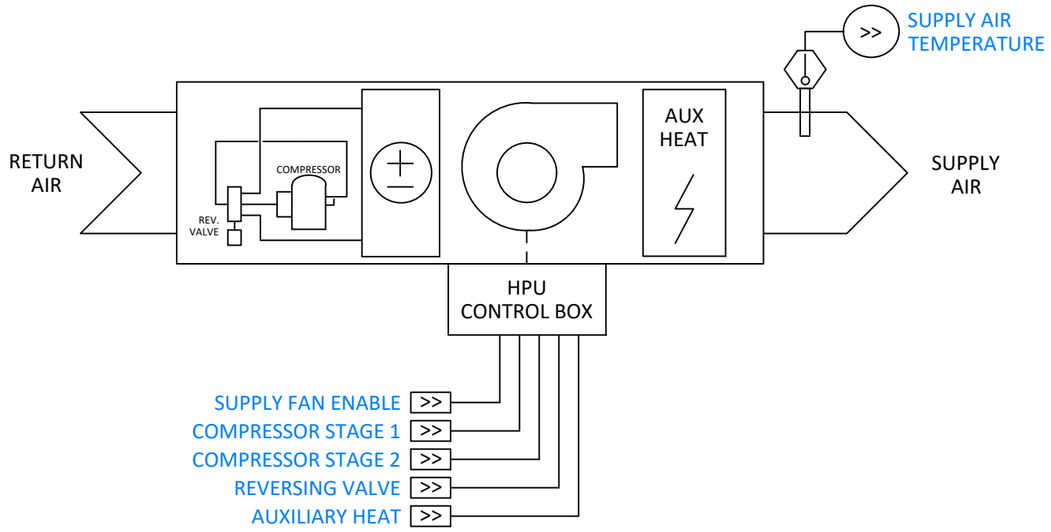
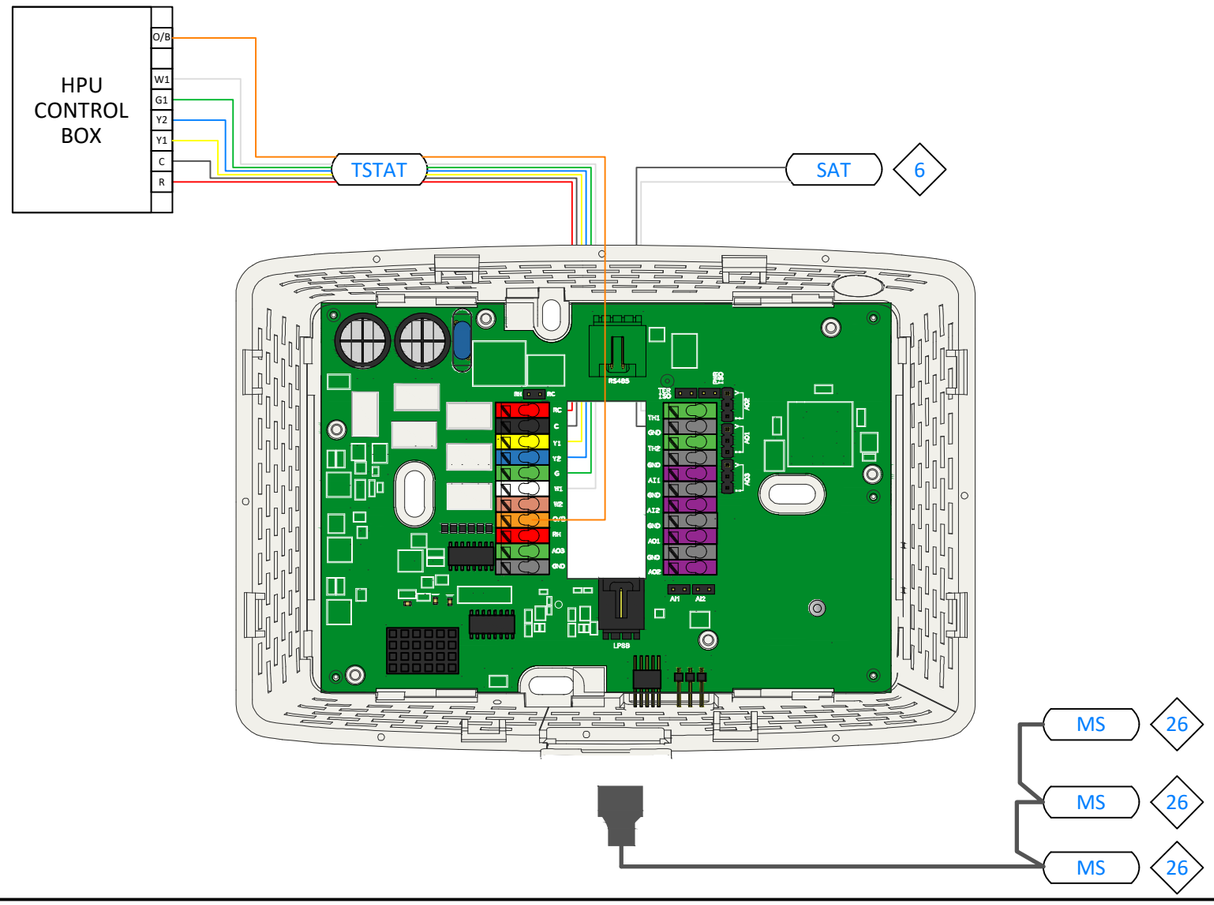
X.1 - LOGICAL DIAGRAM



X.2 - POINTS LIST

HYPERSTAT					
DESCRIPTION	**POINT**	**TAG**	**DEVICE RANGE**	**MFG**	**PART #**
SPARE	AI1		0-10VDC		
SPARE	AI2		0-10VDC		
SUPPLY AIR TEMPERATURE	TH1	SAT	°F (10K TYPE II)	75F	3X-SE-C31X-X
SPARE	TH2		10K TYPE II OR DIGITAL		
COMPRESSOR STAGE 1	Y1	TSTAT	CC = ENABLE	-	(TO UNIT)
COMPRESSOR STAGE 1	Y2	TSTAT	CC = ENABLE	-	(TO UNIT)
SUPPLY FAN ENABLE	G	TSTAT	CC = ENABLE	-	(TO UNIT)
AUXILIARY HEAT STAGE 1	W1	TSTAT	CC = ENABLE	-	(TO UNIT)
SPARE	W2		CC = ENABLE		
SPARE	O/B		WET CONTACT		
SPARE	AO1		0-10VDC		
SPARE	AO2		0-10VDC		
SPARE	AO3		0-10VDC		
POWER IN	R	TSTAT	24VAC (FROM UNIT)		
TEMP, HUMIDITY, OCC & CO2	RTS	MS	3-PIN CABLE (NO LOCAL INTERFACE)	75F	7X-SE-C72K-X
SPARE	RS485		4-PIN CONNECTOR		

X.3 - PHYSICAL DIAGRAM



X.4 - SEQUENCE OF OPERATION

THE WATER-SOURCE HEAT PUMP (WSHP) IS A WEIGHTED AVERAGE OF ONLY ONE ZONE.

HEATING/COOLING

1. UPON OCCUPANCY, THE SUPPLY FAN WILL BE ENABLED.
2. IF THE ZONE REQUIRES COOLING, THE REVERSING VALVE WILL MOVE INTO THE COOLING POSITION. AS THE CURRENT TEMPERATURE RISES ABOVE THE COOLING SETPOINT (72°F, ADJ.), THE COMPRESSOR WILL STAGE UP. AS THE CURRENT TEMPERATURE DROPS AT LEAST 0.5°F BELOW THE COOLING SETPOINT, THE COMPRESSOR WILL BE DISABLED. IN GENERAL, WHEN THE TEMPERATURE IS AT LEAST 2°F ABOVE SETPOINT, BOTH STAGES OF COMPRESSOR WILL BE RUNNING.
3. IF THE ZONE REQUIRES HEATING, THE REVERSING VALVE WILL MOVE INTO THE HEATING POSITION. AS THE CURRENT TEMPERATURE FALLS BELOW THE COOLING SETPOINT (68°F, ADJ.), THE COMPRESSOR WILL STAGE UP. AS THE CURRENT TEMPERATURE RISES AT LEAST 0.5°F ABOVE THE HEATING SETPOINT, THE COMPRESSOR WILL BE DISABLED. IN GENERAL, WHEN THE TEMPERATURE IS AT LEAST 2°F BELOW SETPOINT, BOTH STAGES OF THE COMPRESSOR WILL BE RUNNING.
4. IF THE ZONE REQUIRES ADDITIONAL HEATING, THE AUXILIARY HEAT WILL BE ENABLED WHEN THE CURRENT TEMPERATURE IS AT LEAST 3°F BELOW SETPOINT.

75F COMMISSIONING NOTES

- THE SYSTEM PROFILE WILL BE SET TO 'HEAT PUMP UNIT'.
- ENABLE: RELAY 1 (Y1), RELAY 2 (Y2), RELAY 3 (G), RELAY 4 (W1), RELAY 5 (W2), RELAY 6 (O/B), AND TH1.
- RELAY 6 (O/B) WILL BE SET TO '0-ENERGIZE IN COOLING'.

Drawing Notes:

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75F

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Drawing: HYPERSTAT HPU WITH MULTISENSOR AVERAGING