

# M18-A Series AC-DIMM+®

## High Power Constant Current LED Driver

|                   |                  |
|-------------------|------------------|
| Total Power       | 18 Watts max.    |
| Input Voltages    | 110VAC or 220VAC |
| Number of Outputs | One              |

# Product Specifications

ANZ#: Z185e, May 8, 2012

## SPECIAL FEATURES

- Compact size maximizes design flexibility.
- 3.36" (L) x 1.50" (W) x 1.09" (H)
- Fully potted, suitable for dry and damp location applications
- Phase dimmable, compatible with Standard Triac and Electronics Low Voltage Dimmers
- UL8750 Class 2 (110V) or CE compliant (230V)
- Wide selection of pre-adjusted C/C outputs

## ENVIRONMENTAL

|                            |                                                                    |
|----------------------------|--------------------------------------------------------------------|
| Operating temperature:     | -20 to +50 °C                                                      |
| Storage temperature:       | -40 to +85 °C                                                      |
| Humidity (Non-Condensing): | 5% to 95%                                                          |
| Cooling:                   | Convection                                                         |
| Vibration Frequency:       | 5 to 50 Hz                                                         |
| MTBF:                      | >100,000 Hours at full load and 25°C ambient conditions (MIL-217F) |



## SPECIFICATIONS :

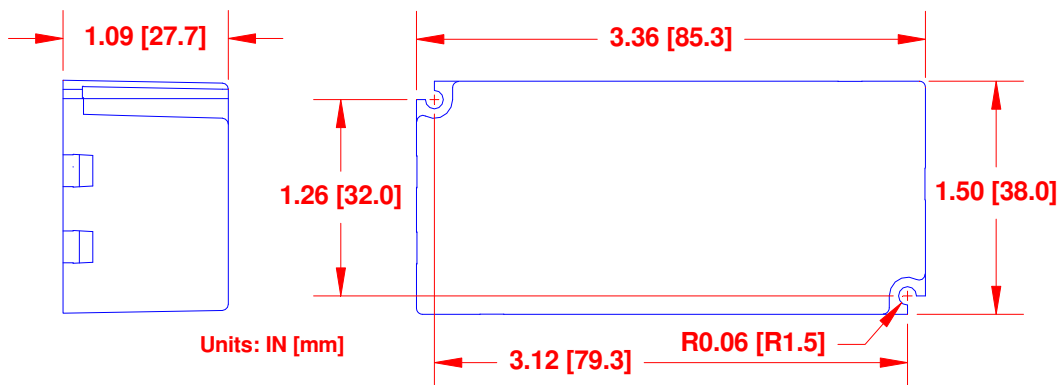
|                                                                 |                                                            |
|-----------------------------------------------------------------|------------------------------------------------------------|
| Input Range : 100~132 or 200~264 / 0.3~0.15A / 47~63Hz          | Power Factor: > 0.98 at full load, 115VAC or 230VAC        |
| DC Output Range : Refer to Model selection table                | Operation Temp. : -20°C ~ +50°C , Tc : 80 °C               |
| Efficiency : 83% Typical                                        | Storage Temp. : -40°C ~ +85°C                              |
| Output Current Regulation : ±5%                                 | MTBF(@25°C) : >100,000 Hours, MIL-217F                     |
| Protection : OCP, SCP, OVP – Auto Recovery                      | Regulation Compliance: UL8750 or EN61347, EN55015, EN61547 |
| Dimming : AC Phase - leading or trailing edge (110 or 220 only) | Dimension: 3.36" (L) x 1.50" (W) x 1.09" (H)               |

## MODEL SELECTION :

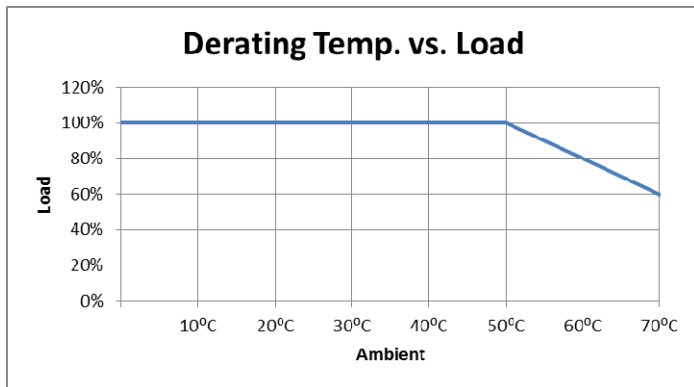
| Model Number<br>(110VAC) | DC Output (Vf) | Max. Output<br>(mA/Watts) | Model Number<br>(220VAC) | DC Output (Vf) | Max. Output<br>(mA/Watts) |
|--------------------------|----------------|---------------------------|--------------------------|----------------|---------------------------|
| M18-A18-0750             | 10 ~ 18 VDC    | 860 / 18.0                | M18-E18-0750             | 10 ~ 18 VDC    | 860 / 18.0                |
| M18-A24-0750             | 15 ~ 24 VDC    | 750 / 18.0                | M18-E24-0750             | 15 ~ 24 VDC    | 750 / 18.0                |
| M18-A30-0750             | 18 ~ 30 VDC    | 600 / 18.0                | M18-E30-0750             | 18 ~ 30 VDC    | 600 / 18.0                |
| M18-A36-0500             | 21 ~ 36 VDC    | 500 / 18.0                | M18-E36-0500             | 21 ~ 36 VDC    | 500 / 18.0                |
| M18-A42-0420             | 26 ~ 42 VDC    | 420 / 18.0                | M18-E42-0420             | 26 ~ 42 VDC    | 420 / 18.0                |
| M18-A54-0300             | 32 ~ 56 VDC    | 320 / 18.0                | M18-E54-0300             | 32 ~ 56 VDC    | 320 / 18.0                |

## MECHANICAL SPECIFICATION : M18-XYX-ZZZZ

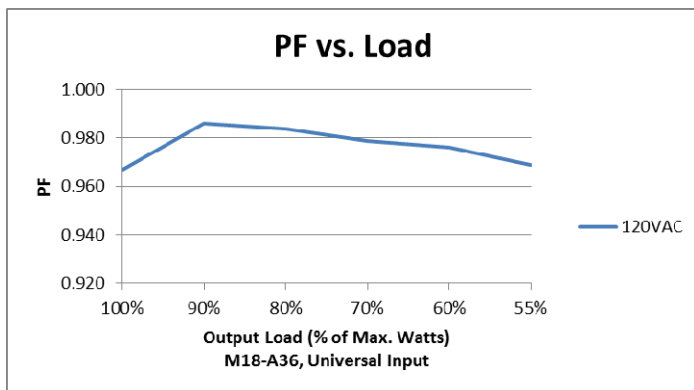
A = 110VAC input  
E = 220VAC input



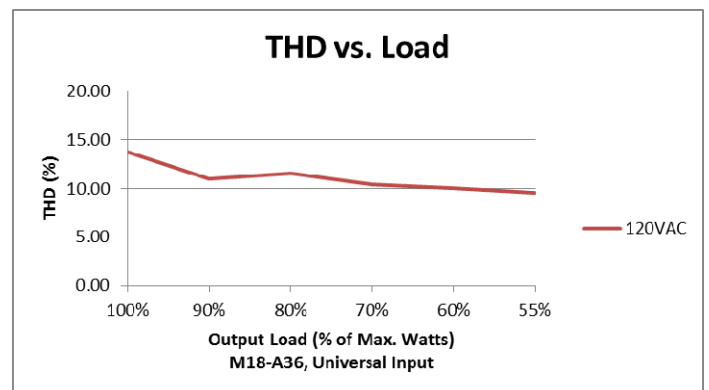
## De-rating Temp. vs. Load



## Power Factor vs. Load



## THD vs. Load



## Efficiency vs. Load

