



	SWING VALVE 1	SWING VALVE 2	DHW PUMP	B2 - BLDG (SWING)	B3 - DHW
Heating + DHW loads present	CLOSE	OPEN	ON	HEATING MODE	CONSTANT SETPOINT
Heating load present (<100%); NO DHW	CLOSE	OPEN	OFF	HEATING MODE	STANDBY
Heating load present (B1 & B2 = 100%); NO DHW	OPEN	OPEN	OFF	HEATING MODE	HEATING MODE
Heating load present (B1 & B2 = 100%); DHW present	CLOSE	OPEN	ON	HEATING MODE	CONSTANT SETPOINT
Heating present; DHW present (B3 = 90%, >10 min.)	OPEN	CLOSE	ON	CONSTANT SETPOINT	CONSTANT SETPOINT

- NOTES:**
1. SEE COMBINATION HEATING/DOMESTIC WATER HEATING APPLICATIONS GUIDE TAG-0050 AND WIRING DIAGRAM SD-A-1179 FOR COMPLETE APPLICATION AND CONTROLS DETAILS.
 2. THE ABOVE DIAGRAM DEPICTS THE COMBINATION HEATING/DOMESTIC WATER PIPING ONLY. FOR GAS PIPING AND THE REST OF THE WATER-SIDE PIPING DETAILS, REFER TO APPROPRIATE BENCHMARK BOILER INSTALLATION DRAWINGS.
 3. FOR SIZES AND LOCATIONS OF PIPING AND OTHER CONNECTIONS TO THE BOILER, SEE APPROPRIATE BENCHMARK BOILER DIMENSIONAL DRAWING.
 4. REFER TO SMARTPLATE INSTALLATION DRAWINGS FOR RECOMMENDED DOMESTIC PIPING INSTALLATION:
SD-A-1198, SD-A-1199, SD-A-1200, SD-A-1201, SD-A-1202, SD-A-1203.
 5. BOILER PUMP MUST BE SIZED TO PROVIDE THE APPROPRIATE FLOW AT THE DESIGN ΔT OF BOILER PLANT.
BOILER PUMP MUST MAINTAIN BENCHMARK BOILER(S) REQUIRED MINIMUM FLOW.
 6. THIS IS A TYPICAL INSTALLATION DRAWING. LOCAL CODES AND AUTHORITIES SHOULD BE CONSULTED.
 7. THE COMBINATION SYSTEM PUMP IS CONTROLLED BY EDGE, AS PER REFERENCE DRAWING SD-A-1179.
 8. MODULATING BOILER VALVES CAN BE USED FOR SINGLE POINT BALANCING.
 9. IF BST IS USED, A HEADER SENSOR MUST BE INSTALLED BETWEEN 2 TO 10 FEET FROM PIPE JUNCTION.
 10. COMMON PIPE DIAMETER MUST BE SIZED FOR LESS THAN 4.0 FT/SEC; COMMON PIPE LENGTH MUST BE 3 TO 5 TIMES ITS DIAMETER.
 11. BMK PLATINUM CAN BE WIRED TO ALTERNATE REDUNDANT PUMPS ON THE PRIMARY LOOP.

 A WATTS Brand	100 CRITANI DRIVE BLAUVELT, NY 10913 aerco.com	
	BENCHMARK® PLATINUM W/ EDGE & BOILER/SMARTPLATE EV COMBINATION PLANT WITH MODULATING ISOLATION VALVES & TWO SWING VALVES & P-S PIPING APPLICATION	
DWN.BY <u>K.S.</u> DATE <u>080320</u> SCALE <u>NTS</u> REV.BY <u>K.S.</u> DATE <u>042022</u>	SD-A-1208	REV. C