

## HWS600 12-27316, 15-27317, 24-27318, 48-27319 SPECIFICATIONS

### Options /PV; /HD; /ME; /RY; /Ex; /RKW

SPECIFICATION				MODELS				
				Notes	Unit	HWS600-12-27316	HWS600-15-27317	HWS600-24-27318
1	Nominal Output Voltage	(*1)	V	12	15	24	48	
2	Maximum Output Current	(*2)	A	53	43	27 (31)	13	
3	Maximum Output Power		W	636	645	648	634	
4	Efficiency	100VAC	(*3)	%	80	81	82	83
		200VAC	(*3)	%	83	84	85	86
5	Input Voltage Range	(*4)		85 - 265VAC (47 - 63Hz) or 120 - 330VDC				
6	Input Current (100/200VAC)(Typ)	(*3)	A	8.1/3.9				
7	Inrush Current(Typ)	(*5)		20A at 100VAC, 40A at 200VAC				
8	PFHC			Meet EN 61000-3-2				
9	Power Factor (100/200VAC)(Typ)	(*3)		0.99/0.95				
10	Output Voltage Range	Internal trimpot		Vdc	9.6 to 14.4	12.0 to 18.8	19.2 to 28.8	38.4 to 52.0
		External Resistance			0 to 14.4	0 to 18.0	0 to 28.8	0 to 52.8
		External Voltage			0 to 14.4	0 to 18.0	0 to 28.8	0 to 52.8
11	Maximum Ripple & Noise	0<Ta<70°C		mV	180	180	180	420
		-10<Ta<0°C	(*7)	mv	240	240	240	480
12	Maximum Line Regulation	(*8)	mV	48	60	96	182	
13	Minimum Line Regulation	(*9)	mV	96	120	192	384	
14	Temperature Coefficient			Less than 0.02% / °C				
15	Overcurrent Protection	(*10)	A	>55.7	>45.2	>31.4	>13.7	
16	Over Voltage Protection	(*11)	V	15.0 - 17.4	18.8 - 21.8	30.0 - 34.8	55.2 - 64.8	
17	Hold-up Time (Typ)	(*12)		20ms				
18	Leakage Current	(*13)		<0.75mA. 0.2mA(Typ) at 100VAC / 0.44mA(Typ) at 230VAC				
19	Remote Sensing			Yes				
20	Remote ON/OFF Control			Yes (Isolated from output)				
21	Monitoring Signal			PF (Open Collector Output)				
22	Parallel Operation			Yes ( Current balance single wire up to 5 units)				
23	Series Operation			Possible				
24	Operating Temperature	(*14)		-10 - +70°C (-10 - +50°C:100%, +70°C:50%)				
25	Operating Humidity			10 - 90%RH (No dewdrop)				
26	Storage Temperature			-30 - +85°C				
27	Storage Humidity			10 - 95%RH (No dewdrop)				
28	Cooling			Forced see Outline dwg for flow direction				
29	Withstand Voltage			Input - FG : 2.5kVAC (20mA), Input - Output : 3kVAC (20mA) Output - FG : 500VAC (100mA), Output - CNT : 100VAC (100mA) for 1min				
30	Isolation Resistance			More than 100MOhms Output - FG : 500VDC More than 10MOhms Output - CNT : 100VDC at 25°C and 70%RH				
31	Vibration			At no operating, 10 - 55Hz (Sweep for 1min) 19.6m/s <sup>2</sup> Constant, X,Y,Z 1hour each.				
32	Shock (in package)			Less than 196.1m/s <sup>2</sup>				
33	Safety	(*15)		Approved by UL62368-1, CSA62368-1, EN62368-1, UL60950-1, CSA60950-1, EN60950-1 (Expire date of 60950-1 : 20/12/2020), EN50178, UL 508. Designed to meet DENAN				
34	Line Dip			Designed to meet SEMI-F47 (200VAC Line only)				
35	Conducted Emission			Designed to meet EN55011/EN55032-B, FCC-B, VCCI-B				
36	Radiated Emission			Designed to meet EN55011/EN55032-B, FCC-B, VCCI-B				
37	Immunity			Designed to meet IEC61000-4-2(Level 2,3), -3(Level 3), -4(Level 3), -5(Level 3,4), -6(Level 3), -8(Level 4), -11				

## HWS600 12-27316, 15-27317, 24-27318, 48-27319 SPECIFICATIONS

### Options /PV; /HD; /ME; /RY; /Ex; /RKW

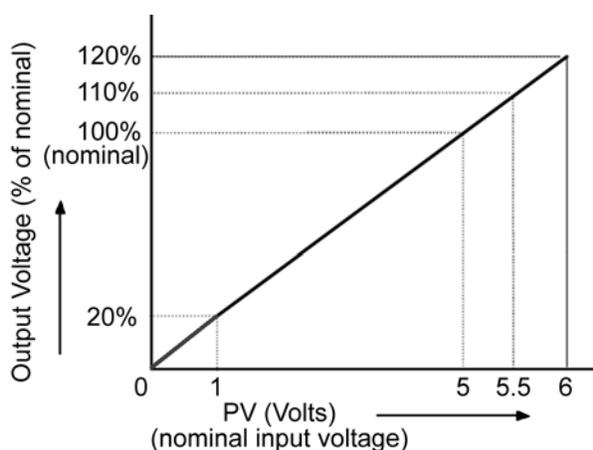
SPECIFICATION			MODELS			
			HWS600-12-27316	HWS600-15-27317	HWS600-24-27318	HWS600-48-27319
38	Weight (Typ.)	(*16)	1.6kg (-RKW adapter/mounting plate extra)			
39	Size (W x H x D)		100 x 82 x 165 ( Refer to Outline Drawing)			
			3.94 x 3.23 x 6.5 ( Refer to Outline Drawing)			

NOTES: \* Read instruction manual carefully, before using the power supply unit.

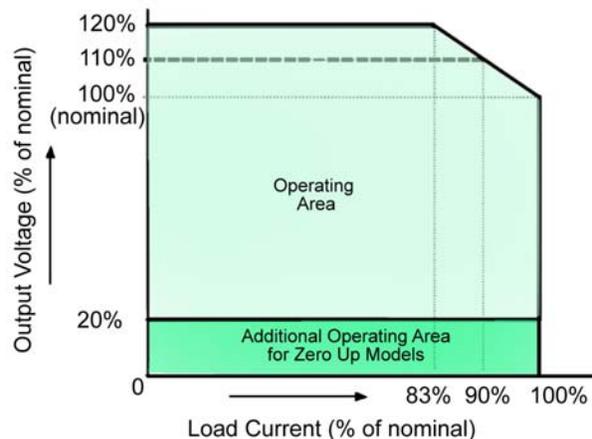
- (\*1) Refer to adjustment type ( see item 10) or refer to operation manual
- (\*2) ( ): Peak output current at 200VAC. Operating time at peak output is less than 10sec, duty is less than 35%.
- (\*3) At 100/200VAC, Ta=25°C and maximum output power.
- (\*4) For cases where conformance to various safety specs (UL, CSA, EN) are required, to be described as 100 - 240VAC(50/60Hz).
- (\*5) Not applicable for the Inrush Current to Noise Filter for less than 0.2ms. Inrush Current is 30A(Typ) when PFHC start-up.
- (\*6) Output Voltage can be changed by adjusting either : internal trim-pot, external resistor 5-20kOhms,external voltage 0-6V; refer to manual
- (\*7) Measure with JEITA RC-9131A probe, Bandwidth of scope :100MHz.
- (\*8) 85 - 265VAC, constant load.
- (\*9) No load - Full load, constant input voltage.
- (\*10) Constant current limit with automatic recovery.Avoid to operate at over load or short circuit condition for more than 30seconds.
- (\*11) OVP circuit will shut the output down, manual reset (CNT reset or Re-power on).
- (\*12) At 100/200VAC, nominal output voltage and maximum output current.
- (\*13) Measured by the each measuring method of UL, CSA, EN and DENAN(at 60Hz), Ta=25°C.
- (\*14) Ratings - Derating at standard mounting. Refer to output derating curve.(A232-01-02\_)  
 - Load (%) is percent of maximum output power or maximum output current, whichever is greater.
- (\*15) As for DENAN, designed to meet at 100VAC.
- (\*16) Consult factory for all the factory options weights :RKW mounting plate, RKW adapter bracket

#### KEPCO HWS suffixes

- / 27316 or /02xxxx internal trimpot adjust 80-120% nominal; 0-6V program voltage input to adjust output 0-120% of nominal ;external trimpot
- /PV 1-6V program voltage input to adjust output 20-120% of nominal (20-110% for 48V) (12V-48V models only)
- /HD 40 to +71(74)°C operation, conformally coated PCBs
- /ME Medical . UL60601-1, EN60950-1 medical certification
- /RY ISA 12.12.01 (UL1604) - Class 1 Div 2 with dry contact relay DC Good signal (300W, 600W and 1500W 24V output models only, no UL508 certification, no remote on/off function.)
- /Ex Same as /RY factory adjusted to nominal voltage with internal trimpot
- /RKW include mounting bracket and I/O connector exact drop in replacement for RKW series



OUTPUT VOLTAGE VS. PV VOLTAGE



OUTPUT VOLTAGE VS. LOAD CURRENT