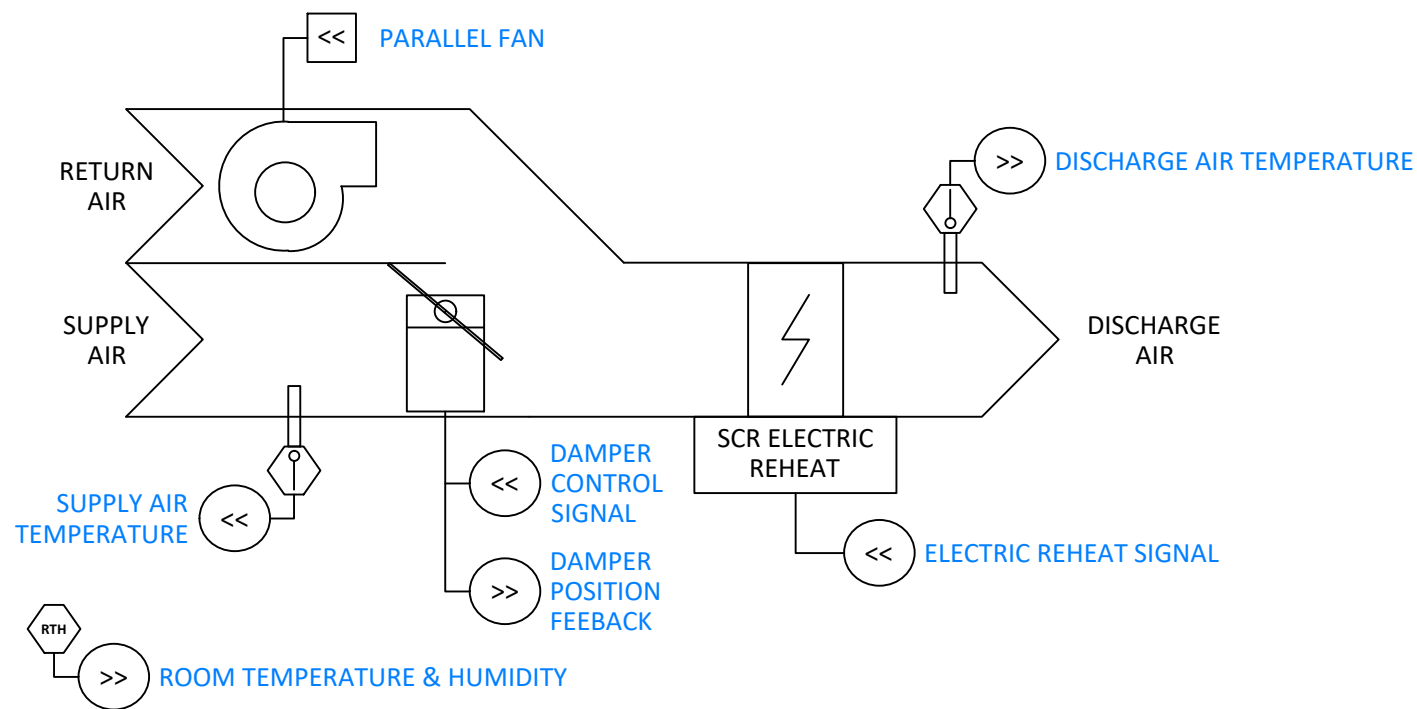


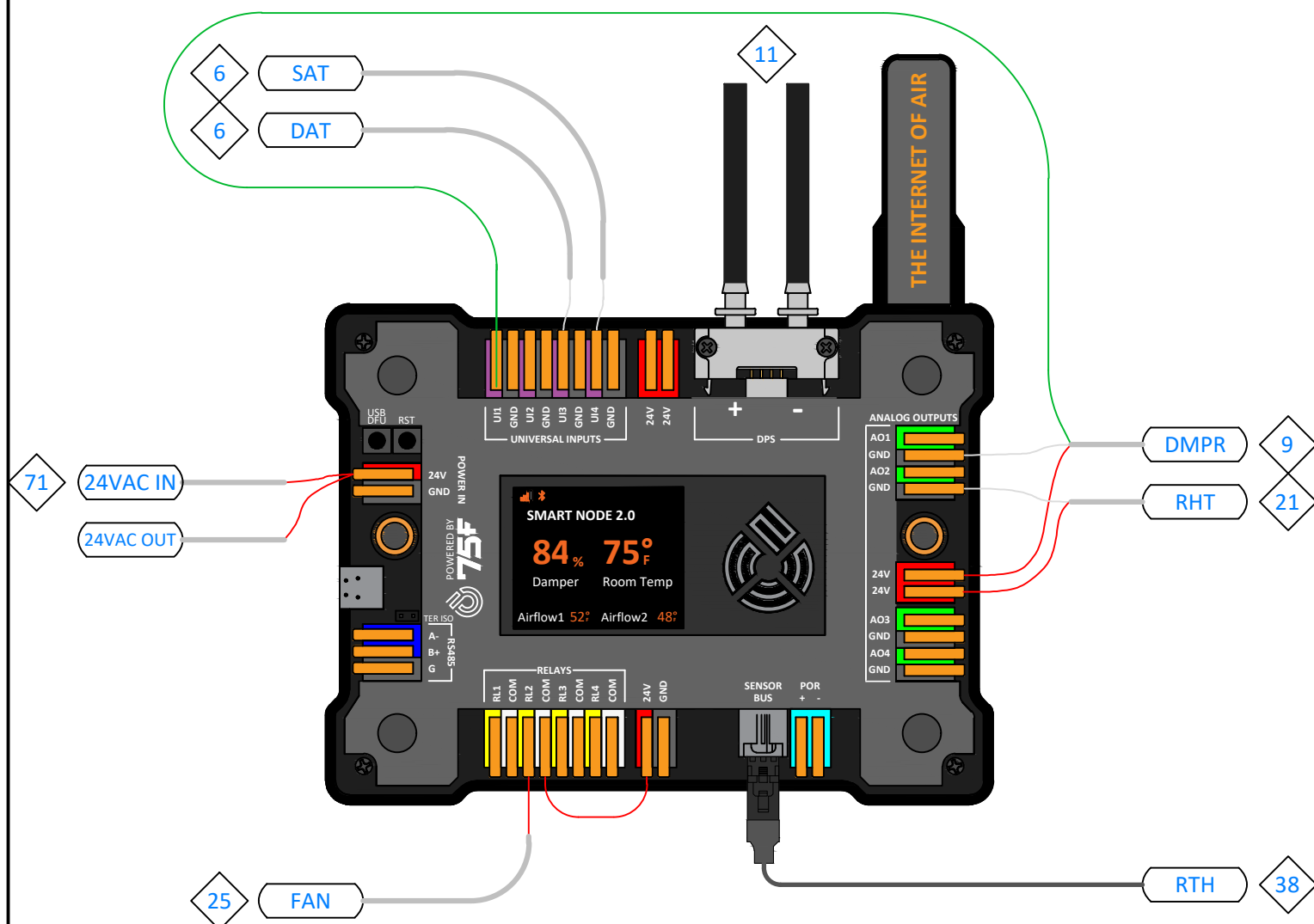
X.1 - LOGICAL DIAGRAM



X.2 - POINTS LIST

| SMART NODE | | | | | |
|---------------------------|------------|----------|---------------------------------|-----|--------------|
| DESCRIPTION | POINT | TAG | DEVICE RANGE | MFG | PART # |
| DAMPER POSITION FEEDBACK | UI1 | DMPR | 0-10VDC FEEDBACK = 0-100% OPEN | 75F | 7X-AT-C6X-X |
| SPARE | UI2 | | DIGITAL / 10K TYPE II / 0-10VDC | | |
| DISCHARGE AIR TEMPERATURE | UI3 | DAT | °F (10K TYPE II) | 75F | 3X-SE-C29X-X |
| ENTERING AIR TEMPERATURE | UI4 | SAT | °F (10K TYPE II) | 75F | 3X-SE-C29X-X |
| DAMPER CONTROL SIGNAL | AO1 | DMPR | 0-10VDC = 0-100% OPEN | 75F | 7X-AT-C6X-X |
| REHEAT | AO2 | RHT | 0-10VDC = 0-100% OPEN | | |
| SPARE | AO3 | | 0-10VDC / 4-20mA | | |
| SPARE | AO4 | | 0-10VDC / 4-20mA | | |
| SPARE | RELAY 1 | | DRY CONTACT | | |
| FAN ENABLE | RELAY 2 | FAN | CC = ENABLE | - | 3X-RB-C3X-X |
| SPARE | RELAY 3 | | DRY CONTACT | | |
| SPARE | RELAY 4 | | DRY CONTACT | | |
| SPARE | POR | | 2-WIRE POR | | |
| TEMP & HUMIDITY | SENSOR BUS | | 3-WIRE SENSOR BUS | 75F | 7X-SE-C43W-X |
| SPARE | RS-485 | | 3-WIRE RS-485 | | |
| 24VAC IN/OUT | POWER IN | 24VAC IN | 24VAC | | |

X.3 - PHYSICAL DIAGRAM



X.4 - SEQUENCE OF OPERATION

THE CONTROLLER MODULATES THE SUPPLY AIR DAMPER TO MAINTAIN THE SPACE TEMPERATURE SETPOINT. THE FAN RUNS AT ALL TIMES DURING OCCUPANCY AND WHEN CONDITIONING IS REQUIRED.

COOLING

1. WHEN THE SYSTEM IS IN COOLING MODE AND THE ZONE REQUIRES COOLING, THE AIRFLOW SETPOINT WILL INCREASE FROM THE MINIMUM TO THE MAXIMUM COOLING AIRFLOW SETPOINT AS THE COOLING LOAD INCREASES. THE DAMPER MODULATES TO MAINTAIN THE AIRFLOW SETPOINT.

HEATING

1. WHEN THE SYSTEM IS IN COOLING AND THE ZONE REQUIRES HEATING, AS THE ZONE HEATING LOAD INCREASES, THE DISCHARGE AIR TEMPERATURE WILL BE RESET FROM THE HEATING DESIRED TEMPERATURE TO THE MAXIMUM SETPOINT (ADJ.). THE DAMPER WILL MODULATE TO THE MINIMUM HEATING AIRFLOW SETPOINT UNTIL THE CURRENT DISCHARGE AIR TEMPERATURE (DAT) REACHES ITS MAXIMUM SETPOINT. ONCE THE DAT SETPOINT IS RESET TO ITS MAXIMUM, THE AIRFLOW SETPOINT WILL BE RESET FROM THE MINIMUM TO THE MAXIMUM HEATING AIRFLOW SETPOINT. IF THE TEMPERATURE DIFFERENCE ACROSS THE REHEAT COIL IS LESS THAN 9°F (ADJ.), THE DAMPER WILL REMAIN AT ITS MINIMUM POSITION.
2. WHEN THE SYSTEM IS IN HEATING AND THE ZONE REQUIRES HEATING, THE DAMPER WILL MODULATE TO NEAR ITS MAXIMUM POSITION UNTIL THE ZONE IS SATISFIED. ONCE ANY ZONE REQUIRES COOLING, THE SYSTEM WILL STOP PROVIDING HEAT AND WILL SWITCH BACK INTO COOLING.

75F COMMISSIONING NOTES

- EACH OF THE ZONE CONTROLS SHOULD BE PAIRED AS A 'VAV REHEAT - PARALLEL FAN' ZONE PROFILE.
- CONFIGURE:

| | | |
|---|---|---------------------------------------|
| DAMPER TYPE: 0-10V | SIZE: DETERMINED BY INSTALLER | SHAPE: DETERMINED BY INSTALLER |
| REHEAT TYPE: 0-10V (FIELD VERIFY ACTUATOR SETTINGS) | AUTO FORCE OCCUPIED: DISABLED (UNLESS REQUIRED) | ZONE PRIORITY: NORMAL |
| ENABLE CFM CONTROL: ENABLED | | AUTO AWAY: DISABLED (UNLESS REQUIRED) |
- SET ALL CFM SETPOINTS PER PROJECT SPECIFICATION

Drawing Notes:

- ①
- ②
- ③

| | | | |
|-----------------|---|--------------------------------------|-----------------|
| | Project Name: 75F DESIGN MASTER REV. 1.4 | | |
| | Project Address: | | |
| | DB: | CB: | Page: of |
| Drawing: | | PARALLEL FPVAV (SCR) WITH RTH - SNV2 | |