

**Product Feature**

- ◆ Input Voltage: 108~305Vac;
- ◆ Surge immunity: DM-4KV, CM-6KV;
- ◆ THD<10%;
- ◆ Protection: Input OVP, Output OVP, SCP, OTP;
- ◆ IP67 design for indoor and outdoor applications;
- ◆ 5 years warranty.

**Application**

- ◆ LED street lighting, industrial lighting and landscape lighting.

**DESCRIPTION**

The EHC-026W is a 26W, constant-current, IP67 LED driver that operates from 108-305Vac input with excellent power factor and low THD. It is created for industrial lights, tunnel and street lights. The high efficiency of these drivers and compact metal case enable them to run cooler, significantly improving reliability and extending product life. To ensure trouble-free operation, protection is provided against input surge, output over voltage, short circuit, and over temperature.

**Models**

Model Number	Input Voltage Range(Vac)	Max. Output Power (W)	Output Voltage Range (Vdc)	Output Current (A)	Typical Efficiency	Typical PF	
						120Vac	230Vac
EHC-026B074	108~305	26	37-74	0.35	87.5%	0.99	0.97
EHC-026B037	108~305	26	20-37	0.70	87%	0.99	0.97
EHC-026B030	108~305	26	20-30	0.86	86%	0.99	0.97
EHC-026B025	108~305	26	18-25	1.05	85%	0.99	0.97

**Remark:** All specifications are measured at 25°C ambient temperature, if no specific note.

**INPUT SPECIFICATIONS**

Parameter	Min.	Typ.	Max.	Notes
Input Voltage	108Vac	120-277Vac	305Vac	Please refer to the derating curve
Input Frequency	47Hz	-	63Hz	
Leakage Current	-	-	0.75mA	240V/60Hz
Input AC Current	-	-	0.35A	120-277Vac & Full load
Inrush Current (I <sub>rt</sub> )	-	-	0.01A <sup>2</sup> S	230Vac input, 25°C cold start.
Power Factor	0.97	0.98	-	230Vac, full load
	0.95	0.97	-	230Vac, full load
THD	-	-	20%	120-277Vac, 70%-100%load
	-	10%	15%	120-230Vac, 100%load

**OUTPUT SPECIFICATIONS**

Parameter	Min.	Typ.	Max.	Notes
Output Current Tolerance	-8%I <sub>set</sub>	-	8%I <sub>set</sub>	Full load
Total Output Current Ripple(pk-pk)	-	100%	150%	Full load & LED Load, ripple is different with difference LED load. 20MHz BW
Startup Overshoot Current	-		10%I <sub>o</sub>	120~277Vac & Full load, LED load
No Load Output Voltage				
EHC-026B074			100V	
EHC-026B037	-	-	60V	
EHC-026B030			50V	
EHC-026B025			50V	
Line Regulation	-	-	±5%	25°C±10°C ambient temperature, input voltage changes from 120Vac to 277Vac.
Load Regulation	-	-	±5%	25°C±10°C ambient temperature, 230Vac input, load changes from 60% to 100%.
Turn-on Delay Time	-	-	3S	120Vac,100% load
	-	0.5S	1S	230Vac,100% load

## OUTPUT SPECIFICATIONS

Parameter	Min.	Typ.	Max.	Notes	
Efficiency@120Vac					
EHC-026B074	84.5%	86.5%		Measured at full load and 25°C ambient temperature	
EHC-026B037	85.0%	86.0%			
EHC-026B030	83.0%	85.0%			
EHC-026B025	82.0%	84.0%			
Efficiency@230Vac					
EHC-026B074	85.0%	87.5%		Measured at full load and 25°C ambient temperature	
EHC-026B037	85.0%	87.0%			
EHC-026B030	84.0%	86.0%			
EHC-026B025	82.0%	85.0%			
Efficiency@277Vac					
EHC-026B074	85.0%	87.5%		Measured at full load and 25°C ambient temperature	
EHC-026B037	85.0%	87.0%			
EHC-026B030	84.0%	86.0%			
EHC-026B025	82.0%	85.0%			
Dielectric Strength	Input-Output	-	3750Vac	-	10mA/60S
	Input-PE	-	1600Vac	-	
	Output- PE	-	1600Vac	-	
Grounding Resistance	-	-	0.1Ω		25A/60S
Insulation Resistance	50MΩ	-	-		Input-Output, Input-PE, Output-PE, 500Vdc/60S/25°C/70%RH
MTBF	-	200000 Hours	-		230Vac,80% load (MIL-HDBK-217F)
Lifetime	-	50000Hours	-		230Vac&100% load,70°C case temperature, refer to lifetime VS Tc curve for details
Operating Case Temperature for Safety Tc_s	-40°C	-	+85°C		
Operating Case Temperature for Warranty Tc_w	-40°C	-	+75°C		5 Years Warranty Humidity: 10% to 95% RH
Storage Temperature	-40°C	-	+85°C		Humidity: 10% to 95% RH
Dimensions (LxWxH)mm	96*64*33mm				
Net Weight	330±20g/PCS				
Package	L480xW275xH208mm; 24pcs/ctn.				

**Note:** All specifications are tested by Cree XLamp XP-G2 and typical measured at 230Vac and 25°C unless otherwise stated.

**SAFTY STANDARDS**

Safety Category	Country / Territory	Standards
CCC	China	GB19510.1, GB19510.14
CE	China	EN61347-1, EN61347-2-13
CB	CB Countries	IEC61347-1, IEC61347-2-13
BIS	India	IS 15885(PART 2/SEC 13)
UL	USA	UL 8750
CUL	Canada	CSA C22.2 No.250.13
KC	South Korea	K61347-1, K61347-2-13, K62384
PSE	Japan	J61347-1, J61347-2-13
SAA	Australia	AS/NZS IEC 61347-2-13
		AS/NZS 61347.1

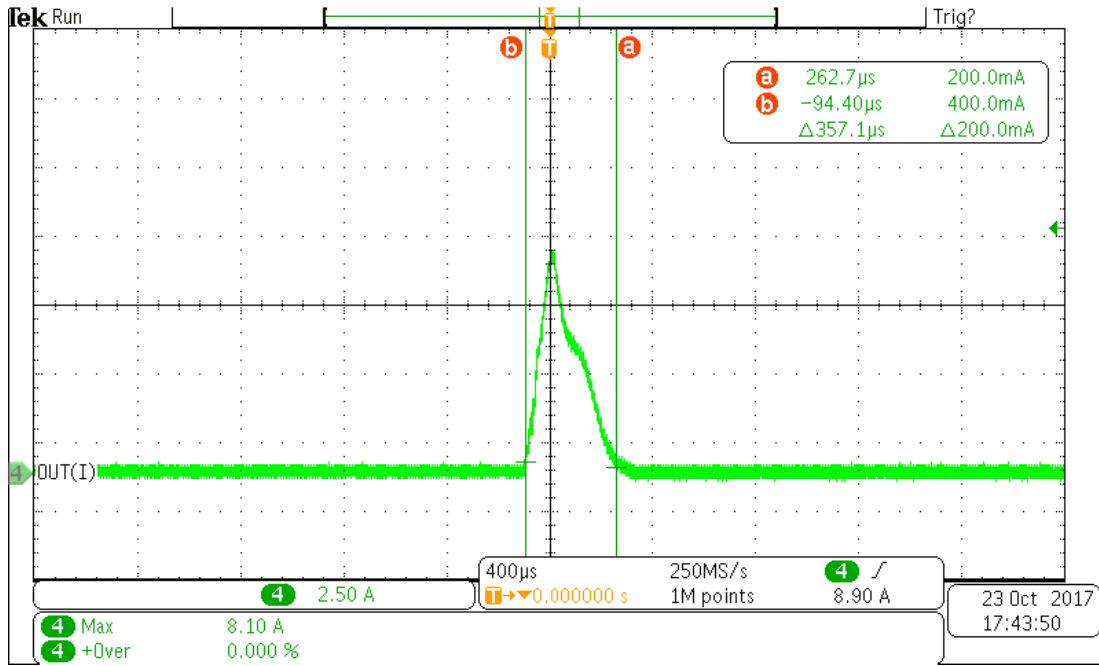
**EMC COMPLIANCE**

EMC Category	Country / Territory	Standards
CCC	China	GB 17743, GB 17625.1
CE	Europe	EN 55015, EN 61000-3-2, EN 61000-3-3
		EN61000-4-2,3,4,5,6,8,11
		EN 61547
KC	South Korea	K61547
		K00015
PSE	Japan	J55015
FCC	USA	FCC part 15

**NOTE:**

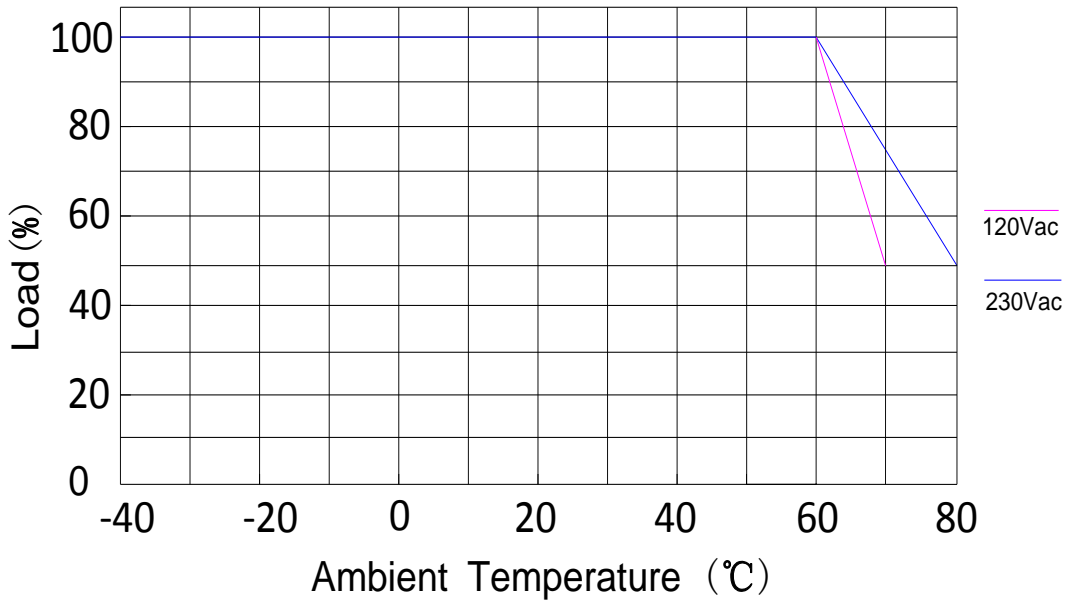
This LED driver meets the EMI specifications above, but EMI performance of a luminaire that contains it depends also on the other devices connected to the driver and on the fixture itself.

### INRUSH CURRENT WAVEFORM

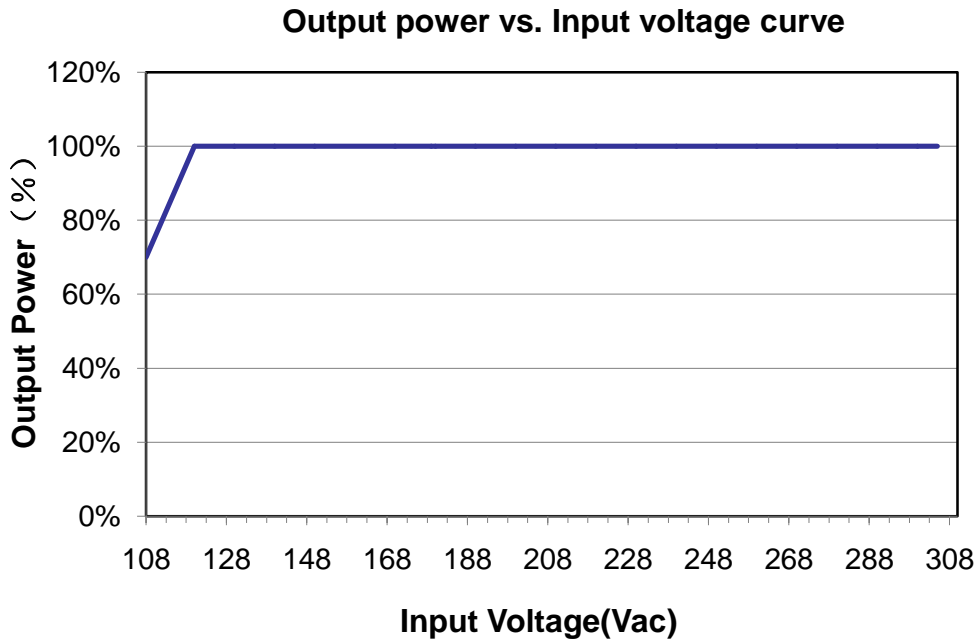


### DERATING CURVE

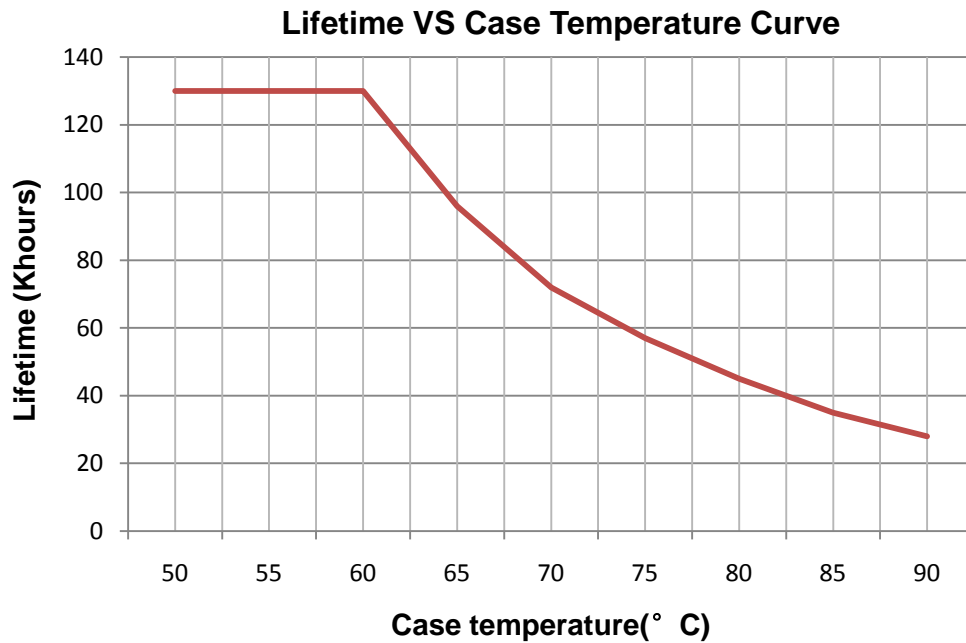
Derating Curve



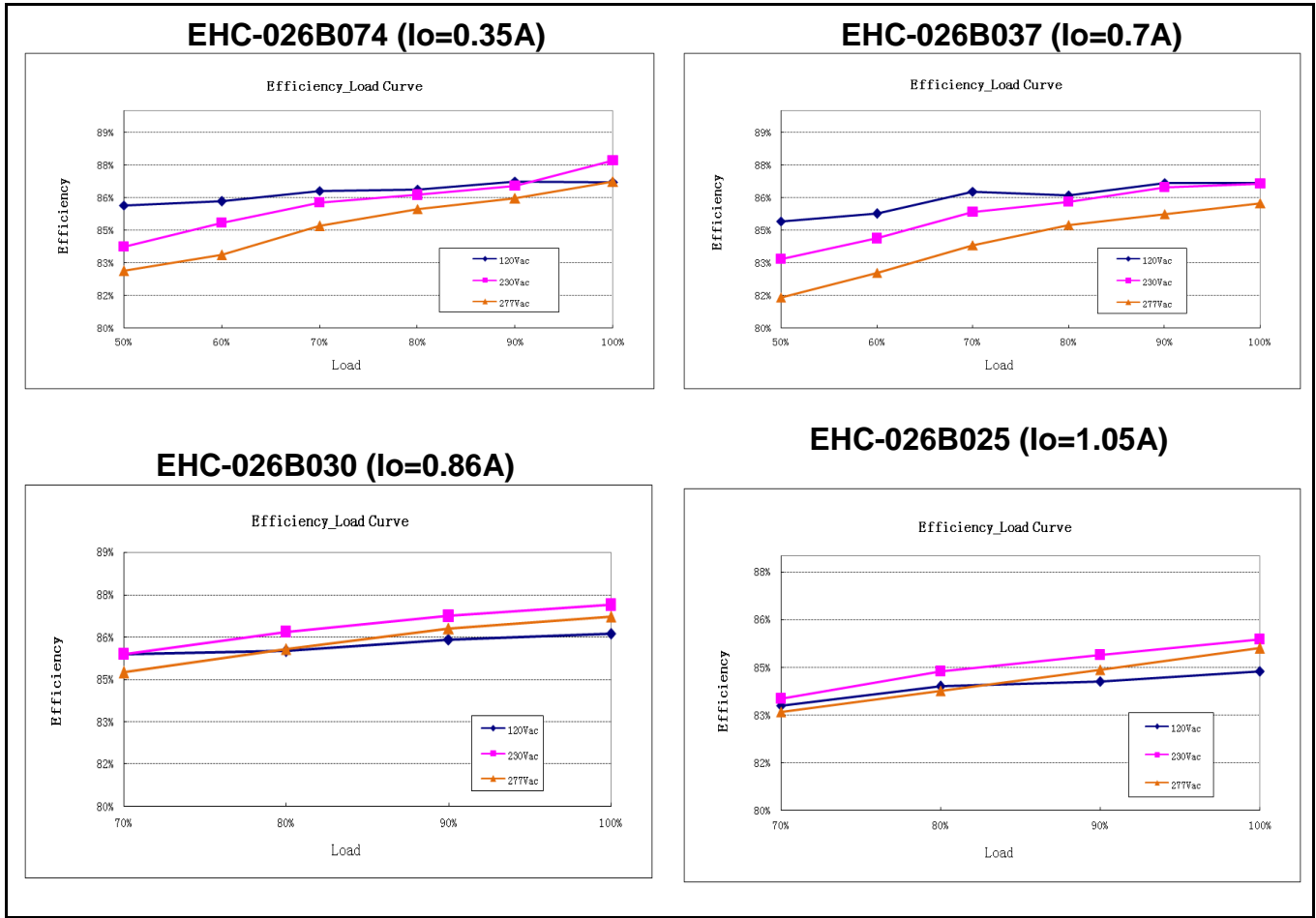
### OUTPUT POWER VS INPUT VOLTAGE



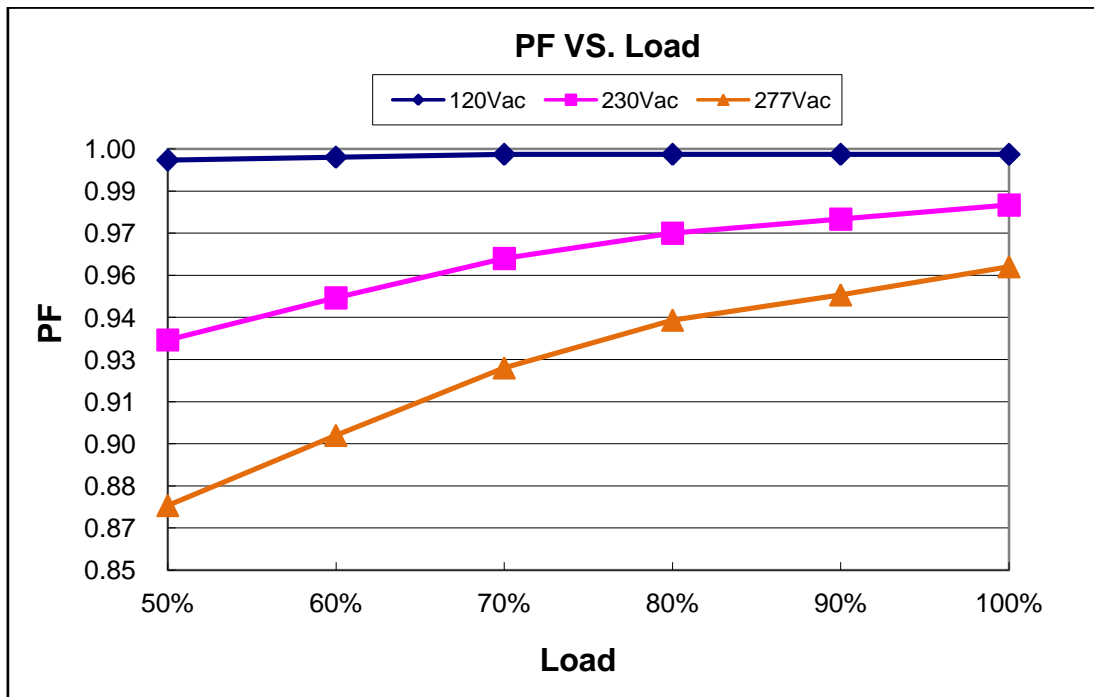
### LIFETIME VS CASE TEMPERATURE



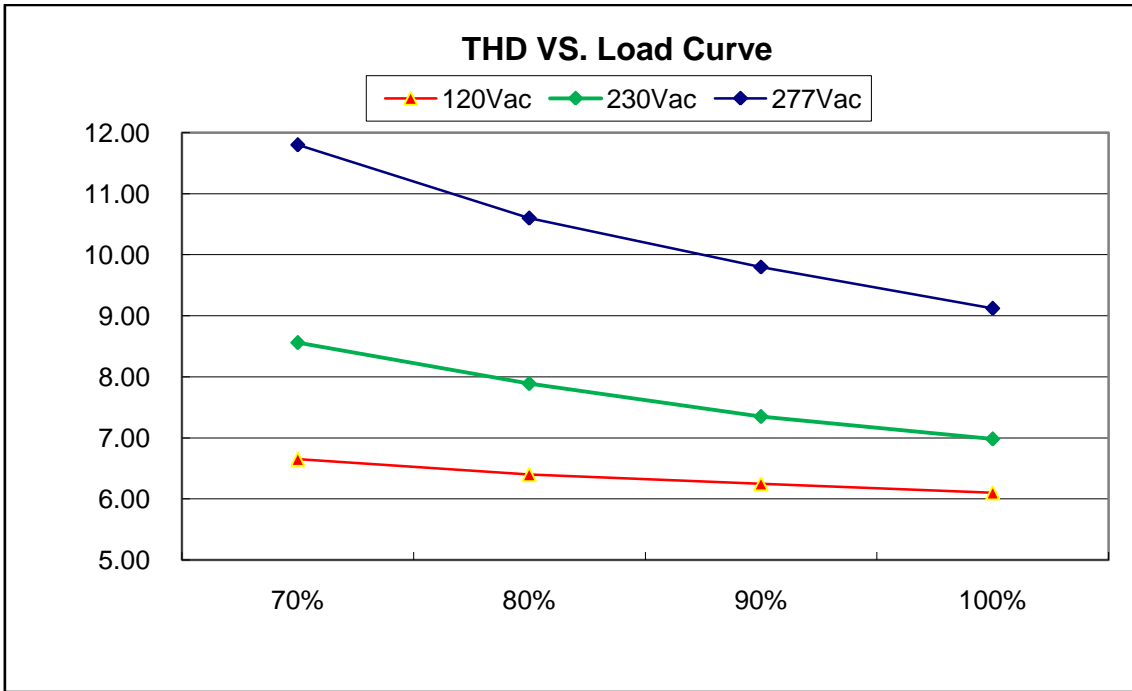
### EFFICIENCY VS LOAD



### POWER FACTOR VS LOAD



### TOTAL HARMONIC DISTORTION

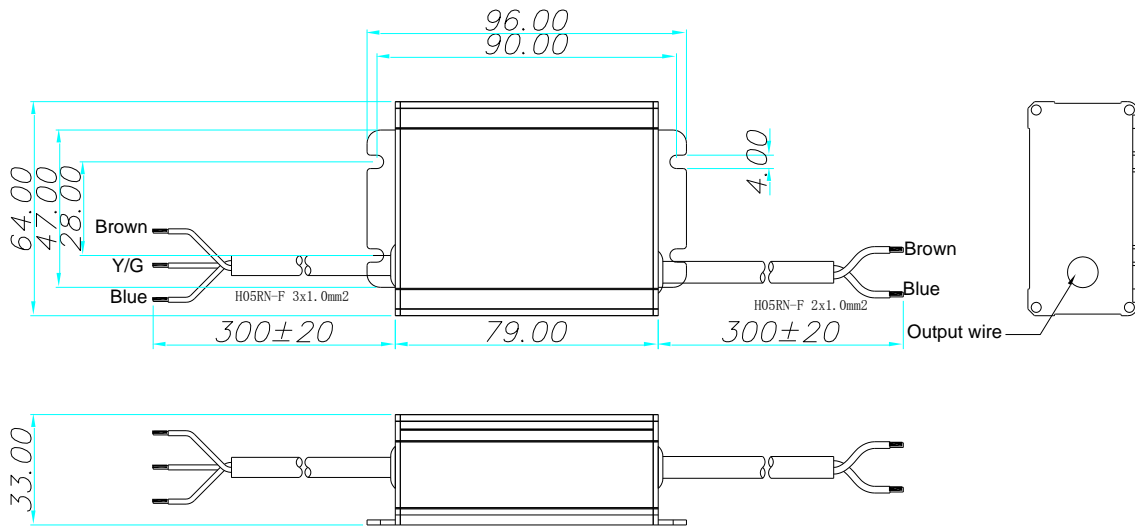


### PROTECTIONS

Parameter		Min.	Typ.	Max.	Notes
Input Over Voltage Protection	Input Protection Voltage	310Vac	330Vac	340Vac	Turn off the output when the input voltage exceeds protection voltage.
	Recovery Voltage	300Vac	320Vac	340Vac	Auto Recovery. The driver will restart when the input voltage falls below recovery voltage.
	Max. of Input Over Voltage	-	-	440Vac	The driver can survive for 48 hours with input over-voltage of 440Vac.
Over Temperature Protection		Decreases output current, returning to normal after over temperature is removed.			
Short Circuit Protection		Hiccup mode and auto recovery. No damage will occur when any output is short circuited. The output shall return to normal when the fault condition is removed.			
Output Over Voltage Protection		Limits output voltage at no load and in case the normal voltage limit fail.			



### MECHANICAL OUTLINE



**REVISION HISTORY**

Version	Description of Change		Date	Notes
	Before	Now		
A.1	—	Datasheets Release	2018-02-22	