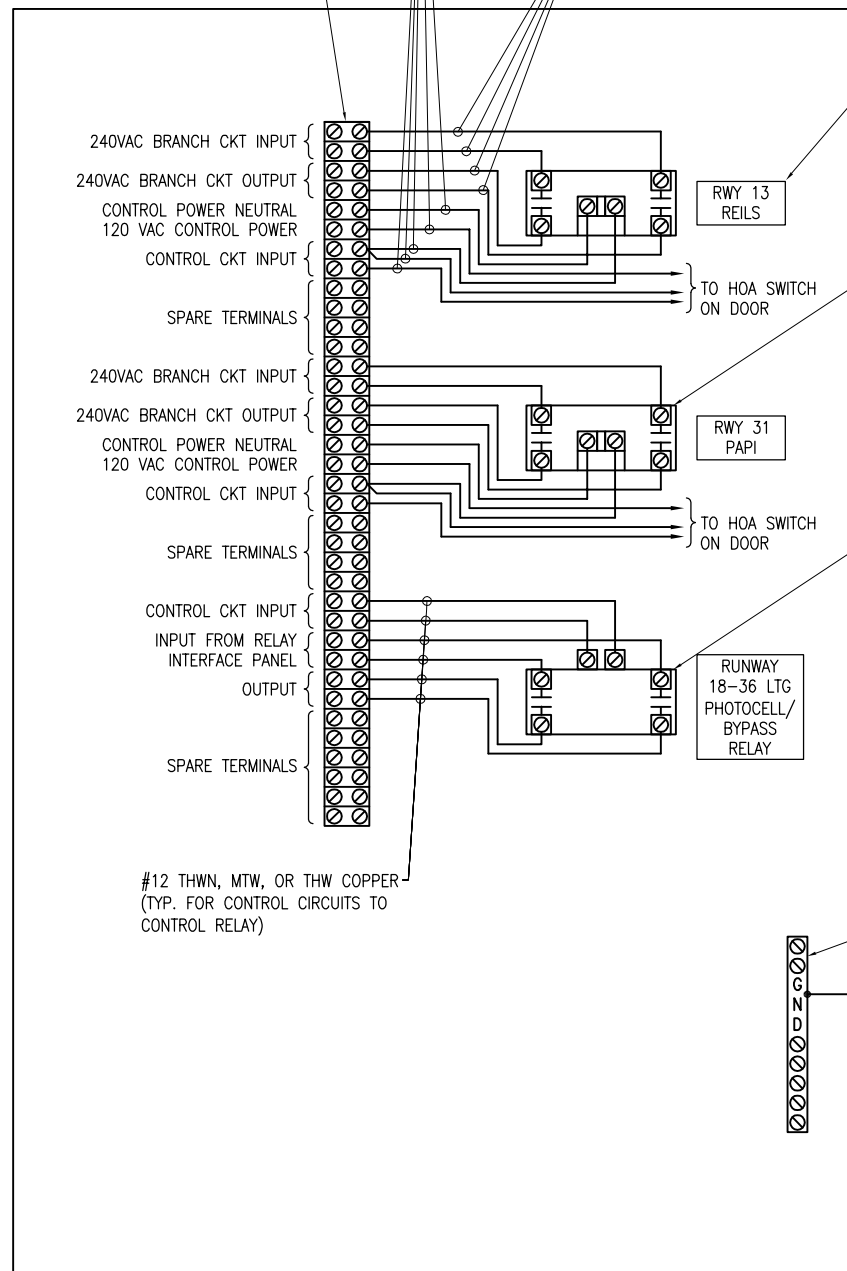


NEMA TYPE TERMINAL BLOCKS RATED 85A, 600 VOLT SUITABLE FOR THE FOLLOWING WIRE COMBINATIONS
 1 #4 AWG
 1 #6 AWG
 1-2 #8 AWG
 1-4 #10 AWG
 1-5 #12 AWG
 TERMINAL BLOCKS SHALL BE SQUARE D CLASS 9080 TYPE GC6 OR APPROVED EQUAL. IEC RATED TERMINAL BLOCKS ARE NOT ACCEPTABLE.

#14 THWN, MTW, OR THW COPPER (TYP. FOR INTERNAL WIRING CONTROL CIRCUITS TO LIGHTING CONTACTORS). MAX. CIRCUIT BREAKER SIZE FOR CONTROL POWER SHALL BE 15 AMP.

#10 THWN, MTW, OR THW COPPER (TYP. FOR POWER CIRCUITS TO CONTACTORS)



FURNISH & INSTALL ENGRAVED LEGEND PLATES TO IDENTIFY EACH RELAY/CONTACTOR

30 AMP, 600 VAC, 2 POLE ELECTRICALLY HELD LIGHTING CONTACTOR WITH 120 VAC COIL, SQUARE D CLASS 8903, TYPE SM01V02, OR APPROVED EQUAL (TYPICAL FOR 5)

10 AMP, 600 VAC, 2 POLE NEMA TYPE INDUSTRIAL CONTROL RELAY WITH 120 VAC COIL, SQUARE D CLASS 8501, TYPE X020V02, OR APPROVED EQUAL

COPPER EQUIPMENT GROUND BAR ADEQUATELY SIZED FOR ALL GROUND WIRES TO AND FROM LIGHTING CONTACTOR PANEL; ILSCO D167-12, OR EQUAL. INSTALL ONE GROUND WIRE PER TERMINAL.

NEMA 4X STAINLESS STEEL OR ALUMINUM ENCLOSURE WITH HINGED DOOR SIZED AS REQUIRED TO HOUSE LIGHTING CONTACTORS, CONTROL RELAY, TERMINAL BLOCKS, WIRING & INTERFACE TO EXISTING CONDUITS, APPROXIMATE 24"Hx20"Wx8"D AS MANUFACTURED BY HOFFMAN OR APPROVED EQUAL. CONFIRM DIMENSIONS AND PROVIDE AN ENCLOSURE TO HOUSE EQUIPMENT AND TO FIT INSIDE VAULT TRANSCLOSURE. NOTE - NEMA 4X RATING IS TO ACCOMMODATE FUTURE RELOCATION TO AN OUTDOOR LOCATION.

CONTROL PANEL FOR AIRFIELD LIGHTING AND NAVAIDS

NOTES

- 15 AMP & 20 AMP INPUT POWER/BRANCH CIRCUITS SHALL BE #10 AWG COPPER THWN FROM THE RESPECTIVE POWER SOURCE TO THE LIGHTING CONTACTOR/RELAY PANEL. 30 AMP INPUT POWER/BRANCH CIRCUITS SHALL BE #8 AWG COPPER THWN (MIN.) FROM THE RESPECTIVE POWER SOURCE TO THE LIGHTING CONTACTOR/RELAY PANEL.
- INPUT CONTROL CIRCUITS SHALL BE #12 AWG COPPER THWN.
- FOR 120 VAC BRANCH CIRCUITS THE NEUTRAL CONDUCTOR SHALL NOT BE SWITCHED THROUGH THE RELAY CONTACTS. USE TERMINAL BLOCKS TO TRANSITION FROM VAULT BRANCH CIRCUIT WIRING TO FIELD WIRING.
- PROVIDE #10 AWG COPPER BONDING JUMPER FROM PANEL ENCLOSURE FRAME TO ENCLOSURE DOOR.
- PROVIDE 3-POSITION MAINTAINED CONTACT "HAND-OFF-AUTO" SELECTOR SWITCH FOR EACH LIGHTING CONTACTOR & MOUNT ON LIGHTING CONTACTOR PANEL ENCLOSURE DOOR. SELECTOR SWITCH SHALL BE SQUARE D CLASS 9001, TYPE KSTYPE SK SERIES RATED NEMA 4, 4X OR APPROVED EQUAL. INCLUDE LEGEND PLATE TO IDENTIFY THE DEVICE CONTROLLED (EX: "RWY 13 REILS" OR "RWY 31 PAPI").
- SEE "LIGHTING CONTACTOR SCHEMATIC" SHEET FOR ADDITIONAL INFORMATION ON WIRING. ALSO SEE "AIRFIELD LIGHTING CONTROL WIRING SCHEMATIC" SHEET FOR INFORMATION ON WIRING.
- INCLUDE LEGEND PLATE LABELED "NOTICE: CONTACTORS HAVE REMOTE LOCATED CONTROLS AND MAY ACTIVATE AT ANY TIME".
- 120/240 VAC PHASE "A" CONDUCTORS SHALL HAVE BLACK COLORED INSULATION. 120/240 VAC PHASE "B" CONDUCTORS SHALL HAVE RED COLORED INSULATION. NEUTRAL CONDUCTORS SHALL HAVE WHITE COLORED INSULATION. INSULATED EQUIPMENT GROUND WIRES SHALL HAVE GREEN COLORED INSULATION.
- CONTROL PANEL FOR AIRFIELD LIGHTING AND NAVAIDS SHALL BE MANUFACTURED BY A UL 508 INDUSTRIAL CONTROL PANEL BUILDER OR AN FAA APPROVED L-821 PANEL BUILDER, AND SHALL BE MANUFACTURED IN THE UNITED STATES TO COMPLY WITH THE AIRPORT IMPROVEMENT PROGRAM BUY AMERICAN PREFERENCE REQUIREMENTS. WHERE THE PANEL IS MANUFACTURED BY AN L-821 PANEL BUILDER IT SHALL BE LABELED AS AN L-821 PANEL.
- ALL FEEDER AND/OR BRANCH CIRCUIT CONDUCTORS OF THE SAME CIRCUIT (INCLUDING NEUTRAL CONDUCTORS AND EQUIPMENT GROUNDING CONDUCTORS) SHALL BE CONTAINED WITHIN THE SAME RACEWAY, AUXILIARY GUTTER, OR WIREWAY TO COMPLY WITH NEC 300.3(B). FOR VOLTAGE POWERED CIRCUITS TO AIRFIELD DEVICES, ROUTE ALL PHASE, NEUTRAL, AND EQUIPMENT GROUNDING CONDUCTORS FROM THE VAULT PANELBOARD TO THE RELAY/CONTACTOR PANEL AND THEN TO THE RESPECTIVE AIRFIELD DEVICE.

REVISION	
DATE	12/11/12
	TWO LIG CONTACTORS

MARSHALL COUNTY AIRPORT
 LACON, ILLINOIS
 BLOCK GRANT PROJ.: 3-17-0059-B15
 IL PROJ.: C75-4223

Hanson Proj. No.	10A00051
Filename	E-605.DWG
Scale	NONE
Date	12/14/12
LAYOUT	KNL 08/26/10
DRAWN	MLH 09/02/10
REVIEWED	KNL/CAH 03/30/11

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PAVE, LIGHT AND MARK
 805' EXTENSION
 LIGHTING CONTACTOR
 PANEL DETAIL

JAN 11, 2013 7:42 AM KINCAD0394
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