Optional product for 40W2(V1) Series

S. A	A.P.S	LED Converter	Water Proof Converter		
Metal cas	2(V1)) se,40W single output tant voltage circuit	 AC Inpu Protecti Over loa /Over te IP68 des 100% ful Suitable sign app Metal co Safety si /K61347 EMC sta 	Id/Over voltage /Short circuit mperature sign for outdoor installations Il load burn-in test for LED lighting and moving blications ase tandards : EN61347-1,EN61347-2-13 7-1,K61347-2-13 ndards : EN55022,EN61204-3, 0-3-2,3/K00015,K61547 warranty		
		UP40S12W2(V1)M	UP40S24W2(V1)M		
	VOLTAGE RANGE	AC160~277V			
		<u>&</u> 177	47~63Hz		
INPUT	EFFICIENCY(typ.)	84%	47~63Hz 86%		
INPUT		0	47~63Hz		
INPUT	EFFICIENCY(typ.) AC CURRENT(typ.)	0	47~63Hz 86% 0.35A/230VAC		
INPUT	EFFICIENCY(typ.) AC CURRENT(typ.) INRUSH CURRENT(typ.)	COLD	47~63Hz 86% 0.35A/230VAC START 40A/230VAC		
INPUT	EFFICIENCY(typ.) AC CURRENT(typ.) INRUSH CURRENT(typ.) DC VOLTAGE	COLD 12V	47~63Hz 86% 0.35A/230VAC START 40A/230VAC 24V		
	EFFICIENCY(typ.) AC CURRENT(typ.) INRUSH CURRENT(typ.) DC VOLTAGE RATED CURRENT	0 COLD 12V 3.33A	47~63Hz 86% 0.35A/230VAC START 40A/230VAC 24V 1.66A		
	EFFICIENCY(typ.) AC CURRENT(typ.) INRUSH CURRENT(typ.) DC VOLTAGE RATED CURRENT RATED POWER	0 COLD 12V 3.33A 40W	47~63Hz 86% 0.35A/230VAC START 40A/230VAC 24V 1.66A 40W		
OUTPUT	EFFICIENCY(typ.) AC CURRENT(typ.) INRUSH CURRENT(typ.) DC VOLTAGE RATED CURRENT RATED POWER RIPPLE&NOISE(max.) Note2	0 COLD 12V 3.33A 40W	47~63Hz 86% 0.35A/230VAC START 40A/230VAC 24V 1.66A 40W 340mVp-p		
	EFFICIENCY(typ.) AC CURRENT(typ.) INRUSH CURRENT(typ.) DC VOLTAGE RATED CURRENT RATED POWER RIPPLE&NOISE(max.) Note2 VOLTAGE ADJ. RANGE	0 COLD 12V 3.33A 40W	47~63Hz 86% 0.35A/230VAC START 40A/230VAC 24V 1.66A 40W 340mVp-p ±5%		
	EFFICIENCY(typ.) AC CURRENT(typ.) INRUSH CURRENT(typ.) DC VOLTAGE RATED CURRENT RATED POWER RIPPLE&NOISE(max.) Note2 VOLTAGE ADJ. RANGE VOLTAGE TOLERANCE Note3	0 COLD 12V 3.33A 40W	47~63Hz 86% 0.35A/230VAC START 40A/230VAC 1.66A 40W 340mVp-p ±5% ±3%		
	EFFICIENCY(typ.) AC CURRENT(typ.) INRUSH CURRENT(typ.) DC VOLTAGE RATED CURRENT RATED POWER RIPPLE&NOISE(max.) Note2 VOLTAGE ADJ. RANGE VOLTAGE TOLERANCE Note3 LINE REGULATION Note4	0 COLD 12V 3.33A 40W 220mVp-p	47~63Hz 86% 0.35A/230VAC START 40A/230VAC 1.66A 40W 340mVp-p ±5% ±1%		
	EFFICIENCY(typ.) AC CURRENT(typ.) INRUSH CURRENT(typ.) DC VOLTAGE RATED CURRENT RATED POWER RIPPLE&NOISE(max.) Note2 VOLTAGE ADJ. RANGE VOLTAGE TOLERANCE Note3 LINE REGULATION Note4 LOAD REGULATION Note5	0 COLD 12V 3.33A 40W 220mVp-p 3000ms,100	47~63Hz 86% 0.35A/230VAC START 40A/230VAC 1.66A 40W 340mVp-p ±5% ±1% ±2%		
	EFFICIENCY(typ.) AC CURRENT(typ.) INRUSH CURRENT(typ.) DC VOLTAGE RATED CURRENT RATED POWER RIPPLE&NOISE(max.) Note2 VOLTAGE ADJ. RANGE VOLTAGE TOLERANCE Note3 LINE REGULATION Note4 LOAD REGULATION Note5 SETUP,RISE TIME(max.)	0 COLD 12V 3.33A 40W 220mVp-p 3000ms,100 50ms/	47~63Hz 86% 0.35A/230VAC START 40A/230VAC 1.66A 40W 340mVp-p ±5% ±3% ±1% ±2% Dms/230VAC at full load		
	EFFICIENCY(typ.) AC CURRENT(typ.) INRUSH CURRENT(typ.) DC VOLTAGE RATED CURRENT RATED CURRENT RATED POWER RIPPLE&NOISE(max.) Note2 VOLTAGE ADJ. RANGE VOLTAGE TOLERANCE Note3 LINE REGULATION Note4 LOAD REGULATION Note5 SETUP,RISE TIME(max.) HOLD UP TIME(typ.)	0 COLD 12V 3.33A 40W 220mVp-p 3000ms,100 50ms/ Hiccup mode ; recovers auto	47~63Hz 86% 0.35A/230VAC START 40A/230VAC 1.66A 40W 340mVp-p ±5% ±1% ±2% Dms/230VAC at full load 230VAC at full load		
OUTPUT	EFFICIENCY(typ.) AC CURRENT(typ.) INRUSH CURRENT(typ.) DC VOLTAGE RATED CURRENT RATED POWER RIPPLE&NOISE(max.) Note2 VOLTAGE ADJ. RANGE VOLTAGE TOLERANCE Note3 LINE REGULATION Note4 LOAD REGULATION Note5 SETUP,RISE TIME(max.) HOLD UP TIME(typ.) SHORT CIRCUIT	0 COLD 12V 3.33A 40W 220mVp-p 3000ms,100 50ms/ Hiccup mode ; recovers auto Over 110% of rating ; recovers a	47~63Hz 86% 0.35A/230VAC START 40A/230VAC 1.66A 40W 340mVp-p ±5% ±3% ±1% ±2% 0ms/230VAC at full load 230VAC at full load 230VAC at full load 230VAC at full load		
OUTPUT	EFFICIENCY(typ.) AC CURRENT(typ.) INRUSH CURRENT(typ.) DC VOLTAGE RATED CURRENT RATED POWER RIPPLE&NOISE(max.) Note2 VOLTAGE ADJ. RANGE VOLTAGE TOLERANCE Note3 LINE REGULATION Note4 LOAD REGULATION Note5 SETUP,RISE TIME(max.) HOLD UP TIME(typ.) SHORT CIRCUIT OVERLOAD	0 COLD 12V 3.33A 40W 220mVp-p 3000ms,100 50ms/2 Hiccup mode ; recovers auto Over 110% of rating ; recovers a 115 85±10°C (temp. Sensor) ; recovers a	47~63Hz 86% 0.35A/230VAC START 40A/230VAC 1.66A 40W 340mVp-p ±5% ±3% ±1% ±2% 0ms/230VAC at full load 230VAC at full load		
OUTPUT PROTEC -TION ISOLA	EFFICIENCY(typ.) AC CURRENT(typ.) INRUSH CURRENT(typ.) DC VOLTAGE RATED CURRENT RATED CURRENT RATED POWER RIPPLE&NOISE(max.) Note2 VOLTAGE ADJ. RANGE VOLTAGE TOLERANCE Note3 LINE REGULATION Note4 LOAD REGULATION Note5 SETUP,RISE TIME(max.) HOLD UP TIME(typ.) SHORT CIRCUIT OVERLOAD OVER VOLTAGE	0 COLD 12V 3.33A 40W 220mVp-p 3000ms,100 50ms/2 Hiccup mode ; recovers auto Over 110% of rating ; recovers a 115 85±10°C (temp. Sensor) ; recovers a	47~63Hz 86% 0.35A/230VAC START 40A/230VAC 1.66A 40W 340mVp-p ±5% ±1% ±2% 0ms/230VAC at full load 230VAC at full load 230VAC at full load omatically after fault condition is removed utomatically after fault condition is removed		
OUTPUT PROTEC -TION	EFFICIENCY(typ.) AC CURRENT(typ.) INRUSH CURRENT(typ.) DC VOLTAGE RATED CURRENT RATED POWER RIPPLE&NOISE(max.) Note2 VOLTAGE ADJ. RANGE VOLTAGE TOLERANCE Note3 LINE REGULATION Note4 LOAD REGULATION Note5 SETUP,RISE TIME(max.) HOLD UP TIME(typ.) SHORT CIRCUIT OVERLOAD OVER VOLTAGE OVER TEMPERATURE	0 COLD 12V 3.33A 40W 220mVp-p 3000ms,100 50ms/ Hiccup mode ; recovers auto Over 110% of rating ; recovers a 115 85±10°C (temp. Sensor) ; recovers a I/P-O/P:AC3KV, I/P-	47~63Hz 86% 0.35A/230VAC START 40A/230VAC 1.66A 40W 340mVp-p ±5% ±3% ±1% ±2% 0ms/230VAC at full load 230VAC at full load		
OUTPUT PROTEC -TION ISOLA -TION	EFFICIENCY(typ.) AC CURRENT(typ.) INRUSH CURRENT(typ.) DC VOLTAGE RATED CURRENT RATED POWER RIPPLE&NOISE(max.) Note2 VOLTAGE ADJ. RANGE VOLTAGE ADJ. RANGE VOLTAGE TOLERANCE Note3 LINE REGULATION Note4 LOAD REGULATION Note5 SETUP,RISE TIME(max.) HOLD UP TIME(typ.) SHORT CIRCUIT OVERLOAD OVER VOLTAGE OVER TEMPERATURE WITHSTAND VOLTAGE ISOLATION RESISTANCE WORKING TEMP.&HUMID.	0 COLD 12V 3.33A 40W 220mVp-p 3000ms,100 50ms/2 Hiccup mode ; recovers auto Over 110% of rating ; recovers a 115 85±10°C (temp. Sensor) ; recovers a I/P-O/P:AC3KV, I/P-	47~63Hz 86% 0.35A/230VAC START 40A/230VAC 1.66A 40W 340mVp-p ±5% ±1% ±2% Dms/230VAC at full load 230VAC at full load call condition is removed utomatically after fault condition is removed i-140% of rating automatically after fault condition is removed F.G:AC1.5KV, O/P-F.G:AC0.5KV		
OUTPUT PROTEC -TION ISOLA	EFFICIENCY(typ.) AC CURRENT(typ.) INRUSH CURRENT(typ.) DC VOLTAGE RATED CURRENT RATED CURRENT RATED POWER RIPPLE&NOISE(max.) Note2 VOLTAGE ADJ. RANGE VOLTAGE TOLERANCE Note3 LINE REGULATION Note4 LOAD REGULATION Note5 SETUP,RISE TIME(max.) HOLD UP TIME(typ.) SHORT CIRCUIT OVERLOAD OVER VOLTAGE OVER VOLTAGE OVER TEMPERATURE WITHSTAND VOLTAGE ISOLATION RESISTANCE	0 COLD 12V 3.33A 40W 220mVp-p 3000ms,100 50ms/ Hiccup mode ; recovers auto Over 110% of rating ; recovers a 115 85±10°C (temp. Sensor) ; recovers a 175 17P-O/P:AC3KV, I/P- I/P-O/P, I/P-F.G, O/P-F.G:DC5 -40~+70°C (Refer to -40~	47~63Hz 86% 0.35A/230VAC START 40A/230VAC 1.66A 40W 340mVp-p ±5% ±3% ±1% ±2% 0ms/230VAC at full load 230VAC at full load 230VAC at full load omatically after fault condition is removed utomatically after fault condition is removed 5~140% of rating automatically after fault condition is removed F.G:AC1.5KV, O/P-F.G:AC0.5KV 500V 100Mohms(At room temp. & humid.)		

 OTHERS
 DIMENSION/WEIGHT
 171x48.1x36.8mm(L*W*H)/0.4kg

 1. All parameters not specially mentioned are measured at 230vac input, rated load and 25°C of ambient temperature.
 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pare-wire terminated with 0.1 uF & 47uF parallel capacitor.

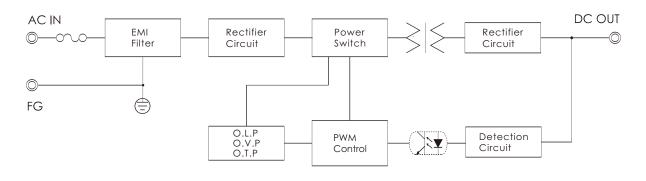
NOTE
3. Tolerance : includes set up tolrance, line regulation and load regulation.
4. Line regulation is measured from low line to high line at rated load.

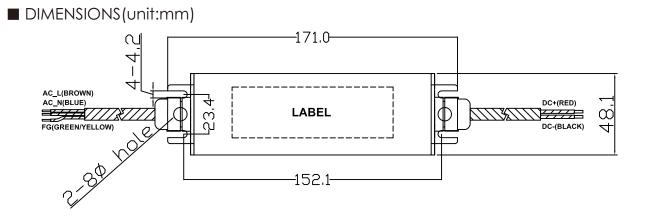
5. Load regulation is measured from low 0% to 100% rated load.

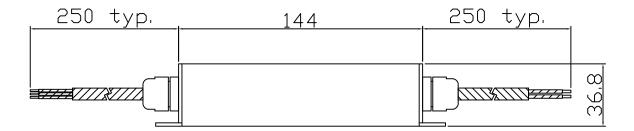
Optional product for 40W2(V1) Series

S.M.P.S	LED Converter	Water Proof Converter
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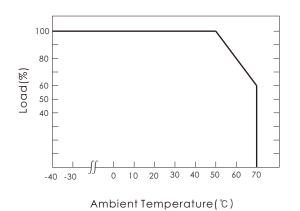
BLOCK DIAGRAM



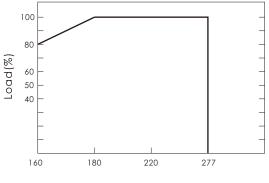




DERATING CURVE



■ STATIC CHARACTERISTICS



Input Voltage(Vac), 60Hz