

TWR Lighting, Inc. **MARK** *Enlightened Technology*

4300 WINDFERN RD #100 HOUSTON TX 77041-8943
VOICE (713) 973-6905 FAX (713) 973-9352
web: www.twrlighting.com

IMPORTANT!!!

PLEASE TAKE THE TIME TO FILL OUT THIS FORM COMPLETELY. FILE IT IN A SAFE PLACE. IN THE EVENT YOU EXPERIENCE PROBLEMS WITH, OR HAVE QUESTIONS CONCERNING YOUR CONTROLLER, THE FOLLOWING INFORMATION IS NECESSARY TO OBTAIN PROPER SERVICE AND PARTS.

MODEL # AA0/5MTSSLED 230V

SERIAL # _____

PURCHASE DATE _____

PURCHASED FROM _____

TWR Lighting, Inc. **MARK**[®]

Enlightened Technology[®]

AA0/5MTSSLED 230V CONTROLLER

TABLE OF CONTENTS

1.0	GENERAL INFORMATION	1
2.0	INSTALLATION.....	2
2.1	MOUNTING THE CONTROL CABINET.....	2
2.2	EXTERNAL PHOTOCELL WIRING.....	2
2.3	POWER WIRING	3
2.4	LED BEACON AND LED SIDELIGHT WIRING.....	3
2.5	LED BEACON AND LED SIDELIGHT ALARM WIRING.....	3
3.0	THEORY OF OPERATION	5
3.1	POWER SUPPLY.....	5
3.2	LED SIDELIGHTS.....	5
3.3	LED BEACON	5
4.0	MAINTENANCE GUIDE.....	6
4.1	RED OBSTRUCTION LIGHTING	6
4.2	L-810 LAMP REPLACEMENT.....	6
4.3	L-864 LED BEACON REPLACEMENT	6
4.4	L-864 CONTROLLER.....	6
4.5	PHOTOCELL	6
5.0	MAJOR COMPONENTS PARTS LIST	7
6.0	SUGGESTED SPARE PARTS LIST.....	8

WARRANTY & RETURN POLICY

RETURN MERCHANDISE AUTHORIZATION (RMA) FORM

TWR Lighting, Inc. **MARK**[®]

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AA0/5MTSSLED 230V CONTROLLER

APPENDIX

CHASSIS COMPONENT LAYOUT.....	1310-R
SCHEMATIC LAYOUT.....	1310-S
PHOTOCELL HOUSING DETAIL.....	100239 (REV H)
CURRENT MEASUREMENT RELAY.....	100694 (REV H)
A1 W/OL2-CASA LIGTING KIT.....	T1660
OL2CLED2CASA	100752 (REV B)
LEDBEACON2RFA	101009i (REV A)
WRAPLOCK FASTENING DETAIL.....	100984

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AA0/5MTSSLED 230V CONTROLLER

1.0 GENERAL INFORMATION

The TWR Lighting[®], Inc. (TWR[®]) Model AA0/5MTSSLED 230V Controller is for applications of one (1) LEDBEACON at the top and four (4) levels of LED sidelights..

All LED obstruction lights will burn steady.

A by-pass switch (SW1) allows the controller to be turned on during daylight hours without covering the photocell. This is particularly helpful since the controller can be mounted indoors while the photocell is outdoors. SW1 can be operated by turning “on” the toggle switch, which is mounted on the panel of the controller.

The photocell is the three (3) blade, twist to lock, type.

Power supplied to the controller shall be 230V AC.

The controller housing is rated at NEMA 4x. It is suitable for indoor or outdoor mounting.

Controller functions that are monitored by remote alarms in the form of dry contact closures (Form C) are as follows:

POWER FAILURE	Monitors 230V AC to the controller. Alarms in the event of power failure, or tripped circuit breaker.
LIGHTS “ON”	Gives an indication whenever the controller is activated.
LED BEACON	Will give an alarm in the event the LEDBEACON fails, along with a visual indicator for that circuit.
LED OBSTRUCTION LIGHTS	Will give an alarm when one (1) of the group of LED sidelights fails.

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AA0/5MTSSLED 230V CONTROLLER

2.0 INSTALLATION

2.1 MOUNTING THE CONTROL CABINET

(Refer to Drawing 1310-R)

The power supply control cabinet can be located at the base of the structure or in an equipment building. Mounting footprints are shown on drawing 1310-R. Power wiring to the control cabinet should be in accordance with local methods and National Electrical Codes (NEC).

2.1.1 If the control cabinet is mounted inside an equipment building, the photocell should be mounted vertically on ½” conduit outside the building above the eaves facing north. Wiring from the photocell socket to the control cabinet should consist of one (1) each, red, black, and white wires. The white wire is connected to the socket terminal marked “N,” the black wire is connected to the socket terminal marked “Li,” and the red wire is connected to the socket terminal marked “Lo.” The photocell should be positioned so that it does not “see” ambient light, which would prevent it from switching to the nightmode.

2.1.2 If the control cabinet is mounted outside an equipment building, the photocell should be mounted vertically on ½” conduit so the photocell is above the control cabinet. Care must be taken to assure that the photocell does not “see” any ambient light that would prevent it from switching into the nightmode. The photocell wiring is the same as in 2.1.1.

The wiring from the photocell, the service breaker, LEDBEACON, and the LED sidelights should enter the control cabinet through the watertight connectors in the bottom of the cabinet. Inside the cabinet, the connections will be made on the terminal strips and circuit breaker located at the bottom of the chassis. These connections are made as follows:

2.2 EXTERNAL PHOTOCELL WIRING

(Refer to Drawing 1310-R)

2.2.1 Connect the **BLACK** wire from the photocell to terminal block TB2 marked “L.”

2.2.2 Connect the **RED** wire from the photocell to terminal block TB2 marked “SSR.”

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AA0/5MTSSLED 230V CONTROLLER

2.2.3 Connect the **WHITE** wire from the photocell to terminal block TB2 marked "N."

2.3 POWER WIRING

(Refer to Drawing 1310-R)

2.3.1 Power wiring to the control cabinet should be in accordance with local methods and National Electrical Codes (NEC).

2.3.2 Circuit breaker needs to be rated at 10 amps.

2.3.3 Connect incoming 230V AC line to terminal block TB1 marked "L."

2.3.4 Connect the neutral wire(s) to one (1) of the terminal blocks on TB1 marked "N."

2.3.5 Connect the AC ground to the aluminum mounting plate.

2.4 LED BEACON AND LED SIDELIGHT WIRING

(Refer to Drawings 1310-R AND T1660)

2.5 LED BEACON AND LED SIDELIGHT ALARM WIRING

(Refer to Drawings 1310-R and 1310-S)

2.5.1 Alarm relays K1, K2, and Modules M1-M5 are provided for independent contact closures for: Power Failure, Lights "ON," LED Sidelight Burnout, and LEDBEACON burnout.

2.5.2 Alarm wiring: To utilize all of the red light alarms, the customer will need seven (7) pair of wires to interface with the alarm device. One (1) wire from each of the seven (7) pair will terminate at the points marked common (c). The remaining wire from each pair will terminate as follows:

"SL1" LED Sidelight Burnout: Connect to Module M2, terminal #18, for normally open (or) terminal #16, for normally closed monitoring.

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AA0/5MTSSLED 230V CONTROLLER

“SL2” LED Sidelight Burnout: Connect to Module M3, terminal #18, for normally open (or) terminal #16, for normally closed monitoring.

“SL3” LED Sidelight Burnout: Connect to Module M4, terminal #18, for normally open (or) terminal #16, for normally closed monitoring.

“SL4” LED Sidelight Burnout: Connect to Module M5, terminal #18, for normally open (or) terminal #16, for normally closed monitoring.

“B” LED BEACON Burnout: Connect to Module M1, terminal #18, for normally open (or) terminal #16, for normally closed monitoring.

Power Failure Alarm: Connect to relay K1, terminal #3, for normally open (or) terminal #6, for normally closed monitoring.

Lights “ON” Alarm: Connect to relay K2, terminal #3, for normally open (or) terminal #6, for normally closed monitoring.

2.5.3 Testing: To test alarms, follow the procedures using the “ohm” meter between alarm common and alarm points.

Power Failure Pull circuit breaker at electrical panel.

Lights “ON” Operate photocell by-pass switch (SW1) or cover the photocell.

LED BEACON and LED Sidelights Trip circuit breaker on the controller panel.

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AA0/5MTSSLED 230V CONTROLLER

3.0 THEORY OF OPERATION

3.1 POWER SUPPLY

230V AC enters the controller from the circuit breaker panel. Line sits at the 6390-FAA photocell waiting to be switched and also keeps the power failure relay K1 energized. When the 6390-FAA photocell is activated, line SSR energizes K2 “Lights On” relay. This can also be accomplished by using the photocell by-pass switch (SW1).

3.2 LED SIDELIGHTS

Line (SSR) is sent to Modules M2-M5, then to circuit breakers “SL1-SL4.” Modules M2-M5 are the current sensors for the LED sidelights. If one (1) LED sidelight within any level burns out, that particular module for that circuit will detect it, which will cause a contact closure for LED sidelight alarm.

3.3 LED BEACON

Line (SSR) is also being sent to Module M1, which is the current sensing module for the LEDBEACON “B.” If Module M1 detects a LEDBEACON burnout, then the module would provide a contact closure along with a visual indication for that circuit.

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4.0 MAINTENANCE GUIDE

4.1 RED OBSTRUCTION LIGHTING

No scheduled maintenance is required. Perform on an “as needed” basis only.

TOOLS REQUIRED: NONE

4.2 L-810 LED LAMP REPLACEMENT

No scheduled maintenance is required. Perform on an “as needed” basis only.

4.3 L-864 LED BEACON REPLACEMENT

No scheduled maintenance is required. Perform on an “as needed” basis only.

4.4 L-864 CONTROLLER

No scheduled maintenance is required. Perform on an “as needed” basis only.

4.5 PHOTOCELL

The photocell is a sealed unit. No maintenance is needed or required other than replacement as necessary.

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5.0 MAJOR COMPONENTS PARTS LIST

QTY	PART NUMBER	DESCRIPTION
1	6390-FAA	Photocell
1	VJ1210HWPL1	Enclosure, NEMA 4x
2	PB27E122	Octal Sockets (K1 and K2)
7	8WA1204	Terminal Blocks (TB1 and TB2)
5	S261D1	1 amp Circuit Breaker (B) (SL1 - SL4)
2	8WA1808	End Stop
2	9KE240V	SPDT Relay (K1 and K2)
1	SSPIGTAIL	20' Photocell Pigtail
1	STJ01002	15 amp SPDT Switch (SW1)
5	RM4JA31MW	Current Sensor (M1)

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6.0 SUGGESTED SPARE PARTS LIST

QTY	PART NUMBER	DESCRIPTION
1	6390-FAA	Photocell
1	9KE240V	SPDT Relay (K1 and K2)
1	RM4JA31MW	Current Sensor (M1)

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Warranty & Return Policy

TWR Lighting®, Inc. (“TWR®”) warrants its products (other than “LED Product”) against defects in design, material (excluding incandescent bulbs) and workmanship for a period ending on the earlier of two (2) years from the date of shipment or one (1) year from the date of installation.

TWR Lighting®, Inc. (“TWR®”) warrants its “LED Product” against defects in design, material and workmanship for a period of five (5) years from the date of shipment. TWR®, at its sole option, will, itself, or through others, repair, replace or refund the purchase price paid for “LED Product” that TWR® verifies as being inoperable due to original design, material, or workmanship. All warranty replacement “LED Product” is warranted only for the remainder of the original warranty of the “LED Product” replaced. Replacement “LED Product” will be equivalent in function, but not necessarily identical, to the replaced “LED Product.”

TWR Lighting®, Inc. (“TWR®”) warrants its “LED Product” against light degradation for a period of five (5) years from the date of installation. TWR®, at its sole option, will, itself, or through others, repair, replace, or refund the purchase price paid for “LED Product” that TWR® verifies as failing to meet 75% of the minimum intensity requirements as defined in the FAA Advisory Circular 150/5345-43G dated 09/26/12. All warranty replacement “LED Product” is warranted only for the remainder of the original warranty of the “LED Product” replaced. Replacement “LED Product” will be equivalent in function, but not necessarily identical, to the replaced “LED Product.”

Replacement parts (other than “LED Product”) are warranted for 90 days from the date of shipment.

Conditions not covered by this Warranty, or which might void this Warranty are as follows:

- x Improper Installation or Operation
- x Misuse
- x Abuse
- x Unauthorized or Improper Repair or Alteration
- x Accident or Negligence in Use, Storage, Transportation, or Handling
- x Any Acts of God or Nature
- x **Non-OEM Parts**

The use of Non-OEM parts or modifications to original equipment design will void the manufacturer warranty and could invalidate the assurance of complying with FAA requirements as published in Advisory Circular 150/5345-43.

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Warranty & Return Policy (continued)

Field Service – Labor, Travel, and Tower Climb are not covered under warranty. Customer shall be obligated to pay for all incurred charges. An extensive network of certified and insured Service Representatives is available if requested.

Return Terms – You must first contact our Customer Service Department at **713-973-6905** to acquire a Return Merchandise Authorization (RMA) number in order to return the product(s). Please have the following information available when requesting an RMA number:

- x The contact name and phone number of the tower owner
- x The contact name and phone number of the contractor
- x The site name and number
- x The part number(s)
- x The serial number(s) (if any)
- x A description of the problem
- x The billing information
- x The Ship To address

This RMA number must be clearly visible on the outside of the box. If the RMA number is not clearly labeled on the outside of the box, your shipment will be refused. Please ensure the material you are returning is packaged carefully. **The warranty is null and void if the product(s) are damaged in the return shipment.**

All RMAs must be received by TWR LIGHTING[®], INC., 4300 WINDFERN RD #100, HOUSTON TX 77041-8943, within 30 days of issuance.

Upon full compliance with the Return Terms, TWR[®] will replace, repair and return, or credit product(s) returned by the customer. It is TWR[®]'s sole discretion to determine the disposition of the returned item(s).

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AA0/5MTSSLED 230V CONTROLLER

Warranty & Return Policy (continued)

Replacements – Replacement part(s) will be shipped and billed to the customer for product(s) considered as Warranty, pending return of defective product(s). When available, a certified reconditioned part is shipped as warranty replacement with a Return Merchandise Authorization (RMA) number attached. Upon receipt of returned product(s), inspection, testing, and evaluation will be performed to determine the cause of defect. The customer is then notified of the determination of the testing.

- x Product(s) that is deemed defective and/or unrepairable and covered under warranty - a credit will be issued to the customer's account.
- x Product(s) found to have no defect will be subject to a **\$75.00 per hour testing charge (1 hour minimum), which will be invoiced to the customer.** At this time the customer may decide to have the tested part(s) returned and is responsible for the return charges.
- x Product(s) under warranty, which the customer does not wish returned, the customer will be issued a credit against the replacement invoice.

Repair & Return – A Return Merchandise Authorization (RMA) will be issued for all part(s) returned to TWR[®] for repair. Upon receipt of returned product(s), inspection, testing, and evaluation will be performed to determine the cause of defect. The customer is then notified of the determination of the testing. If the returned part(s) is deemed unrepairable, or the returned part(s) is found to have no defect, the customer will be subject to a **\$75.00 per hour testing charge (1 hour minimum), which will be invoiced to the customer.** Should the returned parts be determined to be repairable, a written estimated cost of repair will be sent to the customer for their written approval prior to any work being performed. In order to have the tested part(s) repaired and/or returned, the customer must issue a purchase order and is responsible for the return shipping charges.

Return to Stock – Any order that is returned to TWR[®] for part(s) ordered incorrectly by the customer, or unneeded upon receipt, the customer is required to pay a **20% restocking fee.** A credit will be issued once it is determined that the Return Terms are met.

Credits – Credits are issued once it is determined that all of the Warranty and Return Terms are met. All credits are processed on Fridays. In the event a Friday falls on a Holiday, the credit will be issued on the following Friday.

Freight – All warranty replacement part(s) will be shipped via ground delivery and paid for by TWR[®]. Delivery other than ground is the responsibility of the customer.

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AA0/5MTSSLED 230V CONTROLLER

Warranty & Return Policy (continued)

REMEDIES UNDER THIS WARRANTY ARE LIMITED TO PROVISIONS OF REPLACEMENT PARTS AND REPAIRS AS SPECIFICALLY PROVIDED. IN NO EVENT SHALL TWR[®] BE LIABLE FOR ANY OTHER LOSSES, DAMAGES, COSTS, OR EXPENSES INCURRED BY THE CUSTOMER, INCLUDING, BUT NOT LIMITED TO, LOSS FROM FAILURE OF THE PRODUCT(S) TO OPERATE FOR ANY TIME, AND ALL OTHER DIRECT, INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, INCLUDING ALL PERSONAL INJURY OR PROPERTY DAMAGE DUE TO ALLEGED NEGLIGENCE, OR ANY OTHER LEGAL THEORY WHATSOEVER. THIS WARRANTY IS MADE BY TWR[®] EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, WHETHER EXPRESSED OR IMPLIED. WITHOUT LIMITING THE GENERALITY OF THE FORGOING, TWR[®] MAKES NO WARRANTY OF MERCHANTABILITY OR FITNESS OF THE PRODUCT(S) FOR ANY PARTICULAR PURPOSE. TWR[®] EXPRESSLY DISCLAIMS ALL OTHER WARRANTIES.

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RETURN MATERIAL AUTHORIZATION (RMA) FORM

RMA#: _____ **DATE:** _____

CUSTOMER: _____

CONTACT: _____ **PHONE NO.:** _____

ITEM DESCRIPTION (PART NO.): _____

MODEL NO.: _____ **SERIAL NO.:** _____

ORIGINAL TWR INVOICE NO.: _____ **DATED:** _____

DESCRIPTION OF PROBLEM: _____

SIGNED _____ **DATE NEEDED** _____

RETURN ADDRESS: _____

PLEASE RETURN PRODUCT TO: 4300 WINDFERN RD. #100 HOUSTON TX 77041-8943

TWR Lighting, Inc. **HARK**[®]

Enlightened Technology[®]

AA0/5MTSSLED 230V CONTROLLER

RETURN MATERIAL AUTHORIZATION (RMA) FORM

RMA#: _____ **DATE:** _____

CUSTOMER: _____

CONTACT: _____ **PHONE NO.:** _____

ITEM DESCRIPTION (PART NO.): _____

MODEL NO.: _____ **SERIAL NO.:** _____

ORIGINAL TWR INVOICE NO.: _____ **DATED:** _____

DESCRIPTION OF PROBLEM: _____

SIGNED _____ **DATE NEEDED** _____

RETURN ADDRESS: _____

PLEASE RETURN PRODUCT TO: 4300 WINDFERN RD. #100 HOUSTON TX 77041-8943

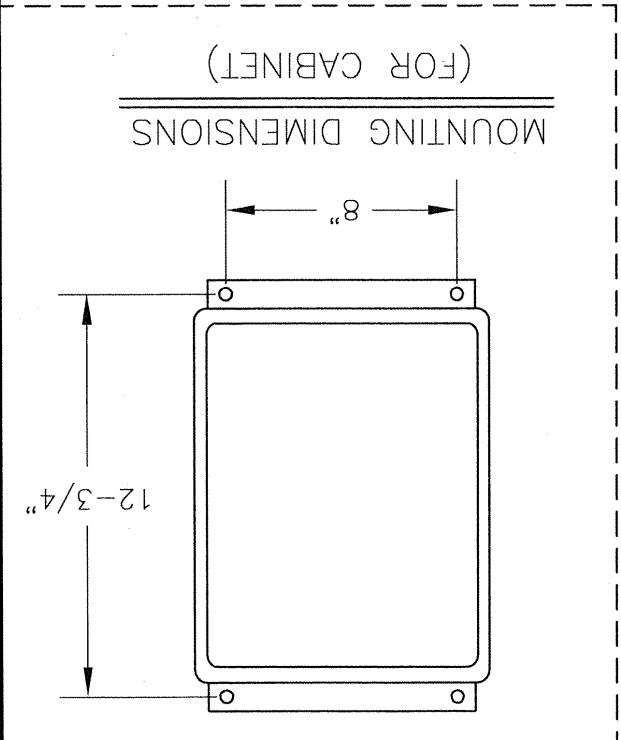
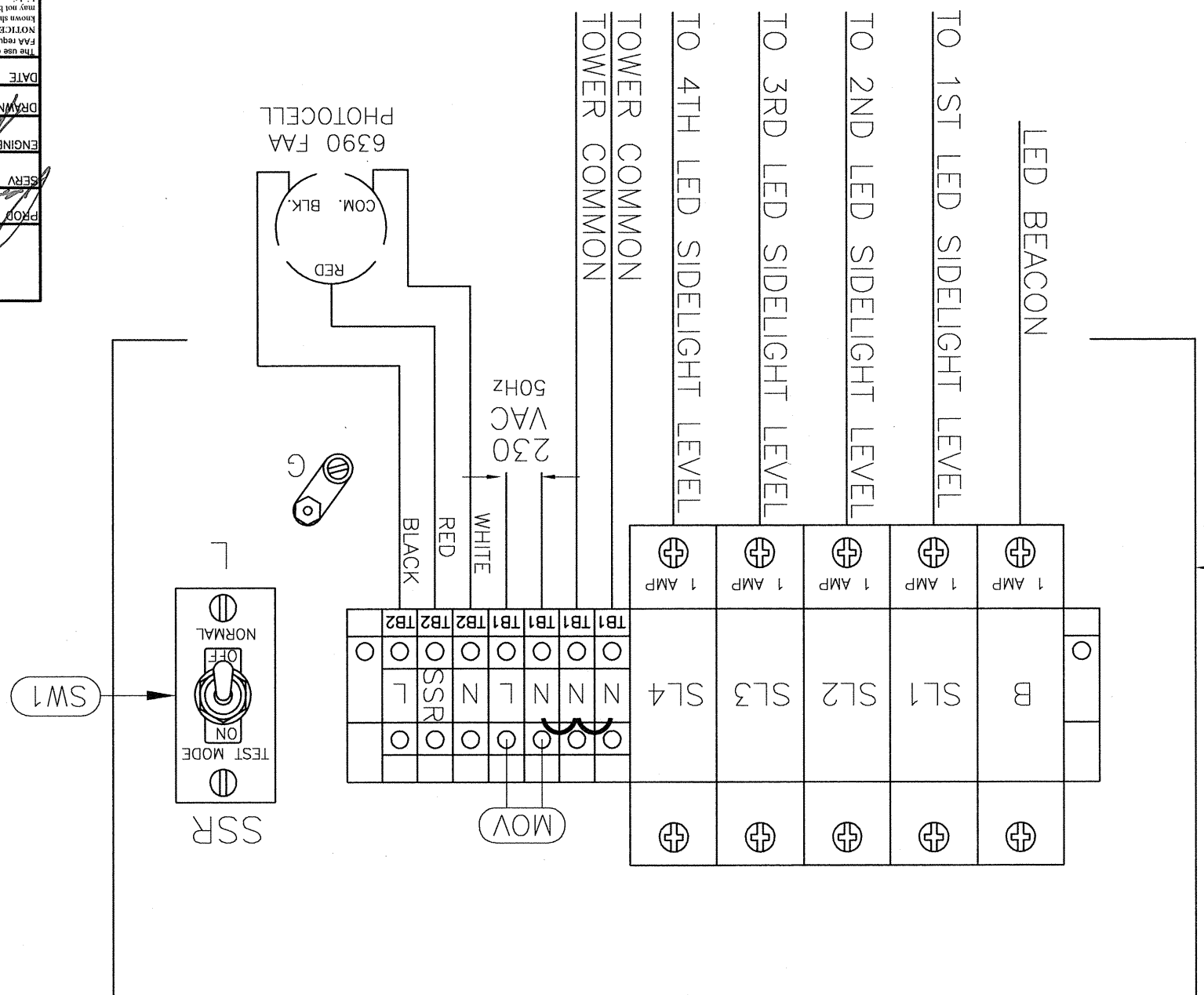
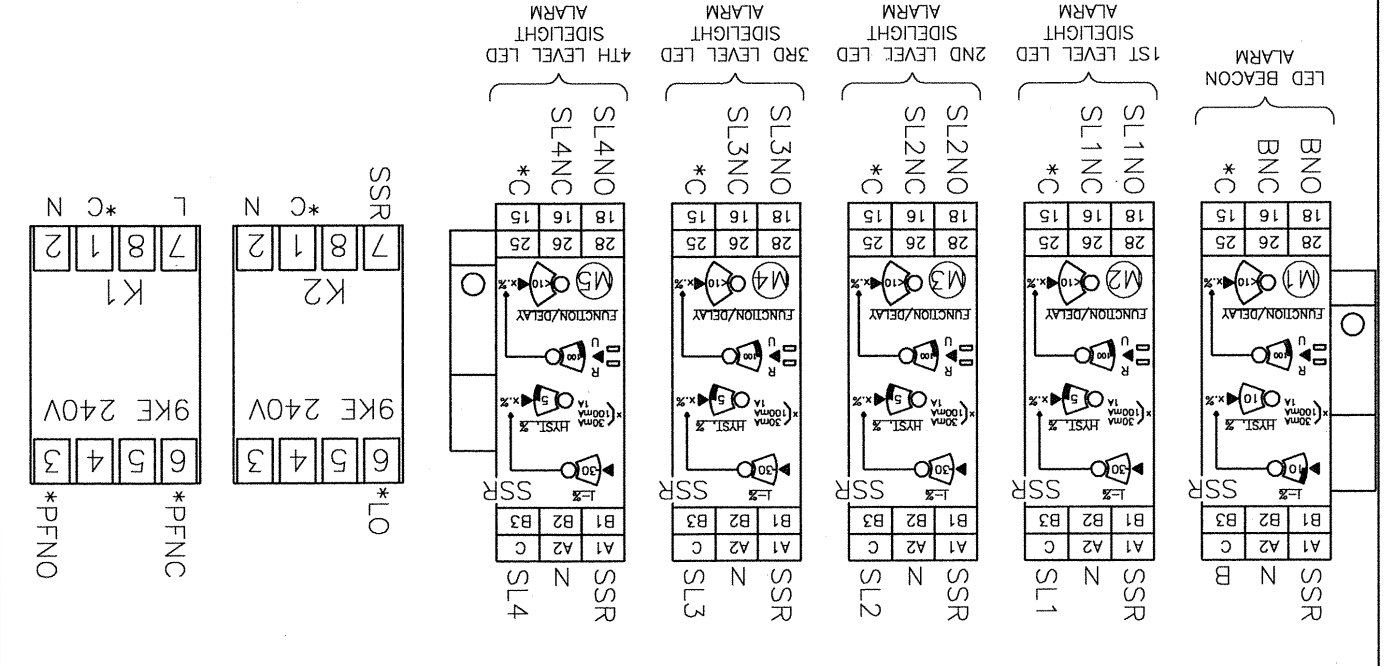
*CUSTOMER ALARM POINTS

SL1NC=1ST LEVEL LED SIDELIGHT ALARM (NORMALLY CLOSED)
 SL1NO=1ST LEVEL LED SIDELIGHT ALARM (NORMALLY OPEN)
 SL2NC=2ND LEVEL LED SIDELIGHT ALARM (NORMALLY CLOSED)
 SL2NO=2ND LEVEL LED SIDELIGHT ALARM (NORMALLY OPEN)
 SL3NC=3RD LEVEL LED SIDELIGHT ALARM (NORMALLY CLOSED)
 SL3NO=3RD LEVEL LED SIDELIGHT ALARM (NORMALLY OPEN)
 SL4NC=4TH LEVEL LED SIDELIGHT ALARM (NORMALLY CLOSED)
 SL4NO=4TH LEVEL LED SIDELIGHT ALARM (NORMALLY OPEN)
 BNC=LED BEACON ALARM (NORMALLY CLOSED)
 BNO=LED BEACON ALARM (NORMALLY OPEN)
 PFNC=POWERFAIL (NORMALLY CLOSED)
 PFX=POWERFAIL (NORMALLY OPENED)
 LO=LIGHTS "ON" INDICATOR
 C=ALARM COMMON

NOTES:

1. PLUG 6390-FAA PHOTOCELL INTO 43109
- TWIST LOCK RECEPTACLE AND TWIST TO LOCK.
2. WIRES ARE CONNECTED LETTER TO LETTER. (EXAMPLE) N TO N...

PANEL SIZE 10-7/8" X 8-7/8"



AAO/5MTSSLED230V CONTROLLER

PROJ. DEPT. _____

SERV. DEPT. _____

ENGINEER _____

J. ZAMORANO

DATE 01/19/2015 SCALE N.T.S.

DWG. NO. _____

SHEET SIZE B

SHEET QTY. 1 OF 1

1310-R

FAA requirements as published in Advisory Circular 150/5345-43. The use of non-FAA parts or modifications to original equipment design will void the manufacturer warranty and could invalidate the assurance of compliance with FAA requirements.

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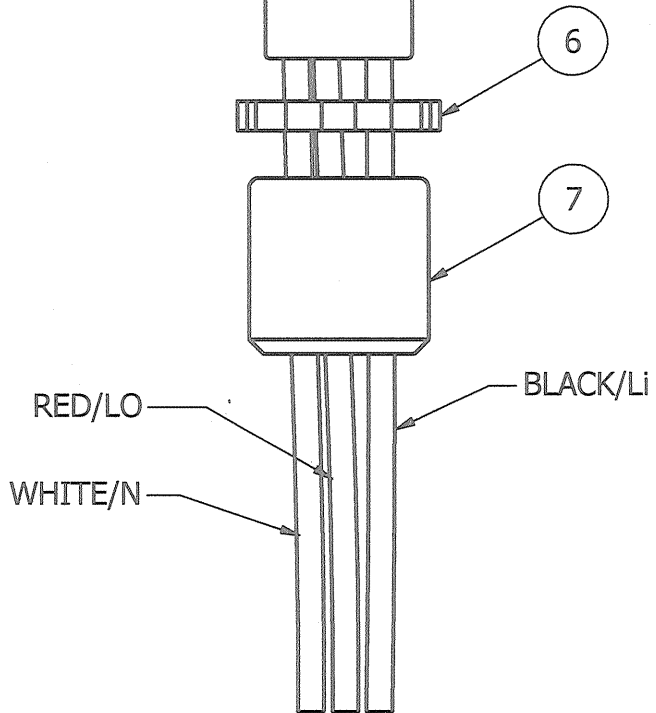
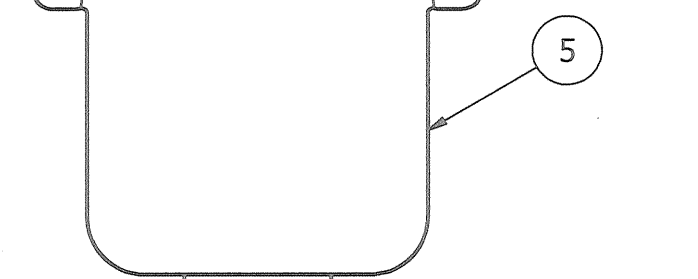
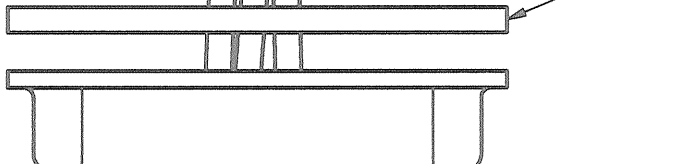
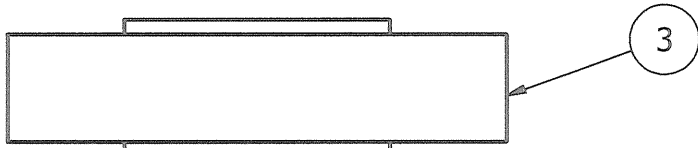
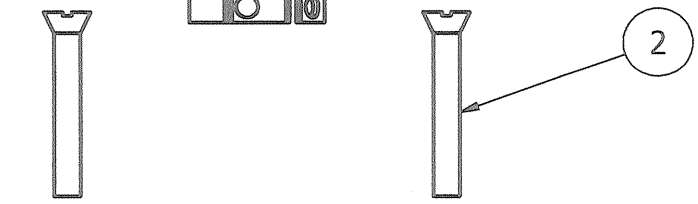
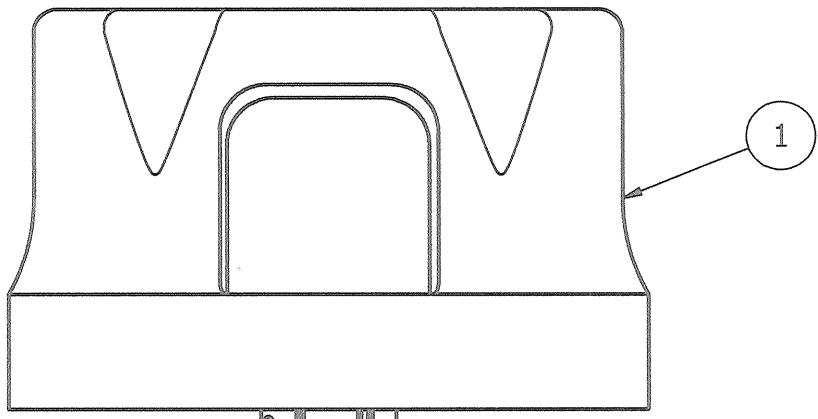
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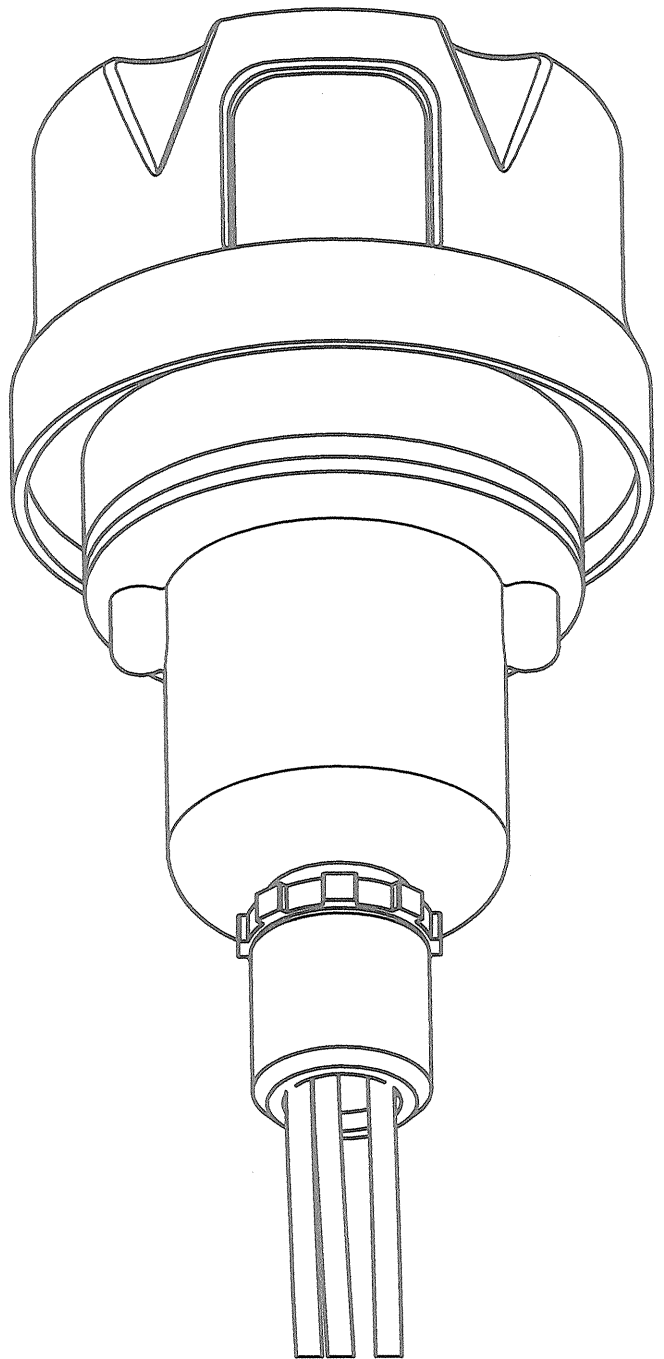
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PARTS LIST		
ITEM	QTY	PART NUMBER
1	1	PHOTOCELL
2	2	6-32 x 1" SCREW
3	1	RECEPTACLE SOCKET
4	1	RECEPTACLE GASKET
5	1	RECEPTACLE HOUSING
6	1	1/2" CONDUIT LOCKNUT
7	1	3/4" TO 1/2" REDUCER



EXPLODED VIEW



ASSEMBLY

NOTES:

- ITEM #7 CAN BE USED TO REDUCE 3/4" CONDUIT TO 1/2" CONDUIT AT THE HOUSING OR AT THE CONTROLLER ITSELF.
- IF ADDITIONAL WIRE IS REQUIRED OVER THE FACTORY 20', USE THE FOLLOWING CHART.
 21' TO 300' - 16 AWG TFFN
 301' TO 500' - 14 AWG TFFN

PHOTOCELL HOUSING DETAIL

PROD. DEPT
 SERV. DEPT
 ENGINEER
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DRAWN BY	vhernandez	SHEET SIZE	B	SHEET QTY.	1 OF 1
DATE	10/18/1995	SCALE	1/1	DWG. NO.	100239i

DATE	REV	AUTHOR	DESCRIPTION
02/03/2015	H	JZAMORANO	UPDATED NOTES

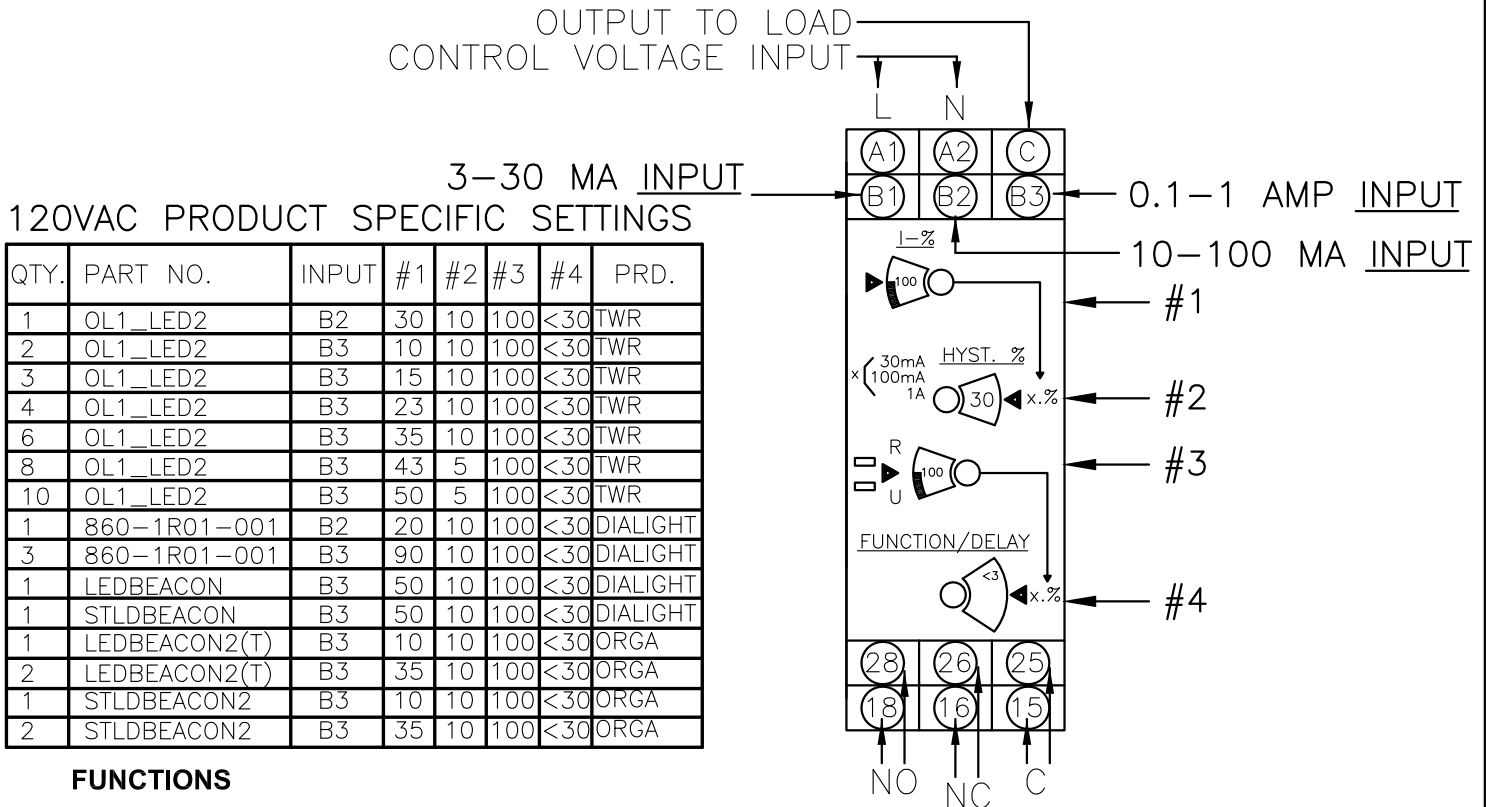
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1

AC UNITS CURRENT MEASUREMENT—RM4JA31M



120VAC PRODUCT SPECIFIC SETTINGS

QTY.	PART NO.	INPUT	#1	#2	#3	#4	PRD.
1	OL1_LED2	B2	30	10	100	<30	TWR
2	OL1_LED2	B3	10	10	100	<30	TWR
3	OL1_LED2	B3	15	10	100	<30	TWR
4	OL1_LED2	B3	23	10	100	<30	TWR
6	OL1_LED2	B3	35	10	100	<30	TWR
8	OL1_LED2	B3	43	5	100	<30	TWR
10	OL1_LED2	B3	50	5	100	<30	TWR
1	860-1R01-001	B2	20	10	100	<30	DIALIGHT
3	860-1R01-001	B3	90	10	100	<30	DIALIGHT
1	LED BEACON	B3	50	10	100	<30	DIALIGHT
1	STLDBEACON	B3	50	10	100	<30	DIALIGHT
1	LED BEACON2(T)	B3	10	10	100	<30	ORGA
2	LED BEACON2(T)	B3	35	10	100	<30	ORGA
1	STLDBEACON2	B3	10	10	100	<30	ORGA
2	STLDBEACON2	B3	35	10	100	<30	ORGA

FUNCTIONS

- 1 Adjustment of current threshold as % of setting range. ±5%
- 2 Hysteresis adjustment from 5 to 30 % ▲.
- 3 Fine adjustment of time delay as % of setting range max. value.
- 4 10-position switch combining
 - selection of the timing range: 1 s, 3 s, 10 s, 30 s, no time delay.
 - selection of overcurrent (>) or undercurrent (<) detection. See table below.
- R Yellow LED: indicates relay state (Off for de-energized relay, On for energized).
- U Green LED: indicates that supply to the RM4 is present.

Overcurrent Control	Overcurrent or Undercurrent Control ■	Measuring Range
Yes	Yes	3 MA - 1,000 MA

Detailed Positions for Switch 4

Switch Position	Function	Time Delay (t)
< 0	Undercurrent detection	No time delay
< 1	Undercurrent detection	0.05 to 1 s
< 3	Undercurrent detection	0.15 to 3 s
< 10	Undercurrent detection	0.5 to 10 s
< 30	Undercurrent detection	1.5 to 30 s
> 0	Overcurrent detection	No time delay
> 1	Overcurrent detection	0.05 to 1 s
> 3	Overcurrent detection	0.15 to 3 s
> 10	Overcurrent detection	0.5 to 10 s
> 30	Overcurrent detection	1.5 to 30 s

- = Selection by switch on front face
- ▲ = Value of current between energization and de-energization of the output relay (% of the current threshold to be measured).

*Due to current draw tolerances slight adjustments to setting #1 may be needed for proper alarming.

Sign: _____

LED BEACON 2RF

204M TOWER HT (B)

163M TOWER HT (SL1)

122M TOWER HT (SL2)

81M TOWER HT (SL3)

40M TOWER HT (SL4)

ARMOR CABLE

ARMOR CABLE

ARMOR CABLE

TO CONTROLLER

BRIDGE NOT TO EXCEED 75M

GROUND TO JUNCTION BOX

GROUND TO JUNCTION BOX

GROUND TO JUNCTION BOX

GROUND TO JUNCTION BOX

GROUND TO JUNCTION BOX

⊗ = TERMINAL

WIRING DIAGRAM

A1 W/OL2-CASA LIGHTING KIT
MAXIMUM TOWER FACE WIDTH 5.5M

PROD. DEPT.
SERV. DEPT.
ENGINEER

TWR Lighting, Inc.
Enlightened Technology®

DRAWN BY J. ZAMORANO

SHEET SIZE B SHEET QTY. 1 OF 1

DATE 08/07/2015

SCALE N.T.S.

DWG. NO. T1660

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Lighting, Inc.

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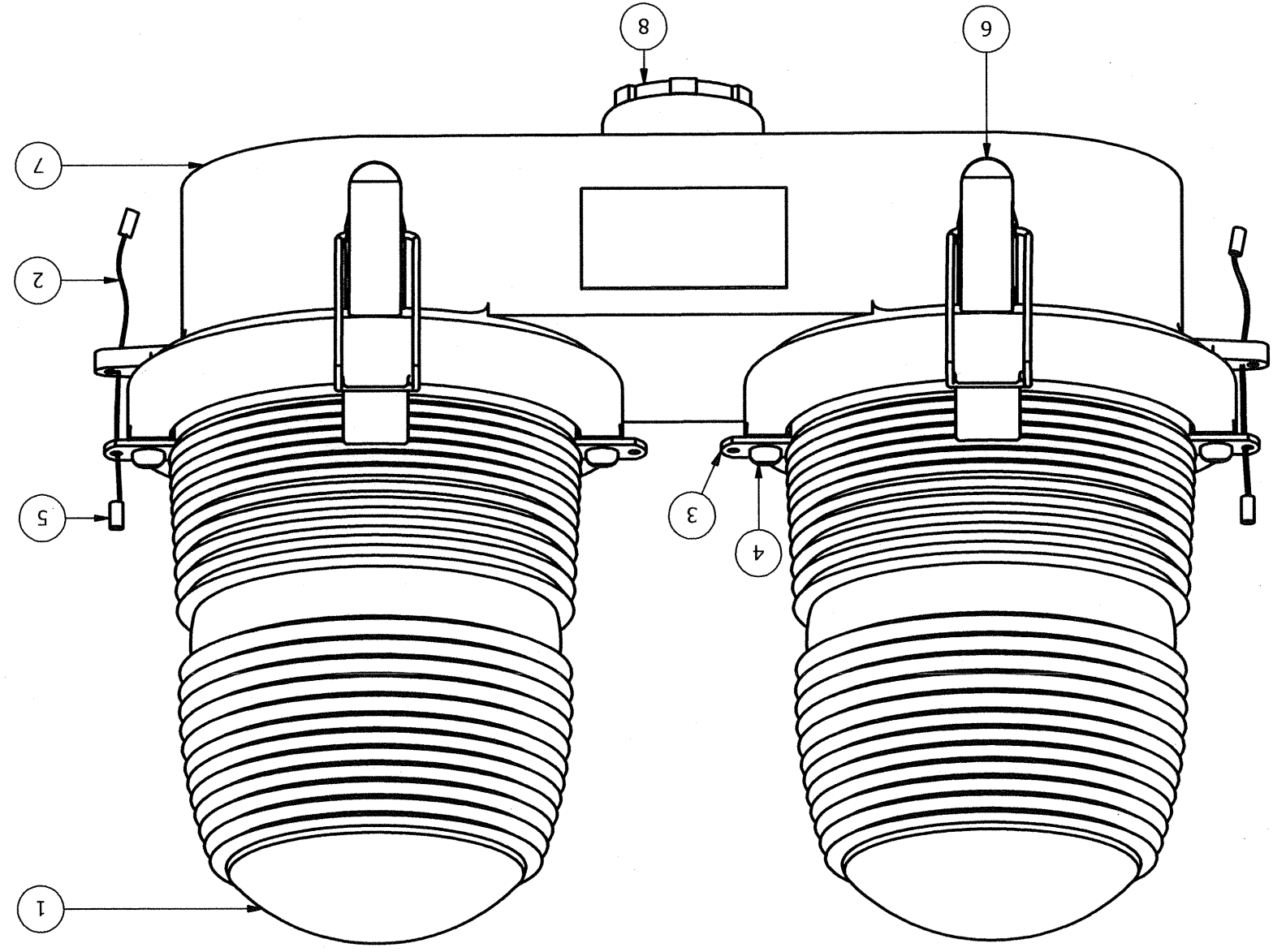
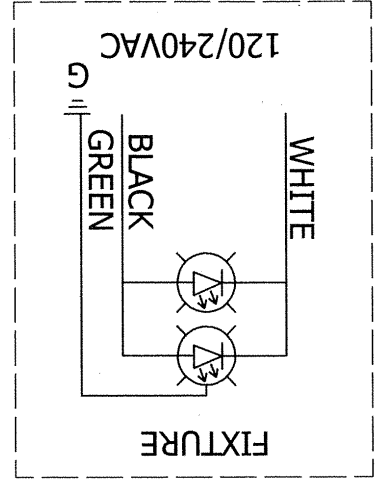
DATE: 100752
 DWG. NO.: 100752
 SCALE: N.T.S.
 DRAWN BY: jjustamante
 SHEET SIZE: B
 SHEET QTY: 1 OF 1

ENGINEER: *[Signature]*
 PROD. DEPT.: *[Signature]*
 SERV. DEPT.: *[Signature]*

TWR Lighting, Inc. HARRIS
Enlightened Technology

OL2CLEDD2CASA (120/240 VAC)

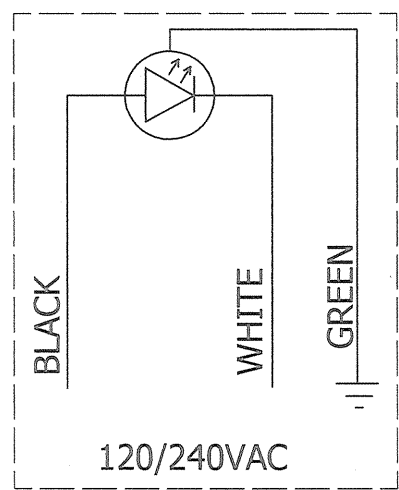
AUTHOR	JZAMORANO	DATE	1/25/2016
REV	B	DESCRIPTION	UPDATED DIAGRAM



* = ITEMS NOT SHOWN

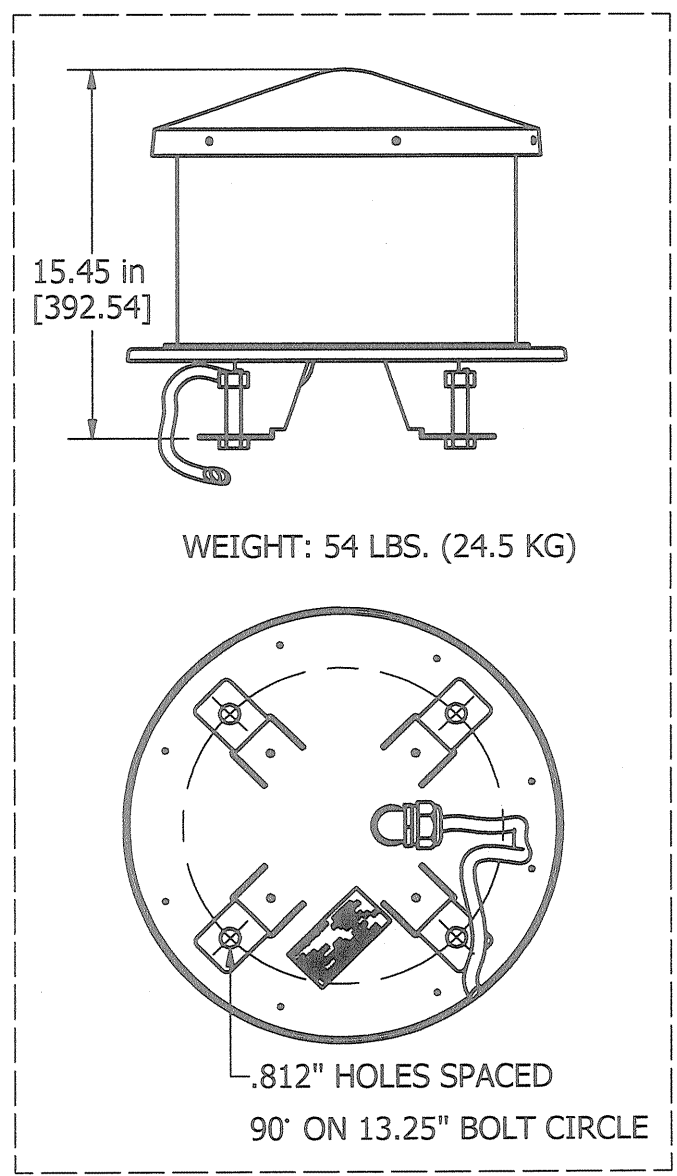
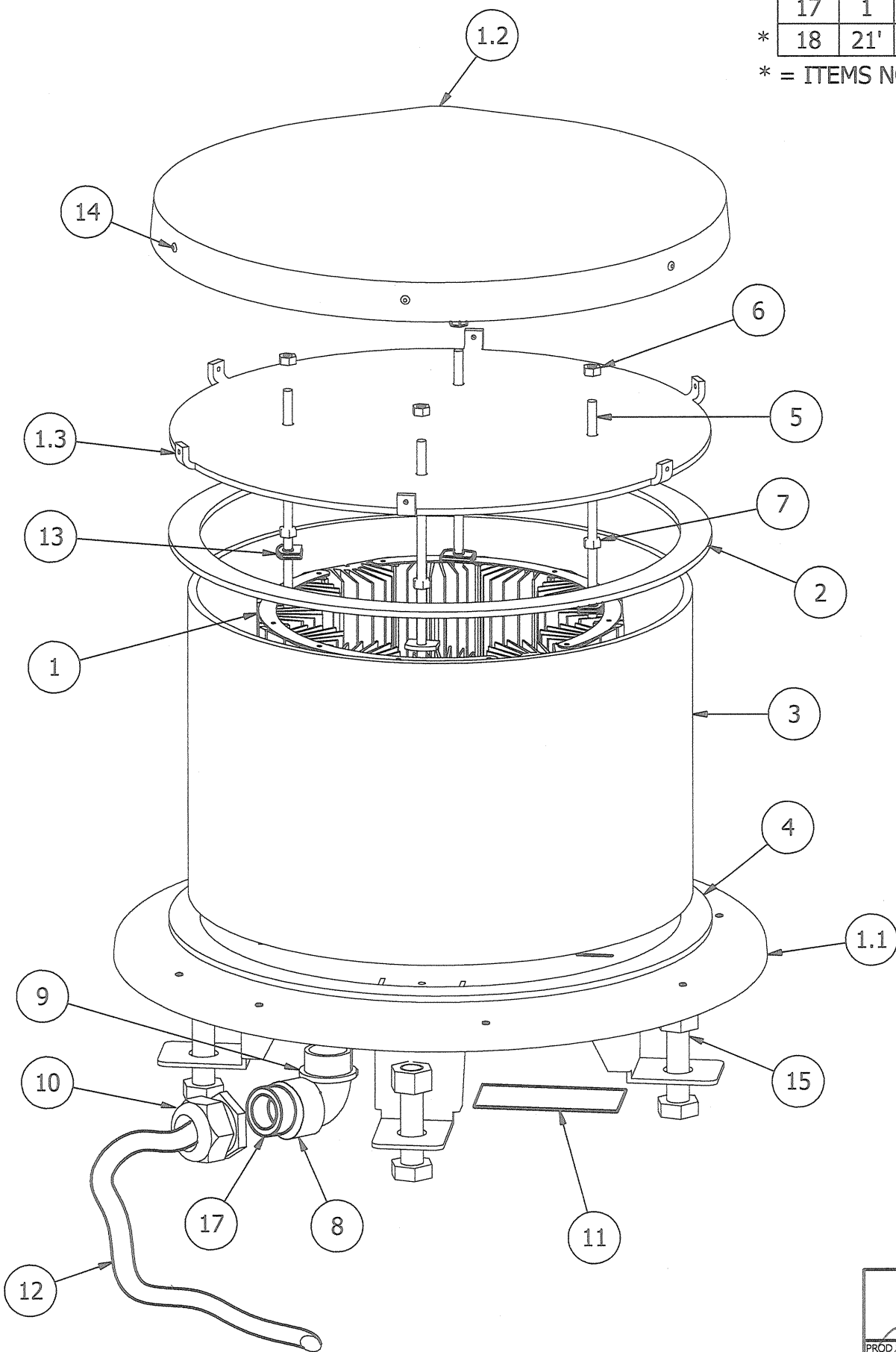
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	OL2CLEDD2CASA	DESCRIPTION
1.1	2	100588	OL 6LED BASE PLATE
1.2	2	100591	OL 6LED STAR DISK
1.3	2	A10290	5/32" ID RUBBER GROMMET
1.4	12	STE01-047	LED VERTICAL PCB
1.5	12	STD05008	LED EMITTER
1.6	2	OLG2	OL 1.6 LED GASKET
1.7	2	AP100846	SIDELIGHT LENS CLEAR ACRYLIC
1.8	2	106CP	LENS HOLDER RING
1.9	2	PS90-260/24	120/240VAC POWER SUPPLY
1.10	32	18PRSS	1/8 X .45 SS POP RIVET
1.11	12	100751	SHIM
1.12	12	STD05005	5mm. LED
1.13	12	STA08022	RESISTOR 25.5Ω 1/4W
1.14	3	WIRENUTRD	RED WIRE NUT
1.15	0.75	18AWG RED/BLK	#18AWG TEFLON TYPE EE RED/BLACK
2	2	7X7SS	1/16 HOL 7X7 S.S. WIRE
3	4	12V245	OL LENS CLIP
4	4	832X14PH	8-32 X 1/4 PH SS SLOT SCREW
5	4	A1A	STAKON
6	4	HC255SS	SIDELIGHT LATCH
7	1	OL2CP	OL-2 CASTING BODY PAINT
8	1	A314	LOCK NUT

Parts List



Parts List				
ITE	QTY	PART NUMBER	DESCRIPTION	
1	1	LEDLITEENG2A	120 VAC L-864 LED LIGHT ENG	
1.1	1	100672RF	LED BEACON BASE PLATE	
1.2	1	100344RF	CAP DUAL BEACON	
1.3	1	100673RF	LED BEACON1 LID PLATE	
2	1	STBEAGSKT4	GASKET 1/8 x 15 ODX	
3	1	STLDBCTUBE2	CLEAR ACRYLIC TUBE 14"	
4	1	STBEAGSKT	GASKET 3/16 X 15 1/4	
5	4	100727	14-20 X 8-13/16 S/S	
7	4	1420SSNUTN	1/4-20 S/S NUT W/NYLON	
6	8	1420NUT	1/4-20 S/S NUT	
8	1	EL190S	1" 90 SHORT ELBOW GALV	
9	1	A315	1" CONDUIT LOCKNUT GALV	
10	1	CPCFST03	1" FLEX TITE CORD CONNECTOR	
11	1	STCONLAB2	PRODUCT LABEL	
12	19'	COF03	1" FLEX CONDUIT	
13	2	100606M	RETAINING WASHER	
14	6	18PRSS-2	1/8 X .45 SS POP RIVET	
15	4	58X112	A325 5/8 X 1-1/2 W/LNUT	
*	16	3	14RB-2577	FEM DISC 16-14 GA
	17	1	RE32	1" TO 3/4" REDUCER
*	18	21'	CSO14/3	3- #14 AWG WIRE SO CORD

* = ITEMS NOT SHOWN



WEIGHT: 54 LBS. (24.5 KG)

.812" HOLES SPACED 90° ON 13.25" BOLT CIRCLE

LED BEACON2RFA ASSEMBLY DETAIL

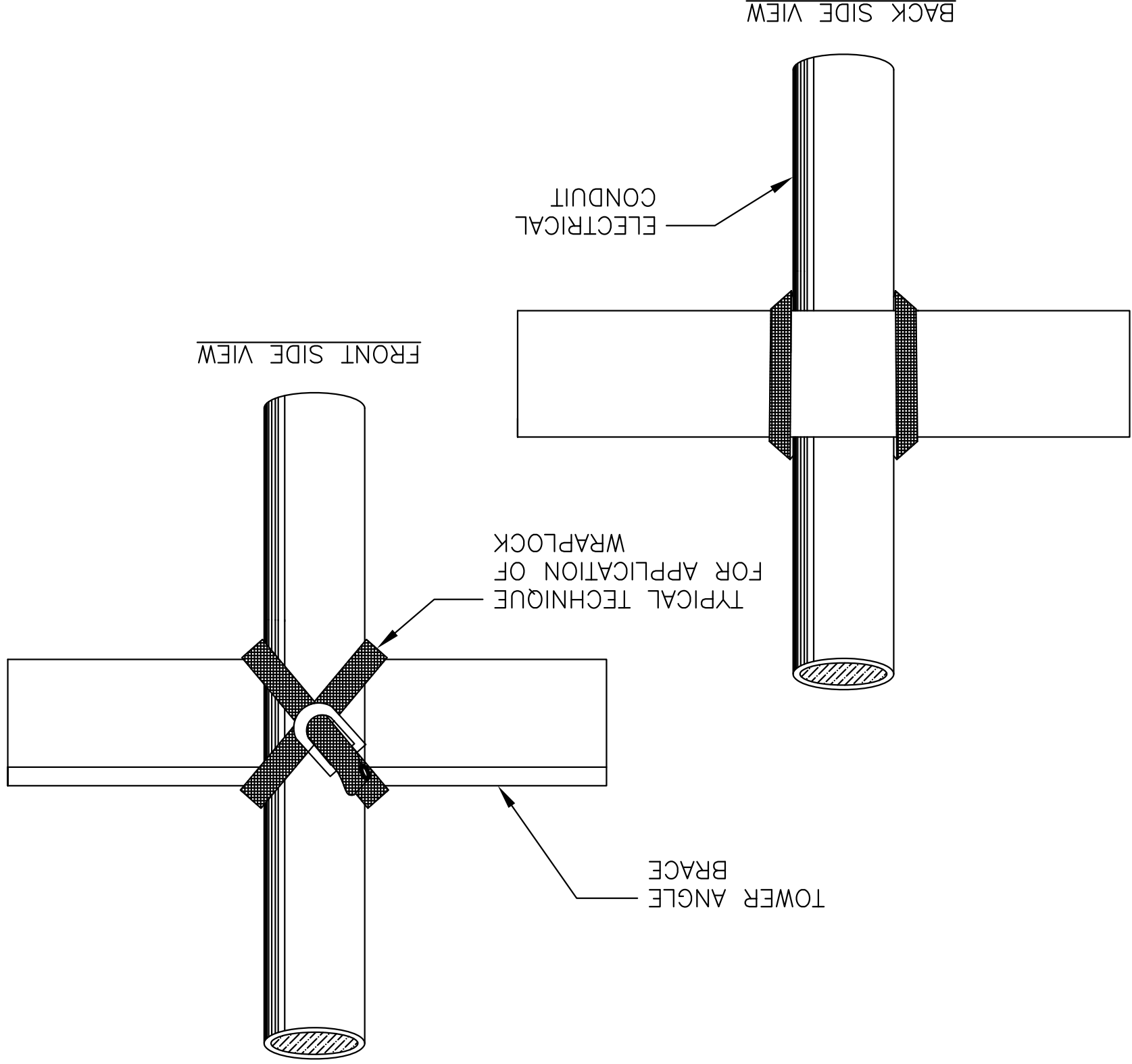
PROD DEPT: _____
 SERV DEPT: _____
 ENGINEER: _____

TWR Lighting, Inc. HARK
Enlightened Technology®

DRAWN BY: J.ZAMORANO	SHEET SIZE: B	SHEET QTY: 1 OF 1
DATE: 10/23/2014	SCALE: N.T.S.	DWG. NO.: 1010091

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AUTHOR	DATE	REV	DESCRIPTION
JZAMORANO	03/03/2015	A	UPDATED DRAWING



DIRECTIONS FOR USING Wraplock
 CUT OFF BAND TO PROPER LENGTH. (SEE TABLE ON COVER OF BOX)

1. — PASS ONE END THROUGH YOKE AND BEND BACK ABOUT 1 1/2" AND FLATTEN DOWN.
2. — PASS BAND AROUND WORK AND THROUGH YOKE.
3. — REPEAT AND PASS END THROUGH A SECOND TIME, DRAW UP FREE END SNUGLY WITH PLIERS.
4. — INSERT FREE END IN SLOT OF RATCHET. TURN DOWN UNTIL CLAMP IS TIGHT.
5. — BACK OFF SLIGHTLY TO REMOVE RATCHET. CLAMP IS NOW SECURELY LOCKED.
6. — TO REMOVE Wraplock UNCOIL END WITH RATCHET. PRESS DOWN AT POINT WHERE BAND METAL HAS BEEN FORCED THROUGH CURVED PART OF YOKE.

WRAPLOCK FASTENING DETAIL

ENGINEER

APPROVED

APPROVED

APPROVED

DRAWN BY M. PETERMAN
 SHEET SIZE B
 SHEET QTY. 1 OF 1

DATE 05/01/2014
 SCALE N.T.S.
 DWG. NO. 100984

TWR Lighting, Inc. HARK
Lightened Technology

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