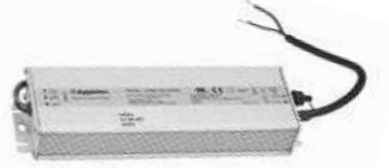


APMS150C105UD LED Drivers

Replacement BU Voltage driver for use on the following Appleton™ LED Luminaires: 13,500 and 17,500 Lumen Mercmaster™ LED Generation 3 and Industrial Mercmaster LED Generation 3; , 15,000 and 19,500 Lumen Areamaster™ Generation 2 LED and Industrial Areamaster Generation 2 LED; 30,000 and 38,000 Lumen Areamaster Generation 2 HL LED and Industrial Areamaster Generation 2 HL LED; 15,000 and 19,500 Lumen Baymaster™ LED and Industrial Baymaster™ LED; 30,000 and 38,000 Lumen Baymaster HL LED Industrial Baymaster HL LED; 13,600, 16,700 and 19,300 Lumen Code•Master™ LED

Features

- Input voltage: 90–305 Vac
- Built-in active PFC function 0.98 typ.
- High efficiency: up to 92% typ.
- Built-in lightning protection
- Three dimming in one operation modes (0–10 V dimming / clock dimming (CLK) / PWM dimming)
- Protection: OVP, SCP, OTP
- Full power at 65% Io max ~ 100% Io max (constant power)
- IP67 design for indoor or outdoor installations

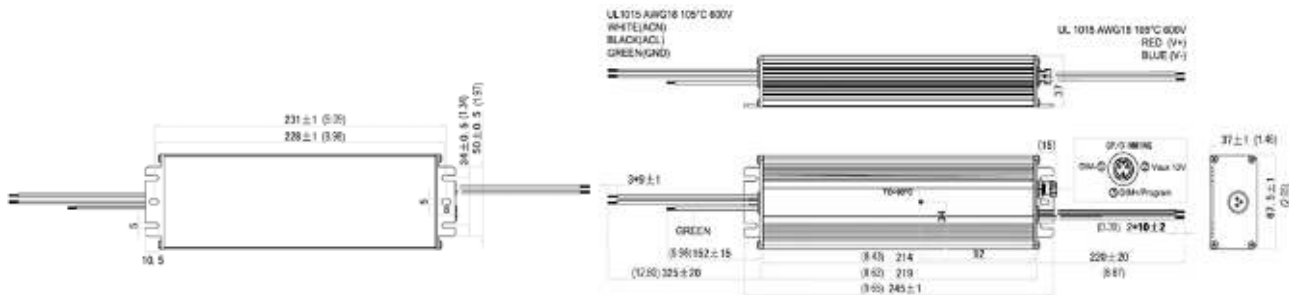


NEC/CEC Compliances

- UL8750, UL1012, EN61347-1
- EN61347-2-13, EN60598-1, EN62384

Output Current	Input Voltage	Max. Output Power	Typical Efficiency	Typical Power Factor	Used in BU Luminaire Models	Part Number
650 mA	90-305 Vac / 125-300 Vdc	150 W	90%	0.98	AMLGL7W, AMLHL2W, BLLL7W, BLLPL7W, BHLL2W, BHLPL2W, CMLED40	APMS150C105UD65
680 mA	90-305 Vac / 125-300 Vdc	150 W	90%	0.98	AMLGL7C, AMLGL7N, AMLHL2C, AMLHL2N, BLLL7C / BLLPL7C, BLLL7N / BLLPL7N, BHLL2C / BHLPL2C, BHLL2N / BHLPL2N	APMS150C105UD68
720 mA	90-305 Vac / 125-300 Vdc	150 W	90%	0.98	MLGH3	APMS150C105UD72
820 mA	90-305 Vac / 125-300 Vdc	150 W	90%	0.98	CMLED75	APMS150C105UD82
890 mA	90-305 Vac / 125-300 Vdc	150 W	90%	0.98	AMLGL8W, AMLHL3W, BLLL8W, BLLPL8W, BHLL3W, BHLPL3W	APMS150C105UD89
900 mA	90-305 Vac / 125-300 Vdc	150 W	90%	0.98	MLGH6	APMS150C105UD90
915 mA	90-305 Vac / 125-300 Vdc	150 W	90%	0.98	AMLHL3C, AMLHL3N, BHLL3C / BHLPL3C, BHLL3N / BHLPL3N	APMS150C105UD91
930 mA	90-305 Vac / 125-300 Vdc	150 W	90%	0.98	AMLGL8C, AMLGL8N, BLLL8C / BLLPL8C, BLLL8N / BLLPL8N	APMS150C105UD93
980 mA	90-305 Vac / 125-300 Vdc	150 W	90%	0.98	CMLED90	APMS150C105UD98

Dimensions in Millimeters (Inches)

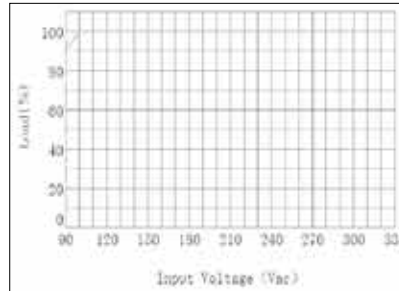


APMS150C105UD LED Drivers

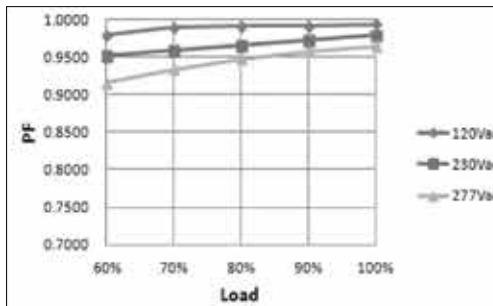
Replacement BU Voltage driver for use on the following Appleton™ LED Luminaires: 13,500 and 17,500 Lumen Mercmaster™ LED Generation 3 and Industrial Mercmaster LED Generation 3; , 15,000 and 19,500 Lumen Areamaster™ Generation 2 LED and Industrial Areamaster Generation 2 LED; 30,000 and 38,000 Lumen Areamaster Generation 2 HL LED and Industrial Areamaster Generation 2 HL LED; 15,000 and 19,500 Lumen Baymaster™ LED and Industrial Baymaster™ LED; 30,000 and 38,000 Lumen Baymaster HL LED Industrial Baymaster HL LED; 13,600, 16,700 and 19,300 Lumen Code•Master™ LED

Diagrams

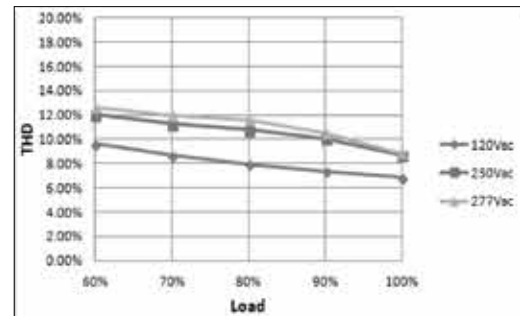
Derating Curve



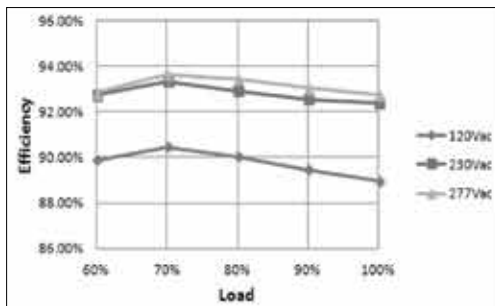
Power Factor vs. Load Curve



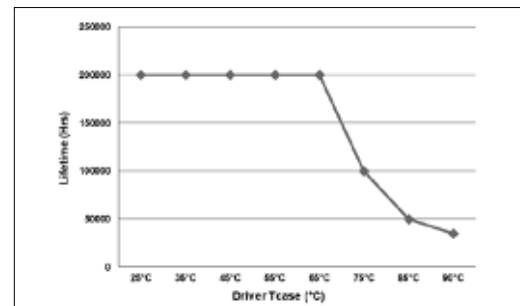
THD Curve



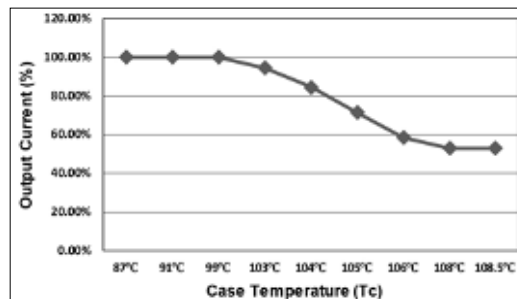
Efficiency vs. Load Curve



Lifetime vs. Driver Tcase



OTP



APMS150C105UD LED Drivers

Replacement BU Voltage driver for use on the following Appleton™ LED Luminaires: 13,500 and 17,500 Lumen Mercmaster™ LED Generation 3 and Industrial Mercmaster LED Generation 3; , 15,000 and 19,500 Lumen Areamaster™ Generation 2 LED and Industrial Areamaster Generation 2 LED; 30,000 and 38,000 Lumen Areamaster Generation 2 HL LED and Industrial Areamaster Generation 2 HL LED; 15,000 and 19,500 Lumen Baymaster™ LED and Industrial Baymaster™ LED; 30,000 and 38,000 Lumen Baymaster HL LED Industrial Baymaster HL LED; 13,600, 16,700 and 19,300 Lumen Code•Master™ LED

Specifications

Input	Efficiency (120 Vac) (Typ.)	89.0%
	Efficiency (230 Vac) (Typ.)	92.0%
	Voltage Range (V)	90–305 Vac, 125-300 Vdc (min.-max.)
	Frequency Range (Hz)	47 ~ 63
	Power Factor (Typ.)	>0.95 with 100% load, at 100 Vac–277 Vac 0.90 (Typ.) with 60% ~ 100% load, at 100 Vac–277 Vac, 60 Hz
	THD (Typ.)	<15% at 220 Vac input 50 Hz, 80% ~ 100% load <20% at 100 Vac - 277 Vac, 60 Hz input, 60% ~ 100% load
	AC Current (Typ.)	1.8 A at 100 Vac input, 0.9 A at 230 Vac
	Inrush Current (Max.)	65 A at 230 Vac input +25 °C (+77 °F) Cold Start (time wide=500 uS, measured at 50% Ipeak
	Leakage Current (Max.)	0.75 mA at 277 Vac, 60 Hz input
Output	Voltage Range (V) ③	214–86
	Output Current Range (mA)	70–1050
	Rated Power (W)	150 (max.)
	Output Current Settable Range	0.45 to 1.05 A dc
	Constant Power Output Set	65% I _{o_max} ~ 100% I _{o_max}
	Ripple & Noise Current (Typ.)	10% max. ((PK-AV) / AV), full load)
	Current Tolerance (I _{max})	±5%
	Line Regulation (I _{max})	±3%
	Load Regulation (I _{max})	±5%
Dimming Control	Turn On Delay Time	<1.2s, at 120 Vac; <1s, at 277 Vac
	12 Vdc Output Voltage (Vdc)	10.8 V min. ~ 13.2 V max.
	12 Vdc Output Current (mA)	0 mA ~ 20 mA max.
	0 ~ 10V / DMI+ Voltage	Absolute maximum voltage -10 V min ~ 20 V max
	0 ~ 10V / DMI+ Short Current	280 uA ~ 450 uA (DIM(+)=0)
Protection	Dimming Function	Default is 0–10 V dimming mode; others dimming ways like PWM / CLK. Dimming can set by software configuration
	Over Voltage (V)	280 V max. No damage. The power supply shall be self-recovery when the fault is removed.
	Short Circuit	Protection type: Constant current limiting.
	Over Temperature	Decreases output current, returning to normal after over temperature is removed. (See OTP plot.)

① All parameters NOT specially mentioned are measured at 230 Vac input, rated load and +25 °C (+77 °F) of ambient temperature.

② Measured at full load and steady-state temperature in +25 °C (+77 °F) ambient (Efficiency will be about 2% lower if measured immediately after startup).

③ Refer to V/I curve.

APMS150C105UD LED Drivers

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Specifications		
Environment	Operating Humidity	20 ~ 95% RH, non-condensing
	Tc	-40 ~ +90 °C (-40 ~ +194 °F) (max.)
	Storage Temp., Humidity	-40 ~ +85 °C (-40 ~ +185 °F), 10~95% RH
	Vibration	10~500 Hz, 5G 12 min./cycle, period for 72 min. each along X, Y, Z axes
Safety & EMC	Safety Standard	UL8750, UL1012, EN61347-1, EN61347-2-13, EN60598-1, EN62384
	Withstand Voltage	I / P-O / P:3.75K Vac I / P-FG:1.875KV O / P-FG:1.5KV
	Isolation Resistance	I / P-O / P, I / P-FG, O / P-FG:100M Ohms / 500 Vdc / +25 °C (+77 °F) / 70%RH
	EMC Emission	EN55015/FCC Part 15 Class B, EN61000-3-2 Class C, EN61000-3-3
	EMC Immunity	EN61000-4-2,3,4,5,6,8,11, EN61000-4-5: Line to Neutral: ±6 kV ; Line to GND: ±6 kV; Neutral to GND: ±6 kV. IEEEE/ANSI C62.41.2Transient Surge Requirements, combi wave 2 ohm source impedance.
Others	MTBF	300,000 Hours,measured at full load, +25 °C (+77 °F) ambient temperature
	Lifetime	Refer to plot.
	Dimension	221 x 67.5 x 40 mm (L x W x H); (8.70 x 2.66 x 1.46 inches)
	Weight	1550 g (2.31 lb)

① All parameters NOT specially mentioned are measured at 230 Vac input, rated load and +25 °C (+77 °F) of ambient temperature.