ENSTICK

Switching mode power supply

Din-Rail type switching power supplies

30W Single Output Industrial DIN Rail Power Supply (HDR-30)



GHDR-30...

Feature

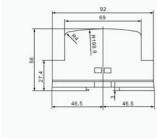
- · Universal AC input/ full range
- Protections: Short circuit/ Over load/ Over voltage
- · Cooling by free air convection
- Can be installed on DIN rail TS-3.5/7.5 or 15
- Isolation class II
- LED indicator for power on
- 100% full load burn-in test
- 3 years warranty
- Dimensions: 78*93*56mm (W*H*D)

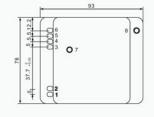
Notes:

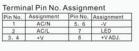
- All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.
- Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1µ & 47µf parallel capacitor.
- Each output can within current range.
 But total output power can't exceed rated load
- The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives.

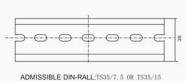
Model		GHDR-30-5	GHDR-30-12	GHDR-30-15	GHDR-30-24		
Output	DC Voltage	5V	12V	15V	24V		
	Voltage Tolerance	±2%	±1%	±1%	±1%		
	Rated Current	ЗА	2A	2A	1.5A		
	Current Range	0-3A	0-2A	0-2A	0-1.5A		
	Rated Power	15W	24W	30W	36W		
	Ripple & Noise	80mVp-p	120mVp-p	120mVp-p	150mVp-p		
	DC Voltage Adj.Range	-5%, +10%	±10%	±10%	±10%		
	Setup,Rise,Hold Time	100ms,30ms/230VAC 100ms,30ms/115VAC at full load					
Input	Voltage Range	85~264 VAC 47-63 Hz; selected by switch 120~370VDC					
	AC Current	0.88 A/115 V 0.48A/ 230 V					
	Efficiency	74%	81%	82%	83%		
	Inrush Current	Cold start 15A/115V 30A/230V					
Protection	Over Load	105%~160% Protection type: Constant current limiting, recovers automatically after fault condition is removed					
	Over Voltage	115%~135% Protection type: Shut down o/p voltage, re-power on to recover					
Environment	Working Temp & Humidity	-10°C~+60°C, 20%~90 %RH					
	Storage Temp & Humidity	-40°C~+85°C, 10%~95 %RH					
	Vibration	10~500Hz, 2G 10min/1cycle, period for 60min, each along X, Y, Z axes					
Safety	Withstand Voltage	I/P-O/P: 3KVAC					
	Isolation Resistance	I/P-O/P: 100M Ohms / 500VDC					
Standards	Safety Standard	Design refer to UL60950-1,TUV EN60950-1,EN50178					
	EMC Standard	Design refer to EN55011,EN55022,EN61000-3-2,-3,EN61000-4-2,3,4,5,6,8,11, ENV50204,EN65024,EN61000-6-2,EN61204-3					
Others	Weight	0.27Kg					
	Packing	48pcs/14Kg/1.02CUFT					

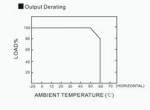
Outline and dimension

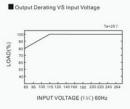












ENSTICK

Switching mode power supply

Din-Rail type switching power supplies

45W Single Output Industrial DIN Rail Power Supply (HDR-45)



GHDR-45...

Feature

- Universal AC input/ full range
- Protections: Short circuit/ Over load/ Over voltage/ Over temperature
- Cooling by free air convection
- Can be installed on DIN rail TS-3.5/7.5 or 15
- LED indicator for power on
- 100% full load burn-in test
- Fixed switching frequency at 100KHz
- · 3 years warranty
- Dimensions: 78*97*67mm (L*W*H)

Notes:

- All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.
- Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1µ & 47µf parallel capacitor.
- Each output can within current range.
 But total output power can't exceed rated load
- The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives.

Model		GHDR-45-5	GHDR-45-12	GHDR-45-15	GHDR-45-24		
Output	DC Voltage	5V	12V	15V	24V		
	Voltage Tolerance	±2%	±1%	±1%	±1%		
	Rated Current	5A	3.5A	2.8A	2A		
	Current Range	0-5A	0-3.5A	0-2.8A	0-2A		
	Rated Power	25W	42W	42W	48W		
	Ripple & Noise	100mVp-p	200mVp-p	240mVp-p	480mVp-p		
	DC Voltage Adj.Range	4.75-5.5V	10.8-13.2V	13.5-16.5V	21.6-26.4V		
	Setup,Rise,Hold Time	800ms,60ms, 100ms/230VAC at full load					
Input	Voltage Range	85~264 VAC 47-63 Hz;selected by switch120~370VDC					
	AC Current	1.5 A/115 V 0.75A/ 230 V					
	Efficiency	72%	77%	77%	80%		
	Inrush Current	Cold start 28A/115V 56A/230V					
	Leakage Current	<1mA/240VAC					
Protection	Over Load	105%~150% Protection type: Constant current limiting, recovers automatically after fault condition is removed					
	Over Voltage	115%~135% Protection type: Shut down o/p voltage, re-power on to recover					
	Over Temperature	Tj 135 typically (U1) Detect on heat sink of power transistor, shut down o/p voltage, recovers automatically after temperature goes down					
Environment	Working Temp & Humidity	-10°C~+50°C, 20%~90 %RH					
	Storage Temp & Humidity	-20°C~+85°C, 10%~95 %RH					
	Vibration	10~500Hz, 2G 10min./1cycle, period for 60min, each along X, Y, Z axes					
	Withstand Voltage	I/P-O/P: 3KVAC					
Safety	Isolation Resistance	I/P-O/P, I/P-FG, O/P-FG: 100M Ohms / 500VDC					
Standards	Safety Standard	Design refer to UL508,TUV EN60950-1					
	EMC Standard	Design refer to EN55011,EN55022,EN61000-3-2,-3,EN61000-4-2,3,4,5,6,8,11,ENV50204, EN55024,EN61000-6-2					
Others	Weight	0.31Kg					
	Packing	48pcs/16.1Kg/1.3CUFT					

Outline and dimension Terminal Pin No. Assignment Pin No. Assignment

ENSTICK

Switching mode power supply

Din-Rail type switching power supplies

60W Single Output Industrial DIN Rail Power Supply (HDR-60)



GHDR-60...

Feature

- · Universal AC input/ full range
- Protections: Short circuit/ Over load/ Over voltage
- Cooling by free air convection
- Can be installed on DIN rail TS-3.5/7.5 or 15
- Isolation class II
- LED indicator for power on
- 100% full load burn-in test
- · 3 years warranty
- Dimensions: 78*93*56mm (W*H*D)

Notes:

- All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.
- \bullet Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1 μ & 47 μ f parallel capacitor.
- Each output can within current range.
 But total output power can't exceed rated load
- The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives.

Model		GHDR-60-5	GHDR-60-12	GHDR-60-15	GHDR-60-24		
Output	DC Voltage	5V	12V	15V	24V		
	Voltage Tolerance	±2%	±1%	±1%	±1%		
	Rated Current	6.5A	4.5A	4A	2.5A		
	Current Range	0-6.5A	0-4.5A	0-4A	0-2.5A		
	Rated Power	32.5W	54W	60W	60W		
	Ripple & Noise	80mVp-p	120mVp-p	120mVp-p	150mVp-p		
	DC Voltage Adj.Range	-5%, +10%	-8%, +10%	±10%	±10%		
	Setup,Rise,Hold Time	100ms,30ms/230VAC at full load 200ms,30ms/115VAC at full load					
	Hoid time	100ms/230VAC 23ms/115VAC at full load					
Input	Voltage Range	88~264 VAC 47-63 Hz; selected by switch 124~370VDC					
	AC Current	1.2A/115 V 0.8A/ 230 V					
	Efficiency	76%	82%	83%	81%		
	Inrush Current	Cold start 20A/115V 40A/230V					
Protection	Over Load	105%~160% Protection type: Constant current limiting, recovers automatically after fault condition is removed					
	Over Voltage	115%~135% Protection type: Shut down o/p voltage, re-power on to recover					
Environment	Working Temp & Humidity	-20°C~+60°C, 20%~90 %RH					
	Storage Temp & Humidity	-40°C~+85°C, 10%~95 %RH					
	Vibration	10~500Hz, 2G 10min./1cycle, period for 60min, each along X, Y, Z axes					
20100	Withstand Voltage	I/P-O/P: 3KVAC					
Safety	Isolation Resistance	I/P-O/P: 100M Ohms / 500VDC					
Standards	Safety Standard	Design refer to UL60950-1,TUV EN60950-1,EN50178					
	EMC Standard	Design refer to EN55011,EN55022,EN61000-3-2,-3,EN61000-4-2,3,4,5,6,8,11,ENV50204,EN55024,EN610 00-6-2, EN61204-3					
Others	Weight	0.3Kg					
	Packing	48pcs/15.4Kg/1.02C	UFT				

Outline and dimension

