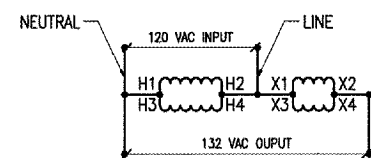


**CONTROL PANEL FOR WIND CONES**

(TYPICAL FOR 3)



NOTE:  
CONFIRM WIRING WITH RESPECTIVE  
TRANSFORMER MFR.

**120 VAC TO 132 VAC BOOST TRANSFORMER  
CONNECTION DIAGRAM FOR SQUARE D  
CAT. NO. 250SV43B OR CAT. NO. 500SV43B TRANSFORMER**

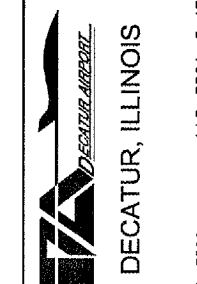
**KEYED NOTES**

- 1 CONTROL PANEL ENCLOSURE ADEQUATELY SIZED TO HOLD THE RESPECTIVE COMPONENTS AND EQUIPMENT. PANEL ENCLOSURE SHALL BE UL LISTED NEMA 4X STAINLESS STEEL WITH HINGED COVER FOR OUTDOOR APPLICATIONS. PANEL ENCLOSURE SHALL BE UL LISTED NEMA 12 PAINTED STEEL WITH HINGED COVER FOR THE UNIT LOCATED IN THE AIRPORT ELECTRICAL VAULT. PROVIDE INNER DOOR TO MOUNT PHOTOCELL BYPASS SWITCHES.
- 2 20 AMP, 120 VAC, 1 POLE SPECIFICATION GRADE TOGGLE SWITCH. MOUNT ON PANEL INNER DOOR PROVIDE LEGEND PLATES LABELED "RUNWAY XX PHOTOCELL BYPASS SWITCH" WHERE "XX" IS THE RESPECTIVE RUNWAY NUMBER. PROVIDE ADDITIONAL LEGEND PLATES LABELED "ON" & "PHOTOCELL", TO INDICATE SWITCH FUNCTION & POSITIONS.
- 3 POWER CONTROL WIRING SHALL BE SIZED AS REQUIRED PER NEC MINIMUM #10 AWG TYPE MTW, THW, OR THWN, COPPER. TERMINAL BLOCKS FOR POWER & CONTROL WIRING SHALL BE 600 VOLT, WITH AMPERAGE RATINGS IN CONFORMANCE WITH NEC TABLE 310-16 USING 75 DEGREE C WIRE FOR THE RESPECTIVE WIRE LUG RANGE, BOX LUG TYPE, SQUARE D CLASS 9080, TYPE GC6, OR APPROVED EQUAL. PROVIDE A MINIMUM OF 8 SPARE TERMINAL BLOCKS TO ACCOMMODATE CONNECTIONS TO BOOST TRANSFORMERS.
- 4 EQUIPMENT GROUNDING BAR: PROVIDE A GROUNDING BAR MOUNTED AND BONDED INSIDE THE PANEL ENCLOSURE, ADEQUATELY SIZED TO ACCOMMODATE ALL GROUND CONDUCTORS TO OR FROM THE CONTROL PANEL. TERMINATE ONE GROUND WIRE PER LUG/TERMINAL.
- 5 U.L. LISTED PER UL1449, AC SURGE PROTECTOR SUITABLE FOR 120/240 VAC, 1 PH, 3W PLUS GROUND SYSTEM, WITH SURGE CURRENT RATING OF 40 KA (MIN.), 8x20 MICROSECOND WAVE, PER MODE, AND STATUS INDICATION LIGHTS, JOSLYN MODEL 1265-21, SQUARE D CAT. NO. TVS120XR40S OR APPROVED EQUAL. MAINTAIN LEADS AS SHORT & AS STRAIGHT AS POSSIBLE. INCLUDE MOUNTING BRACKET.
- 6 PHOTOCELL RATED 2000 WATTS AT 120 VAC, WITH OFF DELAY, AND -40 DEGREE C TO 60 DEGREE C OPERATING TEMPERATURE RANGE, TORK MODEL NO. 2101, OR APPROVED EQUAL. WHERE CONTROL PANEL IS LOCATED INSIDE A BUILDING THE PHOTOCELL SHALL BE MOUNTED JUST ABOVE ROOF LEVEL OF RESPECTIVE BUILDING WHERE CONTROL PANEL IS INSTALLED. PHOTOCELL SHALL FACE NORTH.
- 7 30 AMP, 2 POLE, 240 VAC, U.L. LISTED, HEAVY DUTY FUSIBLE SAFETY SWITCH IN A NEMA 4X STAINLESS STEEL ENCLOSURE, WITHOUT KNOCKOUTS, SQUARE D CLASS 3110, CAT. NO. H221DS OR APPROVED EQUAL. PROVIDE TWO 20 AMP, U.L. LISTED CLASS RK5 FUSES AS MANUFACTURED BY BUSSMANN. INCLUDE 2 SPARE FUSES OF THE SAME SIZE AND TYPE. INCLUDE LEGEND PLATE "LABELED SERVICE DISCONNECT 120/240 VAC, 1 PH, 3W MAX FUSE SIZE: 20 AMP." SEE "ELECTRICAL ONE LINE DIAGRAM FOR WIND CONES" FOR ADDITIONAL DETAILS.

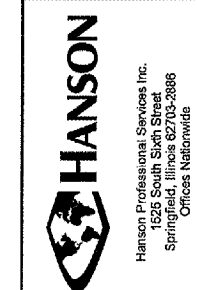
**NOTES**

1. FURNISH & INSTALL A WEATHERPROOF WARNING LABEL FOR EACH SERVICE DISCONNECT & CONTROL PANEL TO WARN PERSONS OF POTENTIAL ELECTRIC ARC FLASH HAZARDS, PER THE REQUIREMENTS OF NEC 110.16 "FLASH PROTECTION".
2. ELECTRIC SERVICE/POWER & WIND CONE CONTROL WORK SHALL BE PAID FOR UNDER THE FOLLOWING:  
 AS800579 ELECTRIC SERVICE FOR RUNWAY 12 AND RUNWAY 18 WIND CONES - PER LUMP SUM  
 AS800580 ELECTRIC SERVICE FOR RUNWAY 24 AND RUNWAY 30 WIND CONES - PER LUMP SUM  
 AS800581 ELECTRIC POWER FOR RUNWAY 6 AND RUNWAY 36 WIND CONES - PER LUMP SUM
3. PROVIDE LEGEND PLATES FOR THE RESPECTIVE WIND CONE CONTROL PANELS AS FOLLOWS:  
 "CONTROL PANEL RWY 6 WIND CONE & RWY 36 WIND CONE"  
 "CONTROL PANEL RWY 24 WIND CONE & RWY 30 WIND CONE"  
 "CONTROL PANEL RWY 12 WIND CONE & RWY 18 WIND CONE"

BY	
REVISION	
DATE	



Project No.	802-06TXVD_0800
Drawn	E-150.DWG
Scale	NONE
Date	03/31/06
LAYOUT	KNL 04/22/05
DRAWN	MY 04/25/05
REVIEWED	LDP 03/30/06



TAXIWAY "C"  
RECONSTRUCTION  
CONTROL PANEL  
FOR WIND CONES