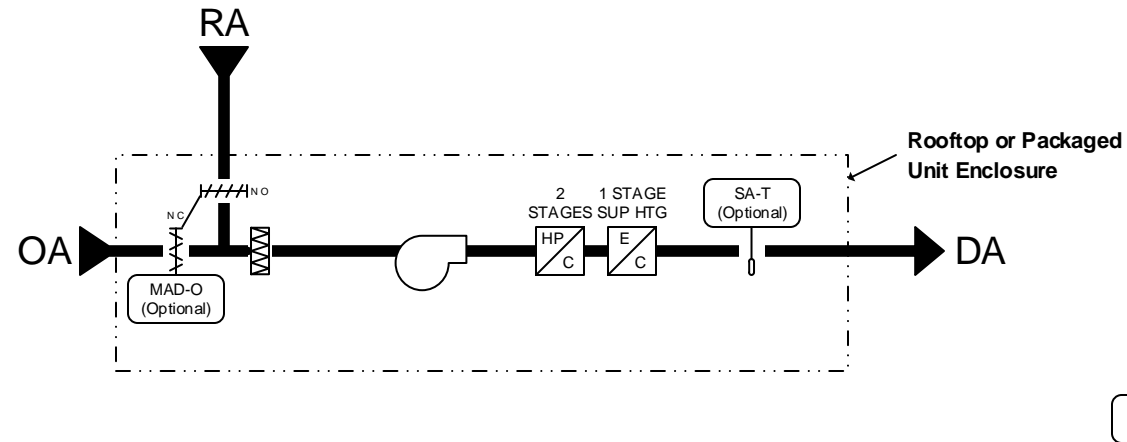


3RD PARTY HEATPUMP



SUPPLY FAN CONTROL:

THE CONSTANT SPEED SUPPLY FAN WILL RUN ANY TIME THERE IS A CALL FOR HEATING OR COOLING DURING BOTH OCCUPIED AND UNOCCUPIED STATES.

TEMPERATURE CONTROL:

THE UNIT WILL CONTROL TO MAINTAIN THE ZONE TEMPERATURE SETPOINT AS SENSED BY THE ZONE TEMPERATURE SENSOR.

OCCUPIED MODE:

THE OCCUPANCY MODE WILL BE CONTROLLED VIA ON BOARD SCHEDULE.

HEATPUMP COIL:

WHEN THE SPACE IS CALLING FOR COOLING THE REVERSING VALVE WILL BE INDEXED TO PROVIDED COOLING. THE COMPRESSORS WILL BE STAGED IN SEQUENCE TO MAINTAIN THE TEMPERATURE SETPOINT. WHEN THE SPACE IS CALLING FOR HEATING THE REVERSING VALVE WILL BE INDEXED TO PROVIDED HEATING. THE COMPRESSORS WILL BE STAGED IN SEQUENCE TO MAINTAIN THE TEMPERATURE SETPOINT.

SUPPLEMENTAL REHEAT COIL:

IF THE HEATPUMP COMPRESSORS IS NOT ENOUGH HEAT TO SATISFY THE SPACE, THE REHEAT COIL WILL BE STAGED IN SEQUENCE TO MAINTAIN THE TEMPERATURE SETPOINT.

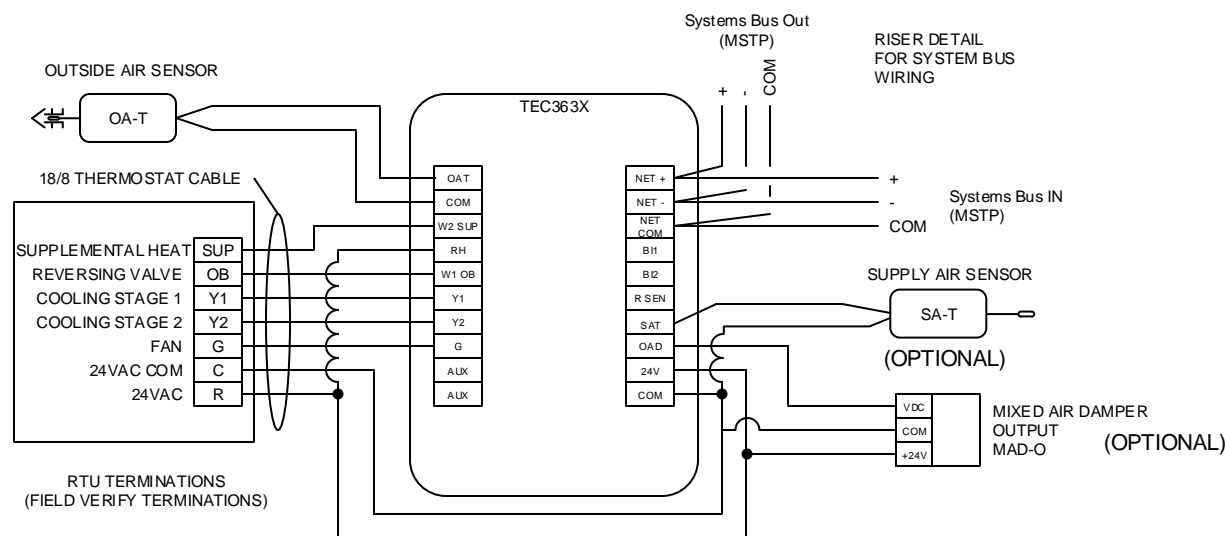
ECONOMIZER CONTROL:

WHEN THE OUTDOOR AIR IS COOLER THAN THE ECONOMIZER SETPOINT, THE ECONOMIZER WILL ACT AS THE INITIAL STAGE OF COOLING, WORKING IN SEQUENCE WITH THE COOLING COIL. OUTSIDE AIR TEMPERATURE (OA-T) MUST BE CONNECTED. SUPPLY AIR TEMPERATURE (SA-T) IS FOR MONITORING ONLY.

ADDITIONAL POINTS MONITORED BY THE FMS:

- SUPPLY AIR TEMPERATURE (SA-T) – IF THE THERMOSTAT CALLS FOR HEATING OR COOLING AND THE SUPPLY AIR SENSOR DOES NOT CHANGE WITHIN AN ADJUSTABLE PERIOD OF TIME, THEN AN ALARM WILL BE GENERATED BY THERMOSTAT. IF THIS TIME SETTING IS SET TO 0 THE ALARM WILL BE DISABLED.
- THE UNIT WILL TOTALIZE THE RUN HOURS THAT THE FAN IS COMMANDED. WHEN THE UNIT HITS THE TOTALIZED LIMIT AN ALARM WILL BE GENERATED SO MAINTENANCE CAN BE CONDUCTED ON THE UNIT (IE CHANGE THE FILTERS, ROUTINE CHECKS). IF THE LIMIT IS SET TO 0 THE ALARM WILL BE DISABLED.

(OPTIONAL, MUST HAVE IF YOU HAVE ECONOMIZER)



Drawing Title									
3RD PARTY HEAT PUMP UNIT									
REFERENCE DRAWING		NO.		REVISION-LOCATION		ECN		DATE	
Sales Engineer		Project Manager		Applied on Engineer		DRAWN		APPROVED	
BY		DATE		BY		DATE		DATE	
Project Title		Branch Information		CONTRACT NUMBER		DRAWING NUMBER			
		VERASYS™				TEC-HP			