

VARI-WATT DRIVERS WITH INTEGRATED EM BACKUP



JAYKAL

PROJECT NAME:

JAYKAL LED SOLUTIONS, INC.

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PROJECT NOTES:

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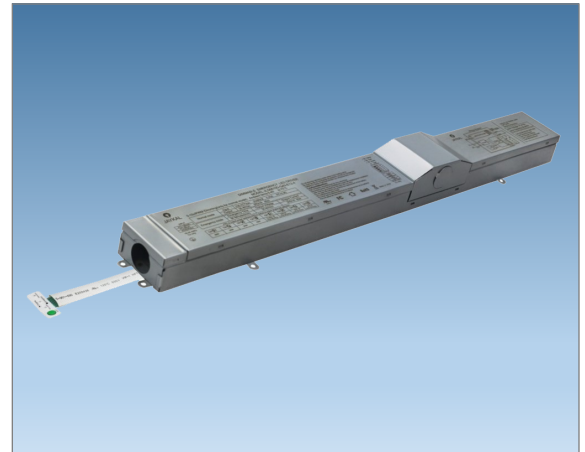
OVERVIEW

This multi-current output LED driver gives the installer the ability to field select the desired wattage for the fixture. Multiple output wattages are available using simple DIP switch settings.

The driver features integrated bi-level dimming with selections of 40%, 50%, 60% or defeated. 0-10V dimming maintains compatibility with wall dimmers and controls. The integrated emergency backup features a field serviceable battery.

FEATURES

- ◆ Bi-Level Dimming Settings: 60%, 50%, 40%, Disabled
- ◆ Output Wattage and Bi-Level Dimming Selectable by DIP Switch
- ◆ 0-10V Dimming
- ◆ Integrated Emergency Backup with Field Serviceable Battery
- ◆ Four Standard Models are Available



OPERATION

Beginning with the power off, remove the center cover to reveal the 4-position DIP Switch. Using the guide printed on the cover of the driver, select the desired output wattage by configuring the **Wattage** DIP switches to the desired setting. Once the output current settings are set the driver will maintain this constant current output. Configure the **50/50** dimming DIP switches to the desired bi-level dimming setting.

To activate the bi-level dimming function simply turn on the light switch. The fixture will illuminate to the **50/50** defined level. To raise the level to 100% (Full ON), within 10 seconds of turning on the light switch, return the switch to the OFF position and immediately back to on. The next time the light switch is turned on, the fixture will return to the bi-level preset.



RoHS 
Compliant

Revised 8/3/21

Specifications are typical values and may change without notification

efficiency. illuminated.

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GENERAL SPECIFICATIONS	
Frequency	50/60Hz
Inrush Current	<25A
Harmonics (Nominal)	Fully complies with EN61000-3-2
Total Harmonic Distortion	<20% at 120V, <20% at 208V, <20% at 277V.
Input Current Protection	Fuse (Internal)
Full Range Dimming	100% - 10% of full power (standard configuration), minimum 40W Analog dimming current draw 1.5mA per fixture. Maximum number of fixtures = sensor current / 1.5mA
Dimming Options	0-10V analog dimming by relay, ambient sensor, daylight sensor or any other compatible sensor
Operating Temperature	-30°C to +50°C / -22°F to 122°F -30°C to +50°C / -22°F to 122°F
Operating Humidity	0 to 90% RH Non-Condensing 0 to 90% RH Non-Condensing
Maximum Case Temperature (Tc)	85°C / 185°F
Remote Installation Losses	Dependent upon wire length, significantly lower than class II low voltage related losses.
EMC	FCC Title 47 Part 18 C (non-consumer): EN55015:2006, EN61547, N61000-3-2, EN61000-3-3
UL	E471865
Surge Protection	IEEE C62.41 Category C Low Between phase and neutral 6KV / 3KA Between line and ground 10KV / 1KA
Self-protection Mechanisms	In the event of a short circuit, or open circuit; If the LED fails to light; In the end of the LED's life; Input current protection by internal fuse; Advanced surge protection between phase and neutral and between line and ground; Advanced output protection against arcing or shorting to ground.

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SPECIFICATIONS TABLE				
Model JLS6810D-EMVW-1224-10-S-X-4 (12W,16W,20W,24W) (EM1)				
WATTAGE SETTINGS	24W	20W	16W	12W
INPUT VOLTAGE	100-277VAC			
INPUT CURRENT	0.096@277V	0.08A@277V	0.063@277V	0.062A@277V
POWER FACTOR	>0.9	>0.9	>0.9	>0.7
WATTAGE@60% DIMMING	14.4W	12W	9.6W	7.2W
WATTAGE@50% DIMMING	12W	10W	8W	6W
WATTAGE@40% DIMMING	9.6W	8W	6.4W	4.8W
CURRENT@60% DIMMING	0.057A@277V	0.047A@277V	0.096A@277V	0.037A@277V
CURRENT@50% DIMMING	0.047A@277V	0.039A@277V	0.031A@277V	0.031A@277V
CURRENT@40% DIMMING	0.038A@277V	0.041A@277V	0.025A@277V	0.025A@277V
CURRENT DIMMING DISABLED	0.096A@277V	0.031A@277V	0.063A@277V	0.062A@277V
EMERGENCY MODE WATTAGE	12W			
EMERGENCY MODE VOLTAGE	30-40VDC			
EMERGENCY MODE CURRENT	300mA			
DIMENSIONS				

SPECIFICATIONS TABLE				
Model JLS6810D-EMVW-1836-10-S-X-4 (18W,24W,30W,36W) (EM2)				
WATTAGE SETTINGS	36W	30W	24W	18W
INPUT VOLTAGE	100-277VAC			
INPUT CURRENT	0.163A@277V	0.120A@277V	0.096@277V	0.093A@277V
POWER FACTOR	>0.8	>0.9	>0.9	>0.7
WATTAGE@60% DIMMING	21.6W	18W	14.4W	10.8W
WATTAGE@50% DIMMING	18W	15W	12W	9W
WATTAGE@40% DIMMING	14.4W	12W	9.4W	7.2W
CURRENT@60% DIMMING	0.095A@277V	0.071A@277V	0.057A@277V	0.056A@277V
CURRENT@50% DIMMING	0.081A@277V	0.059A@277V	0.047A@277V	0.046A@277V
CURRENT@40% DIMMING	0.065A@277V	0.047A@277V	0.038A@277V	0.037A@277V
CURRENT DIMMING DISABLED	0.163A@277V	0.120A@277V	0.096A@277V	0.093A@277V
EMERGENCY MODE WATTAGE	12W			
EMERGENCY MODE VOLTAGE	30-40VDC			
EMERGENCY MODE CURRENT	300mA max			
DIMENSIONS				

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SPECIFICATIONS TABLE

Model JLS6810D-EMVW-2440-10-S-X-4 (24W,30W,36W,40W) (EM3)

WATTAGE SETTINGS	40W	36W	30W	24W
INPUT VOLTAGE	100-277VAC			
INPUT CURRENT	0.158A@277V	0.163A@277V	0.120A@277V	0.096@277V
POWER FACTOR	>0.9	>0.8	>0.9	>0.9
WATTAGE@60% DIMMING	24W	21.6W	18W	14.4W
WATTAGE@50% DIMMING	20W	18W	15W	12W
WATTAGE@40% DIMMING	16W	14.4W	12W	9.4W
CURRENT@60% DIMMING	0.095A@277V	0.095A@277V	0.071A@277V	0.057A@277V
CURRENT@50% DIMMING	0.079A@277V	0.081A@277V	0.059A@277V	0.047A@277V
CURRENT@40% DIMMING	0.063A@277V	0.065A@277V	0.047A@277V	0.038A@277V
CURRENT DIMMING DISABLED	0.158A@277V	0.163A@277V	0.120A@277V	0.096A@277V
EMERGENCY MODE WATTAGE	12W			
EMERGENCY MODE VOLTAGE	30-40VDC			
EMERGENCY MODE CURRENT	300mA max			
DIMENSIONS				

SPECIFICATIONS TABLE

Model JLS6810D-EMVW-4060-10-S-X-4 (40W,45W,50W,60W) (EM4)

WATTAGE SETTINGS	60W	50W	45W	40W
INPUT VOLTAGE	100-277VAC			
INPUT CURRENT	0.241A@277V	0.201A@277V	0.199A@277V	0.158A@277V
POWER FACTOR	>0.9	>0.9	>0.8	>0.9
WATTAGE@60% DIMMING	36W	30W	27W	24W
WATTAGE@50% DIMMING	30W	25W	22.5W	20W
WATTAGE@40% DIMMING	24W	20W	18W	16W
CURRENT@60% DIMMING	0.142A@277V	0.119A@277V	0.119A@277V	0.095A@277V
CURRENT@50% DIMMING	0.119A@277V	0.098A@277V	0.010A@277V	0.079A@277V
CURRENT@40% DIMMING	0.950A@277V	0.080A@277V	0.080A@277V	0.063A@277V
CURRENT DIMMING DISABLED	0.241A@277V	0.201A@277V	0.199A@277V	0.158A@277V
EMERGENCY MODE WATTAGE	12W			
EMERGENCY MODE VOLTAGE	30-40VDC			
EMERGENCY MODE CURRENT	300mA max			
DIMENSIONS				

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WIRING LOCATIONS AND DIP SWITCH SETTINGS

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INPUT
SWITCHED LINE
LINE IN
NEUTRAL IN
16-20AWG

GROUND

DIMMABLE EMERGENCY LED DRIVER
MODEL: JLS6810D-EMVW-1836-10-S-X-4
 0-10v/PWM Dimming(only for normal mode) Ambient temp:5-40°C tc:70°C

Normal mode	Input	100-277Vac 50/60HZ 0.4A PF>0.90		
	Output	28-40Vac 900mA Max		
Emergency mode	Emergency Time	90 Minutes(min)		Output Current
		28-40Vdc		300mA Max

PIN1,2 Output power selection.PIN3,4 Switch to adjust brightness selection

ON	ON	ON	ON	ON	ON	ON	ON
36W	30W	24W	18W	Disable Bi level dimming	60% Bi leve dimming	50% Bi level dimming	40% Bi level dimming

✓ Yellow
✓ Red
✓ Green
○ Test
ON ←

4
3
2
1

0-10V DIMMING

DIM+
DIM-
LED-
LED+

DC OUTPUT
16-20AWG

Do not short the dimming control wires to the loading wires
 Ne court les fils de commande de gradation aux fils de chargement
 Suitable for Damp locations/Convient aux emplacements mouilles

Caution/Attention:
 Risk of Electric shock!/Risque de choc electrique
 Disconnect power before installation/Couper l'alimentation avant installation
 Case must be grounded/Cas doit etre mis a la terre
 Do not open the battery box,prohibit the replacement of the battery.
 No maintenance parts inside
 N'ouvrez pas la batterie,interdisez le remplacement de la batterie
 Aucune piece de maintenance a interieur

TEST BUTTON BEHAVIOR AND FUNCTIONS

The test button acts as a multi-function indicator. When the test button is pushed the driver will toggle between normal and back-up modes. The button also provides status indication for the presence of main power, charging, emergency and malfunction status with easily read indicator lights.

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