

**EMERGENCY POWER SHUTDOWN MANAGEMENT SYSTEM SEQUENCE OF OPERATION
FIKE MODEL 20-1181 EPSMS BASE PANEL AND 20-1398 EPSMS PRE-ACTION**

EPSMS OUTPUT SIGNALS/ANNUNCIATION	EPSMS INPUT SIGNAL							
	MAINTENANCE OVERRIDE KEYED SWITCH IN NORMAL POSITION	FIRE CONTROL PANEL 2ND ALARM ACTIVATED	FIRE CONTROL PANEL DISCHARGE ALARM (or PRE-ACTION model 20-1398) ACTIVATED	EMERGENCY POWER OFF (EPO) SWITCH ACTIVATED	MAINTENANCE OVERRIDE KEYED SWITCH IN OVERRIDE POSITION (See Note 1,2,3,4,5)	LAMP TEST SWITCH (MOMENTARY) ACTIVATED (Note: LEDs shall return to normal condition when lamp test button is released)	LOSS OF POWER TO EPSMS CONTROL PANEL	SILENCE BUTTON (MOMENTARY) ACTIVATED
"POWER" GREEN LED ILLUMINATES	●	●	●	●	●	●		
"NORMAL" GREEN LED ILLUMINATES	●	●	●	●		●		
"OVERRIDE" AMBER LED ILLUMINATES					●	●		
"2ND ALARM ACTIVATION" RED LED ILLUMINATES		●				●		
2ND ALARM SHUTDOWN RELAYS ENERGIZE AND LATCH		●		●				
2ND ALARM MOMENTARY (5 SECOND) 120VAC SHUNT TRIP CIRCUIT SHALL ACTIVATE		●		●				
ALL INTERCONNECTED 2ND ALARM EQUIPMENT SHALL DE-ENERGIZE		●		●				
"DISCHARGE (or PRE-ACTION model 20-1398)" ACTIVATION LED ILLUMINATES			●			●		
DISCHARGE (or PRE-ACTION model 20-1398) SHUTDOWN RELAYS ENERGIZE AND LATCH			●	●				
DISCHARGE (or PRE-ACTION model 20-1398) MOMENTARY (5 SECOND) 120VAC SHUNT TRIP CIRCUIT SHALL ACTIVATE			●	●				
ALL DISCHARGE (or PRE-ACTION model 20-1398) EQUIPMENT SHALL DE-ENERGIZE			●	●				
"EPO ACTIVATION" RED LED ILLUMINATES				●		●		
EPO SWITCH MONITORING RELAY ACTIVATED				●				
PIEZO ALERT ACTIVATED		●	●	●		●		
PIEZO ALERT DE-ACTIVATED								●
SYSTEM TROUBLE RELAY ACTIVATED					●		●	
REMOTE AMBER NOTIFICATION LED ILLUMINATES (OPTIONAL)					●	●		

EMERGENCY POWER SHUTDOWN MANAGEMENT SYSTEM SEQUENCE OF OPERATION FIKE MODEL 20-1181 EPSMS BASE PANEL AND 20-1398 EPSMS PRE-ACTION

Notes:

- 1. When the maintenance override switch is in the override position, the shunt trip circuits, "2nd Alarm Activation" (or Smoke Alarm Activation (20-1398) , "Discharge Activation" (or Pre-Action Activation (for model 20-1398) and "EPO Activation" relays shall remain in the normal position (locked out) regardless of the input signals received to prevent accidental shutdown of equipment.**
- 2. When the maintenance override switch is in the override position, if any input signal is received, the corresponding "2nd Alarm Activation" (or Smoke Alarm Activation (20-1398) , "Discharge Activation" (or Pre-Action Activation (for model 20-1398) and "EPO Activation" LEDs shall illuminate.**
- 3. When the maintenance override switch is in the override position, if any input signal is received then cleared, the corresponding "2nd Alarm Activation" (or Smoke Alarm Activation (20-1398) , "Discharge Activation" (or Pre-Action Activation (for model 20-1398) and "EPO Activation" LEDs shall flash indicating the input alarm condition is cleared. The output relays and shunt trip circuits shall remain locked out.**
- 4. Once the maintenance override switch is in the override position, the system cannot be returned to "Normal" without activating the reset switch. The reset switch "Unlocks" the maintenance override feature.**
- 5. If the EPSMS panel receives an input signal while in Maintenance Override it cannot be returned to Normal mode and reset until all input signals are cleared. This feature provides a second level of protection against accidental equipment shutdown.**
- 6. One normally open/normally closed dry contacts shall change state upon loss of power or when maintenance override switch is in override position.**
- 7. One normally open/normally closed dry contacts shall change state upon EPO activation.**
- 8. The emergency power off switch shall be dual-action keyed latching type. The button shall have a flip-up protective cover to protect against accidental equipment shutdown. All EPO Buttons as shown on the drawings shall terminate inside the EPSMS cabinet.**
- 9. The logic for the EPSMS shall be controlled by a programmable relay logic controller. Logic using hardwired relays shall not be acceptable.**
- 10. Submittals shall include one-line general arrangement diagram showing the EPSMS control panel and identifying all devices the EPSMS connects to, enclosure diagram showing the key switch, indicating LEDs, and labels. This sheet shall contain the enclosure dimensions and a complete bill of materials to be used in the construction of the EPSMS, sequence of operation detailing the input signals, output logic, monitoring relay operation, and maintenance override operation and wiring schematic clearly identifying termination points on terminal blocks within the EPSMS control panel.**
- 11. One remote amber notification LED shall be furnished and installed per EPSMS panel. The LED shall be activated when the maintenance override key switch is in the override position.**
- 12. The EPSMS shall be a Fike Model 20-1181 manufactured by Fike Corporation. Quantities and locations as shown on the drawings.**