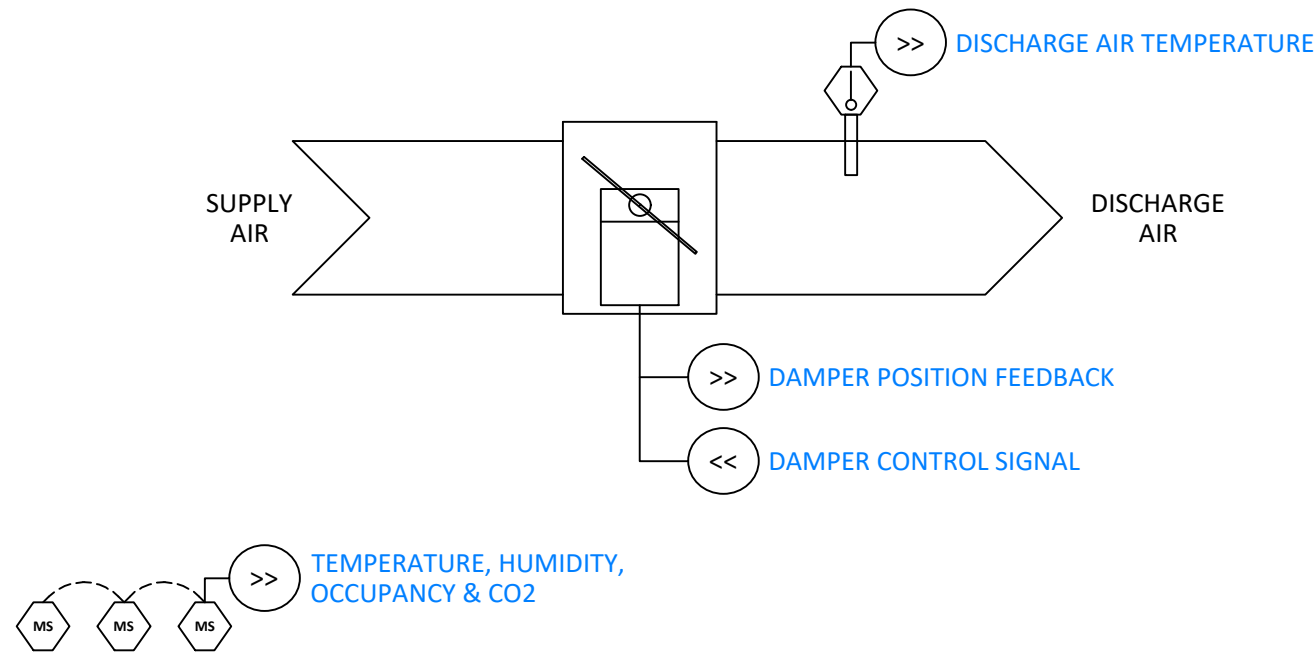


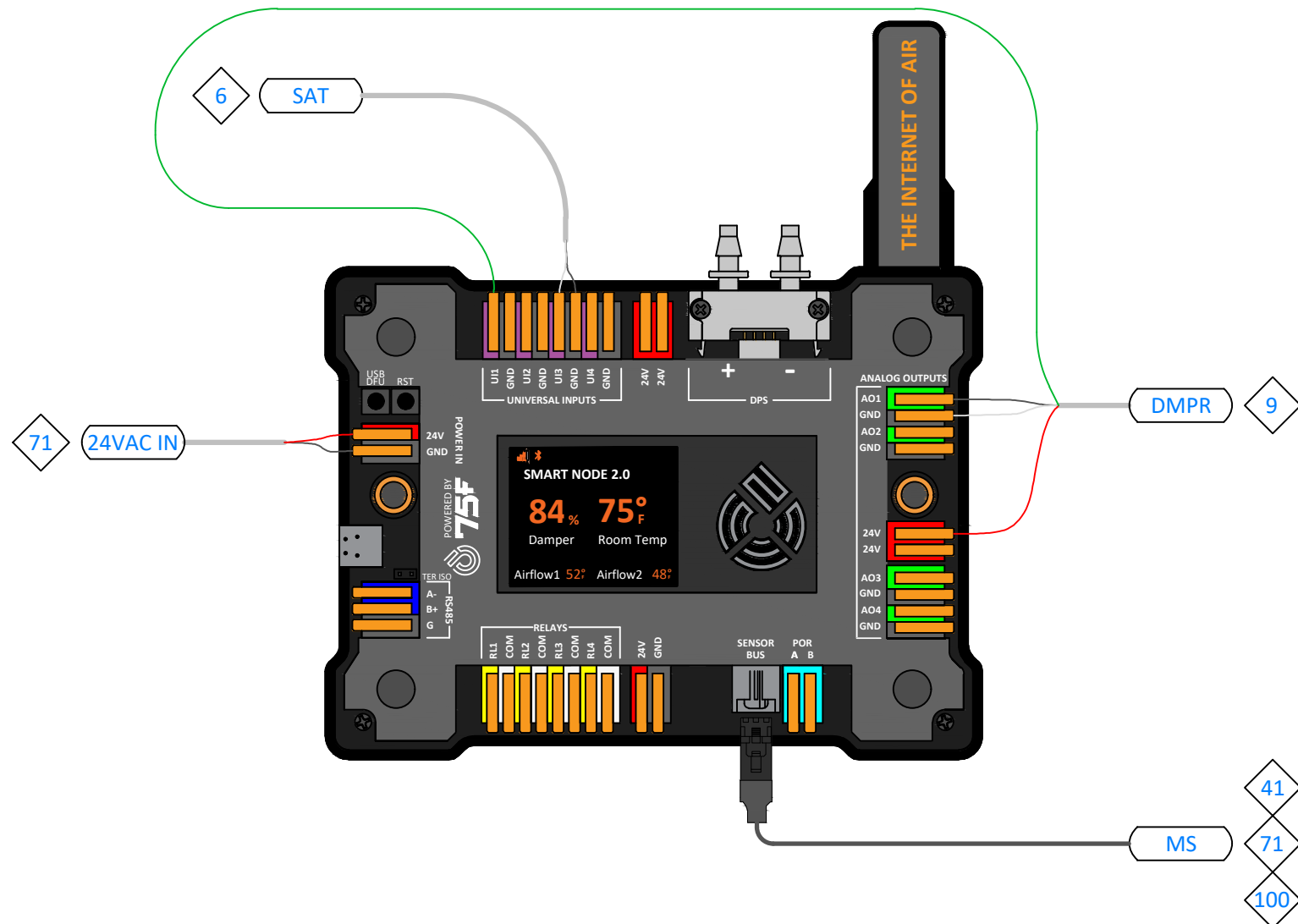
LOGICAL DIAGRAM



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
SPARE	UI4		10K TYPE II OR DIGITAL		
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		
TEMP, HUMIDITY, OCC & CO2	SENSOR BUS	RTH	3-PIN CABLE (NO LOCAL INTERFACE)	75F	7X-SE-C72X-X
SPARE	RS-485		3-WIRE RS-485		
POWER IN/OUT	POWER IN	24VAC IN	24VAC	-	

PHYSICAL DIAGRAM



SEQUENCE OF OPERATION

THE ZONE DAMPERS WILL MODULATE TO REDIRECT THE AIRFLOW WHERE IT IS NEEDED. THE SPACE TEMPERATURE WILL BE THE AVERAGE OF ALL SENSORS ON THE ZONE TRUNK.

HEATING

1. WHEN THE SYSTEM IS PROVIDING WARM AIR AND THE ZONE REQUIRES HEATING, THE DAMPER WILL MODULATE TOWARD ITS MAXIMUM POSITION.
2. WHEN THE SYSTEM IS PROVIDING WARM AIR AND THE ZONE IS SATISFIED, THE DAMPER WILL REMAIN IN ITS LAST KNOWN POSITION.
3. WHEN THE SYSTEM IS PROVIDING WARM AIR AND THE ZONE REQUIRES COOLING, THE DAMPER WILL MODULATE TOWARD ITS MINIMUM POSITION.

COOLING

1. WHEN THE SYSTEM IS PROVIDING COOL AIR AND THE ZONE REQUIRES COOLING, THE DAMPER WILL MODULATE TOWARD ITS MAXIMUM POSITION.
2. WHEN THE SYSTEM IS PROVIDING COOL AIR AND THE ZONE IS SATISFIED, THE DAMPER WILL REMAIN IN ITS LAST KNOWN POSITION.
3. WHEN THE SYSTEM IS PROVIDING COOL AIR AND THE ZONE REQUIRES HEATING, THE DAMPER WILL MODULATE TOWARD ITS MINIMUM POSITION.

DEMAND CONTROL VENTILATION

1. IF DEMAND CONTROL VENTILATION IS ENABLED, WHEN THE CO2 LEVEL RISES THE MINIMUM DAMPER POSITION WILL BE INCREASED FROM THE MINIMUM POSITION TO THE MAXIMUM POSITION. WHEN THE CO2 LEVEL IS AT THE ZONE CO2 THRESHOLD, THE DAMPER WILL BE 100% OPEN.

75F COMMISSIONING NOTES

- EACH OF THE ZONE CONTROLS SHOULD BE PAIRED AS A DYNAMIC AIRFLOW BALANCING (DAB) ZONE PROFILE.
- FIRST DAMPER TYPE WILL BE SET TO '0-10VDC DAMPER' CONTROL.
- DAMPER SIZE AND SHAPE WILL BE DETERMINED BY THE INSTALLER.

Drawing Notes:

- ①
- ②
- ③



Project Name:
75F DESIGN MASTER
REV. 1.4

Project Address:

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

Drawing: DAB ZONE WITH MULTI SENSOR - ZONE AVERAGING