

COMPONENTS	FUNCTION	LOCATION	CONTACTS
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1CR	MANUAL START RELAY	29	17,29
2CR	START RELAY	17	10,28
3CR	1MC DELAY RELAY	38	10,11

1PR	POWER FAILURE RELAY	32	9,13,16
2PR	PHASE REVERSAL RELAY	34	30,32

1TR	RUN PERIOD TIMER	28	25
2TR	1MC DELAY TIMER	18	38

1MC	RUN CONTACTOR 1	10	4,5,6
2MC	AUTOTRANSFORMER NEUTRAL CONT.	11	4,5,6
3MC	ACCELERATING CONTACTOR	13	4,5,6
10CM	OVERCURRENT MONITOR	7,24	33,35,50

1MCA	1MC AUXILIARY CONTACT	11,11,17,19	
2MCA	2MC AUXILIARY CONTACT	10	

1CS	STOP SWITCH	20	
2CS	START SWITCH	30	

1IS	NORMAL POWER ISOLATION SWITCH	4,5,6	
1LS	EMERGENCY START LIMIT SWITCH	12	
1CB	CIRCUIT BREAKER	4,5,6	50

1PS	PRESSURE SWITCH	20	
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1CPT	CONTROL POWER TRANSFORMER	14	
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1PM	POWER MONITOR	1	32,34
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1CT	CURRENT TRANSFORMER	4	
2CT	CURRENT TRANSFORMER	5	
3CT	CURRENT TRANSFORMER	6	

CVD1	NORM. CURRENT/VOLTAGE DISPLAY	1,20	
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SA	SURGE ARRESTOR	7	
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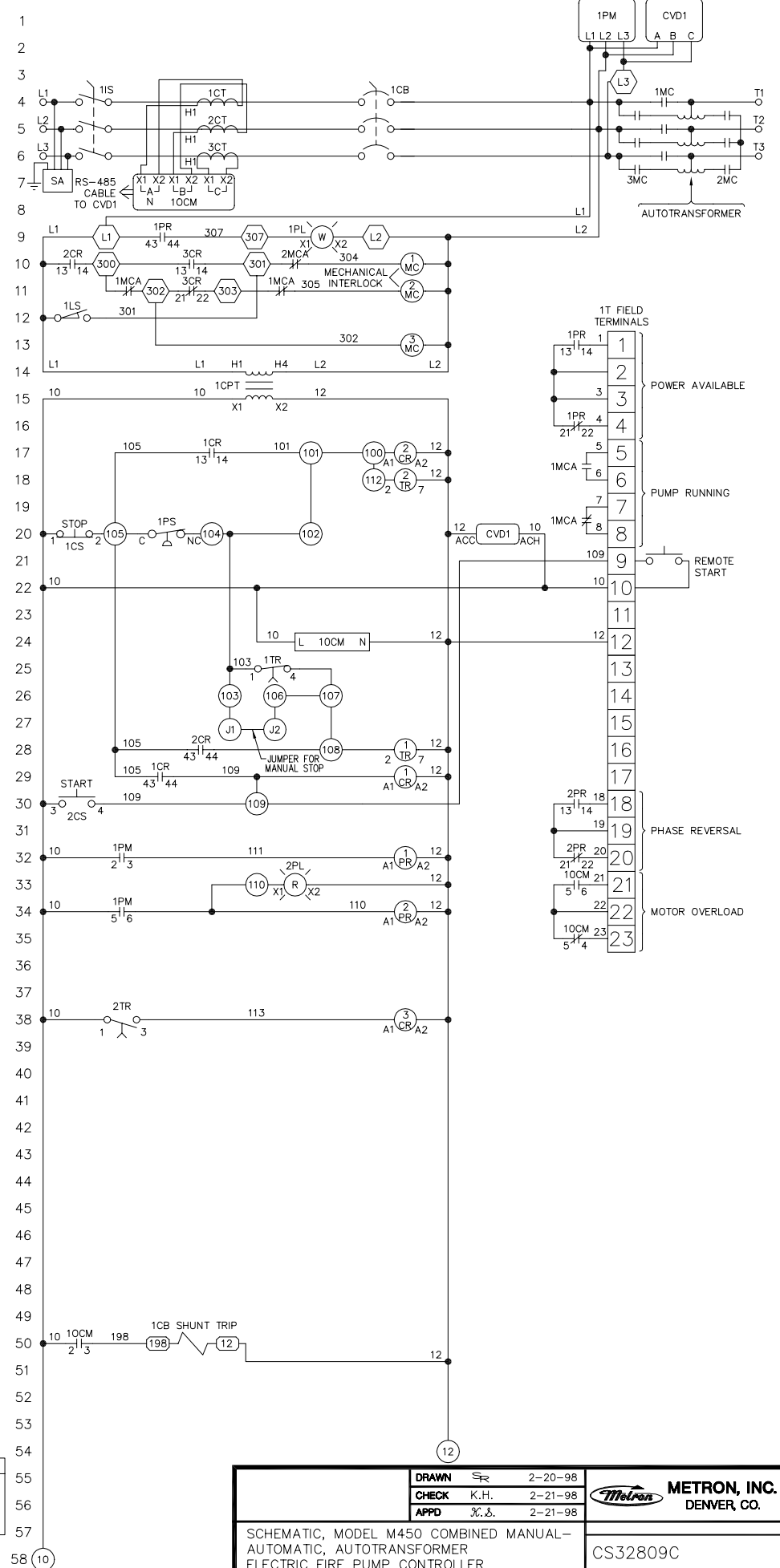
1PL	POWER ON LIGHT	9	
2PL	PHASE REVERSAL LIGHT	33	

NOTES FOR FIELD WIRING:  
 USE COPPER WIRING ONLY EXCEPT AT TERMINALS MARKED CU-AL. ALL 1T FIELD TERMINAL CONTACTS RATED 10A @ 600VAC.

□ DENOTES TERMINALS ON 1T TERMINAL STRIP  
 ○ DENOTES TERMINALS ON 2T TERMINAL STRIP  
 ○ DENOTES TERMINALS ON 3T TERMINAL STRIP  
 ○ DENOTES TERMINALS ON 4T TERMINAL STRIP

THERE IS A RS-485 CABLE THAT CONNECTS THE CVD TO THE OCM.

THE FOLLOWING TERMINAL JUMPERS ARE INSTALLED			
J-1-2	J-9-109	J-100-101	J-103-104
J-1-103	J-10-10	J-100-112	
J-2-106		J-101-102	J-106-107
	J-12-12	J-102-103	J-107-108



DRAWN	SR	2-20-98
CHECK	K.H.	2-21-98
APPD	J.C.	2-21-98

SCHEMATIC, MODEL M450 COMBINED MANUAL-AUTOMATIC, AUTOTRANSFORMER ELECTRIC FIRE PUMP CONTROLLER

**METRON, INC.**  
DENVER, CO.

CS32809C

SCALE N.T.S. SHEET 1 OF 1