



General Characteristics

Power Factor	PF	Full load, $V_{IN} = 120V_{AC}$	0.9			PF
		Full load, $V_{IN} = 277/347V_{AC}$	0.9			
Total Harmonic Distortion	THD	Full load, $V_{IN} = 120V_{AC}$			20	%
		Full load, $V_{IN} = 277/347V_{AC}$			20	
Efficiency	η_{120}	SIF30 I0750, Full load, $V_{IN} = 120V_{AC}$, Thermal balance	84	86		%
		SIF40 I1050, Full load, $V_{IN} = 120V_{AC}$, Thermal balance	84	86		%
		SIF50 I1250, Full load, $V_{IN} = 120V_{AC}$, Thermal balance	84	86		%
	$\eta_{277/347}$	SIF30 I0750, Full load, $V_{IN} = 277/347V_{AC}$, Thermal balance	85	87		%
		SIF40 I1050, Full load, $V_{IN} = 277/347V_{AC}$, Thermal balance	85	87		%
		SIF50 I1250, Full load, $V_{IN} = 277/347V_{AC}$, Thermal balance	85	87		%
Turn On Delay Time	T_{on_delay}	Cold Start, Full load			0.75	S

OUTPUT

Output current tolerance	t_{25}	SIF30, $I_{OUT} = 300-750mA$	-5		+5	%
		SIF30, $I_{OUT} = 150-299mA$	-8		+8	%
	t_{40}	SIF40, $I_{OUT} = 350-1050mA$	-5		+5	%
		SIF40, $I_{OUT} = 200-349mA$	-8		+8	%
	t_{50}	SIF50, $I_{OUT} = 400-1250mA$	-5		+5	%
		SIF50, $I_{OUT} = 250-399mA$	-8		+8	%
Output current range	I_{OUT}	SIF30 I0750, 277/347VAC	30/35		750	mA
		SIF40 I1050, 277/347VAC	35/40		1050	mA
		SIF50 I1250, 277/347VAC	40/50		1250	mA
Output Voltage	V_{OUT}	In performance ok area	30		45	V
Line Regulation	$V_{OUT-LINE}$	In performance ok area			5	%
Load Regulation	$I_{OUT-LOAD}$	In performance ok area			5	%
Ripple Current	$I_{OUT-RIPPLE}$	Full Load, ($I_{max} - I_{min}$) / ($I_{max} + I_{min}$), Flicker free			10	%
Output Current Overshoot	$I_{OVERSHOOT}$	Turning Power ON			10	%

Programming

User can program the driver via terminal block. Please contact to ADPower for details.

Current Program port	Item		Default Setting				
	Output current(1mA Step)		See “Model list”				
	Dim to off		See”0~10V or Resistor Dimming” Section				
	ON/OFF, full brightness point		See”0~10V or Resistor Dimming” Section				
	The MIN.dimming level		See”0~10V or Resistor Dimming” Section				
CCT Program port	CCT, (Optional)						
Interface-Terminal block	Programming software	“Light Touch”					
	Programming tool	“ADP tool box”					
	Operating voltage	Control port and CCT Program port			5	5.5	V



Pull up resistor	Control port, TX/RX are pulled up to +5V		62K		Ohm
+5V Aux power	Control port			10	mA

INT(output current) selection(Optional)

Built-in INT selection switch	Programmable, Optional 3/4/5 positions.
External INT selection switch	Programmable, Optional 3/4/5 positions, Connect to Current Program port.

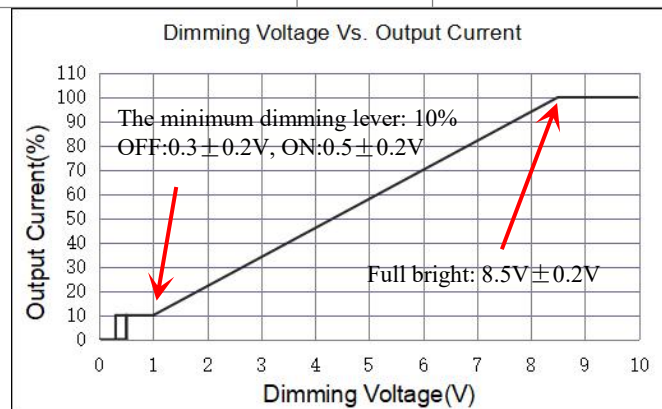
CCT selection (Optional)

Build in CCT selection switch	Programmable, Optional 3/4/5 positions.
External CCT selection switch	Programmable, Optional 3/4/5 positions, Connect to CCT Program port.

0~10V or Resistor Dimming

The 0~10V or resistor dimming can be used to dim the output Current via a standard commercial wall dimmer (0~10V_{DC}) or an external control voltage source (0~10V_{DC}) .

Dimming Curve	Linear. See "Dimming curve".				
Absolute Maximum Voltage on 0~10V Pin	V _{DIM}		0	50	V
Source Current on 0~10V Dimming Pin	I _{DIM}			200	uA
Light On	V _{DIM-on}	Programmable		0.5	V
Light Off	V _{DIM-off}	Programmable		0.3	V
Dimming Voltage for Full Bright	V _{DIM-MAX}	Programmable		8.5	V
Dimming range	I _{OUT-DIMMING}	In the "Performance OK Area"	10	100	%
Standby power	P _{STANDBY}	Light Off		0.8	W

**Auxiliary source (Optional)**

Output Voltage range	V _{AUX}		11	12	13	Vdc
Current range	I _{AUX}				100	mA
Over load protection	P _{AUX_OLP}	CC/CV Mode			3.0	W

Protection

Over Voltage Protection	V _{OVP}	The driver will recover automatically after fault conditions is removed.			60	V
Short Circuit Protection	The driver can recover automatically after fault conditions is removed.					

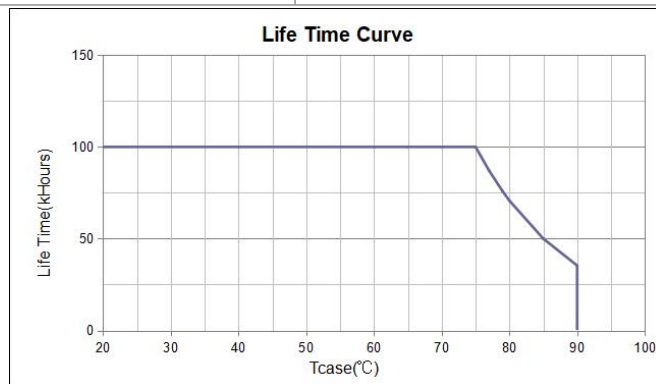
Environment



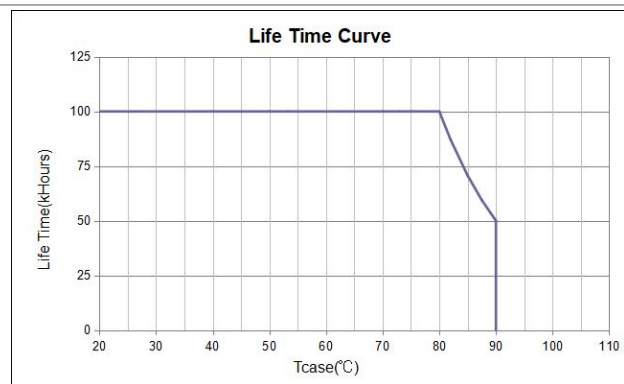
Storage Temperature	T _{Storage}	Humidity: 5% RH to 95% RH	-40	-	+85	°C
Ambient Operating Temperature	T _a		-25	-	+50	°C
Max. Case Temperature	T _c	Hot spot on case			90	°C
Operating Relative Humidity	H _a	Non-Condensing	10		90	%
Acoustic Noise		Measured from one meter away.			24	dBA
Cooling	Convection Cooling					
IP Rating	Dry and damp UL approved					

Others

Life Time	T _{Life}	SIF30, Full Load, 85 °C case temperature	50			kHrs
		SIF40, Full Load, 85 °C case temperature	50			kHrs
		SIF50, Full Load, 90 °C case temperature	50			kHrs
MTBF	T _{MTBF}	Full Load, 25 °C ambient temperature	200			kHrs
Warranty	5 Years Warranty at T _c ≤ T _{Life}					
Flicker	Title 24					



Life time curve for SIF30, SIF40



Life time curve for SIF50

Safety Compliance

CUL/UL	UL8750, CAN/CSA-C22.2 No. 250.13
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Electromagnetic Compliance

EMC Requirements	Standard	Conditions
EMI Emissions	FCC Title 47 Part 15	Class A
Voltage Fluctuations and Flicker	IEC61000-3-3	
Immunity Compliance	IEC 61000-4-2	±8kV air Discharge, ±6kV Contact Discharge
	ANSI C62.41.1-2002	2.5kV Ring Wave, test at 30Q 7 Strikes/1 minute interval, Common and Differential mode, 56 total strikes
	IEC 61000-4-11	>95% dip, .5 period; 30% dip, 25 periods; 95% reduction, 250 periods
	IEC 61000-4-4	± 2kV Direct couple to Line input, 5kHz repetition rate, 15mS duration, 300mS period. 7 coupling paths, 1 minute per path (14 total combinations)

Note: Unless otherwise specified, all the above parameters are measured at ambient temperature of 25 °C and rated voltage.

■ Typical Application

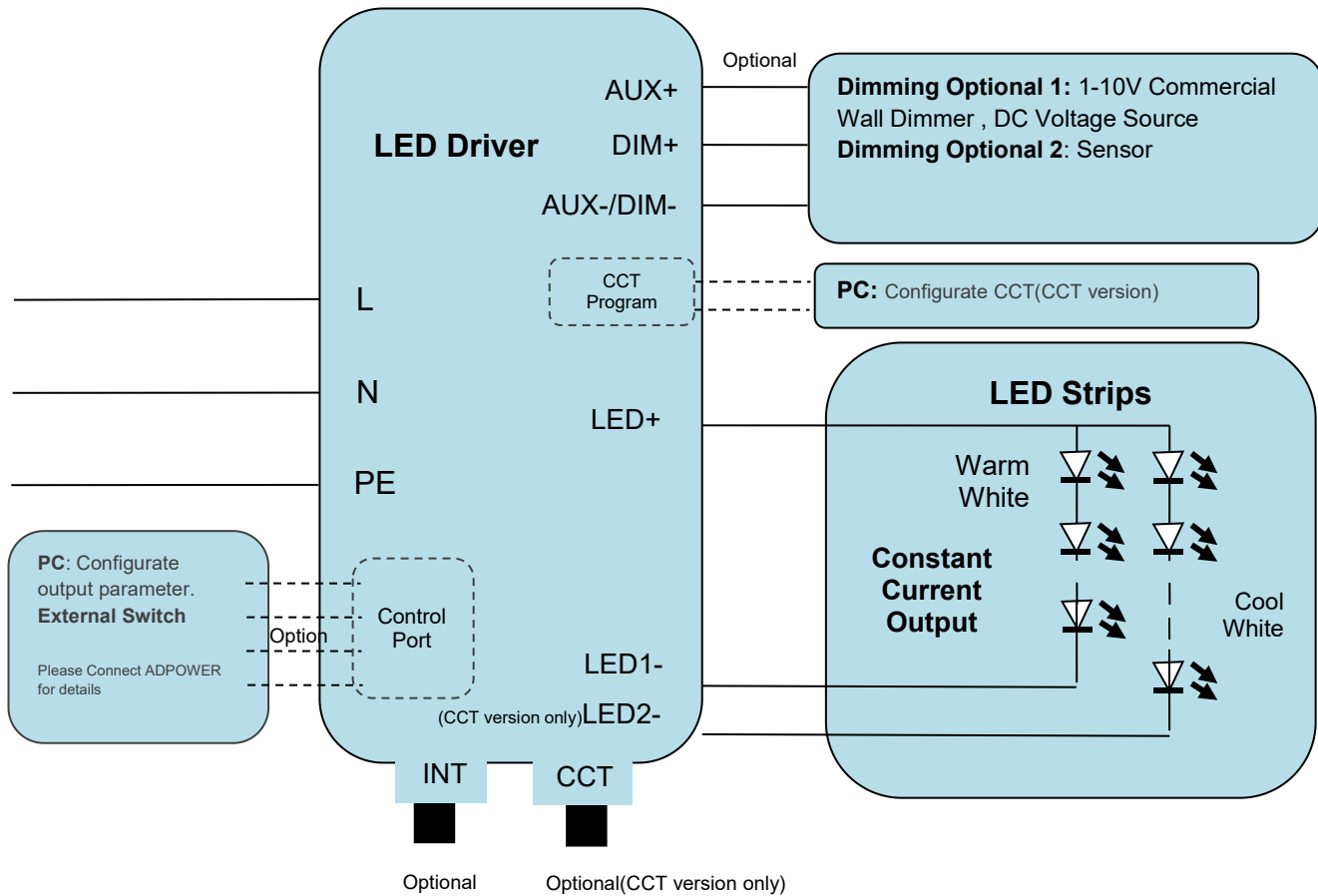
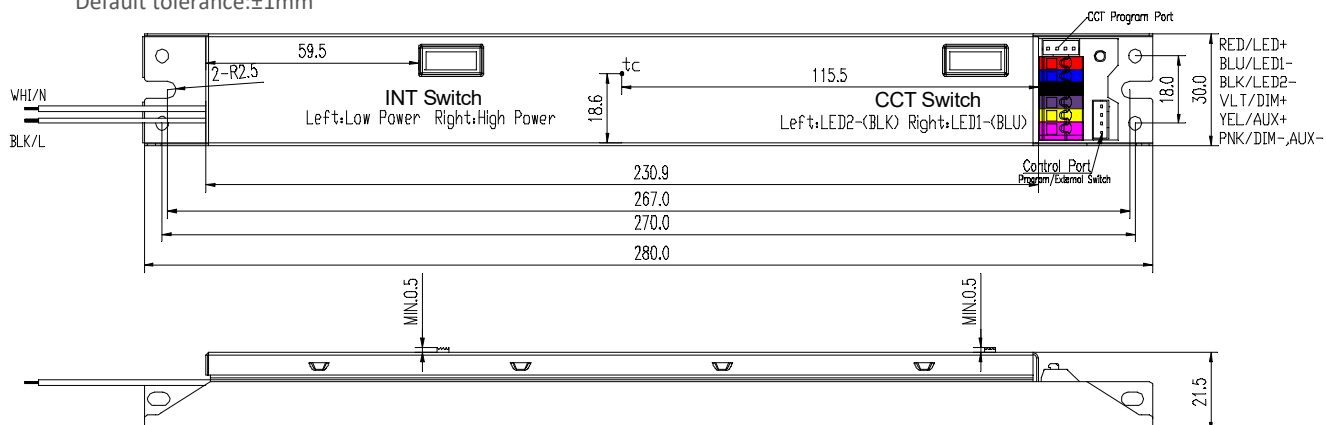


Fig. Typical Application

■ Mechanical Drawing:

Dimensions(Unit:mm)

Default tolerance:±1mm



Version	Input wire (WHI/BLK)
120-277VAC	18AWG, 300V, 300mm, Strand Wire, UL1569
120-347VAC	18AWG, 600V, 300mm, Strand Wire, UL1015