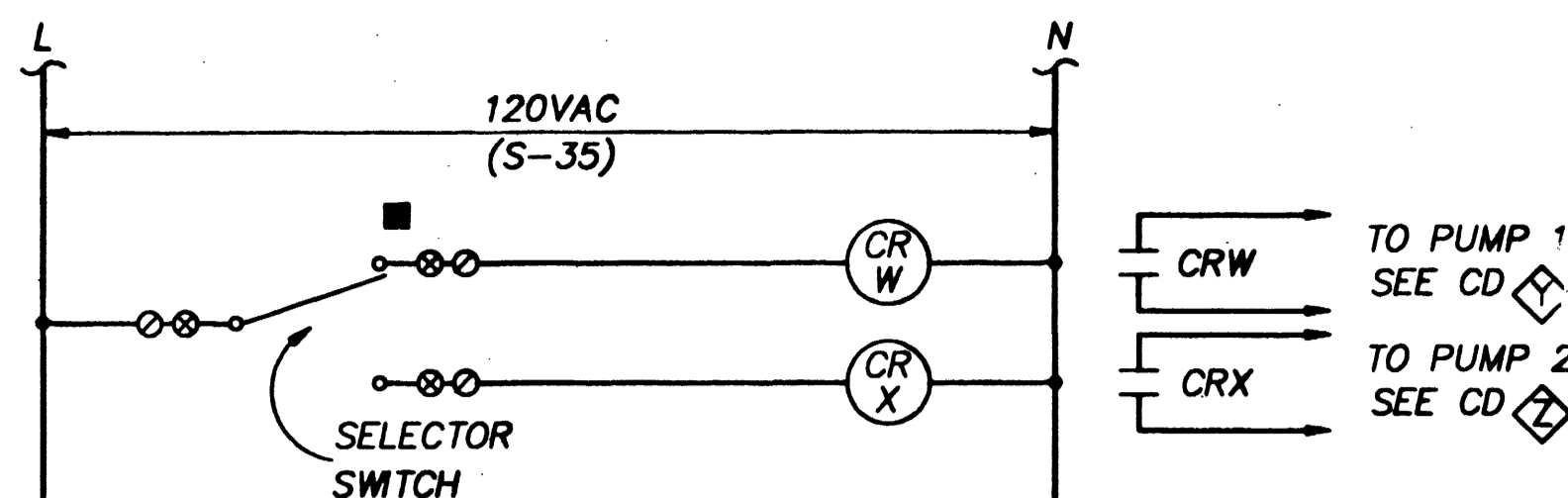


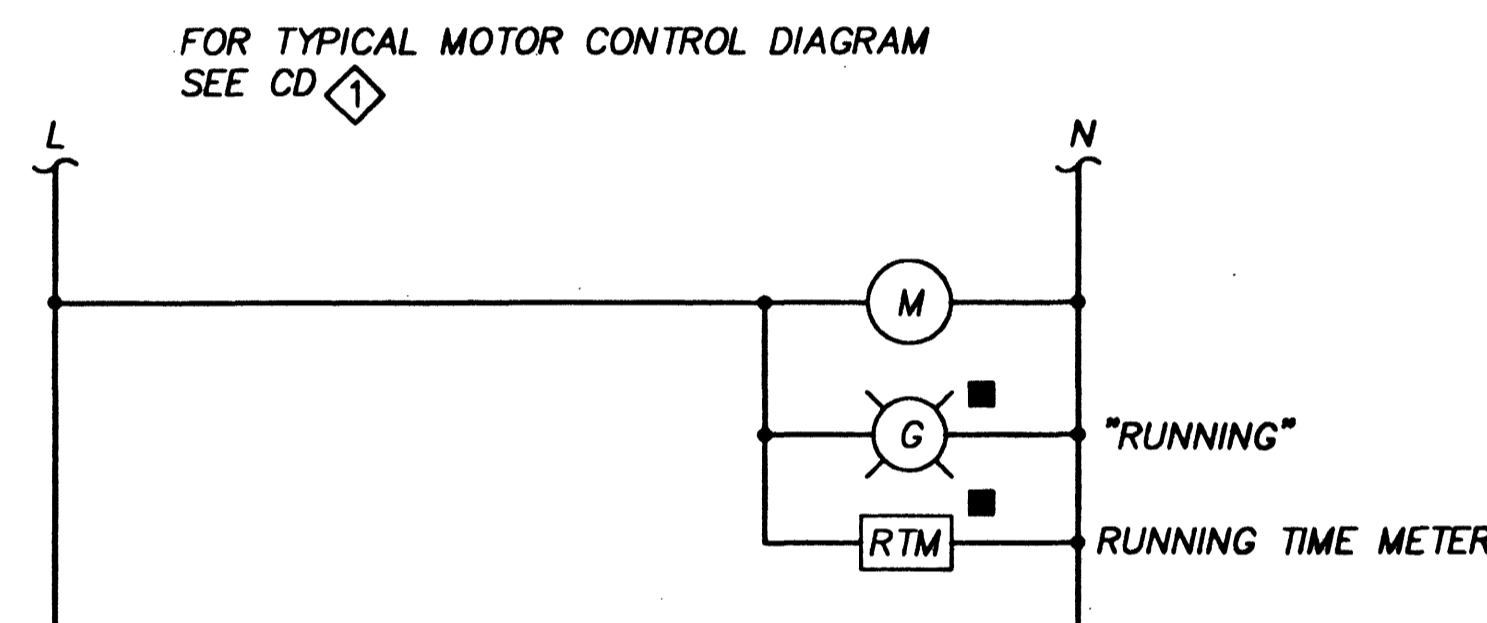
CD 1 TYPICAL MOTOR CONTROL DIAGRAM



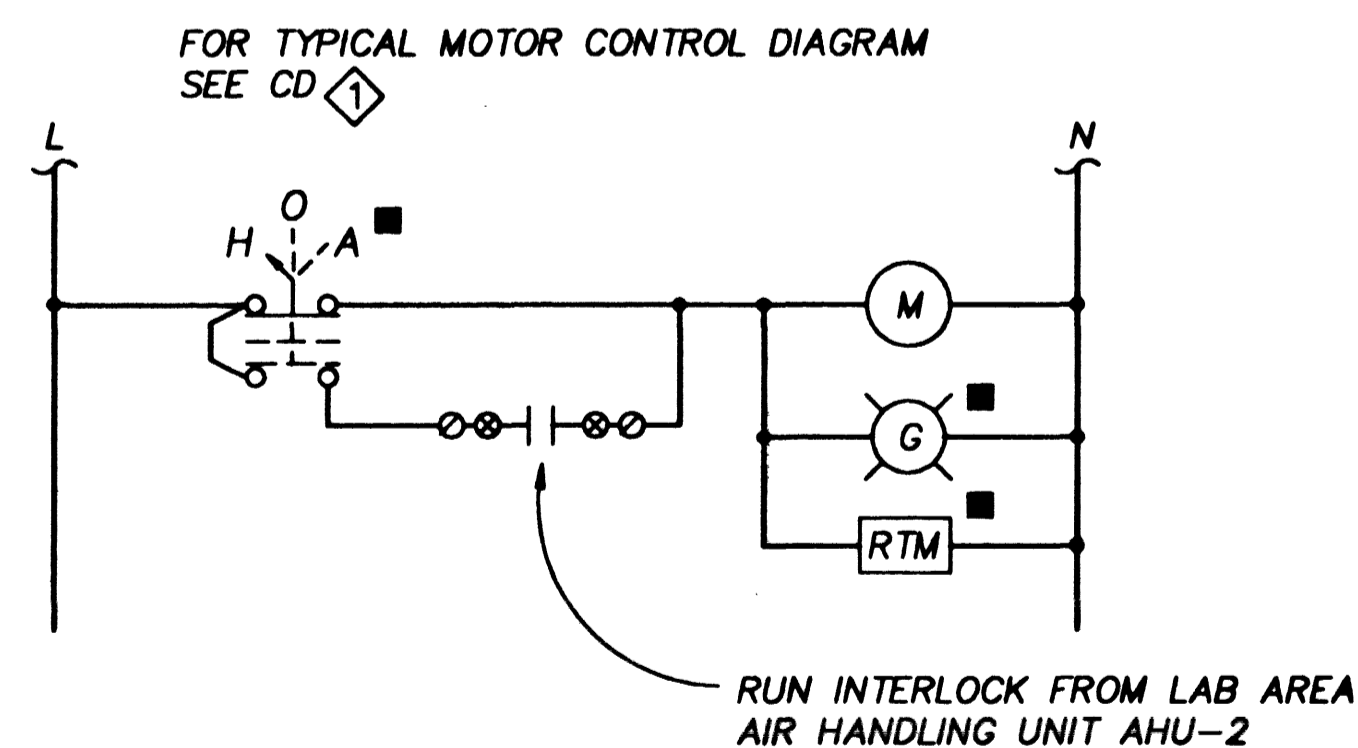
PUMP	RELAY CONTROL DIAGRAM			
	CRW	CRX	CDY	CDZ
WATER BOILER PUMP 1	2	-	2	2
WATER BOILER PUMP 2	-	3	2	2
CONDENSOR PUMP 1	4	-	3	3
CONDENSOR PUMP 2	-	5	3	3
CHILLED WATER LOOP PUMP 1	6	-	3	3
CHILLED WATER LOOP PUMP 2	-	7	3	3

CD 4 PUMP SELECTOR CONTROL STATION CONTROL DIAGRAM

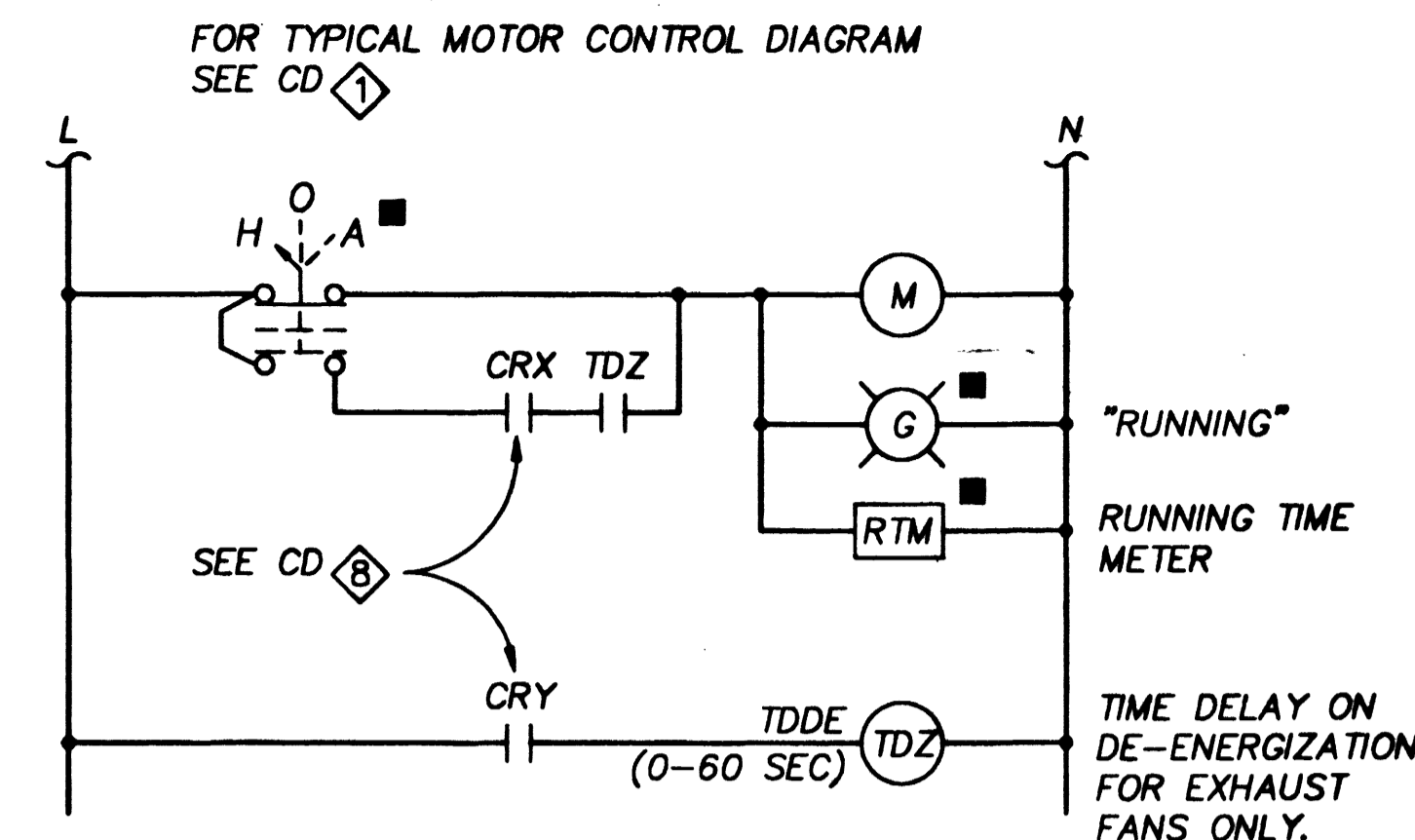
(TYPICAL FOR HOT WATER BOILER PUMPS, CONDENSER PUMPS AND CHILLED WATER LOOP PUMPS - 3 TOTAL)



CD 5 WATER HEATER PUMP (P-7) CONTROL DIAGRAM



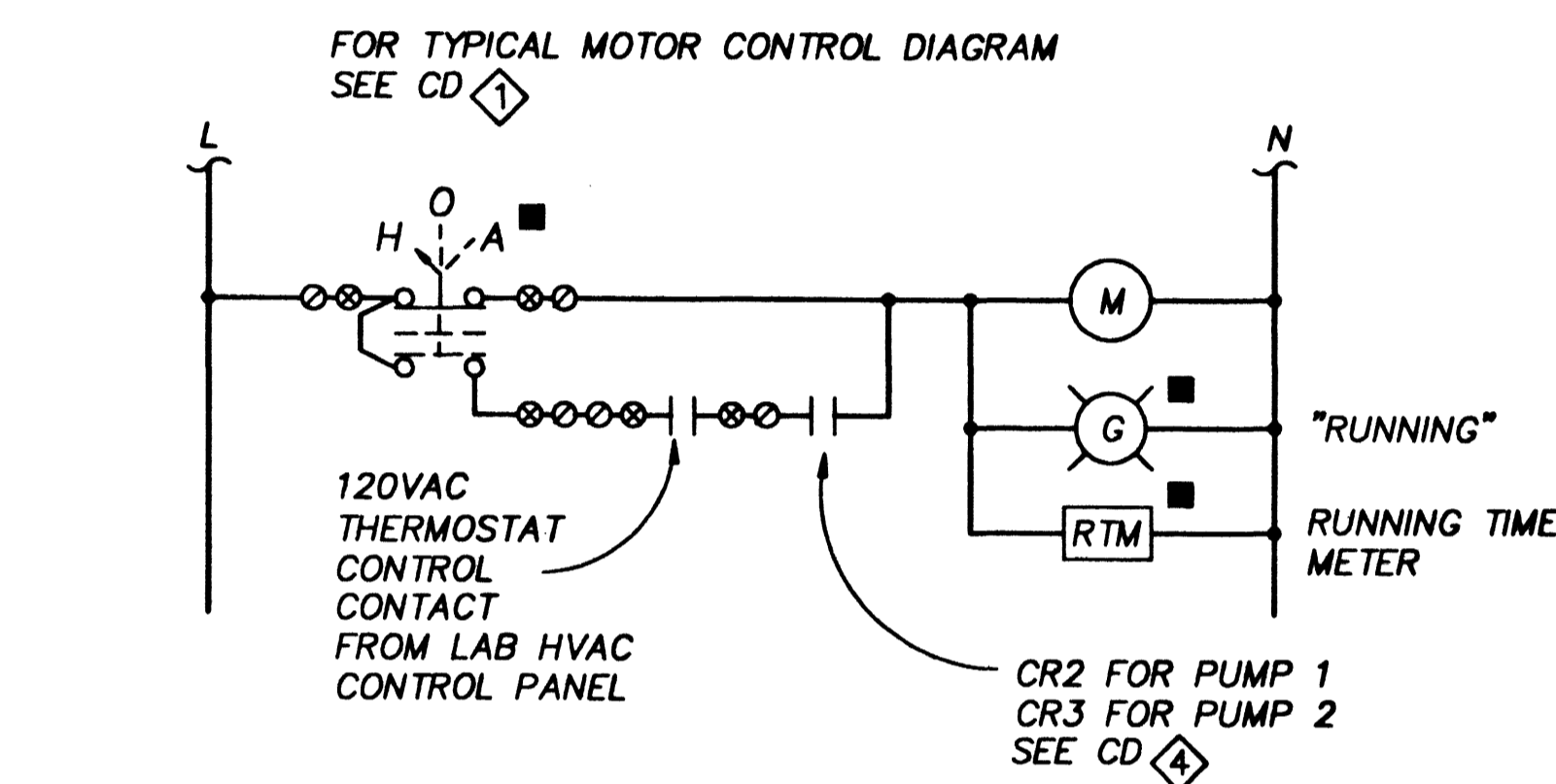
CD 6 EXHAUST ROOF VENT (ERV-1) CONTROL DIAGRAM



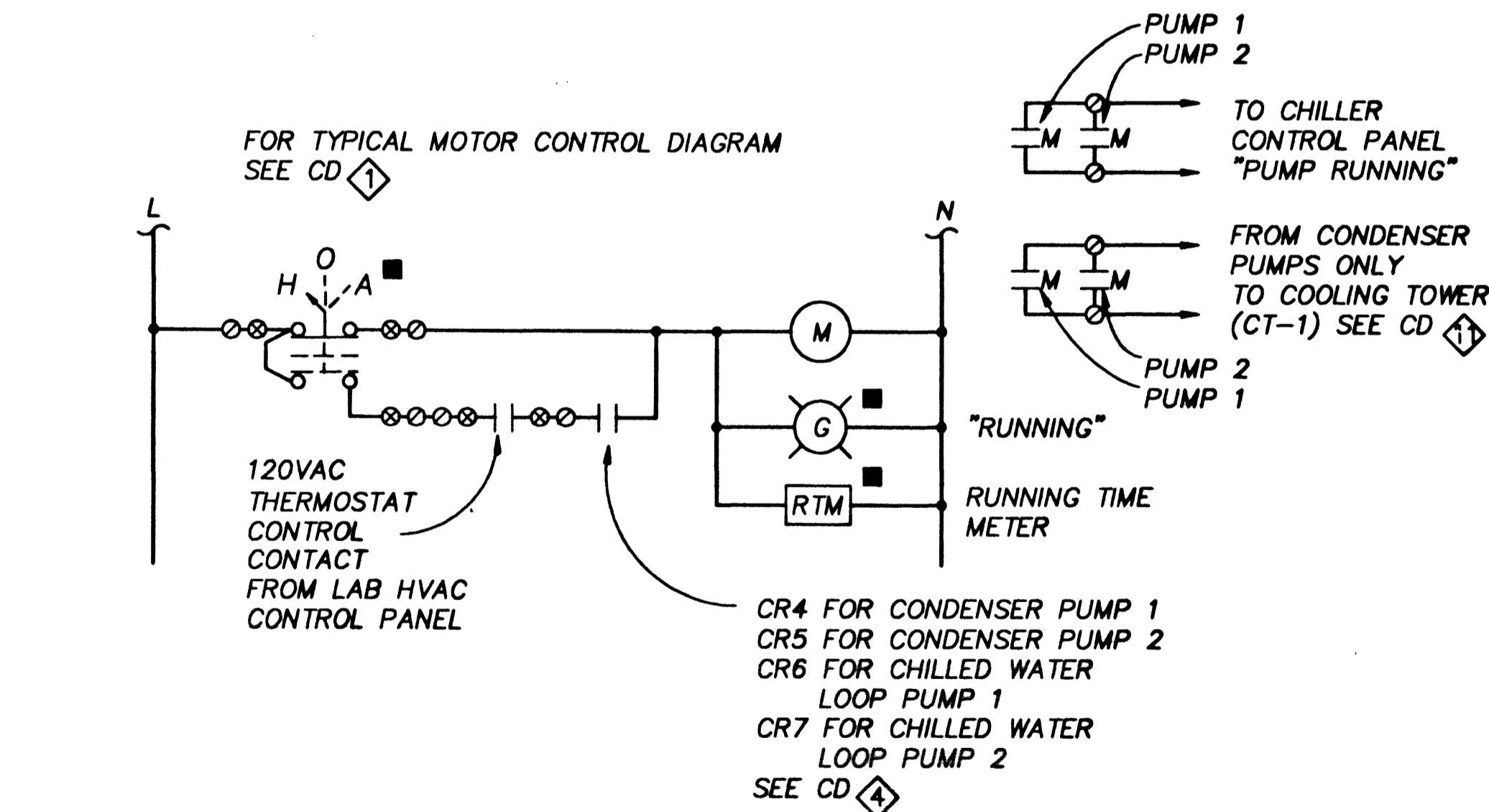
CD 7 EXHAUST FAN AND SUPPLY FAN CONTROL DIAGRAM

(TYPICAL FOR EF 1, EF 2, EF 3, EF 4, EF 5, EF 6, FC 1, FC 2, FC 3, FC 4, FC 5, FC 6 & FC 7)  
(NOTE: NEMA 3R PEDESTAL MOUNTED MOTOR STARTER FOR FC-7)

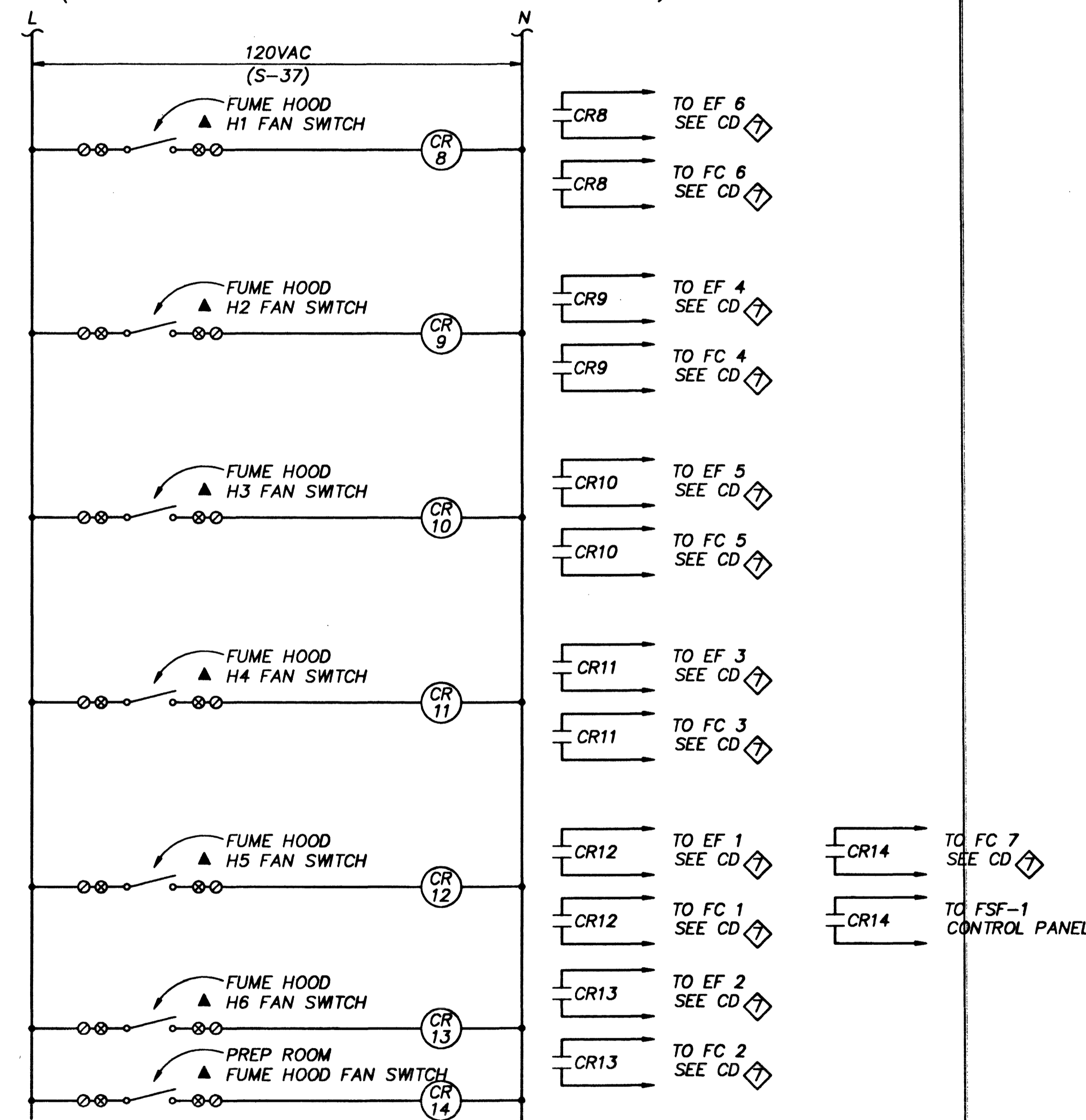
EQUIPMENT	CRX	CRY	TDZ
EF 1	-	2	1
EF 2	-	3	2
EF 3	-	1	3
EF 4	-	9	4
EF 5	-	10	5
EF 6	-	8	6
FC 1	12	-	-
FC 2	13	-	-
FC 3	11	-	-
FC 4	9	-	-
FC 5	10	-	-
FC 6	8	-	-
FC 7	14	-	-



CD 2 TYPICAL HOT WATER BOILER PUMP CONTROL DIAGRAM



CD 3 TYPICAL CONDENSER PUMP AND CHILLED WATER LOOP PUMP CONTROL DIAGRAM

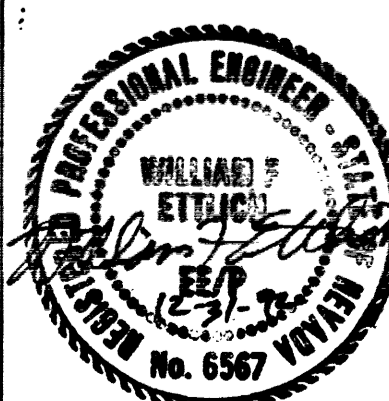


CD 8 EXHAUST FAN AND SUPPLY FAN CONTROL DIAGRAM



HDR Engineering, Inc.

Issue No.	Description	Date	Drawn	Checked	Reviewed	Project Mgr.
7	ISSUED FOR CONSTRUCTION	11/27/91	PVM	M.JH	KDW	DAP
6	ADDENDUM	10/17/91	BAD	M.JH	KDW	DAP



Project Manager	DAVID PIVETTI
Architect	
Chf	
Electrical	K. WRIGHT
Drawn By	PVM

City of Los Angeles  
Water Pollution Control Facility  
Nitrification / Filtration Facilities  
Contract 14  
LABORATORY

LABORATORY  
CONTROL DIAGRAMS

Date	AUGUST 1991	Project No.	00120-081-141	Drawing No.	E-16	Issue	7
Scale	NONE						

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