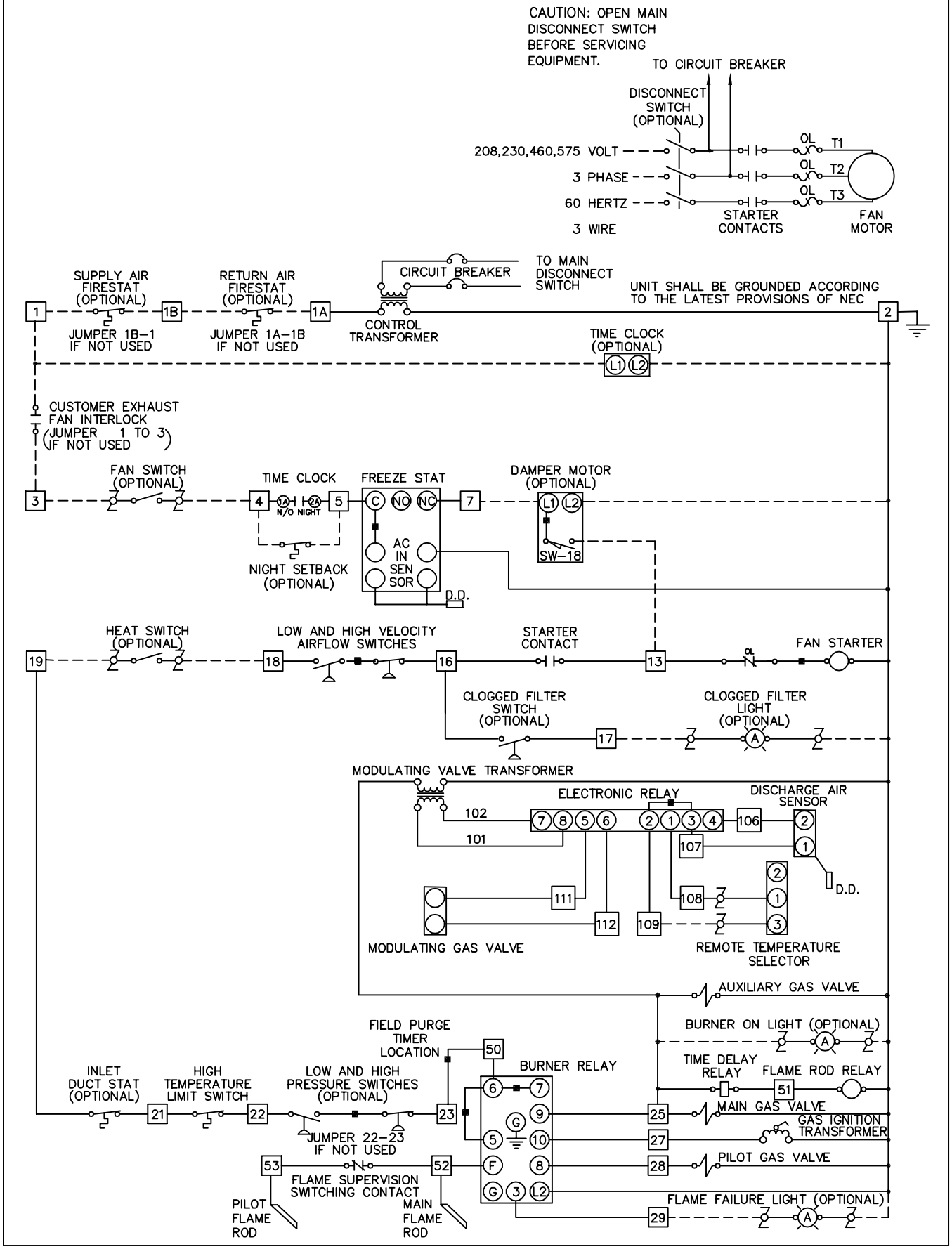
Wiring Diagram

Typical Wiring Diagram - Make-Up Air Unit

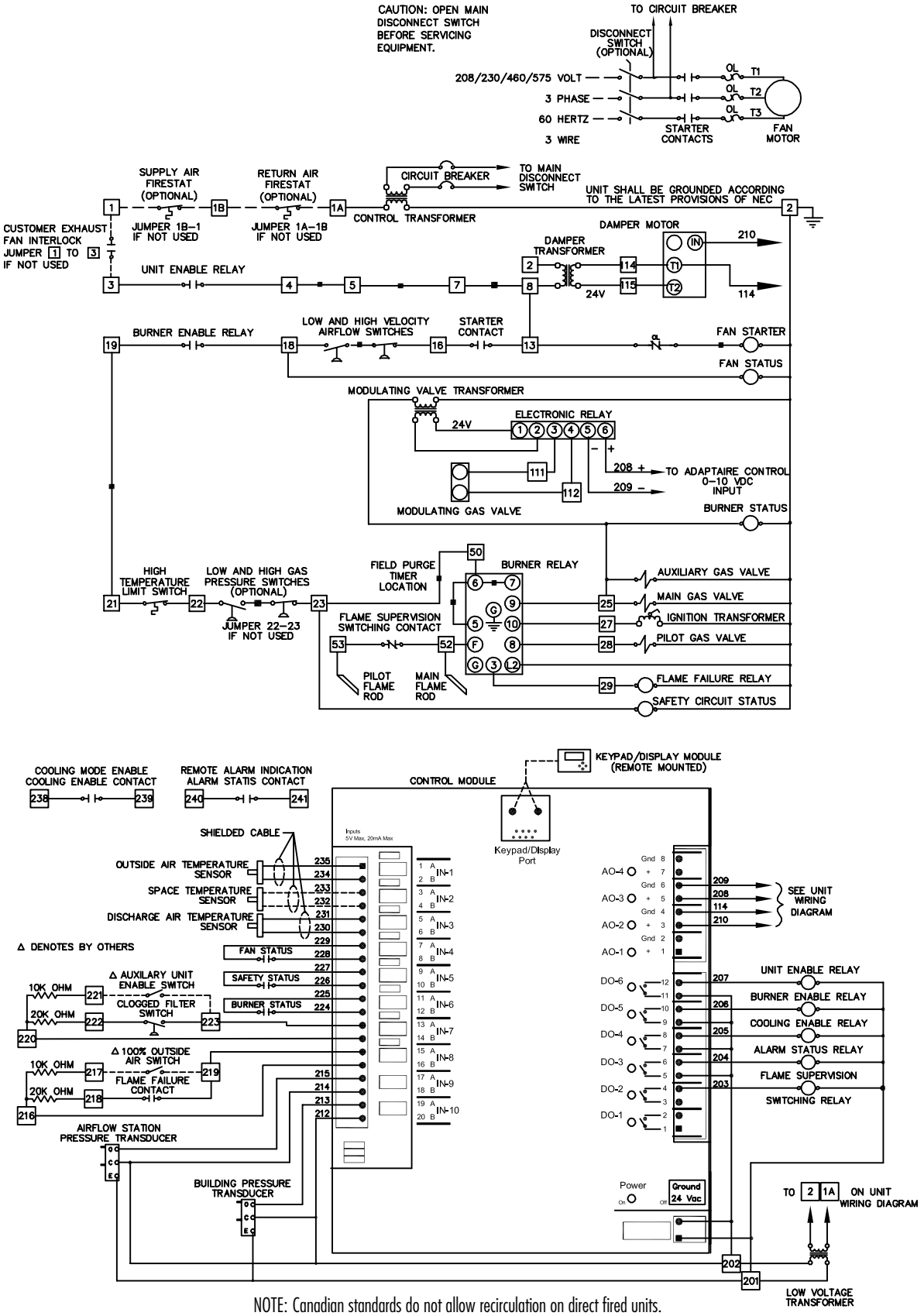
C000553



Wiring Diagram

Typical Wiring Diagram - Return Air Unit with TracRite

C000552



NOTE: Canadian standards do not allow recirculation on direct fired units.

NOTE: *DDC Control package includes burner control with room temperature sensor and high and low discharge limits, keypad and display for remote control capabilities, inlet on-off ductstat, electronic time clock, on-off night set back thermostat and timed freeze protection.*

Electrical Data and Sequence of Operation

Amp Draw Table

ITEM	SOURCE	AMPS	MOTOR HORSEPOWER						
			1	1½	2	3	5	7½	10
A	Blower Motor	AMPS for 208V 3 Ph.	4.6	6.6	7.5	10.6	16.7	24.2	30.8
		AMPS for 230V 3 Ph.	4.2	6.0	6.8	9.6	15.2	22.0	28.0
		AMPS for 460V 3 Ph.	2.1	3.0	3.4	4.8	7.6	11.0	14.0
		AMPS for 575V 3 Ph.	1.7	2.4	2.7	3.9	6.1	9.0	11.0
ITEM	SOURCE	AMPS	MOTOR HORSEPOWER						
			15	20	25	30	40	50	60
A	Blower Motor	AMPS for 208V 3 Ph.	46.2	59.4	74.8	88.0	114.0	143.0	169.0
		AMPS for 230V 3 Ph.	42.0	54.0	68.0	80.0	104.0	130.0	154.0
		AMPS for 460V 3 Ph.	21.0	27.0	34.0	40.0	52.0	65.0	77.0
		AMPS for 575V 3 Ph.	17.0	22.0	27.0	32.0	41.0	52.0	62.0
ITEM	SOURCE	AMPS	CONTROL CIRCUIT AMPS						
			Heating Only Unit						
B	Control Transformer	AMPS for 208V 3 Ph.	2.4						
		AMPS for 230V 3 Ph.	2.2						
		AMPS for 460V 3 Ph.	1.1						
		AMPS for 575V 3 Ph.	0.9						

Steps to size optional disconnect switch:

1. Find the blower motor HP required from tables on pages 4 and 5.
2. Find amp draw for required motor HP from chart in Item A above.
3. Find amps for control circuit from chart in Item B above.
4. Add amps from step 2 and step 3, multiply by 1.25.

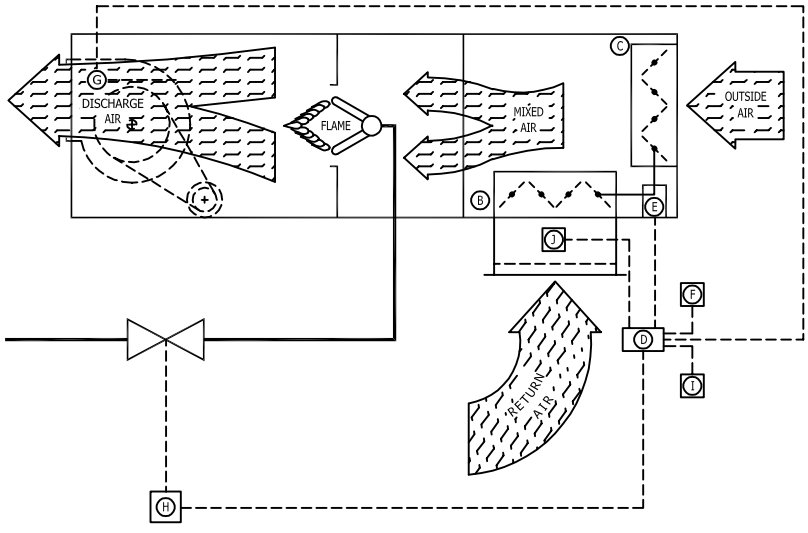
NOTES:

1. Above motor amps are based on 2002 edition of NEC.
2. Control circuit amps are based on standard controls.

Sequence of Operation – Return Air Units

P000621

OPERATION WITH RETURN AIR UPSTREAM OF BURNER



NOTE: Canadian standards do not allow recirculation on direct fired units.

Signal from remote control I to TracRite Controller D, sets operational parameters for dampers B and C, and burner. Damper operation can be manual, building pressure or mixed air temperature.

Return air dampers B, and outside air dampers C, are interlocked to move together. As one opens, the other closes. As the return air dampers open, allowing more return air to enter the unit, the outside air dampers move toward the closed position, decreasing the amount of outside air. Pressure sensor and flow station J, senses change in return airflow and signals TracRite Controller D.

Modulating gas valve H, regulates gas supply in response to signal from TracRite Controller D. TracRite Controller D, varies signal based on input from room temperature sensor F, discharge temperature sensor G, and airflow sensor J. Gas valve H can provide approximately 4% to 100% of rated burner capacity.