



TECHNICAL SPECIFICATION

MODEL NO.:APMS-105CAJ-700 DOCUMENT NO.:_____

CUSTOMER NO.:_____ DATA.:_____

CHANGZHOU AMCFLEX TECHNOLOGY CO LTD
ADD: NO8, HUASHAN ROAD, XINBEI AREA, CHANGZHOU, JIANGSU, CHINA
TEL: 0086 519 69682537 FAX: 0086 519 68693467
Email: info@amcflex.com www.amcflex.com

APMS-105CAJ-700 Series

105W output with current adjustable function



1. Constant Power Mode
2. Built-in Active PFC Function, High efficiency up to 92%
3. Protection: Over load/overvoltage/over temperature Short Circuit Protection
4. Output current support adjustable
5. Aluminum housing design with functional Ground
6. IP67 full sealed for indoor and outdoor installations
7. Low ripple, 100% flicker-free design
8. 5 Years warranty



TECHNICAL PARAMETERS

Model		APMS-105CAJ-700
OUTPUT	Output voltage range	75-150VDC
	Output Current range	700mA-1050mA
	Output Power	105W
	Open Circuit Voltage(Max)	170VDC
	Efficiency	≥92%
	Total Output Current Ripple (pk-pk)	5% Io Max
	Current Tolerance	±5.0%
	Startup overshoot current	10% Io Max, at 100% Load condition
	Line Regulation	±1%, @100% load
	Load Regulation	±3%
	Turn-on delay time	<2S
	Efficiency	90%/120VAC, 92%/220VAC, 92.5%/277VAC, Measured at 100% load and steady-state temperature in 25 °C ambient; (Efficiency will be about 2.0% lower if measured immediately after startup.)

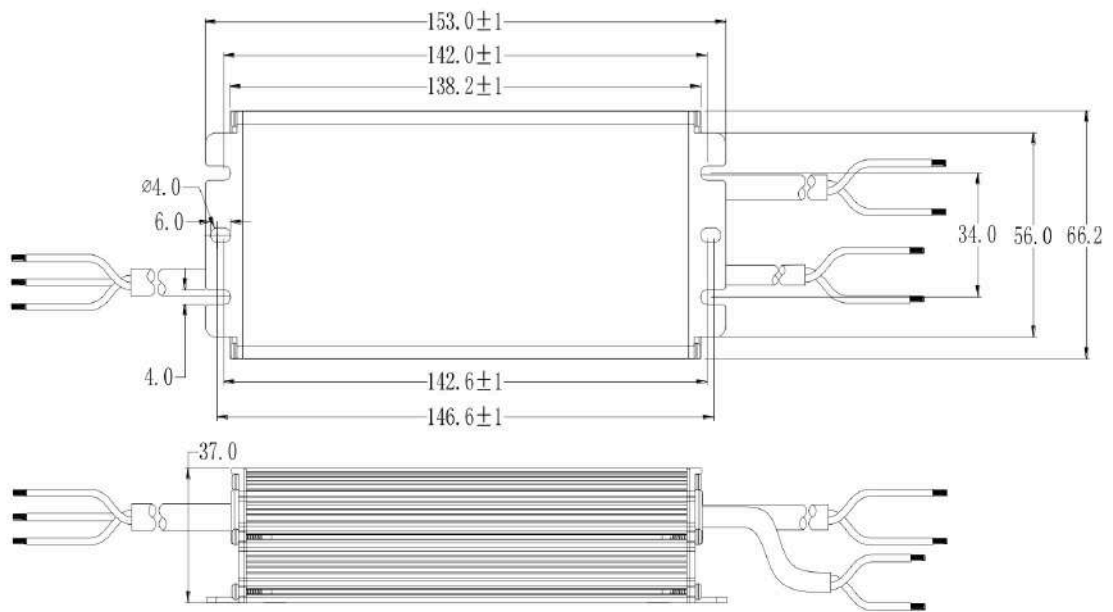
INPUT	Rated Input voltage	100-277VAC
	Input voltage range	90-305VAC
	Input Frequency	47-63(Typical 50/60)HZ
	Input Current Max	1.5A Max
	Inrush Current	75A @230Vac & Full load.
	Power Factor	≥ 0.95 /230VAC; ≥ 0.92 /277VAC @ full load
	THD	$\leq 10\%$ At 220-240Vac, 50-60Hz, 75%-100%load (112.5-150W)
	Leakage Current	$< 0.70\text{mA}/277\text{VAC}, 60\text{Hz}$
PROTECTION	Short Circuit	Auto Recovery. No damage will occur when any output is short circuited. The output shall return to normal when the fault condition is removed.
	Over Load	Hiccup mode, auto-recovery after fault condition is removed
	Over Temperature	Decreases output current, auto-recovery after temperature goes down
	Over Voltage	Shut-down output voltage, re-power on to recover
	Open circuit	yes
ENVIRONMENT	Working Temperature	$-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$ (Typical 25°C), refer to derating curve
	Max Case Temperature	90°C Max, $T_a: 60^{\circ}\text{C}$
	Working Humidity	20-95% RH NO-condensing
	Storage Temp/Humidity	$-40^{\circ}\text{C} \sim +80^{\circ}\text{C}$, 10-90% RH
	Attitude	0 ~ 5000 M, Altitude Over 2000 meters, 1.5% derating for every 100 meters increase
	Temperature Coefficient	$0.03\%/^{\circ}\text{C}$ (0- 60°C)
	Vibration	10-500Hz, 5G 12min./1cycle, period for 72 min, each along X.Y. Z axes
OTHERS	MTBF	200Khours, MIL-HDBK-217F (25 $^{\circ}\text{C}$)
	Lifetime	50Khours(230Vac&100% load, 75 $^{\circ}\text{C}$ case temperature, refer to lifetime curve for details)
	Dimension	153(L)*66.2 (W)*37(H) mm
	Packing	0.6Kg;24pcs/ 15.4Kg/0.025CBM

SAFETY& EMC	Safety Standards	UL8750, IEC/EN61347-1,EN61347-2-13,EN62368, GB19510.1,GB19510.14, IP67 Approved
	Withstand Voltage	I/P-O/P:3.75KVAC, I/P-FG:1.5KVAC, O/P-FG: 500VAC
	Isolation Resistance	I/P-O/P,I/P-FG,O/P-FG:100M Ohms/500VDC/25C°/70RH
	Storage Temp/Humidity	-40C°~+80C°, 10-90% RH
	EMI	
	Conducted	EN55015(CISPR15), GB17743
	Radiated	EN55015(CISPR15), GB17743
	Harmonic Current	EN61000-3-2 , Class C @load ≥50%
	EMS	
	ESD	EN61000-4-2, 8KV air ; Level 2, 4KV contact
	Radiated	EN61000-4-3
	EFT/Burst	EN61000-4-4
	Surge	EN61000-4-5, 4KV/Line-Line 6KV/Line-Earth
	Conducted	EN61000-4-6
	EN61547, Electromagnetic Immunity Requirements applies to lighting Equipment	

Note: (1) This LED driver meets the EMI specifications above, but EMI performance of a luminaire that contains it depends also on the other devices connected to the driver and on the fixture itself.

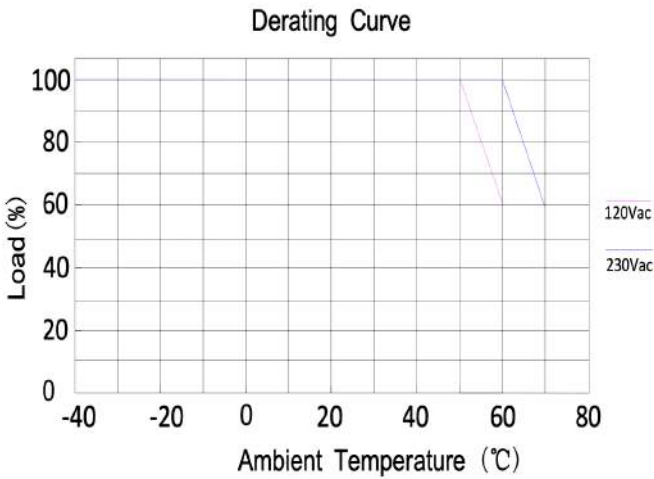
Mechanical Mounting

DIMENSION	153(L)*66.2 (W)*37(H) mm		
Input Cable	AC/N(Blue) AC/L(Brown) FG(Green/Yellow)	VDE 17AWGx3C & 3x1.0mm ²	250±30mm Length
Output Cable	V+(RED)/Brown, V-(BLACK)/Blue	VDE 17AWGx2C & 2x1.0mm ²	250±30mm Length

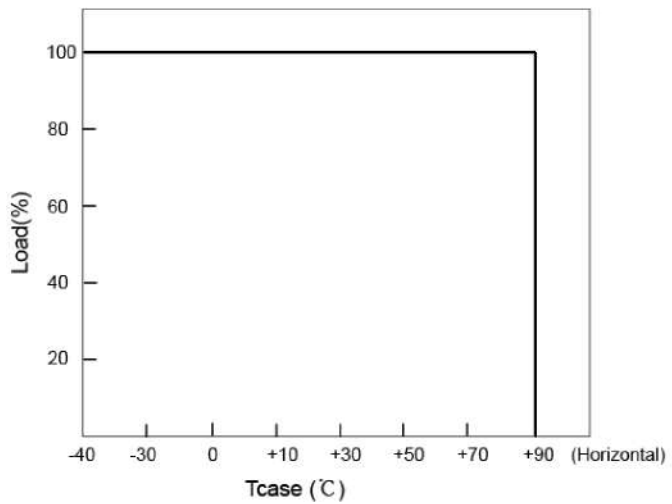


Characteristics & Derating

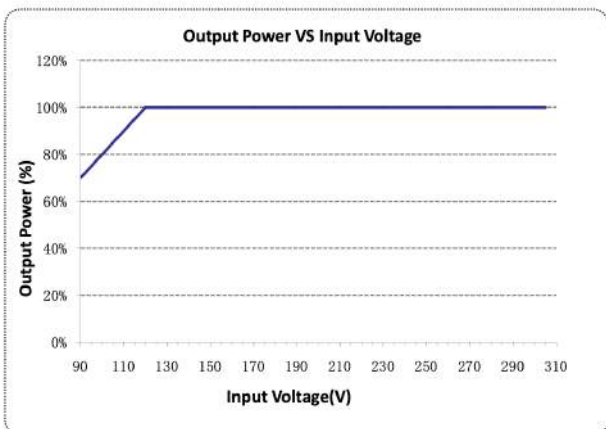
OUTPUT LOAD vs TEMPERATURE



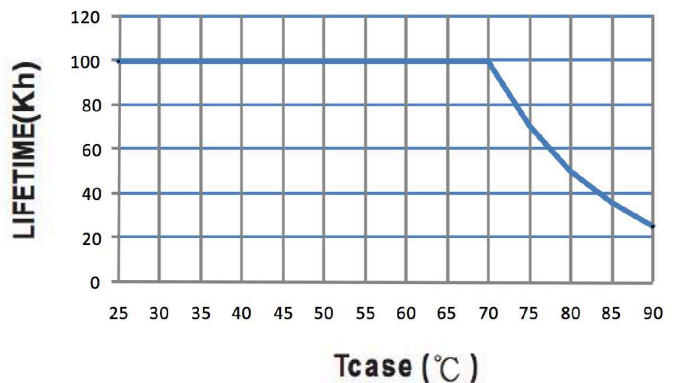
OUTPUT LOAD vs Tcase



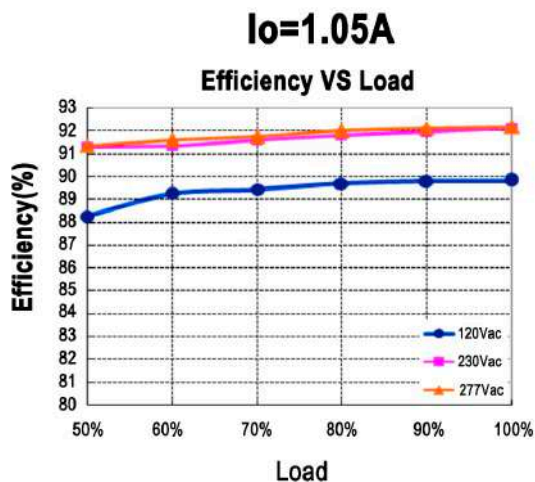
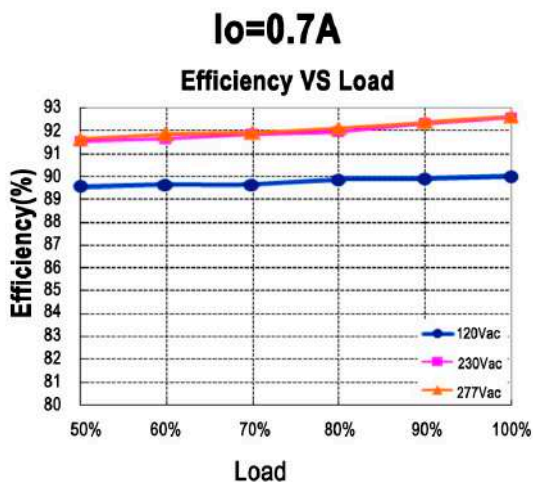
STATIC CHARACTERISTIC



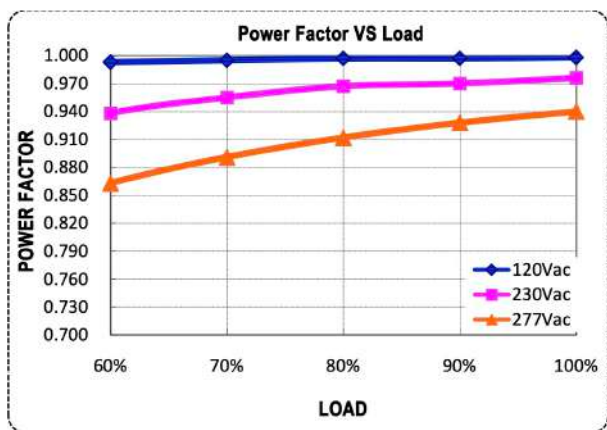
LIFE TIME



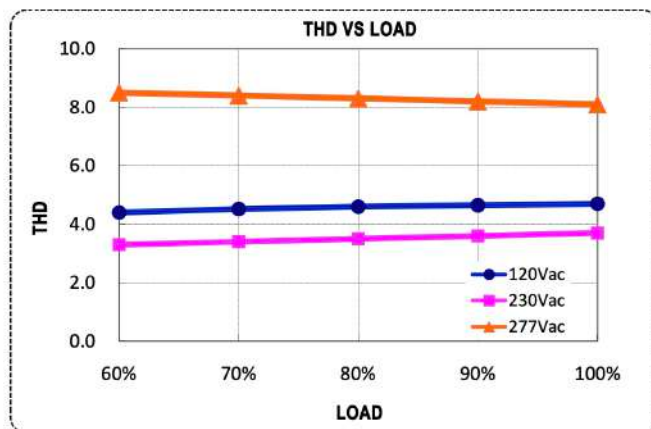
EFFICIENCY VS LOAD



POWER FACTOR VS LOAD

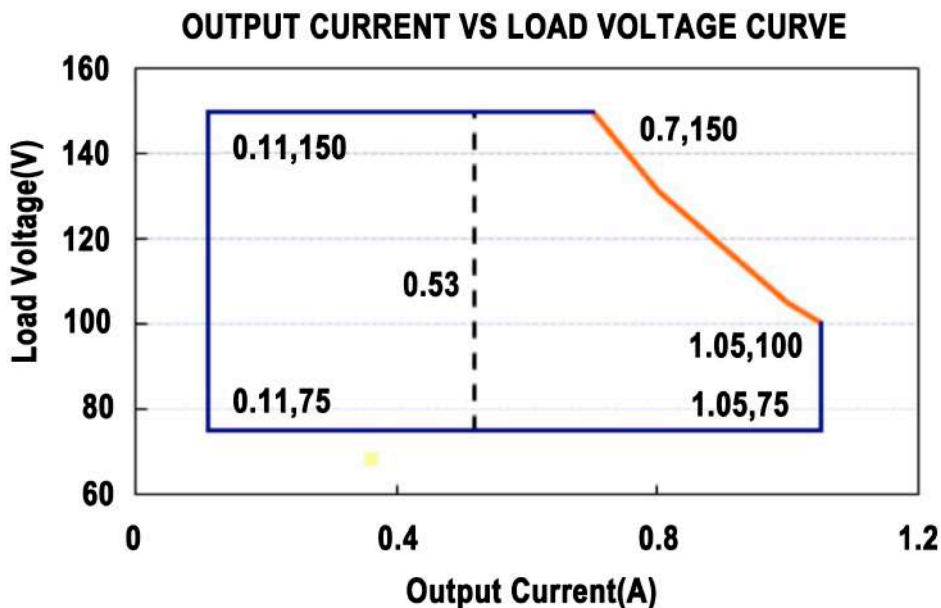


TOTAL HARMONIC DISTORTION





RoHS Compliance Our products comply with reference to RoHS Directive (EU) 2015/863 amending 2011/65/EU, calling for the elimination of lead and other hazardous substances from electronic products

Operation Area



Product Labels

 APMS-105CAJ-700 CONSTANT CURRENT LED DRIVER		 Io ADJ
INPUT	OUTPUT	
<ul style="list-style-type: none">● AC/N(BLUE)● AC/L(BROWN)⊕ GND (GREEN/YELLOW)	<p>INPUT:100-240V~ 50/60Hz, 1.5A max, $\lambda > 0.95$ 277V~ 50/60Hz, 0.5A max (277V~ for North American only)</p> <p>OUTPUT: 75-150V === 0.7A-1.05A Max: 170V === Max 105W</p> <p>100-200V~ ta:50°C ,tc:90°C 200-277V~ ta:60°C, tc:90°C</p> <p>SELV ROHS IP67</p>	<ul style="list-style-type: none">Vo- ● (BLUE)Vo+ ● (BROWN) <p>MADE IN CHINA</p>

Installation Manuel & Caution

- (1).Before commencing any installation or maintenance work, please disconnect the power supply from the utility. Ensure that it cannot be re-connected inadvertently.
- (2). Keep proper ventilation around the unit and do not put any object on it. 15-20cm clearance must be kept when the adjacent device is a heat source
- (3).Operating under high ambient temperature may cause the internal component temperature and will require a de-rating in output load
- (4).Install in wet condition need use waterproof connectors, make sure there is no space between the unit and lighting fixtures.
- (5). Output current and output wattage must not exceed the rated values on the specifications
- (6).Wiring
 - Connect the ACL wire (Brown) of the LED power supply to Live (black or brown).
 - Connect the ACN wire (Blue) of the LED power supply to Neutral (white or blue)
- (7) . Risk of electrical shock and energy hazard. All failure should be examined by a qualified technician. Please do not remove the case of the power supply by yourself!
- (8). Can' t be installed under water or buried in soil directly
- (9). Please do not install LED power supplies in places with high ambient temperature or close to fire source
- (10). The FG (⊕) must be well connected to PE(protective earth)
- (11). If the external flexible cable or cord of this switching power supply is damaged, it shall be exclusively replaced by the manufacturer or similar qualified person in order to avoid a hazard.