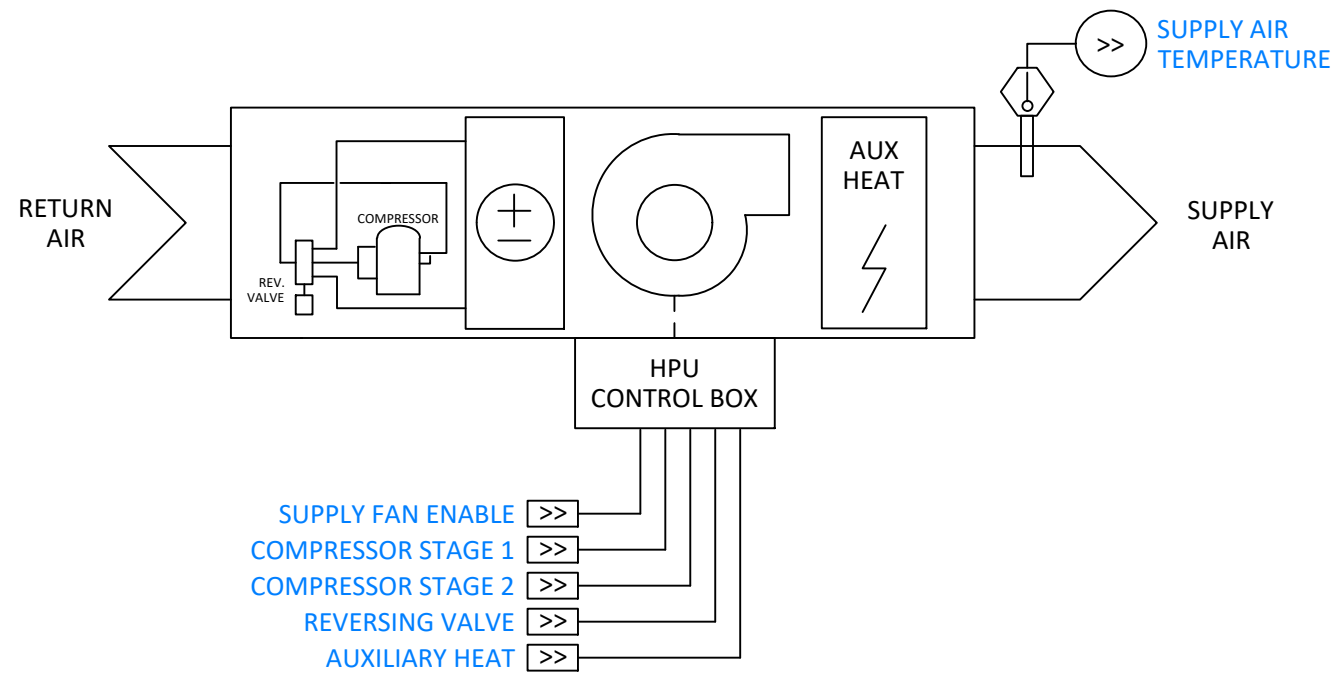


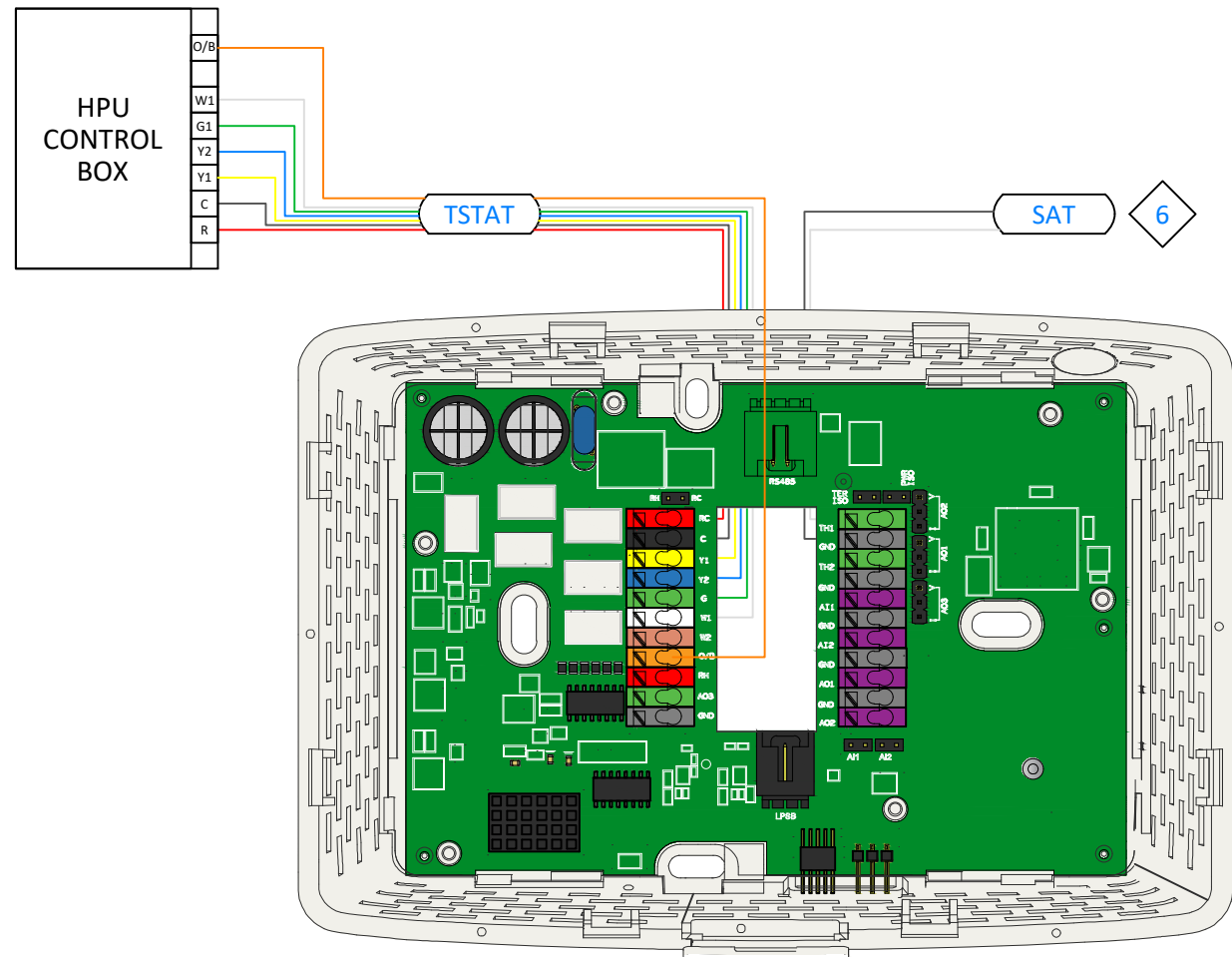
X.1 - LOGICAL DIAGRAM



X.2 - POINTS LIST

CENTRAL CONTROL UNIT (CCU)					
DESCRIPTION	POINT	TAG	DEVICE RANGE	MFG	PART #
SUPPLY AIR TEMPERATURE	TH1		10K TYPE II		
SPARE	TH2		10K TYPE II OR DIGITAL		
SPARE	AI1		0-10VDC		
SPARE	AI2		0-10VDC		
COMPRESSOR STAGE 1	BO1 (Y1)	TSTAT	CC = ENABLE	-	(TO UNIT)
COMPRESSOR STAGE 1	BO2 (Y2)	TSTAT	CC = ENABLE	-	(TO UNIT)
SUPPLY FAN ENABLE	BO3 (G)	TSTAT	CC = ENABLE	-	(TO UNIT)
AUXILIARY HEAT STAGE 1	BO4 (W1)	TSTAT	CC = ENABLE	-	(TO UNIT)
SPARE	BO5 (W2)	TSTAT	CC = ENABLE		
REVERSING VALVE	BO6 (O/B)	TSTAT	WET CONTACT	-	(TO UNIT)
SPARE	AO1		0-10VDC		
SPARE	AO2		0-10VDC		
SPARE	AO3		0-10VDC		
SPARE	AO4		0-10VDC		
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:

- ①
- ②
- ③



Project Name:
75F DESIGN MASTER
REV 1.4

Project Address:

DB: **CB:** **Page:** **of**

Drawing: HYPERSTAT HPU