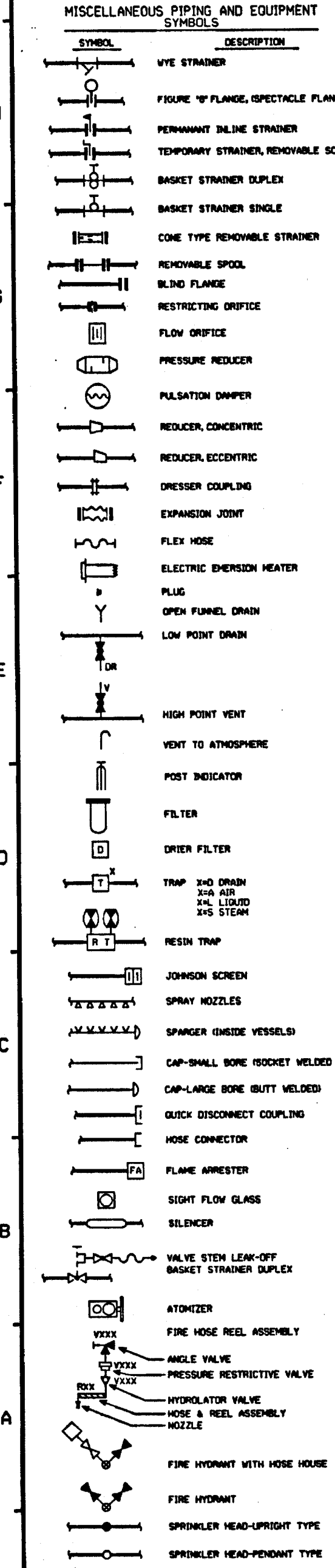
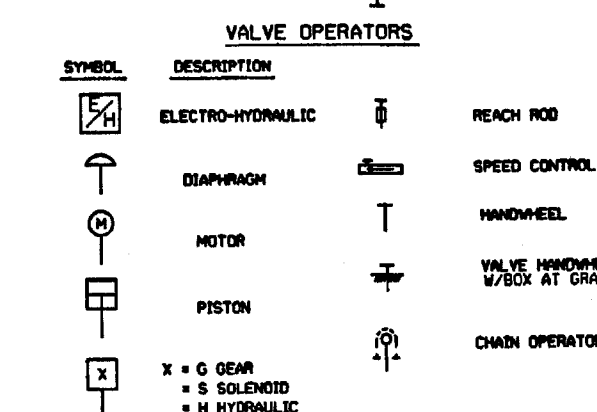
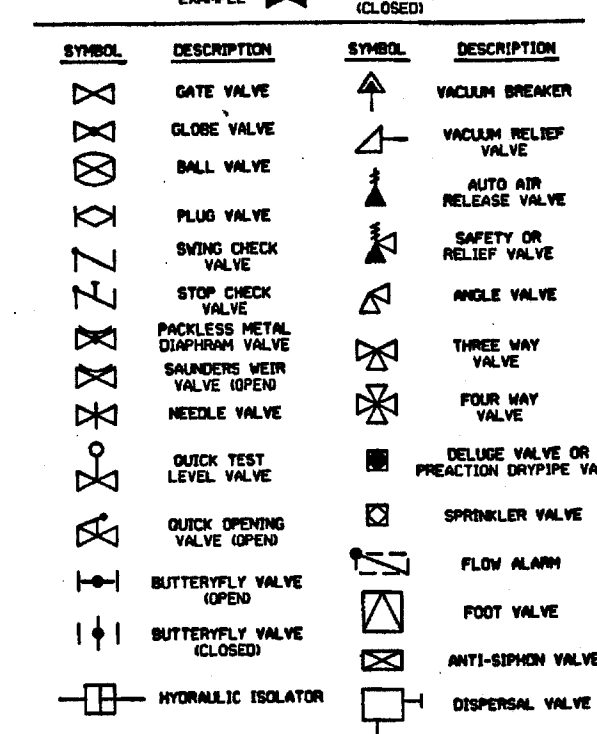


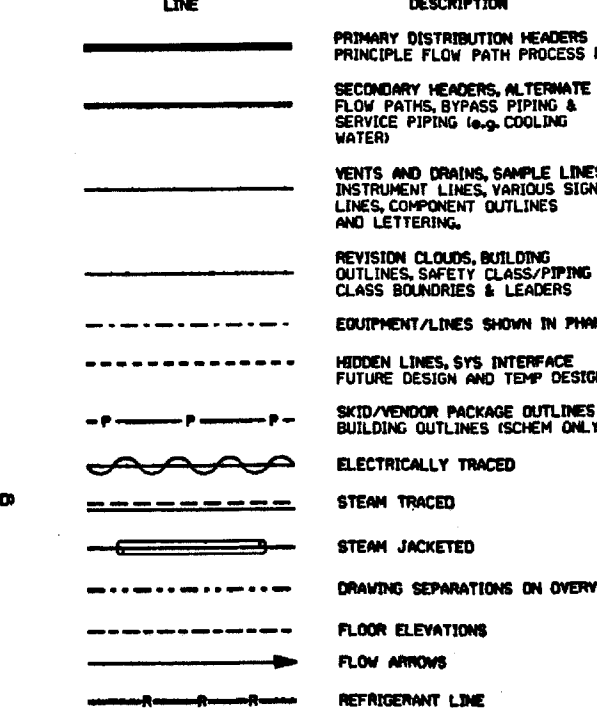
MISCELLANEOUS PIPING AND EQUIPMENT SYMBOLS



VALVE TYPES



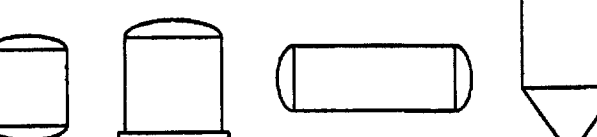
LINE CODES



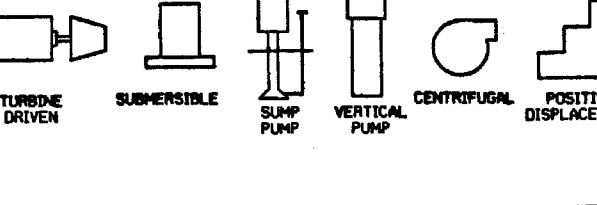
TYPICAL HEAT EXCHANGERS



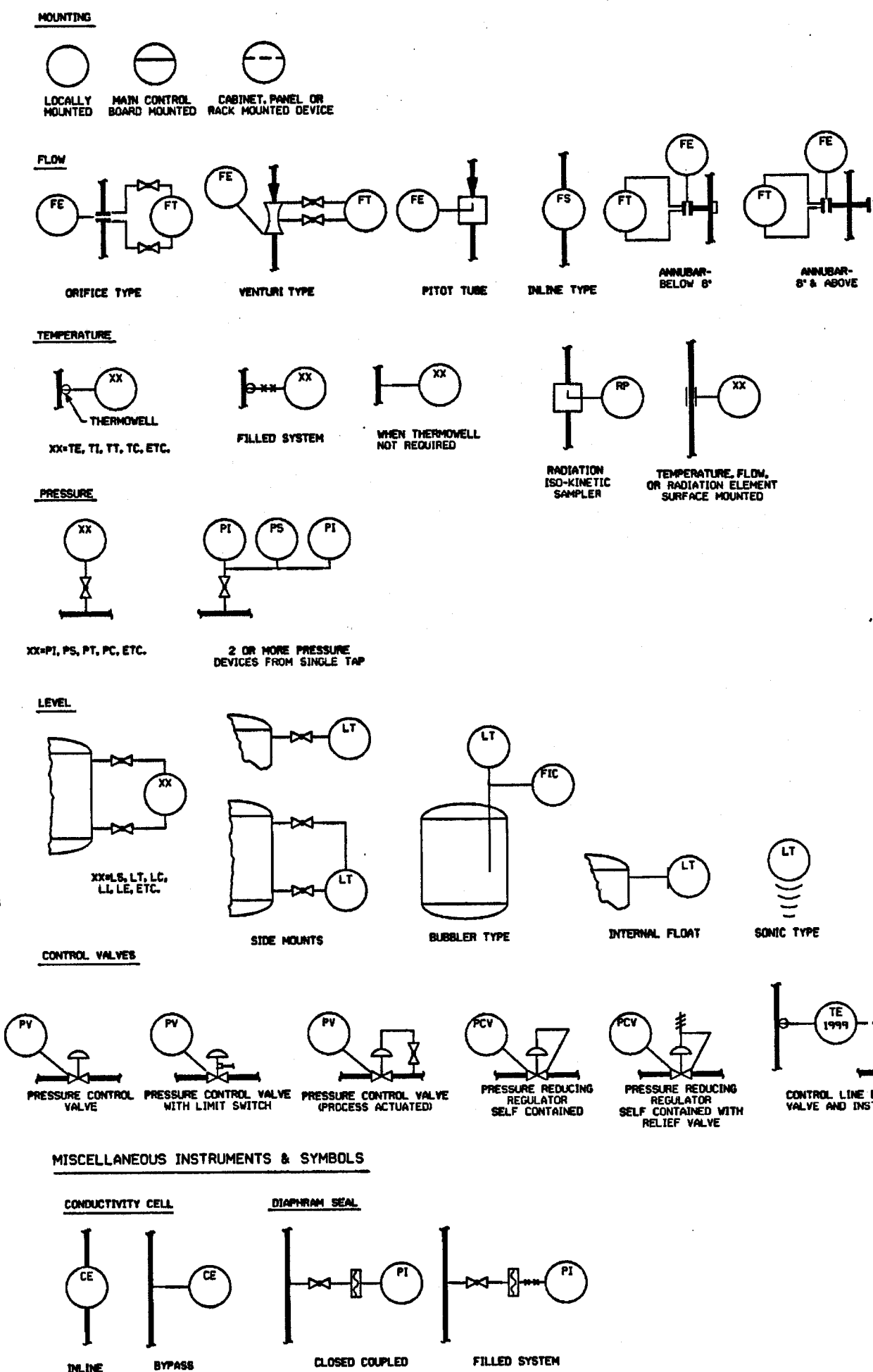
TYPICAL TANKS AND VESSELS



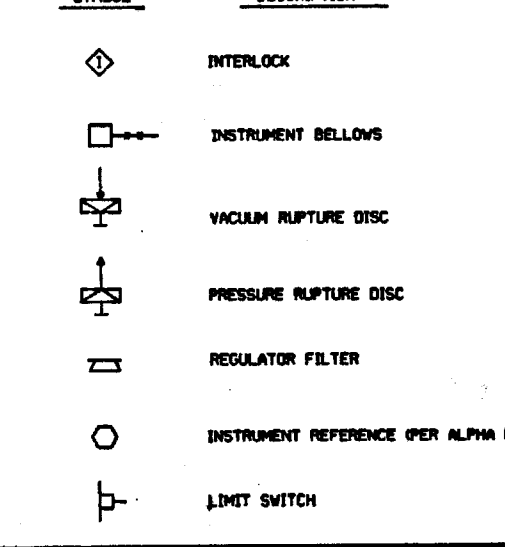
TYPICAL PUMP TYPES



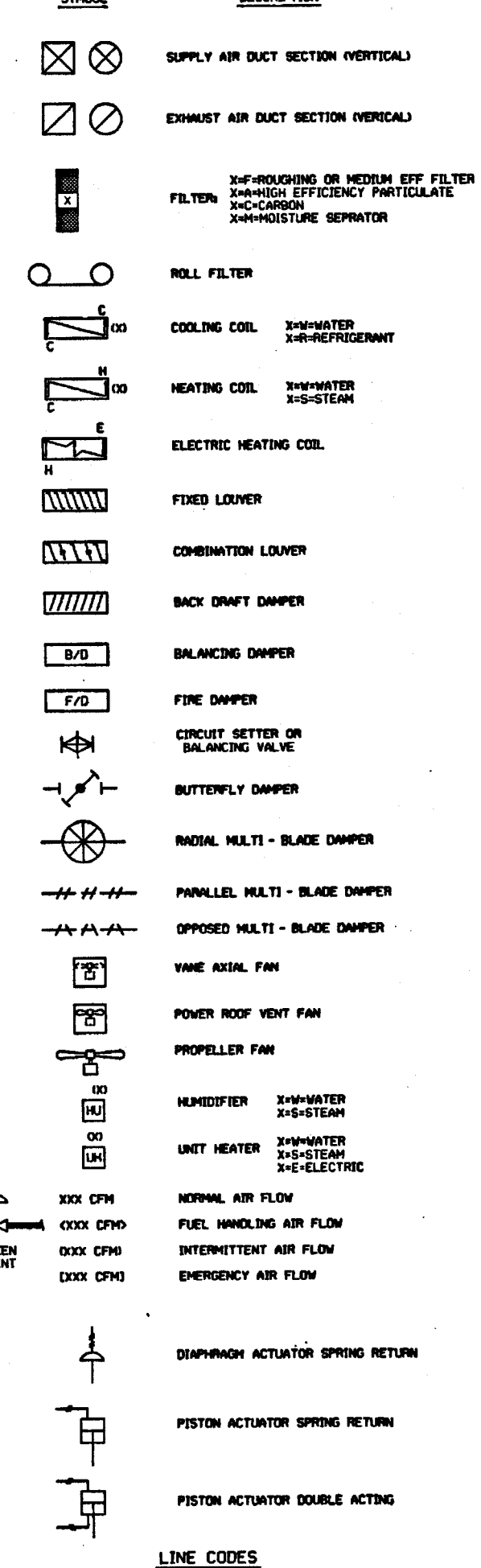
TYPICAL INSTRUMENT DETAILS



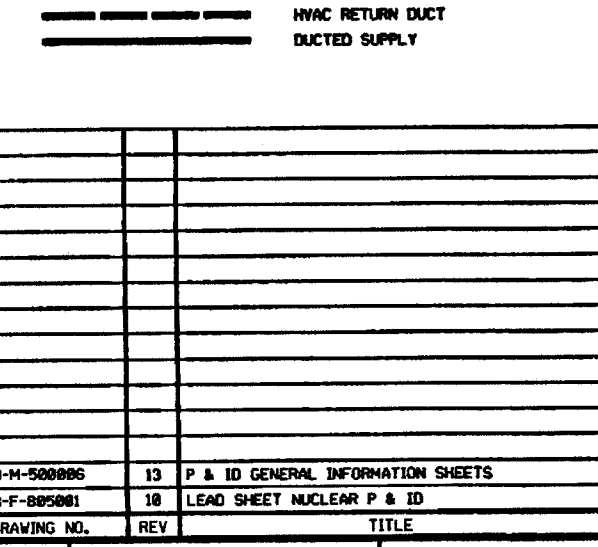
MISCELLANEOUS INSTRUMENTS & SYMBOLS



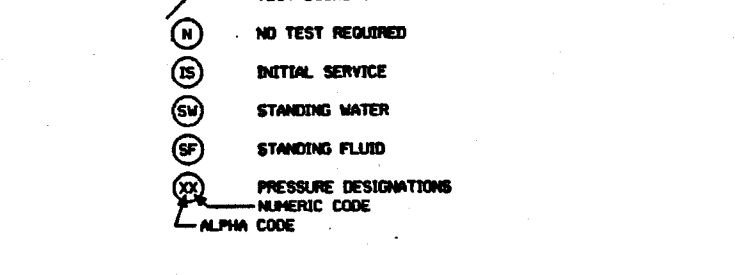
HVAC SYMBOLS



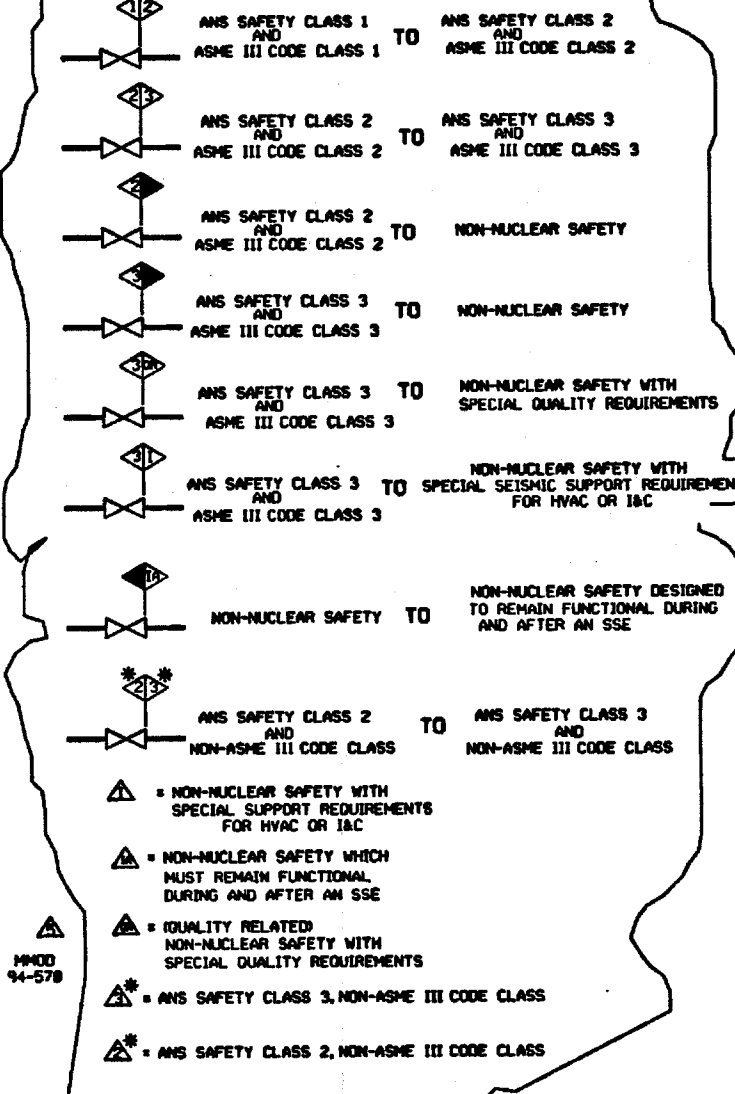
LINE CODES



MITD (MASTER INTEGRITY TEST DIAGRAMS)



PIPING SAFETY CLASS FLAGS



REV	DATE	DSGN	DRWN	CHKD	CODE	SEC	DESCRIPTION
5	6/1/85	BCL					INCORP. MPOD 94-578 CA-8
4	7/17/84	BCL	MPW	DWS	DMO		INCORP. MPOD 93-517 CA8
3	8/14/83	MRB					INCORP. MPOD 92-256 CA8 & DER 86-41 CA8
2	2/26/81	RHC		JM	MRB	BCL	INCORPORATED MPOD 91-511 CA81
1	2/24/81	MRB	FCB	JM	APL	BCL	ISSUED FOR OPERATIONS
0	8/8/86	MRJ	SKN	WRD	BCL	RRC	INITIAL ISSUE

North Atlantic Energy Service Corporation

LEAD SHEET NUCLEAR P & I DIAGRAMS SHEET 2 OF 2

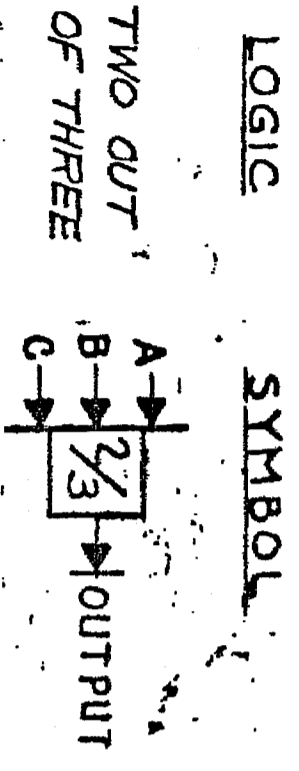
PID-LEGEND2

REF. DRAWING NO.	REV	TITLE
9763-H-500086	13	P & I GENERAL INFORMATION SHEETS
9763-F-885081	18	LEAD SHEET NUCLEAR P & I

ISSUED-FOR-CONSTRUCTION

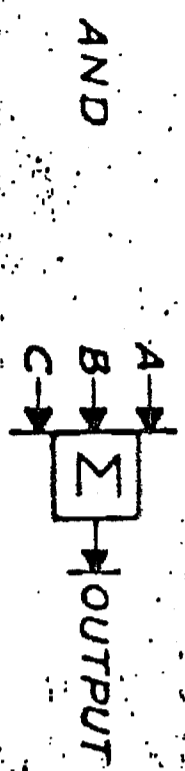
SYMBOLS LOGIC DIAGRAM
New Hampshire Yankee
Seabrook Station

1-NHY-503100

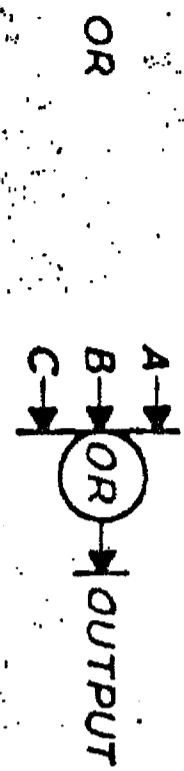


DESCRIPTION

ANY TWO OUT OF THREE INPUTS TO PRODUCE AN OUTPUT; I.E. A & B, A & C, B & C (ANY AMOUNT OF INPUTS MAY BE USED - E.G. 1 OUT OF 4 = 1/4)



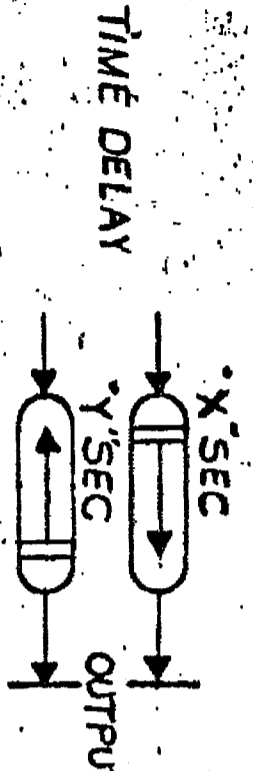
INPUTS A, B & C MUST ALL BE PRESENT TO PRODUCE AN OUTPUT.



INPUTS A, OR B, OR C, OR ANY COMBINATION OF A, B & C TO PRODUCE AN OUTPUT.



WHEN INPUT A IS PRESENT THERE IS NO OUTPUT SIGNAL AND WITH NO INPUT SIGNAL AN OUTPUT IS PRESENT.



OUTPUT SIGNAL IS PRESENT 'X' SEC AFTER INPUT IS APPLIED; AFTER INPUT SIGNAL REMAINS 'Y' SEC AFTER INPUT IS REMOVED.



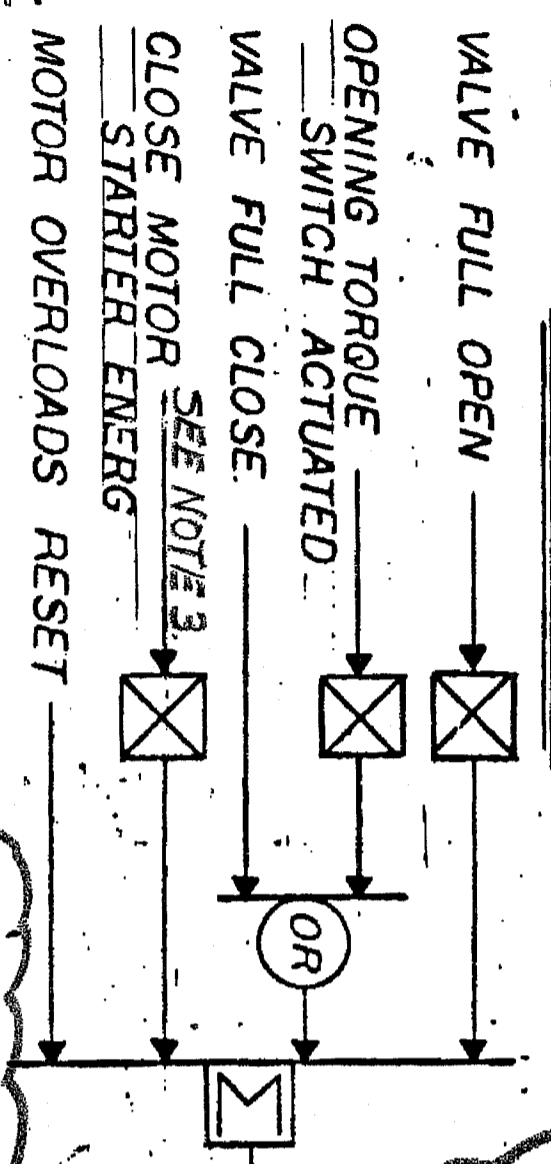
RETAINS THE COND. OF OUTPUT CORRESPONDING TO LAST ENERGY INPUT (ALSO UPON INTERRUPTION OF POWER)

CS-NAC SBM SWITCH APPLICATIONS: NAC EQUALS 'NORMAL AFTER CLOSE' NAS EQUALS 'NORMAL AFTER START' RED FLAG IS EXPOSED ON THE SWITCH ESCUTCHEON.

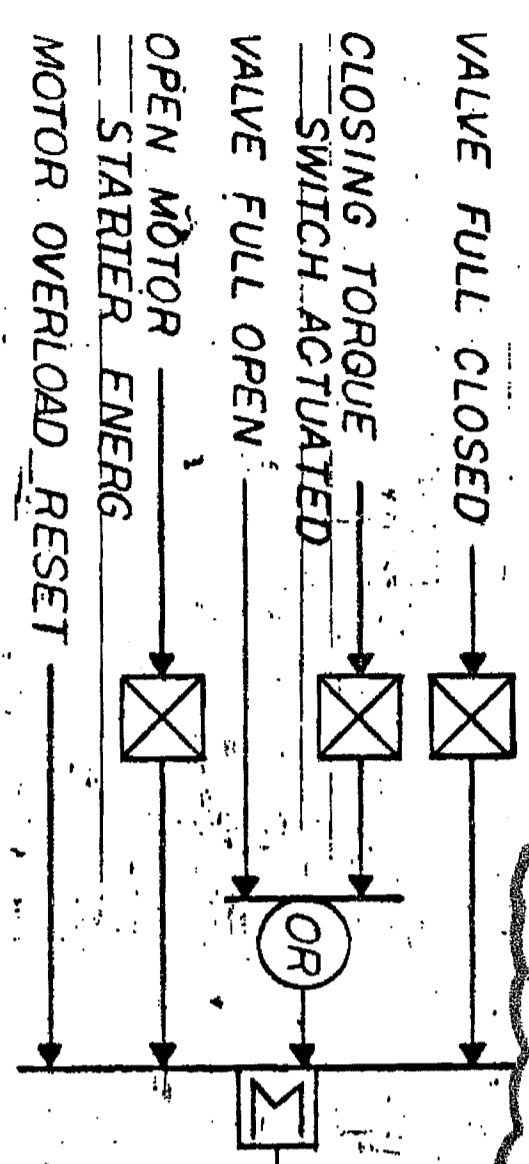
CS-NA STOP : NA STOP EQUALS 'NORMAL AFTER STOP' CS-NA TRIP : NA TRIP EQUALS 'NORMAL AFTER TRIP' GREEN FLAG IS EXPOSED ON THE SWITCH ESCUTCHEON

MOV SCHEMES

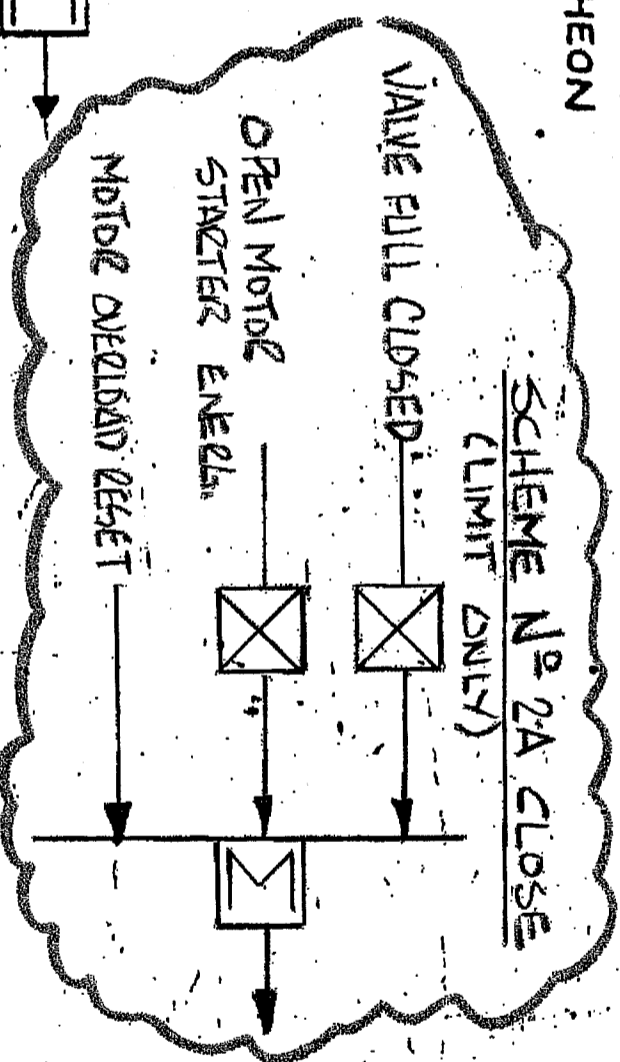
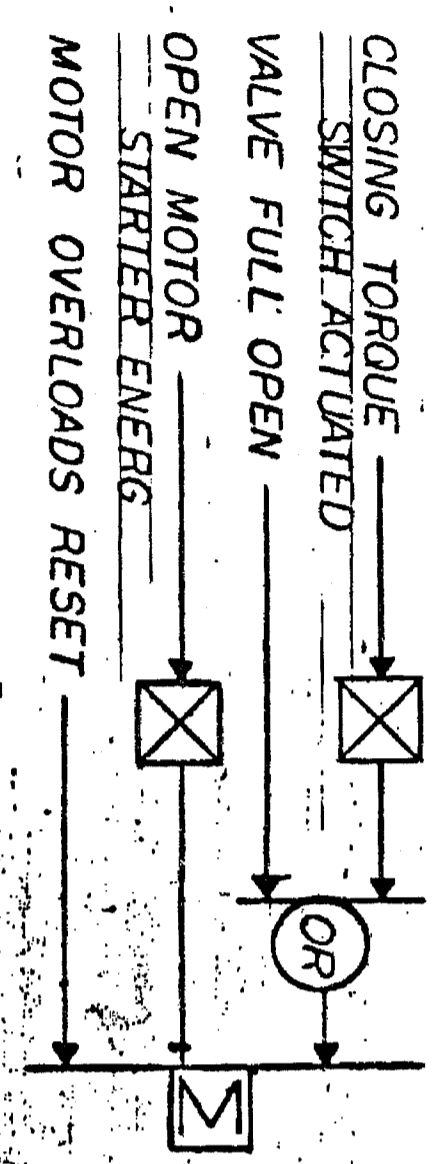
SCHEME No 1 - OPEN



SCHEME No 2 - CLOSE (LIMIT WITH TORQUE BACK-UP)



SCHEME No 3 (T SEATED) - CLOSE



NOTES

- 1) LOGIC SHOWN DOWNSTREAM (TO THE RIGHT) OF COMPUTER INPUTS (◇S) IS BY SOFTWARE INTERNAL TO THE COMPUTER
- 2) GATE AND GLOBE VALVES, TYPICALLY, ARE TORQUE (T) SEATED
- 3) FULL CLOSED AS DEFINED BY ROTOR 2 OF LIMIT TORQUE SWITCH IS ADJUSTED IN ACCORDANCE WITH APPLICABLE STATION PROCEDURES TO PROVIDE A SUFFICIENT BY-PASS OF THE OPENING TORQUE SWITCH TO ALLOW THE VALVE TO OPEN FROM THE MAIN SEAT WHEN DESIGNATED IN STATION SCHEMATICS.

REV	DATE	DRWN	CHKD	CE	LDE	DESCRIPTION
5	3/25/82	JWB	WDS	MR	DFB	REV'D PER. DER 92.005%
4	9/21/80	HP	AMP	APL	JFB	INCORP. DCR 87-0071, CA-02
3	10/20/80	JH	BCE	RRL	NA	9763-M-503100 SUPERCEDES UE&C DWG.;
2	4-21-78					ISSUED FOR CONSTR. (NO CHANGE REQ'D.)
1	8-1977					ADDED LOGIC 2/3, RFT. MEM. & NOTES 1, 2, RFT.
	7-30-76					FIRST ISSUE

SECURITY-RELATED INFORMATION – WITHHELD UNDER 5 U.S.C. SECTION 552(b)(4) AND 5 U.S.C. SECTION 552(b)(7)(F)

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