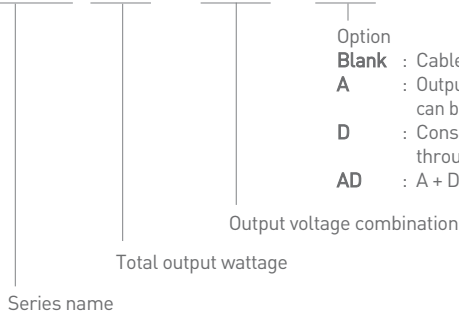
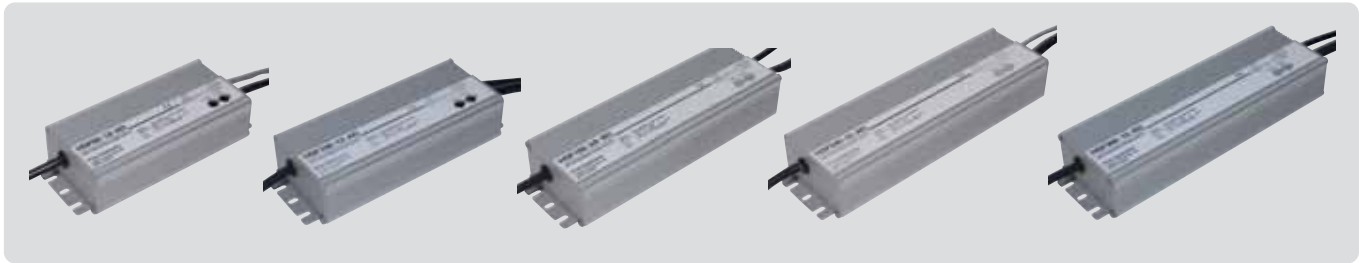


ORDERING INFORMATION **NEW**

# HSF60-12-□



- A, AD Type = IP66, NONE, D Type = IP67
- Built in PFC function(Active)
- Inrush current limit
- Wide input voltage(Universal input voltage)
- Over voltage protection
- Over current protection
- Outdoor LED Lighting
- LED Street Lighting
- 5 years warranty



## HSF60-S SPECIFICATIONS



MODEL		HSF60-12	HSF60-24	HSF60-36	HSF60-48	
INPUT	VOLTAGE, FREQUENCY	AC100-240V (AC 90 ~ 264V or DC 127 ~ 370V), 50/60Hz (47 ~ 63Hz), Universal input				
	CURRENT [A]	110V	0.8 (I <sub>o</sub> =100%)			
		220V	0.4 (I <sub>o</sub> =100%)			
	EFFICIENCY [%]	110V	84 typ	85 typ	85 typ	85 typ
		220V	86 typ	88 typ	88 typ	88 typ
	POWER FACTOR	110V	0.97 typ			
220V		0.93 typ				
INRUSH CURRENT		25A typ (AC IN 110V, I <sub>o</sub> =100%), 45A typ (AC IN 220V, I <sub>o</sub> =100%) at cold start.				
OUTPUT	VOLTAGE [V]	12	24	36	48	
	VOLTAGE ADJ RANGE *NOTE1 [V]	10.8 ~ 13.5	22 ~ 27	33 ~ 40	43 ~ 53	
	CURRENT [A]	5	2.5	1.7	1.3	
	CURRENT ADJ RANGE *NOTE1 [A]	2.5 ~ 5	1.25 ~ 2.5	0.85 ~ 1.7	0.65 ~ 1.3	
	REGULATION, LINE [mV]	120 Max	120 Max	180 Max	240 Max	
	REGULATION, LOAD [mV]	120 Max	120 Max	180 Max	240 Max	
	RIPPLE MAX [mV]	120 Max	120 Max	180 Max	240 Max	
	RIPPLE NOISE MAX 1 [mV]	150 Max	150 Max	250 Max	150 Max	
	RIPPLE NOISE MAX 2 *NOTE1 [mV]	400 Max	400 Max	600 Max	600 Max	
	TEMPERATURE DRIFT [mV]	180 Max	360 Max	540 Max	720 Max	
	RISE TIME [ms]	600 Max (AC IN 100V I <sub>o</sub> =100%)				
	HOLDING TIME [ms]	17 typ (AC IN 100V I <sub>o</sub> =100%)				
FUNCTION	OVER CURRENT PROTECTION [A]	Works at 95 ~ 110% of rating				
	OVER VOLTAGE PROTECTION [V]	14 ~ 17	28 ~ 34	41 ~ 46	54 ~ 60	
ELECTRICALLY ISOLATED	INPUT-OUTPUT	AC 3,000V 1 minute current 20mA, DC 500V 100MΩ (At room temperature & Humidity)				
	INPUT-CASE, FG	AC 2,000V 1 minute current 20mA, DC 500V 100MΩ (At room temperature & Humidity)				
	OUTPUT-CASE, FG	AC 500V 1 minute current 20mA, DC 500V 100MΩ (At room temperature & Humidity)				
ENVIRONMENT	OPERATING TEMP AND HUMID	-25 ~ +70°C(Required Derating), 20 ~ 90% RH (Non Condensing)				
	STORAGE TEMP AND HUMID	-20 ~ +75°C, 20 ~ 90% RH (Non condensing)				
	VIBRATION	10 ~ 55Hz at 1G, 3 minutes period, 30 minutes along X, Y and Z axis				
	IMPACT	10G for 20ms, once on each X, Y and Z axi				
SAFETY	SAFETY REGULATION	CE, KC	CE, KC	CE, KC	CE, KC	
	CONDUCTED EMISSION	Built to meet EN55015				

NOTE 1 : Type A, AD only

NOTE 2 : Frequency 50 / 60Hz