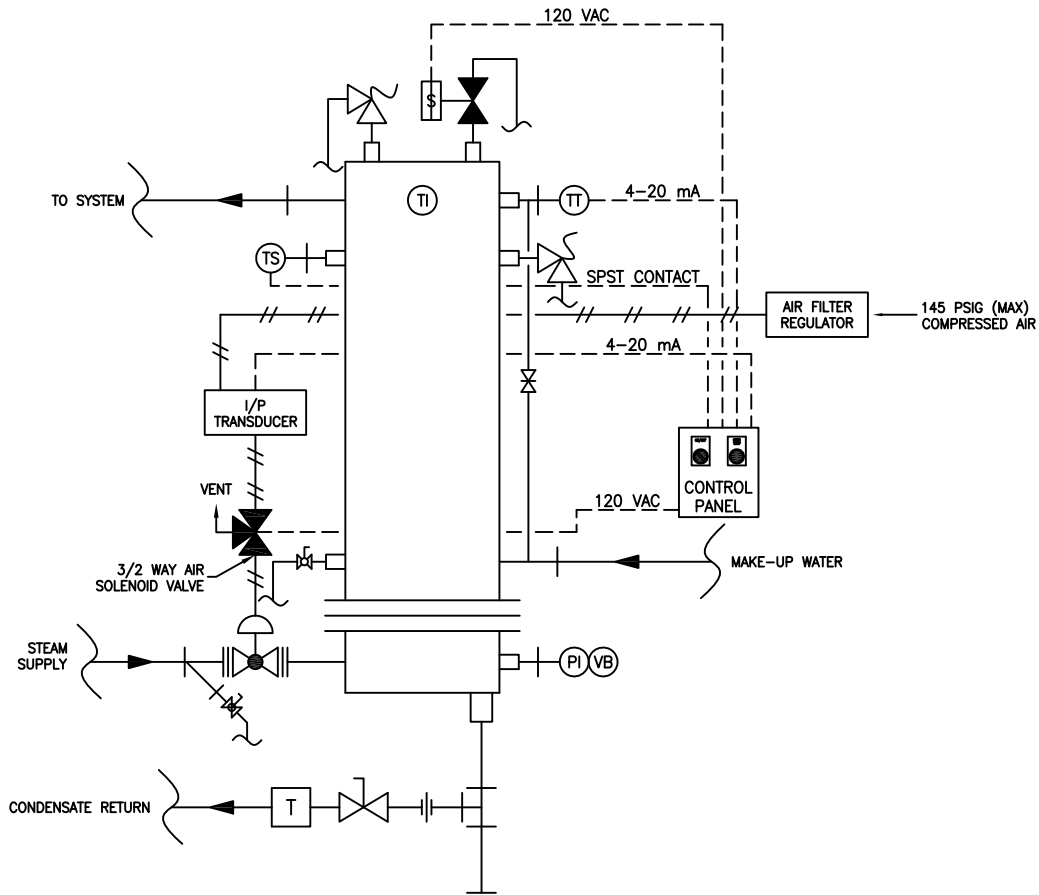


DOMESTIC WATER HEAT EXCHANGER VALVE CONDITIONS				
	NORMAL OPERATION	START UP	SHUT DOWN	HIGH TEMPERATURE
AIR SOLENOID VALVE	OPEN	OPEN	CLOSED	CLOSED
STEAM CONTROL VALVE	MODULATING	MODULATING	CLOSED	CLOSED
WATER SOLENOID VALVE	CLOSED	CLOSED	CLOSED	OPEN

1. DOMESTIC WATER HEAT EXCHANGERS HAVE THEIR OWN RESPECTIVE HIGH PRESSURE STEAM CONTROL VALVE AND BOILER DOMESTIC WATER TEMPERATURE CONTROLLERS.
2. UPON POSITIVE PROOF OF PUMP STATUS, VIA THE FLOW SWITCH ON THE DOMESTIC WATER SUPPLY LINE, THE HIGH PRESSURE STEAM CONTROL VALVE SHALL RAMP OPEN SLOWLY.
3. UPON SYSTEM START-UP, THE STROKE OF THE HIGH PRESSURE STEAM CONTROL VALVE SHALL TAKE ONE HOUR TO GO FROM CLOSED TO MAXIMUM DESIGN FLOW RATE/VALVE POSITION. THIS FEATURE IS ENABLED THROUGH THE TEMPERATURE CONTROLLER. NOTE: FULL OPEN SHALL BE AT VALVE MAXIMUM FLOW % OPEN, NOT 100% OPEN - FULL VALVE STROKE.
4. THE SUPPLY TEMPERATURE FOR THE DOMESTIC WATER WILL BE CONTROLLED BY MODULATING THE HIGH PRESSURE STEAM CONTROL VALVE THROUGH THE TEMPERATURE CONTROLLER TO MAINTAIN 180°F.
5. SHOULD THE DOMESTIC WATER GO OVER TEMPERATURE 10°F A SPDT SWITCH IN THE THERMOSTAT WILL CUT POWER TO THE AIR SOLENOID VALVE - CLOSING THE HIGH PRESSURE STEAM CONTROL VALVE.
6. A LOSS OF POWER WILL RESULT IN CLOSURE OF THE HIGH PRESSURE STEAM CONTROL VALVE.
7. A DRY SET OF ALARM CONTACTS SHALL CLOSE UPON ANY ALARM SIGNAL TO SEND ALARM NOTIFICATION TO CENTRAL CAMPUS EMS.



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PIPING AND INSTRUMENTATION DIAGRAM
HSW SERIES, ELECTRO-PNEUMATIC
CONTROL VALVE



DRAWN BY: SW	DATE: 09.04.2014	SIZE: B	FSCM NO.:	DWG NO. 14-18200-2	REV. N/C
APPROVED:	DATE:	SCALE: 1 TO 1	SHEET 1 OF 1		