR	— HEATER CONTACTOR
F20	HS	— HUMIDITY SENSOR
F13	HTT	— HEAT TERMINATION THERMOSTAT
E7,F11,H10,H11	IP	— INTERNAL PROTECTOR
M14	IRL	— IN-RANGE LIGHT (OPTION)
B16	KP	— KEYPAD CONNECTOR
E16	MDS	— MANUAL DEFROST SWITCH
L6,L14,L16	RM	— REMOTE MONITORING RECEPTACLE (OPTION)
K20	RRS	— RETURN RECORDER SENSOR
B20	RTS	— RETURN TEMPERATURE SENSOR
E20	SMV	— SUCTION MODULATION VALVE
H20	SPT	— SUCTION PRESSURE TRANSDUCER (OPTION)
K20	SRS	— SUPPLY RECORDER SENSOR
H15	SSV	— SUCTION SOLENOID VALVE
K4	ST	— START-STOP SWITCH
A20	STS	— SUPPLY TEMPERATURE SENSOR
K7	TC	— CONTROLLER RELAY (COOLING)
K8	TD	— CONTROLLER RELAY (LOW SPEED COMPRESSOR)
K11	TE	— CONTROLLER RELAY (HIGH SPEED EVAPORATOR FANS)
K13	TH	— CONTROLLER RELAY (HEATING)
K16	TI	— INRANGE RELAY
K14	TF	— DEFROST RELAY
K10	TN	— CONTROLLER RELAY (CONDENSER FAN)
D17,F15,G10,J7, J10,J11,J13,M16}	TP	— TEST POINT
M3	TR	— TRANSFORMER
D1	TRANS	— TRANSFORMER AUTO 230/460 (OPTION)
E15	TS	— CONTROLLER RELAY (SUCTION SOLENOID VALVE)
K9	TT	— CONTROLLER RELAY (COMPRESSOR SHORTING)
K12	TV	— CONTROLLER RELAY (LOW SPEED EVAPORATOR FANS)
E10	WP	— WATER PRESSURE SWITCH (OPTION)

**Figure 7-39. Electrical Schematic - See Model Chart
(Sheet 1 of 2)**

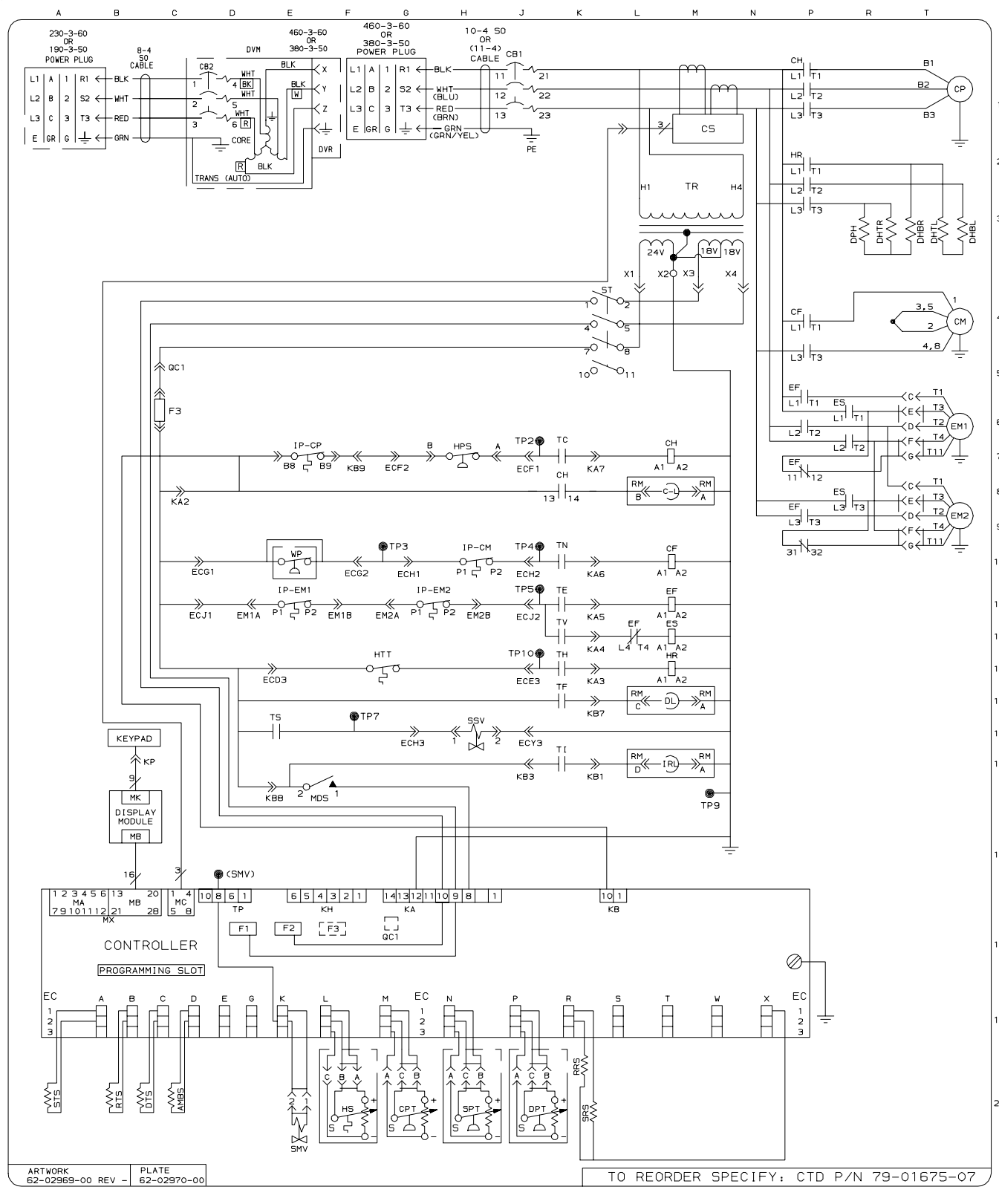


Figure 7-39. Electrical Schematic - See Model Chart (Sheet 2 of 2)

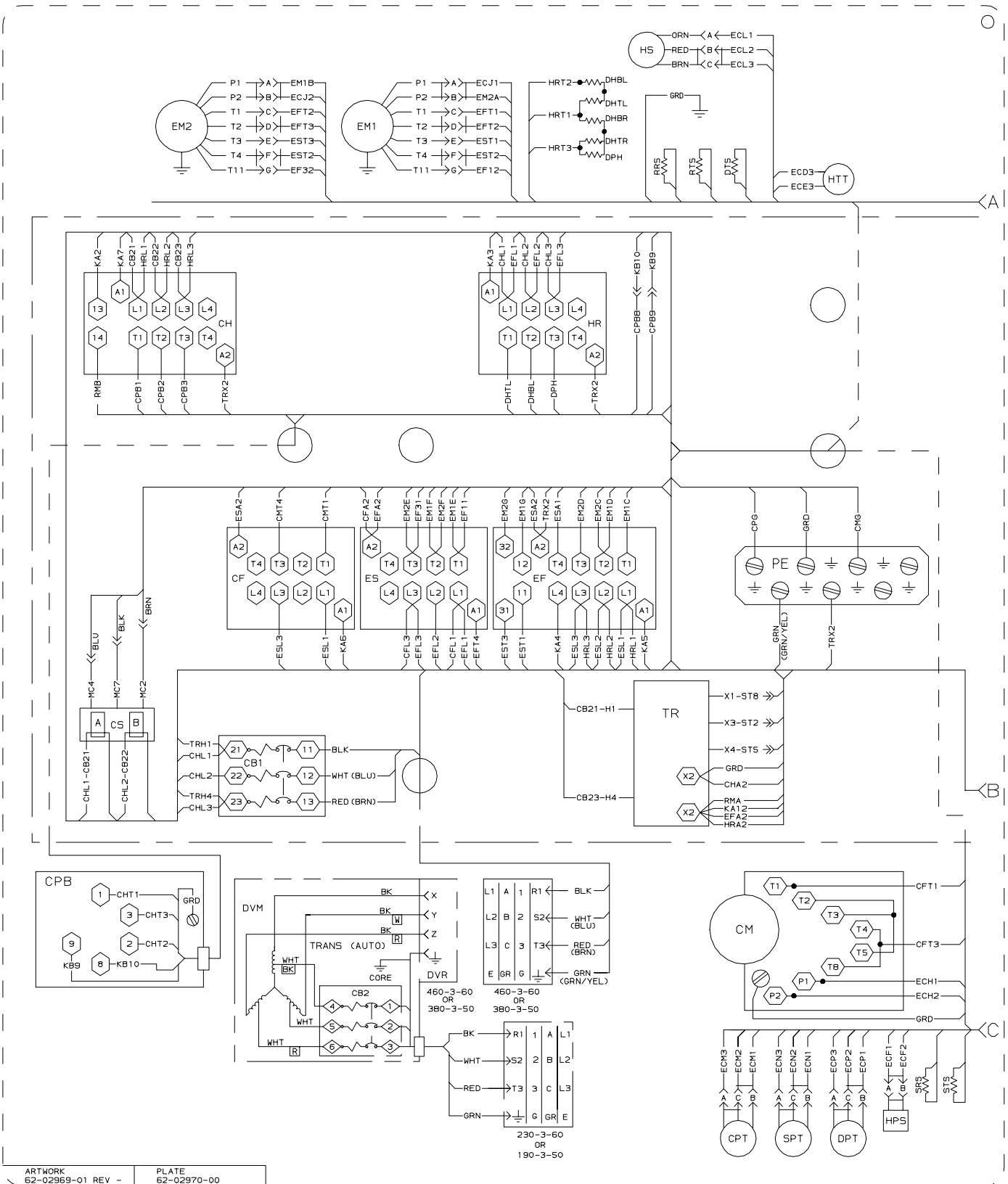
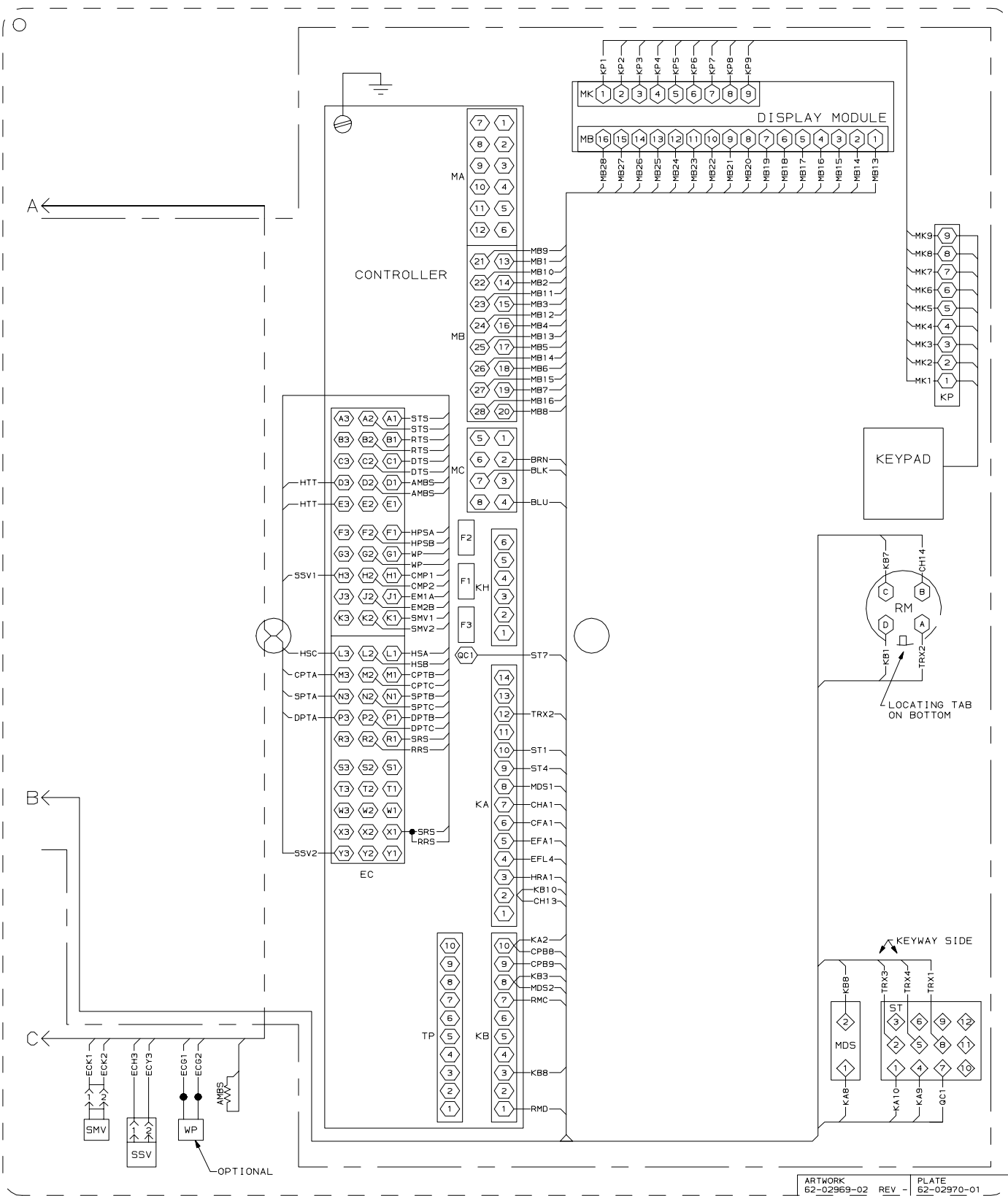


Figure 7-40. Electrical Wiring Diagram - See Model Chart (Sheet 1 of 2)



ARTWORK 62-02969-02 REV - PLATE 62-02970-01

Figure 7-40. Electrical Wiring Diagram - See Model Chart (Sheet 2 of 2)

LEGEND		
<u>ZONE</u>	<u>SYMBOL</u>	<u>DESCRIPTION</u>
C19	AMBS	— AMBIENT SENSOR
J1	CB1	— CIRCUIT BREAKER 460V
D1	CB2	— OPTIONAL CIRCUIT BREAKER 230V (DVM OPTION) TERMINAL BLOCK WHEN CB2 NOT PRESENT
M9, P4	CF	— CONDENSER FAN CONTACTOR
A3	CI	— COMMUNICATIONS INTERFACE MODULE (OPTION)
M7, P1, K8	CH	— COMPRESSOR CONTACTOR
M6	C-L	— COOL LIGHT (OPTION)
H10, T4	CM	— CONDENSER FAN MOTOR
E7, T1	CP	— COMPRESSOR MOTOR
A20	CPDS	— COMPRESSOR DISCHARGE SENSOR (TEMP.)
C20	CPSS	— COMPRESSOR SUCTION SENSOR (TEMP.)
G20	CPT	— CONDENSER PRESSURE TRANSDUCER
G2	CR	— CHART RECORDER (OPTION)
M1	CS	— CURRENT SENSOR
T3	DHBL	— DEFROST HEATER - BOTTOM LEFT
T3	DHBR	— DEFROST HEATER - BOTTOM RIGHT
T3	DHTL	— DEFROST HEATER - TOP LEFT
R3	DHTR	— DEFROST HEATER - TOP RIGHT
M15	DL	— DEFROST LIGHT (OPTION)
R3	DPH	— DRAIN PAN HEATER
J20	DPT	— DISCHARGE PRESSURE TRANSDUCER (OPTION)
C20	DTS	— DEFROST TEMPERATURE SENSOR
D1	DVM	— DUAL VOLTAGE MODULE (OPTIONAL)
E1	DVR	— DUAL VOLTAGE RECEPTACLE (OPTIONAL)
L12, M11, P6	EF	— EVAPORATOR FAN CONTACTOR (HIGH SPEED)
G11, H11, T6, T9	EM	— EVAPORATOR FAN MOTOR
M12, R6	ES	— EVAPORATOR FAN CONTACTOR (LOW SPEED)
C6, D18, E18, G5	F	— FUSE
	FLA	— FULL LOAD AMPS
H7	HPS	— HIGH PRESSURE SWITCH
M13, P2	HR	— HEATER CONTACTOR
F20	HS	— HUMIDITY SENSOR
F13	HTT	— HEAT TERMINATION THERMOSTAT
M20	IC	— INTERROGATOR CONNECTOR (OPTION)
E7, F11, H10, H11	IP	— INTERNAL PROTECTOR
M14	IRL	— IN-RANGE LIGHT (OPTION)
B16	KP	— KEYPAD CONNECTOR
E16	MDS	— MANUAL DEFROST SWITCH
D20, L20, M20, P20	PR	— PROBE RECEPTACLE (USDA OPTION)
L8, L14, L16	RM	— REMOTE MONITORING RECEPTACLE (OPTION)
K20	RRS	— RETURN RECORDER SENSOR (OPTION)
B20	RTS	— RETURN TEMPERATURE SENSOR
E20	SMV	— SUCTION MODULATION VALVE
H20	SPT	— SUCTION PRESSURE TRANSDUCER (OPTION)
K20	SRS	— SUPPLY RECORDER SENSOR (OPTION)
H15	SSV	— SUCTION SOLENOID VALVE
K4	ST	— START-STOP SWITCH
A20	STS	— SUPPLY TEMPERATURE SENSOR
K7	TC	— CONTROLLER RELAY (COOLING)
D5	TCC	— TRANSFRESH COMMUNICATIONS CONNECTOR (OPTION)
K8	TD	— CONTROLLER RELAY (LOW SPEED COMPRESSOR)
K11	TE	— CONTROLLER RELAY (HIGH SPEED EVAPORATOR FANS)
G5	TFC	— TRANSFRESH CONTROLLER (OPTION)
K13	TH	— CONTROLLER RELAY (HEATING)
K16	TI	— INRANGE RELAY
K14	TF	— DEFROST RELAY
K10	TN	— CONTROLLER RELAY (CONDENSER FAN)
D17, F15, G10, J7, \	TP	— TEST POINT
J10, J11, J13, M16		
M3	TR	— TRANSFORMER
D1	TRANS	— TRANSFORMER AUTO 230/460 (OPTION)
E5, F5	TRC	— TRANSFRESH REAR CONNECTOR (OPTION)
E15	TS	— CONTROLLER RELAY (SUCTION SOLENOID VALVE)
K9	TT	— CONTROLLER RELAY (COMPRESSOR SHORTING)
K12	TV	— CONTROLLER RELAY (LOW SPEED EVAPORATOR FANS)
E10	WP	— WATER PRESSURE SWITCH (OPTION)

**Figure 7-41. Electrical Schematic - See Model Chart
(Sheet 1 of 2)**

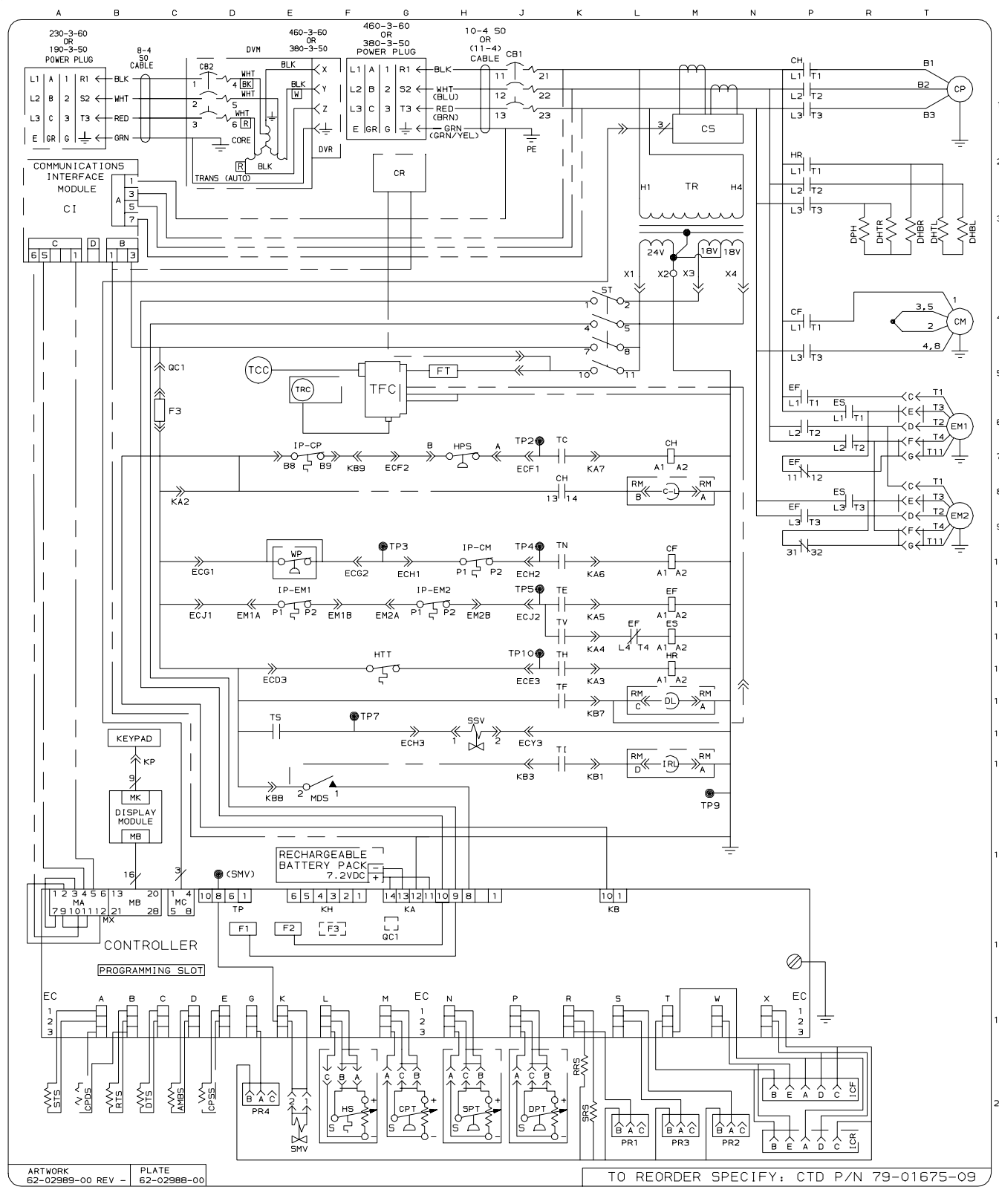


Figure 7-41. Electrical Schematic - See Model Chart (Sheet 2 of 2)

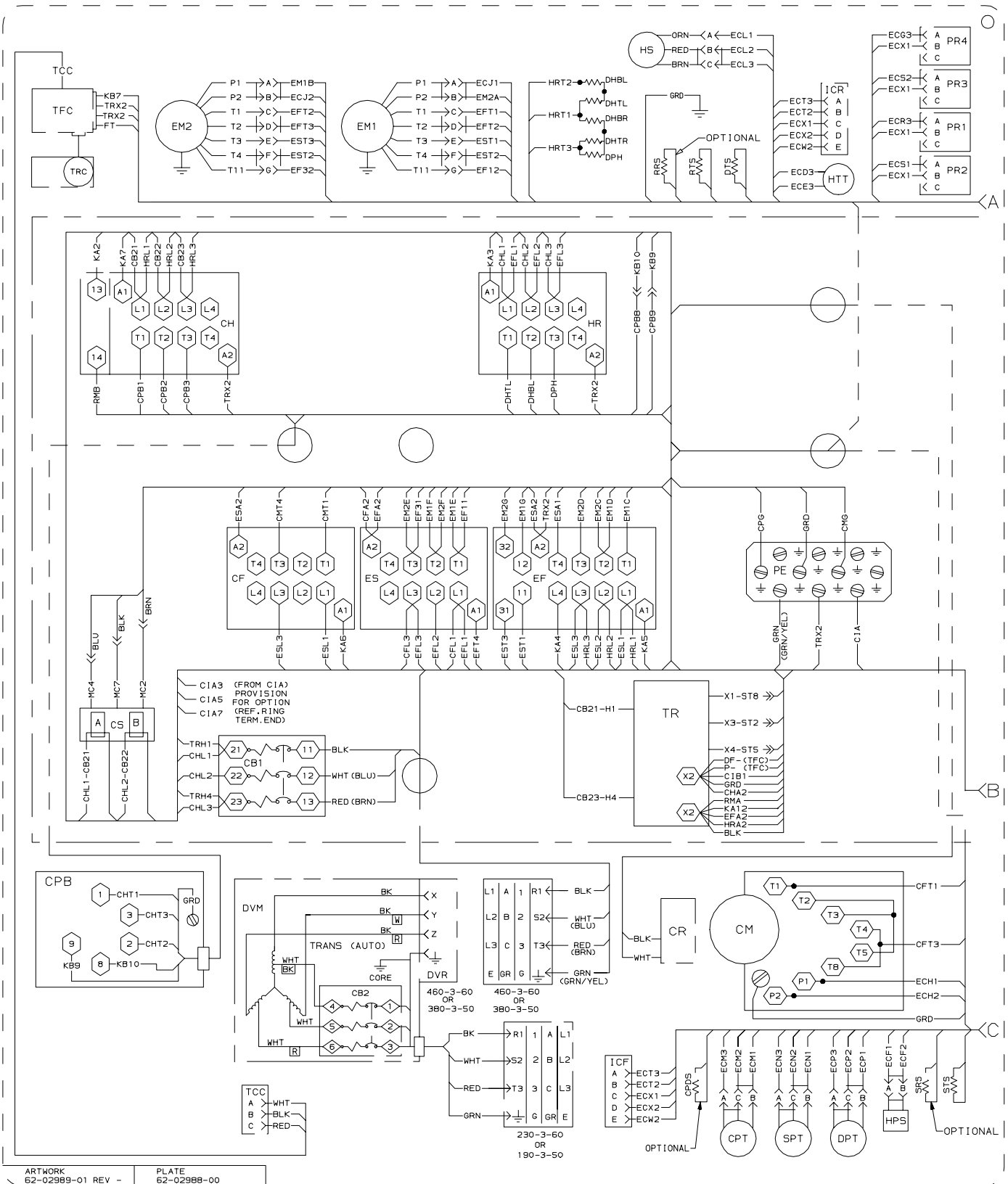
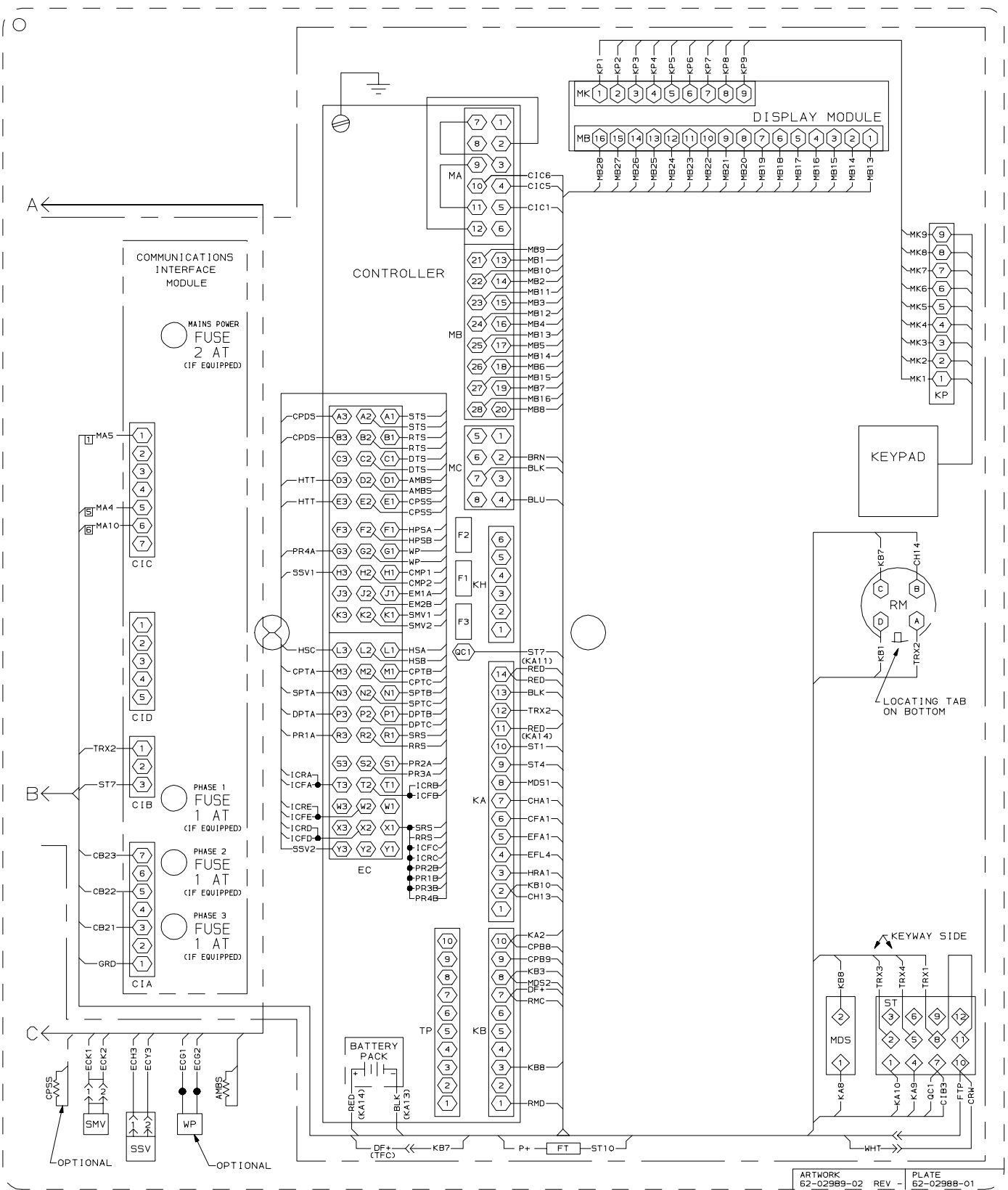


Figure 7-42. Electrical Wiring Diagram - See Model Chart (Sheet 1 of 2)

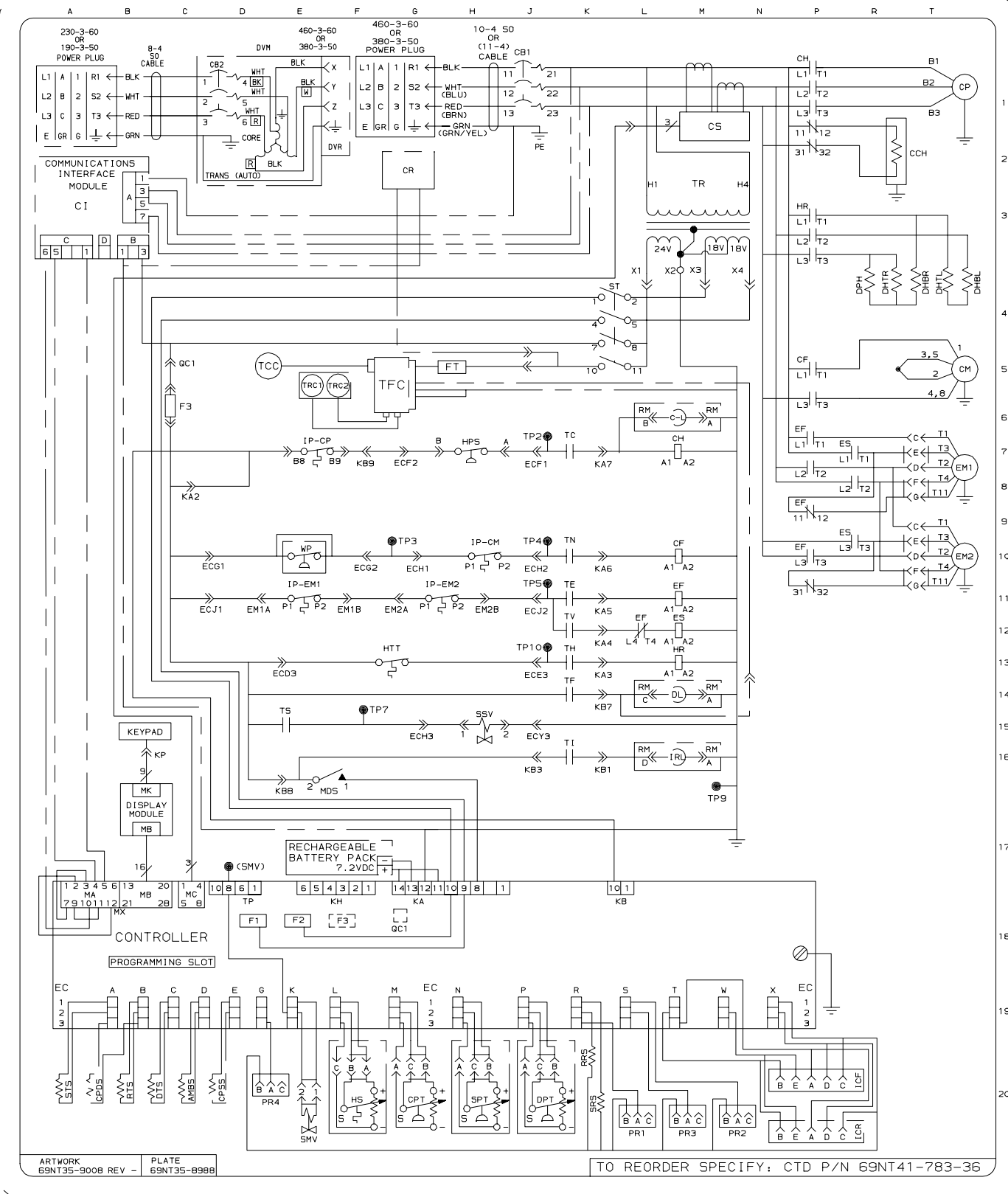


ARTWORK 62-02989-02 REV. PLATE 62-02988-01

Figure 7-42. Electrical Wiring Diagram - See Model Chart (Sheet 2 of 2)

LEGEND		
<u>ZONE</u>	<u>SYMBOL</u>	<u>DESCRIPTION</u>
C19	AMBS	— AMBIENT SENSOR
J1	CB1	— CIRCUIT BREAKER 460V
D1	CB2	— OPTIONAL CIRCUIT BREAKER 230V (DVM OPTION) TERMINAL BLOCK WHEN CB2 NOT PRESENT
R2	CCH	— COMPRESSOR CRANKCASE HEATER
M9,P5	CF	— CONDENSER FAN CONTACTOR
A3	CI	— COMMUNICATIONS INTERFACE MODULE (OPTION)
M7,P1	CH	— COMPRESSOR CONTACTOR
M6	C-L	— COOL LIGHT (OPTION)
H10, T5	CM	— CONDENSER FAN MOTOR
E7, T1	CP	— COMPRESSOR MOTOR
A20	CPDS	— COMPRESSOR DISCHARGE SENSOR (TEMP.)
C20	CPSS	— COMPRESSOR SUCTION SENSOR (TEMP.)
G20	CPT	— CONDENSER PRESSURE TRANSDUCER
G2	CR	— CHART RECORDER (OPTION)
M1	CS	— CURRENT SENSOR
T4	DHBL	— DEFROST HEATER - BOTTOM LEFT
T4	DHBR	— DEFROST HEATER - BOTTOM RIGHT
T4	DHTL	— DEFROST HEATER - TOP LEFT
R4	DHTR	— DEFROST HEATER - TOP RIGHT
M15	DL	— DEFROST LIGHT (OPTION)
R4	DPH	— DRAIN PAN HEATER
J20	DPT	— DISCHARGE PRESSURE TRANSDUCER (OPTION)
C20	DTS	— DEFROST TEMPERATURE SENSOR
D1	DVM	— DUAL VOLTAGE MODULE (OPTIONAL)
E1	DVR	— DUAL VOLTAGE RECEPTACLE (OPTIONAL)
L12, M11, P7	EF	— EVAPORATOR FAN CONTACTOR (HIGH SPEED)
G11, H11, T7, T10	EM	— EVAPORATOR FAN MOTOR
M12, R7	ES	— EVAPORATOR FAN CONTACTOR (LOW SPEED)
C6, D18, E18, G5	F	— FUSE
H7	FLA	— FULL LOAD AMPS
M13, P3	HPS	— HIGH PRESSURE SWITCH
F20	HR	— HEATER CONTACTOR
F13	HS	— HUMIDITY SENSOR
M20	HTT	— HEAT TERMINATION THERMOSTAT
E7, F11, H10, H11	IC	— INTERROGATOR CONNECTOR (OPTION)
M14	IP	— INTERNAL PROTECTOR
B16	IRL	— IN-RANGE LIGHT (OPTION)
E16	KP	— KEYPAD CONNECTOR
D20, L20, M20, P20	MDS	— MANUAL DEFROST SWITCH
L6, L14, L16	PR	— PROBE RECEPTACLE (USDA OPTION)
K20	RM	— REMOTE MONITORING RECEPTACLE (OPTION)
B20	RRS	— RETURN RECORDER SENSOR (OPTION)
E20	RTS	— RETURN TEMPERATURE SENSOR
H20	SMV	— SUCTION MODULATION VALVE
K20	SPT	— SUCTION PRESSURE TRANSDUCER (OPTION)
H15	SRS	— SUPPLY RECORDER SENSOR (OPTION)
K4	SSV	— SUCTION SOLENOID VALVE
A20	ST	— START-STOP SWITCH
K7	STS	— SUPPLY TEMPERATURE SENSOR
D5	TC	— CONTROLLER RELAY (COOLING)
K8	TCC	— TRANSFRESH COMMUNICATIONS CONNECTOR (OPTION)
K11	TD	— CONTROLLER RELAY (LOW SPEED COMPRESSOR)
G5	TE	— CONTROLLER RELAY (HIGH SPEED EVAPORATOR FANS)
K13	TEC	— TRANSFRESH CONTROLLER (OPTION)
K16	TH	— CONTROLLER RELAY (HEATING)
K14	TI	— INRANGE RELAY
K10	TF	— DEFROST RELAY
D17, F15, G10, J7, J10, J11, J13, M16	TN	— CONTROLLER RELAY (CONDENSER FAN)
M3	TP	— TEST POINT
D1	TR	— TRANSFORMER
E5, F5	TRANS	— TRANSFORMER AUTO 230/460 (OPTION)
E15	TRC	— TRANSFRESH REAR CONNECTOR (OPTION)
K9	TS	— CONTROLLER RELAY (SUCTION SOLENOID VALVE)
K12	TT	— CONTROLLER RELAY (COMPRESSOR SHORTING)
E10	TV	— CONTROLLER RELAY (LOW SPEED EVAPORATOR FANS)
	WP	— WATER PRESSURE SWITCH (OPTION)

**Figure 7-43. Electrical Schematic - See Model Chart
(Sheet 1 of 2)**



ARTWORK 69NT35-3008 REV - PLATE 69NT35-8988

TO REORDER SPECIFY: CTD P/N 69NT41-783-36

Figure 7-43. Electrical Schematic - See Model Chart (Sheet 2 of 2)

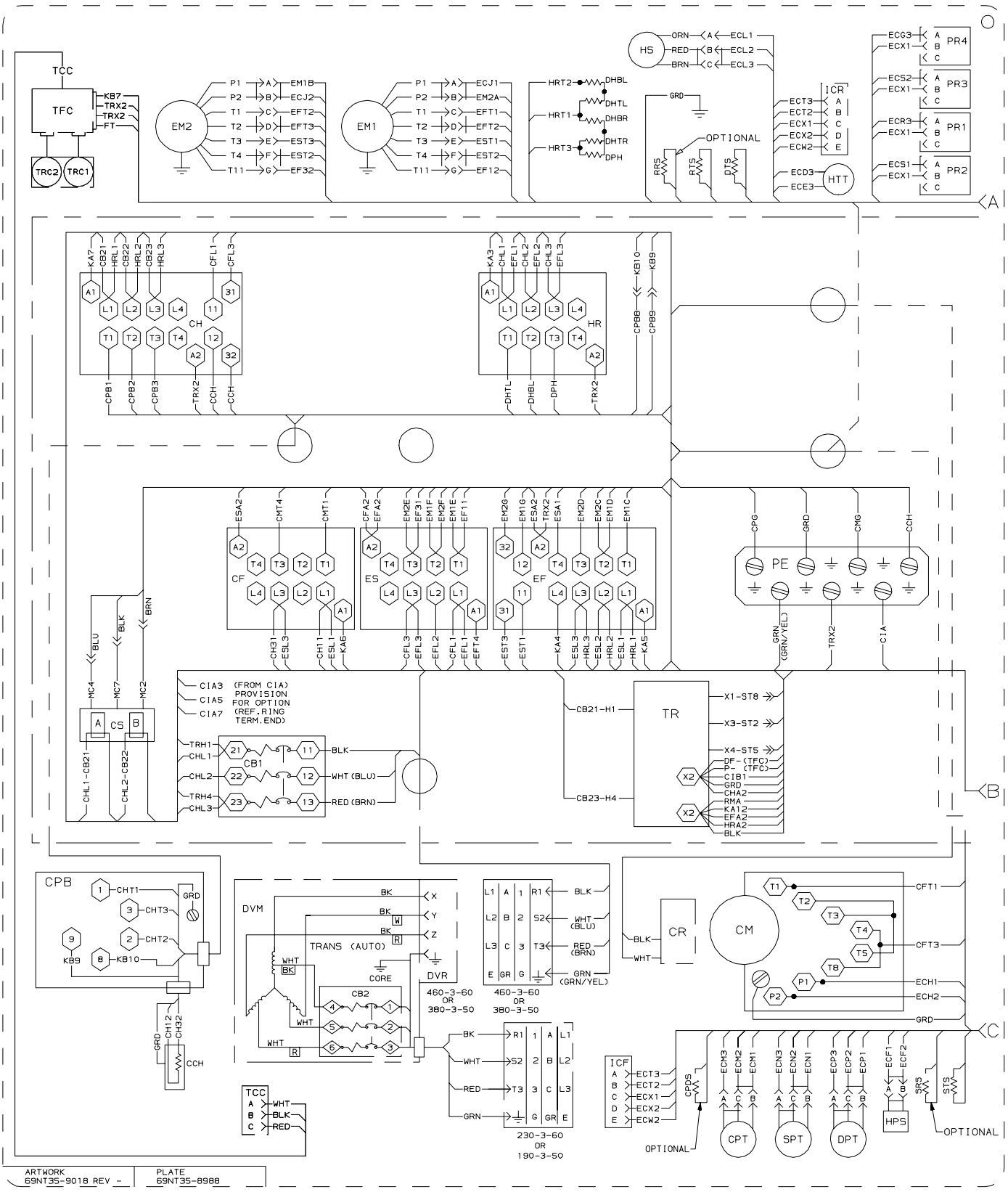
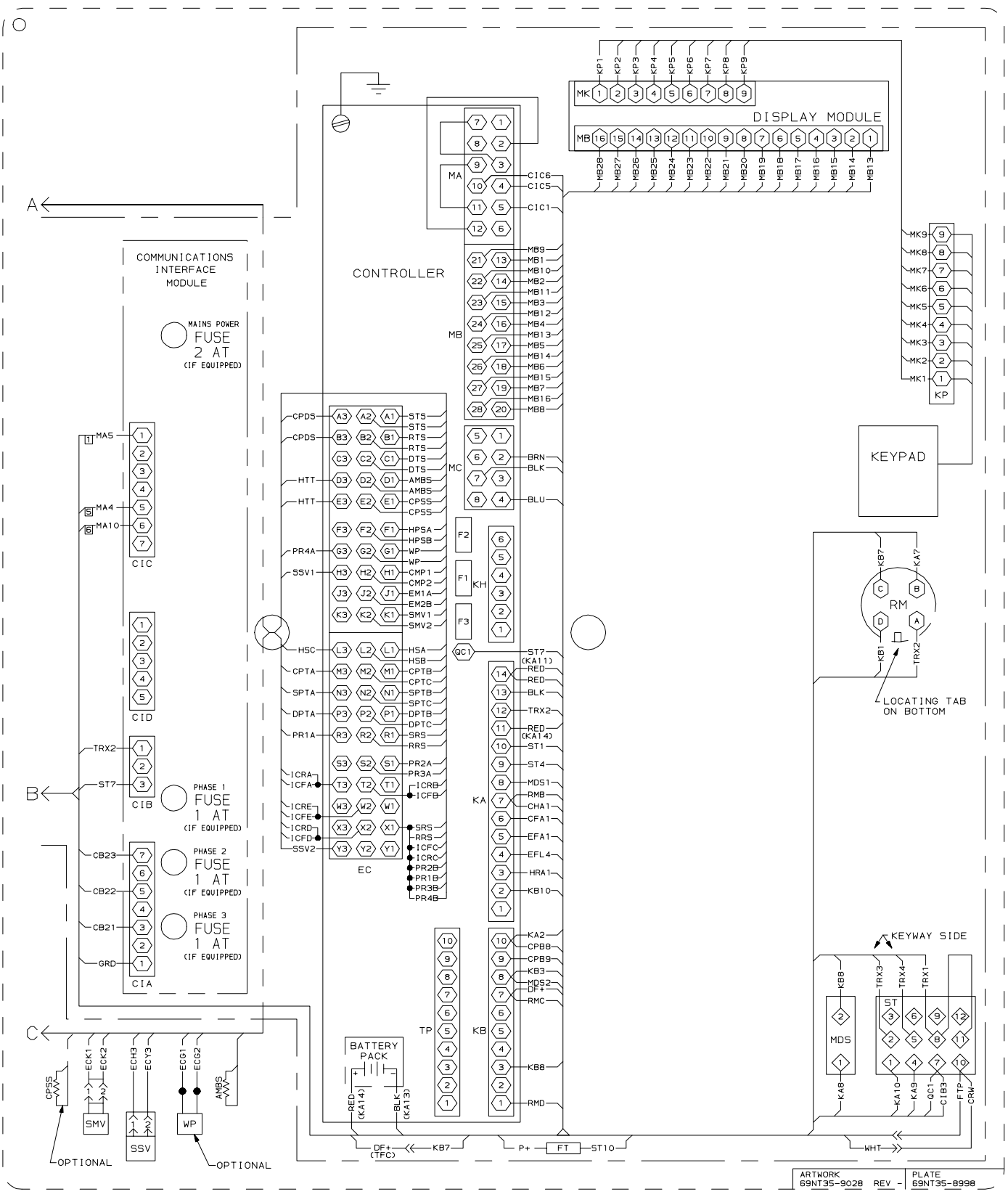


Figure 7-44. Electrical Wiring Diagram - See Model Chart (Sheet 1 of 2)

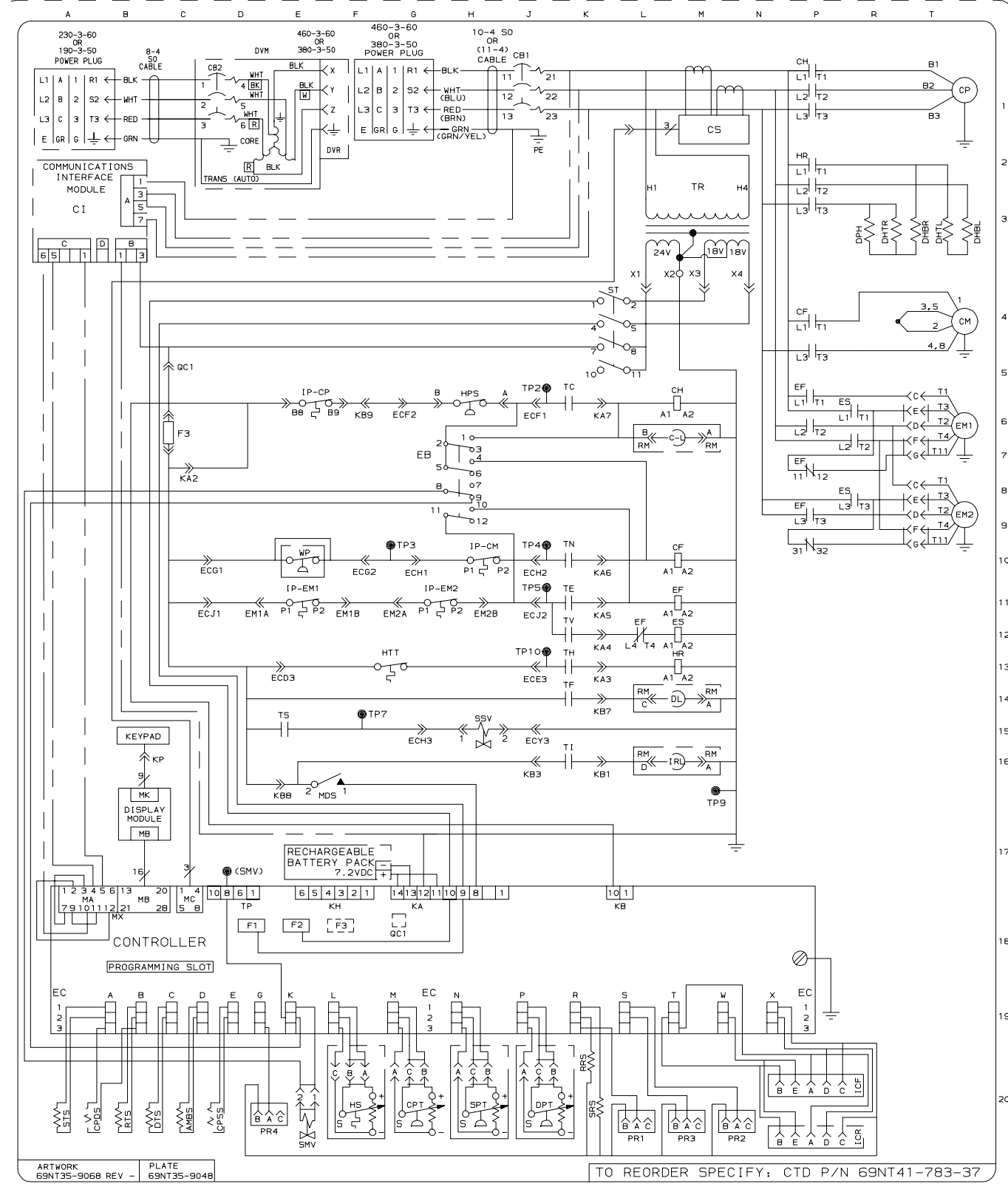


ARTWORK 69NT35-9028 REV - PLATE 69NT35-8998

Figure 7-44. Electrical Wiring Diagram - See Model Chart (Sheet 2 of 2)

LEGEND		
<u>ZONE</u>	<u>SYMBOL</u>	<u>DESCRIPTION</u>
C19	AMBS	— AMBIENT SENSOR
J1	CB1	— CIRCUIT BREAKER 460V
D1	CB2	— OPTIONAL CIRCUIT BREAKER 230V (DVM OPTION) TERMINAL BLOCK WHEN CB2 NOT PRESENT
M9,P4	CF	— CONDENSER FAN CONTACTOR
A3	CI	— COMMUNICATIONS INTERFACE MODULE (OPTION)
M5,P1	CH	— COMPRESSOR CONTACTOR
M6	C-L	— COOL LIGHT (OPTION)
H10,T4	CM	— CONDENSER FAN MOTOR
E7,T1	CP	— COMPRESSOR MOTOR
A20	CPDS	— COMPRESSOR DISCHARGE SENSOR (TEMP.)
C20	CPSS	— COMPRESSOR SUCTION SENSOR (TEMP.)
G20	CPT	— CONDENSER PRESSURE TRANSDUCER
M1	CS	— CURRENT SENSOR
T3	DHBL	— DEFROST HEATER - BOTTOM LEFT
T3	DHBR	— DEFROST HEATER - BOTTOM RIGHT
T3	DHTL	— DEFROST HEATER - TOP LEFT
R3	DHTR	— DEFROST HEATER - TOP RIGHT
M15	DL	— DEFROST LIGHT (OPTION)
R3	DPH	— DRAIN PAN HEATER
J20	DPT	— DISCHARGE PRESSURE TRANSDUCER (OPTION)
C20	DTS	— DEFROST TEMPERATURE SENSOR
D1	DVM	— DUAL VOLTAGE MODULE (OPTIONAL)
E1	DVR	— DUAL VOLTAGE RECEPTACLE (OPTIONAL)
H7	EB	— EMERGENCY (CONTROLLER) BYPASS SWITCH
L12,M11,P6	EF	— EVAPORATOR FAN CONTACTOR (HIGH SPEED)
G11,H11,T6,T9	EM	— EVAPORATOR FAN MOTOR
M12,R6	ES	— EVAPORATOR FAN CONTACTOR (LOW SPEED)
C6,D18,E18	F	— FUSE
	FLA	— FULL LOAD AMPS
H5	HPS	— HIGH PRESSURE SWITCH
M13,P2	HR	— HEATER CONTACTOR
F20	HS	— HUMIDITY SENSOR (OPTION)
F13	HTT	— HEAT TERMINATION THERMOSTAT
M20	IC	— INTERROGATOR CONNECTOR (OPTION)
E5,F11,H10,H11	IP	— INTERNAL PROTECTOR
M14	IRL	— IN-RANGE LIGHT (OPTION)
B16	KP	— KEYPAD CONNECTOR
E16	MDS	— MANUAL DEFROST SWITCH
D20,L20,M20,P20	PR	— PROBE RECEPTACLE (USDA OPTION)
L6,L14,L16	RM	— REMOTE MONITORING RECEPTACLE (OPTION)
K20	RRS	— RETURN RECORDER SENSOR (OPTION)
B20	RTS	— RETURN TEMPERATURE SENSOR
E20	SMV	— SUCTION MODULATION VALVE
H20	SPT	— SUCTION PRESSURE TRANSDUCER (OPTION)
K20	SRS	— SUPPLY RECORDER SENSOR (OPTION)
H15	SSV	— SUCTION SOLENOID VALVE
K4	ST	— START-STOP SWITCH
A20	STS	— SUPPLY TEMPERATURE SENSOR
K5	TC	— CONTROLLER RELAY (COOLING)
K8	TD	— CONTROLLER RELAY (LOW SPEED COMPRESSOR)
K11	TE	— CONTROLLER RELAY (HIGH SPEED EVAPORATOR FANS)
K13	TH	— CONTROLLER RELAY (HEATING)
K16	TI	— INRANGE RELAY
K14	TF	— DEFROST RELAY
K10	TN	— CONTROLLER RELAY (CONDENSER FAN)
D17,F15,G10,J7, } J10,J11,J13,M16 }	TP	— TEST POINT
M3	TR	— TRANSFORMER
D1	TRANS	— TRANSFORMER AUTO 230/460 (OPTION)
E5,F5	TRC	— TRANSFRESH REAR CONNECTOR (OPTION)
E15	TS	— CONTROLLER RELAY (SUCTION SOLENOID VALVE)
K9	TT	— CONTROLLER RELAY (COMPRESSOR SHORTING)
K12	TV	— CONTROLLER RELAY (LOW SPEED EVAPORATOR FANS)
E10	WP	— WATER PRESSURE SWITCH (OPTION)

**Figure 7-45. Electrical Schematic - See Model Chart
(Sheet 1 of 2)**



ARTWORK 69NT35-3068 REV - PLATE 69NT35-3048

TO REORDER SPECIFY: CTD P/N 69NT41-783-37

Figure 7-45. Electrical Schematic - See Model Chart (Sheet 2 of 2)

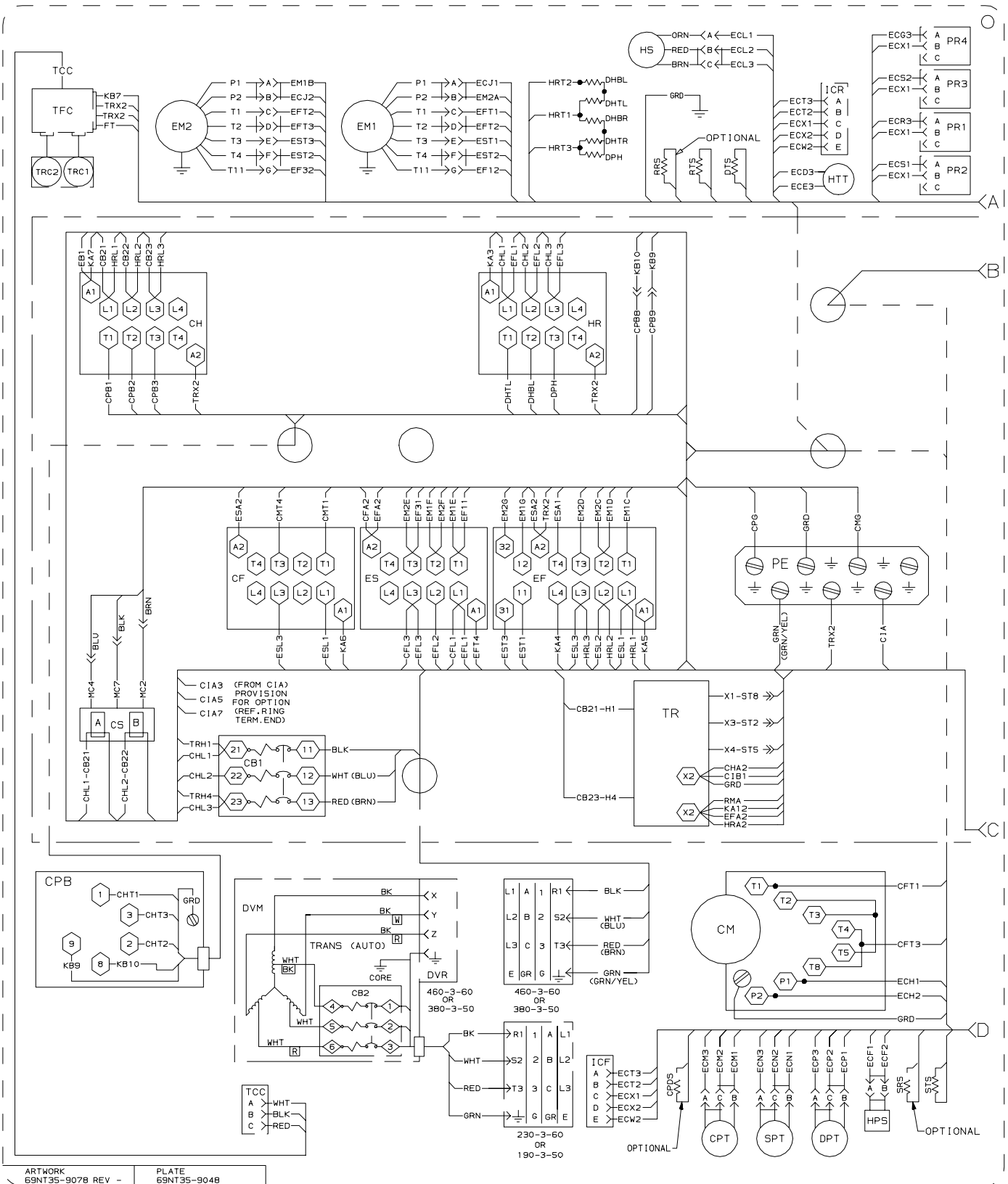
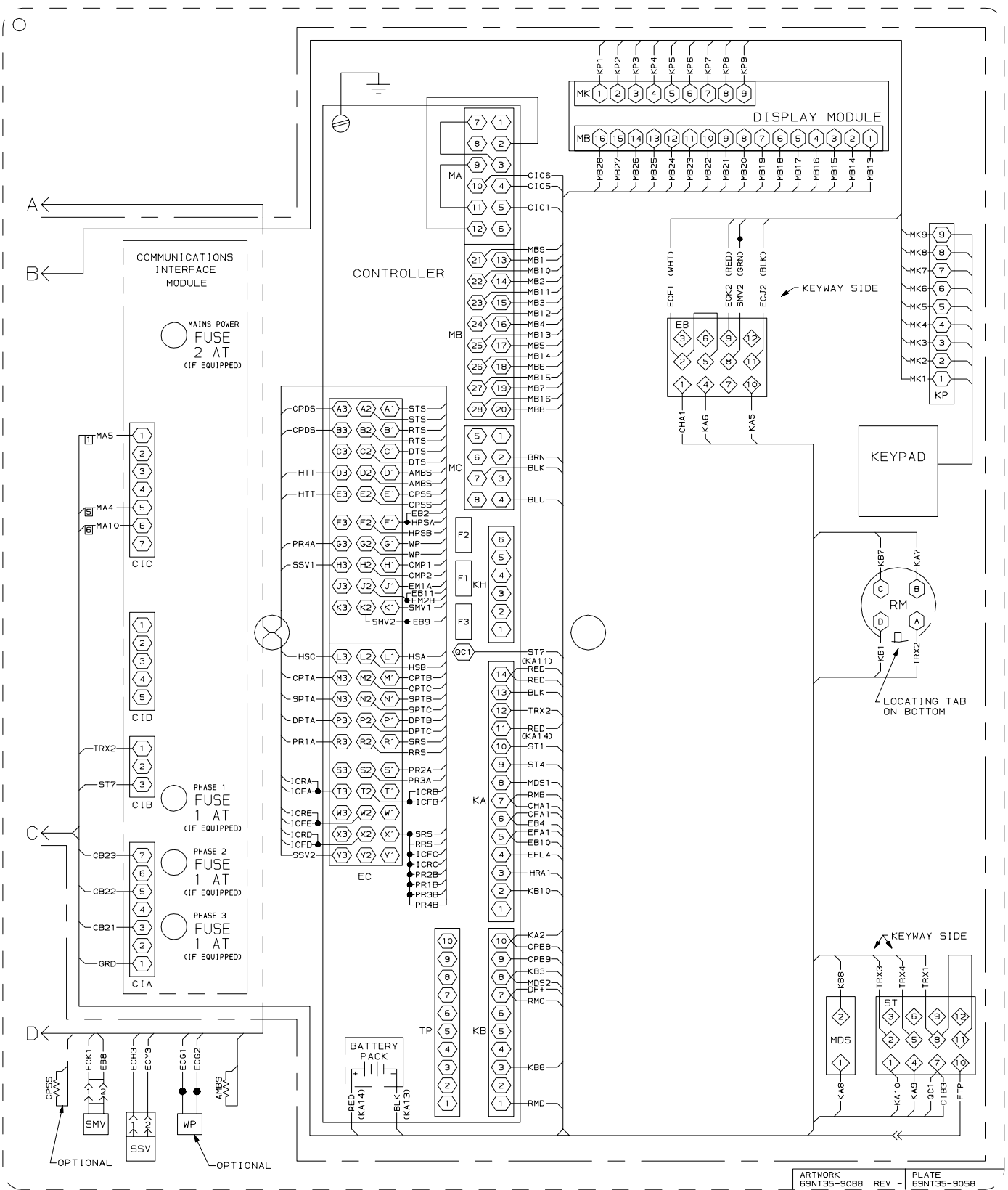


Figure 7-46. Electrical Wiring Diagram - See Model Chart (Sheet 1 of 2)



ARTWORK 69NT35-9088 REV - PLATE 69NT35-9058

Figure 7-46. Electrical Wiring Diagram - See Model Chart (Sheet 2 of 2)

LEGEND

<u>ZONE</u>	<u>SYMBOL</u>	<u>DESCRIPTION</u>
C20	AMBS	— AMBIENT SENSOR
J1	CB1	— CIRCUIT BREAKER 460V
M10, P4	CF	— CONDENSER FAN CONTACTOR
M7, P1	CH	— COMPRESSOR CONTACTOR
A3	CI	— COMMUNICATIONS INTERFACE MODULE
H10, T4	CM	— CONDENSER FAN MOTOR
E7, T1	CP	— COMPRESSOR MOTOR
B20	CPDS	— COMPRESSOR DISCHARGE SENSOR (TEMP.)
D20	CPSS	— COMPRESSOR SUCTION SENSOR (TEMP.)
G20	CPT	— CONDENSER PRESSURE TRANSDUCER
M1	CS	— CURRENT SENSOR
T3	DHBL	— DEFROST HEATER - BOTTOM LEFT
T3	DHBR	— DEFROST HEATER - BOTTOM RIGHT
T3	DHTL	— DEFROST HEATER - TOP LEFT
R3	DHTR	— DEFROST HEATER - TOP RIGHT
R3	DPH	— DRAIN PAN HEATER
C20	DTS	— DEFROST TEMPERATURE SENSOR
L12, M11, P6	EF	— EVAPORATOR FAN CONTACTOR (HIGH SPEED)
E11, G11, T6, T9	EM	— EVAPORATOR FAN MOTOR
M12, R6	ES	— EVAPORATOR FAN CONTACTOR (LOW SPEED)
C6, D18, E18	F	— FUSE
	FLA	— FULL LOAD AMPS
H7	HPS	— HIGH PRESSURE SWITCH
M13, P2	HR	— HEATER CONTACTOR
F20	HS	— HUMIDITY SENSOR
G13	HTT	— HEAT TERMINATION THERMOSTAT
P20	IC	— INTERROGATOR CONNECTOR
E7, E11, G11, H10	IP	— INTERNAL PROTECTOR
B16	KP	— KEYPAD CONNECTOR
F16	MDS	— MANUAL DEFROST SWITCH
D20, L20, M20, N20	PR	— PROBE RECEPTACLE (USDA OPTION)
K20	RRS	— RETURN RECORDER SENSOR
B20	RTS	— RETURN TEMPERATURE SENSOR
E20	SMV	— SUCTION MODULATION VALVE
K20	SRS	— SUPPLY RECORDER SENSOR
H15	SSV	— SUCTION SOLENOID VALVE
K4	ST	— START-STOP SWITCH
A20	STS	— SUPPLY TEMPERATURE SENSOR
K7	TC	— CONTROLLER RELAY (COOLING)
K11	TE	— CONTROLLER RELAY (HIGH SPEED EVAPORATOR FANS)
K13	TH	— CONTROLLER RELAY (HEATING)
K10	TN	— CONTROLLER RELAY (CONDENSER FAN)
D17, F15, G10, J7, } J10, J11, J13, M16 }	TP	— TEST POINT
M3	TR	— TRANSFORMER
E15	TS	— CONTROLLER RELAY (SUCTION SOLENOID VALVE)
K12	TV	— CONTROLLER RELAY (LOW SPEED EVAPORATOR FANS)

**Figure 7-47. Electrical Schematic - See Model Chart
(Sheet 1 of 2)**

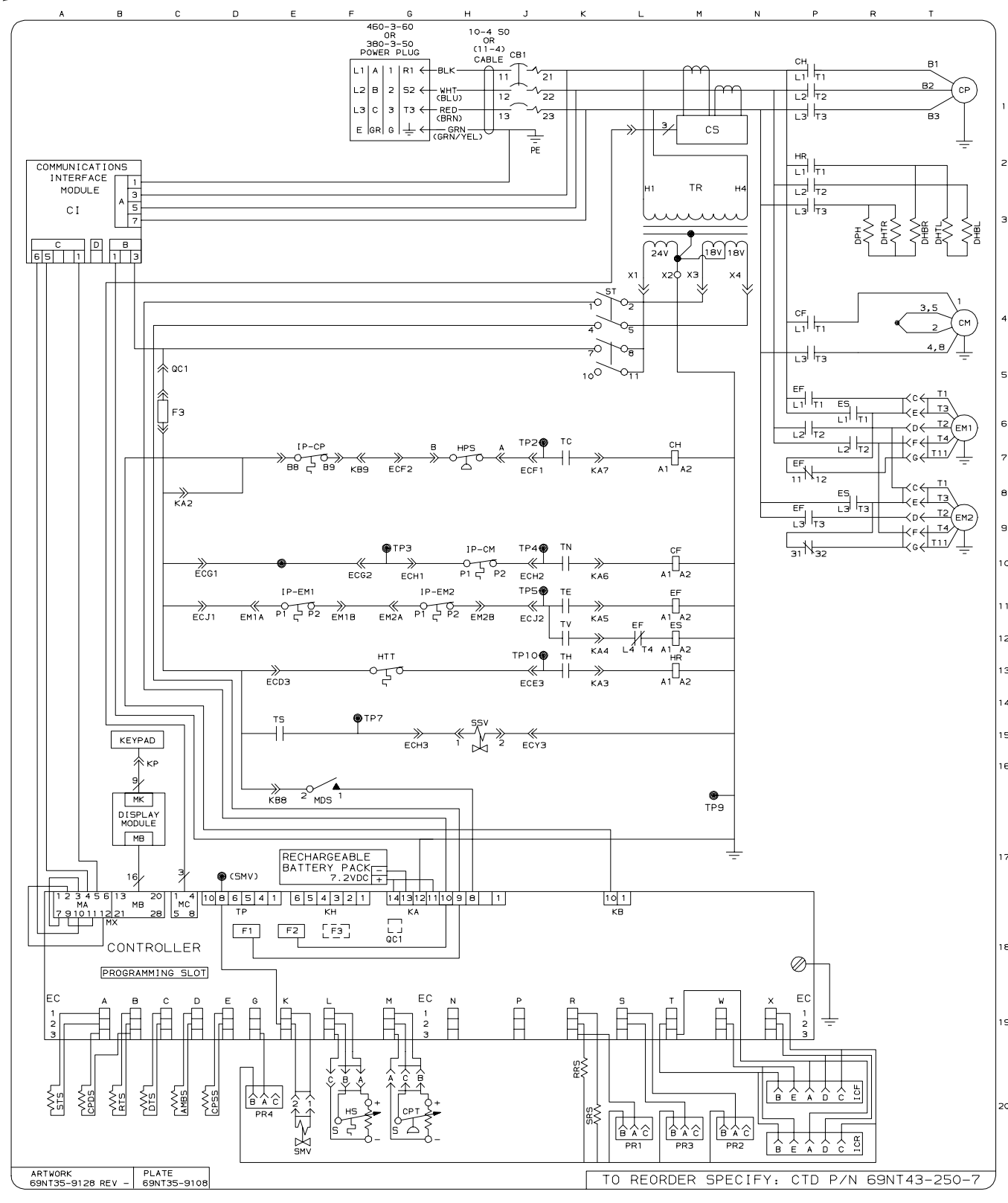


Figure 7-47. Electrical Schematic - See Model Chart (Sheet 2 of 2)

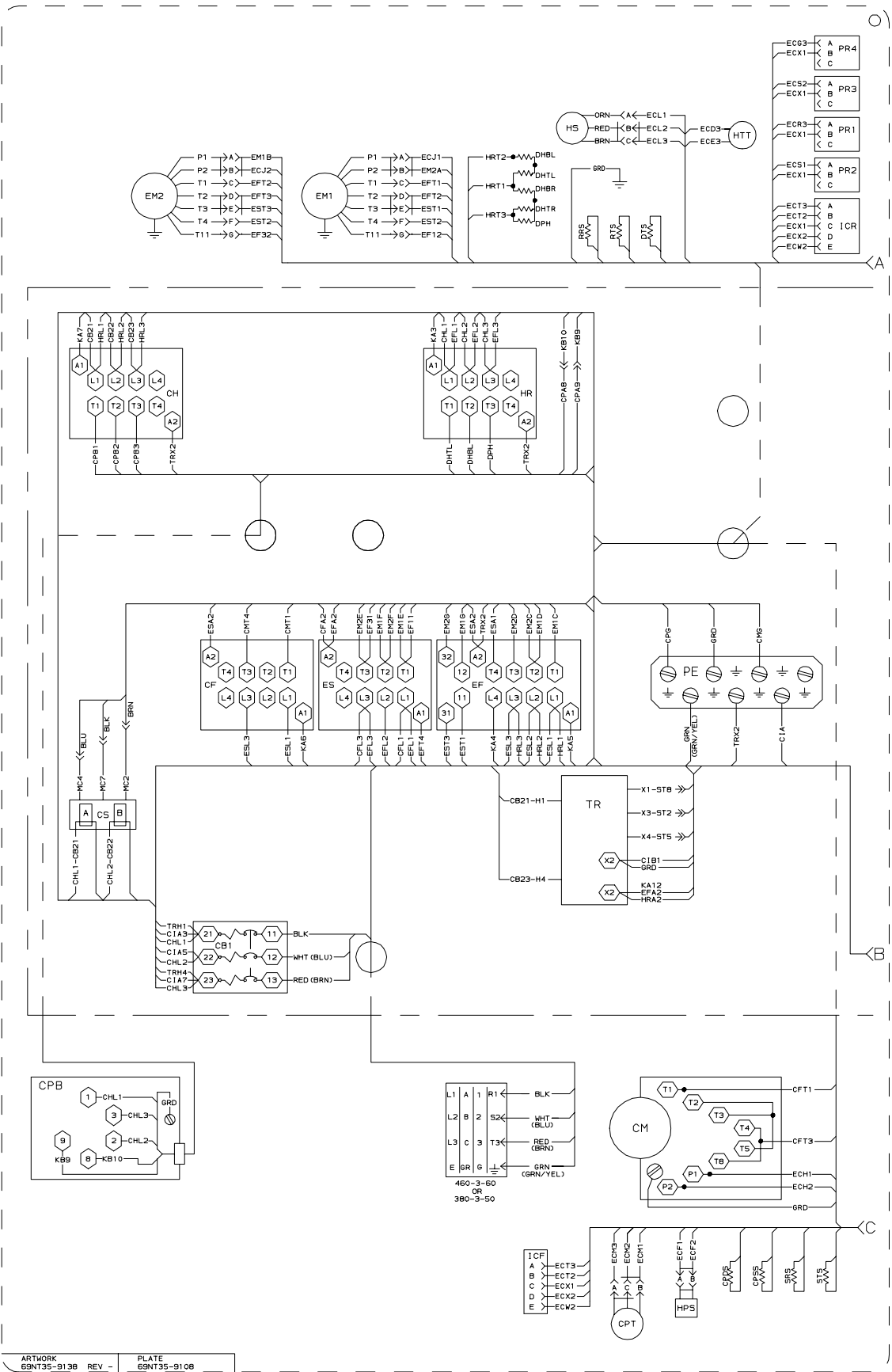
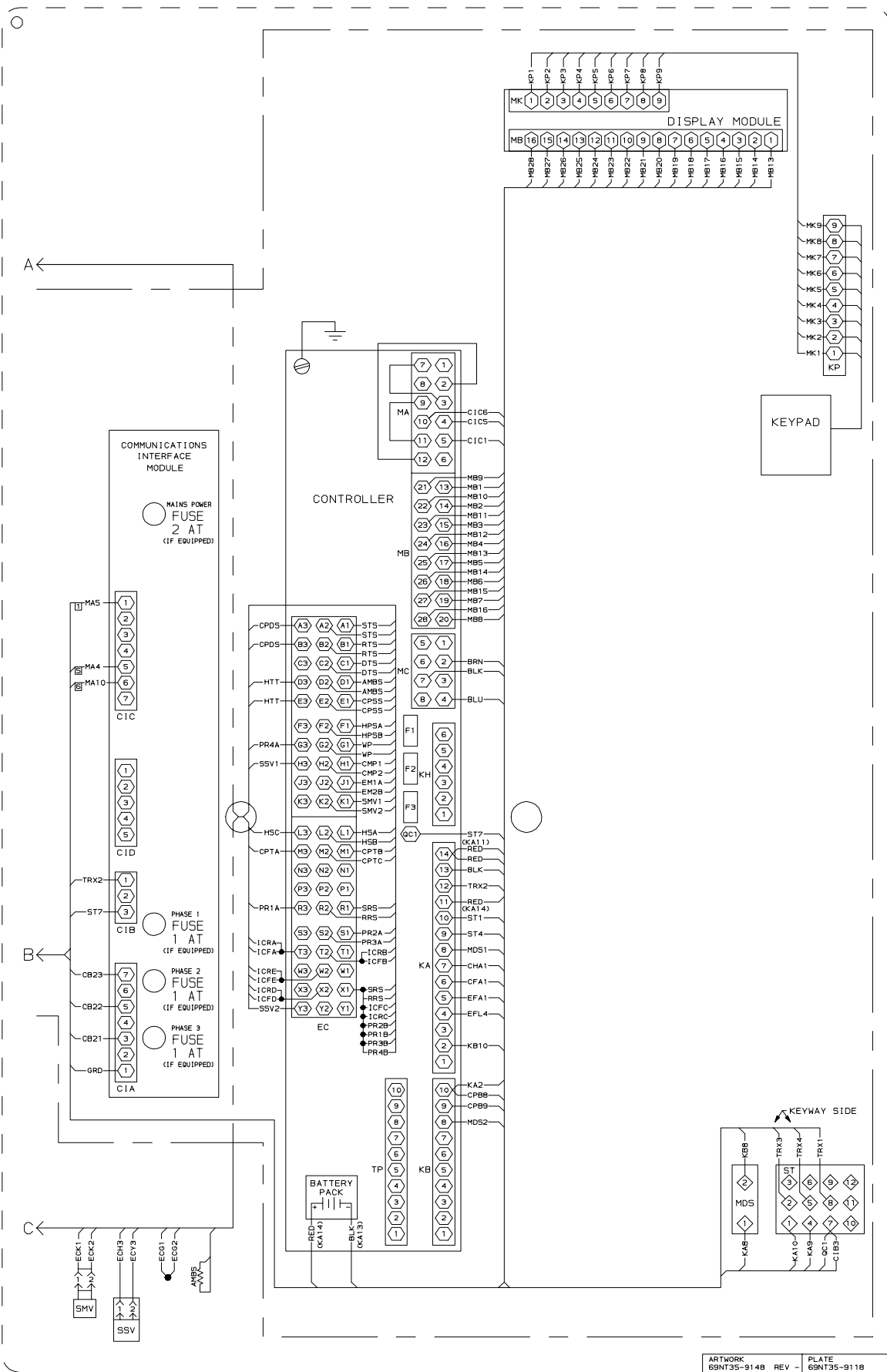


Figure 7-48. Electrical Wiring Diagram - See Model Chart
(Sheet 1 of 2)



ARTWORK 69NT35-9148 REV - PLATE 69NT35-9118

Figure 7-48. Electrical Wiring Diagram - See Model Chart (Sheet 2 of 2)

<u>ZONE</u>	<u>SYMBOL</u>	<u>LEGEND</u> <u>DISCUPTION</u>
C19	AMBS	— AMBIENT SENSOR
J1	CB1	— CIRCUIT BREAKER 460V
D1	CB2	— CIRCUIT BREAKER 230V (AUTO TRANS OPTION)
M8, P4	CF	— CONDENSER FAN CONTACTOR
A3	CI	— COMMUNICATIONS INTERFACE MODULE (OPTION)
M7, P1, K6	CH	— COMPRESSOR CONTACTOR
M6	C-L	— COOL LIGHT (OPTION)
H8, T4	CM	— CONDENSER FAN MOTOR
E7, T1	CP	— COMPRESSOR MOTOR
A20	CPDS	— COMPRESSOR DISCHARGE SENSOR (TEMP.)
C20	CPSS	— COMPRESSOR SUCTION SENSOR (TEMP.)
G20	CPT	— CONDENSER PRESSURE TRANSDUCER
G2	CR	— CHART RECORDER (OPTIONAL)
M1	CS	— CURRENT SENSOR
T3	DHBL	— DEFROST HEATER - BOTTOM LEFT
T3	DHBR	— DEFROST HEATER - BOTTOM RIGHT
T3	DHTL	— DEFROST HEATER - TOP LEFT
R3	DHTR	— DEFROST HEATER - TOP RIGHT
M15	DL	— DEFROST LIGHT (OPTION)
R3	DPH	— DRAIN PAN HEATER
J20	DPT	— DISCHARGE PRESSURE TRANSDUCER (OPTION)
C20	DTS	— DEFROST TEMPERATURE SENSOR
D1	DVM	— DUAL VOLTAGE MODULE (OPTIONAL)
E1	DVR	— DUAL VOLTAGE RECEPTACLE (OPTIONAL)
G10, H10, J11, K11, P6, P9	} E	— EVAPORATOR FAN CONTACTOR (HIGH SPEED)
M10, M11, T6, T9	EM	— EVAPORATOR FAN MOTOR
C6, D18, E18, G5	F	— FUSE
	FLA	— FULL LOAD AMPS
H7	HPS	— HIGH PRESSURE SWITCH
M13, P2	HR	— HEATER CONTACTOR
F20	HS	— HUMIDITY SENSOR
F13	HTT	— HEAT TERMINATION THERMOSTAT
M20	IC	— INTERROGATOR CONNECTOR (OPTION)
E7, H8, M10, M11	IP	— INTERNAL PROTECTOR
M14	IRL	— IN-RANGE LIGHT (OPTION)
B16	KP	— KEYPAD CONNECTOR
E16	MDS	— MANUAL DEFROST SWITCH
D20, L20, M20, P20	PR	— PROBE RECEPTACLE (USDA OPTION)
L6, L14, L16	RM	— REMOTE MONITORING RECEPTACLE (OPTION)
K20	RRS	— RETURN RECORDER SENSOR
B20	RTS	— RETURN TEMPERATURE SENSOR
F10, G10, H11, J11, R6, R9	} S	— EVAPORATOR FAN CONTACTOR (LOW SPEED)
E20	SMV	— SUCTION MODULATION VALVE
H20	SPT	— SUCTION PRESSURE TRANSDUCER (OPTION)
K20	SRS	— SUPPLY RECORDER SENSOR
H15	SSV	— SUCTION SOLENOID VALVE
K4	ST	— START-STOP SWITCH
A20	STS	— SUPPLY TEMPERATURE SENSOR
K7	TC	— CONTROLLER RELAY (COOLING)
D5	TCC	— TRANSFRESH COMMUNICATIONS CONNECTOR (OPTION)
K8	TD	— CONTROLLER RELAY (LOW SPEED COMPRESSOR)
E10	TE	— CONTROLLER RELAY (HIGH SPEED EVAPORATOR FANS)
G5	TFC	— TRANSFRESH CONTROLLER (OPTION)
K13	TH	— CONTROLLER RELAY (HEATING)
K16	TI	— INRANGE RELAY
K14	TF	— DEFROST RELAY
K8	TN	— CONTROLLER RELAY (CONDENSER FAN)
D9, D17, F15, G10, J7, J10, J13, M16	} TP	— TEST POINT
M3	TR	— TRANSFORMER
D1	TRANS	— TRANSFORMER AUTO 230/460 (OPTION)
E5, F5	TRC	— TRANSFRESH REAR CONNECTOR (OPTION)
E15	TS	— CONTROLLER RELAY (SUCTION SOLENOID VALVE)
K9	TT	— CONTROLLER RELAY (COMPRESSOR SHORTING)
E11	TV	— CONTROLLER RELAY (LOW SPEED EVAPORATOR FANS)
E8	WP	— WATER PRESSURE SWITCH (OPTION)

**Figure 7-49. Electrical Schematic - See Model Chart
(Sheet 1 of 2)**

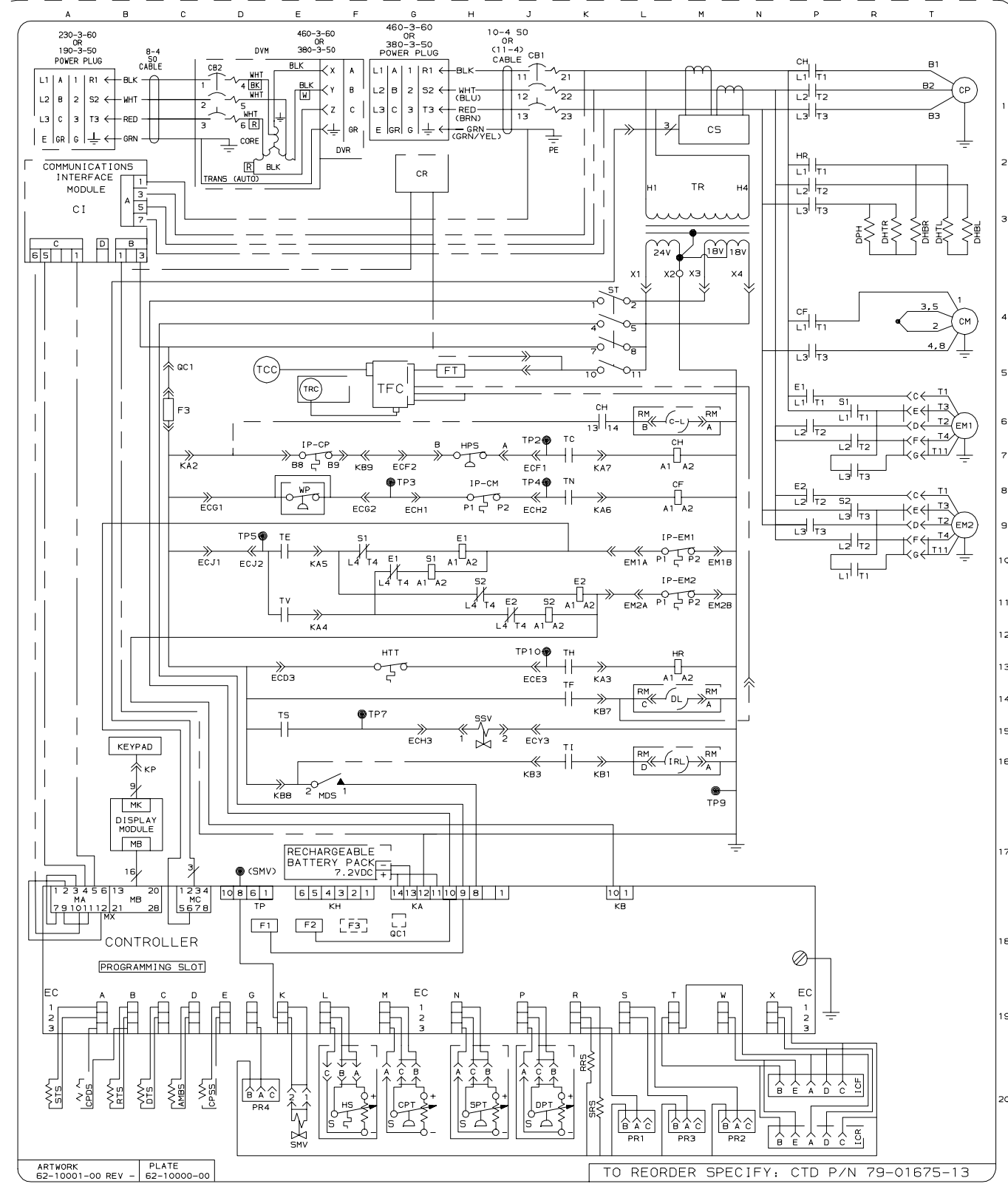


Figure 7-49. Electrical Schematic - See Model Chart (Sheet 2 of 2)

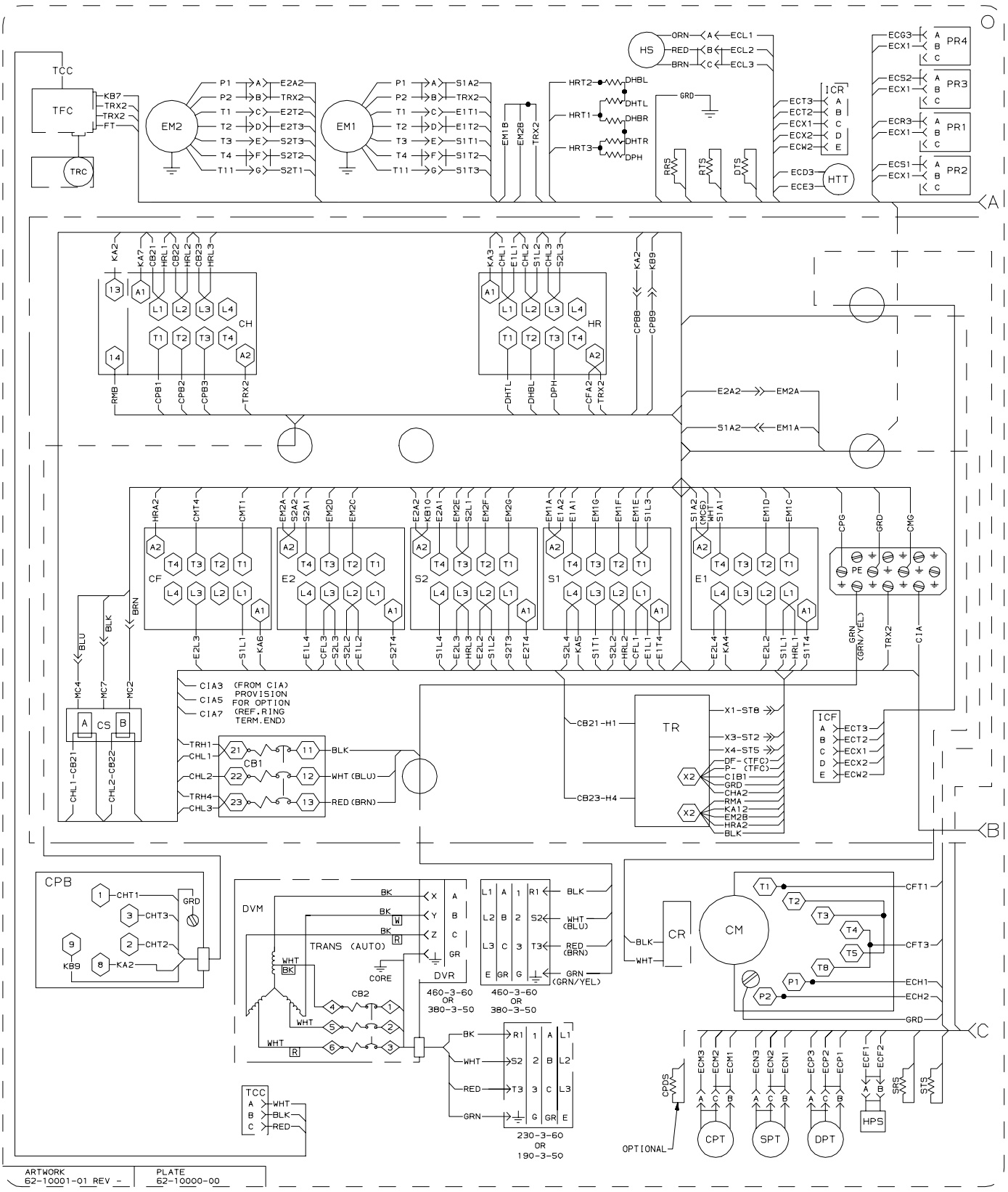
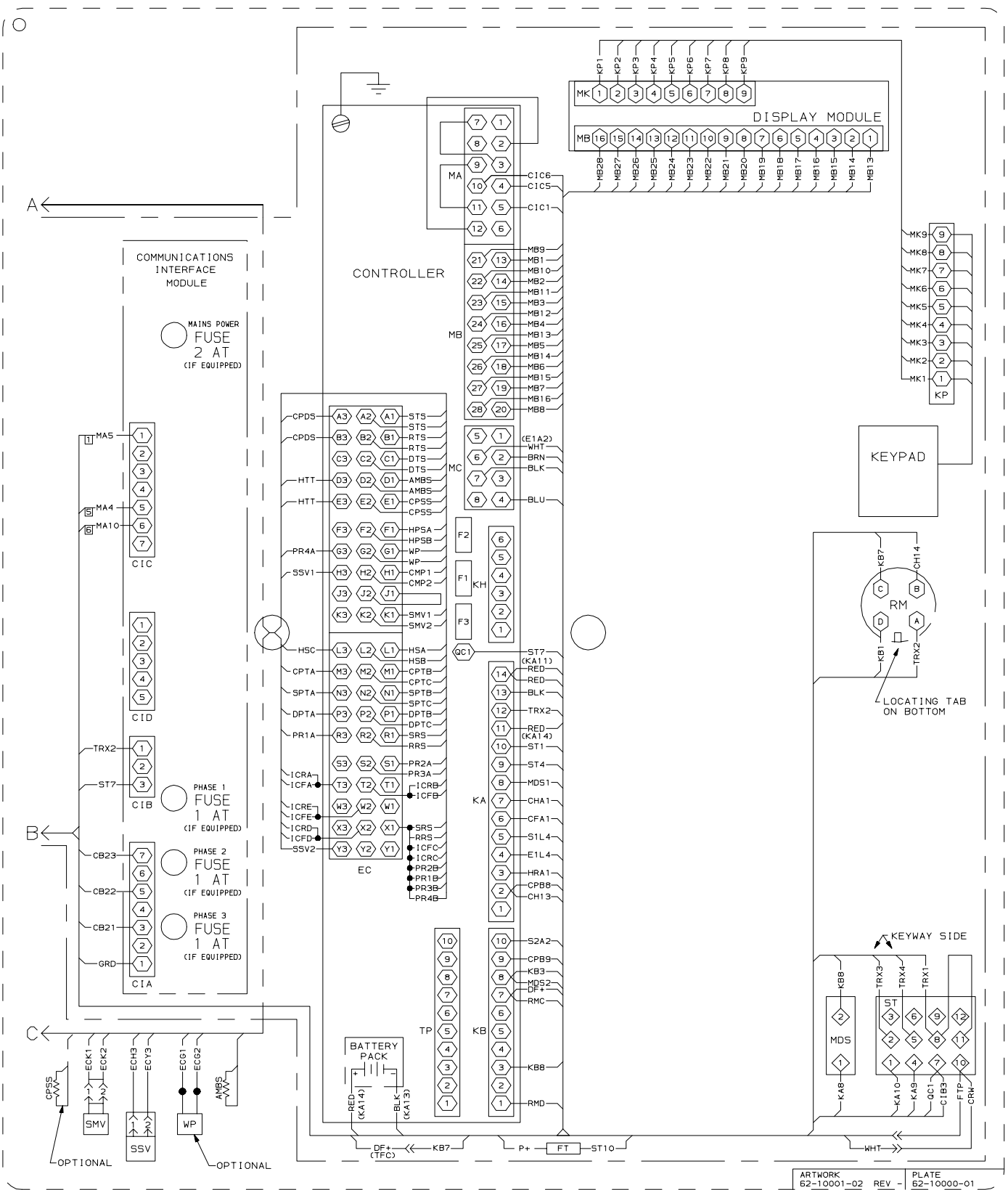


Figure 7-50. Electrical Wiring Diagram - See Model Chart (Sheet 1 of 2)

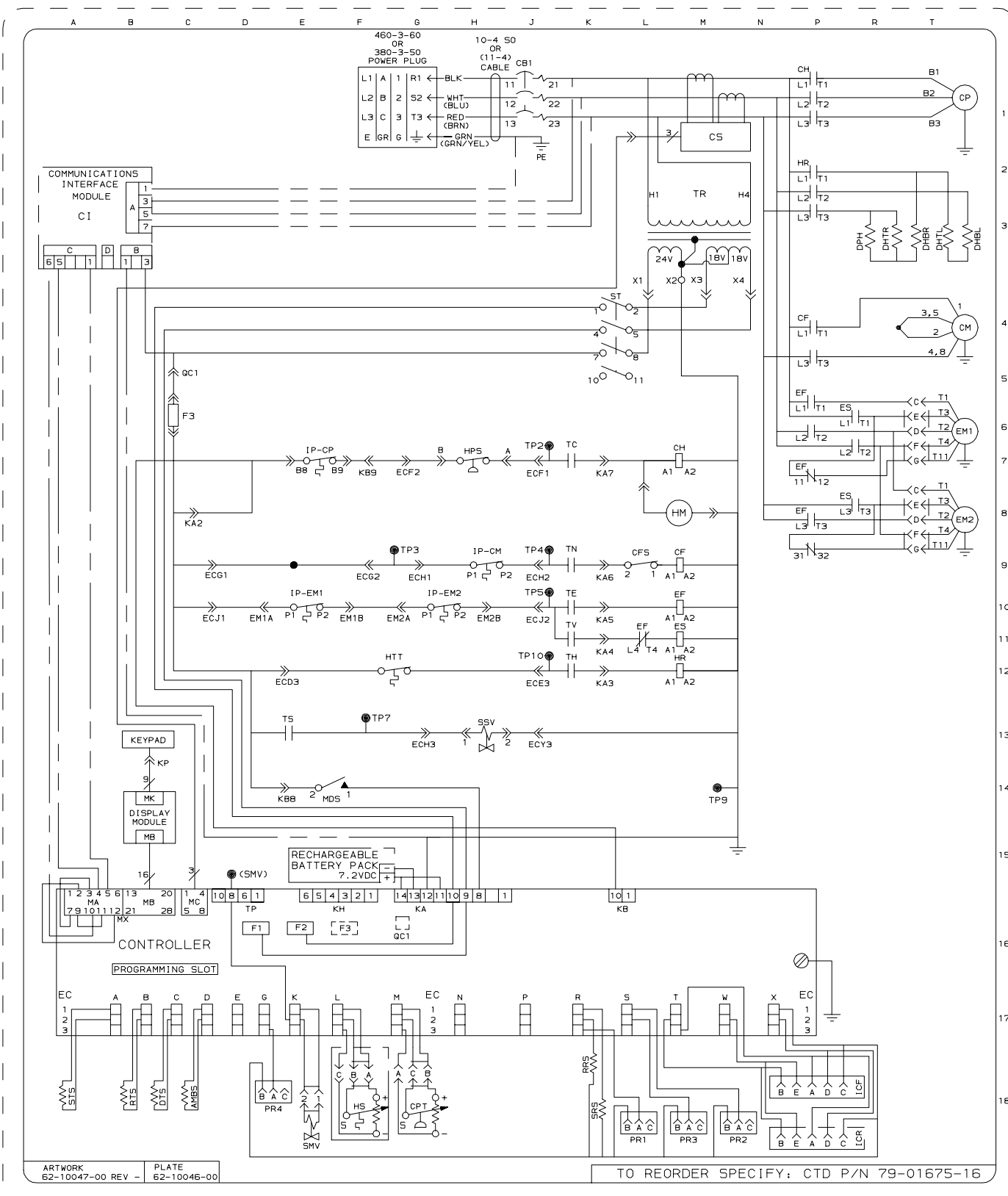


ARTWORK 62-10001-02 REV - PLATE 62-10000-01

Figure 7-50. Electrical Wiring Diagram - See Model Chart (Sheet 2 of 2)

<u>ZONE</u>	<u>SYMBOL</u>	<u>DESCRIPTION</u>
C18	AMBS	— AMBIENT SENSOR
J1	CB1	— CIRCUIT BREAKER 460V
M9, P4	CF	— CONDENSER FAN CONTACTOR
L9	CFS	— CONDENSER FAN SWITCH
M7, P1	CH	— COMPRESSOR CONTACTOR
A3	CI	— COMMUNICATIONS INTERFACE MODULE (OPTION)
H9, T4	CM	— CONDENSER FAN MOTOR
E7, T1	CP	— COMPRESSOR MOTOR
G18	CPT	— CONDENSER PRESSURE TRANSDUCER
M1	CS	— CURRENT SENSOR
T3	DHBL	— DEFROST HEATER - BOTTOM LEFT
T3	DHBR	— DEFROST HEATER - BOTTOM RIGHT
T3	DHTL	— DEFROST HEATER - TOP LEFT
R3	DHTR	— DEFROST HEATER - TOP RIGHT
R3	DPH	— DRAIN PAN HEATER
C18	DTS	— DEFROST TEMPERATURE SENSOR
L11, M10, P5, P7	EF	— EVAPORATOR FAN CONTACTOR (HIGH SPEED)
E10, H10, T6, T8	EM	— EVAPORATOR FAN MOTOR
M11, R6, R8	ES	— EVAPORATOR FAN CONTACTOR (LOW SPEED)
C6, D16, E16	F	— FUSE
	FLA	— FULL LOAD AMPS
M8	HM	— HOUR METER
H7	HPS	— HIGH PRESSURE SWITCH
M12, P2	HR	— HEATER CONTACTOR
F18	HS	— HUMIDITY SENSOR
G12	HTT	— HEAT TERMINATION THERMOSTAT
P18	IC	— INTERROGATOR CONNECTOR (OPTION)
E7, E10, H9, H10	IP	— INTERNAL PROTECTOR
B13	KP	— KEYPAD CONNECTOR
E14	MDS	— MANUAL DEFROST SWITCH
D18, L18, M18, P18	PR	— PROBE RECEPTACLE (USDA OPTION)
K18	RRS	— RETURN RECORDER SENSOR (OPTION)
B18	RTS	— RETURN TEMPERATURE SENSOR
E18	SMV	— SUCTION MODULATION VALVE
K18	SRS	— SUPPLY RECORDER SENSOR (OPTION)
H13	SSV	— SUCTION SOLENOID VALVE
K4	ST	— START-STOP SWITCH
A18	STS	— SUPPLY TEMPERATURE SENSOR
K7	TC	— CONTROLLER RELAY (COOLING)
K10	TE	— CONTROLLER RELAY (HIGH SPEED EVAPORATOR FANS)
K12	TH	— CONTROLLER RELAY (HEATING)
K9	TN	— CONTROLLER RELAY (CONDENSER FAN)
D15, F13, G9, J7 } J9, J10, J12, H14 }	TP	— TEST POINT
M3	TR	— TRANSFORMER
E13	TS	— CONTROLLER RELAY (SUCTION SOLENOID VALVE)
K11	TV	— CONTROLLER RELAY (LOW SPEED EVAPORATOR FANS)

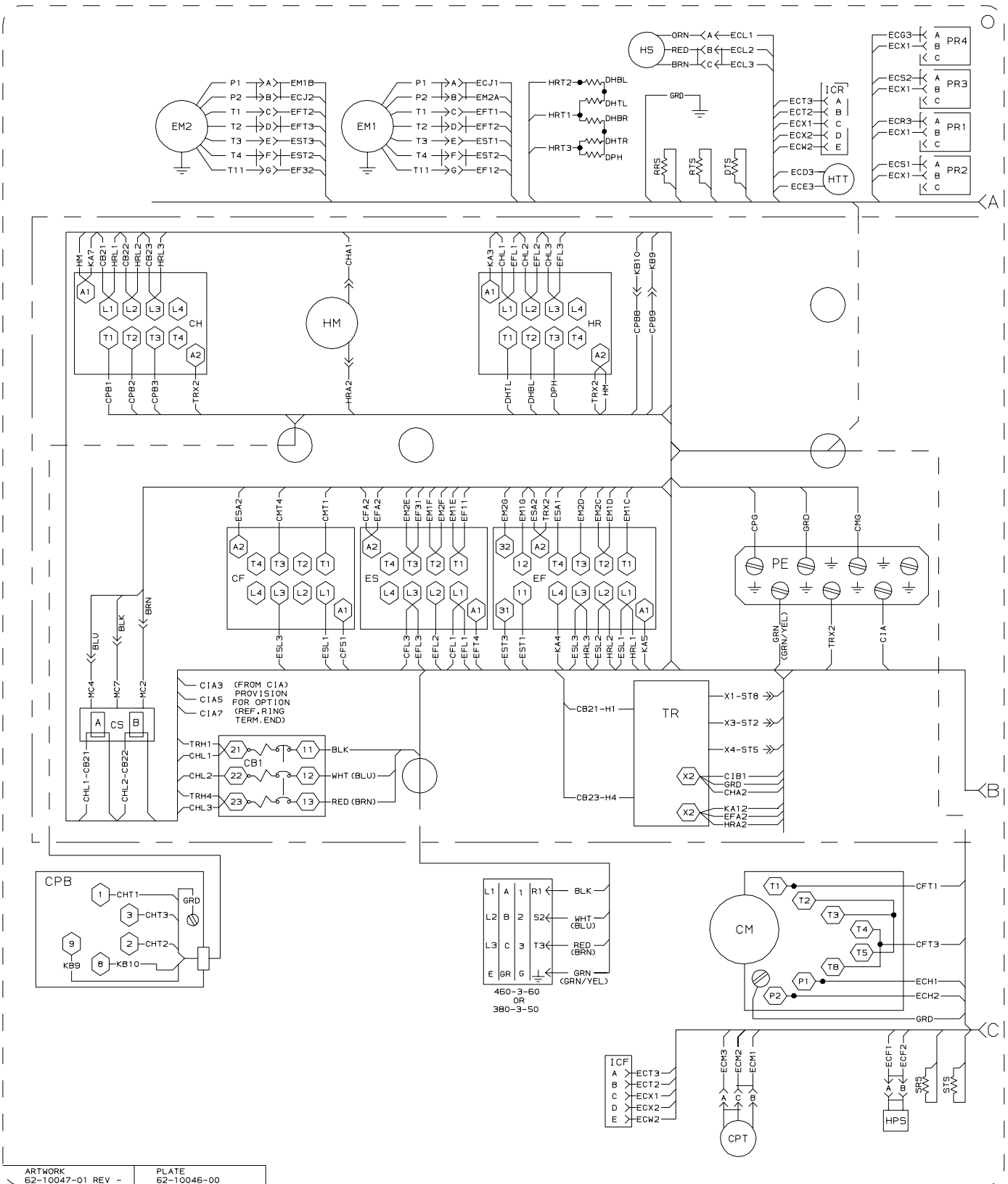
**Figure 7-51. Electrical Schematic - See Model Chart
(Sheet 1 of 2)**



ARTWORK 62-10047-00 REV - PLATE 62-10046-00

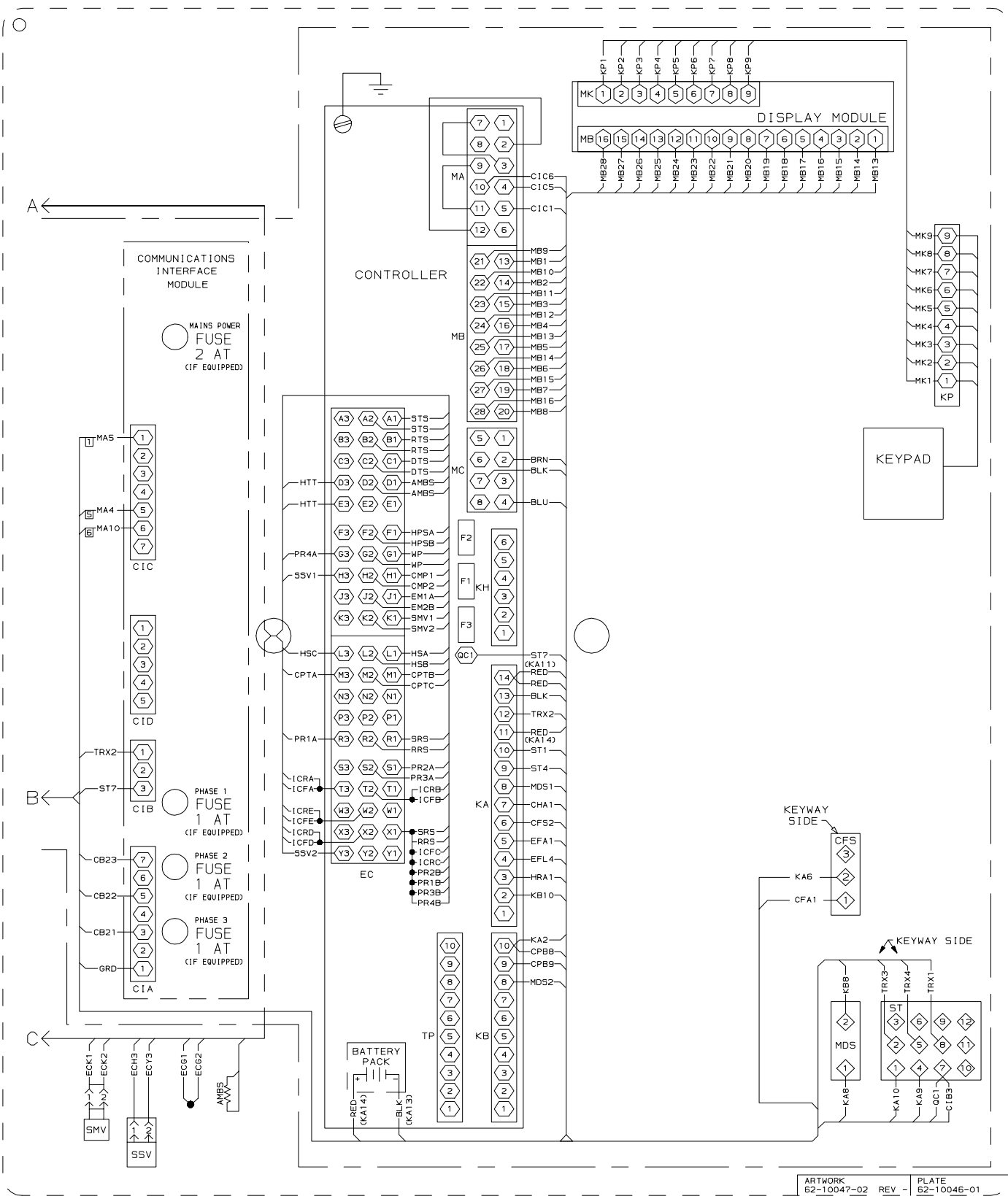
TO REORDER SPECIFY: CTD P/N 79-01675-16

Figure 7-51. Electrical Schematic - See Model Chart (Sheet 2 of 2)



ARTWORK 62-10047-01 REV -
 PLATE 62-10046-00

Figure 7-52. Electrical Wiring Diagram - See Model Chart (Sheet 1 of 2)

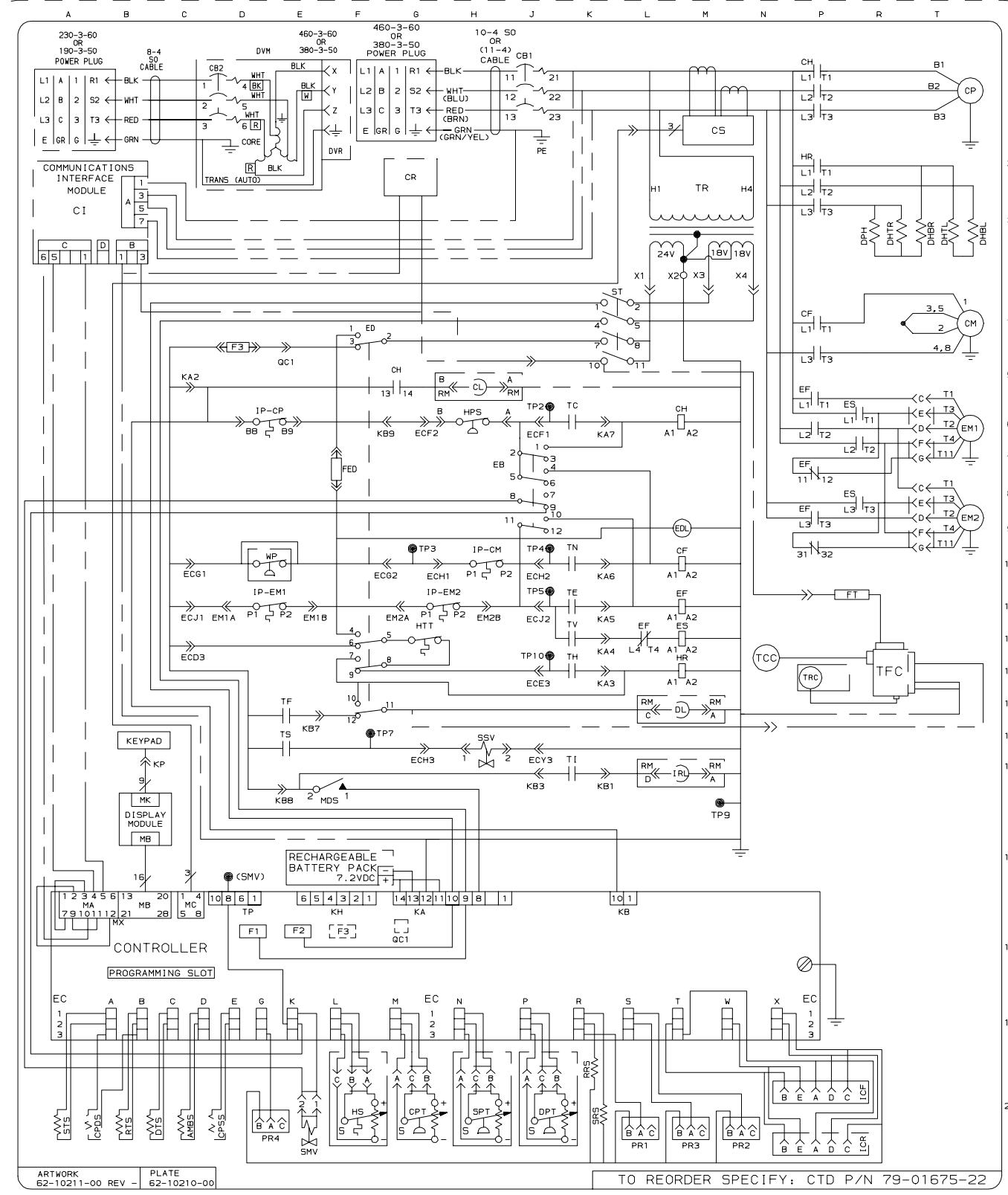


ARTWORK 62-10047-02 REV - PLATE 62-10046-01

Figure 7-52. Electrical Wiring Diagram - See Model Chart (Sheet 2 of 2)

LEGEND		
<u>ZONE</u>	<u>SYMBOL</u>	<u>DESCRIPTION</u>
C20	AMBS	— AMBIENT SENSOR
J1	CB1	— CIRCUIT BREAKER 460V
D1	CB2	— OPTIONAL CIRCUIT BREAKER 230V (DVM OPTION) TERMINAL BLOCK WHEN CB2 NOT PRESENT
M10,P4	CF	— CONDENSER FAN CONTACTOR
A3	CI	— COMMUNICATIONS INTERFACE MODULE (OPTION)
M6,P1,G5	CH	— COMPRESSOR CONTACTOR
H5	CL	— COOL LIGHT (OPTION)
H10,T4	CM	— CONDENSER FAN MOTOR
D6,T1	CP	— COMPRESSOR MOTOR
A20	CPDS	— COMPRESSOR DISCHARGE SENSOR (TEMP.)
C20	CPSS	— COMPRESSOR SUCTION SENSOR (TEMP.)
G20	CPT	— CONDENSER PRESSURE TRANSDUCER
G2	CR	— CHART RECORDER (OPTION)
M1	CS	— CURRENT SENSOR
T3	DHBL	— DEFROST HEATER - BOTTOM LEFT
T3	DHBR	— DEFROST HEATER - BOTTOM RIGHT
T3	DHTL	— DEFROST HEATER - TOP LEFT
R3	DHTR	— DEFROST HEATER - TOP RIGHT
M15	DL	— DEFROST LIGHT (OPTION)
R3	DPH	— DRAIN PAN HEATER
J20	DPT	— DISCHARGE PRESSURE TRANSDUCER (OPTION)
C20	DTS	— DEFROST TEMPERATURE SENSOR
D1	DVM	— DUAL VOLTAGE MODULE (OPTIONAL)
E1	DVR	— DUAL VOLTAGE RECEPTACLE (OPTIONAL)
J7	EB	— EMERGENCY (CONTROLLER) BYPASS SWITCH
F4	ED	— EMERGENCY DEFROST SWITCH
M9	EDL	— EMERGENCY DEFROST LIGHT
L12,M11,P6	EF	— EVAPORATOR FAN CONTACTOR (HIGH SPEED)
D11,G11,T6,T9	EM	— EVAPORATOR FAN MOTOR
M12,R6	ES	— EVAPORATOR FAN CONTACTOR (LOW SPEED)
D5,D18,E18,R11	F	— FUSE
F7	FED	— EMERGENCY DEFROST FUSE
	FLA	— FULL LOAD AMPS
H6	HPS	— HIGH PRESSURE SWITCH
M13,P2	HR	— HEATER CONTACTOR
F20	HS	— HUMIDITY SENSOR (OPTION)
G12	HTT	— HEAT TERMINATION THERMOSTAT
M20	IC	— INTERROGATOR CONNECTOR (OPTION)
D6,D11,G11,H10	IP	— INTERNAL PROTECTOR
L16	IRL	— IN-RANGE LIGHT (OPTION)
B16	KP	— KEYPAD CONNECTOR
E16	MDS	— MANUAL DEFROST SWITCH
D20,L20,M20,P20	PR	— PROBE RECEPTACLE (USDA OPTION)
H5,L14,L16	RM	— REMOTE MONITORING RECEPTACLE (OPTION)
K20	RRS	— RETURN RECORDER SENSOR (OPTION)
B20	RTS	— RETURN TEMPERATURE SENSOR
E20	SMV	— SUCTION MODULATION VALVE
H20	SPT	— SUCTION PRESSURE TRANSDUCER (OPTION)
K20	SRS	— SUPPLY RECORDER SENSOR (OPTION)
H15	SSV	— SUCTION SOLENOID VALVE
K4	ST	— START-STOP SWITCH
A20	STS	— SUPPLY TEMPERATURE SENSOR
K6	TC	— CONTROLLER RELAY (COOLING)
K11	TE	— CONTROLLER RELAY (HIGH SPEED EVAPORATOR FANS)
R13	TFC	— TRANSFRESH CONTROLLER (OPTION)
K13	TH	— CONTROLLER RELAY (HEATING)
K16	TI	— INRANGE RELAY
D15	TF	— DEFROST RELAY
K10	TN	— CONTROLLER RELAY (CONDENSER FAN)
D17,F15,G10,J6, J10,J11,J13,M16}	TP	— TEST POINT
M3	TR	— TRANSFORMER
D1	TRANS	— TRANSFORMER AUTO 230/460 (OPTION)
P13	TRC	— TRANSFRESH REAR CONNECTOR (OPTION)
E15	TS	— CONTROLLER RELAY (SUCTION SOLENOID VALVE)
K12	TV	— CONTROLLER RELAY (LOW SPEED EVAPORATOR FANS)
E10	WP	— WATER PRESSURE SWITCH (OPTION)

**Figure 7-53. Electrical Schematic - See Model Chart
(Sheet 1 of 2)**



ARTWORK 62-10211-00 REV - PLATE 62-10210-00

TO REORDER SPECIFY: CTD P/N 79-01675-22

Figure 7-53. Electrical Schematic - See Model Chart (Sheet 2 of 2)

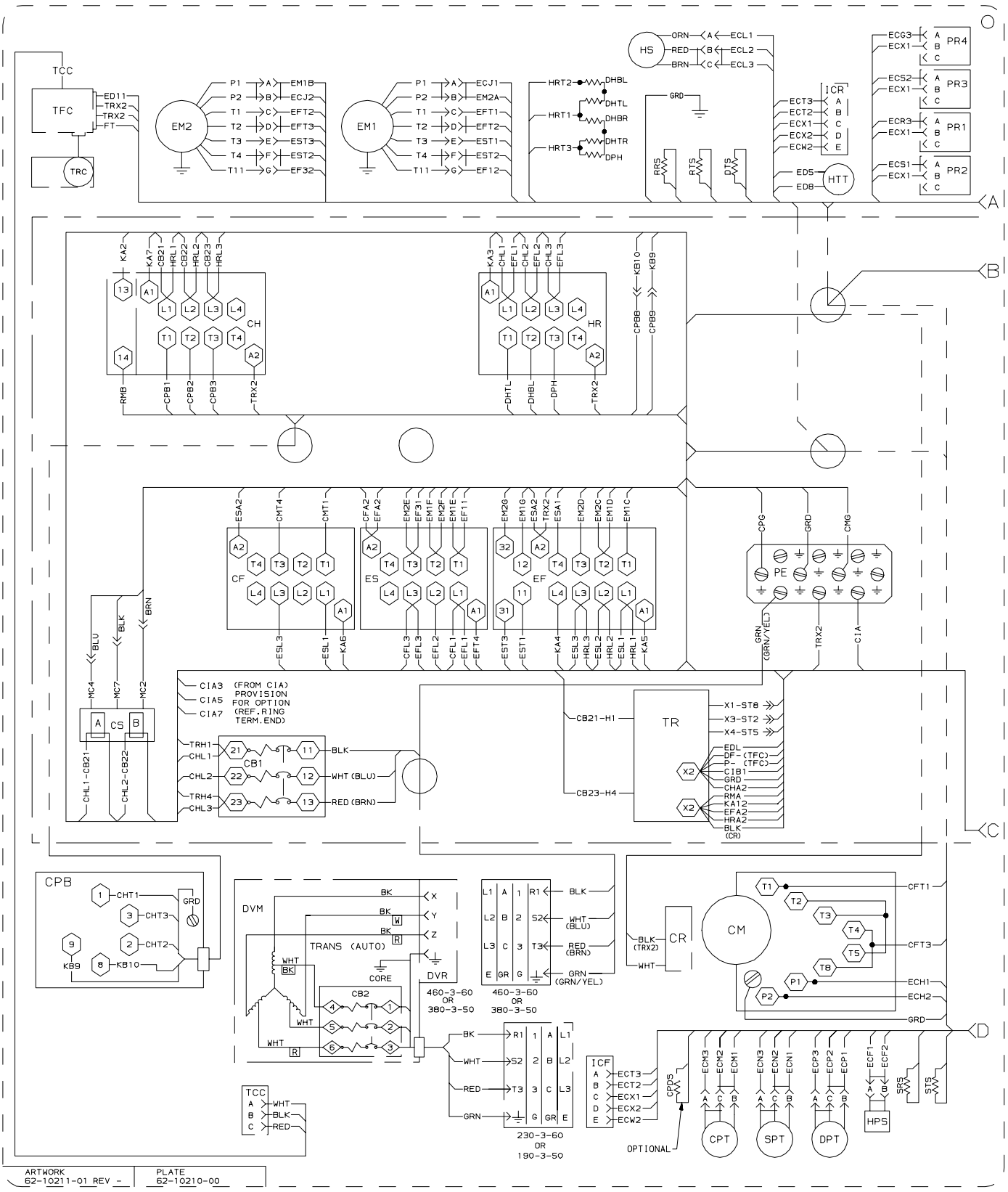
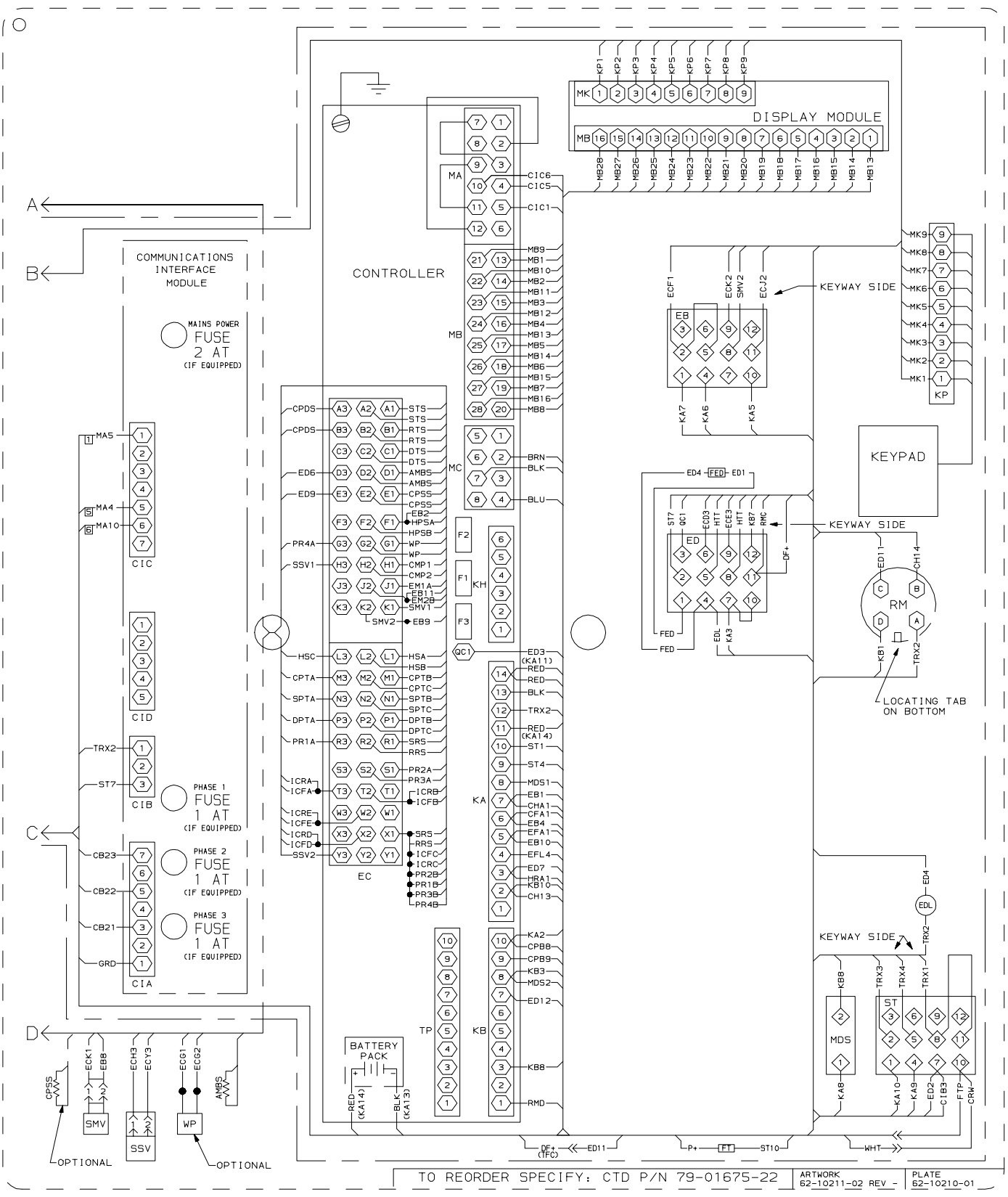


Figure 7-54. Electrical Wiring Diagram - See Model Chart (Sheet 1 of 2)



TO REORDER SPECIFY: CTD P/N 79-01675-22 ARTWORK 62-10211-02 REV - PLATE 62-10210-01

Figure 7-54. Electrical Wiring Diagram - See Model Chart (Sheet 2 of 2)

LEGEND

<u>ZONE</u>	<u>SYMBOL</u>	<u>DESCRIPTION</u>
C20	AMBS	— AMBIENT SENSOR
J1	CB1	— CIRCUIT BREAKER 460V
M10,P4	CF	— CONDENSER FAN CONTACTOR
L10	CFS	— CONDENSER FAN SWITCH
M7,P1	CH	— COMPRESSOR CONTACTOR
A3	CI	— COMMUNICATIONS INTERFACE MODULE
H10,T4	CM	— CONDENSER FAN MOTOR
E7,T1	CP	— COMPRESSOR MOTOR
B20	CPDS	— COMPRESSOR DISCHARGE SENSOR (TEMP.)
D20	CPSS	— COMPRESSOR SUCTION SENSOR (TEMP.)
G20	CPT	— CONDENSER PRESSURE TRANSDUCER
M1	CS	— CURRENT SENSOR
T3	DHBL	— DEFROST HEATER - BOTTOM LEFT
T3	DHBR	— DEFROST HEATER - BOTTOM RIGHT
T3	DHTL	— DEFROST HEATER - TOP LEFT
R3	DHTR	— DEFROST HEATER - TOP RIGHT
R3	DPH	— DRAIN PAN HEATER
C20	DTS	— DEFROST TEMPERATURE SENSOR
L12,M11,P6	EF	— EVAPORATOR FAN CONTACTOR (HIGH SPEED)
E11,G11,T6,T11	EM	— EVAPORATOR FAN MOTOR
M12,R6	ES	— EVAPORATOR FAN CONTACTOR (LOW SPEED)
C6,D18,E18	F	— FUSE
	FLA	— FULL LOAD AMPS
H7	HPS	— HIGH PRESSURE SWITCH
M13,P2	HR	— HEATER CONTACTOR
F20	HS	— HUMIDITY SENSOR
G13	HTT	— HEAT TERMINATION THERMOSTAT
P20	IC	— INTERROGATOR CONNECTOR
E7,E11,G11,H10	IP	— INTERNAL PROTECTOR
B16	KP	— KEYPAD CONNECTOR
F16	MDS	— MANUAL DEFROST SWITCH
D20,L20,M20,N20	PR	— PROBE RECEPTACLE (USDA OPTION)
K20	RRS	— RETURN RECORDER SENSOR
B20	RTS	— RETURN TEMPERATURE SENSOR
E20	SMV	— SUCTION MODULATION VALVE
K20	SRS	— SUPPLY RECORDER SENSOR
H15	SSV	— SUCTION SOLENOID VALVE
K4	ST	— START-STOP SWITCH
A20	STS	— SUPPLY TEMPERATURE SENSOR
K7	TC	— CONTROLLER RELAY (COOLING)
K11	TE	— CONTROLLER RELAY (HIGH SPEED EVAPORATOR FANS)
K13	TH	— CONTROLLER RELAY (HEATING)
K10	TN	— CONTROLLER RELAY (CONDENSER FAN)
D17,F15,G10,J7, } J10,J11,J13,M16 }	TP	— TEST POINT
M3	TR	— TRANSFORMER
E15	TS	— CONTROLLER RELAY (SUCTION SOLENOID VALVE)
K12	TV	— CONTROLLER RELAY (LOW SPEED EVAPORATOR FANS)

**Figure 7-55. Electrical Schematic - See Model Chart
(Sheet 1 of 2)**

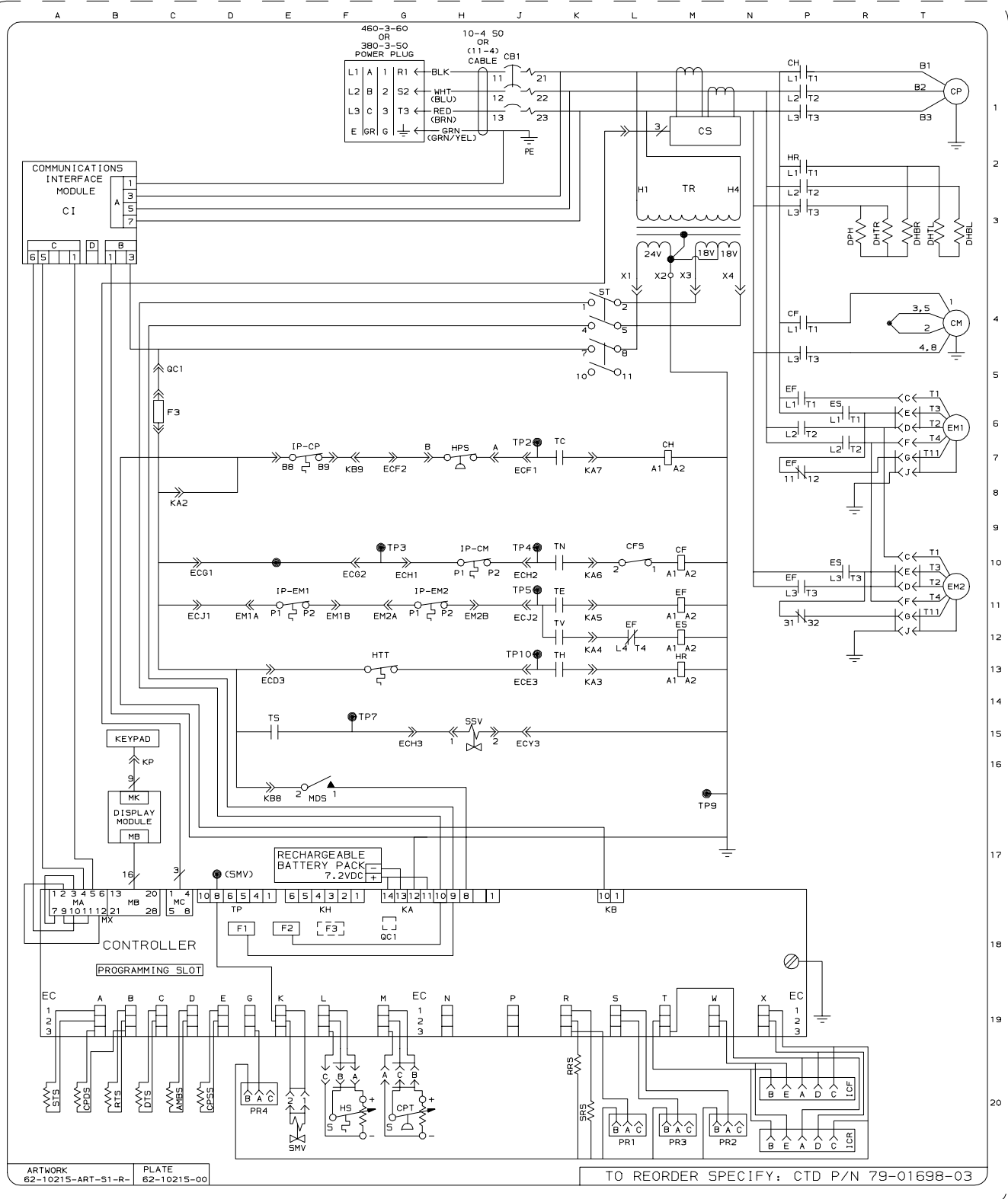
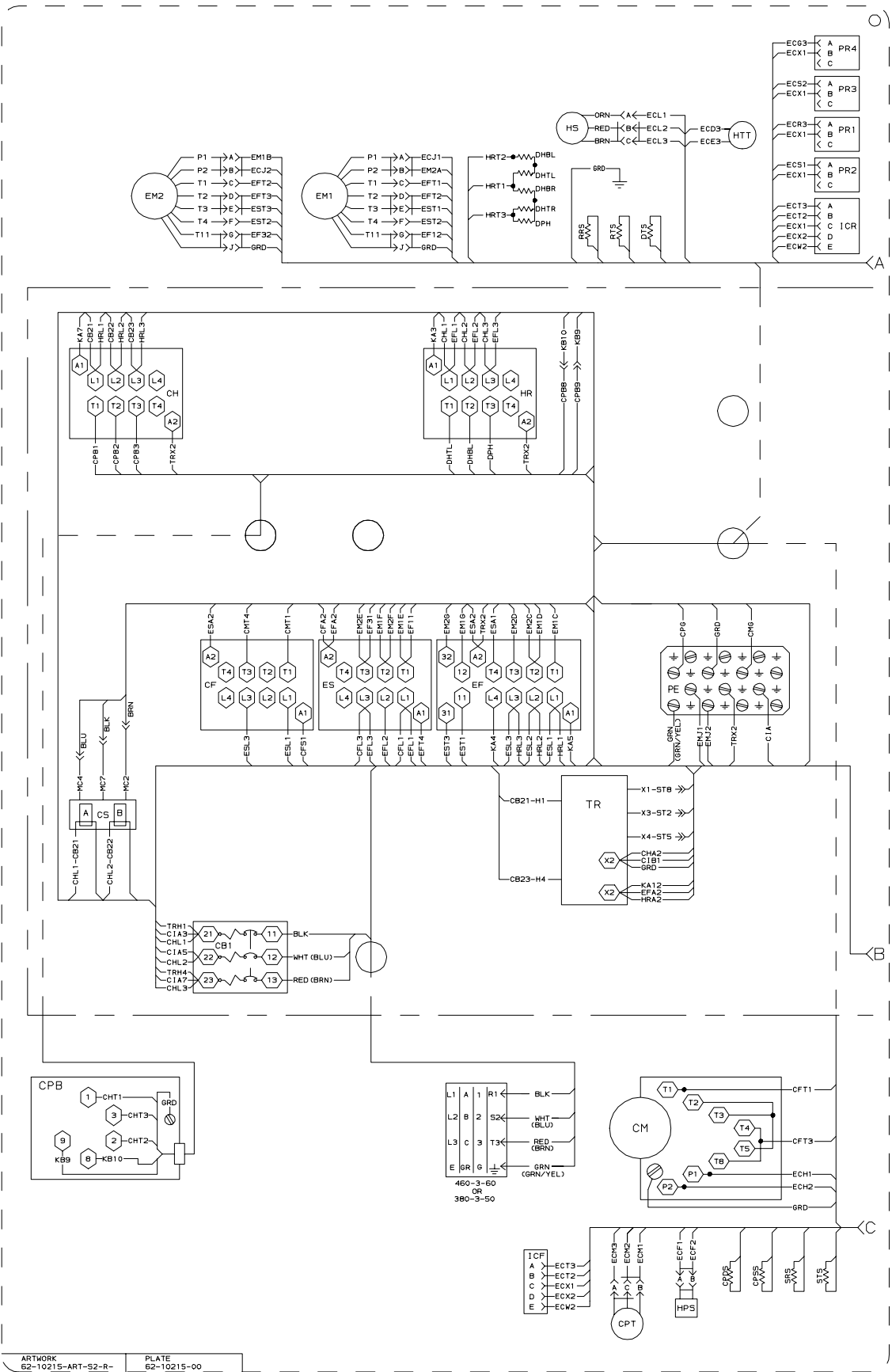
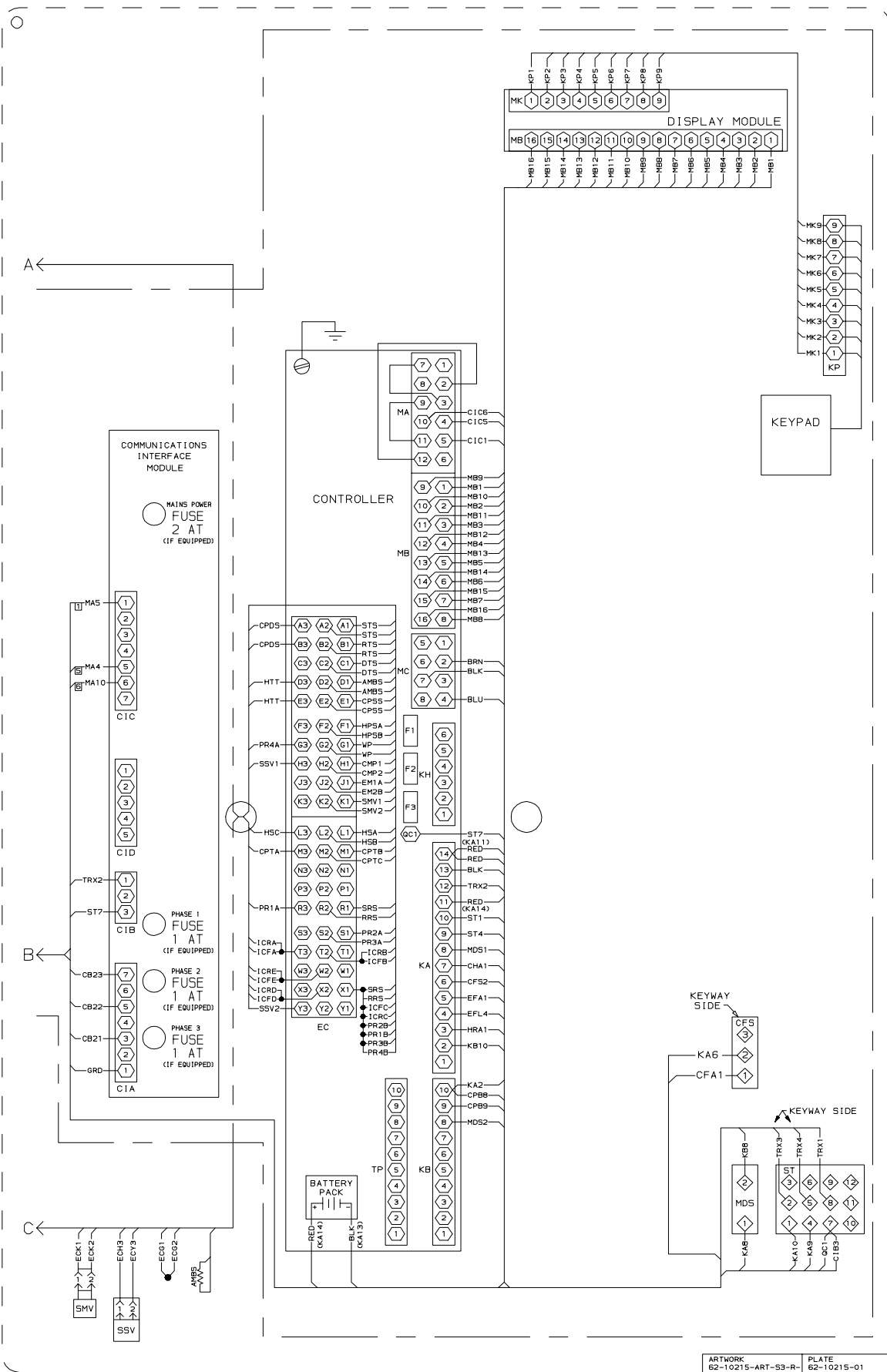


Figure 7-55. Electrical Schematic - See Model Chart (Sheet 2 of 2)



ARTWORK 62-10215-ART-52-R PLATE 62-10215-00

Figure 7-56. Electrical Wiring Diagram - See Model Chart (Sheet 1 of 2)



ARTWORK 62-10215-ART-S3-R PLATE 62-10215-01

Figure 7-56. Electrical Wiring Diagram - See Model Chart (Sheet 2 of 2)

LEGEND		
<u>ZONE</u>	<u>SYMBOL</u>	<u>DESCRIPTION</u>
C19	AMBS	— AMBIENT SENSOR
J1	CB1	— CIRCUIT BREAKER 460V
D1	CB2	— OPTIONAL CIRCUIT BREAKER 230V (DVM OPTION) TERMINAL BLOCK WHEN CB2 NOT PRESENT
M9, P4	CF	— CONDENSER FAN CONTACTOR
A3	CI	— COMMUNICATIONS INTERFACE MODULE (OPTION)
M7, P1, K8	CH	— COMPRESSOR CONTACTOR
M6	C-L	— COOL LIGHT (OPTION)
H10, T4	CM	— CONDENSER FAN MOTOR
E7, T1	CP	— COMPRESSOR MOTOR
A20	CPDS	— COMPRESSOR DISCHARGE SENSOR (TEMP.)
C20	CPSS	— COMPRESSOR SUCTION SENSOR (TEMP.)
G20	CPT	— CONDENSER PRESSURE TRANSDUCER
G2	CR	— CHART RECORDER (OPTION)
M1	CS	— CURRENT SENSOR
T3	DHBL	— DEFROST HEATER - BOTTOM LEFT
T3	DHBR	— DEFROST HEATER - BOTTOM RIGHT
T3	DHTL	— DEFROST HEATER - TOP LEFT
R3	DHTR	— DEFROST HEATER - TOP RIGHT
M15	DL	— DEFROST LIGHT (OPTION)
R3	DPH	— DRAIN PAN HEATER
J20	DPT	— DISCHARGE PRESSURE TRANSDUCER (OPTION)
C20	DTS	— DEFROST TEMPERATURE SENSOR
D1	DVM	— DUAL VOLTAGE MODULE (OPTIONAL)
E1	DVR	— DUAL VOLTAGE RECEPTACLE (OPTIONAL)
L12, M11, P6	EF	— EVAPORATOR FAN CONTACTOR (HIGH SPEED)
G11, H11, T6, T10	EM	— EVAPORATOR FAN MOTOR
M12, R6	ES	— EVAPORATOR FAN CONTACTOR (LOW SPEED)
C6, D18, E18, G5	F	— FUSE
	FLA	— FULL LOAD AMPS
H7	HPS	— HIGH PRESSURE SWITCH
M13, P2	HR	— HEATER CONTACTOR
F20	HS	— HUMIDITY SENSOR
F13	HTT	— HEAT TERMINATION THERMOSTAT
M20	IC	— INTERROGATOR CONNECTOR (OPTION)
E7, F11, H10, H11	IP	— INTERNAL PROTECTOR
M14	IRL	— IN-RANGE LIGHT (OPTION)
B16	KP	— KEYPAD CONNECTOR
E16	MDS	— MANUAL DEFROST SWITCH
D20, L20, M20, P20	PR	— PROBE RECEPTACLE (USDA OPTION)
L8, L14, L16	RM	— REMOTE MONITORING RECEPTACLE (OPTION)
K20	RRS	— RETURN RECORDER SENSOR (OPTION)
B20	RTS	— RETURN TEMPERATURE SENSOR
E20	SMV	— SUCTION MODULATION VALVE
H20	SPT	— SUCTION PRESSURE TRANSDUCER (OPTION)
K20	SRS	— SUPPLY RECORDER SENSOR (OPTION)
H15	SSV	— SUCTION SOLENOID VALVE
K4	ST	— START-STOP SWITCH
A20	STS	— SUPPLY TEMPERATURE SENSOR
K7	TC	— CONTROLLER RELAY (COOLING)
D5	TCC	— TRANSFRESH COMMUNICATIONS CONNECTOR (OPTION)
K8	TD	— CONTROLLER RELAY (LOW SPEED COMPRESSOR)
K11	TE	— CONTROLLER RELAY (HIGH SPEED EVAPORATOR FANS)
G5	TFC	— TRANSFRESH CONTROLLER (OPTION)
K13	TH	— CONTROLLER RELAY (HEATING)
K16	TI	— INRANGE RELAY
K14	TF	— DEFROST RELAY
K10	TN	— CONTROLLER RELAY (CONDENSER FAN)
D17, F15, G10, J7, \	TP	— TEST POINT
J10, J11, J13, M16		
M3	TR	— TRANSFORMER
D1	TRANS	— TRANSFORMER AUTO 230/460 (OPTION)
E5, F5	TRC	— TRANSFRESH REAR CONNECTOR (OPTION)
E15	TS	— CONTROLLER RELAY (SUCTION SOLENOID VALVE)
K9	TT	— CONTROLLER RELAY (COMPRESSOR SHORTING)
K12	TV	— CONTROLLER RELAY (LOW SPEED EVAPORATOR FANS)
E10	WP	— WATER PRESSURE SWITCH (OPTION)

**Figure 7-57. Electrical Schematic - See Model Chart
(Sheet 1 of 2)**

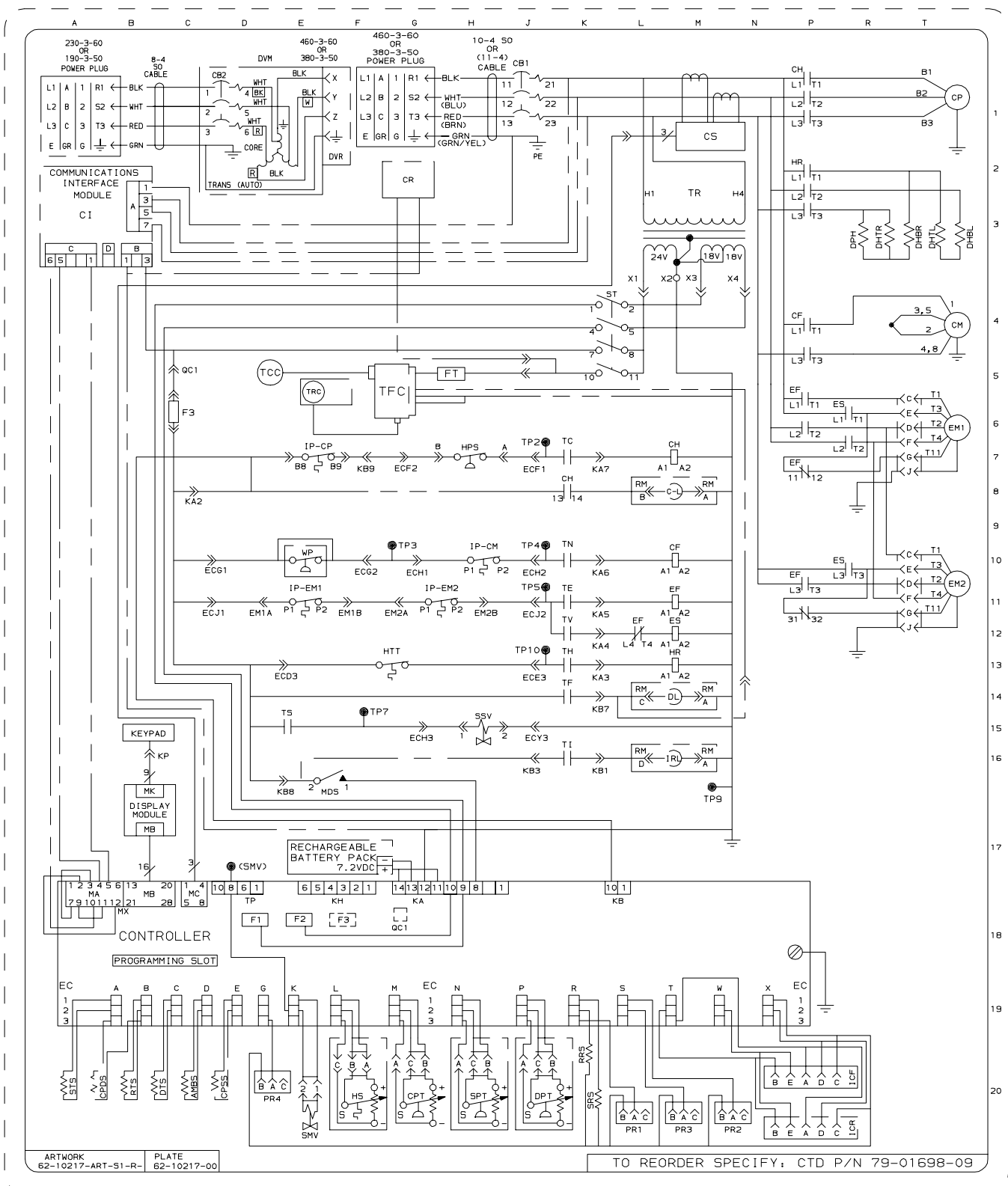


Figure 7-57. Electrical Schematic - See Model Chart
(Sheet 2 of 2)

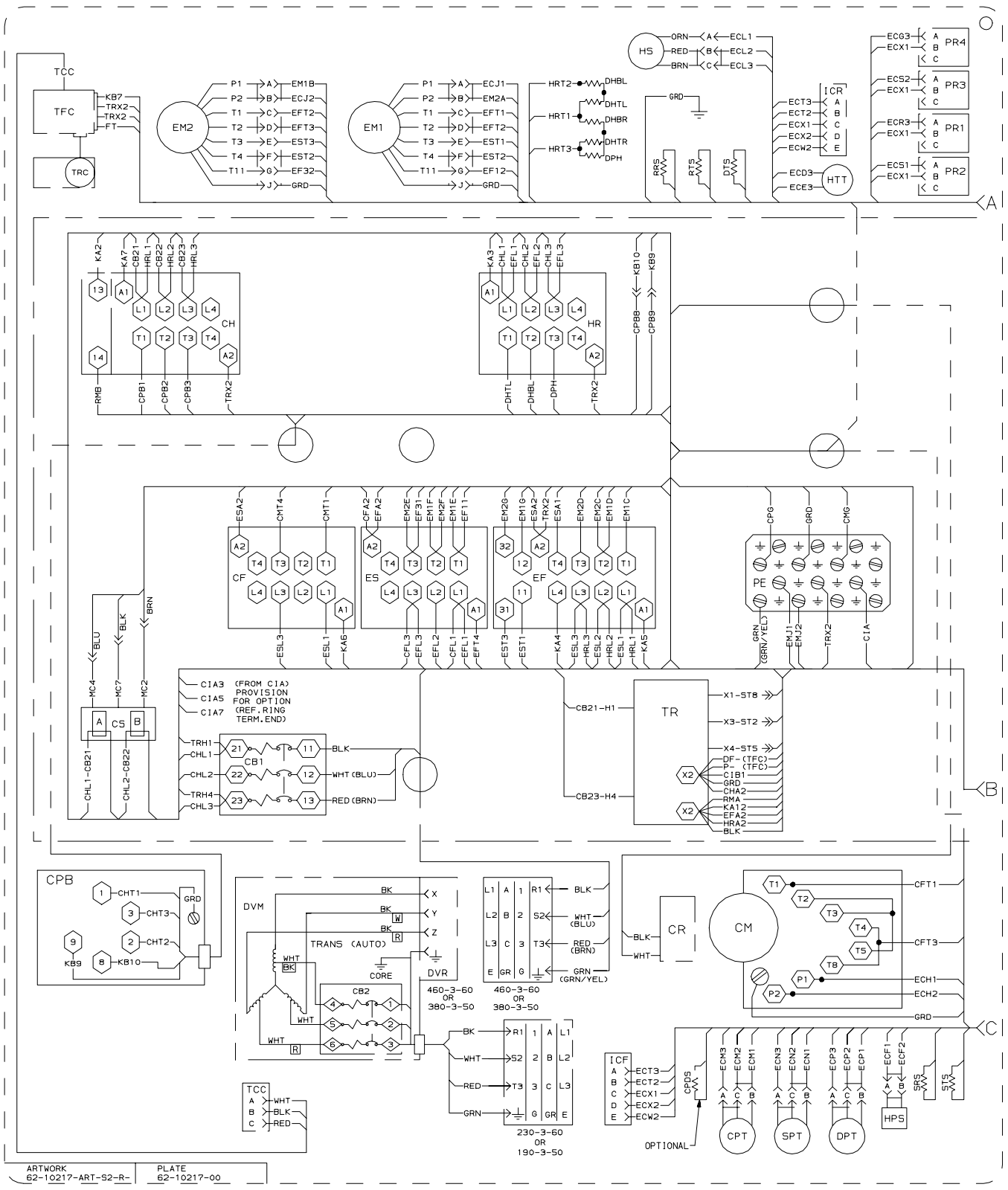
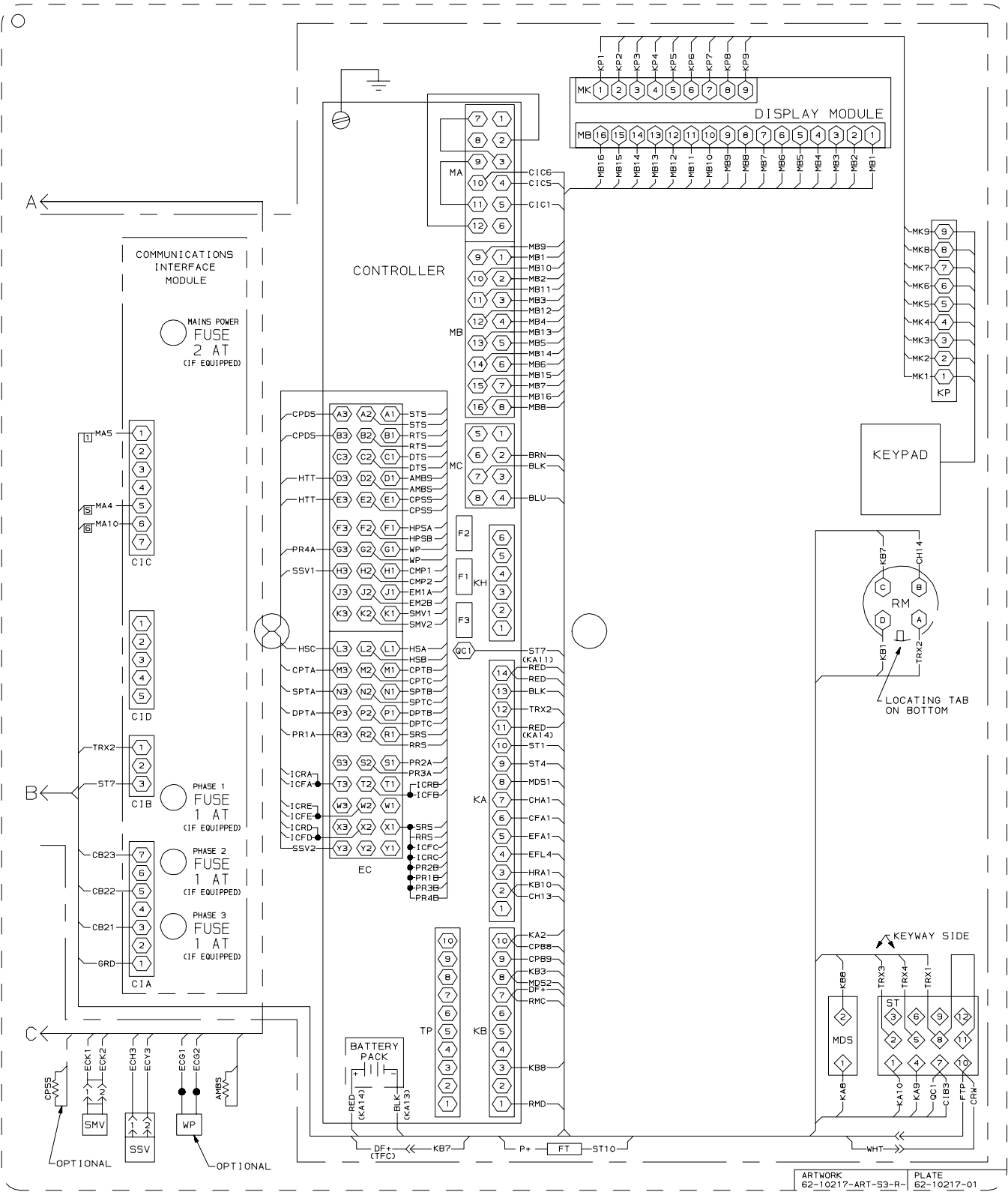


Figure 7-58. Electrical Wiring Diagram - See Model Chart (Sheet 1 of 2)



ARTWORK 62-10217-ART-53-R PLATE 62-10217-01

Figure 7-58. Electrical Wiring Diagram - See Model Chart (Sheet 2 of 2)

<u>ZONE</u>	<u>SYMBOL</u>	<u>LEGEND</u> <u>DISCRPTION</u>
C19	AMBS	— AMBIENT SENSOR
J1	CB1	— CIRCUIT BREAKER 460V
D1	CB2	— CIRCUIT BREAKER 230V (AUTO TRANS OPTION)
M8,P4	CF	— CONDENSER FAN CONTACTOR
A3	CI	— COMMUNICATIONS INTERFACE MODULE (OPTION)
M7,P1,K6	CH	— COMPRESSOR CONTACTOR
M6	C-L	— COOL LIGHT (OPTION)
H8,T4	CM	— CONDENSER FAN MOTOR
E7,T1	CP	— COMPRESSOR MOTOR
A20	CPDS	— COMPRESSOR DISCHARGE SENSOR (TEMP.)
C20	CPSS	— COMPRESSOR SUCTION SENSOR (TEMP.)
G20	CPT	— CONDENSER PRESSURE TRANSDUCER
G2	CR	— CHART RECORDER (OPTIONAL)
M1	CS	— CURRENT SENSOR
T3	DHBL	— DEFROST HEATER - BOTTOM LEFT
T3	DHBR	— DEFROST HEATER - BOTTOM RIGHT
T3	DHTL	— DEFROST HEATER - TOP LEFT
R3	DHTR	— DEFROST HEATER - TOP RIGHT
M15	DL	— DEFROST LIGHT (OPTION)
R3	DPH	— DRAIN PAN HEATER
J20	DPT	— DISCHARGE PRESSURE TRANSDUCER (OPTION)
C20	DTS	— DEFROST TEMPERATURE SENSOR
D1	DVM	— DUAL VOLTAGE MODULE (OPTIONAL)
E1	DVR	— DUAL VOLTAGE RECEPTACLE (OPTIONAL)
G10,H10,J11,K11, P6,P9	} E	— EVAPORATOR FAN CONTACTOR (HIGH SPEED)
M10,M11,T6,T10	EM	— EVAPORATOR FAN MOTOR
C6,D18,E18,G5	F	— FUSE
	FLA	— FULL LOAD AMPS
H7	HPS	— HIGH PRESSURE SWITCH
M13,P2	HR	— HEATER CONTACTOR
F20	HS	— HUMIDITY SENSOR
F13	HTT	— HEAT TERMINATION THERMOSTAT
M20	IC	— INTERROGATOR CONNECTOR (OPTION)
E7,H8,M10,M11	IP	— INTERNAL PROTECTOR
M14	IRL	— IN-RANGE LIGHT (OPTION)
B16	KP	— KEYPAD CONNECTOR
E16	MDS	— MANUAL DEFROST SWITCH
D20,L20,M20,P20	PR	— PROBE RECEPTACLE (USDA OPTION)
L6,L14,L16	RM	— REMOTE MONITORING RECEPTACLE (OPTION)
K20	RRS	— RETURN RECORDER SENSOR
B20	RTS	— RETURN TEMPERATURE SENSOR
F10,G10,H11,J11, R6,R9	} S	— EVAPORATOR FAN CONTACTOR (LOW SPEED)
E20	SMV	— SUCTION MODULATION VALVE
H20	SPT	— SUCTION PRESSURE TRANSDUCER (OPTION)
K20	SRS	— SUPPLY RECORDER SENSOR
H15	SSV	— SUCTION SOLENOID VALVE
K4	ST	— START-STOP SWITCH
A20	STS	— SUPPLY TEMPERATURE SENSOR
K7	TC	— CONTROLLER RELAY (COOLING)
D5	TCC	— TRANSFRESH COMMUNICATIONS CONNECTOR (OPTION)
K8	TD	— CONTROLLER RELAY (LOW SPEED COMPRESSOR)
E10	TE	— CONTROLLER RELAY (HIGH SPEED EVAPORATOR FANS)
G5	TFC	— TRANSFRESH CONTROLLER (OPTION)
K13	TH	— CONTROLLER RELAY (HEATING)
K16	TI	— INRANGE RELAY
K14	TF	— DEFROST RELAY
K8	TN	— CONTROLLER RELAY (CONDENSER FAN)
D9,D17,F15,G10, J7,J10,J13,M16	} TP	— TEST POINT
M3	TR	— TRANSFORMER
D1	TRANS	— TRANSFORMER AUTO 230/460 (OPTION)
E5,F5	TRC	— TRANSFRESH REAR CONNECTOR (OPTION)
E15	TS	— CONTROLLER RELAY (SUCTION SOLENOID VALVE)
K9	TT	— CONTROLLER RELAY (COMPRESSOR SHORTING)
E11	TV	— CONTROLLER RELAY (LOW SPEED EVAPORATOR FANS)
E8	WP	— WATER PRESSURE SWITCH (OPTION)

**Figure 7-59. Electrical Schematic - See Model Chart
(Sheet 1 of 2)**

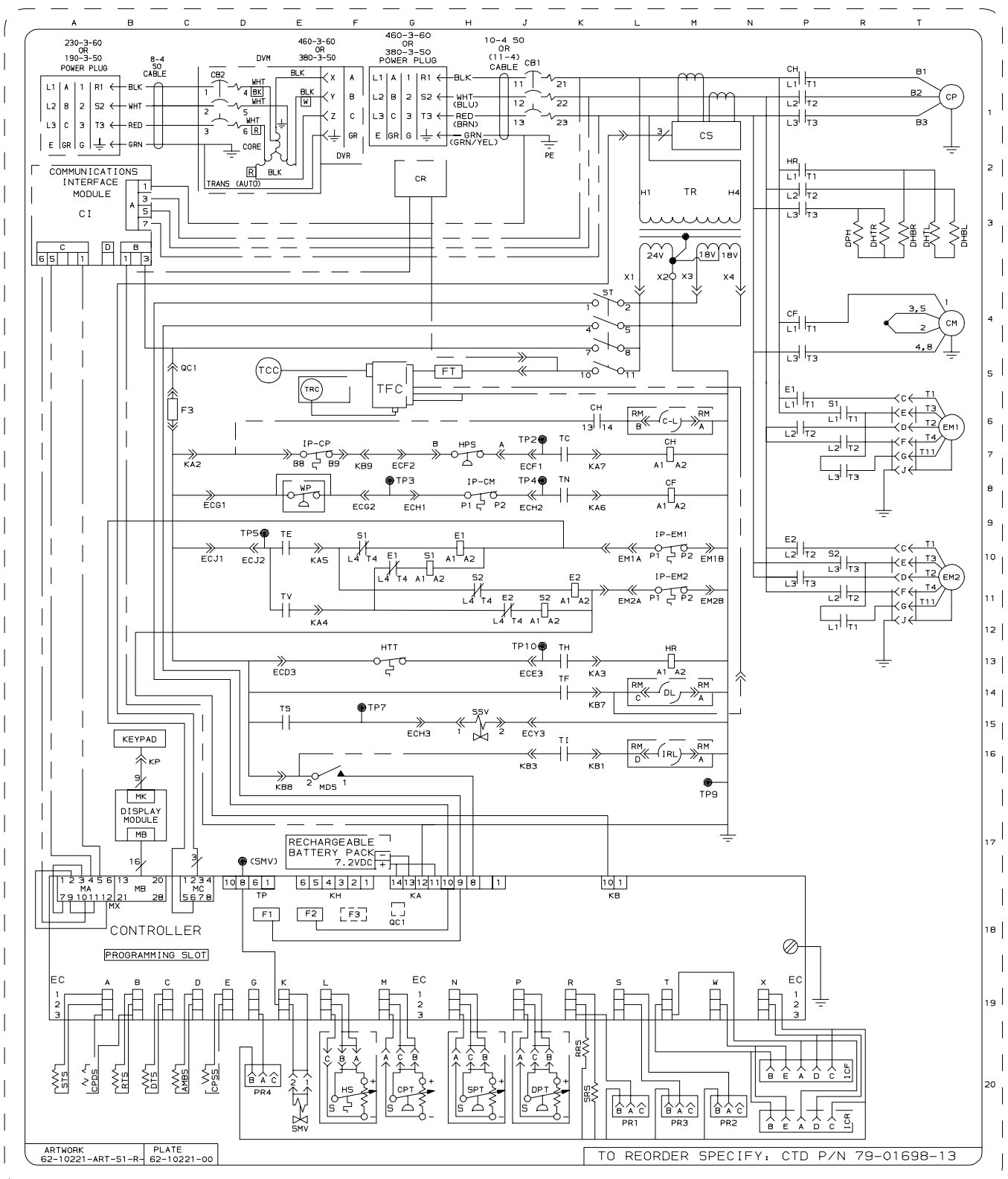


Figure 7-59. Electrical Schematic - See Model Chart (Sheet 2 of 2)

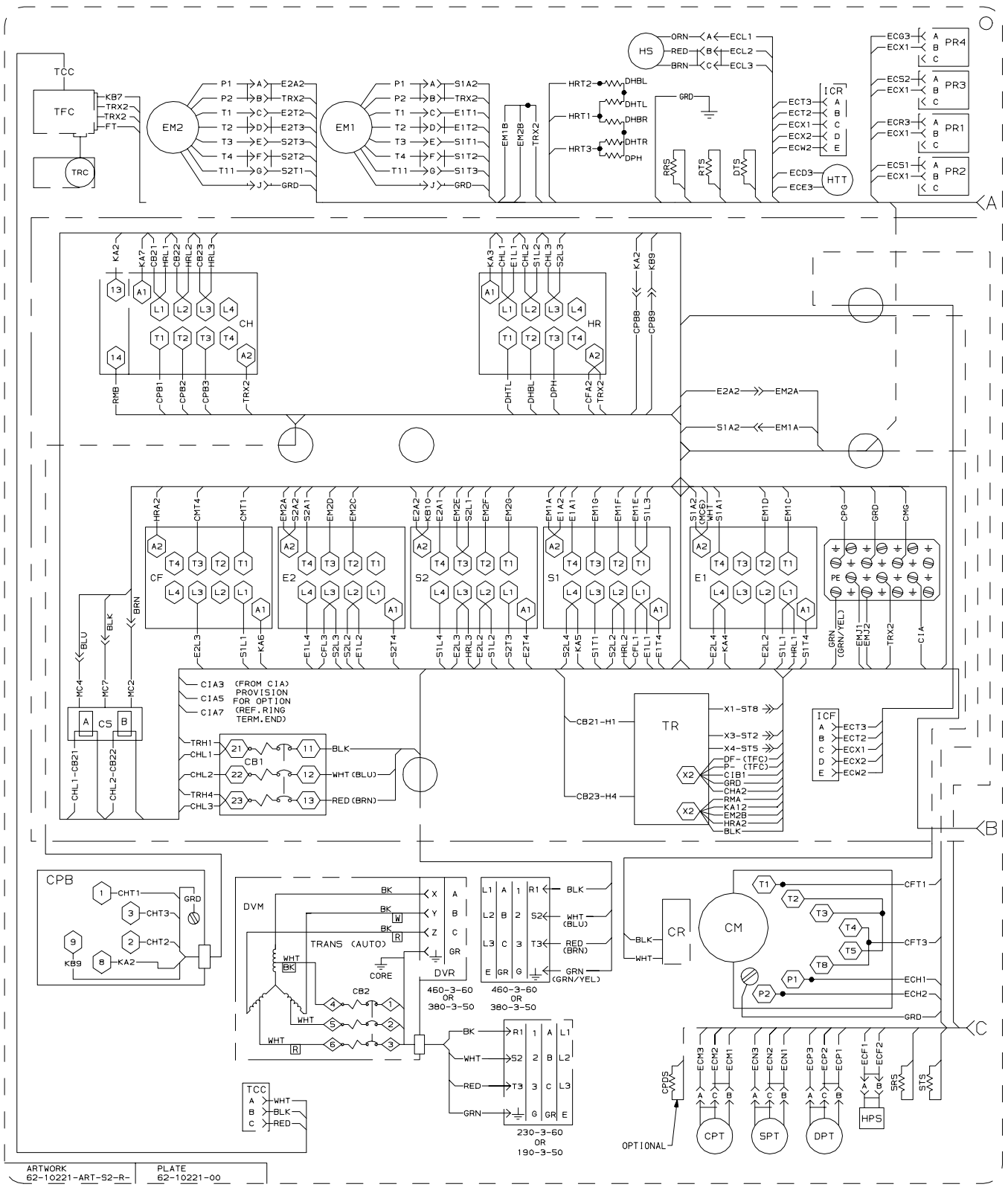
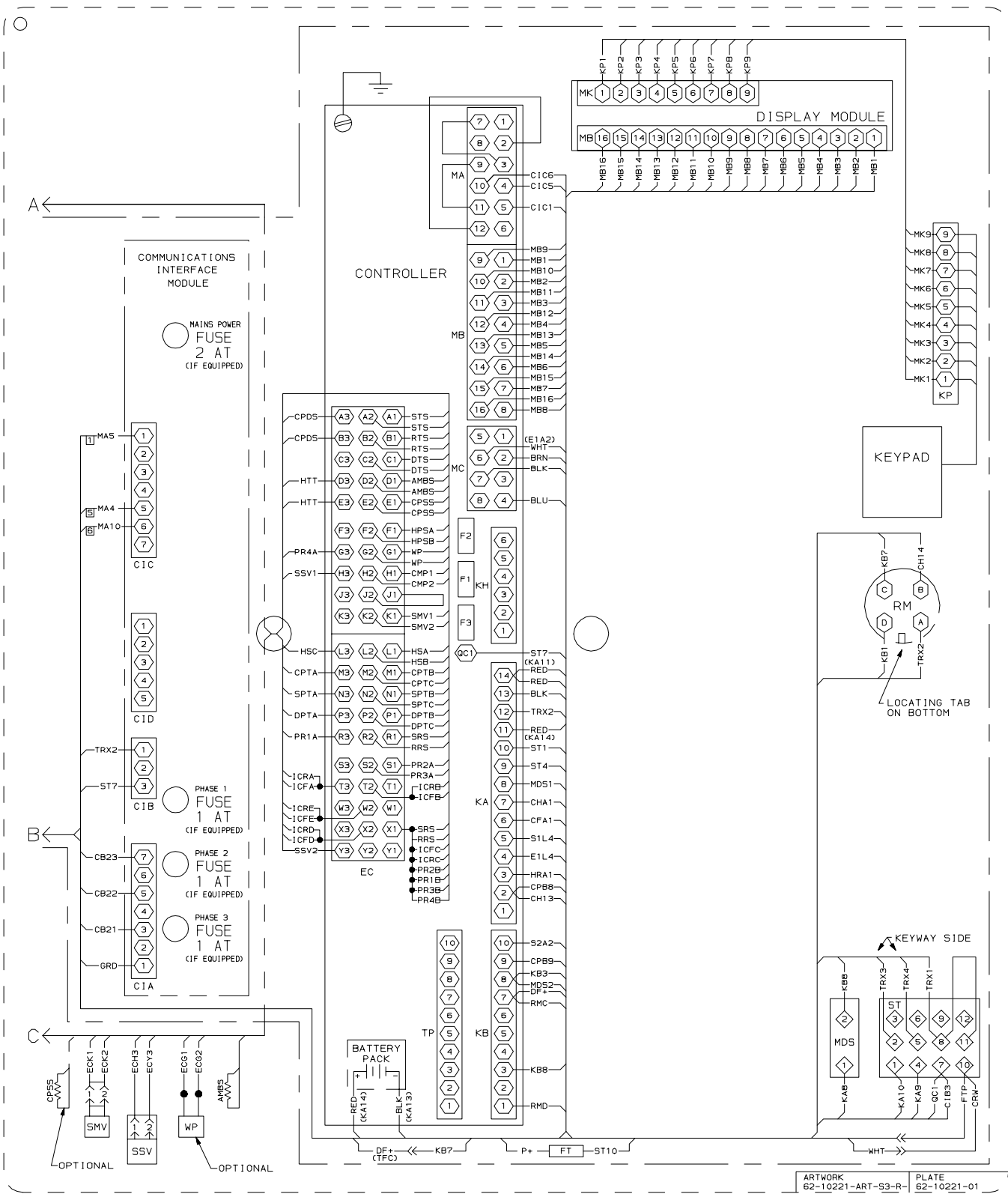


Figure 7-60. Electrical Wiring Diagram - See Model Chart (Sheet 1 of 2)



ARTWORK 62-10221-ART-53-R PLATE 62-10221-01

Figure 7-60. Electrical Wiring Diagram - See Model Chart (Sheet 2 of 2)

<u>ZONE</u>	<u>SYMBOL</u>	<u>DESCRIPTION</u>
C18	AMBS	— AMBIENT SENSOR
J1	CB1	— CIRCUIT BREAKER 460V
M9, P4	CF	— CONDENSER FAN CONTACTOR
L9	CFS	— CONDENSER FAN SWITCH
M7, P1	CH	— COMPRESSOR CONTACTOR
A3	CI	— COMMUNICATIONS INTERFACE MODULE (OPTION)
H9, T4	CM	— CONDENSER FAN MOTOR
E7, T1	CP	— COMPRESSOR MOTOR
G18	CPT	— CONDENSER PRESSURE TRANSDUCER
M1	CS	— CURRENT SENSOR
T3	DHBL	— DEFROST HEATER - BOTTOM LEFT
T3	DHBR	— DEFROST HEATER - BOTTOM RIGHT
T3	DHTL	— DEFROST HEATER - TOP LEFT
R3	DHTR	— DEFROST HEATER - TOP RIGHT
R3	DPH	— DRAIN PAN HEATER
C18	DTS	— DEFROST TEMPERATURE SENSOR
L11, M10, P5, P7	EF	— EVAPORATOR FAN CONTACTOR (HIGH SPEED)
E10, H10, T6, T9	EM	— EVAPORATOR FAN MOTOR
M11, R6, R8	ES	— EVAPORATOR FAN CONTACTOR (LOW SPEED)
C6, D16, E16	F	— FUSE
	FLA	— FULL LOAD AMPS
M8	HM	— HOUR METER
H7	HPS	— HIGH PRESSURE SWITCH
M12, P2	HR	— HEATER CONTACTOR
F18	HS	— HUMIDITY SENSOR
G12	HTT	— HEAT TERMINATION THERMOSTAT
P18	IC	— INTERROGATOR CONNECTOR (OPTION)
E7, E10, H9, H10	IP	— INTERNAL PROTECTOR
B13	KP	— KEYPAD CONNECTOR
E14	MDS	— MANUAL DEFROST SWITCH
D18, L18, M18, P18	PR	— PROBE RECEPTACLE (USDA OPTION)
K18	RRS	— RETURN RECORDER SENSOR (OPTION)
B18	RTS	— RETURN TEMPERATURE SENSOR
E18	SMV	— SUCTION MODULATION VALVE
K18	SRS	— SUPPLY RECORDER SENSOR (OPTION)
H13	SSV	— SUCTION SOLENOID VALVE
K4	ST	— START-STOP SWITCH
A18	STS	— SUPPLY TEMPERATURE SENSOR
K7	TC	— CONTROLLER RELAY (COOLING)
K10	TE	— CONTROLLER RELAY (HIGH SPEED EVAPORATOR FANS)
K12	TH	— CONTROLLER RELAY (HEATING)
K9	TN	— CONTROLLER RELAY (CONDENSER FAN)
D15, F13, G9, J7 } J9, J10, J12, H14 }	TP	— TEST POINT
M3	TR	— TRANSFORMER
E13	TS	— CONTROLLER RELAY (SUCTION SOLENOID VALVE)
K11	TV	— CONTROLLER RELAY (LOW SPEED EVAPORATOR FANS)

**Figure 7-61. Electrical Schematic - See Model Chart
(Sheet 1 of 2)**

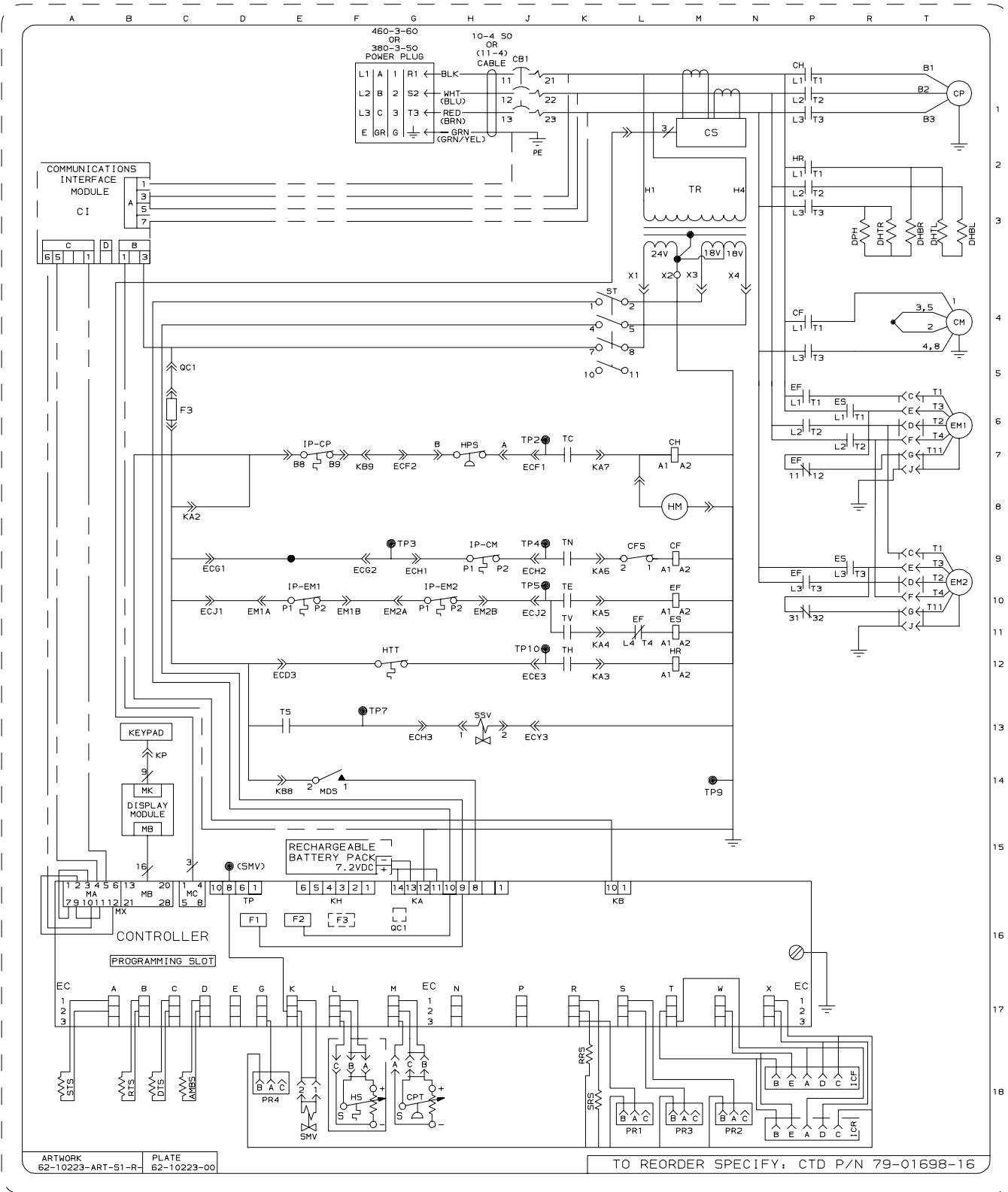
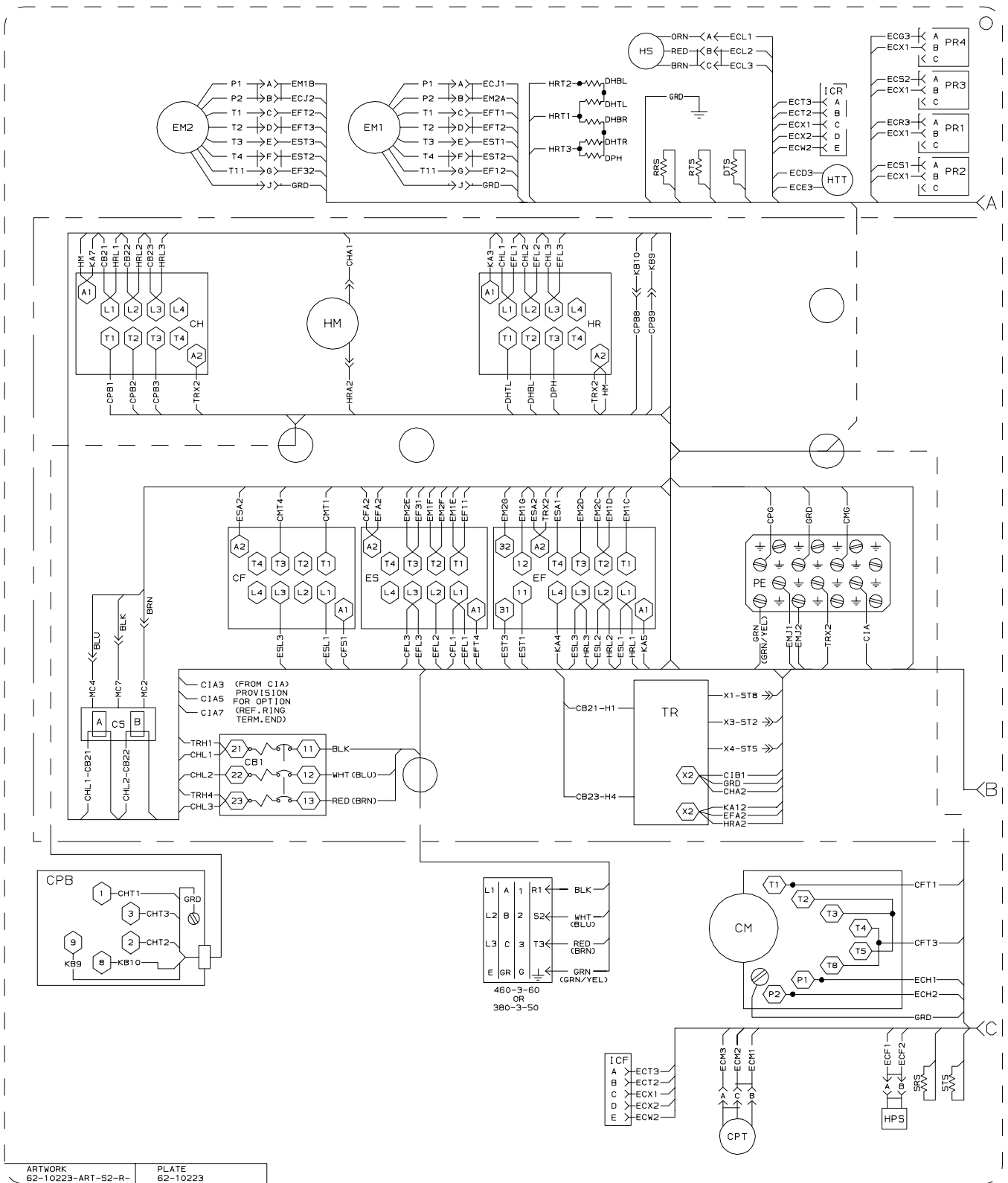
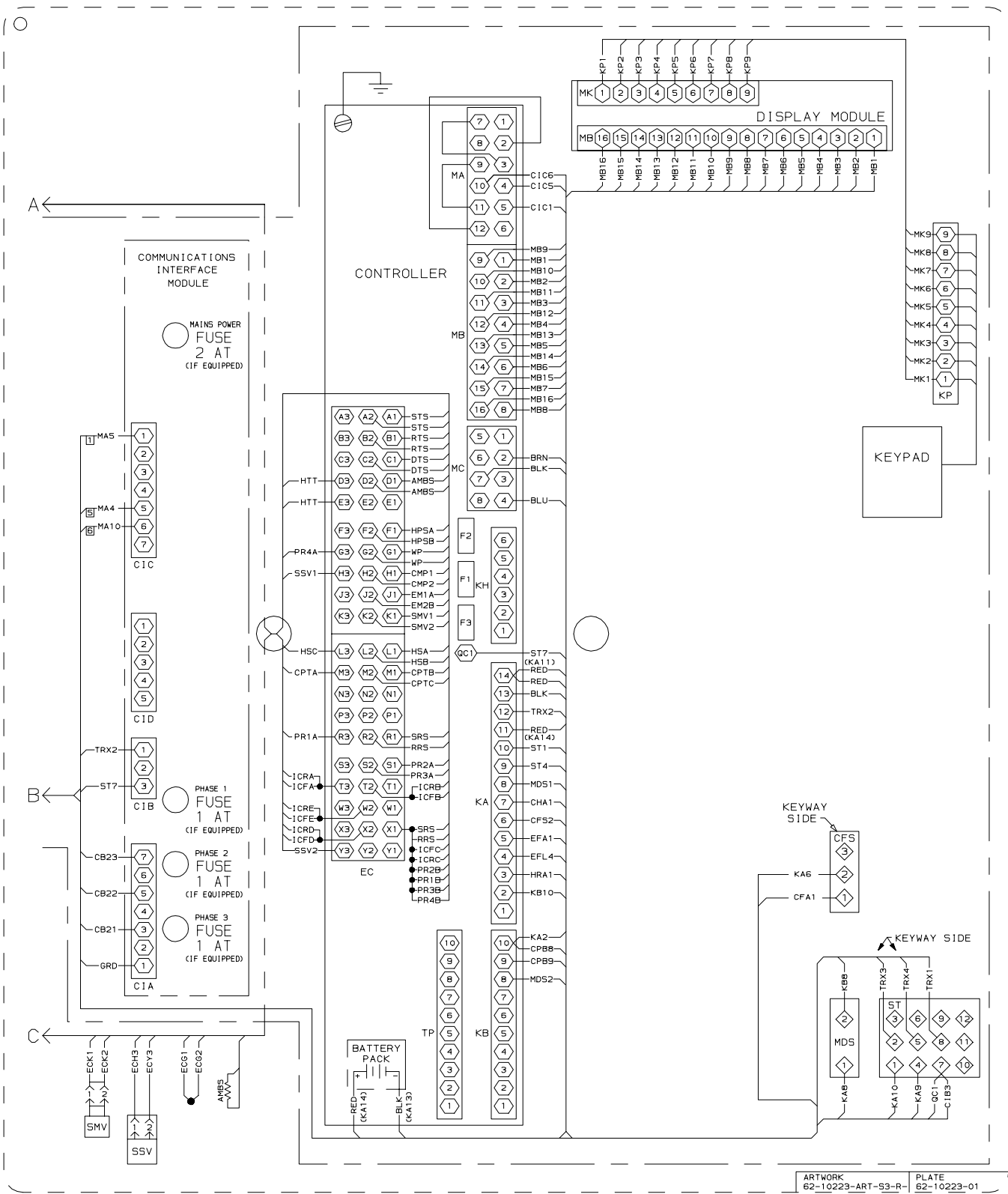


Figure 7-61. Electrical Schematic - See Model Chart (Sheet 2 of 2)



ARTWORK 62-10223-ART-S2-R- PLATE 62-10223

Figure 7-62. Electrical Wiring Diagram - See Model Chart (Sheet 1 of 2)



ARTWORK 62-10223-ART-53-R PLATE 62-10223-01

Figure 7-62. Electrical Wiring Diagram - See Model Chart (Sheet 2 of 2)

LEGEND

<u>ZONE</u>	<u>SYMBOL</u>	<u>DESCRIPTION</u>
C20	AMBS	— AMBIENT SENSOR
J1	CB1	— CIRCUIT BREAKER 460V
M10, P4	CF	— CONDENSER FAN CONTACTOR
M7, P1	CH	— COMPRESSOR CONTACTOR
A3	CI	— COMMUNICATIONS INTERFACE MODULE
H10, T4	CM	— CONDENSER FAN MOTOR
E7, T1	CP	— COMPRESSOR MOTOR
B20	CPDS	— COMPRESSOR DISCHARGE SENSOR (TEMP.)
D20	CPSS	— COMPRESSOR SUCTION SENSOR (TEMP.)
G20	CPT	— CONDENSER PRESSURE TRANSDUCER
M1	CS	— CURRENT SENSOR
T3	DHBL	— DEFROST HEATER - BOTTOM LEFT
T3	DHBR	— DEFROST HEATER - BOTTOM RIGHT
T3	DHTL	— DEFROST HEATER - TOP LEFT
R3	DHTR	— DEFROST HEATER - TOP RIGHT
R3	DPH	— DRAIN PAN HEATER
C20	DTS	— DEFROST TEMPERATURE SENSOR
L12, M11, P6	EF	— EVAPORATOR FAN CONTACTOR (HIGH SPEED)
E11, G11, T6, T10	EM	— EVAPORATOR FAN MOTOR
M12, R6	ES	— EVAPORATOR FAN CONTACTOR (LOW SPEED)
C6, D18, E18	F	— FUSE
	FLA	— FULL LOAD AMPS
H7	HPS	— HIGH PRESSURE SWITCH
M13, P2	HR	— HEATER CONTACTOR
F20	HS	— HUMIDITY SENSOR
G13	HTT	— HEAT TERMINATION THERMOSTAT
P20	IC	— INTERROGATOR CONNECTOR
E7, E11, G11, H10	IP	— INTERNAL PROTECTOR
B16	KP	— KEYPAD CONNECTOR
F16	MDS	— MANUAL DEFROST SWITCH
D20, L20, M20, N20	PR	— PROBE RECEPTACLE (USDA OPTION)
K20	RRS	— RETURN RECORDER SENSOR
B20	RTS	— RETURN TEMPERATURE SENSOR
E20	SMV	— SUCTION MODULATION VALVE
K20	SRS	— SUPPLY RECORDER SENSOR
H15	SSV	— SUCTION SOLENOID VALVE
K4	ST	— START-STOP SWITCH
A20	STS	— SUPPLY TEMPERATURE SENSOR
K7	TC	— CONTROLLER RELAY (COOLING)
K11	TE	— CONTROLLER RELAY (HIGH SPEED EVAPORATOR FANS)
K13	TH	— CONTROLLER RELAY (HEATING)
K10	TN	— CONTROLLER RELAY (CONDENSER FAN)
D17, F15, G10, J7, } J10, J11, J13, M16 }	TP	— TEST POINT
M3	TR	— TRANSFORMER
E15	TS	— CONTROLLER RELAY (SUCTION SOLENOID VALVE)
K12	TV	— CONTROLLER RELAY (LOW SPEED EVAPORATOR FANS)

**Figure 7-63. Electrical Schematic - See Model Chart
(Sheet 1 of 2)**

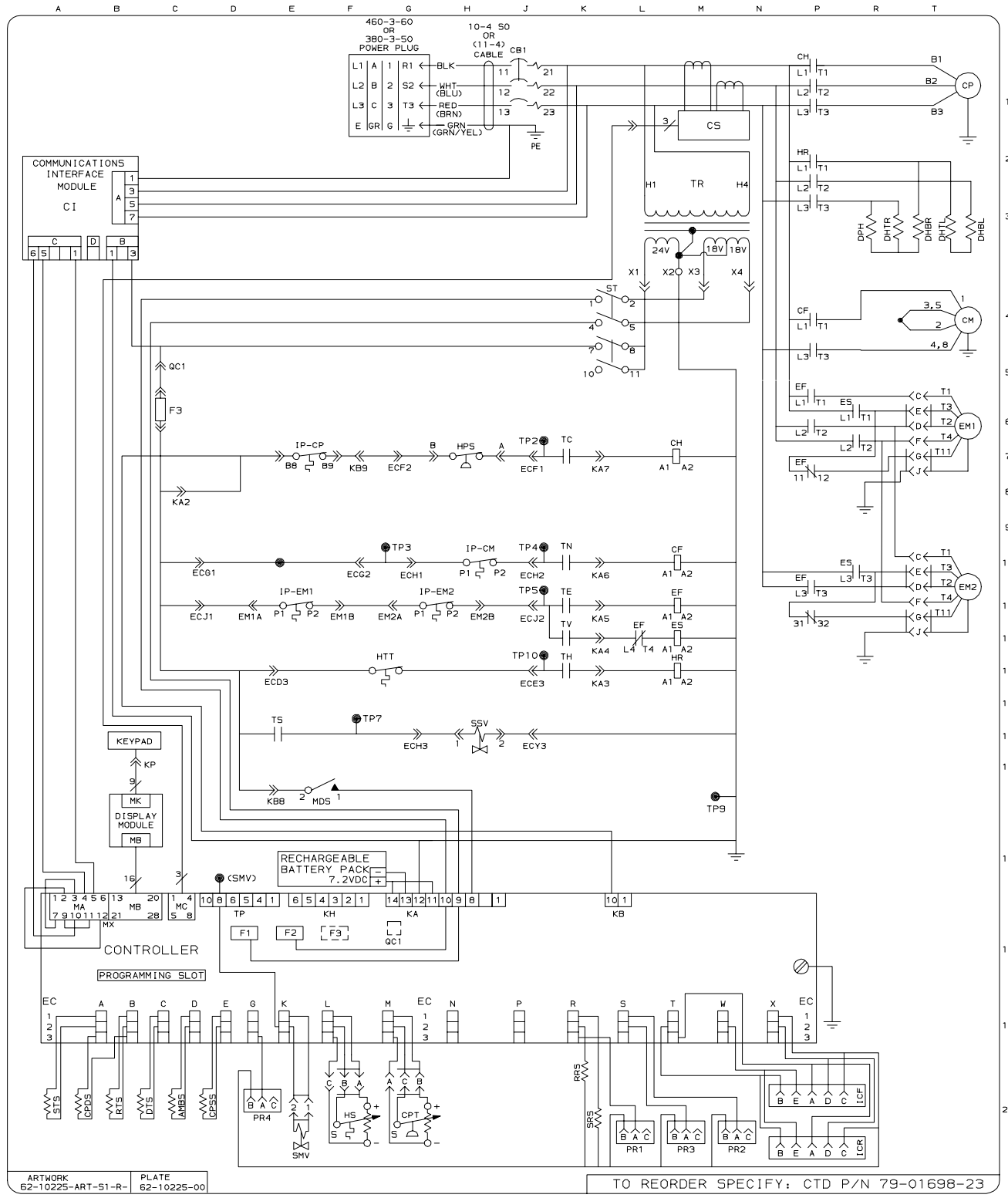
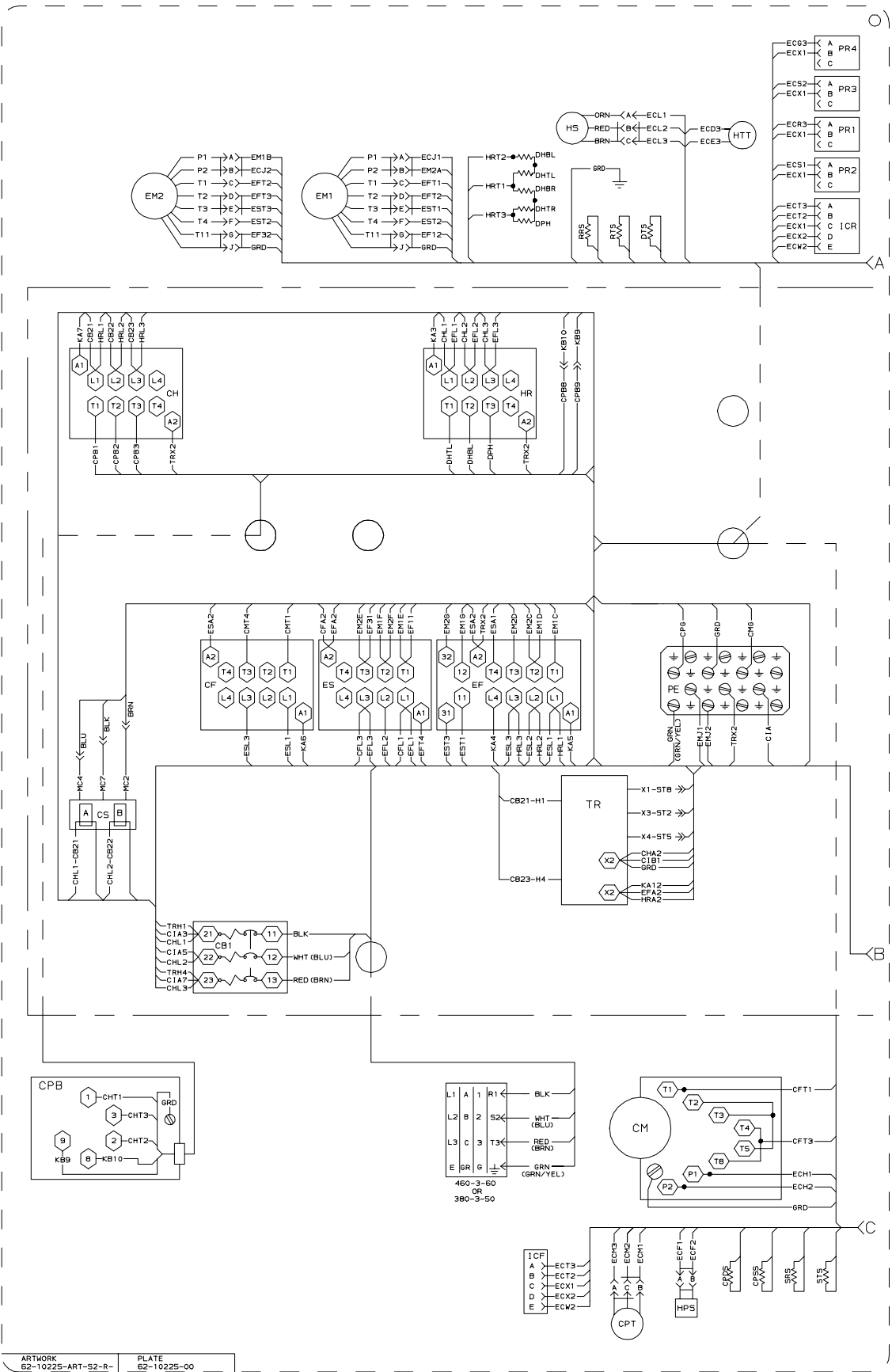
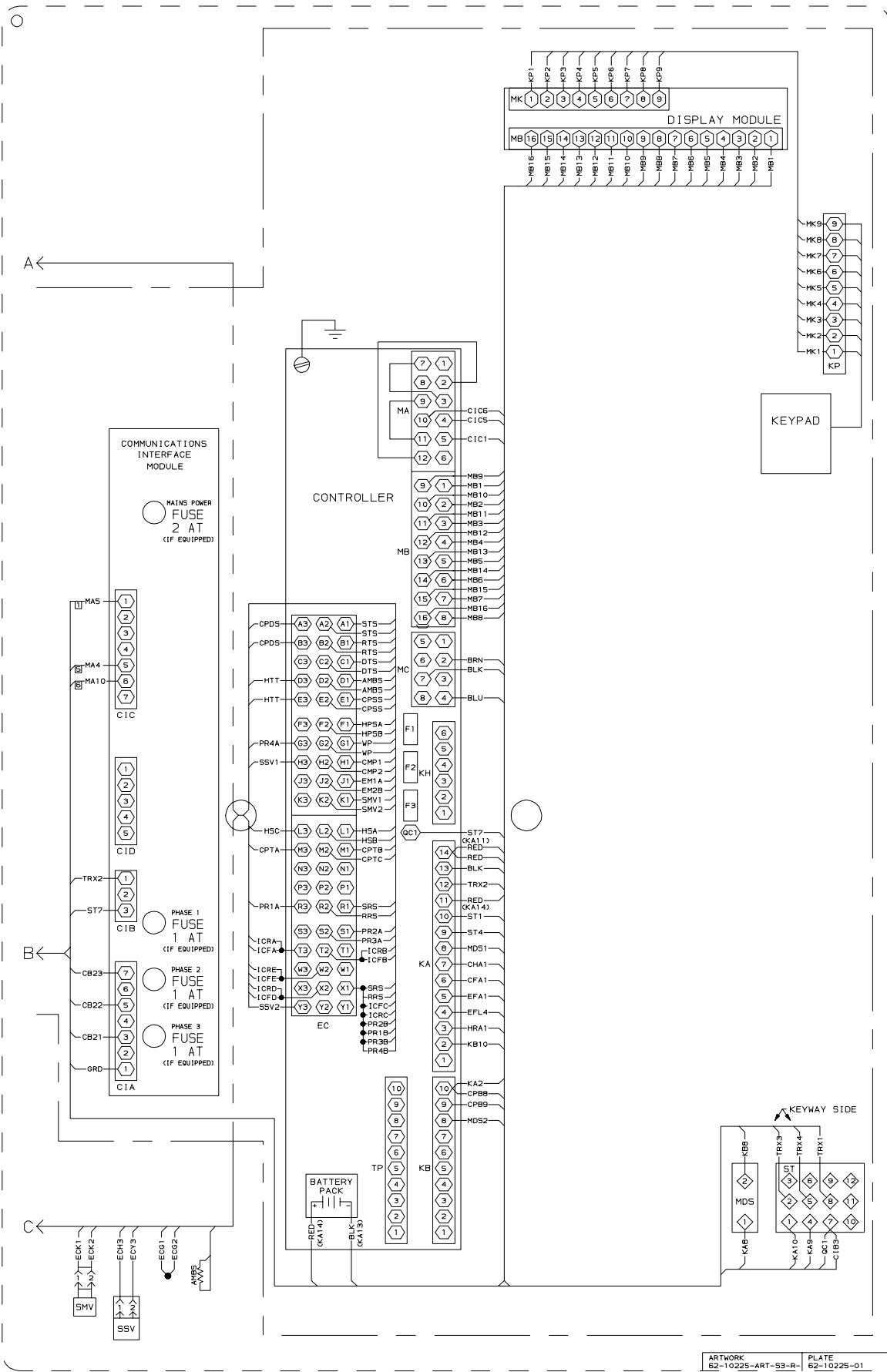


Figure 7-63. Electrical Schematic - See Model Chart (Sheet 2 of 2)



ARTWORK 62-10225-ART-52-R- PLATE 62-10225-00

Figure 7-64. Electrical Wiring Diagram - See Model Chart (Sheet 1 of 2)



ARTWORK 62-10225-ART-53-R PLATE 62-10225-01

Figure 7-64. Electrical Wiring Diagram - See Model Chart (Sheet 2 of 2)

LEGEND

<u>ZONE</u>	<u>SYMBOL</u>	<u>DESCRIPTION</u>
C19	AMBS	— AMBIENT SENSOR
J1	CB1	— CIRCUIT BREAKER 460V
D1	CB2	— CIRCUIT BREAKER 230V (AUTO TRANS OPTION)
M9, P6	CF	— CONDENSER FAN CONTACTOR
A3	CI	— COMMUNICATIONS INTERFACE MODULE (OPTION)
M7, P1	CH	— COMPRESSOR CONTACTOR (HIGH SPEED)
M6	C-L	— COOL LIGHT (OPTION)
L9, M8, P3	CL	— COMPRESSOR CONTACTOR (LOW SPEED)
H10, T6	CM	— CONDENSER FAN MOTOR
E7, T1	CP	— COMPRESSOR MOTOR
A20	CPDS	— COMPRESSOR DISCHARGE SENSOR (TEMP.)
C20	CPSS	— COMPRESSOR SUCTION SENSOR (TEMP.)
G20	CPT	— CONDENSER PRESSURE TRANSDUCER
M1	CS	— CURRENT SENSOR
T4	DHBL	— DEFROST HEATER - BOTTOM LEFT
T4	DHBR	— DEFROST HEATER - BOTTOM RIGHT
T4	DHTL	— DEFROST HEATER - TOP LEFT
R4	DHTR	— DEFROST HEATER - TOP RIGHT
M15	DL	— DEFROST LIGHT (OPTION)
R4	DPH	— DRAIN PAN HEATER
J20	DPT	— DISCHARGE PRESSURE TRANSDUCER (OPTION)
C20	DTS	— DEFROST TEMPERATURE SENSOR
D1	DVM	— DUAL VOLTAGE MODULE (OPTIONAL)
E1	DVR	— DUAL VOLTAGE RECEPTACLE (OPTIONAL)
L12, M11, P8	EF	— EVAPORATOR FAN CONTACTOR (HIGH SPEED)
G11, H11, T9, T11	EM	— EVAPORATOR FAN MOTOR
M12, R9	ES	— EVAPORATOR FAN CONTACTOR (LOW SPEED)
C6, D18, E18, G5	F	— FUSE
	FLA	— FULL LOAD AMPS
H7	HPS	— HIGH PRESSURE SWITCH
M13, P4	HR	— HEATER CONTACTOR
F20	HS	— HUMIDITY SENSOR
F13	HTT	— HEAT TERMINATION THERMOSTAT
M20	IC	— INTERROGATOR CONNECTOR (OPTION)
E7, F11, H10, H11	IP	— INTERNAL PROTECTOR
M14	IRL	— IN-RANGE LIGHT (OPTION)
B16	KP	— KEYPAD CONNECTOR
E16	MDS	— MANUAL DEFROST SWITCH
D20, L20, M20, P20	PR	— PROBE RECEPTACLE (USDA OPTION)
L6, L14, L16	RM	— REMOTE MONITORING RECEPTACLE (OPTION)
K20	RRS	— RETURN RECORDER SENSOR (OPTION)
B20	RTS	— RETURN TEMPERATURE SENSOR
L9, R2	SC	— COMPRESSOR CONTACTOR (SHORTING)
E20	SMV	— SUCTION MODULATION VALVE
H20	SPT	— SUCTION PRESSURE TRANSDUCER (OPTION)
K20	SRS	— SUPPLY RECORDER SENSOR (OPTION)
H15	SSV	— SUCTION SOLENOID VALVE
K4	ST	— START-STOP SWITCH
A20	STS	— SUPPLY TEMPERATURE SENSOR
K7	TC	— CONTROLLER RELAY (COOLING)
D5	TCC	— TRANSFRESH COMMUNICATIONS CONNECTOR (OPTION)
K8	TD	— CONTROLLER RELAY (LOW SPEED COMPRESSOR)
K11	TE	— CONTROLLER RELAY (HIGH SPEED EVAPORATOR FANS)
G5	TFC	— TRANSFRESH CONTROLLER (OPTION)
K13	TH	— CONTROLLER RELAY (HEATING)
K16	TI	— INRANGE RELAY
K14	TF	— DEFROST RELAY
K10	TN	— CONTROLLER RELAY (CONDENSER FAN)
D17, F15, G10, J7, } J10, J11, J13, M16 }	TP	— TEST POINT
M3	TR	— TRANSFORMER
D1	TRANS	— TRANSFORMER AUTO 230/460 (OPTION)
E5, F5	TRC	— TRANSFRESH REAR CONNECTOR (OPTION)
E15	TS	— CONTROLLER RELAY (SUCTION SOLENOID VALVE)
K9	TT	— CONTROLLER RELAY (COMPRESSOR SHORTING)
K12	TV	— CONTROLLER RELAY (LOW SPEED EVAPORATOR FANS)
E10	WP	— WATER PRESSURE SWITCH (OPTION)

**Figure 7-65. Electrical Schematic - See Model Chart
(Sheet 1 of 2)**

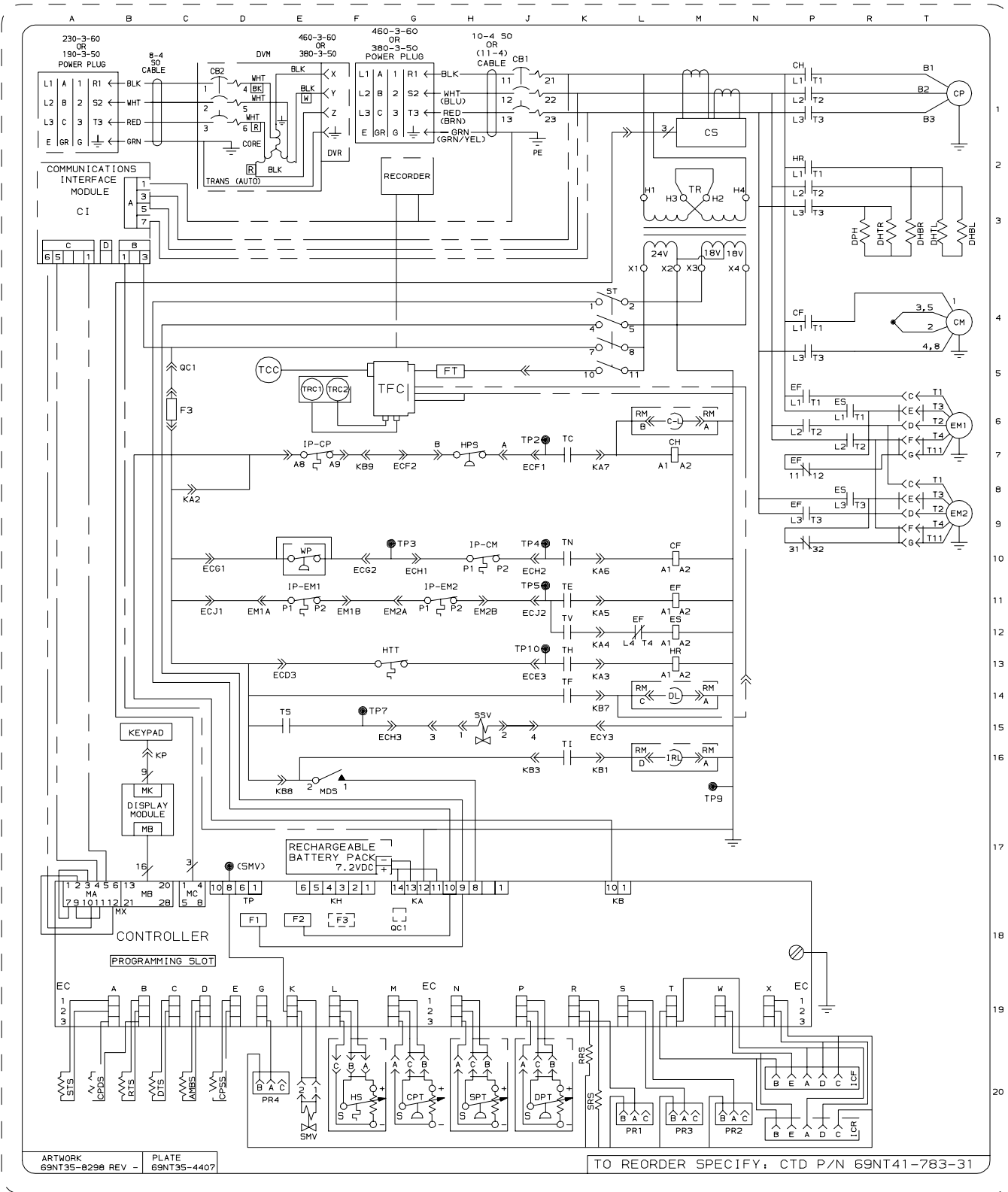


Figure 7-65. Electrical Schematic - See Model Chart (Sheet 2 of 2)

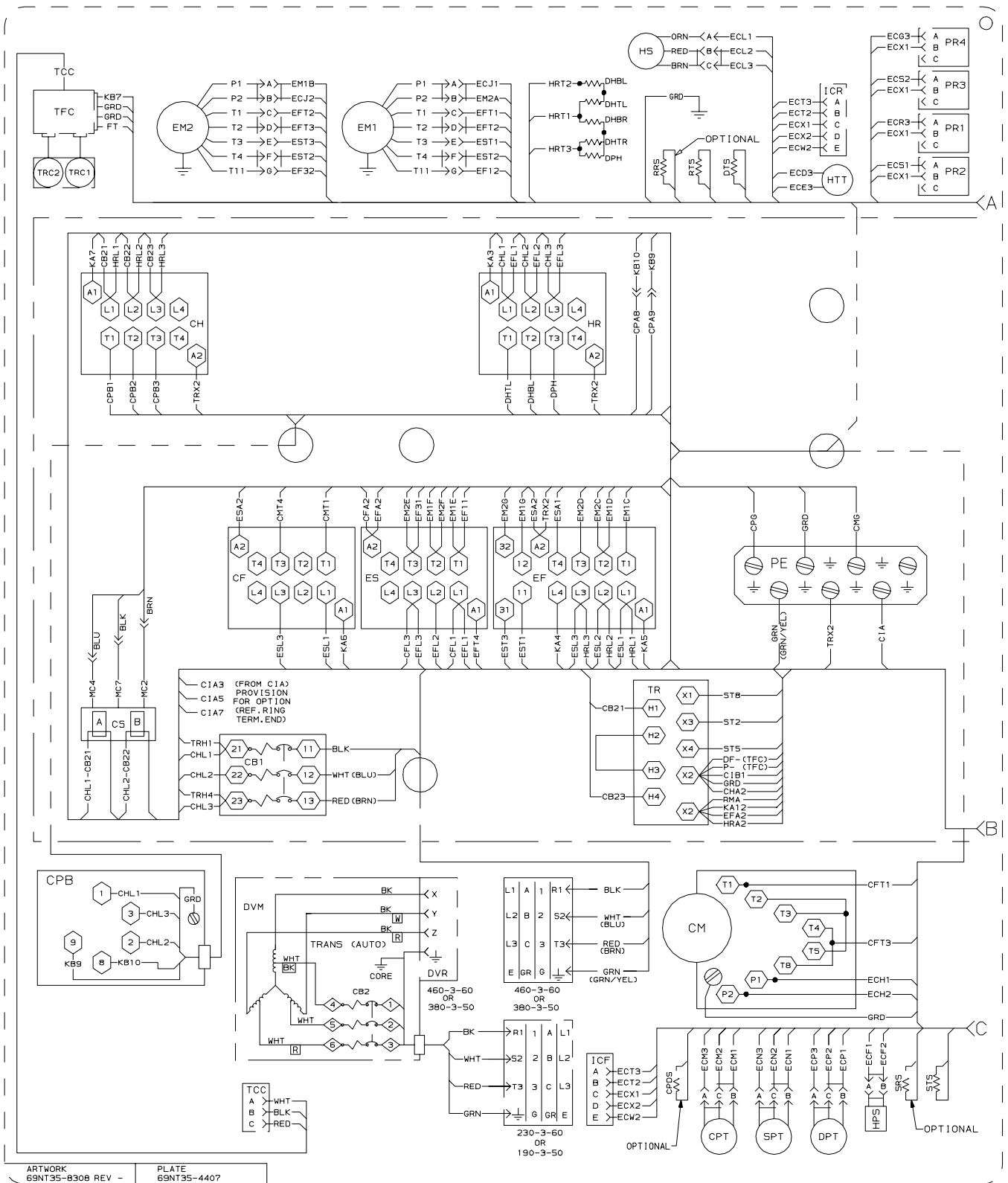


Figure 7-66. Electrical Wiring Diagram - See Model Chart (Sheet 1 of 2)

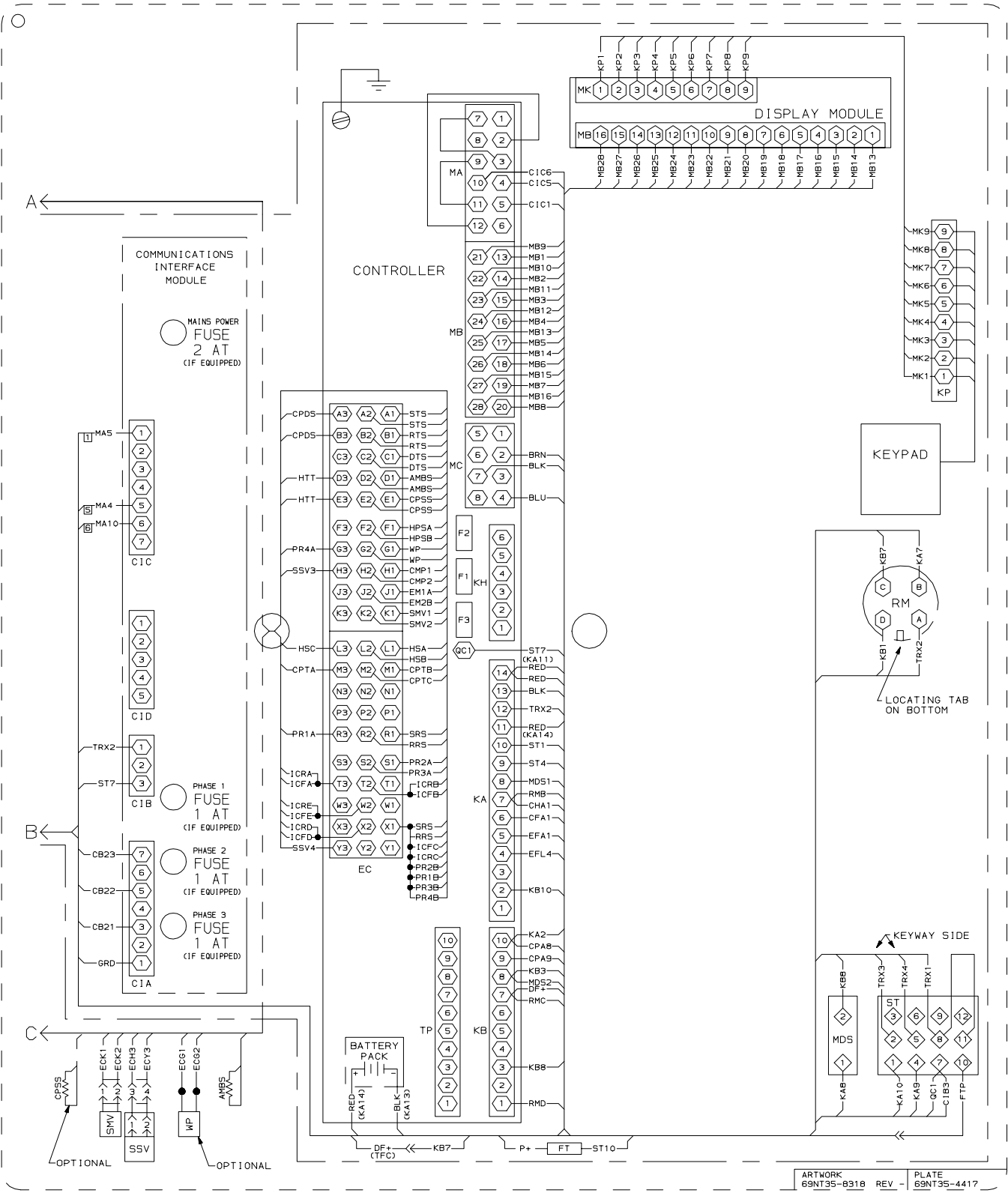
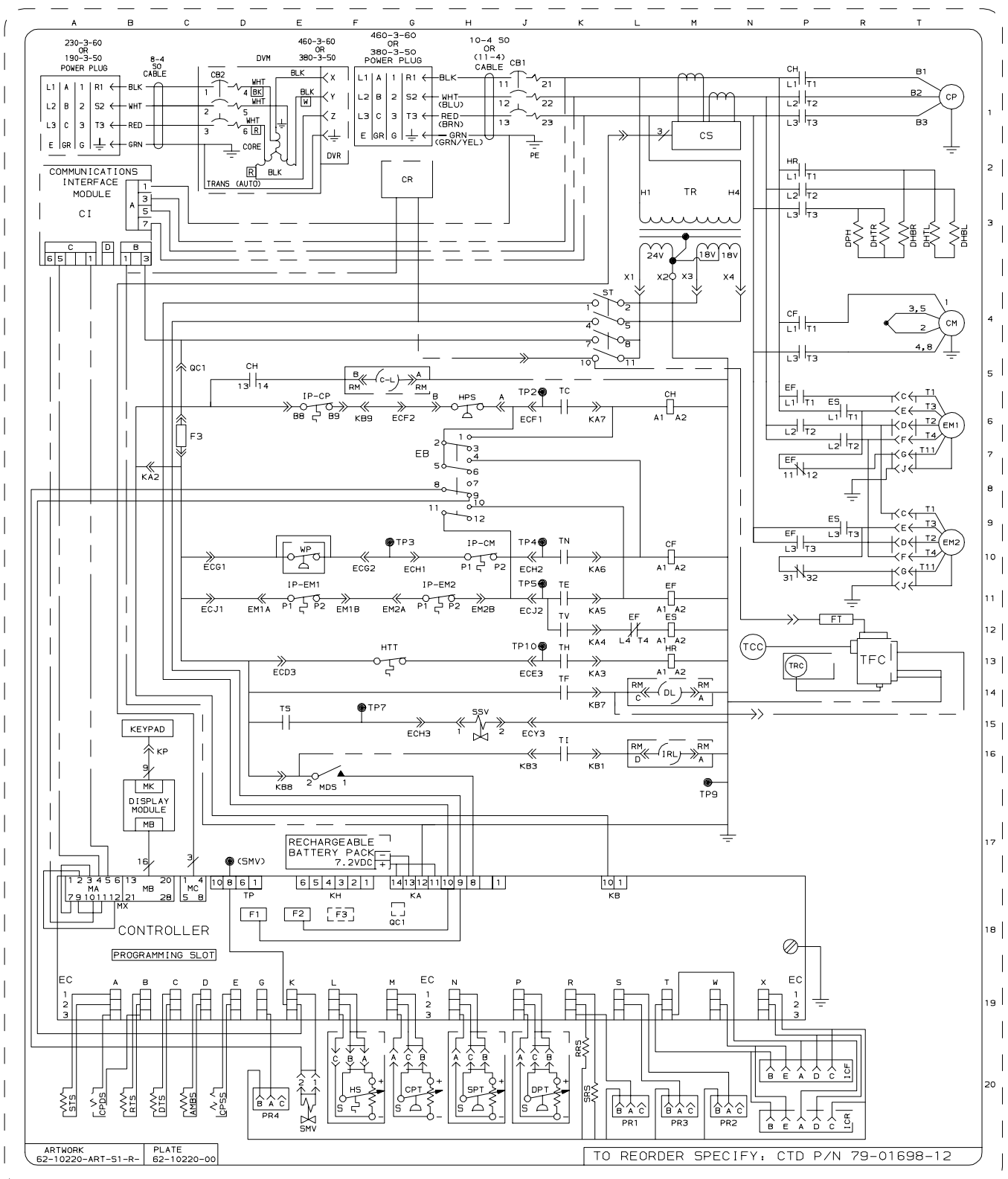


Figure 7-66. Electrical Wiring Diagram - See Model Chart (Sheet 2 of 2)

LEGEND		
<u>ZONE</u>	<u>SYMBOL</u>	<u>DESCRIPTION</u>
C19	AMBS	— AMBIENT SENSOR
J1	CB1	— CIRCUIT BREAKER 460V
D1	CB2	— OPTIONAL CIRCUIT BREAKER 230V (DVM OPTION) TERMINAL BLOCK WHEN CB2 NOT PRESENT
M9, P4	CF	— CONDENSER FAN CONTACTOR
A3	CI	— COMMUNICATIONS INTERFACE MODULE (OPTION)
M5, P1, D5	CH	— COMPRESSOR CONTACTOR
M6	C-L	— COOL LIGHT (OPTION)
H10, T4	CM	— CONDENSER FAN MOTOR
E7, T1	CP	— COMPRESSOR MOTOR
A20	CPDS	— COMPRESSOR DISCHARGE SENSOR (TEMP.)
C20	CPSS	— COMPRESSOR SUCTION SENSOR (TEMP.)
G20	CPT	— CONDENSER PRESSURE TRANSDUCER
G2	CR	— CHART RECORDER (OPTION)
M1	CS	— CURRENT SENSOR
T3	DHBL	— DEFROST HEATER - BOTTOM LEFT
T3	DHBR	— DEFROST HEATER - BOTTOM RIGHT
T3	DHTL	— DEFROST HEATER - TOP LEFT
R3	DHTR	— DEFROST HEATER - TOP RIGHT
M15	DL	— DEFROST LIGHT (OPTION)
R3	DPH	— DRAIN PAN HEATER
J20	DPT	— DISCHARGE PRESSURE TRANSDUCER (OPTION)
C20	DTS	— DEFROST TEMPERATURE SENSOR
D1	DVM	— DUAL VOLTAGE MODULE (OPTIONAL)
E1	DVR	— DUAL VOLTAGE RECEPTACLE (OPTIONAL)
H7	EB	— EMERGENCY (CONTROLLER) BYPASS SWITCH
L12, M11, P6	EF	— EVAPORATOR FAN CONTACTOR (HIGH SPEED)
G11, H11, T6, T10	EM	— EVAPORATOR FAN MOTOR
M12, R6	ES	— EVAPORATOR FAN CONTACTOR (LOW SPEED)
C6, D18, E18, R11	F	— FUSE
	FLA	— FULL LOAD AMPS
H5	HPS	— HIGH PRESSURE SWITCH
M13, P2	HR	— HEATER CONTACTOR
F20	HS	— HUMIDITY SENSOR (OPTION)
F13	HTT	— HEAT TERMINATION THERMOSTAT
M20	IC	— INTERROGATOR CONNECTOR (OPTION)
E5, F11, H10, H11	IP	— INTERNAL PROTECTOR
M14	IRL	— IN-RANGE LIGHT (OPTION)
B16	KP	— KEYPAD CONNECTOR
E16	MDS	— MANUAL DEFROST SWITCH
D20, L20, M20, P20	PR	— PROBE RECEPTACLE (USDA OPTION)
G5, L14, L16	RM	— REMOTE MONITORING RECEPTACLE (OPTION)
K20	RRS	— RETURN RECORDER SENSOR
B20	RTS	— RETURN TEMPERATURE SENSOR
E20	SMV	— SUCTION MODULATION VALVE
H20	SPT	— SUCTION PRESSURE TRANSDUCER (OPTION)
K20	SRS	— SUPPLY RECORDER SENSOR
H15	SSV	— SUCTION SOLENOID VALVE
K4	ST	— START-STOP SWITCH
A20	STS	— SUPPLY TEMPERATURE SENSOR
K5	TC	— CONTROLLER RELAY (COOLING)
K8	TD	— CONTROLLER RELAY (LOW SPEED COMPRESSOR)
K11	TE	— CONTROLLER RELAY (HIGH SPEED EVAPORATOR FANS)
R13	TFC	— TRANSFRESH CONTROLLER (OPTION)
K13	TH	— CONTROLLER RELAY (HEATING)
K16	TI	— INRANGE RELAY
K14	TF	— DEFROST RELAY
K10	TN	— CONTROLLER RELAY (CONDENSER FAN)
D17, F15, G10, J7, J10, J11, J13, M16	TP	— TEST POINT
M3	TR	— TRANSFORMER
D1	TRANS	— TRANSFORMER AUTO 230/460 (OPTION)
E5, F5	TRC	— TRANSFRESH REAR CONNECTOR (OPTION)
E15	TS	— CONTROLLER RELAY (SUCTION SOLENOID VALVE)
K9	TT	— CONTROLLER RELAY (COMPRESSOR SHORTING)
K12	TV	— CONTROLLER RELAY (LOW SPEED EVAPORATOR FANS)
E10	WP	— WATER PRESSURE SWITCH (OPTION)

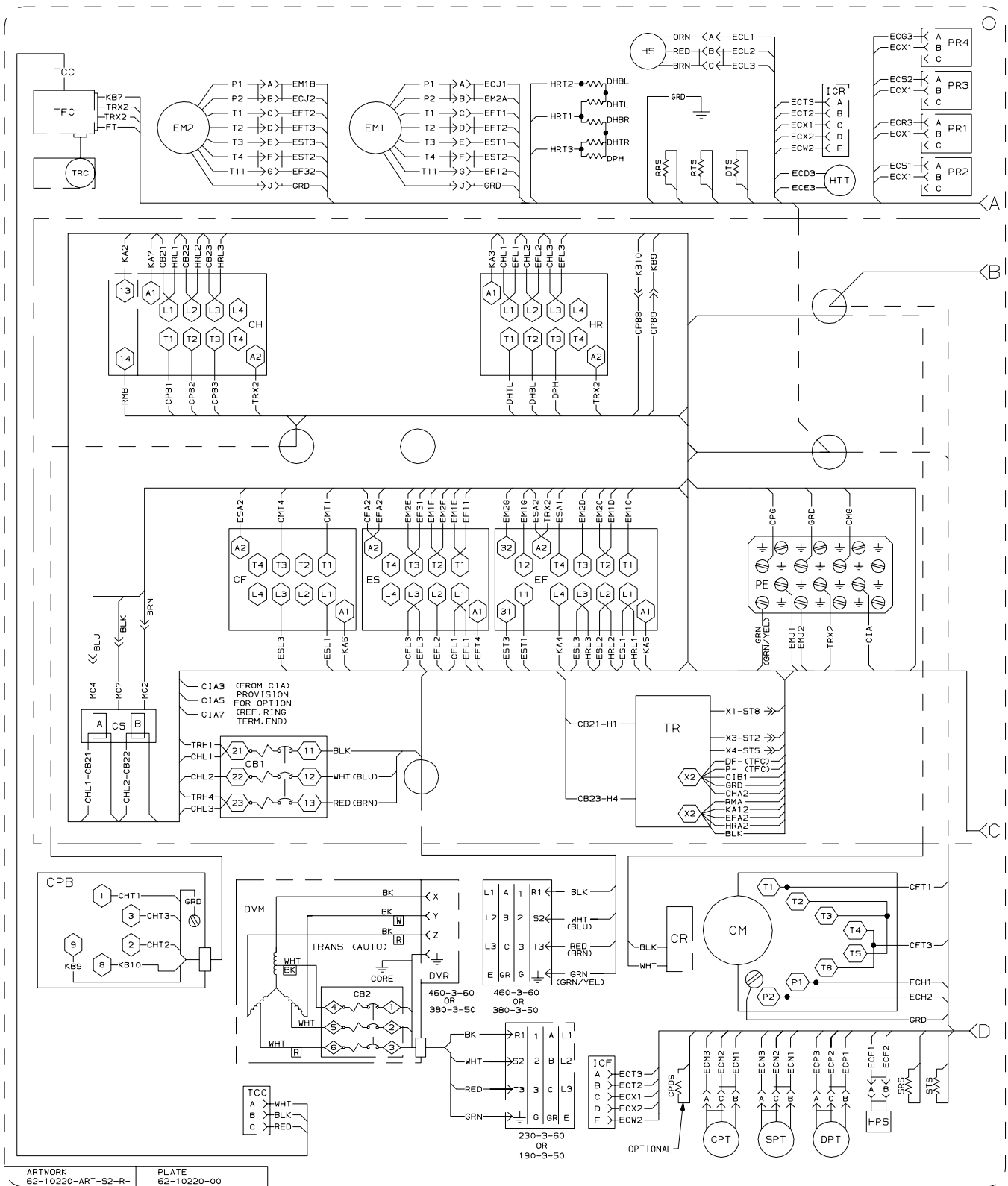
**Figure 7-67. Electrical Schematic - See Model Chart
(Sheet 1 of 2)**



ARTWORK 62-10220-ART-S1-R- PLATE 62-10220-00

TO REORDER SPECIFY: CTD P/N 79-01698-12

Figure 7-67. Electrical Schematic - See Model Chart (Sheet 2 of 2)



ARTWORK 62-10220-ART-S2-R- PLATE 62-10220-00

Figure 7-68. Electrical Wiring Diagram - See Model Chart (Sheet 1 of 2)

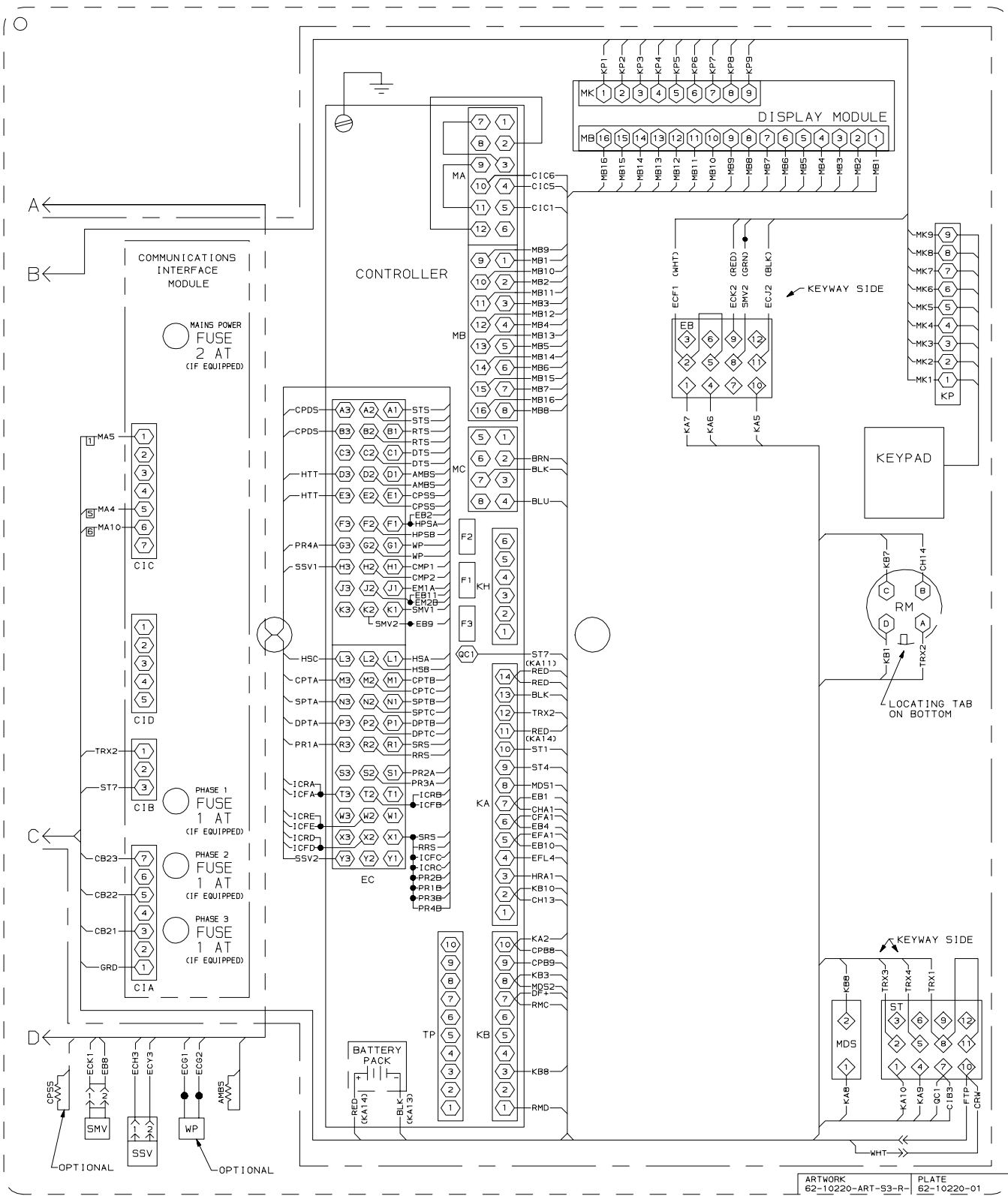


Figure 7-68. Electrical Wiring Diagram - See Model Chart (Sheet 2 of 2)