

■ Features & benefits:

- Universal AC Input Voltage(120-277VAC)
- Linear form factor, Side feed, Metal sheet case
- Isolated 0-10V dimming
- Economic Design
- Suitable for indoor use
- Class 2 output
- Output Current /dimming off programmable
- Operating temperature: -25°C~+50°C
- Surge(DM:1KV, CM:2KV), Ringwave 2.5KV
- Comply with UL8750
- UL Class P



■ Optional Function

- Aux power(12V 100mA) & dim to off
- Build in INT or CCT selection switch
- Flicker free(Comply with IEEE1789)

■ Model List:

Model Name	Rated Input Voltage	Max. Output Power	Output Current	Rated Output Voltage	AUX Power & Dim to off (Optional)	
					Flicker free type (Y/N)	High ripple type (Y/N)
SIF20-Iyyyy 120-277 W D1 F-a(b+c)	120-277V _{AC}	23W max.	270-575mA	30-45V _{DC} Label: 30-42V	Y/N	Y/N
SIF30-Iyyyy 120-277 W D1 F-a(b+c)	120-277V _{AC}	32W max.	350-750mA	30-45V _{DC} Label: 30-42V	Y/N	Y/N
SIF40-Iyyyy 120-277 W D1 F-a(b+c)	120-277V _{AC}	42W max.	420-850mA	30-45V _{DC} Label: 30-42V	Y/N	Y/N
SIF40-Iyyyy 120-277 W D1 F-a(b+c)	120-277V _{AC}	42W max.	480-950mA	30-45V _{DC} Label: 30-42V	Y/N	Y/N
SIF40-Iyyyy 120-277 W D1 F-a(b+c)	120-277V _{AC}	42W max.	550-1050mA	30-45V _{DC} Label: 30-42V	Y/N	Y/N
SIF50-Iyyyy 120-277 W D1 F-a(b+c)	120-277V _{AC}	53W max.	650-1250mA	30-45V _{DC} Label: 30-42V	Y/N	Y/N
SIF60-Iyyyy 120-277 W D1 F-a(b+c)	120-277V _{AC}	60W max.	750-1400mA	30-45V _{DC} Label: 30-42V	Y/N	Y/N

Note: Please see appendix for detailed model list.

Model name code:

S I F x x - I y y y y 1 2 0 - 2 7 7 W D 1 F - a (b + c)

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

①	Series	Linear type series; xx: Output power
②	Output current	Output current
③	Input voltage	120-277: 120-277V _{AC}
④	The connection method	W: Wire type
⑤	Dimming	D1: 0-10V Dimming
⑥	Case	The iron shell
⑦	CCT and output current(INT) selection switch	BLANK: No switch
		-S1: INT
		-S2: CCT

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		S1+S2: INT+CCT
⑧	Ripple	W: Flicker free
		Y: High ripple, $I_{OUT-ripple} < 30\%$
⑨	AUX power	S:12V/100mA
		BLANK: Without AUX power

■ Specification:

Parameters	Symbols	Test Conditions / Comment	Min	Typ	Max	Units
INPUT						
Input Voltage	V_{IN}		108		305	V_{AC}
Rated Input Voltage	$V_{IN\ RATED}$		120		277	V_{AC}
Input Frequency	f_{line}	Full Load, $V_{IN} = 120V_{AC}$	47	50/60	63	Hz
Max. Input Current	I_{IN_Max}	SIF20-Iyyyy, Full Load, $V_{IN} = 120V_{AC}$			0.27	A
		SIF30-Iyyyy, Full Load, $V_{IN} = 120V_{AC}$			0.34	A
		SIF40-Iyyyy, Full Load, $V_{IN} = 120V_{AC}$			0.44	A
		SIF50-Iyyyy, Full Load, $V_{IN} = 120V_{AC}$			0.56	A
		SIF60-Iyyyy, Full Load, $V_{IN} = 120V_{AC}$			0.67	A
Inrush Current	I_{INRUSH}	Cold Start, $V_{IN} = 277V_{AC}$			60	A
Leakage Current	$I_{Leakage}$	$V_{IN} = 277V_{AC}$, 60Hz			0.75	mA
General Characteristics						
Power Factor	PF	60-100% load, $V_{IN} = 120V_{AC}$	0.95			PF
		60-100% load, $V_{IN} = 277V_{AC}$	0.9			
Total Harmonic Distortion	THD	60-100% load, $V_{IN} = 120V_{AC} - 277V_{AC}$			20	%
Efficiency	η_{120}	SIF20-I0575, Full load, $V_{IN} = 120V_{AC}$, Thermal balance, Flicker Free, Aux Power	85	86		%
		SIF30-I0750, Full load, $V_{IN} = 120V_{AC}$, Thermal balance, Flicker Free, Aux Power	85	86		%
		SIF40-I1050, Full load, $V_{IN} = 120V_{AC}$, Thermal balance, Flicker Free, Aux Power	85	86		%
		SIF50-I1250, Full load, $V_{IN} = 120V_{AC}$, Thermal balance, Flicker Free, Aux Power	84.5	85.5		%
		SIF60-I1400, Full load, $V_{IN} = 120V_{AC}$, Thermal balance, Flicker Free, Aux Power	84.5	85.5		%
	η_{277}	SIF20-I0575, Full load, $V_{IN} = 277V_{AC}$, Thermal balance, Flicker Free, Aux Power	85	87		%
		SIF30-I0750, Full load, $V_{IN} = 277V_{AC}$, Thermal balance, Flicker Free, Aux Power	85	87		%
		SIF40-I1050, Full load, $V_{IN} = 277V_{AC}$, Thermal balance, Flicker Free, Aux Power	85	87		%
		SIF50-I1250, Full load, $V_{IN} = 277V_{AC}$, Thermal balance, Flicker Free, Aux Power	85	87		%
		SIF60-I1400, Full load, $V_{IN} = 277V_{AC}$, Thermal balance, Flicker Free, Aux Power	85	87		%
	High ripple type is around 2% Higher than high ripple type.					
Turn On Delay Time	T_{on_delay}	Cold Start, without dimmer			0.75	S
OUTPUT						
Output current tolerance	t	Max output	-5		5	%

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		The middle and minimum gears	-8		5	%
Output Voltage	V_{OUT}		30		45	V
Line Regulation	$V_{OUT-LINE}$				5	%
Load Regulation	$I_{OUT-LOAD}$	V_{OUT} from MIN. to MAX.			5	%
Ripple Current	$I_{OUT-RIPPLE}$	Full Load, $(I_{OMAX}-I_{OMIN})/(I_{OMAX}+I_{OMIN})$, Flicker free			10	%
		Full Load, $(I_{OMAX}-I_{OMIN})/(I_{OMAX}+I_{OMIN})$, High ripple			30	%
Output Current Overshoot	$I_{OVERSHOOT}$	Turning Power ON			10	%

INT(output current) selection(Optional)

Built-in INT selection switch	3 positions
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CCT selection (Optional)

Build in CCT selection switch	CCT1=Channel 1 on, Channel 2 off
	CCT2=Channel 1 on, Channel 2 on
	CCT3=Channel 1 off, Channel 2 on

0~10V Dimming (Optional)

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		10	V
Source Current on 0~10V Dimming Pin	I_{DIM}		200		500	uA
Output Current Range	I_{OUT}	Non dim to off version	10		100	%
		Dim to off version, Dim to off at $V_{DIM}=0$	0		100	%

Auxiliary source 12V (Optional)

Output Voltage	V_{AUX}		11	12	13	Vdc
Output Current	I_{AUX}				100	mA

Protection

Over Voltage Protection	V_{OVP}	It will recover automatically after fault conditions is removed.			60	V
Short Circuit Protection	It will 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				90	°C
Operating Relative Humidity	H_a	Non-Condensing	10		90	%
Acoustic Noise		Measured from 1 m away w/o dimmer.			24	dBA

Cooling	Convection Cooling
IP Rating	Dry and damp UL approved

Others

Life Time	T_{Life}	Full Load, 90°C T_c , $V_{IN} = 120V_{AC}$	50			kHrs
MTBF	T_{MTBF}	Full Load, 25°C ambient temperature $V_{IN} = 120V_{AC}$	200			kHrs
Net Weight	W_{NET}			210		g
Warranty	5 Years Warranty at $T_c \leq 90^\circ C$					
Flicker	Title 24 and IEEE 1789(10% ripple version), Title 24(30% ripple version)					

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 15B	Class A
Voltage Fluctuations and Flicker	IEC61000-3-3	
Immunity Compliance	IEC 61000-4-2	$\pm 8kV$ air Discharge, $\pm 6kV$ Contact Discharge
	ANSI/IEEE C62.41.1-2002	2.5kV Ring Wave, test at 30Ω 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	$\pm 2kV$ 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.

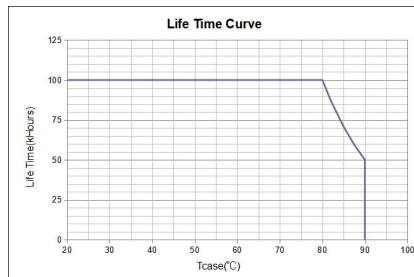
■ Typical Characteristics Curve:

Fig.1 Life curve

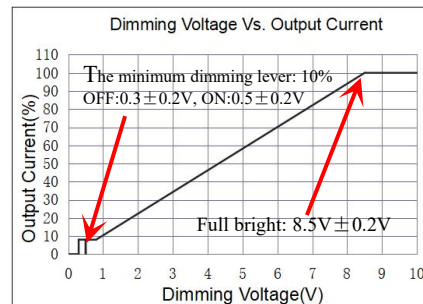


Fig.2 Dimming Curve(Dim to off type)

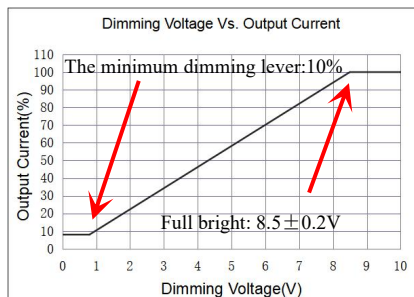


Fig.3 Dimming Curve(NON-Dim to off type)

■ Typical Application

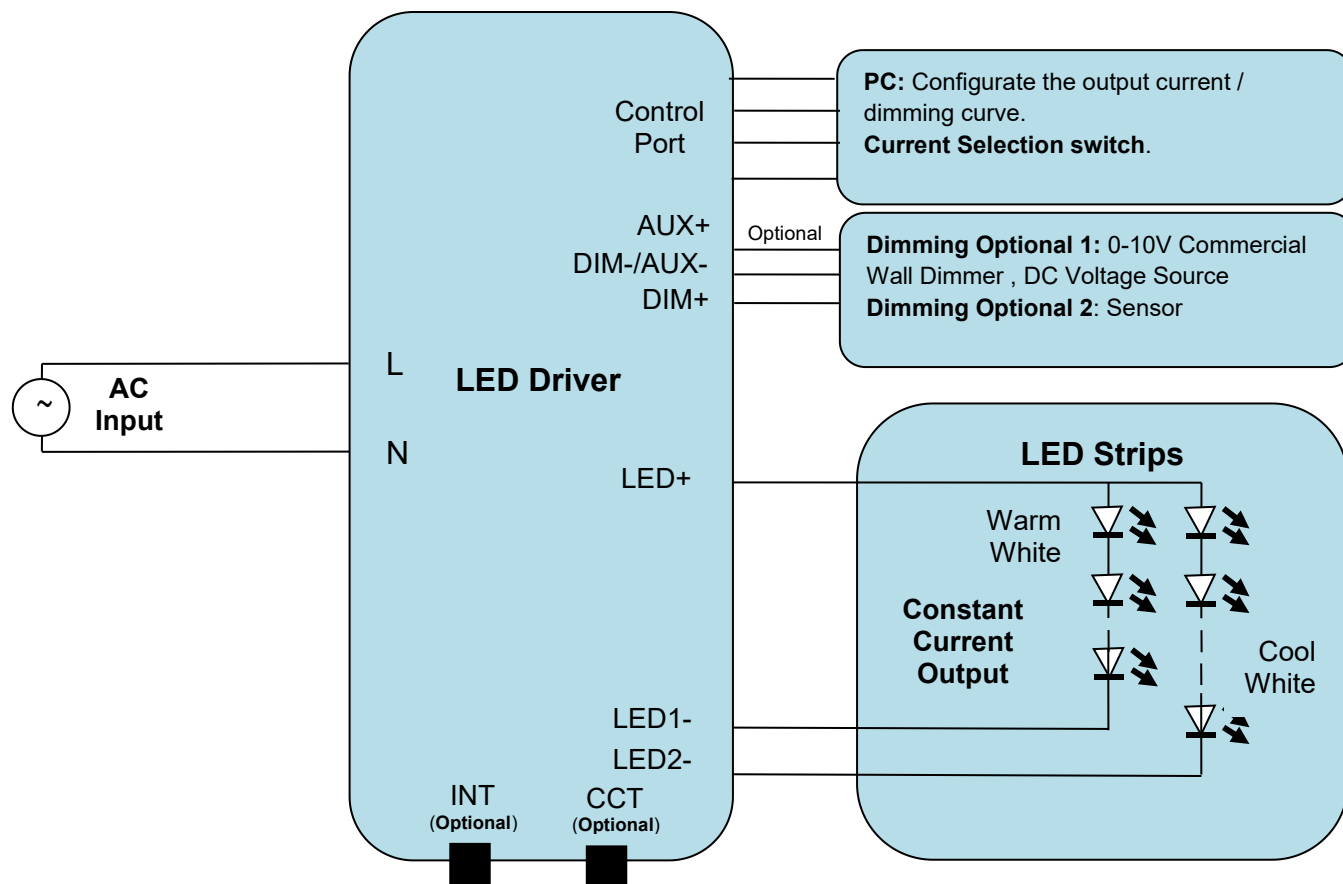
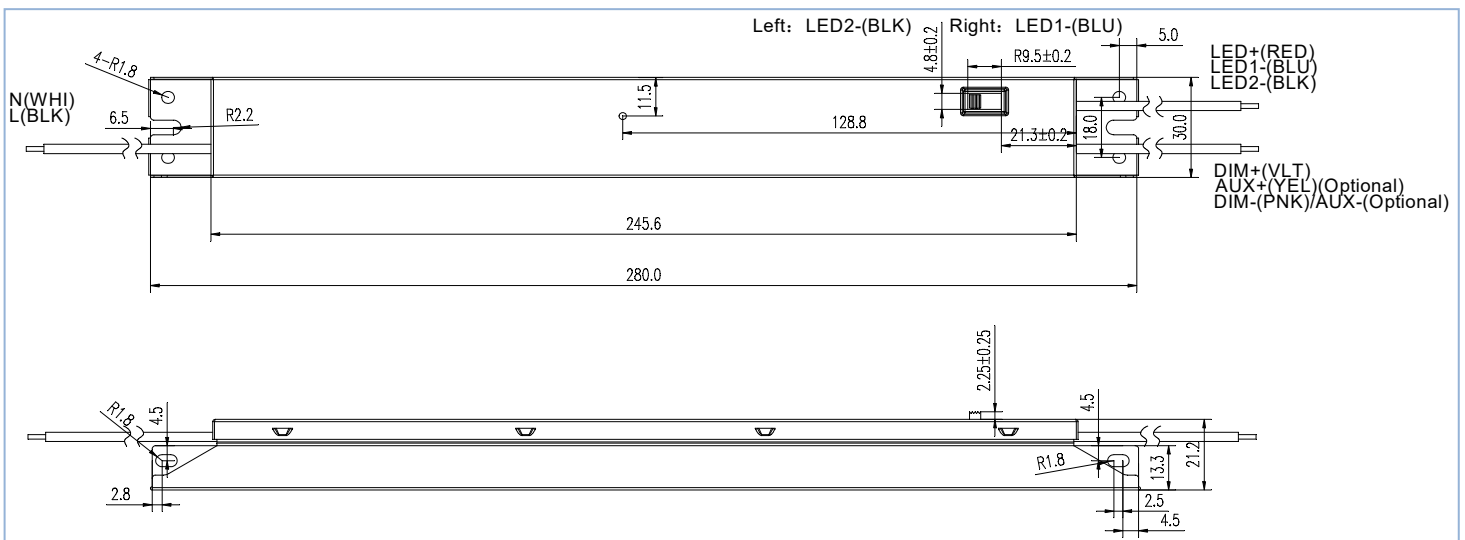
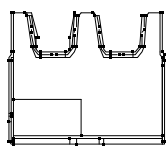
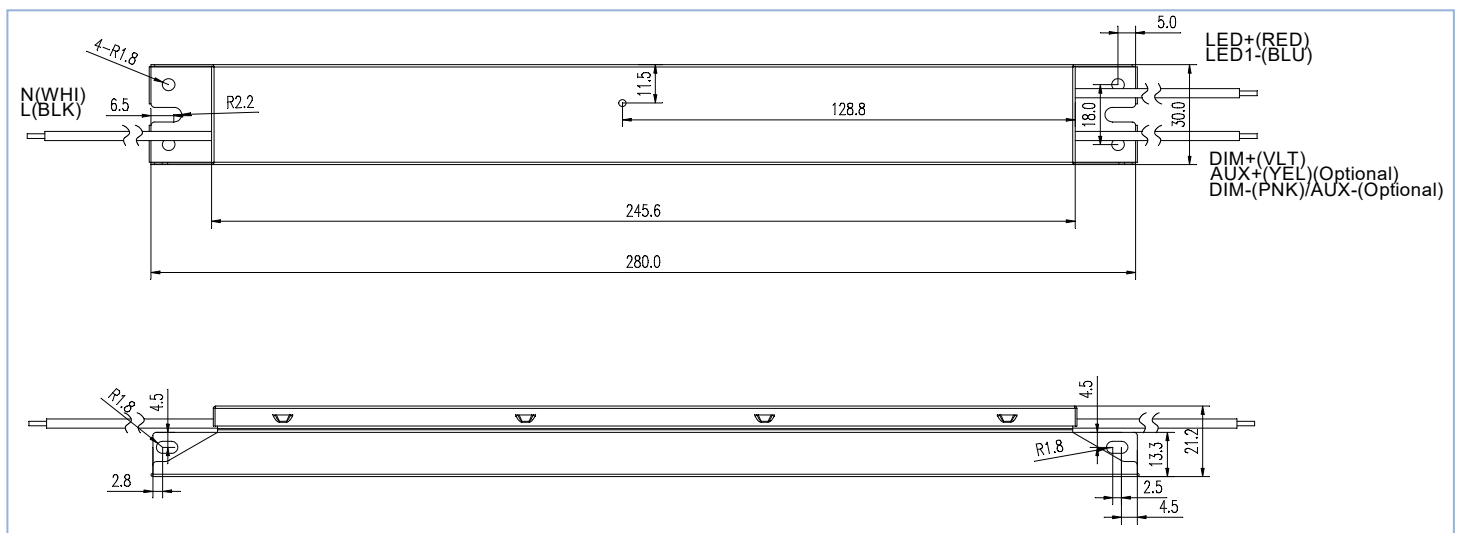
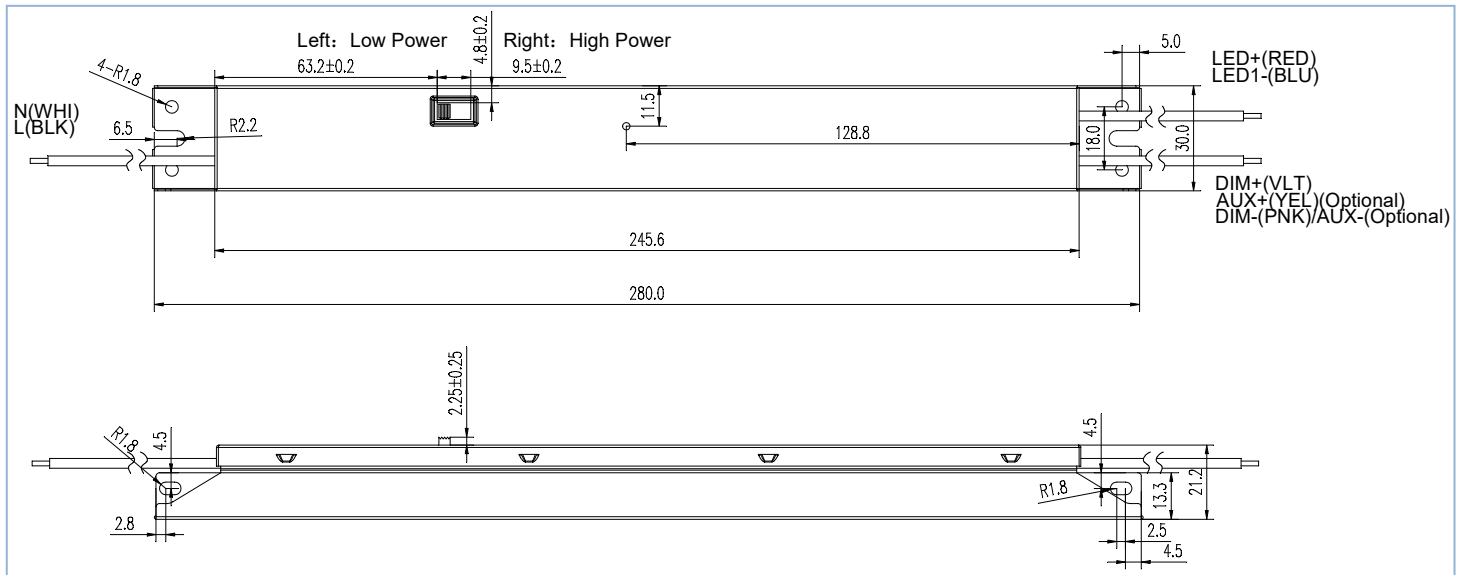


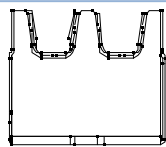
Fig. Typical Application

Wire stripping: 10 ± 1 mm



SIFxx-Iyyyy 120-277 series for Wire type

输出端: 有编程口



输出端: 无编程口