Armacost LIGHTING

Universal Dimming LED Drivers

24, 45, 60, 96, and 120-watt models available in 12 or 24-volt DC output

Outstanding LED dimming performance, architectural-quality brightness control, and guaranteed dimmer compatibility. Excellent for any type of dimmable LED lighting requiring constant voltage – from LED strips, modules, and light bars to puck and accent lights.

- Delivers smooth, stable, flicker-free dimming with soft start and desirable fade-on and fade-to-dark performance.
- When a dimmer is set to full brightness, drivers deliver full brightness – there is no loss of top-end light output.
- Depending on model, little or no load required for dimming.
- No de-rating required, power up to 100% of the rated load.
- For large area lighting brightness control, connect multiple LED drivers to a single 120-volt AC dimmer switch.
- Thin profile: 24-watt is 3/4-in. thick, 45-watt is less than 1 in.
- Direct wire or plug-in options are available on some models.
- Class 2 power units up to 96 watts. 60-watt models and below use Class II AC inputs with a fully isolated case – no ground wire is required.
- Auto reset protection in case of lighting overload, open circuit, short circuit, or over-temperature.
- Indoor/outdoor – ETL listed for dry or damp locations, 96 and 120-watt models are ETL listed for wet location use.

Although virtually all dimmers will work with Universal Dimming Drivers, Armacost recommends dimmers that can have an adjustment dial to set the low end dimming range, such as Lutron® CL and Leviton IllumaTech® Universal Dimmers. These dimmers are readily available in stores and offered in a wide range of styles and colors.

120-watt 12-volt model features dual 16AWG DC outputs to reduce voltage drop when at full 10 amp load.

All Universal Dimming Drivers are ETL listed and have been tested to comply with FCC Part 15B. 24, 45, 60, and 96-watt drivers conform to UL Standards 1310 and 8750, and are certified to Canada CSA Standard C22.2 No. 223-M91 and C22.2 No. 250.13. 120-watt drivers conform to UL Standard 1012, and are certified to Canada CSA C22.2 No.107.1.

For direct wire connection, 24, 45, and 60-watt drivers have sturdy, built-in terminal block connectors to accept 14-gauge solid core cable (Romex® style).

24, 45 and 60-watt drivers can be supplied with an optional 5 ft. AC cord with plug.

All drivers are available with optional enclosures.

UL listed wet location enclosure shown holding two Armacost drivers.

ETL Listed indoor/outdoor damp location enclosure.

To learn more, contact sales@armacostlighting.com

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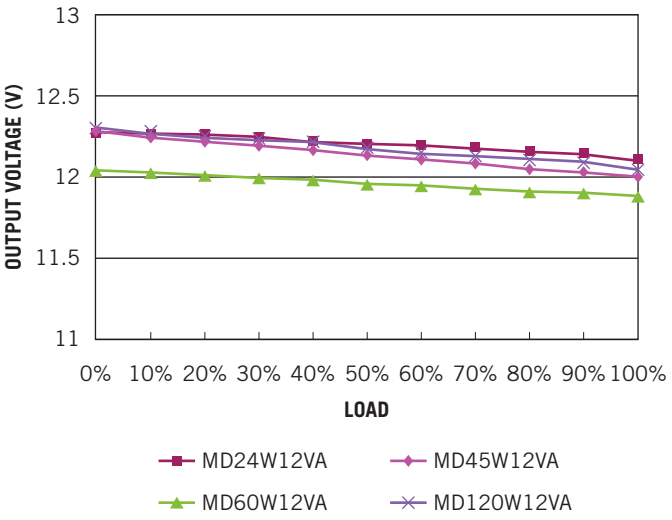
MODEL		MD24W12VA UL CLASS 2	MD24W24VA UL CLASS 2	MD45W12VA UL CLASS 2	MD45W24VA UL CLASS 2	MD60W12VA UL CLASS 2	MD60W24VA UL CLASS 2	MD96W24VA UL CLASS 2	MD120W12VA UL 1012	MD120W24VA UL 1012
DIMMING	Dimming Technology	PWM								
	Load Requirement	1W – 24W		1W – 45W		3W – 60W		5W – 96W	20W – 120W	
	Dimming Range (Standard Triac)	5% – 100%				10% – 100%		10% – 100%	20% – 100%	
	Dimming Range (Lutron CL)	0% – 100%								
	Rated PWM Dimming Frequency	400Hz				600Hz				
OUTPUT	DC Voltage	12V	24V	12V	24V	12V	24V	24V	12V	24V
	Rated Current	2A	1A	3.75A	1.87A	5A	2.5A	4A	10A	5A
	Rated Power	24W		45W		60W		96W	120W	
	Voltage Tolerance	+/-0.5V								
	Start-up Time (Typ.)	350ms				500ms		500ms	600ms	
INPUT	Voltage Range	100 – 120VAC				100 – 130VAC				
	Frequency Range	47 – 63Hz				50 – 60Hz				
	Efficiency (Typ.)	80%	81%		82%	85%		85%	83%	86%
	AC Current (Typ.)	0.52A	0.50A	0.99A	0.97A	1A		2A	2A	
	Inrush Current (Typ.)	6.5A / 120VAC	6.5A / 120VAC	8A / 120VAC	8A / 120VAC	15A / 120VAC		20A / 120VAC	30A / 120VAC	
	Leakage current	<0.7mA / 120VAC				<0.5mA/120VAC				
GUARDS	Over Current	Hiccup mode, auto-recovery upon removal of fault condition								
	Short Circuit	Hiccup mode, auto-recovery upon removal of fault condition								
	Over Temperature	Shut down, auto-recovery								
ENVIRO.	Ta	4°F (-20°C) to 104°F (40°C)								
	Working Humidity	20 – 90% Relative Humidity, non-condensing								
	Storage Temp. & RH	-40°F (-40°C) to 176°F (80°C), 10 – 95% Relative Humidity								
	Vibration	10 – 500Hz, 2G 10min./1 cycle, period for 60min. each along X, Y, Z axes								
SAFETY & EMC	Safety Standards	UL Std. 1310 and 8750, Cert. to CAN/CSA Std. C22.2 No. 223-M91 and C22.2 No. 250.13; Class 2 LED power supply, ETL Listed for dry and damp location use							UL 1012, CSA C22.2 No.107.1; ETL Listed for wet location use	
	Withstand Voltage	I/P – O/P: 1.2KVAC				I/P – O/P: 3.75KVAC				
	Isolation Resistance	I/P – O/P: 100M Ohms / 500VDC / 25°C / 70% RH								
	EMC Emission	Compliance to FCC Part 15B (>=50% loading)								
OTHER	MTBF	318.5K hrs min. (25°C, MIL-HDBK-217F)		292K hrs min. (25°C, MIL-HDBK-217F)		284K hrs min. (25°C, MIL-HDBK-217F)			280K hrs min. (25°C, MIL-HDBK-217F)	
	Cooling	Free Air Convection								
	Life Time*	30,000 hours							20,000 hours	
	Case	Fully isolated polycarbonate plastic case with built in terminal block for direct-wire connections						IP66 aluminum case with flying leads		
	Dimension	6.10" L x 2.13" W x 0.79" H (155mm L x 54mm W x 20mm H)		7.09" L x 2.4" W x 0.98" H (180mm L x 61mm W x 25mm H)		7.09" L x 2.36" W x 1.38" H (180mm L x 60mm W x 35mm H)		9.06" L x 2.76" W x 1.77" H (230mm L x 70mm W x 45mm H)	10.12" L x 3.07" W x 1.89" H (257mm L x 78mm W x 48mm H)	

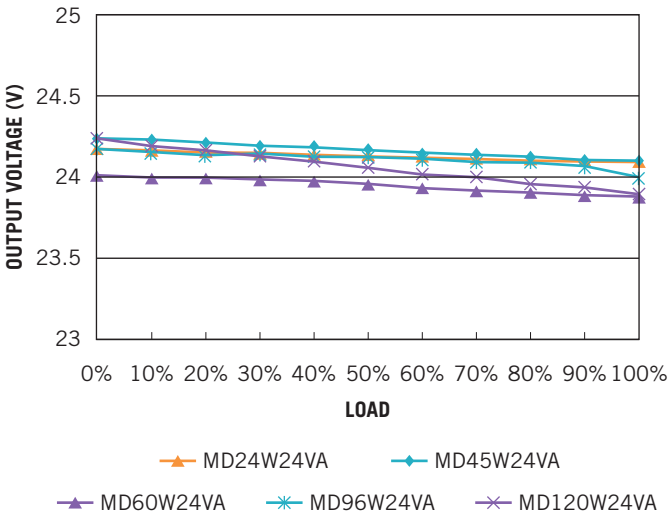
**Note: Life time tested under adverse operating conditions with ambient air temperature at 104°F and under full wattage load, failure rate <10%.*

Limited three-year warranty

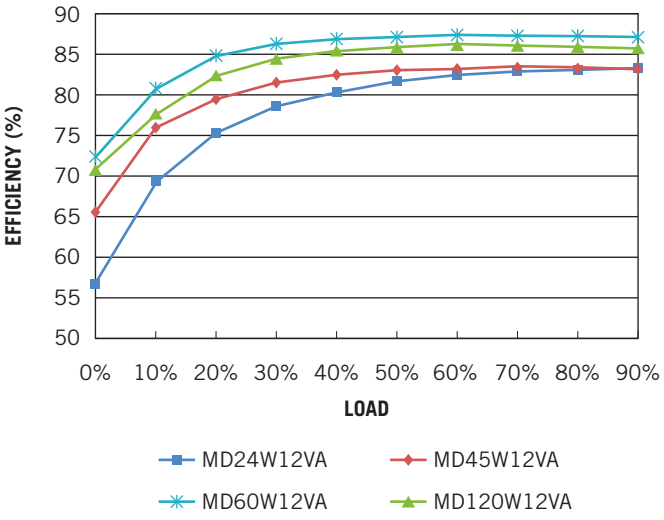
OUTPUT VOLTAGE VS LOAD (1)



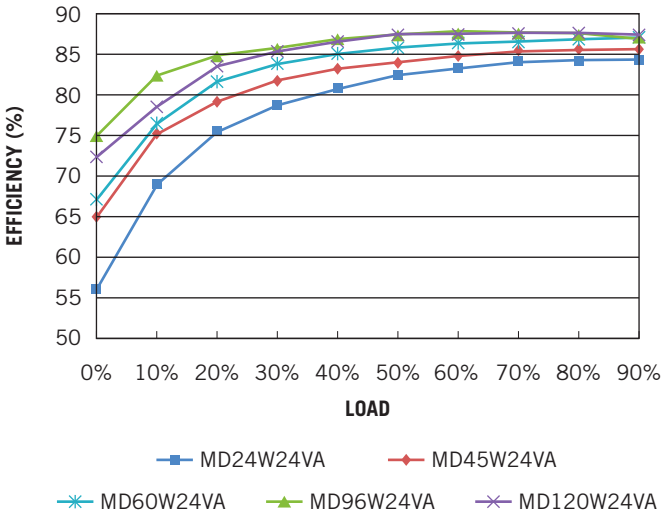
OUTPUT VOLTAGE VS LOAD (2)



EFFICIENCY VS LOAD (1)



EFFICIENCY VS LOAD (2)



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