

TABLE 1-2. GENERAL SPECIFICATIONS

CHARACTERISTIC	REQUIREMENT		
INPUT			
A-c Voltage (User selectable)	105-125V/210-250V a-c		
A-c Input Frequency Range	47-63 Hz		
A-c Input Current	115V a-c (nominal)	7.5 Amperes	
	230V a-c (nominal)	3.7 Amperes	
OUTPUT			
Voltage/Current Adjustment Range	0 - 100% of rating, either continuously (inherent resolution), by step or by programmed setting.		
Remote Sensing Range	0.5V per lead		
D-C Isolation Voltage	500V d-c		
Enable/Disable Output Power	Using front panel or via the Digital Bus.		
Polarity Reversal (MR and MGR models only)	Built-in polarity reversal power & sense relays.		
Protection	Oversupply	Tracks programmed voltage, crowbars output & turns off input circuit breaker.	
	Overcurrent	Tracks programmed current, crowbars output & turns off input circuit breaker.	
	Overttemperature	Monitors heatsink temperature, crowbars output & turns off input circuit breaker.	
	External Polarity Reversal	Built-in diode protects unipolar supply output.	
	Power Loss	Detects loss of a-c input power, disables output & turns off input circuit breaker.	
	Overvoltage or interruption between Power and Sensing Leads	MR and MGR Models: Output voltage and current programmed to zero and output relays opened. M and MG Models: Output voltage and current programmed to zero and/or output crowbar activated and input circuit breaker turned off	
CONTROL-INDICATORS			
Programming Resolution/Accuracy	Voltage	Programming Resolution	Accuracy
		0.024% E _{OMAX} (12 Bits)	0.024% E _{OMAX}
	Current	0.024% I _{OMAX} (12 Bits)	0.1% I _{OMAX}
Data Read-back Accuracy	Voltage	0.1% E _{OMAX}	
	Current	0.15% I _{OMAX}	
Output Display	2X16 Char. Alphanumeric LCD with LED Backlight Indicates Output Voltage, Output Current, Status and Menu. Output voltage displayed by four digits with either three, two, or one decimal(s), depending on Model; output current displayed by either three or four digits (depending on Model) with two decimals.		
Indicators (LED)	VOLTAGE MODE	Green; lit when unit is in voltage mode.	
	CURRENT MODE	Amber; lit when unit is in current mode.	
	POLARITY REVERSED	Red; lit when polarity reversed. (Operational for MR and MGR Models only.)	
	REMOTE	Green; lit when unit is operating in remote mode.	
	OUTPUT ENABLED	Green; lit when output is enabled.	

TABLE 1-2. GENERAL SPECIFICATIONS (CONTINUED)

CHARACTERISTIC	REQUIREMENT	
STATIC		
Source Effect	Voltage	0.001% E_{OMAX}
	Current	0.005% I_{OMAX}
Load Effect	Voltage	0.002% E_{OMAX}
	Current	0.024% I_{OMAX} or 4mA (whichever is greater)
Time Effect (8 Hour Drift)	Voltage	0.01% E_{OMAX}
	Current	0.02% I_{OMAX}
Temperature Coefficient (per $^{\circ}C$)	Voltage	0.01% E_{OMAX}
	Current	0.02% I_{OMAX}
Ripple & Noise (rms/p-p)	Voltage	0.001%/0.01% E_{OMAX} or 0.3mV/3mV (whichever is greater)
	Current	0.03%/0.3% I_{OMAX}
MISCELLANEOUS		
Series/Parallel Operation	Consult Kepco applications engineering.	
Leakage Current	Common mode current: 5 μA rms or 50 μA p-p @ 115V a-c	
Temperature	Storage	-20 $^{\circ}$ C to +70 $^{\circ}$ C
	Operating	0 $^{\circ}$ C to 50 $^{\circ}$ C
Cooling	Built-in fan, exhausts air to rear.	
D-C Output Terminals	Binding posts; barrier strip for remote sensing and monitor connections.	
Local voltage/current control	Output can be controlled by entering the desired value via front panel keypad or continuously (inherent resolution) adjusted via front panel control knobs.	
Remote Error Sensing	Provision for 4-terminal (Kelvin) connection to load; static drop of up to 0.5V/lead may be compensated.	
Voltage Recovery for a Step Load Current	100 μ sec typical, 150 μ sec max to recover within 10mV for a 10% to 100% step in rated load current.	
PHYSICAL		
Dimensions	See Figure 1-2.	
Weight (lbs.)	Model M: 35; Models MR, MG: 36; Model MGR:37	
Source Connections	Detachable IEC type 3-wire power entry.	
Load Connections	Binding Post	
Remote Control Signal Connections	IEEE 1118	Two 9-Pin D-type connectors (female) in parallel for input/output daisy chain.
	RS232-C	9-Pin D-type connector (male)
	IEEE 488	24-Pin connector (female)
Sense, Monitor Connections	Barrier strip	