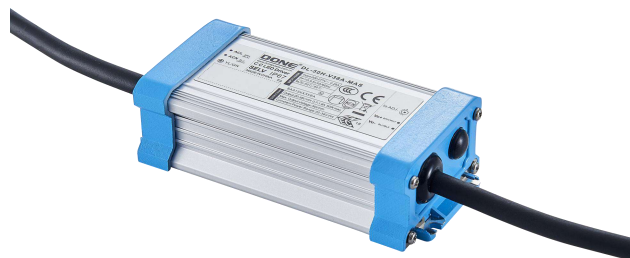


Features

- Class I type for insulation
- Input voltage range 200-277 V ~ 50/60 Hz
- Efficiency :89%(Typ.)
- Constant current output ,with power limitation for control mode
- Metal case, protection grade against water and dust: IP67
- Surge level:
 - differential mode 4kV
 - common mode 6kV
- available version :
 - A version: Output current is dimmed by external potentiometer
 - P version: Output current is dimmed by Isolated 3 in 1 dimmer
- guaranteed Lifetime : 5 years



Applications

street lighting、Industrial lighting、Venue lighting
 Floodlight lighting、Landscape lighting 、Plant lighting

Model list

Model NO.	Input voltage	Output power	Output voltage	The default current	Eff.	T.H.D	PF
DL-50H-V38A-MAS	200-277V	50W	20-38Vdc	1.5A	≥89%	≤10%	≥0.9
DL-50H-V38P-MAS	50/60Hz						
DL-50H-V58A-MAS	200-277V	50W	32-58Vdc	0.9A	≥89%	≤10%	≥0.9
DL-50H-V58P-MAS	50/60Hz						
DL-50H-V72A-MAS	200-277V	50W	36-72Vdc	0.7A	≥89%	≤10%	≥0.9
DL-50H-V72P-MAS	50/60Hz						

Note:

- 1.. Test conditions: Ta=25℃, under 230Vac input,after running for 30 minutes with full load .
2. When the input is less than 165±-15Vac,the output power gradually decreases to a half.and it recovers full power of 50W when the input is above 180VAC again. Please refer to "THE OUTPUT POWER VS INPUT VOLTAGE" curve chart for details.



Input characteristics

Parameter	Min	Typ.	Max	Note
Rated input voltage	200Vac	230Vac	277Vac	
Input voltage range	180Vac		305Vac	
Rated frequency range	47Hz	50/60Hz	63Hz	
Power factor	-	0.95	-	@230Vac input ,with full load
Power factor	-	0.9	-	@200-277Vac input ,with 75%-100%
T.H.D.	-	-	10%	@230Vac input ,with full load
T.H.D.	-	-	20%	@200-277Vac input ,with 75%-100%
Input current	-	-	0.35A	@200Vac input ,with full load
Inrush current	-	-	70A	230Vac, cold start (25℃)

Output characteristic

Parameter	Min	Typ.	Max	Note
Rated current				
DL-50H-V38P/A-MAS	-	1.32A	-	With loading 38VDC
DL-50H-V58P/A-MAS	-	0.86A	-	With loading 58VDC
DL-50H-V72P/A-MAS	-	0.7A	-	With loading 72VDC
Output current range				
DL-50H-V38P/A-MAS	0.7A	-	1.6A	
DL-50H-V58P/A-MAS	0.5A	-	1.2A	
DL-50H-V72P/A-MAS	0.5	-	1.05A	
Output voltage range				
DL-50H-V38P/A-MAS	20V	-	38V	Constant power output range:32-38VDC
DL-50H-V58P/A-MAS	32V	-	58V	Constant power output range:42-58VDC
DL-50H-V72P/A-MAS	36V	-	72V	Constant power output range:48-72VDC
Available power(100-180Vac)	-	25W	50W	Decrease to a half once input voltage being less than 165±15Vac
Rated power(200-277Vac)	-	50W	-	
No-load voltage				
DL-50H-V38P/A-MAS	-	-	50V	
DL-50H-V58P/A-MAS	-	-	72V	
DL-50H-V72P/A-MAS	-	-	92V	
Efficiency@200Vac				
DL-50H-V38P/A-MAS	87%	88%	-	full load@200Vac
DL-50H-V58P/A-MAS	87%	88%	-	
DL-50H-V72P/A-MAS	87%	88%	-	

Output characteristics

Parameter	Min	Typ.	Max	Note
Efficiency@230Vac				
DL-50H-V38P/A-MAS	88%	89%	-	@230Vac input ,with full load
DL-50H-V58P/A-MAS	88%	89%		
DL-50H-V72P/A-MAS	88%	89%		
Accuracy of output current	-5%	-	+5%	For constant-power range , with full load
Line regulation	-3%	-	+3%	full load
Load regulation	-3%	-	+3%	full load
Starting time	-	-	1000ms	Full load@230Vac

Note: 1.The output current is limited by the input and output voltage, please refer to “I-V WORKING AREA” for details;

Dimming characteristics

Dimming function		Min	Typ.	Max	Instructions
1-10V Dimming (Optional)	Safe operation voltage range	0V	-	12V	Beyond the range maybe lead to a failure of the driver.
	Rated operation voltage range	1V	-	10V	Negative logic dimming mode is also available by program
	Dimming output range	10%	-	100%	0% is only for positive logic dimming by program
PWM Dimming (Optional)	PWM high level	9.5V	-	10.5V	-
	PWM low level	0V	-	0.5V	-
	Rated dimming frequency	300Hz	-	2000Hz	-
	PWM duty cycle	10%	-	99%	Output full power at 99% duty cycle
Resistor Dimming (Optional)	Rated external resistance value	10KΩ	-	100KΩ	Bigger resistor won't increase the output.
	Dimming output range	10%	-	100%	Negative logic dimming mode is also available by program
Multiple time-controlled dimming (Optional)	MCU control	set dimming function Segment by segment through program		three operation modes for selection.	
	Timer control	The default is six segments, Can be customized. 24H a cycle.		With extra timer controller outside.	



Note:

1. Output current of dimming port: 100uA (typical value);
2. The maximum operation voltage for the dimming port is 12V. Wrong voltage beyond the range or a reverse connection may lead to a critical failure of the driver.
3. When over-temperature protection happens, the threshold of output power(or output current) for dim-off and turn-on will keep the same as that in normal condition. Since the output power has been decreased to a half of normal condition, the dimming signal from the port need to be doubled to meet the same threshold as a result. Only for P version.
4. Dim -off function is available only for positive logic dimming mode of P version. Please consult the technician for details if you have other requirements.
5. All these drivers will not work in the no-load mode.

Protection

Protection	description
under-voltage protection	When the input voltage is less than $165 \pm 15\text{Vac}$, the output power decreases.
Output over-voltage protection	hiccup mode,and recovers automatically when the fault condition is removed.
Output short circuit protection	Hiccup mode,and recovery automatically when the fault condition is removed.
Over temperature protection	when the temperature of the case is greater than $95 \pm 5^{\circ}\text{C}$, the output power decreases to a half.
Output over-power protection	The maximum output power is limited to about 1.1 time of the rating automatically. Only for P version

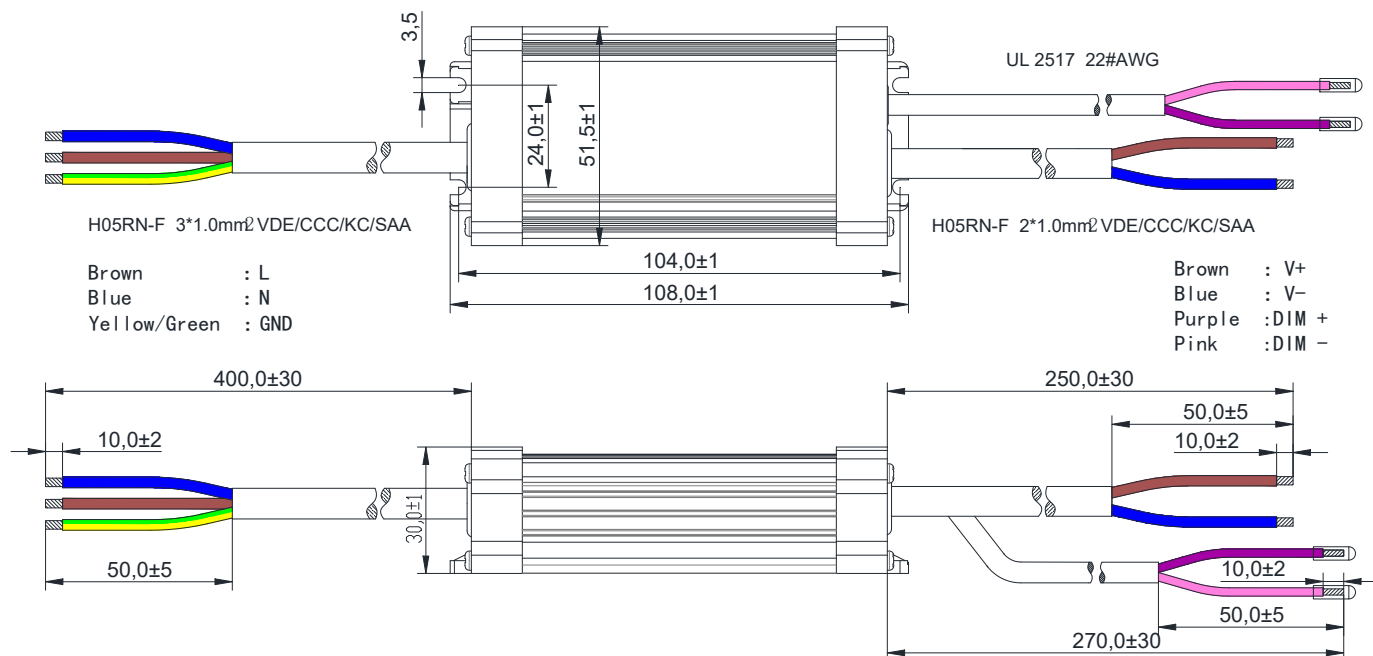
Note:

1. Unless otherwise specified, all parameters should be measured at the condition of 230Vac (50Hz) input ,with rated load ,and ambient temperature of 25°C ;

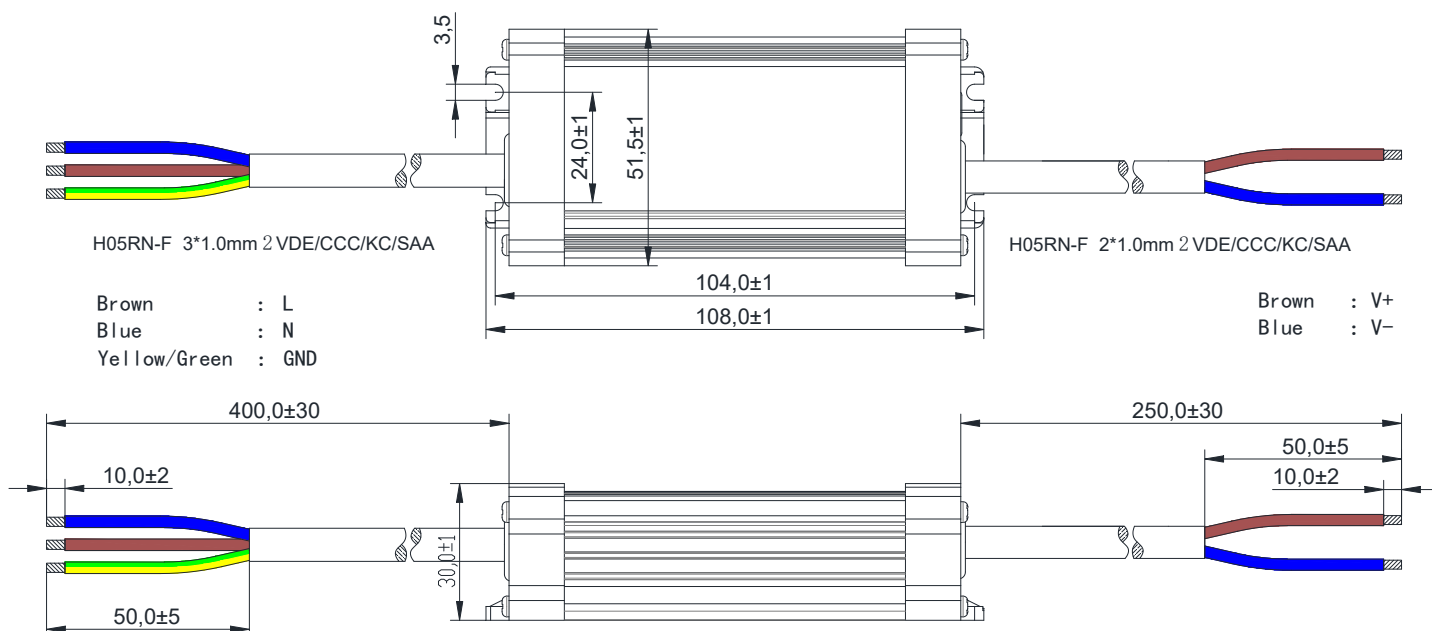
Mechanical specification

Size (mm) L108mm*W51.5mm*H30mm

Dimension drawing
DL-50H-V38P/V58P-MAS



Dimension drawing
DL-50H-V38A/V58A-MAS



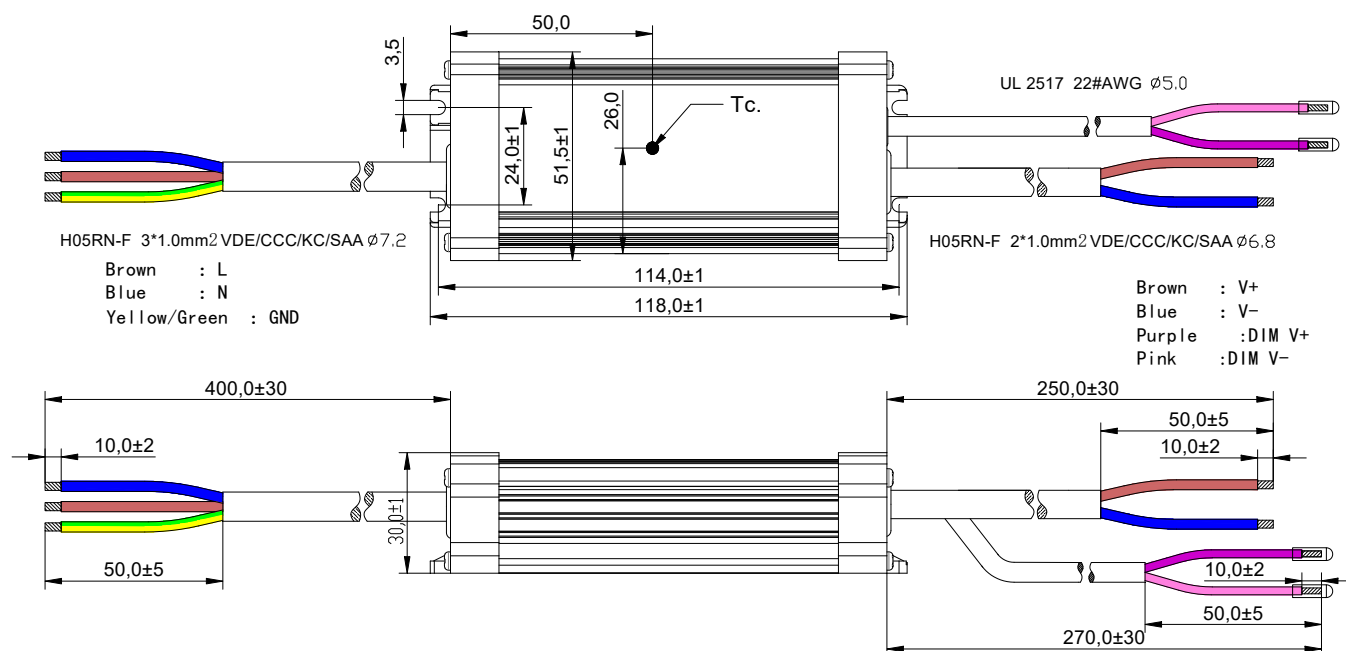
Weight

Weight 300 g

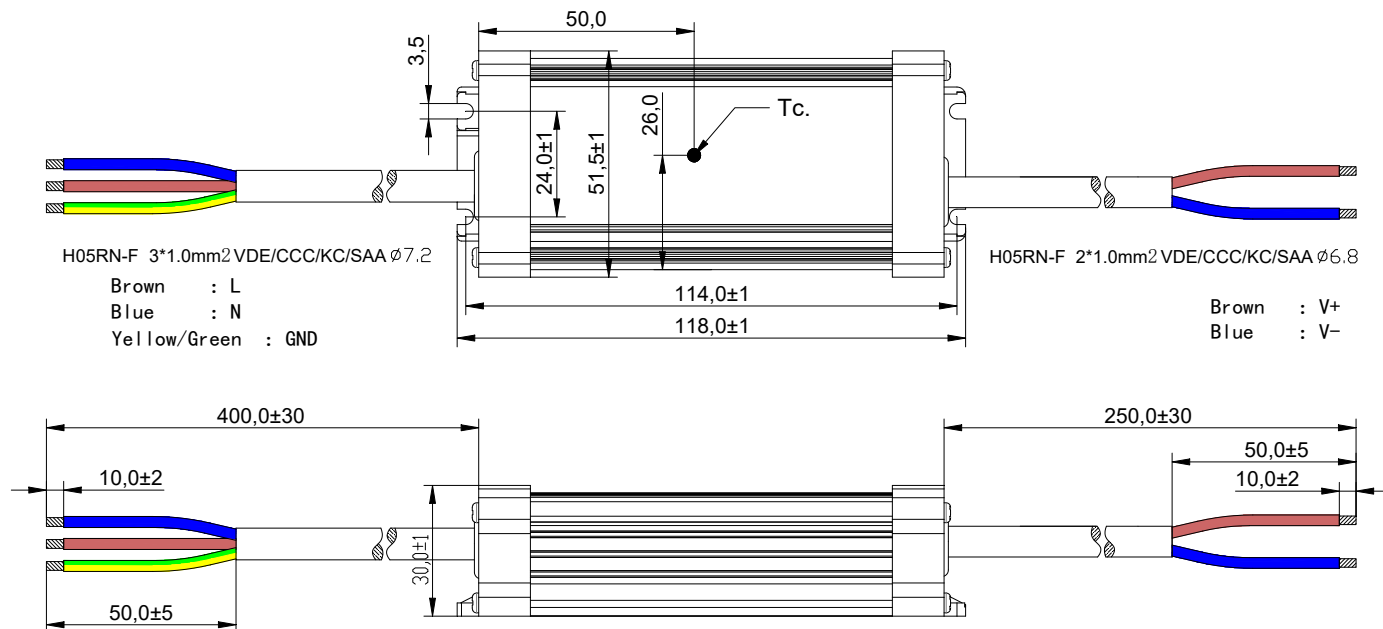
尺寸 (mm)

L118mm*W51.5mm*H30mm

DL-50H-V72P-MAS



DL-50H-V72A-MAS



Weight

Weight

330 g