

# MD22 Series AC-Dimm+®

# Product Specifications

ANZ#: Z239f, November 08, 2016

Multi-Dimmable Constant Current LED Driver	
Total Power	20 Watts max.
Input Voltages	110 ~ 277VAC
Number of Outputs	One

## SPECIAL FEATURES

- Compact size maximizes design flexibility.
- Available in plastic and stud-mount metal enclosures
- Fully potted, suitable for dry and damp location applications
- 4in1 dimming method, TriAC/ELV/0-10V/PWM
- UL8750 Class 2 Class P, TL mark and HL certified; CE certified
- Full range AC input from 115 ~ 277V

## ENVIRONMENTAL

Operating temperature:	-40 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 :

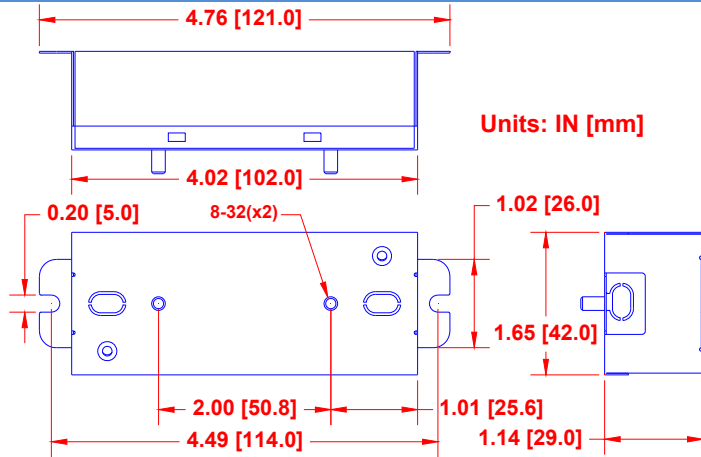
Input Range : 110 ~ 277VAC / 0.30 ~ 0.15A /47~63Hz	Power Factor: > 0.98 at full load, 115VAC or 230VAC
DC Output Range : Refer to Model selection table	Operation Temp. : -30°C ~ +50°C , Tc : 80 °C
Efficiency : 87% Typical ; Start up time: less than 0.5 Sec.	Storage Temp. : -40°C ~ +85°C
Output Current Regulation : ±5%	MTBF(@25°C) : >100,000 Hours, MIL-217F
Protection : OCP, SCP, OVP – Auto Recovery	Regulation Compliance: UL8750 or EN61347, EN55015, EN61547
Dimming : Compatible with TriAC; ELV; 0-10V; PWM	Dimension: 3.49” (L) x 1.64” (W) x 1.20” (H)

## MODEL SELECTION :

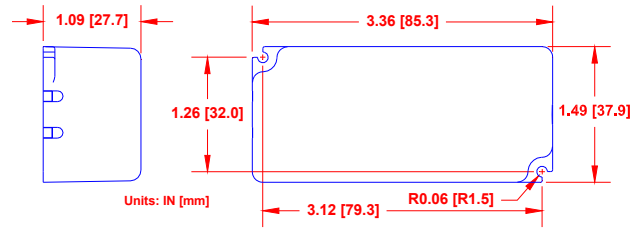
Model Number	DC Output Range (Vf)	Max. Output Current (mA)	Max. Output Power (W)
MD22-U24-yyyy-Xz	14 ~ 24 VDC	500 ~ 250	10
MD22-U30-yyyy-Xz	16 ~ 30 VDC	400 ~ 200	10
MD22-U36-yyyy-Xz	20 ~ 36 VDC	350 ~ 170	10
MD22-U42-yyyy-Xz	27 ~ 42 VDC	300 ~ 150	10
MD22-U54-yyyy-Xz	36 ~ 54 VDC	250 ~ 120	10
MD22-U24-yyyy-Xz	14 ~ 24 VDC	1000 ~ 500	20
MD22-U30-yyyy-Xz	16 ~ 30 VDC	770 ~ 400	20
MD22-U36-yyyy-Xz	20 ~ 36 VDC	670 ~ 340	20
MD22-U42-yyyy-Xz	27 ~ 42 VDC	580 ~ 290	20
MD22-U54-yyyy-Xz	36 ~ 54 VDC	450 ~ 230	20

- “xx” = Output Voltage ; “yyyy” = Output current ; “z” = Case style and material, Xp = 94V-0 plastic ; Xm = stud-mount metal
- 0-10V dimming profile: 10V-8.8V = 100%; 1V = 3%; < 1V output remain on. (This apply to 110VAC input only and 80% greater load condition)
- Compatible with ELV and 0-10V dimmers at specified AC input range when adequate dimmer is used.
- Compatible with ELV and TriAC dimmers at 120VAC only when adequate dimmer is used.
- Complies with Energy Star® specifications and DLC requirements

# MECHANICAL SPECIFICATION : MD22-Uxx-yyyy-Xz



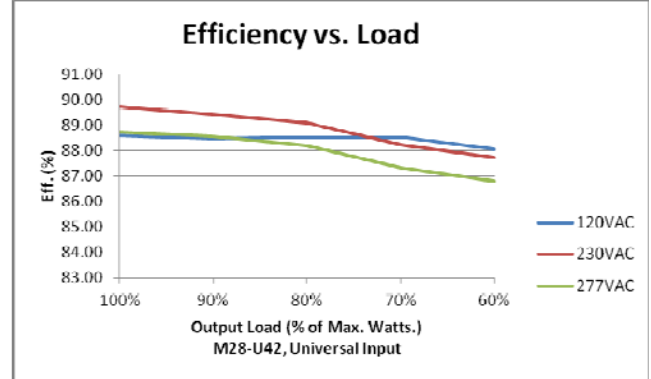
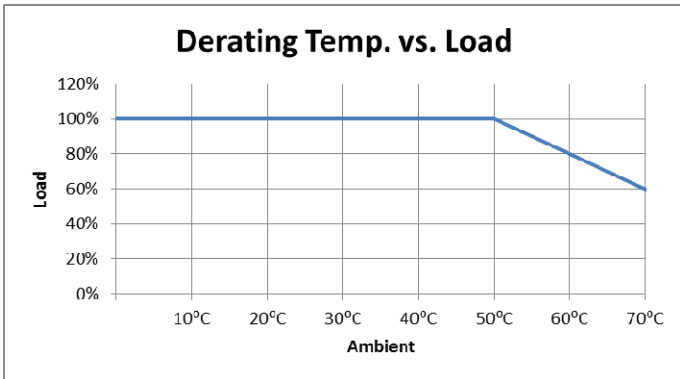
“Xm” – Stud-mountable Metal Case / Class P Certified



“Xp” – Plastic Case / TL Mark Certified

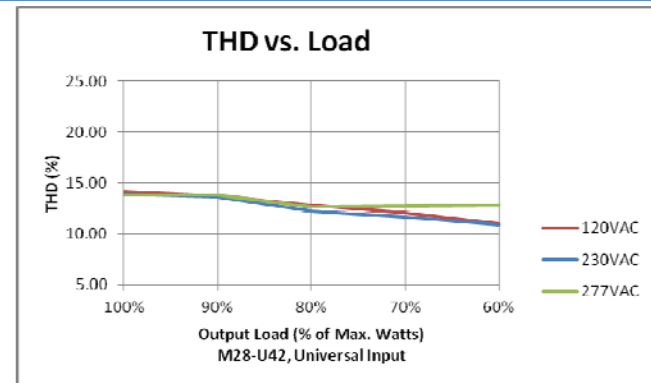
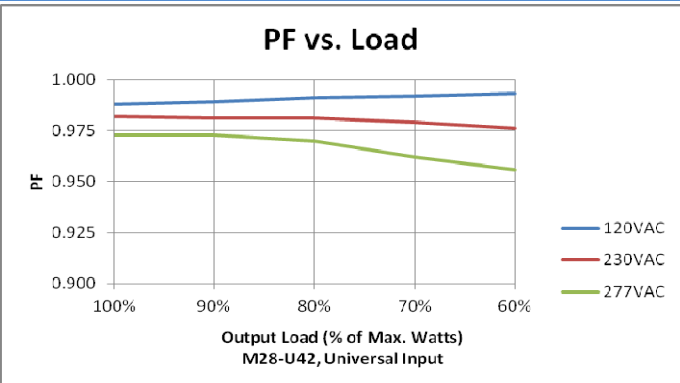
## De-rating Temp vs. Load

## Efficiency vs. Load



## Power Factor vs. Load

## THD vs. Load



## Life Time vs. Ambient Temp

## 0-10V Dimming Curve

