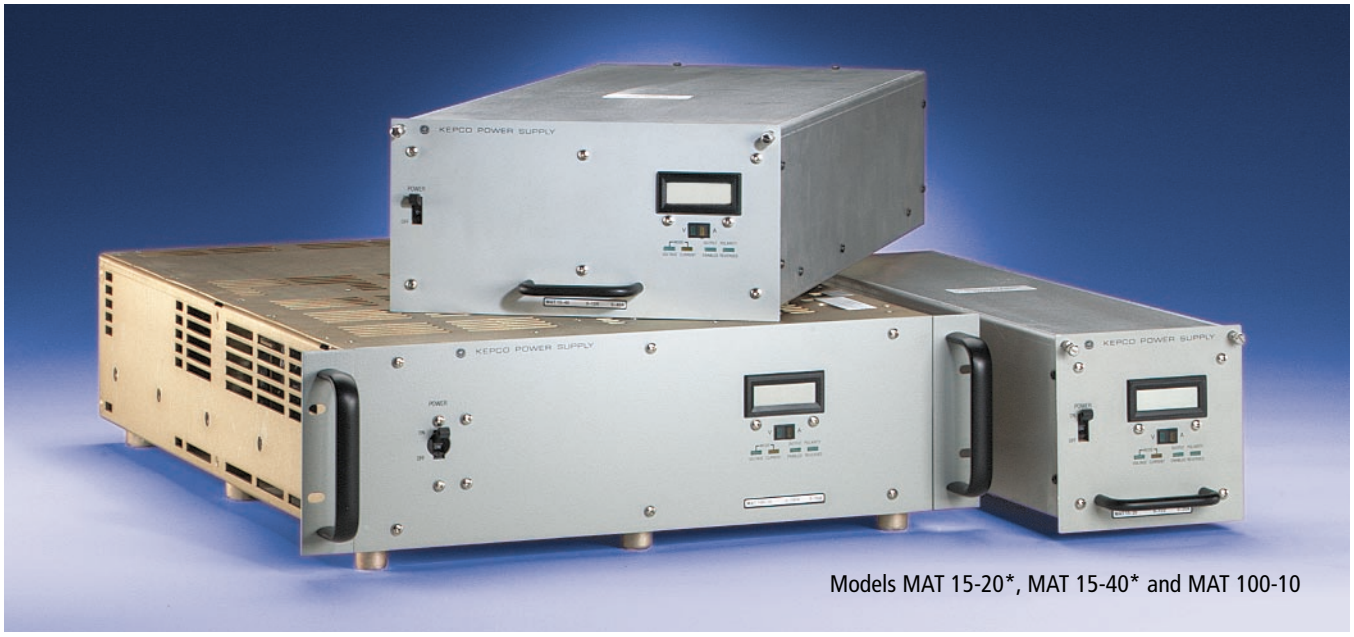
SERIES **MAT**



Models MAT 15-20*, MAT 15-40* and MAT 100-10

Kepco MAT power supplies are oriented to systems applications. Their principal control means is a 2-wire, long range, serial bus, Kepco's single address, multiple instrument bus. As many as 27 power supplies, including models in the Kepco MST and BOP series may be "daisy-chained" on this bus and interfaced either to IEEE 488.2, a PC bus, or to a VXI host.

MAT are produced in three sizes: 360W, 720W, and 1080W. The two smaller groups plug in to appropriate rack adapters and may be replaced from the front. The 360W models are 1/3 width. The 720W models are 2/3 width. The 1080W models are full rack size and mount directly in a standard 19" rack.

FEATURES

- Plug-in construction (360W & 720W models).
- Local display of voltage and current.
- Talk-listen on the GPIB through Kepco's single address, multiple instrument long-range (300m) serial bus.
- Linear stabilization for low noise.

This KEPCO product is backed by a firm **5-YEAR WARRANTY**

CE MAT are CE marked per the Low Voltage Directive (LVD), EN61010-1.

For information on digital interfaces, see page 59.

Model MAT 15-20*
Size: 1/3 rack width
Weight: 33lbs (15Kg)

360 WATT MODULES – 1/3 RACK

Single output. Nominally 360 Watts.
Mount in RA 50 and RA 51.

MODEL	VOLTS	AMPS	POWER
MAT 6-32	0-6	0-32	192
MAT 15-20	0-15	0-20	300
MAT 25-14	0-25	0-14	350
MAT 36-10	0-36	0-10	360
MAT 55-7	0-55	0-7	385
MAT 75-5	0-75	0-5	375
MAT 100-3.6	0-100	0-3.6	360
MAT 150-2.4	0-150	0-2.4	360

Model MAT 15-40*
Size: 2/3 rack width
Weight: 60lbs (27.3Kg)

720 WATT MODULES – 2/3 RACK

Single output. Nominally 720 Watts.
Mount in RA 51.

MODEL	VOLTS	AMPS	POWER
MAT 6-64	0-6	0-64	384
MAT 15-40	0-15	0-40	600
MAT 25-28	0-25	0-28	700
MAT 36-20	0-36	0-20	720
MAT 55-14	0-55	0-14	770
MAT 75-10	0-75	0-10	750
MAT 100-7.2	0-100	0-7.2	720
MAT 150-4.8	0-150	0-4.8	720

Model MAT 100-10
Size: Full rack width
Weight: 75lbs (34.1Kg)

1080 WATT MODULES – FULL RACK

Single output. Nominally 1080 Watts.
Mounted directly into 19" rack. Panel: 5¼". Depth: 25"

MODEL	VOLTS	AMPS	POWER
MAT 6-100	0-6	0-100	600
MAT 15-60	0-15	0-60	900
MAT 25-42	0-25	0-42	1050
MAT 36-30	0-36	0-30	1080
MAT 55-20	0-55	0-20	1100
MAT 75-15	0-75	0-15	1125
MAT 100-10	0-100	0-10	1000
MAT 150-7	0-150	0-7	1050

*Covers shown are for shipping purposes only.

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MAT GENERAL SPECIFICATIONS

PARAMETER	CONDITION	MAT POWER MODULE		
		360W	720W	1080W
Input Voltage Range	User selectable	105-125V a-c 210-250V a-c		
Input Current Max	115V a-c	7.0A	14.0A	21.0A
	230V a-c	3.5A	7.0A	10.5A
Input Frequency	Range	47-63Hz		
Source Effect	Voltage	0.001% E_{omax}		
	Current	0.005% I_{omax}		
Load Effect	Voltage	0.002% E_{omax}		
	Current	3mA		
Time 8 hour Drift	Voltage	0.01% E_{omax}		
	Current	0.02% I_{omax}		
Temperature Coefficient/°C	Voltage	0.01% E_{omax}		
	Current	0.02% I_{omax}		
Ripple & Noise rms/p-p(2)	Voltage	0.001%/0.01% E_{omax} or 0.3mV/3mV(1)		
	Current	0.06%/ 0.6% I_{omax}	0.03%/0.3% I_{omax}	
Transient Recovery	Voltage	100µsec		
Programming Resolution	Voltage	0.024% E_{omax} (12 Bits)		
	Current	0.024% I_{omax} (12 Bits)		
Data Read-back Accuracy	Voltage	0.1% E_{omax}		
	Current	0.1% I_{omax}		
Operating Temperature	Range	0°C to 50°C		
Remote Sensing	Range	0.5V per lead		
dc Output Isolation	Voltage	500V d-c		
Output Display	3½ digit LCD	Switch selectable voltage/current		
Indicators	4 LEDs	Voltage mode, current mode, output enabled, polarity reversed		
Output Enable/Disable		Built-in power & sense relays		
Polarity Reversal		Built-in relays		
Protection	Overvoltage	Tracking 10% of full scale above the programmed value		
	Overcurrent			
	Overtemperature	Monitors heat sink temperature		
	Polarity reversal	Diode		
	Power loss	Disables output		
Mounting	RA 50	3 x 360W		
	RA 51	1 x 360W & 1 x 720W		
	19" x 3U	1 x 1080W		
Filler Panels	For either RA 50 or RA 51	RFP 50-1 ⅓ panel; RFP 50-2 ⅔ panel		

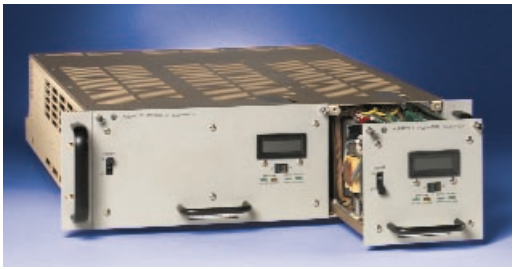
(1) Whichever is greater.
(2) Peak-to-peak ripple is measured over a 20Hz to 20MHz bandwidth.

MAT front panels provide local status monitoring and on/off control. All setting controls and read back are via the serial bus. The interface between this bus and common host controllers is via devices called TMAs. TMA 4882-27 is a 1¾" high rack mount instrument that provides interface to the GPIB (IEEE 488.2 or RS 232). TMA 4882-27 supports IEEE 488.2 and the SCPI language.

Model TMA PC-27 is a card that plugs into any PC (half card slot) and provides direct control to MAT, MST and BOP models via their serial bus by emulating a GPIB. All of the GPIB functions are provided without having the awkward GPIB cables, the GPIB driver card and GPIB's limitations on distance.

Model TMA VXI-27 is a gateway to the VXI world. The unit is a single width size C instrument that plugs into a VXI cage and will drive Kepco's serial bus to control the power supplies "daisy-chained" thereon.

Accessories for MAT Models



RA 51 Housing with (1) 360W and (1) 720W MAT Module

To accommodate the 1/3 and 2/3 rack size MAT modules, Kepco offers two housings called RA 50 and RA 51. RA 50 is 3U, 5¼" x 19" x 25" and accepts up to three 1/3 rack power modules. RA 51 is like sized, but configured for one 1/3 rack module and one 2/3 rack module.

Filler Panels **RFP 50-1** (1/3 slot filler)
RFP 50-2 (2/3 slot filler)

The full rack (1080W) MAT power supplies mount directly into a standard 19" rack.

FEATURES: RA 50 and RA 51

- Each power module installs from the front and has a latching means.
- A MIL-type connector supplies a-c power to the modules.
- Two DIN-type connectors link to the communications bus (arrangement permits daisy chaining).