

## MEDICAL LINEAR SERIES INSTALLATION INSTRUCTIONS

### **RATINGS:**

Input: 100/120/215/230-240 V ac, 50/60 Hz Derate output current 10 % for operation at 50 Hz. Refer to chassis marking for input current ratings.

Output: See table on Page 2.

- Notes: 1. Maximum ambient temperature for continuous output specified in the table is 50 °C.
  - 2. Maximum Relative Humidity 96 %, no condensation.
    - 3. Storage: -40 to +85 °C. Units should be allowed to warm-up under non-condensing conditions before application of power.

**SAFETY DECLARATION:** Condor DC Power Supplies, Inc. declares under our sole responsibility, that all models listed above are in conformity with the applicable requirements of EN 60950 following the provisions of the Low Voltage Directive 73/23/EEC. All models are Certified to be in compliance with the applicable requirements of UL 60601-1, CSA 22.2 No. 601.1, and EN 60601-1 for Pollution Degree 2 environment and Class I TN-S power systems.

#### CLASSIFICATION: (5.1) Protection against electric shock = Class I

- (In accordance with sub- (5.2) Degree of protection against electric shock = Signal output or intermediate
- clause 5 of EN 60601-1) (5.3) Protection against harmful ingress of water = Ordinary (no protection)
  - (5.5) Have not been evaluated for use in the presence of a flammable anaesthetic mixture with air, oxygen, or nitrous oxide. This evaluation is to be made on the end equipment.
  - (5.6) Mode of operation = Continuous

**GROUNDING:** Protection Class I requires that the chassis be bonded to Protective Earth in the end application.

**OUTPUTS:** The output(s) are intended for Signal Input/Signal Output and Intermediate Circuits only. The output(s) are not acceptable for patient connection without additional isolation. All DC outputs are SELV.

**ISOLATION:** The isolation voltage from primary to secondary is 4000 V ac. The creepage distance between primary and secondary circuits is 12 mm minimum. The required creepage and clearance distances from primary circuits to ground and secondary circuits must be maintained after installation to preserve the intended safety.

**TEMPERATURES:** The maximum operating temperatures of certain safety components, as defined in the applicable safety standards, must not be exceeded after installation to preserve the intended safety. The output power, ambient air temperature and the availability, amount, direction and/or restriction of airflow influence the temperatures of these components.

**OVERCURRENT PROTECTION:** All models require external fusing to maintain the intended safety. Refer to marking on chassis for maximum fuse ratings. EN 60601-1 requires that both supply leads (phase and neutral) be protected against overcurrent.

**WARNING! RISK OF FIRE!** A blown secondary fuse may be an indication of catastrophic failure of circuit component(s). Repair must be performed by Condor authorized personnel. Replace secondary fuses with Littelfuse 2AG slo-blow type. Fuse values are marked on unit and are listed on page 2.

Condor DC Power Supplies Inc. will not be liable for the safety, reliability or performance of these power supplies if a) any changes, modifications or repairs are carried out by other than authorized agents of Condor DC Power Supplies Inc., or b) the installation of the supply is not in accordance with these installation instructions and the applicable UL, CSA, EN/IEC safety standards.





## **MEDICAL LINEAR SERIES**

# AC INPUT HOOKUP INSTRUCTIONS



MODEL	Maximum Output Ratings 50 °C Ambient	Secondary Fuse Rating	CSA Level
	SINGLE OUTPUT MODEL	S	
MB12-1.7-A	12 V 1.7 A	F1=3.5 A/250 V	3
MB15-1.5-A	15 V 1.5 A	F1=3 A/250 V	3
MB24-1.2-A	24 V 1.2 A	F1=2.25 A/250 V	3
MB28-1-A	28 V 1 A	F1=2 A/250 V	3
MB5-3/OVP-A	5 V 3 A	F1,F3=4 A/125 V	3
MC12-3.4-A	12 V 3.4 A	F1,F3=4 A/125 V	3
MC15-3-A	15 V 3 A	F1,F3=3.5 A/250 V	3
MC24-2.4-A	24 V 2.4 A	F1,F2=2.25 A/250 V	3
MC28-2-A	28 V 2 A	F1=4 A/125 V	3
MC5-6/OVP-A	5 V 6 A	F1,F3=7 A/125 V	3
MD12-6.8-A	12 V 6.8 A	F1,F2,F5,F6=5 A/125 V	3
MD15-6-A	15 V 6 A	F1,F2,F5,F6=4 A/125 V	3
MD24-4.8-A	24 V 4.8 A	F1,F2=5 A/125 V	3
MD28-4-A	28 V 4 A	F1,F2=4 A/125 V	3
MD5-12/OVP-A	5 V 12 A	F1,F2,F5,F6=7 A/125 V	3
	DUAL OUTPUT MODELS	3	
MODEL	Maximum Output Ratings 50 °C Ambient		CSA Level
MAA15-0.8-A	+12 V 1 A or +15 V 0 8 A: or -5 V 0 4 A	F4.F6=2.5 A/250 V	3
MAA512-A	5 V 2 A: 9-15 V 0.5 A	F1.F3=3 A/250 V: F4=1.5 A/250 V	3
MAA524-A	5 V 2 A: 18-24 V 0.3 A	F1.F3=3 A/250 V: F4=1 A/250 V	3
MBB15-1.5-A	+12 V 17 A or +15 V 15 A: or -5 V 07 A	F4.F6=3.5 A/250 V	3
MBB512-A	5 V 3 A: 9-15 V 1 25 A	$F_{1} = F_{2} = 4 A/125 V F_{2} F_{4} F_{6} = 2 A/250 V$	3
MBB524-A	5 V 3 A: 18-24 V 0.8 A	F1.F3=4A/125 V: F4.F6=1.5 A/250 V	3
MCC15-3-A	+12 V 3.4 A or +15 V 3 A: or -5 V 1.4 A	F4.F6=7 A/125 V	3
MCC512-A	5 V 4 A: 9-15 V 2.5 A	F1.F3=7 A/125 V: F4.F6=3.5 A/250 V	3
MCC524-A	5 V 4 A (6 A with 14 cfm airflow); 18-24 V 2 A	F1,F3=4 A/125 V; F4,F6=3 A/250 V	3
	TRIPLE OUTPUT MODEL	S	•
MTAA-16W-A	5 V 2 A: +9 to 15 V 0.4 A: or -5 V 0.4 A	F1.F3=3 A/250 V: F4.F6=1 A/250 V	3
MBAA40W-A	5 V 3 A: +12 V 1 A or +15 V 0.8 A: or -5 V 0 4 A	F1.F3=4 A/125 V: F4.F6=2.5 A/250 V	3
MCAA60W-A	$5 V 6 A$ ; $\pm 12 V 1 A or \pm 15 V 0.8 A$ ; or $-5 V 0.4 A$	F1,F3=7 A/125 V; F4,F6=2 A/250 V	3
MCBB75W-A	5 V 6 A; ±12 V 1.7 A or ±15 V 1.5 A; or -5 V 0.7 A	F1,F3=7 A/125 V; F4,F6=3.5 A/250 V	3

NOTE: All fuses are Littlefuse 2AG Slo-Blo type.

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