

Constant Voltage/Power Mode LED Driver (D21-X-150W)

Features

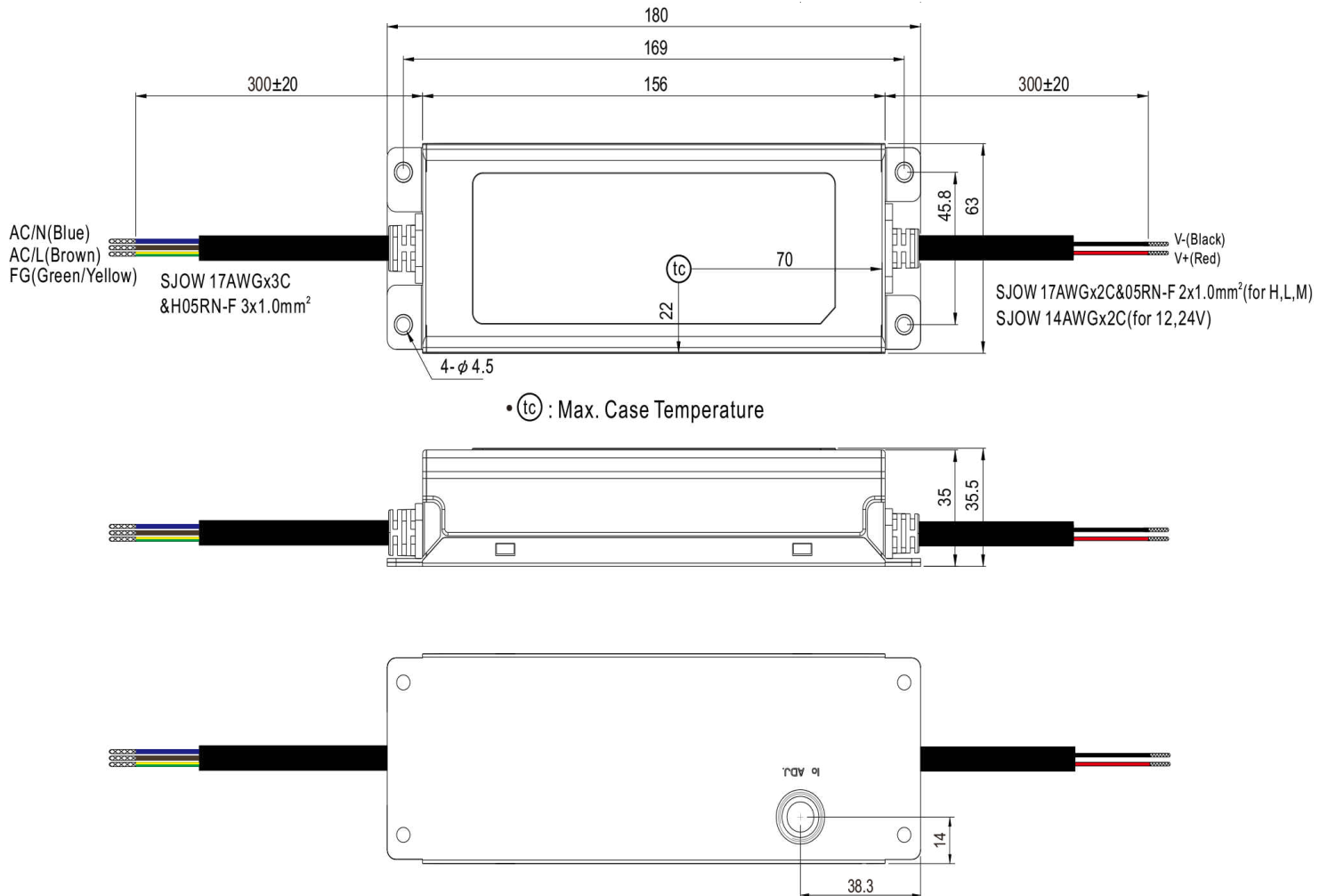
- Wide input range 100-305V AC (Class I)
- Full power output at 70-100% Constant power mode operation
- Metal case with IP67, suitable for outdoor application
- Surge protection with 6KV/4KV (10KV/6KV optional)
- Protection functions: OVP/SVP/OCP/OTP
- Life time > 50,000 hours, and 1 year warranty



Applications

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| <ul style="list-style-type: none"> • Skyscraper lighting • Fishing lighting | <ul style="list-style-type: none"> • Street lighting • Horticulture lighting | <ul style="list-style-type: none"> • Floodlight lighting • Bay lighting | <ul style="list-style-type: none"> • Stage lighting • DMX power supply |
|---|--|---|--|

Dimensions



Specifications

MODEL		D21-X-150W-12V	D21-X-150W-24V	
OUTPUT	DC VOLTAGE	12V	24V	
	CONSTANT CURRENT REGION <small>Note.2</small>	8.4~ 12V	16.8~ 24V	
	RATED CURRENT	12.5A	6.25A	
	RATED POWER	150W	150W	
	RIPPLE & NOISE (max.) <small>Note.3</small>	150mVp-p	240mVp-p	
	CURRENT ADJ. RANGE	Adjustable for A-Type only (via the built-in potentiometer)		
		6.5~ 12.5A	3.2~ 6.25A	
	VOLTAGE TOLERANCE <small>Note.4</small>	±3.0%	±2.0%	
	LINE REGULATION	±0.5%	±0.5%	
	LOAD REGULATION	±2%	±1%	
SETUP, RISE TIME <small>Note.6</small>	500ms, 100ms/230VAC, 1200ms, 100ms/115VAC			
HOLD UP TIME (Typ.)	10ms/ 230VAC 10ms/ 115VAC			
INPUT	VOLTAGE RANGE <small>Note.5</small>	100 ~ 305VAC 142 ~ 431VDC (Please refer to "STATIC CHARACTERISTIC" section)		
	FREQUENCY RANGE	47 ~ 63Hz		
	POWER FACTOR	PF ≥ 0.97/115VAC, PF ≥ 0.95/230VAC, PF ≥ 0.92/277VAC@full load		
	TOTAL HARMONIC DISTORTION	THD < 10% (@load ≥ 50%/115VAC, 230VAC; @load ≥ 75%/277VAC)		
	EFFICIENCY (Typ.)	91.5%	93%	
	AC CURRENT	1.8A / 115VAC 1.0A / 230VAC 0.8A/277VAC		
	INRUSH CURRENT(Typ.)	COLD START 50A(twidth=500µs measured at 50% Ipeak) at 230VAC; Per NEMA 410		
	MAX. No. of PSUs on 16A CIRCUIT BREAKER	4 units (circuit breaker of type B) / 8 units (circuit breaker of type C) at 230VAC		
	LEAKAGE CURRENT	<0.75mA / 277VAC		
NO LOAD POWER CONSUMPTION	No load power consumption <0.5W(for standard version)			
PROTECTION	OVER CURRENT	95 ~ 108% Hiccup mode or constant current limiting, recovers automatically after fault condition is removed		
	SHORT CIRCUIT	Hiccup mode or constant current limiting, recovers automatically after fault condition is removed		
	OVER VOLTAGE	13.5 ~ 18V	27 ~ 34V	
		Shut down output voltage, re-power on to recover		
	INPUT OVER VOLTAGE <small>Note.7</small>	320 ~ 390VAC (Shut down output voltage when the input voltage exceeds protection voltage, recovers automatically after fault condition is removed) Can survive input voltage stress of 440Vac for 48 hours @ tc 75°C max		
OVER TEMPERATURE	Shut down output voltage, re-power on to recover			
ENVIRONMENT	WORKING TEMP.	Tcase=-40 ~ +90°C (Please refer to " OUTPUT LOAD vs TEMPERATURE" section)		
	MAX. CASE TEMP.	Tcase=+90°C		
	WORKING HUMIDITY	20 ~ 95% RH non-condensing		
	STORAGE TEMP., HUMIDITY	-40 ~ +90°C, 10 ~ 95% RH		
	TEMP. COEFFICIENT	±0.06%/°C (0 ~ 60°C)		
	VIBRATION	10 ~ 500Hz, 5G 12min./1cycle, period for 72min. each along X, Y, Z axes		
SAFETY & EMC	SAFETY STANDARDS <small>Note.7</small>	UL8750(type"HL"), UL879, CSA C22.2 No. 250.13-12; ENEC EN61347-1, EN61347-2-13 independent, EN62384; GB19510.1 , GB19510.14; EAC TP TC 004; J61347-1(H29), J61347-2-13(H29), KC61347-1, KC61347-2-13, IS15885(Part2/Sec13)(for XLG-1501 type only); NOM-058-SCFI-2017(except for Blank type); IP67 approved		
	WITHSTAND VOLTAGE	I/P-O/P:3.75KVAC I/P-FG:2KVAC O/P-FG:1.5KVAC		
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C / 70% RH		
	EMC EMISSION	Parameter	Standard	Test Level/Note
		Conducted	EN55015(CISPR15) ,GB/T17743	-----
		Radiated	EN55015(CISPR15) ,GB/T17743	-----
		Harmonic Current	EN61000-3-2 ,GB/T17625.1	Class C @load ≥ 50%
		Voltage Flicker	EN61000-3-3	-----
	EMC IMMUNITY	EN61547		
		Parameter	Standard	Test Level/Note
		ESD	EN61000-4-2	Level 3, 8KV air ; Level 2, 4KV contact
		Radiated	EN61000-4-3	Level 2
		EFT/Burst	EN61000-4-4	Level 3
Surge		EN61000-4-5	4KV/Line-Line 6KV/Line-Earth(6K/10K option)	
Conducted		EN61000-4-6	Level 2	
Magnetic Field		EN61000-4-8	Level 4	
Voltage Dips and Interruptions		EN61000-4-11	>95% dip 0.5 periods, 30% dip 25 periods, >95% interruptions 250 periods	
OTHERS	MTBF	712.17K hrs min. Telcordia SR-332 (Bellcore) ; 213.3Khrs min. MIL-HDBK-217F (25°C)		
	DIMENSION	180*63*35.5mm (L*W*H)		
	PACKING	0.8Kg;16pcs / 13.4Kg /0.67CUFT		