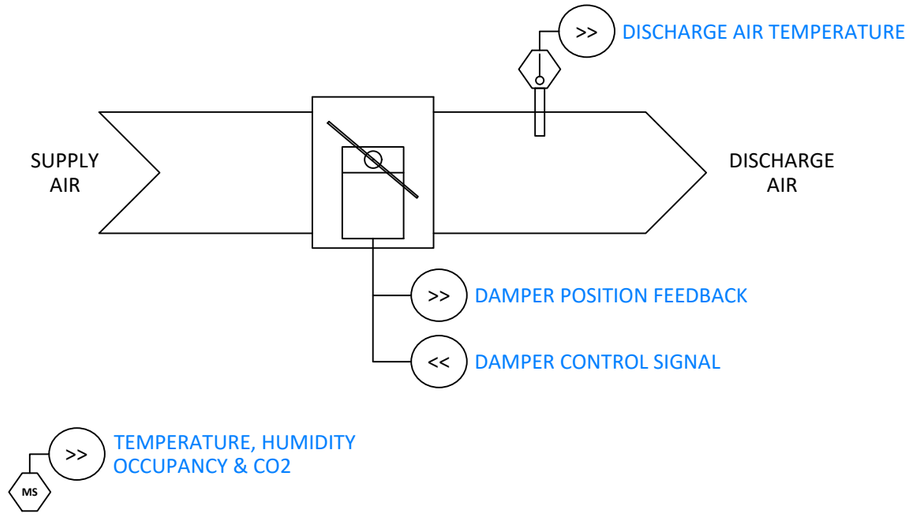
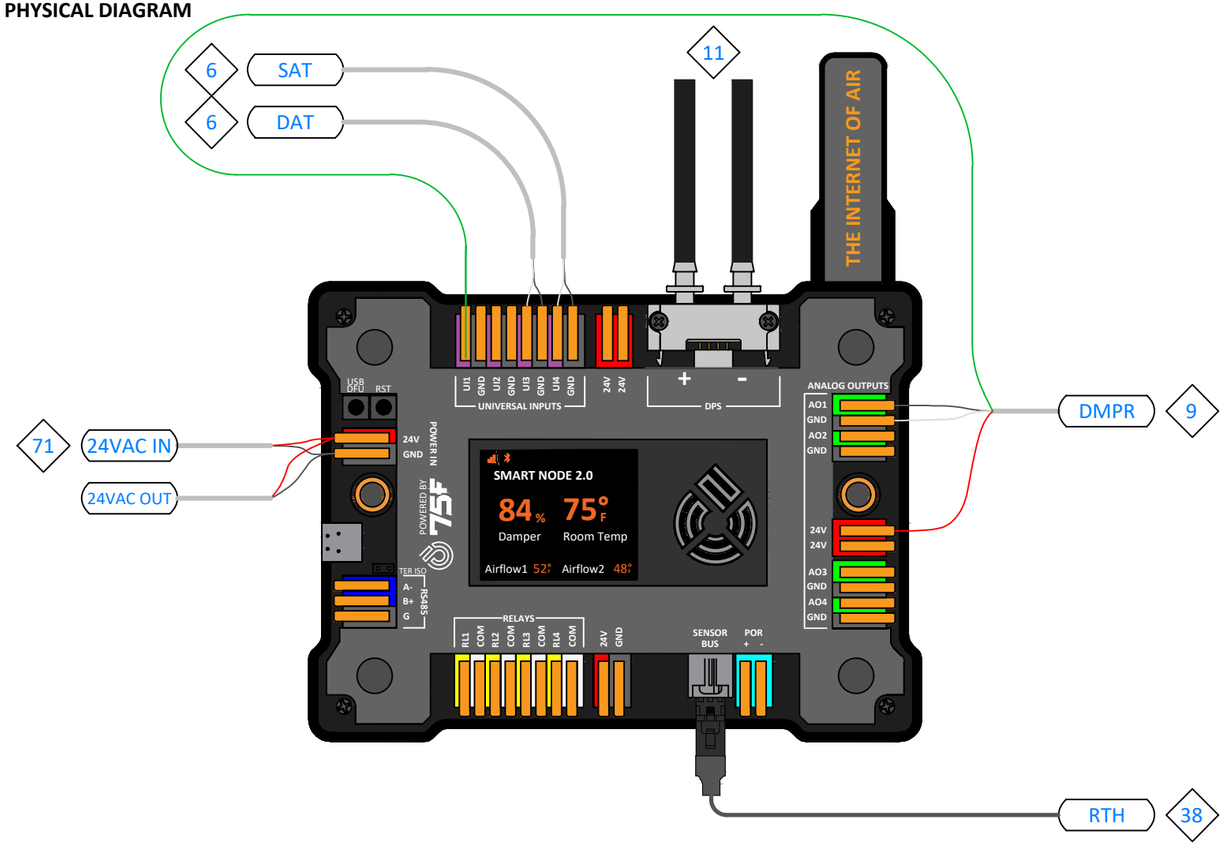
## LOGICAL DIAGRAM




## 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 SIGNAL = 0-100% OPEN | 75F | 7X-AT-C6X-X |
| SPARE | AO2 | | 0-10VDC / 4-20mA | | |
| SPARE | AO3 | | 0-10VDC / 4-20mA | | |
| SPARE | AO4 | | 0-10VDC / 4-20mA | | |
| SPARE | RELAY 1 | | DRY CONTACT | | |
| SPARE | RELAY 2 | | DRY CONTACT | | |
| SPARE | RELAY 3 | | DRY CONTACT | | |
| SPARE | RELAY 4 | | DRY CONTACT | | |
| SPARE | POR | | 2-WIRE POR | | |
| ROOM TEMP & HUMIDITY | SENSOR BUS | RTH | 3-PIN CABLE (NO LOCAL INTERFACE) | 75F | 7X-SE-C43W-X |
| SPARE | RS-485 | | 3-WIRE RS-485 | | |
| 24VAC IN/OUT | POWER IN | 24VAC IN | 24VAC | | |

## PHYSICAL DIAGRAM




## SEQUENCE OF OPERATION

THE CONTROLLER MODULATES THE SUPPLY AIR DAMPER TO MAINTAIN THE SPACE TEMPERATURE SETPOINT.

### 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.

2. WHEN THE SYSTEM IS IN HEATING MODE 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 WILL CHANGEOVER INTO COOLING MODE. NOTE THAT DURING SYSTEM HEATING, THE AIRFLOW SETPOINTS ARE NOT RESPECTED.

### 75F COMMISSIONING NOTES

- EACH OF THE ZONE CONTROLS SHOULD BE PAIRED AS A 'VAV REHEAT - NO FAN' ZONE PROFILE.
- CONFIGURE:
  - DAMPER TYPE: 0-10V
  - SIZE: DETERMINED BY INSTALLER
  - SHAPE: DETERMINED BY INSTALLER
  - REHEAT TYPE: NO REHEAT
  - ZONE PRIORITY: NORMAL
  - AUTO FORCE OCCUPIED: DISABLED (UNLESS REQUIRED)
  - AUTO AWAY: DISABLED (UNLESS REQUIRED)
  - ENABLE CFM CONTROL: ENABLED
  - K-FACTOR: DETERMINED BY INSTALLER
- SET ALL CFM SETPOINTS PER PROJECT SPECIFICATION

**Drawing Notes:**

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③ 

75F

**Project Name:** 75F DESIGN MASTER REV. 1.4

**Project Address:**

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

**Drawing:** VAV (NO REHEAT) ZONE WITH RTH - SNV2