SNC·LAVALIN	HVAC CONTROLLER SETTING SHEET	Page 1 of 4
		ID: TIC-F600

THE CITY OF WINNIPEG
WATER AND WASTE DEPARTMENT

BANNATYNE FLOOD PUMPING STATION
2023 UPGRADES
HVAC CONTROLLER SETTING LETTER
MAIN FLOOR TEMPERATURE CONTROLLER
TIC-F600

City Document Number: 5-0118F-A0001-001

Professional Seal

PROVINCE OF MANITOBA
M. SARIC
Member
46571
REGISTERED PROFESSIONAL ENGINEER
2023-03-02

Rev 00

Rev	Description	Date	Created By	Checked By	Approved By
00	ISSUED FOR CONSTRUCTION, TENDER 167-2023	2023-03-02	M. Saric	B. Cleven	B. Cleven

Data	Control Loops:	1-0118F-A0024, 1-0118F-A0028, 1-0118F-A0029			
	Model:	T775U	Voltage:	24 VAC	-
	Manufacturer:	Honeywell	Control:	0-10V	-

Fan Data	Size:	1 HP	Voltage:	575 VAC	CFM:	560 L/S
	Manufacturer:	Greenheck	FLA:	0.75	S.F.:	-

Damper Data	Type:	Modulating	Voltage:	24 VAC	CFM:	560 L/S
	Manufacturer:	Tamco	Control:	0-10V	-	

Menu			Description	Set Point	Note	Rev.
PROGRAM						
	MOD 1					
		SETPOINT	Unoccupied, Digital Input OFF	15 °C	DI 1=0	
		SETBACK	Occupied, Digital Input is ON	21 °C	DI 1=1	
		SENSOR	Honeywell C7031B2001 Duct Sensor	SENSOR A		
		ACTION	Heating option	HEAT		
	MOD 2	SETPOINT	Station Unoccupied. Damper Closed	26 °C	DI 1=0	
		SETBACK	Station Occupied. Damper Open	-40 °C	DI 1=1	
		SENSOR	Honeywell C7031B2001 Duct Sensor	SENSOR A		
		ACTION	Cooling option	COOL		

Note to enter the Menu options, press and release the “MENU” button.

Setup			Description	Set Point	Note	Rev.
SENSORS						
	# SENSORS			1		
	SENSOR A	TYPE	Honeywell C7031B2001 Duct Sensor	PT 1000		
		UNITS	Celcius	DEG C		
		LABEL	Set Label to Sensor A	DISCHRG A		
OUTPUTS						
	MOD 1					
		TYPE	Sets Control Output Type	0-10 V		
		MIN OUT %	Maintains Damper Minimum Position	0%		
		INTEGRAL	Reduces/Eliminates the Offset from Setpoint	400 sec		
		DERIVATIV	Derivative (PID) Control	0 sec		
		SCHEDULE	Ignores Scheduler	No		
		RESET	Each Output can be Programmed for Reset	No		
	MOD 2					
		TYPE	Sets Control Output Type	0-10 V		
		MIN OUT %	Maintains Damper Minimum Position	25%		
		INTEGRAL	Reduces/Eliminates the Offset from Setpoint	400 sec		
		DERIVATIV	Derivative (PID) Control	0 sec		
		SCHEDULE	Ignores Scheduler	No		
		RESET	Each Output can be Programmed for Reset	No		
	OPTIONS					
		DI OPTS	Digital Input Options	Setback		

Note to enter the Setup configuration, press and hold the “MENU” button for 5 seconds.

Notes
1. Change from Default Value.
2. The Contractor is responsible for ensuring proper parameter values are utilized. SNC-Lavalin assumes no responsibility for incorrect parameter values that result in equipment damage.

Bannatyne Flood Pumping Station Upgrades

Honeywell T775 HVAC Controller Configuration

Document Code: 5-0118F-A0001-001
Revision: 00

General Information:

The Honeywell T775 controls the discharge air temperature and the position of the damper actuators based on occupancy. The controller is connected to the main floor light switch to determine if the station is occupied. The operating parameters are:

Unoccupied Mode:

Discharge air temperature setpoint = 15°C.

Dampers recirculate up to 75% of the air to save energy (minimum 25% outdoor air).

Occupied Mode:

Discharge air temperature setpoint = 21°C.

Dampers open to 100% to provide 100% outdoor air (no recirculation).

Sensor and Modulating Output Connections:

The Honeywell T775 is connected to a duct temperature sensor downstream of the duct heater. This duct temperature sensor is connected to the “Sensor A” input.

There are two modulating outputs on the T775 controller

1. MOD 1 controls the duct heater based on a 0-10 Vdc signal.
2. MOD 2 controls the dampers based on a 0-10 Vdc signal.

Advanced Configuration:

Press and hold the MENU button for 5 seconds to enter the advanced programming menu.

Set the following options:

SETUP > SENSORS > # SENSORS = 1
SETUP > SENSORS > SENSOR A > TYPE = PT 1000
SETUP > SENSORS > SENSOR A > UNITS = DEG C
SETUP > SENSORS > SENSOR A > LABEL = DISCHRG A
SETUP > OUTPUTS > MOD 1 > TYPE = 0-10 V

SETUP > OUTPUTS > MOD 1 > MIN OUT % = 0%
SETUP > OUTPUTS > MOD 1 > INTEGRAL = 400 sec
SETUP > OUTPUTS > MOD 1 > DERIVATIV = 0 sec
SETUP > OUTPUTS > MOD 1 > SCHEDULE = No
SETUP > OUTPUTS > MOD 1 > RESET = No
SETUP > OUTPUTS > MOD 2 > TYPE = 0-10 V
SETUP > OUTPUTS > MOD 2 > MIN OUT % = 25% (damper minimum pos'n = 25%)
SETUP > OUTPUTS > MOD 2 > INTEGRAL = 400 sec
SETUP > OUTPUTS > MOD 2 > DERIVATIV = 0 sec
SETUP > OUTPUTS > MOD 2 > SCHEDULE = NO
SETUP > OUTPUTS > MOD 2 > RESET = No
SETUP > OPTIONS > DI OPTS = SETBACK

Press the HOME button to go back to the Home screen.

Setpoint Configuration

From the Home screen, press and release the MENU button to enter the setpoint configuration.

Set the following options:

PROGRAM > MOD 1 > SETPOINT > 15 °C (Unoccupied, Digital Input OFF)
PROGRAM > MOD 1 > SETBACK > 21 °C (Occupied, Digital Input is ON)
PROGRAM > MOD 1 > SENSOR > SENSOR A
PROGRAM > MOD 1 > ACTION > HEAT
PROGRAM > MOD 2 > SETPOINT > 26 °C (Unoccupied, Digital Input OFF)
PROGRAM > MOD 2 > SETBACK > -40 °C (Occupied. DI is ON. Opens the dampers)
PROGRAM > MOD 2 > SENSOR > SENSOR A
PROGRAM > MOD 2 > ACTION > COOL

Press the HOME button to go back to the Home screen.