LEGEND

FLUID TYPES

CA	COMPRESSED AIR
CHW	CHILLED WATER
CNW	COOLING WATER/CONDENSER WATER
HHW	HEATING HOT WATER
IA	INSTRUMENT AIR
IW	INDUSTRIAL WASTE
NG	NATURAL GAS
SWS	SERVICE WATER SUPPLY
ST	STEAM

FLOW UNITS

CFH	CUBIC FEET PER HOUR
CFM	CUBIC FEET PER MINUTE
GPM	GALLONS PER MINUTE
LB/HR	POUNDS PER HOUR
ACFH	ACTUAL CUBIC FEET PER HOUR
ACFM	ACTUAL CUBIC FEET PER MINUTE
SCFH	STANDARD CUBIC FEET PER HOUR
SCFM	STANDARD CUBIC FEET PER MINUTE

FAIL POSITIONS

FC	FAIL CLOSED
FO	FAIL OPEN
FI	FAIL INTERMEDIATE
NC	NORMALLY CLOSED
NO	NORMALLY OPEN

MATERIALS

BR	BRASS
BRZ	BRONZE
CI	CAST IRON
CS	CARBON STEEL
SS	STAINLESS STEEL

BODY END CONNECTIONS

FLGD	FLANGED
FGLS	FLANGELESS
LGD	LUGGED
SCRD	SCREWED-NPT
WFR	WAFER

ACTUATOR TYPES

PS&D	PNEUMATIC SPRING & DIAPHRAGM
CYL	CYLINDER OPERATOR
CYLR	CYLINDER OPERATOR, SPRING RETURN
ELEC	ELECTRIC MOTOR-OPERATED
HW	HANDWHEEL
SOL	SOLENOID
VO	VANE OPERATOR
VOR	VANE OPERATOR, SPRING RETURN

* LIMIT SWITCHES: PROVIDE AN ISOLATED SINGLE-POLE, DOUBLE-THROW VALVE POSITION LIMIT SWITCH FOR EACH VALVE POSITION AS INDICATED.

AUTOMATIC CONTROL VALVE SCHEDULE

					SERVICE CONDITIONS						VALVE REQUIREMENTS														
							FLOW RATE												Δ P (PSID)		AUXILIARY DEVICES				
CONTROL VALVE TAG NO.	SERVICE	FLUID	LINE SIZE (IN)	MIN. VALVE SIZE	TEMP (°F)	SP. GR.	MINIMUM	DESIGN	UNITS	NORMAL/ FAIL POS.	BODY MATERIAL	ANSI CLASS BODY RATING	END CONN.	VALVE SPEC TYPE	ANSI SEAT LEAK CLASS	TRIM MATERIAL	ACTUATOR TYPE	VALVE SHUTOFF PRESSURE (PSIG)	MINIMUM	MAXIMUM	POSITIONER	TRANSDUCER 4-20mADC	SOLENOID	LIMIT* SWITCH	REMARKS
MOV 715	CLGTWR CTC-5	CNW	14	14	95	1	-	3750	GPM	FI	CS	150	LGD	HPBV 1	VI	SS	ELEC HW	65	-	0.1	NO	NO	NO	OPEN CLOSE	
MOV 800	CLGTWR CTC-5	CNW	2	2	95	1	-	20	GPM	FO	CS	150	SCRD	TPBV 1	VI	SS	ELEC HW	65	-	0.1	NO	NO	NO	OPEN CLOSE	
MOV 716	CLGTWR CTC-6	CNW	14	14	95	1	-	3750	GPM	FI	CS	150	LGD	HPBV 1	VI	SS	ELEC HW	65	-	0.1	NO	NO	NO	OPEN CLOSE	
MOV 801	CLGTWR CTC-6	CNW	2	2	95	1	-	20	GPM	FO	CS	150	SCRD	TPBV 1	VI	SS	ELEC HW	65	-	0.1	NO	NO	NO	OPEN CLOSE	
MOV 714	CLGTWG BYPASS	CNW	14	14	95	1	-	3750	GPM	FI	CS	150	WFR	HPBV 1	VI	SS	ELEC HW	65	-	0.1	NO	NO	NO	OPEN CLOSE	
FV 732	CHL-5	CNW	14	14	85	1	-	3750	GPM	FO	CS	150	LGD	HPBV 2	VI	SS	CYLR HW	65	-	0.1	NO	NO	YES	OPEN CLOSE	
FV 733	CHL-6	CNW	14	14	85	1	-	3750	GPM	FO	CS	150	LGD	HPBV 2	VI	SS	CYLR HW	65	-	0.1	NO	NO	YES	OPEN CLOSE	
CV 731	CLG TWR BLW DN	CNW	3	2	85	1	-	90	GPM	FC	CS	150	SCRD	TPBV 1	VI	SS	CYLR HW	65	-	28	NO	NO	YES	OPEN CLOSE	Slow Open/Close Set: 15 Sec.
FV 649	CHL-5	CHW	12	12	52	1	-	3000	GPM	FO	CS	150	LGD	HPBV 2	VI	SS	CYLR HW	65	-	0.1	NO	NO	YES	OPEN CLOSE	
TCV 653	CHL-5	CHW	8	6	42	1	-	470	GPM	FC	CS	150	WFR	ERPV 1	VI	SS	PS&D HW	65	-	5	YES	YES	NO	NO	
FV 650	CHL-6	CHW	12	12	52	1	-	3000	GPM	FO	CS	150	LGD	HPBV 2	VI	SS	CYLR HW	65	-	0.1	NO	NO	YES	OPEN CLOSE	
TCV 654	CHL-6	CHW	8	6	42	1	-	470	GPM	FC	CS	150	WFR	ERPV 1	V	SS	PS&D HW	65	-	5	YES	YES	NO	NO	
PCV 504	Back Press Ctl	CHW	12	10	52	1	-	3000	GPM	FO	CS	150	WFR	ERPV 1	V	SS	PS&D HW	70	-	10	YES	YES	NO	NO	
TCV 788	IAC-3	CHW	1-1/2	1-1/2	42	1	-	33	GPM	3-WAY	BRZ	125	SCRD	CCV 1	-	SS	PS&D	-	-	3	YES	YES	NO	NO	
FV 790	IAC-3	CHW	1-1/2	1-1/2	42	1	-	17	GPM	FO	CS	150	SCRD	TPBV 1	VI	SS	CYLR	65	-	0.1	NO	NO	YES	OPEN CLOSE	
FV 777	AD-3	CHW	1-1/2	1-1/2	42	1	-	13	GPM	FO	CS	150	SCRD	TPBV 1	VI	SS	CYLR	65	-	0.1	NO	NO	YES	OPEN CLOSE	
LV 734	CLG TWR MAKE-UP	SWS	4	3	55	1	-	282	GPM	FO	CS	150	FLGD	TPBV 1	VI	SS	CYLR	65	-	10	NO	NO	YES	OPEN CLOSE	Slow Open/Close Set: 15 Sec.

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