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REPORT

on

LIGHT-EMITTING-DIODE SURFACE-MOUNTED LUMINAIRES

ANTEC LIGHTING
ONTARIO, CA

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DESCRIPTION

PRODUCT COVERED:

USL, CNL - Light-emitting-diode Luminaire, Models AOK-300WoF-NV-XX-XX-XXXX-BN-P, AOK-400WoF-NV-XX-XX-XXXX-BN-P, AOK-460WoF-NV-XX-XX-XXXX-BN-P, AOK-300WoF-HV-XX-XX-XXXX-BN-P, AOK-400WoF-HV-XX-XX-XXXX-BN-P, AOK-460WoF-HV-XX-XX-XXXX-BN-P, AOK-300WoFH-NV-XX-XX-XXXX-BN-P, AOK-400WoFH-NV-XX-XX-XXXX-BN-P, AOK-460WoFH-NV-XX-XX-XXXX-BN-P, AOK-300WoFH-HV-XX-00-XXXX-BN-P, AOK-400WoFH-HV-XX-00-XXXX-BN-P and AOK-460WoFH-HV-XX-00-XXXX-BN-P. See NOMENCLAUTRE for suffix details.

NOTE: USL - United States Standard Listed.

CNL - Canadian Standard Listed.

ELECTRICAL RATING:

Model No.	Input Rating				Locations Use	Mounting type
	Voltage (Vac)	Freq. (Hz)	Current (A)	Watt (W)		
AOK-300WoF-NV-XX-XX-XXXX-BN-P	100-277	50/60	3.3	300	Wet	Ceiling/ Wall Mounted
AOK-400WoF-NV-XX-XX-XXXX-BN-P	100-277	50/60	4.4	400		
AOK-460WoF-NV-XX-XX-XXXX-BN-P	100-277	50/60	5.1	460		
AOK-300WoF-HV-XX-XX-XXXX-BN-P	200-480	50/60	1.65	300		
AOK-400WoF-HV-XX-XX-XXXX-BN-P	200-480	50/60	2.2	400		
AOK-460WoF-HV-XX-XX-XXXX-BN-P	200-480	50/60	2.6	460		

ELECTRICAL RATING: (CONT'D)

Model No.	Input Rating				Locations Use	Mounting type
	Voltage (Vac)	Freq. (Hz)	Current (A)	Watt (W)		
AOK-300WoFH-NV-XX-XX-XXXX-BN-P	100-277	50/60	3.3	300	Damp	Ceiling/ Pendant
AOK-400WoFH-NV-XX-XX-XXXX-BN-P	100-277	50/60	4.4	400		
AOK-460WoFH-NV-XX-XX-XXXX-BN-P	100-277	50/60	5.1	460		
AOK-300WoFH-HV-XX-00-XXXX-BN-P	200-480	50/60	1.65	300		
AOK-400WoFH-HV-XX-00-XXXX-BN-P	200-480	50/60	2.2	400		
AOK-460WoFH-HV-XX-00-XXXX-BN-P	200-480	50/60	2.6	460		

TECHNICAL CONSIDERATIONS (NOT FOR FIELD REPRESENTATIVE'S USE):

USL indicates product complies with the Standard for Luminaires, UL 1598 and the United States country specific requirements contained within the Standard, along with the relevant parts of the UL Standard for Light Emitting Diode (LED) Equipment for Use in Lighting Products, UL 8750.

CNL indicates product complies with the Canadian National Standard for Luminaires, CSA C22.2 No. 250.0 and the Canadian country-specific requirements contained within the Standard.

CONSTRUCTION DETAILS:

GENERAL CONSTRUCTION:

This product complies with the applicable Standards for USL and/or CNL luminaires as noted under the "Technical Considerations" section noted below, the Section General, and the Description on the following pages.

All components of products bearing the C-UL mark shall be Listed or Recognized for Canada or CSA Certified, in addition to being UL Listed or Recognized.

The product shall be constructed in accordance with the following description.

Corrosion Protection - All enclosures and covers and all ferrous metal parts exposed directly to weather shall be provided with corrosion protection suitable for wet locations, as specified in the Standard.

MARKINGS:

The following markings shall also be provided in addition to the required markings in Section General in accordance with the Standard.

- a. Lister's Name or UL File Number, Model number and Product Identifier.
- b. Electrical Rating (V, Hz, A, W).
- c. Date Code of at least the month and year of manufacturing.
- d. Use location. "SUITABLE FOR WET LOCATIONS" in Form S24-L2 for Models AOK-300WoF, AOK-400WoF and AOK-460WoF series.
- e. "THIS PRODUCT MUST BE INSTALLED IN ACCORDANCE WITH THE APPLICABLE INSTALLATION CODE BY A PERSON FAMILIAR WITH THE CONSTRUCTION AND OPERATION OF THE PRODUCT AND THE HAZARDS INVOLVED" or equivalent in Form S24-L4.
- g) "SUITABLE FOR OPERATION IN AMBIENT NOT EXCEEDING 45°C" in Form S24-L2;

NOMENCLATURE:

Example:	AOK	-	400WoF	-	NV	-	L3	-	SN	-	XXXX	BN	-	P
Group:	AOK	-	W	-	XX	-	XX	-	XX	-	XXXX	BN	-	A

Group	Description
AOK	Represents product series.
W	Represents input wattage, which can be 300, 400 or 460, followed by WoF.
XX	Represents input voltage, which can be as following: NV - 100-277 Vac. HV - 200-480 Vac.
XX	Can be "X5" or "L3" to represent brands of LED.
XX	Represents Photocontrol, which be as following: 00 - No sensor provided, or SN - Photocontrol function provided.
XXXX	Can be any numbers to represent color temperature and color rendering index.
BN	Can be any letter or number to represent beam angles.
P	Represents mounting type, which can be as following: Blank - Ceiling and Wall mounted, A - Ceiling mounted only, or B - Wall mounted only.

NOMENCLATURE:

Example:	AOK	-	400WoFH	-	NV	-	L3	-	SN	-	XXXX	BN	-	P
Group:	AOK	-	W	-	XX	-	XX	-	XX	-	XXXX	BN	-	A

Group	Description
AOK	Represents product series.
W	Represents input wattage, which can be 300, 400 or 460, followed by WoFH.
XX	Represents input voltage, which can be as following: NV - 100-277 Vac. HV - 200-480 Vac.
XX	Can be "X5" or "L3" to represent brands of LED.
XX	Represents Motions Sensor, which be as following: 00 - No sensor provided, or SN - Motion Sensor function provided.
XXXX	Can be any numbers to represent color temperature and color rendering index.
BN	Can be any letter or number to represent beam angles.
P	Represents mounting type, which can be as following: Blank - Ceiling and Pendant mounted, A - Ceiling mounted only, or B - Pendant mounted only.

INSTALLATION INSTRUCTION:

Each luminaire shall be provided with installation instructions showing the correct mounting and installation method, electrical connection.

ILLUSTRATIONS:

ILL. No	Model No.	Description
1	AOK-300WoF, AOK-400WoF and AOK-460WoF series	Enclosure
2		Driver Housing
3		Driver Housing Cover
4		Diffuser
5		Gasket for Diffuser
6		Gasket for Driver Housing
7		Gasket for Driver Housing Cover
8		Shade
9		Mounting Bracket
9A		Alternate Mounting Bracket
10		Strain Relief Bushing
11		Strain Relief Bushing
12		Steel Cable
13, 13A		LED PWB layout
14, 14A, 14B		Connecting Coupler and PWB layout
15	Installation manual	
16	AOK-300WoFH, AOK-400WoFH and AOK-460WoFH series	Driver Housing
17		Canopy
18		Mounting Ring
19		Installation manual

MODEL AOK-460WoF-NV-XX-00-XXXX-BN-P - FIGS. 1 - 5

General - Figs. 1 through 5 show overall and internal views of Model AOK-460WoF-NV-XX-00-XXXX-BN-P and Figs. 6 and 7 show overall and internal views of Model AOK-460WoF-NV-XX-SN-XXXX-BN-P. Also, represents Models AOK-300WoF-NV-XX-XX-XXXX-BN-P, AOK-400WoF-NV-XX-XX-XXXX-BN-P, AOK-300WoF-HV-XX-XX-XXXX-BN-P, AOK-400WoF-HV-XX-XX-XXXX-BN-P and AOK-460WoF-HV-XX-XX-XXXX-BN-P series, except where variations are specifically described below.

1. Enclosure - Die-cast Aluminum, min. 2.4 mm thick. See ILL. 1 for detailed dimensions.
2. Driver Housing - Die-cast Aluminum, min. 2.4 mm thick. Secured to the Enclosure by screws. See ILL. 2 for detailed dimensions.
3. Driver Housing Cover (For models with suffix "XX" = "SN") - Die-cast Aluminum, min. 2.4 mm thick. See ILL. 3 for detailed dimensions. Secured to Driver Housing by Screws.

Alternate (For models with suffix "XX" = "00") - Same as above except ILL. 3A for detailed dimensions.

4. Diffuser - Five provided, R/C (QMFZ2), LG CHEM POLAND SP Z OO (E353371), Model LUPOY GP-1006F(f1), rated 5VA, 120°C, min. 2.5 mm thick. See ILL. 4 for detailed dimensions. Secured to Enclosure by screws.
5. Gasket for Diffuser - Five provided. Silicone rubber, measured min. 2.5 mm thick. Secured around the integral slot of Diffuser by physical fit. See ILL. 5 for detailed dimensions.
6. Gasket for Driver Housing - Five provided. Silicone rubber, measured min. 2.5 mm thick. Secured around the integral slot of Enclosure by physical fit. See ILL. 6 for detailed dimensions.
7. Gasket for Driver Housing Cover - Silicone rubber, measured min. 2.5 mm thick. Secured around the integral slot of Driver Housing Cover by physical fit. See ILL. 7 for detailed dimensions.
8. Shade - Die-cast Aluminum, min. 2.4 mm thick. Secured to Enclosure by screws. See ILL. 8 for detailed dimensions.
9. Mounting Bracket - Die-cast Aluminum, min. 2.4 mm thick. Two-parts construction, secured to each other by screws. See ILL. 9 for detailed dimensions. Secured to both sides of Enclosure by screws.

Alternate - Die-cast Aluminum, min. 2.4 mm thick. Two-parts construction, secured to each other by screws. See ILL. 9A for detailed dimensions. Secured to both sides of Enclosure by screws.

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10. Strain Relief Bushings - Copper. One provided for Driver Housing Cover and secured to Driver Housing Cover by integral threads. See ILL. 10 for dimensions details. Five provided for Enclosure and secured inside Enclosure by integral threads. See ILL. 11 for dimensions details. Each provided Silicone Rubber Gasket, measures min. 1.5 mm thick.
11. Steel Cable - Stainless steel, consisted of wire and hook. See ILL. 12 for dimensions details.
12. Wire Connector - Listed (ZMVV/7) or CN, rated min. 600 V, min. 90°C, using with suitable wire size and combination and assembled using the connector manufacturer's recommended tools.
13. Terminal Block - R/C (XCFR2/8), HEAVY POWER CO LTD (E152546), Model PA9, rated 600 V, 30 A, 130°C. Secured inside Driver Housing.

Alternate - Same as above except R/C (XCFR2/8), DONGGUAN CITY XI YA PLASTIC HARDWARE TECHNOLOGY CO LTD (E499343), Model CLJ-600/85(#1), rated 600 V, 50 A.

14. Photocontroller Assembly - Consisted of the below item:
 - a. For Models AOK-300WoF-NV-XX-SN-XXXX-BN-P, AOK-400WoF-NV-XX-SN-XXXX-BN-P and AOK-460WoF-NV-XX-SN-XXXX-BN-P only:

Photoelectric Switch Receptacle - R/C (WJFX2/8), YANGZHOU NUOKAI ELECYTRONICS CO LTD (E350349), Model NK-DR-103-04, NK-DR-105-04 or NK-DR-107-04, rated 480 V, 15A, 50/60 Hz, suitable for outdoor use.

Alternate - Same as above except R/C (WJFX2/8), TYCO ELECTRONICS CORP (E66375), AM-1-A-NB or AM-2-A-NB, rated 480 Vac, 50/60 Hz, 1000 W Tugsten.

Alternate - Same as above except R/C (WJFX2/8), TYCO ELECTRONICS CORP (E66375), Cat No. 2213362-4, 221362-3, 2213627-8 or 2213863-4, rated 100/120/277/480V, 50/60 Hz, 15/15/3.75 A, 1500/1800 VA VA.
 - b. For Models AOK-300WoF-NV-XX-SN-XXXX-BN-P, AOK-400WoF-NV-XX-SN-XXXX-BN-P and AOK-460WoF-NV-XX-SN-XXXX-BN-P only:

Photocontroller - Listed (WJFX/7), TYCO ELECTRONICS CORP (E66375), Cat No. 6090, rated 120-277 V, 50/60 Hz, 1800 VA.

Alternate - Listed (WJFX/7), SHANGHAI LONG-JOIN INTELLIGENT TECHNOLOGY INC (E188110), Model JL-207C5, rated 120/277 V, 50/60 Hz, 1800 W, suitable for outdoor use.

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Alternate - Listed (WJFX/7), SHANGHAI LONG-JOIN INTELLIGENT TECHNOLOGY INC (E188110), Model JL-205. rated 120/277 V, 50/60 Hz, 1800 W, suitable for outdoor use.

Alternate - Listed (WJFX/7), SHANGHAI LONG-JOIN INTELLIGENT TECHNOLOGY INC (E188110), Model JL-240TL. rated 120/277 V, 50/60 Hz, 1800 W, suitable for outdoor use.

For Models AOK-300WoF-HV-XX-SN-XXXX-BN-P, AOK-400WoF-HV-XX-SN-XXXX-BN-P and AOK-460WoF-HV-XX-SN-XXXX-BN-P only:

Alternate - Listed (WJFX/7), SHANGHAI LONG-JOIN INTELLIGENT TECHNOLOGY INC (E188110), Model JL-207F. rated 200-480 V, 50/60 Hz, 1800 W, suitable for outdoor use.

- c. Shorting Cap - Listed (WJFX/7), TYCO ELECTRONICS CORP (E66375), Cat No. SC-10A, rated 120-480 V, 50/60 Hz, 1000 W.

15. For Models AOK-300WoF-NV-XX-XX-XXXX-BN-P, AOK-400WoF-NV-XX-XX-XXXX-BN-P and AOK-460WoF-NV-XX-XX-XXXX-BN-P only:

Lightning Protector - (Optional), R/C (VZCA2/8), INVENTRONICS (HANGZHOU) INC (E467129), Cat No. PU-20KS10KTTN-xxxx (#), SPD type 4CA, rated 277V, 85°C, 10kA In. Secured to Enclosure by screws.

Alternate - Same as above except for R/C (VZCA2/8), TDC POWER PRODUCTS CO LTD (E471807), Cat No. SPD277-10K.1, SPD type 5, rated 277, 85°C, 3kA In.

Alternate - Same as above except for R/C (VZCA2/8), MW MCWONG INTERNATIONAL INC (E466236), Cat No. SPD-277P-20KA-EC or SPD-277P-20KA-EC1, SPD type 5, rated 277V, 85°C, 10kA In.

Alternate - Same as above except for R/C (VZCA2/8), LITTELFUSE INC (E320116), Cat No. LSP05HST277 (h), SPD type 5, rated 277 VAC, 85°C, 5kA In.

Alternate - Same as above except for R/C (VZCA2/8), LITTELFUSE INC (E320116), Cat No. LSP10277P (h), SPD type 4CA, rated 277V, 85°C, 10kA In.

Alternate - Same as above except for LITTELFUSE INC (E320116), Cat No. LSP05277P (h), SPD type 4CA, rated 277V, 85°C, 5kA In.

For Models AOK-300WoF-HV-XX-XX-XXXX-BN-P, AOK-400WoF-HV-XX-XX-XXXX-BN-P and AOK-460WoF-HV-XX-XX-XXXX-BN-P only:

Alternate - Same as above except MW MCWONG INTERNATIONAL INC (E466236), Cat No. SPD-480P-10KA-EC1, SPD type 5, rated 480V, 85°C, 10 kA In.

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Alternate - Same as above except MW MCWONG INTERNATIONAL INC (E466236), Cat No. SPD-480P-20KA-EC1, SPD type 5, rated 480V, 85°C, 20 kA In.

Alternate - Same as above except LITTELFUSE INC (E320116), Cat No. LSP05480P (h) or LSP05HST480(h), SPD type 5, rated 480V, 85°C, 5 kA In.

Alternate - Same as above except LITTELFUSE INC (E320116), Cat No. LSP10480S(h), SPD type 5, rated 480V, 85°C, 10 kA In.

16. LED Driver - R/C (FKSZ2/8), MEAN WELL ENTERPRISES CO LTD (E334687), see below table for the Cat No. and ratings. Integrally provided with "W" rated input/output leads, min 18 AWG, rated min. 300 V, 105°C. Secured to inside of Driver Housing by screws.

Model	Driver Model	Ratings
AOK-300WoF-NV-XX-XX-XXXX-BN-P	HLG-320H-48AB	Input: 100-240/270 Vac, 50/60 Hz, 3.5/1.45 A; Output: 48 Vdc, 6.7 A.
AOK-400WoF-NV-XX-XX-XXXX-BN-P	HLG-240H-48AB	Input: 100-240/277 Vac, 50/60 Hz, 4/1.2 A; Output: 48 Vdc, 5 A.
	HLG-185H-48AB	Input: 100-240/277 Vac, 50/60 Hz, 2.1/0.8 A; Output: 48 Vdc, 3.9 A.
AOK-460WoF-NV-XX-XX-XXXX-BN-P	HLG-480H-48AB	Input: 100-240/277 Vac, 50/60 Hz, 5.5/2.0 A; Output: 48 Vdc, 10 A.
AOK-300WoF-HV-XX-XX-XXXX-BN-P	HVG-320-48AB	Input: 200-480 Vac, 50/60 Hz, 1.85 A; Output: 48 Vdc, 6.7 A.
AOK-400WoF-HV-XX-XX-XXXX-BN-P	HVG-150-48AB	Input: 200-480 Vac, 50/60 Hz, 0.88 A; Output: 48 Vdc, 3.13 A.
	HVG-240-48AB	Input: 200-480 Vac, 50/60 Hz, 1.4 A; Output: 48 Vdc, 5 A.
AOK-460WoF-HV-XX-XX-XXXX-BN-P	HVG-480-48AB	Input: 200-480 Vac, 50/60 Hz, 2.8 A; Output: 48 Vdc, 10 A.

17. LED Modules - Five provided. Consists of following items:

- a. Printed Wiring Board - R/C (ZPMV2), metal base, rated min V-1, min. 105°C, measured 1.5 mm thick. See illustration in below table for LED PWB layout.
- b. LEDs - 70 pcs provided. Each rated max 6.6 V, max 800 mA.

Model	ILL. No. for LED PWB Layout	No. of LEDs
AOK-300W _o F-NV-XX-XX-XXXX-BN-P	13	56
AOK-300W _o F-HV-XX-XX-XXXX-BN-P		
AOK-400W _o F-NV-XX-XX-XXXX-BN-P	13A	70
AOK-400W _o F-HV-XX-XX-XXXX-BN-P		
AOK-460W _o F-NV-XX-XX-XXXX-BN-P		
AOK-460W _o F-HV-XX-XX-XXXX-BN-P		

18. Connecting Coupler - Consists of the followings:

- a. Housing - R/C (QMFZ2), SABIC JAPAN L L C (E207780), Cat. No. LUX7430C(f1) (gg*), rated 5VA, min. 120 °C, min 3.0 mm thick. Overall 31 mm X 59 mm X 24 mm.
- b. Connecting Cord - Listed (ZJCZ/7), min. 18 AWG, rated min. 300V, min. 105°C, suitable for wet location. Connecting between Connecting Coupler and LED Module.

- c. Printed Wiring Board - R/C (ZPMV2), metal base, rated min V-1, min. 105°C, measured 1.5 mm thick. See illustration below table for LED PWB layout and dimension.

Min. spacing between each wire connection	1.6 mm
Min. spacing from splices to edges of the Splices Enclosure	1.6 mm

Model	ILL. No for Connecting Coupler and PWB Layout
AOK-300WoF-NV-XX-XX-XXXX-BN-P	14 & 14A
AOK-300WoF-HV-XX-XX-XXXX-BN-P	
AOK-400WoF-NV-XX-XX-XXXX-BN-P	14B
AOK-400WoF-HV-XX-XX-XXXX-BN-P	
AOK-460WoF-NV-XX-XX-XXXX-BN-P	
AOK-460WoF-HV-XX-XX-XXXX-BN-P	

19. Grounding Wire - In accordance with the standard, min 18 AWG, 300V. Secured to Driver Housing by a grounding screw.
20. For Models AOK-300WoF-NV-XX-XX-XXXX-BN-P, AOK-400WoF-NV-XX-XX-XXXX-BN-P and AOK-460WoF-NV-XX-XX-XXXX-BN-P only:
- Power Supply Cord - Listed (ZJCZ/7), type SJTW or SJOW, three-conductor type, min. 18 AWG, rated min. 300 V, min. 105°C.
- For Models AOK-300WoF-HV-XX-XX-XXXX-BN-P, AOK-400WoF-HV-XX-XX-XXXX-BN-P and AOK-460WoF-HV-XX-XX-XXXX-BN-P only:
- Power Supply Cord - Listed (ZJCZ/7), type SJTW or SJOW, three-conductor type, min. 18 AWG, rated min. 300 V, min. 105°C.
21. Output Connectors - Five Provided. R/C (ECBT2/8), SHENZHEN LILUTONG ELECTRONIC TECHNOLOGY CO LTD (E470166), Cat No. LLT-M12 series, rated min. 200 V, min. 3 A, 105°C.

MODEL AOK-400WoFH-NV-XX-SN-XXXX-BN-B - FIGS. 8 & 9

General - Figs. 8 and 9 show overall and internal views of Model AOK-400WoFH-NV-XX-SN-XXXX-BN-B. Also, represents Models AOK-300WoFH-NV-XX-XX-XXXX-BN-P, AOK-300WoFH-HV-XX-XX-XXXX-BN-P, AOK-400WoFH-NV-XX-XX-XXXX-BN-P, AOK-400WoFH-HV-XX-00-XXXX-BN-P, AOK-460WoF-NV-XX-00-XXXX-BN-P and AOK-460WoFH-HV-XX-00-XXXX-BN-P series, except where variations are specifically described below.

1. Enclosure - Die-cast Aluminum, min. 2.4 mm thick. See ILL. 1 for detailed dimensions.
2. Driver Housing - Die-cast Aluminum, min. 2.4 mm thick. Three piece construction, secured together and to Enclosure by screws. See ILL. 16 for detailed dimensions.
3. Diffuser - Five provided. R/C (QMFZ2), LG CHEM POLAND SP Z OO (E353371), Model LUPOY GP-1006F(f1), rated 5VA, 120°C, min. 2.5 mm thick. See ILL. 4 for detailed dimensions. Secured to Enclosure by screws.
4. Gasket for Diffuser - Five provided. Silicone rubber, measured min. 2.5 mm thick. Secured around the integral slot of Diffuser by physical fit. See ILL. 5 for detailed dimensions.
5. Shade - Die-cast Aluminum, min. 2.4 mm thick. Secured to Enclosure by screws. See ILL. 8 for detailed dimensions.
6. Canopy (For models with suffix "P" = Blank or "A") - Die-cast Aluminum, min. 2.4 mm thick. Secured to top of Driver Housing by screws. See ILL. 17 for detailed dimensions.
7. Mounting Ring (For models with suffix "P" = "B") - Die-cast Aluminum, min. 2.4 mm thick. Secured to top of Driver Housing by screwing. See ILL. 18 for detailed dimensions.
8. Strain Relief Bushings - Copper. Five provided for Enclosure and secured inside Enclosure by integral threads. See ILL. 11 for dimensions details. Each provided Silicone Rubber Gasket, measures min. 1.5 mm thick.
9. Wire Connector - Listed (ZMVV/7) or CN, rated min. 600 V, min. 90°C, using with suitable wire size and combination and assembled using the connector manufacturer's recommended tools.
10. For Models AOK-300WoFH-NV-XX-SN-XXXX-BN-P, AOK-400WoFH-NV-XX-SN-XXXX-BN-P and AOK-460WoF-NV-XX-SN-XXXX-BN-P series.

Motion Sensor - Listed (XACN/7), SHENZHEN MERRYTEK TECHNOLOGY CO LTD (E489677), Type MC054V RC A or MC031V RC A, rated 120/277V, 50/60Hz, 4/3A. Provided with Listed (ZJCZ/7), type SJTW or SJOW, min. 18 AWG, rated min. 300 V, min. 105°C. Secured to Enclosure by Mounting Tab and screws.

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11. Mounting Tab - Die-cast Aluminum, min. 1.2 mm thick. Secured to Motion Sensor and Enclosure by screws. See ILL. 19 for detailed dimensions.
12. For Models AOK-300WoFH-NV-XX-XX-XXXX-BN-P, AOK-400WoFH-NV-XX-XX-XXXX-BN-P and AOK-460WoF-NV-XX-XX-XXXX-BN-P series.

Lightning Protector - (Optional), R/C (VZCA2/8), INVENTRONICS (HANGZHOU) INC (E467129), Cat No. PU-20KS10KTTN-xxxx (#), SPD type 4CA, rated 277V, 85°C, 10kA In. Secured to Enclosure by screws.

Alternate - Same as above except for R/C (VZCA2/8), TDC POWER PRODUCTS CO LTD (E471807), Cat No. SPD277-10K.1, SPD type 5, rated 277, 85°C, 3kA In.

Alternate - Same as above except for R/C (VZCA2/8), MW MCWONG INTERNATIONAL INC (E466236), Cat No. SPD-277P-20KA-EC or SPD-277P-20KA-EC1, SPD type 5, rated 277V, 85°C, 10kA In.

Alternate - Same as above except for R/C (VZCA2/8), LITTELFUSE INC (E320116), Cat No. LSP05HST277 (h), SPD type 5, rated 277 VAC, 85°C, 5kA In.

Alternate - Same as above except for R/C (VZCA2/8), LITTELFUSE INC (E320116), Cat No. LSP10277P (h), SPD type 4CA, rated 277V, 85°C, 10kA In.

Alternate - Same as above except for LITTELFUSE INC (E320116), Cat No. LSP05277P (h), SPD type 4CA, rated 277V, 85°C, 5kA In.

For Models AOK-300WoFH-HV-XX-00-XXXX-BN-P, AOK-400WoFH-HV-XX-00-XXXX-BN-P and AOK-460WoFH-HV-XX-00-XXXX-BN-P only:

Alternate - Same as above except MW MCWONG INTERNATIONAL INC (E466236), Cat No. SPD-480P-10KA-EC1, SPD type 5, rated 480V, 85°C, 10 kA In.

Alternate - Same as above except MW MCWONG INTERNATIONAL INC (E466236), Cat No. SPD-480P-20KA-EC1, SPD type 5, rated 480V, 85°C, 20 kA In.

Alternate - Same as above except LITTELFUSE INC (E320116), Cat No. LSP05480P (h) or LSP05HST480(h), SPD type 5, rated 480V, 85°C, 5 kA In.

Alternate - Same as above except LITTELFUSE INC (E320116), Cat No. LSP10480S(h), SPD type 5, rated 480V, 85°C, 10 kA In.

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16. LED Driver - R/C (FKSZ2/8), MEAN WELL ENTERPRISES CO LTD (E334687), see below table for the Cat No. and ratings. Integrally provided with "W" rated input/output leads, min 18 AWG, rated min. 300 V, 105°C. Secured to inside of Driver Housing by screws.

Model	Driver Model	Ratings
AOK-300WoFH-NV-XX-XX-XXXX-BN-P	HLG-320H-48AB	Input: 100-240/270 Vac, 50/60 Hz, 3.5/1.45 A; Output: 48 Vdc, 6.7 A.
AOK-400WoFH-NV-XX-XX-XXXX-BN-P	HLG-240H-48AB	Input: 100-240/277 Vac, 50/60 Hz, 4/1.2 A; Output: 48 Vdc, 5 A.
	HLG-185H-48AB	Input: 100-240/277 Vac, 50/60 Hz, 2.1/0.8 A; Output: 48 Vdc, 3.9 A.
AOK-460WoFH-NV-XX-XX-XXXX-BN-P	HLG-480H-48AB	Input: 100-240/277 Vac, 50/60 Hz, 5.5/2.0 A; Output: 48 Vdc, 10 A.
AOK-300WoFH-HV-XX-00-XXXX-BN-P	HVG-320-48AB	Input: 200-480 Vac, 50/60 Hz, 1.85 A; Output: 48 Vdc, 6.7 A.
AOK-400WoFH-HV-XX-00-XXXX-BN-P	HVG-150-48AB	Input: 200-480 Vac, 50/60 Hz, 0.88 A; Output: 48 Vdc, 3.13 A.
	HVG-240-48AB	Input: 200-480 Vac, 50/60 Hz, 1.4 A; Output: 48 Vdc, 5 A.
AOK-460WoFH-HV-XX-00-XXXX-BN-P	HVG-480-48AB	Input: 200-480 Vac, 50/60 Hz, 2.8 A; Output: 48 Vdc, 10 A.

17. LED Modules - Five provided. Consists of following items:

- a. Printed Wiring Board - R/C (ZPMV2), metal base, rated min V-1, min. 105°C, measured 1.5 mm thick. See illustration in below table for LED PWB layout.
- b. LEDs - 70 pcs provided. Each rated max 6.6 V, max 800 mA.

Model	ILL. No. for LED PWB Layout	No. of LEDs
AOK-300WoF-NV-XX-XX-XXXX-BN-P	13	56
AOK-300WoF-HV-XX-XX-XXXX-BN-P		
AOK-400WoF-NV-XX-XX-XXXX-BN-P	13A	70
AOK-400WoF-HV-XX-XX-XXXX-BN-P		
AOK-460WoF-NV-XX-XX-XXXX-BN-P		
AOK-460WoF-HV-XX-XX-XXXX-BN-P		

18. Connecting Coupler - Consists of the followings:

- a. Housing - R/C (QMFZ2), SABIC JAPAN L L C (E207780), Cat. No. LUX7430C(f1) (gg*), rated 5VA, min. 120 °C, min 3.0 mm thick. Overall 31 mm X 59 mm X 24 mm.
- b. Connecting Cord - Listed (ZJCZ/7), min. 18 AWG, rated min. 300V, min. 105°C, suitable for wet location. Connecting between Connecting Coupler and LED Module.
- c. Printed Wiring Board - R/C (ZPMV2), metal base, rated min V-1, min. 105°C, measured 1.5 mm thick. See illustration below table for LED PWB layout and dimension.

Min. spacing between each wire connection	1.6 mm
Min. spacing from splices to edges of the Splices Enclosure	1.6 mm

Model	ILL. No for Connecting Coupler and PWB Layout
AOK-300WoF-NV-XX-XX-XXXX-BN-P	14 & 14A
AOK-300WoF-HV-XX-XX-XXXX-BN-P	
AOK-400WoF-NV-XX-XX-XXXX-BN-P	14B
AOK-400WoF-HV-XX-XX-XXXX-BN-P	
AOK-460WoF-NV-XX-XX-XXXX-BN-P	
AOK-460WoF-HV-XX-XX-XXXX-BN-P	

19. Grounding Wire - In accordance with the standard, min 18 AWG, 300V. Secured to Driver Housing by a grounding screw.
20. For Models AOK-300WoFH-NV-XX-XX-XXXX-BN-P, AOK-400WoFH-NV-XX-XX-XXXX-BN-P and AOK-460WoFH-NV-XX-XX-XXXX-BN-P only:

Power Supply Cord - Listed (ZJCZ/7), type SJTW or SJOW, three-conductor type, min. 18 AWG, rated min. 300 V, min. 105°C.

For Models AOK-300WoFH-HV-XX-00-XXXX-BN-P, AOK-400WoFH-HV-XX-00-XXXX-BN-P and AOK-460WoFH-HV-XX-00-XXXX-BN-P only:

Power Supply Cord - Listed (ZJCZ/7), type SJTW or SJOW, three-conductor type, min. 18 AWG, rated min. 300 V, min. 105°C.
21. Output Connectors - Five Provided. R/C (ECBT2/8), SHENZHEN LILUTONG ELECTRONIC TECHNOLOGY CO LTD (E470166), Cat No. LLT-M12 series, rated min. 200 V, min. 3 A, 105°C.