

## **CONTROL LOGIC SUMMARY**

- THE CONTROLLER SENSES TEMPERATURE AND DECIDES WHETHER TO USE THE HVAC HEATER, DAC FANS OR HVAC COOLING.
- A SMOKE ALARM INHIBITS THE DAC FANS AND HVAC DURING A SMOKE ALARM, THE NORMALLY CLOSED RELAY ON THE SMOKE SENSOR OPENS WHICH CREATES AN OPEN CIRCUIT ON DAC CONTROLLER SMOKE ALARM INPUT.
- ANY NORMALLY CLOSED (NC) DRY CONTACT (FORM C OR FORM A) IS SUITABLE TO PROVIDE INPUT TO THE DAC CONTROLLERS.
- PLACING THE SYSTEM INTO COMFORT MODE (CONTROLLER BUTTON OR WEB INTERFACE) WILL CONTROL THE SITE TEMPERATURE TO A COMFORTABLE SETTING (75F TYP.) WHILE PERSONNEL IS WORKING IN THE SHELTER. THE MODE LAPSES AFTER 1 HOUR.
- ADDITIONAL MAINTENANCE TEST MODES (CONTROLLER BUTTON OR WEB INTERFACE) ARE AVAILABLE TO TEST/TROUBLESHOOT THE COOLING SYSTEM INDIVIDUAL COMPONENTS (DAC, HVAC HEATER, HVAC COOLING, ...).
- SMOKE, HYDROGEN AND CARBON MONOXIDE ALARMS WILL OVERRIDE HVAC MAINTENANCE/COMFORT MODES.
- THE OPERATING PARAMETERS OF THE DAC CONTROLLER HAVE BEEN PRE-SET AND CANNOT BE CHANGED MANUALLY. REFER TO THE SPECIFICATION TABLE FOR THE SEQUENCE OF OPERATION AND SETTINGS. THE CONTROL PROFILE CAN BE CHANGED BY UPLOADING AN APPROVED ALTERNATE PROFILE THROUGH THE WEB INTERFACES OF THE CONTROLLER.
- IF NO HYDROGEN, GENERATOR OR SMOKE SENSORS ARE USED, PLACE A JUMPER WIRE AT THE CORRESPONDING CONTROLLER INPUTS.
- WHEN THE SYSTEM IS USED WITH A POWER GENERATOR, THE GENERATOR CAN PROVIDE AN OPEN/CLOSED OUTPUT TO THE CONTROLLER. THE CONTROLLER CAN BE CONFIGURED TO DISABLE HVAC(S) COOLING AND/OR HEATING WHEN RUNNING ON GENERATOR POWER. SIGNAL FROM GENERATOR MUST BE AN ISOLATED OPEN/CLOSED DRY CONTACT (OPEN FOR GENERATOR RUNNING).

DO NOT SCALE DRAWINGS DS000230 SITE ID:

SCHROFFTECH - PROPRIETARY

1 OF 1

+401/402 (DAC system) Combined cooling system wiring diagram

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Rev.	Date	Revision Description	Drawn by	Approved
1.0	7/1/2022	Initial Release	CM	RD