



AIRFIELD LIGHTING CONTROL WIRING SCHEMATIC

NOTES:

- RELAY INTERFACE CONTROL PANEL SHALL BE MANUFACTURED BY AN FAA APPROVED L-821 PANEL BUILDER OR A UL 508 INDUSTRIAL CONTROL PANEL BUILDER, AND SHALL BE MANUFACTURED IN THE UNITED STATES TO COMPLY WITH THE AIRPORT IMPROVEMENT PROGRAM BUY AMERICAN REQUIREMENT AND THE "BUY AMERICAN ACT". RELAY INTERFACE CONTROL PANEL SHALL BE SEPARATE PANEL. DO NOT COMBINE WITH LIGHTING CONTACTOR PANEL.
- PANEL SHALL BE IN A NEMA 12 ENCLOSURE WITH HINGED COVER. DRILL HOLE IN BOTTOM OF ENCLOSURE TO ALLOW CONDENSATION TO ESCAPE.
- EXTERNAL CONTROL CABLE SHALL BE NO. 12 AWG COPPER, 600 VOLT CABLE. ALL PANEL INTERIOR CONTROL CABLE SHALL BE MINIMUM 16 AWG, COPPER, 600 VOLT CABLE.
- IN THE AUTOMATIC MODE OF OPERATION THE RUNWAY 18-36 CONSTANT CURRENT REGULATORS (PRIMARY UNIT & SPARE UNIT) SHALL BE CONTROLLED BY THE PHOTOCELL & THE L-854 RADIO CONTROL UNIT IN THE FOLLOWING MANNER:  
 PHOTOCELL - 10% BRIGHTNESS & ACTIVATE RADIO CONTROL  
 5 CLICKS - 30% BRIGHTNESS  
 7 CLICKS - 100% BRIGHTNESS
- IN THE AUTOMATIC MODE OF OPERATION THE TAXIWAY CIRCUIT WILL BE CONTROLLED BY THE PHOTOCELL & THE L-854 RADIO CONTROL UNIT IN THE FOLLOWING MANNER:  
 PHOTOCELL -ACTIVATE RADIO CONTROL  
 3 CLICKS -10% BRIGHTNESS  
 5 CLICKS -30% BRIGHTNESS  
 7 CLICKS -100% BRIGHTNESS
- IN THE AUTOMATIC MODE OF OPERATION THE WIND TEE & AIRPORT ROTATING BEACON SHALL BE ACTIVATED BY THE PHOTOCELL OR PHOTOCELL BYPASS SWITCH.
- IN THE AUTOMATIC MODE OF OPERATION THE RWY 18-36 PAPI'S WILL BE CONTROLLED BY THE L-854 RADIO CONTROL UNIT IN THE FOLLOWING MANNER:  
 3 CLICKS - ON  
 5 CLICKS - REMAIN ON  
 7 CLICKS - REMAIN ON.
- EQUIPMENT GROUND WIRES SHALL BE INCLUDED WITH EACH BRANCH CIRCUIT & EACH CONTROL CIRCUIT.
- INCLUDE PHOTOCELL BYPASS SWITCH.
- SURGE PROTECTOR SHALL BE UL LISTED PER UL 1449, SUITABLE FOR 120 VAC, 1PH, 2 WIRE PLUS GROUND SYSTEM WITH SURGE CURRENT RATING OF 40 KA (MIN.), 8x20 MICROSECOND WAVE, AND STATUS INDICATION LIGHTS IN A WEATHERPROOF HOUSING, JOSLYN MODEL 1260-21, OR APPROVED EQUAL. MAINTAIN LEADS AS SHORT & AS STRAIGHT AS POSSIBLE. INCLUDE MOUNTING BRACKET.
- INCLUDE EQUIPMENT GROUND BAR, ILSCO D167-12 OR EQUAL.
- CONTROL RELAYS SHALL HAVE 10 AMP CONTACT RATINGS AT 240 VAC WITH 120 VAC COILS. PROVIDE 3 SPARE RELAYS FOR EACH TYPE USED IN THE RELAY INTERFACE PANEL.
- COLOR CODING FOR THE CONTROL WIRING TO EACH CONSTANT CURRENT REGULATOR SHALL BE CONSISTENT FOR ALL REGULATORS. COLOR CODING SHALL BE AS FOLLOWS:  
 CC -RED  
 10% -ORANGE  
 30% -YELLOW  
 100% -BLUE  
 NEUTRAL -WHITE  
 EQUIPT. GND -GREEN  
 ALSO TAG THE CONTROL WIRES WITH THE RESPECTIVE DESIGNATION (CC, 10%, 30%, 100%)
- "N" DESIGNATES NEUTRAL CONNECTION OR NEUTRAL CONDUCTOR.
- CONTROL SYSTEM IS DESIGNED TO ACCOMMODATE L-828 CONSTANT CURRENT REGULATORS AND / OR L-812 CONSTANT CURRENT REGULATORS.

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CONSTRUCT VAULT, LIGHT TAXIWAY & INSTALL NAVAIDS			AIRFIELD LIGHTING CONTROL WIRING SCHEMATIC		
31					
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