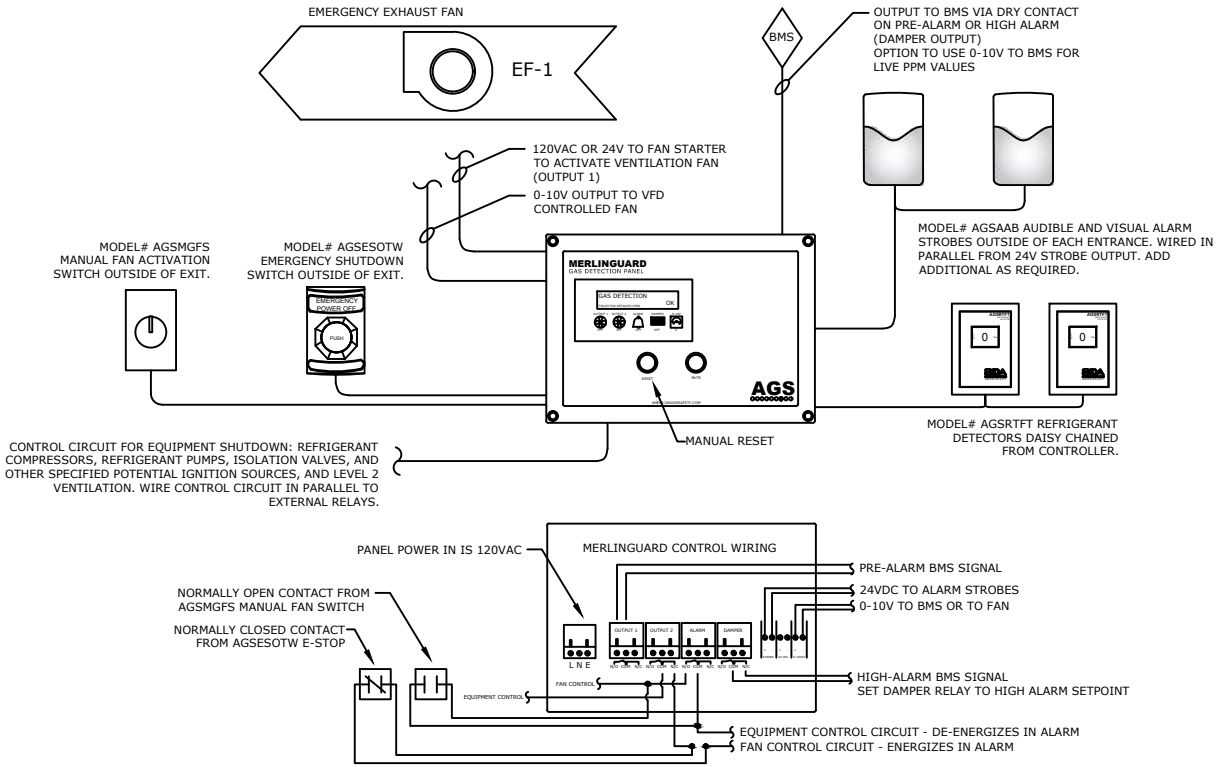
A2L TYPE REFRIGERANT GASES



SEQUENCE OF OPERATION

1. **WHEN GASES ARE AT OR ABOVE PRE-ALARM,**
   - 1.1. OUTPUT 1 RELAY CHANGES STATE AND SHALL SHALL ALERT BMS OF PRE-ALARM DETECTION.
   - 1.2. 0-10V WILL SEND VOLTAGE CORRELATED TO LEVEL.
   - 1.3. DAMPER RELAY CHANGES STATE AND SENDS ALERT TO BMS SYSTEM.
2. **WHEN GASES ARE ABOVE HIGH ALARM,**
   - 2.1. OUTPUT 2 RELAY CHANGES STATE AND EQUIPMENT IS SHUT DOWN.
     - 2.1.1. EQUIPMENT MAY BE CHILLERS, SOLENOID VALVES, COMPRESSORS, PUMPS, AND OTHER IGNITION SOURCES.
   - 2.2. 0-10V WILL SEND 10V.
   - 2.3. ALARM RELAY CHANGES STATE, LATCHES, AND ACTIVATES EMERGENCY VENTILATION FAN.
   - 2.4. DAMPER RELAY CHANGES STATE AND NOTIFIES BMS SYSTEM OF HIGH ALARM CONDITION.
   - 2.5. THE 24VDC SOUNDER STROBE WILL ENERGIZE AUDIBLE ALARM BEACONS, AND THE PANELS INTERNAL BUZZER WILL SOUND.
3. **AFTER ALARM CONDITION THE ALARM SEQUENCE WILL HAVE TO BE MANUALLY RESET AT THE PANEL.**
4. **WHEN THE SHUT-OFF BUTTON IS PRESSED,**
   - 4.1. EQUIPMENT IS SHUT OFF.
   - 4.2. MUST MANUALLY RESET TO TURN EQUIPMENT BACK ON.
5. **WHEN THE MANUAL FAN SWITCH IS TWISTED ON,**
   - 5.1. THE FANS WILL ACTIVATE UNTIL THE SWITCH IS REVERTED BACK, GAS DETECTION OVERRIDES.

SCOPE OF WORK

- **A. FULL SYSTEM SHALL BE PROVIDED BY ONE CONTRACTOR, AND COORDINATE WITH OTHER DIVISIONS AS REQUIRED.**
- **B. POWER IN:** CONTROL PANEL MUST BE POWERED VIA 120VAC BY DIV. 26.
- **C. CONTROL WIRING:** CONTROL WIRING MAY BE 120VAC OR 24VAC. IF UTILIZING 24VAC FOR CONTROL WIRING, 24VAC PERMANENT OUTPUT WITHIN CONTROL PANEL MAY BE USED, OR ELECTRICIAN MUST PROVIDE TRANSFORMER.

OUTPUTS AND RELAYS

- **A. OUTPUT 1 RELAY:** 120/250VAC 6A MAX. IF GREATER, USE AN EXTERNAL RELAY.
- **B. OUTPUT 2 RELAY:** LATCHES UNTIL MANUAL RESET BUTTON IS PRESSED. 120/250VAC 6A MAX. IF GREATER, USE AN EXTERNAL RELAY.
- **C. ALARM RELAY:** LATCHES UNTIL MANUAL RESET BUTTON IS PRESSED. 120/250VAC 6A MAX
- **D. DAMPER RELAY:** SWITCHES WITH OUTPUT 1 RELAY OR OUTPUT 2 RELAY. 120/250VAC 6A MAX
- **E. 0-10V OUTPUT:** LINEAR 0-10V BASED ON ALARM SETPOINT RANGE. HIGH ALARM IS 10V.