Power Supplies Specifications Guide ACV-ACVN Series



A Allanson

LED Power Supplies

Product Description

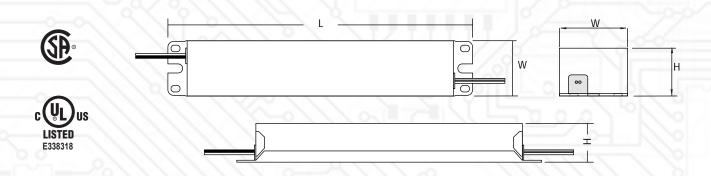
Allanson's ACVN and ACV series of fixed output voltage LED power supply comes with affordable and reliable features. Compatible with signage from any manufacturer. 12V major output voltage with 1,2, or 3 multi-channel selection for different lumen application. ACVN and ACV series meets North American safety certifications, and compliant with FCC Immunity/Emissions/Harmonic requirements. The products are designed and rigorously tested to work in various outdoor and indoor signage LED lighting conditions.

Product Features

- Constant voltage design
- Universal input voltage from 120-277 Vac
- Multi-channel output and independent operating
- Class 2 output
- Dry & damp location
- Operating temperature range -40°C to +55°C

Specifications Chart

| Catalogue | Input | Input 0 | Output Output | Output | Output | Hou | sing (incl | nes) | Power | - · · |
|------------------|---------|--------------|---------------|---------|--------|-------|------------|------|--------|------------|
| Number | Voltage | Current Amps | Volts DC | Current | Watts | L | w | н | Factor | Rating |
| ACVN125-120-277V | 120-277 | 1.20A-0.70A | 12 | 5.0 | 60 | 5.50 | 1.70 | 1.18 | NPF | Dry & Damp |
| ACV125-120-277V | 120-277 | 0.59A-0.26A | 12 | 5.0 | 60 | 6.50 | 1.70 | 1.18 | HPF | Dry & Damp |
| ACV2125-120-277V | 120-277 | 1.15A-0.50A | 12 | 2 x 5.0 | 120 | 11.75 | 1.70 | 1.18 | HPF | Dry & Damp |
| ACV3125-120-277V | 120-277 | 1.70A-0.75A | 12 | 3 x 5.0 | 180 | 16.70 | 1.70 | 1.18 | HPF | Dry & Damp |



Wire Size Recommendation

Recommended wire size from LED Module to Power Supply

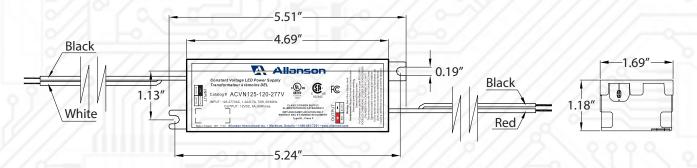
| Distance to Power Supply | Stranded Copper Wire Gauge | Expected Voltage Drop | | |
|--------------------------|----------------------------|-----------------------|--|--|
| 13 Feet | 16 AWG | 5% | | |
| 20 Feet | 14 AWG | 5% | | |
| 30 Feet | 12 AWG | 5% | | |



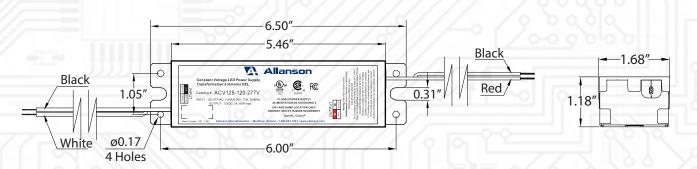
Product Dimensions

All dimensions are in inches. Drawings are not to scale.

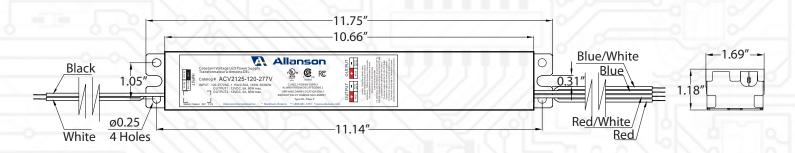
ACVN125-120-277V



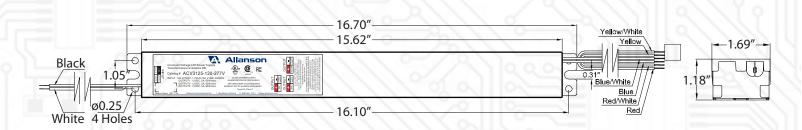
ACV125-120-277V



ACV2125-120-277V



ACV3125-120-277V





Installation Instructions

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ACV3125-120-277V





Loading RecommendationMaximum LED Modules Per Power Supply

| Part Number | LED Power Consumption (Watts) | ACVN125-120-277V ACV125-120-277V | ACV2125-120-277V | ACV3125-120-277V | | | | |
|----------------------|-------------------------------------|-------------------------------------|---------------------------|--------------------------------------|--|--|--|--|
| White Modules | | | | | | | | |
| S03W2CW B M | 0.30 | 180 | 150 + 150 | 150 + 150 + 150 | | | | |
| S04W1CW B M | 0.36 | 150 | 142 + 142 | 142 + 142 + 142 | | | | |
| S05W2CW B | 0.50 | 108 | 108 + 108 | 108 + 108 + 108 | | | | |
| S07W2CW B | 0.75 | 72 | 72 + 72 | 72 + 72 + 72 | | | | |
| S07W2CW BLP | 0.73 | 72 | 72+72 | 72 + 72 + 72 | | | | |
| S07W2WW BLP | 0.73 | 72 | 72+72 | 72 + 72 + 72 | | | | |
| S07W2TW B | 0.73 | 72 | 72+72 | 72 + 72 + 72 | | | | |
| S07W2WW B | 0.75 | 72 | 72+72 | 72 + 72 + 72 | | | | |
| S1W2CW B | 1.10 | 50 | 50 + 50 | 50 + 50 + 50 | | | | |
| S1W2NW B | 1.10 | 50 | 50 + 50 | 50 + 50 + 50 | | | | |
| S1W2TW B | 1.10 | 50 | 50 + 50 | 50 + 50 + 50 | | | | |
| V07W2TW B | 0.75 | 72 | 72 + 72 | 72 + 72 + 72 | | | | |
| Color Modules | | | | | | | | |
| S04W1RD B M* | 0.36 | 142 | 142+142 | 142+142+142 | | | | |
| S05W2BL B* | 0.50 | 108 | 108+108 | 108+108+108 | | | | |
| S05W2OR B* | 0.50 | 108 | 108+108 | 108+108+108 | | | | |
| S05W2RD B* | 0.50 | 108 | 108+108 | 108+108+108 | | | | |
| S1W2GR B* | 1.00 | 54 | 50+50 | 50+50+50 | | | | |
| S1W2OR B* | 1.00 | 54 | 50+50 | 50+50+50 | | | | |
| S1W2RD B* | 1.00 | 54 | 50+50 | 50+50+50 | | | | |
| | | RGB Module | 3 | | | | | |
| ACLW-RGB3 40 | 0.72 | 80 | 80 + 80 | 80 + 80 + 80 | | | | |
| ACLW-RGB AD 2 | 0.72 | 80 | 80 + 80 | 80 + 80 + 80 | | | | |
| | RGB Sky | Line Flexible Border Tubing | g (RGB Color Changing) | | | | | |
| B1-XXXRGB-12V Q AB** | 3.5W/ft (11.5W/m) | 16' 4" (5m) | 16' 4" (5m) + 16' 4" (5m) | 16' 4" (5m) + 16' 4" (5m) + 16' 4" (| | | | |



^{*}RD= Red, BL=Blue, GR=Green, OR=Orange
**XXX in part number for RGB SkyLine Flexible Border Tubing denotes length in inches. Q denotes jacket color, A denotes power lead, and B denotes end cap type. Please refer to product specifications for more information.

Loading RecommendationMaximum Retrofit Lamps Per Power Supply

| Part Number | LED Power Consumption (Watts) | ACVN125-120-277V ACV125-120-277V | ACV2125-120-277V | ACV3125-120-277V | | | | | | |
|---------------|---|-------------------------------------|------------------|------------------|--|--|--|--|--|--|
| | LEDrofit (Retrofit Fluorescent Replacement) | | | | | | | | | |
| | Single Sided LEDrofit | | | | | | | | | |
| ALDF-18CW-SS | 3.50 | 15 | 15 + 15 | 15 + 15 + 15 | | | | | | |
| ALDF-24CW-SS | 5.90 | 9 | 9+9 | 9+9+9 | | | | | | |
| ALDF-30CW-SS | 7.10 | 8 | 8+8 | 8 + 8 + 8 | | | | | | |
| ALDF-36CW-SS | 9.30 | 6 | 6+6 | 6+6+6 | | | | | | |
| ALDF-42CW-SS | 10.50 | 5 | 5 + 5 | 5 + 5 + 5 | | | | | | |
| ALDF-48CW-SS | 12.70 | 4 | 4 + 4 | 4 + 4 + 4 | | | | | | |
| ALDF-60CW-SS | 16.00 | 3 | 3+3 | 3 + 3 + 3 | | | | | | |
| ALDF-64CW-SS | 16.70 | 3 | 3+3 | 3+3+3 | | | | | | |
| ALDF-72CW-SS | 18.80 | 3 | 3+3 | 3+3+3 | | | | | | |
| ALDF-84CW-SS | 21.60 | 2 | 2+2 | 2+2+2 | | | | | | |
| ALDF-96CW-SS | 23.60 | 2 | 2+2 | 2 + 2 + 2 | | | | | | |
| ALDF-108CW-SS | 26.30 | 2 | 2+2 | 2 + 2 + 2 | | | | | | |
| ALDF-117CW-SS | 27.40 | 2 | 2+2 | 2 + 2 + 2 | | | | | | |
| ALDF-120CW-SS | 29.50 | 2 | 2+2 | 2 + 2 + 2 | | | | | | |
| | | Double Sided LED | rofit | | | | | | | |
| ALDF-18CW-DS | 7.00 | 7 | 7 + 7 | 7 + 7 + 7 | | | | | | |
| ALDF-24CW-DS | 11.70 | 4 | 4+4 | 4 + 4 + 4 | | | | | | |
| ALDF-30CW-DS | 13.90 | 4 | 4+4 | 4 + 4 + 4 | | | | | | |
| ALDF-36CW-DS | 18.10 | 3 | 3+3 | 3 + 3 + 3 | | | | | | |
| ALDF-42CW-DS | 20.40 | 2.5 | 2.5 + 2.5 | 2.5 + 2.5 + 2.5 | | | | | | |
| ALDF-48CW-DS | 24.60 | 2 | 2+2 | 2+2+2 | | | | | | |
| ALDF-60CW-DS | 30.70 | 1.5 | 1.5 + 1.5 | 1.5 + 1.5 + 1.5 | | | | | | |
| ALDF-64CW-DS | 31.90 | 1.5 | 1.5 + 1.5 | 1.5 + 1.5 + 1.5 | | | | | | |
| ALDF-72CW-DS | 36.00 | 1.5 | 1.5 + 1.5 | 1.5 + 1.5 + 1.5 | | | | | | |
| ALDF-84CW-DS | 41.00 | 1 | 1+1 | 1+1+1 | | | | | | |
| ALDF-96CW-DS | 45.50 | 1 | 1+1 | 1 + 1 + 1 | | | | | | |
| ALDF-108CW-DS | 49.10 | 1 | 1+1 | 1 + 1 + 1 | | | | | | |
| ALDF-117CW-DS | 51.00 | 1 | 1+1 | 1 + 1 + 1 | | | | | | |
| ALDF-120CW-DS | 55.80 | 1 | 1+1 | 1 + 1 + 1 | | | | | | |

Notes:

- 0.5 represents 1 pair of wires for any double sided LEDrofit. Charts above represent loading recommendation at 90%.

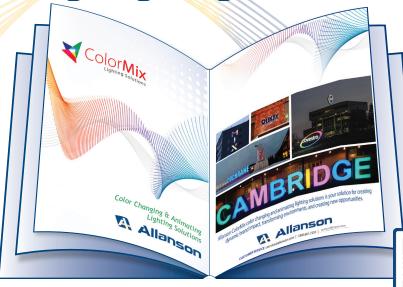












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Warranty

Allanson provides a 5 year standard warranty on LED Power Supplies. For more information, please contact customer service.

Customer Service











Power Supplies

Specifications Guide
CVW Series



M Allanson

LED Power Supplies

Product Description

Allanson's CVW series of fixed output voltage LED power supply comes with affordable and reliable features. 12VDC & 24VDC major output voltage with 1,2,3 multi-channel selection for different applications. CVW series meets North American safety certifications, and compliant with FCC Immunity/Emissions/Harmonic requirements. The CVW power supplies are rated IP68, designed and rigorously tested to work in various outdoor and indoor applications.

Product Features

- Constant voltage design
- Universal input voltage from 120-277 VAC
- Multi-channel output and independent operating
- Class 2 output
- Dry, damp, & wet location IP68 rated
- Operating temperature range -40°C to +40°C

Specifications Chart

| | Catalogue Inpu | Catalogue | Input Input | Input | Output | Output | Output | Hou | sing (incl | hes) | Power | Dating |
|-----|------------------|-----------|--------------|-------------|---------|--------|--------|------|------------|--------|------------------|--------|
| 7 | Number | Voltage | Current Amps | Volts DC | Current | Watts | L | w | н | Factor | Rating | |
| | CVW125-120-277V | 120-277 | 0.70A-0.30A | 12 | 5.0 | 60 | 9.54 | 1.54 | 1.16 | HPF | Dry, Damp, & Wet | |
| 12V | CVW2125-120-277V | 120-277 | 1.40A-0.60A | 12 | 2 x 5.0 | 120 | 9.22 | 2.68 | 1.34 | HPF | Dry, Damp, & Wet | |
| | CVW3125-120-277V | 120-277 | 1.80A-0.80A | 12 | 3 x 5.0 | 180 | 11.70 | 2.68 | 1.52 | HPF | Dry, Damp, & Wet | |
| | CVW244-120-277V | 120-277 | 0.95A-0.40A | 24 | 4.0 | 96 | 9.59 | 1.81 | 1.25 | HPF | Dry, Damp, & Wet | |
| 24V | CVW2244-120-277V | 120-277 | 2.23A-0.99A | 24 | 2 x 4.0 | 192 | 9.22 | 2.68 | 1.52 | HPF | Dry, Damp, & Wet | |
| | CVW3244-120-277V | 120-277 | 3.35A-1.51A | 24 | 3 x 4.0 | 288 | 12.96 | 2.68 | 1.52 | HPF | Dry, Damp, & Wet | |



Wire Size Recommendation

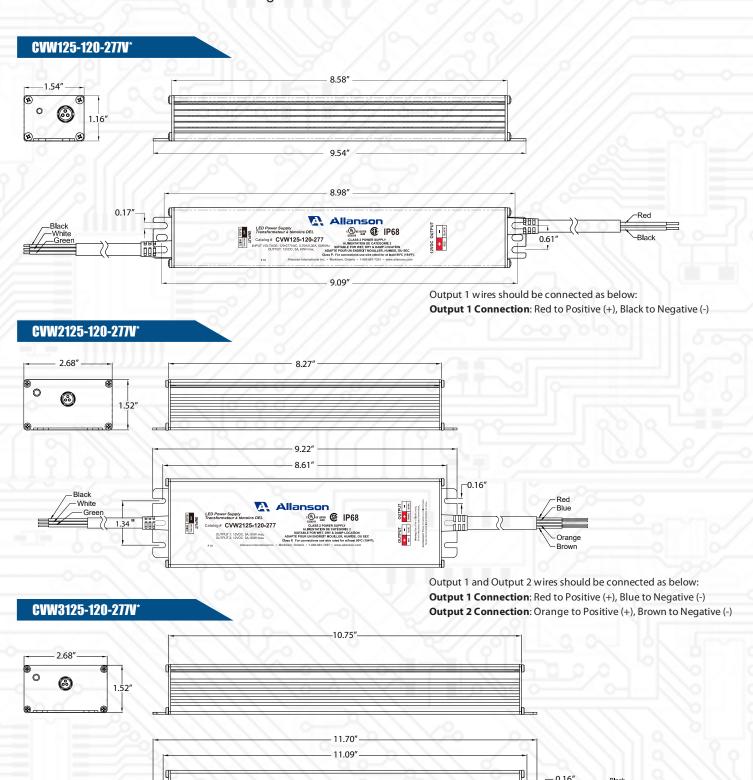
Recommended wire size from LED Module to Power Supply

| Distance to Power Supply | Stranded Copper Wire Gauge | Expected Voltage Drop |
|--------------------------|----------------------------|-----------------------|
| 13 Feet | 16 AWG | 5% |
| 20 Feet | 14 AWG | 5% |
| 30 Feet | 12 AWG | 5% |



12V Product Dimensions

All dimensions are in inches. Drawings are not to scale.



Allanson

Catalog # CVW3125-120-277

*Warning : Do not interconnect output terminations.

1.34"



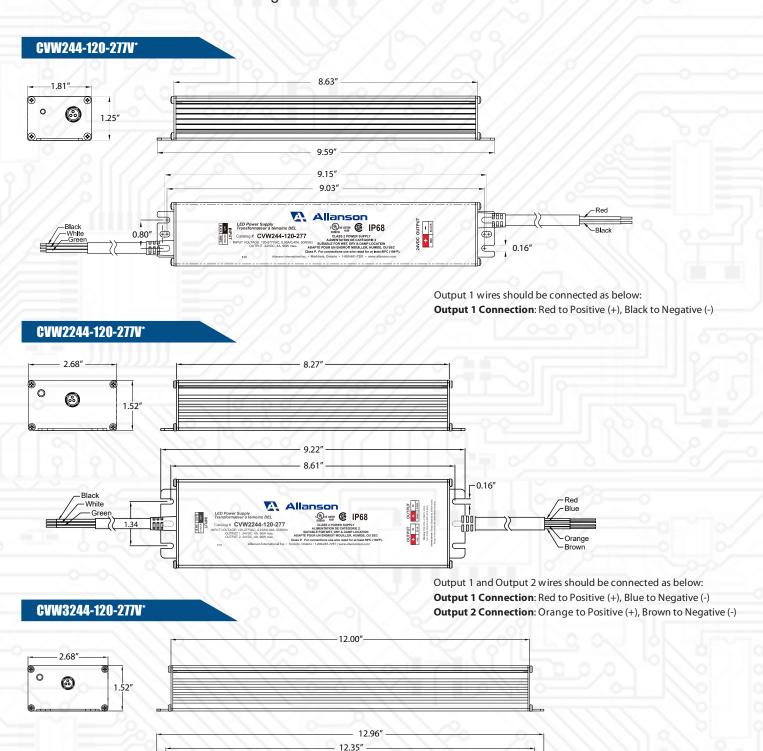
Output 1, Output 2 and Output 3 wires should be connected as below:

Output 1 Connection: Red to Positive (+), Black to Negative (-)

Output 2 Connection: Red to Positive (+), Black to Negative (-) **Output 2 Connection**: Orange to Positive (+), Green to Negative (-)

Output 3 Connection: Yellow to Positive (+), White to Negative (-)

24V Product DimensionsAll dimensions are in inches. Drawings are not to scale.



Output 1, Output 2 and Output 3 wires should be connected as below:

Output 1 Connection: Red to Positive (+), Black to Negative (-)

Output 2 Connection: Orange to Positive (+), Green to Negative (-)

Output 3 Connection: Yellow to Positive (+), White to Negative (-)



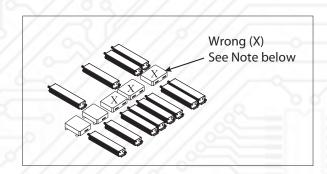
alog# CVW3244-120-277

Installation Instructions

For wet location:

Wet Location Sample Configurations

Note: Power supplies shall be spaced a minimum of 2 inches from other heat producing components. If multiple power supplies are used in one enclosure, the minimum spacing between them shall not be less than 1 inch when arranged end-to-end, and not less than 4 inches when arranged otherwise.

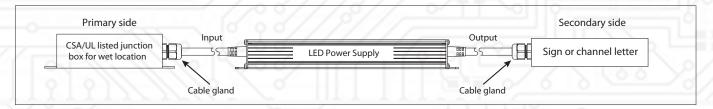


Primary Side

- Step 1 Feed the input cord through the ½" NPT cable gland included in the package.
- Step 2 Pull the input cord into the junction box.
- Step 3 Thread the PS ½" NPT cable gland firmly against the junction box, apply Teflon tape or Multi Thread Seal if necessary.
- Step 4 Connect the three primary wires to the respective wires coming from the sign's service with wire nuts.
- Step 5 Plug all unused ports/knockouts on the junction box with suitable plugs and install the junction box cover.

Please see below for connections:

Both Primary (input) and Secondary (output) cords are 21 inches long.



Secondary Side

- Connect sign or channel letter in the same way as the primary side, use included cable gland.
- Cap off any unused output leads individually.
- Seal all wall penetration with silicone to avoid water damage.

Troubleshooting

| No Light output | Make sure power at breaker is ON. Make sure connections are correct between line and power supply, and between power supply and LED chain. Check output of the power supply using a voltmeter. The output should be 12VDC & 24VDC. Have a licensed electrician check the power at the input of the power supply. Short circuit at the output will shut down the unit. | | | | | |
|--|---|--|--|--|--|--|
| Sections of LED module does not light up | Check connections and polarity between power supply and LED module, connectors and polarity between LED modules. | | | | | |
| One LED Module does not light up | If all other LED modules are working except one, replace this one module. The modules are in parallel and will not cause other modules to fail if one fails. | | | | | |
| Not enough light output Light turns off and on periodically | Make sure the LED load does not exceed the output rating of the LED power supply. Fasten any loose modules or arrays. | | | | | |
| Shadows | Tape any wires down that are interfering with the LED modules. Fasten any loose modules. | | | | | |
| Unit attempts to restart | In fault condition mode, the power supply will attempt to restart periodically and resume normal operation after fault condition is removed. | | | | | |



Installation Instructions

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CVW2125-120-277V

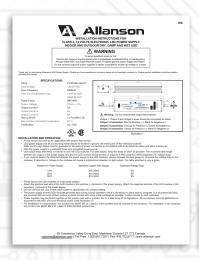


124

Scan



CVW3125-120-277V



121

V Scan

CVW244-120-277V



247

Scan



CVW2244-120-277V

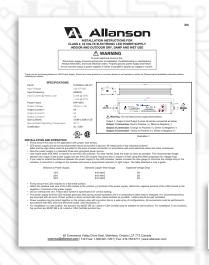


24

Scan



CVW3244-120-277V



241

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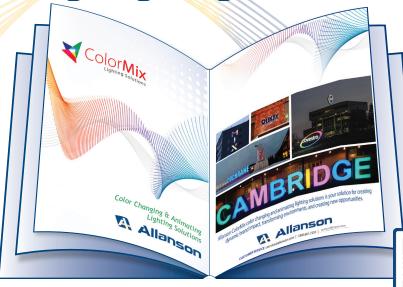












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Warrenty

Allanson provides a 5 year standard warranty on LED Power Supplies. For more information, please contact customer service.

Customer Service











Specifications Guide CV/CVL Series





LED Power Supplies

Product Features

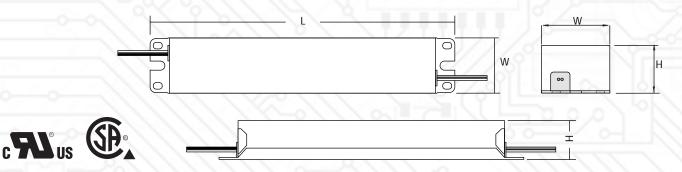
- Suitable for LED sign lighting and signage retrofit kits
- Available in 12 volt and 24 volt DC
- Available in 24W, 60W, 96W, 120W (60W + 60W), and 180W (60W +60W + 60W)
- Overload and short-circuit protected
- High Power Factor (HPF)
- New low profile and linear designs available

- Operating temperature -40°C to 40°C (reduce loading if ambient exceeds 40°C)
- · Dry and damp location rated
- Fully encapsulated
- UL Class 2 rated (SAM Manual)
- CSA certified components
- 5 year standard warranty

Specifications Chart

| Catalogue | Input | Input | Output | Output | Output | out Housing (inches) | | | Power | |
|--------------------|---------|--------------|----------|-----------------|--------------------|----------------------|-------|------|--------|------------|
| Number | Voltage | Current Amps | Volts DC | Current | Watts | L | w | н | Factor | Rating |
| | | | | 12 Volts D | C Output | | | | | |
| CV122-120-277V | 120-277 | 0.27A | 12 | 2.0 | 24 | 4.80 | 1.58 | 0.96 | HPF | Dry & Damp |
| CV125-120-277V | 120-277 | 0.65A | 12 | 5.0 | 60 | 9.50 | 1.85^ | 1.15 | HPF | Dry & Damp |
| CV125-347 | 347 | 0.25A | 12 | 5.0 | 60 | 9.50 | 1.85 | 1.15 | HPF | Dry & Damp |
| CVL2125-120-277 | 120-277 | 1.29A | 12 | 5.0 + 5.0 | 120 (60 + 60) | 16.73 | 1.70 | 1.18 | HPF | Dry & Damp |
| CVL3125-120-277 | 120-277 | 2.07A | 12 | 5.0 + 5.0 + 5.0 | 180 (60 + 60 + 60) | 20.04 | 1.72 | 1.19 | HPF | Dry & Damp |
| 24 Volts DC Output | | | | | | | | | | |
| CV244-120-277 | 120-277 | 0.94A | 24 | 4.0 | 96 | 9.50 | 1.85 | 1.15 | HPF | Dry & Damp |
| CV244-347 | 347 | 0.39A | 24 | 4.0 | 96 | 9.49 | 1.85 | 1.13 | HPF | Dry & Damp |

[^] Possible variance of - 0.10". Please reference instruction manual in package of unit purchased



Wire Size Recommendation

Recommended wire size from LED Module to Power Supply

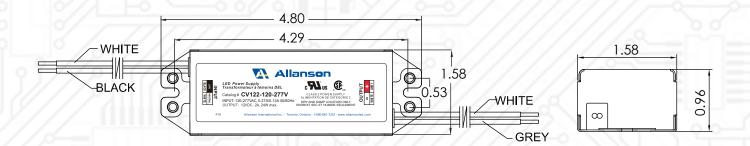
| Distance to Power Supply | Stranded Copper Wire Gauge | Expected Voltage Drop |
|--------------------------|----------------------------|-----------------------|
| 13 Feet | 16 AWG | 5% |
| 20 Feet | 14 AWG | 5% |
| 30 Feet | 12 AWG | 5% |

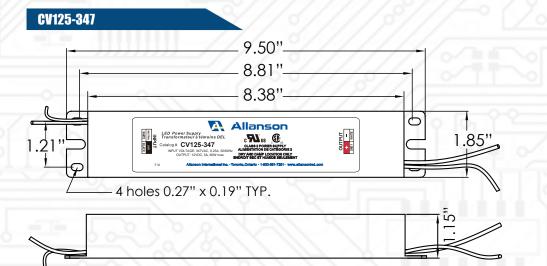


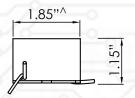
Product Dimensions

All dimensions are in inches. Drawings are not to scale.

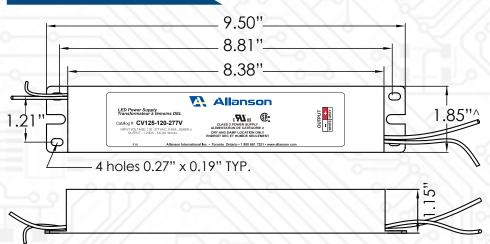
CV122-120-277V

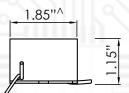






CV125-120-277 & CV244-120-277





^ Possible variance of - 0.10" in width dimension.

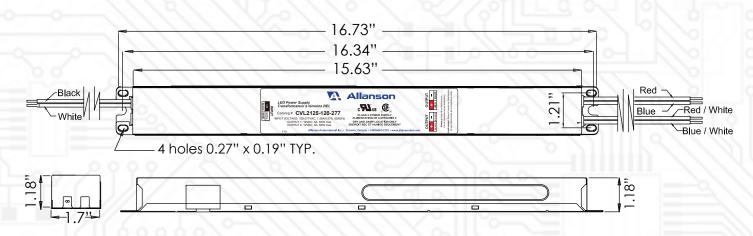
Please reference instruction manual in package of unit purchased



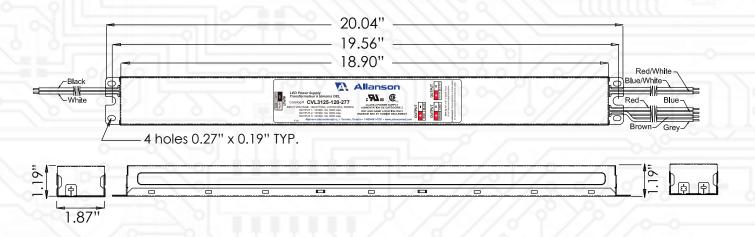
Product Dimensions

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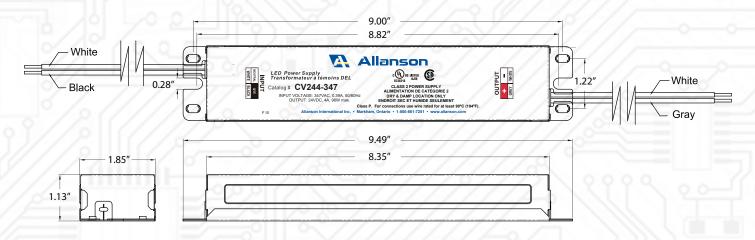
CVL2125-120-277



CVL3125-120-277



CV244-347



Installation Instructions

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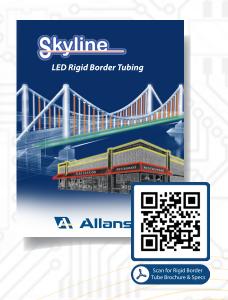




















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Warranty

Allanson provides a 5 year standard warranty on LED Power Supplies. For more information, please contact customer service.



Customer Service

3 1.800.661.7251

www.allanson.com



