

QUICK START GUIDE



KEPCO An ISO 9001 Company.



SINGLE OUTPUT 3U HOT SWAP PLUG-IN POWER SUPPLIES

I — INTRODUCTION

SCOPE OF MANUAL. This Quick Start Guide covers the installation and operation of the Kepco HSF 1200W/1500W Series of Hot Swap Plug-in Power Supplies. Full specifications are listed in the HSF 1200W/1500W Operator Manual that can be downloaded from the Kepco web site at:

www.kepcopower.com/support/opmanls.htm#hsf

These power supplies are designed to be installed in Kepco's RA 19-4C Rack Adapter. The RA 19-4C Operator Manual can be downloaded from the Kepco web site at:

www.kepcopower.com/support/opmanls.htm#ra19-4c

FACTORY DEFAULTS. This guide covers only units as shipped from the factory with the two internal DIP switches set to default configuration (see Figure 1). For other configurations, refer to applicable Operator Manual.

DESCRIPTION. The Kepco HSF 1200W/1500W Series are hot swappable, high frequency switching, plug-in power supplies. Models may be selected for outputs of 24V, 36V or 48V. They employ power factor correction and are designed to operate in a fault tolerant power system with a nominal a-c input of 100V a-c to 240V a-c (input voltage range 85 to 265 Va-c), 50-60 Hz (input frequency range 47-440Hz). A built-in current balancing circuit and OR-ing diodes allow configuration for hot-swap and parallel-redundant N+1 operation. All input/output connections are through a 24-pin connector that plugs in to the rack adapter. All external connections are made through the rack adapter's I/O connector.

II — INSTALLATION

PRIOR TO MOUNTING. Two internal DIP switches are preconfigured for the factory defaults (see Figure 1). To change the factory defaults, refer to the operator manual and configure the DIP switches prior to installation.

KEYING. The units are keyed by voltage at the factory. Refer to the RA 19-4C Operator Manual to make the rack adapter slot match the HSF.

MOUNTING THE POWER SUPPLY. Release the two cap head screw retaining latches (see Figure 2) by loosening

OPTIONS. M models include a digital meter which displays either voltage or current as determined by a front panel switch. The front panel V or A indicator lights to show whether voltage (V) or current (A) is displayed. Metered and non-metered models are completely interchangeable.

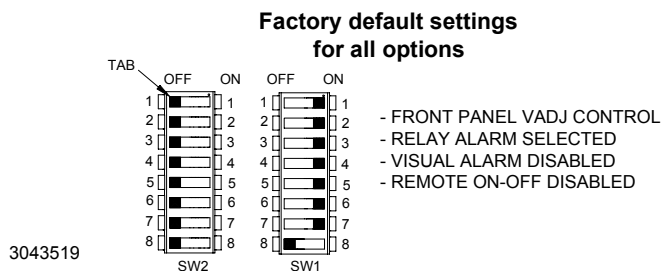


FIGURE 1. DIP SWITCH FACTORY DEFAULTS

C Models include a current sense resistor which allows external current monitoring within 3% (contact Kepco if greater accuracy is required). RoHS-compliant models indicated by HSF* (e.g., HSF 24*50M).

TABLE 1. HSF 1200W/1500W HOT SWAP MODELS

MODELS		
24V	36V	48V
HSF 24-50	HSF 36-42	HSF 48-32
NOTE: Options include suffix M, or C: M for meter, C for current monitor. HSF* indicates RoHS compliance.		

ing the cap-head screw approximately 1/2 turn CCW (use 5/32" hex key) and slide to the open (up) position. Insert the power supply in the slot, then retighten the cap-head screws CW until snug. **DO NOT OVERTIGHTEN!** To release, follow the same procedure, except lift the latch to the top of the slot. Be sure to move the latch completely up or down to ensure full engagement and disengagement of the latching mechanism. When the HSF is not installed in its plug-in rack adapter, it is recommended that the latch be secured in the open (up) position to prevent damage.

CONNECTIONS. All connections are made at the rear panel of the RA 19-4C Rack Adapter (see RA 19-4C Operator Manual).

REMOVAL. To remove a power supply, first use the POWER switch to turn off the unit. Release the two cap head screw retaining latches (see Figure 2) by loosening

the cap-head screw approximately 1/2 turn CCW (use 5/32" hex key) and slide to the open (up) position. Then extract the unit from the RA 19-4C Rack Adapter. **CAUTION: The ON/OFF switch must be set to OFF before removing the unit from the rack adapter.** Leave the latches in the open position when not installed.

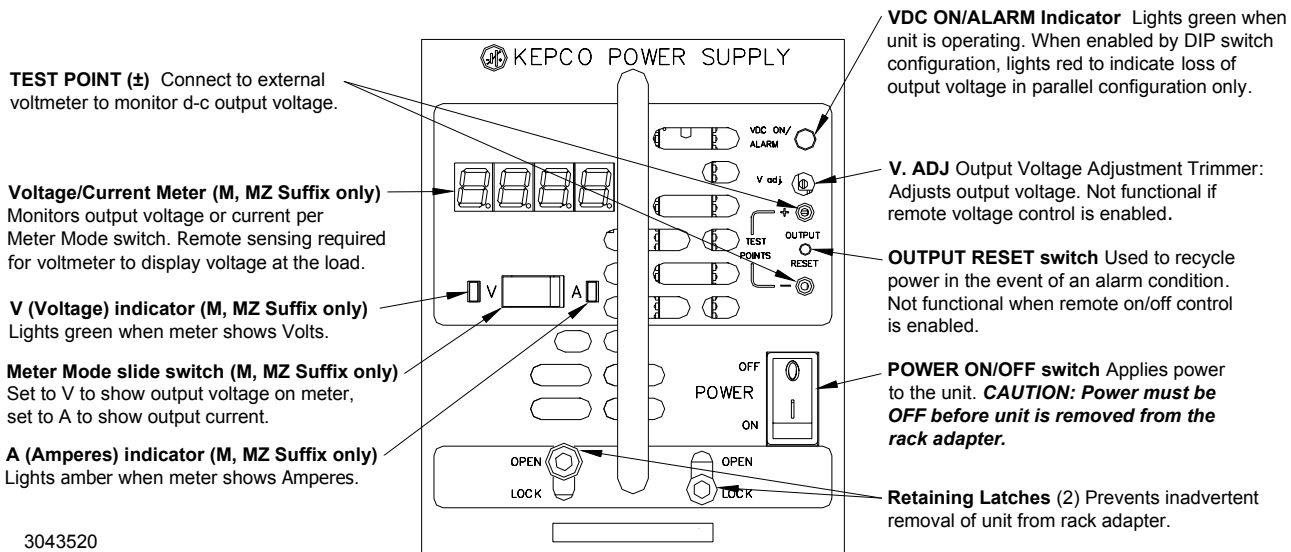


FIGURE 2. COMPONENT LOCATIONS

III — OPERATION

Turn the unit on using the front panel POWER switch (see Figure 2). **CAUTION: DO NOT repeatedly toggle the POWER on/off switch as this may cause unit to fault.**

When output voltage is within range specified in applicable Operator Manual, the VDC ON LED is on (green). The VDC ON indicator can be configured to light red to indicate a loss of output voltage (see applicable Operator manual).

While monitoring output voltage at the front panel test points, the V ADJ Output Voltage Adjust trimmer allows adjustment of the output voltage. The unit can also be configured to control output voltage using a remote resistance or voltage (see applicable Operator's manual referenced on page 1).

The OUTPUT RESET switch can be used to recycle power in the event of an alarm condition. This switch does not function if the remote on/off feature has been enabled (see applicable Operator manual).

M models include a meter which can display either output voltage or current depending on the position of the Meter Mode slide switch. A corresponding indicator V (green) for Volts or A (amber) for Amperes lights to show which meter mode is selected.

The following features of the HSF 1200W/1500W power supplies are covered in the applicable Operator manual:

- Parallel Operation, including current balancing requirements. Parallel operation with current balancing (forced current sharing) is recommended to increase reliability, and results in minimal output voltage bus variation upon shutdown of one unit in a fault-tolerant configuration.
- Remote On/Off and Voltage adjustment
- Protection Circuits
- Alarms
- Keying
- Options