

# 3200MP DISPLAY CODES

TYPE	CODE NO.	FUNCTION	TYPE	CODE NO.	FUNCTION
TIMER	1-15	TIME REMAINING UNTIL RESTART (DECREASES AT ONE MINUTE INTERVALS)	SHUTDOWN STATUS	60	HIGH DISCHARGE TEMPERATURE
START STATUS	20	READY FOR START-UP, LOCAL		61	LOW REFRIGERANT TEMPERATURE
	21	READY FOR START-UP, REMOTE CONTACT		62	HIGH MOTOR TEMPERATURE
	22	READY FOR START-UP, ESP		63	HIGH THRUST BEARING TEMPERATURE
	23	LAG COMPRESSOR READY FOR RESTART		64/1	LEAVING CHILLER WATER SENSOR OUT OF RANGE
	24	LAG COMPRESSOR MANUALLY DISABLED		64/2	EVAPORATOR REFRIGERANT SENSOR OUT OF RANGE
	25	RECYCLE RESTART PENDING		64/3	CONDENSER REFRIGERANT SENSOR OUT OF RANGE
	26	STARTUP IN PROGRESS		64/4	COMP. A THRUST BEARING SENSOR OUT OF RANGE
RUN STATUS	27	CHILLED WATER RESET OPTION ACTIVE		64/5	COMP. A MOTOR WINDING SENSOR OUT OF RANGE
	28	NORMAL TEMPERATURE CONTROL		64/6	COMP. A DISCHARGE TEMPERATURE SENSOR OUT OF RANGE
	29	RAMP LOADING CONTROL		64/7	OPTIONAL TEMP. SENSOR #1 OUT OF RANGE
	30	DEMAND LIMIT CONTROL		64/8	OPTIONAL TEMP. SENSOR #2 OUT OF RANGE
	31	LEAD/LAG MANUALLY DECOUPLED, LEAD IN LOCAL		64/9	COMP. B THRUST BEARING SENSOR OUT OF RANGE
	32	LEAD/LAG MANUALLY DECOUPLED, LAG IN LOCAL		64/9	OPTIONAL TEMP. SENSOR #3 OUT OF RANGE - SINGLE COMP.
	33	LEAD/LAG TEMPORARILY DECOUPLED, LEAD COMM. ERROR		64/10	COMP. B MOTOR WINDING SENSOR OUT OF RANGE
	34	LEAD/LAG TEMPORARILY DECOUPLED, LAG COMM. ERROR		64/10	OPTIONAL TEMP. SENSOR #4 OUT OF RANGE - SINGLE COMP.
	35	MOTOR TEMPERATURE OVERRIDE		64/11	COMP. B DISCHARGE TEMPERATURE SENSOR OUT OF RANGE
	36	REFRIGERANT TEMPERATURE OVERRIDE		65	LOW OIL PRESSURE
	37	EXCESSIVE PURGING		66	MOTOR OVERLOAD TRIP
	38	LEAD CHILLER REDESIGNATION IN PROCESS		67	TEMPORARY LOSS OF LINE VOLTAGE
	39	LEAD/LAG RESTORATION IN PROGRESS		68	LOW LINE VOLTAGE
PRESTART FAILURE STATUS	40	HIGH MOTOR TEMPERATURE		69	HIGH LINE VOLTAGE
	41	STARTS LIMIT EXCEEDED		70	LOSS OF CHILLED WATER FLOW
	42	CONDENSER WATER FLOW INADEQUATE		71	LOSS OF CONDENSER WATER FLOW
	43	EVAPORATOR WATER FLOW INADEQUATE		72	EXCESSIVE IMPELLER DISPLACEMENT
	44	DEFECTIVE OIL PRESSURE SWITCH		73	HIGH CONDENSER PRESSURE
	45	OUT OF RANGE SENSOR READING		74	FAILURE OF STARTER TO COMPLETE TRANSITION
	46	FAILURE TO ESTABLISH OIL PRESSURE		75	EXCESSIVE MOTOR ACCELERATION TIME
	47	EXCESSIVE IMPELLER DISPLACEMENT		76	IMPROPER DIP SWITCH CONFIGURATION
	48	LOW/HIGH LINE VOLTAGE		77	STARTER CONTACTS FAIL TO OPEN
	54	LEAD CHILLER MALFUNCTION		78	MANUAL OVERRIDE SHUTDOWN
	54	LEAD COMPRESSOR MALFUNCTION - DR UNIT		79	SPARE PROTECTIVE LIMIT TRIP
	55	LAG CHILLER MALFUNCTION		80	RECYCLE WITH HIGH MOTOR CURRENT
	56	LAG COMPRESSOR MALFUNCTION - DR UNIT		81	COMMUNICATIONS MALFUNCTION
				82	LOSS OF MOTOR CURRENT SIGNAL
				85	DIFFUSER WALL MALFUNCTION
				87	STARTER RUN CONTACT OPENED WHILE MACHINE RUNNING
				88	LAG COMPRESSOR SURGE PROTECTION SHUTDOWN
			89/1	THERMOSTAT POTENTIOMETER OUT OF RANGE - S/D BOARD	
			89/2	DEMAND LIMIT POTENTIOMETER OUT OF RANGE - S/D BOARD	
			89/3	REFRIGERANT SETPOINT POTENTIOMETER OUT OF RANGE	
			89/4	COMP. A DIFFUSER FEEDBACK POT. OUT OF RANGE	
			89/5	COMP. B DIFFUSER FEEDBACK POT. OUT OF RANGE	

SINGLE COMPRESSOR LABEL PART #19EB516-1153

DUAL COMPRESSOR LABEL PART #19DR516-1083

# SERVICE REFERENCE DIAGRAM

## FUSE TABLE

ALL FUSES ARE TIME DELAY TYPE UNLESS INDICATED OTHERWISE  
FUSES LISTED BELOW BUT NOT SHOWN ARE SPARES.

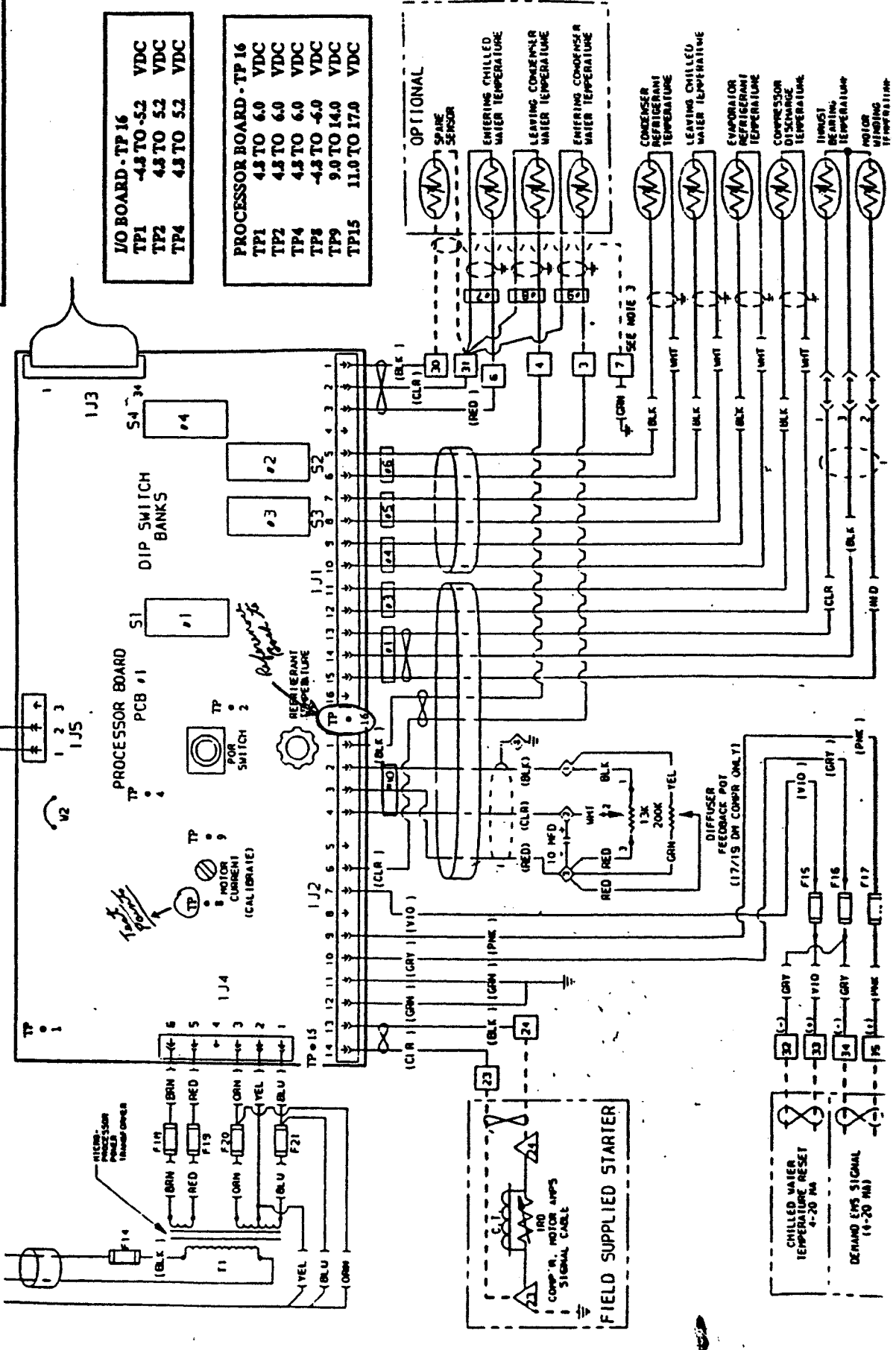
FUSE	F1	F2	F3	F4	F5	F6	F7	F8	F9
AMPS	10.75	10.75	10.75	10.75	10.75	10.75	10.75	10.75	10.75
FUSE	F10	F11	F12	F13	F14	F15	F16	F17	F18
AMPS	10.75	10.75	10.75	11.0	—	—	—	—	—
FUSE	F19	F20	F21	F25	F26	F27	F31	F32	F33
AMPS	10.75	3.0	3.0	10.75	10.75	10.75	10.75	10.75	10.75

SET POINT/DISPLAY BOARD - TP16  
CENTRE TERMINAL OF PUSHBUTTON 4.8 TO 5.2 VDC  
OUTER TERMINAL OF PUSHBUTTON 0 VDC

IJ4 CONNECTOR  
TERMINAL 1 TO 3 16.15 TO 21.85 VAC  
TERMINAL 5 TO 6 15.3 TO 20.7 VAC

I/O BOARD - TP 16  
TP1 4.8 TO 5.2 VDC  
TP2 4.8 TO 5.2 VDC  
TP4 4.8 TO 5.2 VDC

PROCESSOR BOARD - TP 16  
TP1 4.8 TO 6.0 VDC  
TP2 4.8 TO 6.0 VDC  
TP4 4.8 TO 6.0 VDC  
TP8 4.8 TO 6.0 VDC  
TP9 9.0 TO 14.0 VDC  
TP15 11.0 TO 17.0 VDC



OPTIONAL  
SPARE SENSOR  
ENTERING CHILLED WATER TEMPERATURE  
LEAVING CONDENSER WATER TEMPERATURE  
ENTERING CONDENSER WATER TEMPERATURE

CONDENSER REFRIGERANT TEMPERATURE  
LEAVING CHILLED WATER TEMPERATURE  
EVAPORATOR REFRIGERANT TEMPERATURE  
COMPRESSOR DISCHARGE TEMPERATURE  
IN/OUT BEARING TEMPERATURE  
MOTOR WINDING TEMPERATURE

CHILLED WATER TEMPERATURE RESET 4-20 MA  
DEMAND EPS SIGNAL 14-20 MA

FIELD SUPPLIED STARTER  
170 COMP. R. MOTOR AMPS  
SIGNAL CABLE

TP 1  
TP 2  
TP 3  
TP 4  
TP 5  
TP 6  
TP 7  
TP 8  
TP 9  
TP 10  
TP 11  
TP 12  
TP 13  
TP 14  
TP 15  
TP 16

DIP SWITCH BANKS  
S1  
S2  
S3  
S4

PROCESSOR BOARD PCB #1  
TP 1  
TP 2  
TP 3  
TP 4  
TP 5  
TP 6  
TP 7  
TP 8  
TP 9  
TP 10  
TP 11  
TP 12  
TP 13  
TP 14  
TP 15  
TP 16

I/O BOARD - TP 16  
TP1  
TP2  
TP4

SET POINT/DISPLAY BOARD - TP16  
CENTRE TERMINAL OF PUSHBUTTON  
OUTER TERMINAL OF PUSHBUTTON

IJ4 CONNECTOR  
TERMINAL 1 TO 3  
TERMINAL 5 TO 6

## CARRIER 3200MP TEST POINTS

SETPOINT / DISPLAY BOARD	
Centre terminal of Pushbutton	4.8 to 5.2 VDC
Outer terminal of Pushbutton	0.0

POWER SUPPLY CONNECTOR 1J4 (PROCESSOR BOARD)	
Terminal 1 to 3	16.15 to 21.85 VAC
Terminal 5 to 6	15.3 to 20.7 VAC

INPUT / OUTPUT BOARD	
TP 1 to TP 16	-4.8 TO -5.2 VDC
TP 2 "	4.8 TO 5.2 VDC
TP 4 "	4.8 TO 5.2 VDC

PROCESSOR BOARD	
TP 1 to TP 16	4.8 TO 6.0 VDC
TP 2 "	4.8 TO 6.0 VDC
TP 4 "	4.8 TO 6.0 VDC
TP 8 "	-4.8 TO -6.0 VDC
TP 9 "	9.0 TO 14.0 VDC
TP 15 "	11.0 TO 17.0 VDC

NOTE: ALL VOLTAGES ARE MEASURED WITH RESPECT TO TP 16 ON THE PROCESSOR BOARD.