



Advance CertaDrive indoor LED drivers are designed to meet basic lighting needs. These drivers are offered with specific voltage-current settings and are, thus, optimized with specifications that are appropriately suited for the application, making LED conversion affordable.

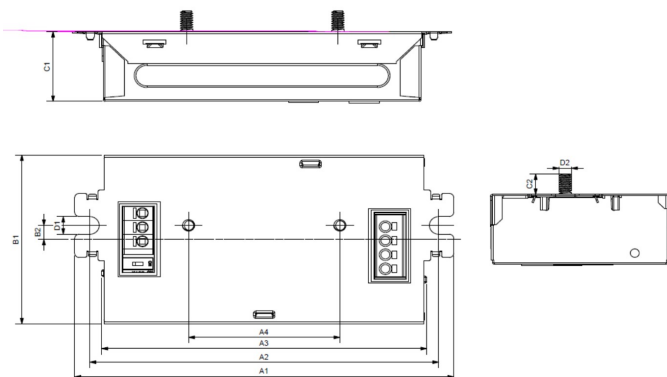
Specifications

| Input Voltage (Vac) | Output Power (W) | Output Voltage (V) | Output Current (A) | Efficiency @ Max Load | Max Case Temp. (°C) Life/UL | Input Current (A) | Input Power (W) | THD @ Max Load (%) | Power Factor @ Max Load | Surge Protect (Combi Wave, KV) | Dimming | Dimming Range (%) | Min Dimming Current (mA) | Drive Type |
|---------------------|------------------|--------------------|--------------------|-----------------------|-----------------------------|-------------------|-----------------|--------------------|-------------------------|--------------------------------|---------|-------------------|--------------------------|------------|
| 120 | 32 | 24-42 | 0.7-0.75 | 87.0 | 75 / 90 | 0.31 | 37.2 | <20 | >0.9 | 2.5 | 0-10V | 1-100 | 7.5 | CC |
| 277 | | | | 88.0 | | 0.13 | 37.2 | <20 | >0.9 | | | | | |

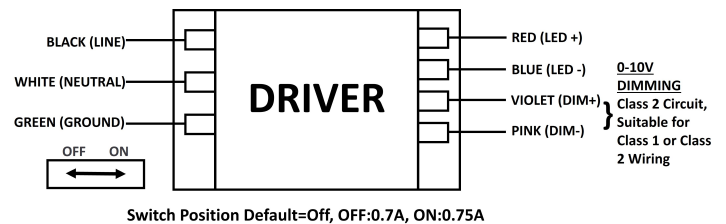
Enclosure

| Item | In(mm) | Tolerance (mm) |
|-----------------------------|-------------|----------------|
| Overall length (A1) | 4.98(126.6) | +/-1 |
| Mounting Length (A2) | 4.59(116.6) | +/-0.5 |
| Case Length (A3) | 4.28(108.6) | +/-0.5 |
| Mounting Length (A4) | 1.99(50.6) | +/-0.5 |
| Case Width (B1) | 2.37(60.1) | +/-0.5 |
| Mounting Width (B2) | 0.2(5) | +/-0.5 |
| Case Height (C1) | 0.98(24.9) | +/-1 |
| Mounting Height (C2) | 0.28(7.2) | +/-0.5 |
| Mounting Hole Diameter (D1) | 0.25(6.3) | +/-0.3 |

Mechanical Diagram



Wiring Diagram



- Install in accordance with national and local electrical codes.
- The field-wiring leads or push-in terminals shall be fully enclosed.
- Use 18 AWG Solid Copper Wire Rated $\geq 90^\circ\text{C}$.
- Strip Wire 3/8".
- For Class 2 Wiring, Use 20 AWG-16 AWG.
- Stud Diameter (D2): #8-32 Screw.
- Driver case must be grounded.

CI032C075V042CDM1

Features

- 50,000+ hour lifetime
- Excellent thermal performance
- High power factor & low THD
- Compatible with Philips Fortimo downlight modules

Benefits

- Enables long life luminaire designs
- Allows operability in indoor (low-bay) ambient conditions
- Suitable for commercial indoor applications

Application

- Indoor downlight applications
- Office areas
- Retail centers
- Wall sconces & ceiling surface luminaires

Logistical data

| Specification item | Value |
|--------------------|--------------------|
| Product name | CI032C075V042CDM1 |
| EOC | CI032C075V042CDM1 |
| Logistic code 12NC | 9290 027 50813 |
| Product code | CI032C075V042CDM1M |
| Pieces per box | 16 |
| Weight | 197 gram |

All the specifications are typical and at $T_{\text{ambient}} = 25^{\circ}\text{C}$ unless specified otherwise

Electrical input data

| Specification item | Value | Value | Unit | Condition |
|---------------------------|-----------|---------|-----------------|--|
| Rated input voltage range | 108...305 | | V_{ac} | Performance range |
| Rated input voltage | 120 | 277 | V_{ac} | |
| Rated input frequency | 50...60 | 50...60 | Hz | Performance range |
| Rated input current | 0.31 | 0.13 | A | @ rated output power @ rated input voltage |
| Rated input power | 37.2 | 37.2 | W | @ rated output power @ rated input voltage |
| Efficiency | 87.0 | 88.0 | % | @ rated output power @ rated input voltage |

Electrical output data

| Specification item | Value | Unit | Condition |
|--------------------------------|------------|-----------------|---------------------------------|
| Output voltage | 24...42 | V_{dc} | Class 2 Output |
| Output voltage max. | 60 | V | Open Circuit Voltage |
| Output current | 700...750 | mA | |
| Min output current | 7.5 | mA | |
| Output current tolerance \pm | 8 | % | within performance window |
| Output current ripple LF | ≤ 30 | % | Ripple = peak / average, < 3kHz |
| Output power | 0.2...32.0 | W | |

CI032C075V042CDM1

Control interfaces

| Specification item | Value | Unit | Condition |
|-------------------------|---------|------|--|
| Control method | 0-10V | | |
| Dimming range | 1...100 | % | Default range |
| Dimming Source Current | 0.25 | mA | Max source current with $1 < V_{dim} < 8V$ |
| Maximum Dimming Voltage | 12 | V | |
| Dimming Leakage Current | 0.01 | mA | Max number of driver in parallel, refer to Design-in Guide |

Isolation

U = Max. input voltage

| Isolation per UL-8750 | Input | Output | 0-10V | Enclosure |
|-----------------------|------------|------------|------------|------------|
| Input | - | 2U + 1kVac | 2U + 1kVac | 2U + 1kVac |
| Output | 2U + 1kVac | - | 2U + 1kVac | 500Vac |
| 0-10V | 2U + 1kVac | 2U + 1kVac | - | 2U + 1kVac |
| Enclosure | 2U + 1kVac | 500Vac | 2U + 1kVac | - |

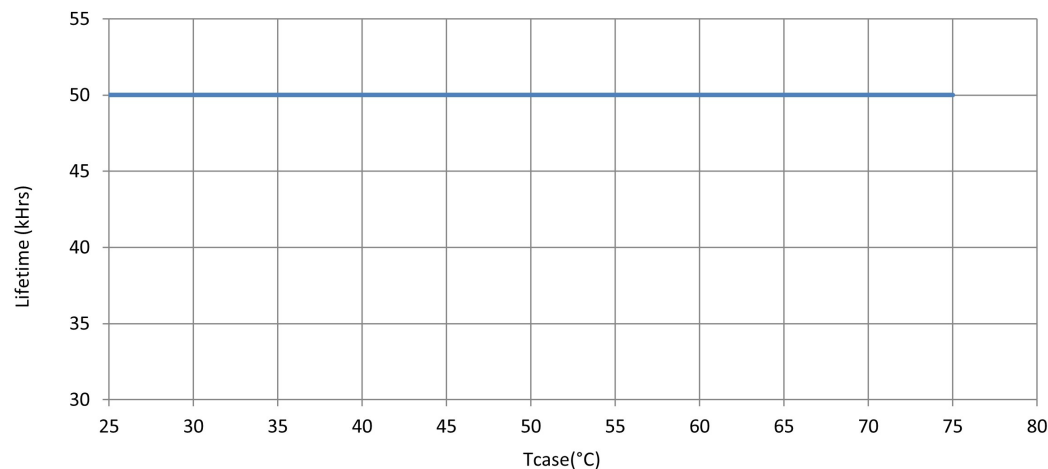
Operational temperatures and humidity

| Specification item | Value | Unit | Condition |
|------------------------|-----------|------|---|
| Ambient temperature | -20...+40 | °C | Higher ambient temperature allowed as long as T _{case-max} is not exceeded |
| T _{case-UL} | 90 | °C | Max. temperature measured at T _{case} -point |
| T _{case-life} | 75 | °C | C10 = 50000 hours measured at T _c -point |

Lifetime

| Specification item | Value | Unit | Condition |
|--------------------|--------|-------|---|
| Driver lifetime | 50,000 | hours | Measured temperature at T _{case} is T _{case-life} |

CI032C075V042CDM1



Maximum failures = 10%

Programmable features

| Specification item | Available | Default setting | Condition |
|-------------------------------------|-----------|-----------------|-----------|
| Set Adjustable Output Current (AOC) | DipSwitch | 700 mA | |
| 0-10V | Yes | | |

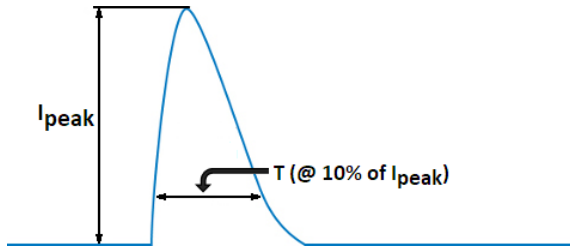
Non-programmable features

| Specification item | Value | Condition |
|--------------------------|-------|----------------------|
| Open load protection | Yes | Automatic recovering |
| Short circuit protection | Yes | Automatic recovering |

CI032C075V042CDM1

Inrush current

| Specification item | Value | Unit | Condition |
|--------------------|-------|---------|--|
| Inrush current | 4.59 | A | Input voltage 120V |
| Inrush current | 12.33 | A | Input voltage 277V |
| Inrush peak width | 8.8 | μ s | Input voltage 120V, measured at 10% height |
| Inrush peak width | 9.8 | μ s | Input voltage 277V, measured at 10% height |



Surge immunity

| Specification item | Value | Unit | Condition |
|-----------------------------------|-------|------|---|
| Mains surge immunity (diff. mode) | 2.5 | kV | ANSI Surge Type 100kHz Ring Wave (w/t 30 ohm) |
| Mains surge immunity (comm. mode) | 2.5 | kV | ANSI Surge Type 100kHz Ring Wave (w/t 30 ohm) |

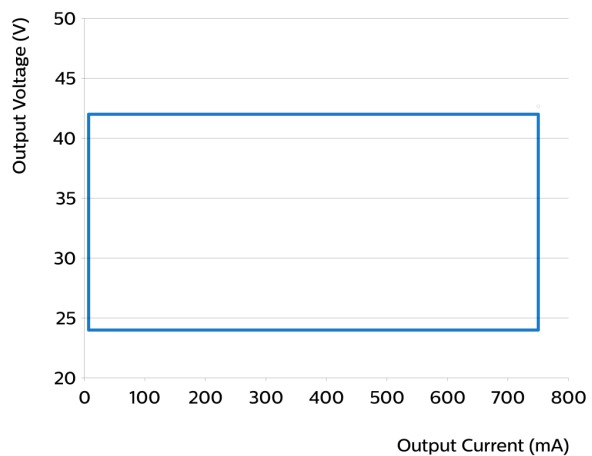
Approbation

| Specification item | Value |
|--------------------------------------|--|
| Approval Marks / Agency Approbations | NOM / RoHS / UL Class P / UL Listed US & Can |
| EMI standards | FCC Title 47 Part 15; Class A |
| Environmental protection rating | UL damp & dry |
| Audible Noise | <24dB Class A |

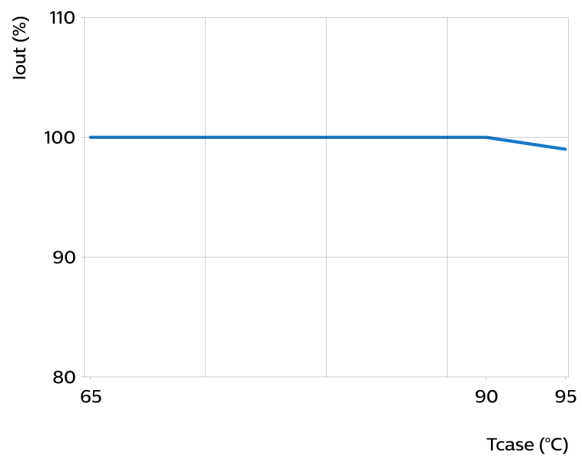
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Graphs

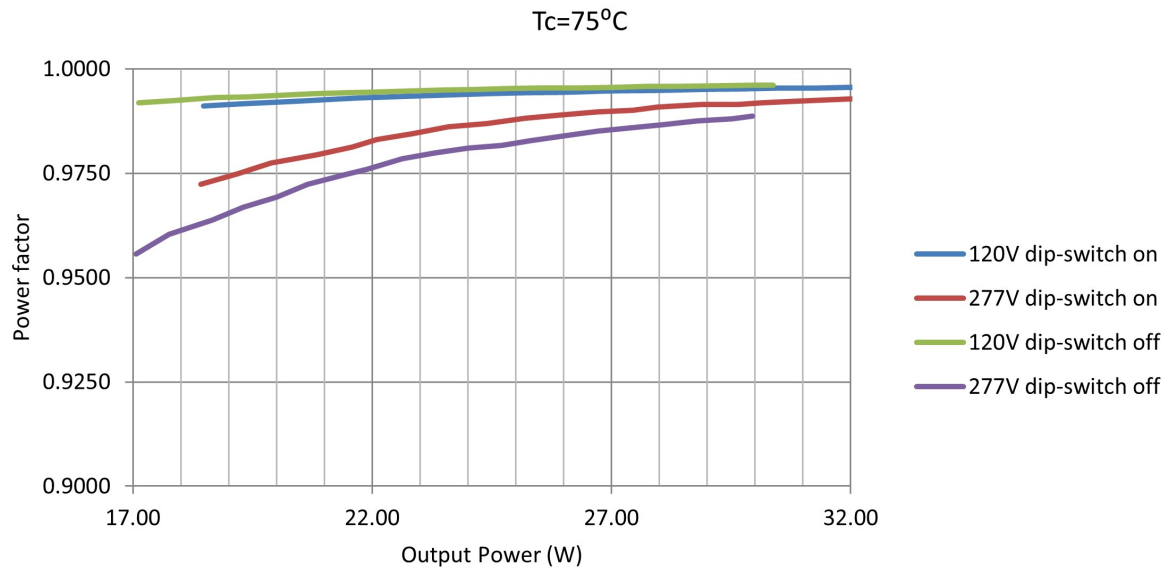
Operating window



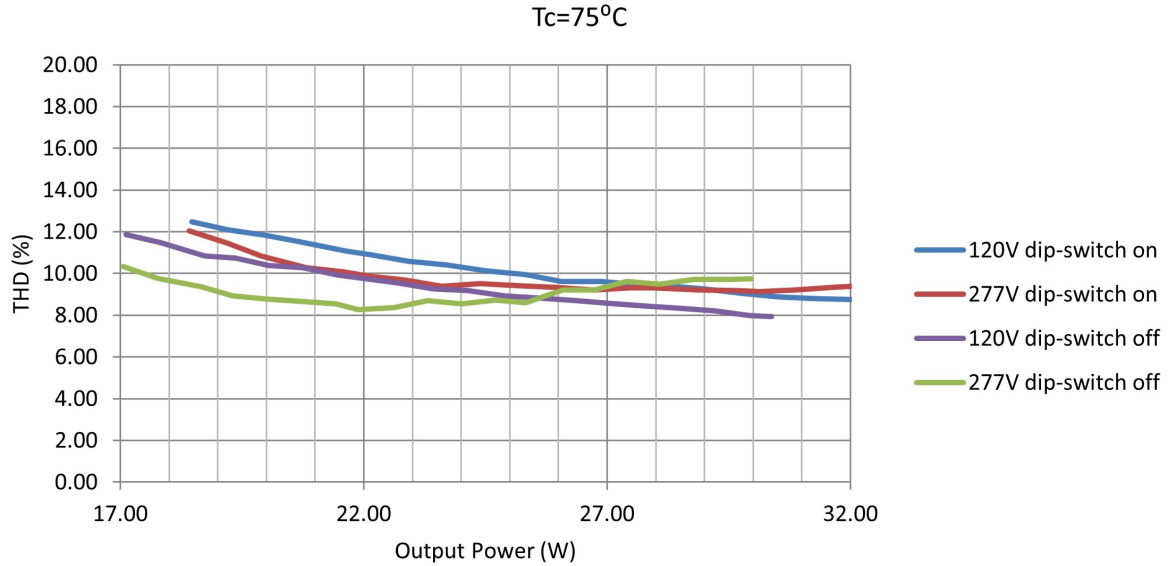
Over Temperature Protection



Power factor versus output power

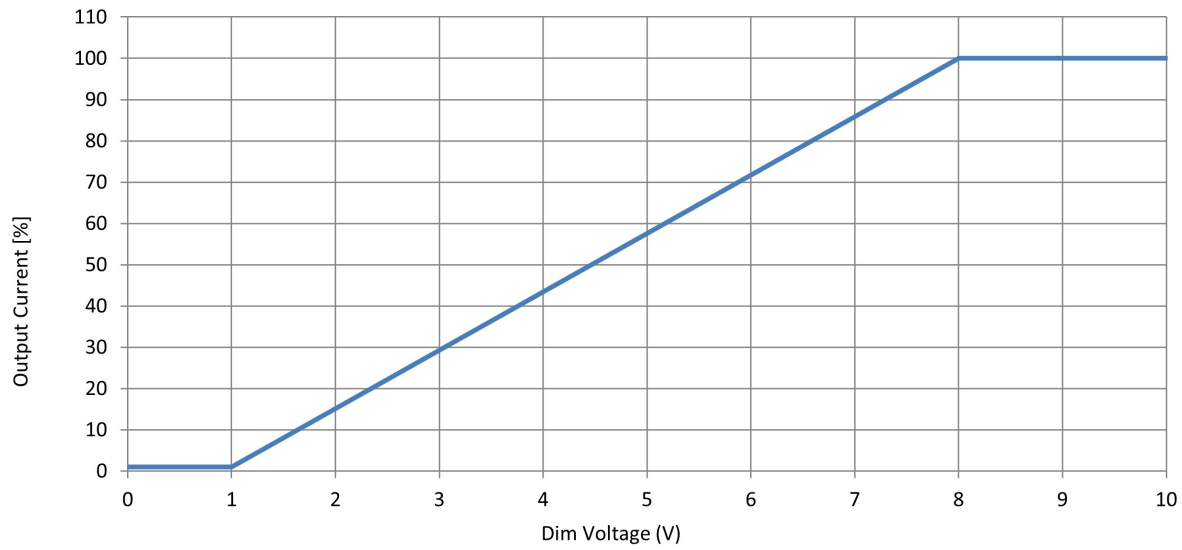


THD versus output power

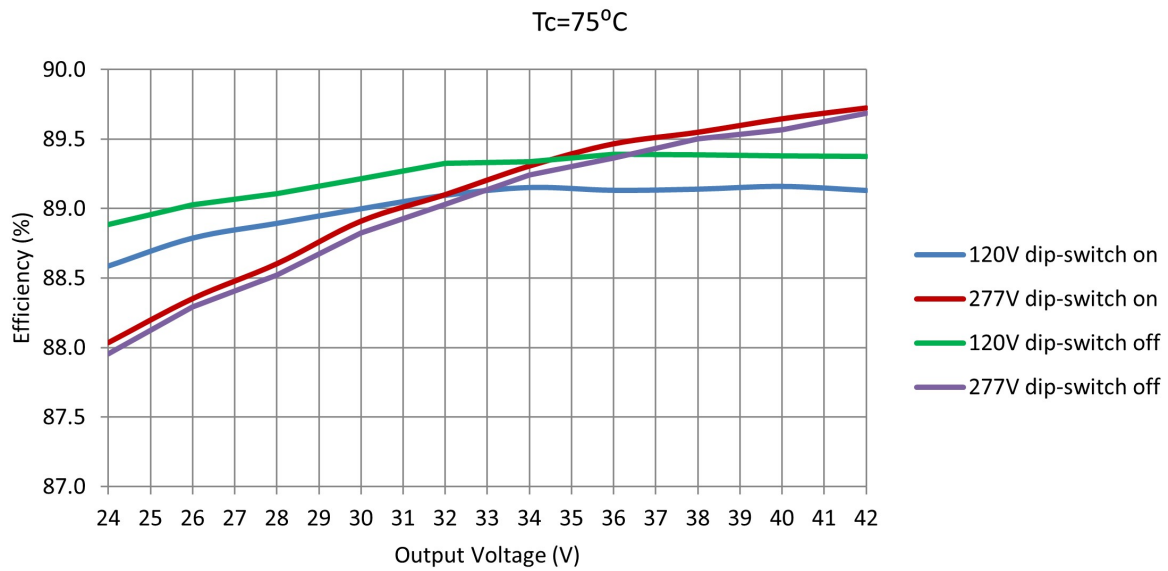


CI032C075V042CDM1

I_{out} as function of 0-10V interface



Efficiency as function of V_{out}



Appendix

Approved Dimmer List

| Manufacturer | Manufacturer Part Number |
|--------------|--|
| Lutron | Visit www.lutron.com/ |
| Leviton | IllumaTech IP7 series |
| Philips | Sunrise - SR1200ZTUNV |

