GENERAL NOTES:
1. THE FOLLOWING NOTES ARE APPLICABLE TO THE AEC9024 SERIES DEVICES IRRESPECTIVE OF SELECTED FUNCTION.
2. OPERATING VOLTAGE: 8 TO 20 VOLTS DC (DD-600 LIMITS FOR CATEGORY Z IN 4W SYSTEMS, 6 - 40 VOLS DC (CATEGORY B IN 28V SYSTEMS)
3. OPERATING CURRENT: 0.01 AMPS MAX (NOT INCLUDING CONTACOR LOADS)
4. OPERATING TEMPERATURE: -20 TO +70 C
5. MAXIMUM CONTACOR COIL CURRENT: 1.5A
6. SIGNAL OUTPUTS: OPEN DRAIN PULL TO GROUND.
7. VIBRATION: NO PRACTICAL LIMITS - QUASI-POTTED ASSEMBLY
8. HUMIDITY: NO PRACTICAL LIMITS - QUASI-POTTED ASSEMBLY
9. ALTITUDE: NO PRACTICAL LIMITS
10. RF EMISSIONS: EXCEEDINGLY LOW; POWERED MICROCONTROLLER WITH VERY SMALL RADIATION GEOMETRY; PROBABILITY OF DIFFICULTY VERY LOW
11. RF SUSCEPTIBILITY: VERY SMALL CAPTURE GEOMETRY; TESTED WITH CLOSE PROXIMITY VHF COMM HAND HELD WITH NO OBSERVABLE EFFECTS
12. DIMENSIONS: SEE ENVELOPE DRAWING
13. WEIGHT: 1 OZ.

CONTACOR POWER MANAGER (CPM) SEE FIGURE 2:

20. OPERATION:
(A) WHEN THE CPM IS FIRST ENERGIZED, IT APPLIES FULL SYSTEM VOLTAGE TO THE CONTACOR COIL UNTIL VOLTAGE RISES ABOVE 10.0 VOLTS.
(B) 10 SECONDS AFTER APPLIED VOLTAGE RISES ABOVE 10 VOLTS, THE CONTROLLER SWITCHES TO A 50% DUTY CYCLE.
(C) IF APPLIED VOLTAGE DROPS BELOW 10.0 VOLTS, THE CONTROLLER REVERTS TO 100% DUTY CYCLE.
(D) ANY TIME APPLIED VOLTAGE IS GREATER THAN 15.0 VOLTS, THE CPM OPERATES AT 33% DUTY CYCLE.

23. DUTY CYCLE REDUCTION FOR STEADY STATE OPERATION (ALTERNATOR OPERATING) REDUCES CONTACTOR TEMPERATURE RISE BY APPROX 80%.

24. OVER VOLTAGE PROTECTION (OVP) SEE FIGURE 3:

30. OPERATION:
(A) WHEN THE OVP IS ENERGIZED, IT APPLIES FULL SYSTEM VOLTAGE TO THE RELAY COIL UNTIL VOLTAGE RISES ABOVE 15.0 VOLTS.
(B) 10 SECONDS AFTER APPLIED VOLTAGE RISES ABOVE 15 VOLTS, THE OVP SWITCHES TO A 50% DUTY CYCLE.
(C) IF APPLIED VOLTAGE EXCEEDS 15.0 VOLTS FOR 100 MS, THE OVP DROPS TO ZERO OUTPUT AND LATCHES IN THAT STATE UNTIL POWER IS REMOVED.

31. DUTY CYCLE REDUCTION FOR STEADY STATE OPERATION (ALTERNATOR OPERATING) REDUCES RELAY TEMPERATURE RISE BY APPROX 80%.

(PRELIMINARY DATA)