

# MICRO-AMP<sup>®</sup> System

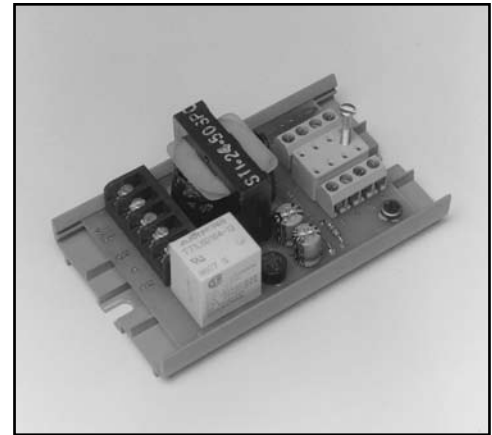
## MPS-15 and MPS-15-230 Power Supplies



**MPS-15 Series power supplies** are designed specifically to supply power for the Banner MICRO-AMP series amplifiers and logic modules. They are constructed on small PC boards that are track-mountable for compatibility with other track-mounted MICRO-AMP components. The MPS-15 includes a socket for a MICRO-AMP amplifier or logic module. The combination of an MPS-15 series power supply and a MICRO-AMP module makes a complete and compact sensing and/or control system.

A built-in 5-amp rated SPDT output relay is supplied for easy interfacing to an external load or circuit. Its action is controlled by the outputs of a MICRO-AMP module which is plugged into the on-board module socket. A switch on the PC board selects which module output (normally open or normally closed) will activate the relay.

Two models are available. Model MPS-15 is for 120V ac operation. Model MPS-15-230 is for 220/240V ac power. Up to three MICRO-AMP modules may be powered by one MPS-15 power supply. A 4-inch (100mm) long mounting track is supplied with each MPS-15. Optional 6-inch (150mm) track model TR100-6 neatly accommodates the MPS-15 Series PC board plus the PC boards of two additional RS8 sockets to form a complete three-module MICRO-AMP sensing/logic system.



### Specifications

**SUPPLY VOLTAGE:** model MPS-15 is for 105 to 130V ac (50/60Hz); model MPS-15-230 is for 210 to 250V ac (50/60Hz).

**OUTPUT CONFIGURATION:** SPDT electromechanical relay. Contact rating: 250V ac max., 30V dc max., 5 amps max. (resistive load). Install MOV (metal oxide varistor) transient suppressor of appropriate voltage across contacts used to switch inductive loads.  
 \*Contact response: 20 milliseconds open and close.  
 Mechanical life: 10,000,000 operations.

\*NOTE: dc loads may be easily connected directly to the output(s) of the MICRO-AMP module used with the chassis in order to bypass the

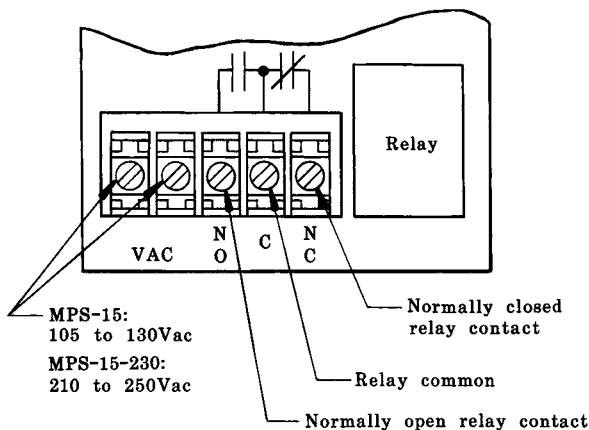
relay and therefore take advantage of the 1 millisecond response time of the module (see MICRO-AMP module specifications and hookup).

**COMPATIBLE MODULES:** models MA3, MA3A, MA3-4, MA4-2, MA4G, MA4L, MA5. *Do not plug modules with current-sourcing PNP outputs (MA3P, MA3-4P, etc.) into the socket on the MPS-15.*

**POWER FOR EXTERNAL DEVICES:** 40 milliamps is available to power external 10 to 30V dc devices (e.g.- two additional MICRO-AMP modules or two MINI-BEAM sensors, etc.).

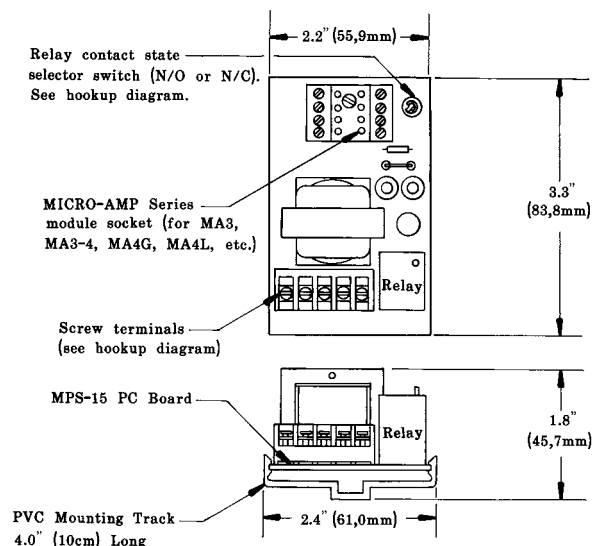
**OPERATING TEMPERATURE:** -40 to 70 degrees C (-40 to 158 degrees F).

### Hookup Diagram, MPS-15 & MPS-15-230



NOTE: for hookup of sensors or inputs to the module socket, see the hookup diagram for the module used.

### Dimension Drawing, MPS-15 & MPS-15-230



# MICRO-AMP® Accessories

## Sockets

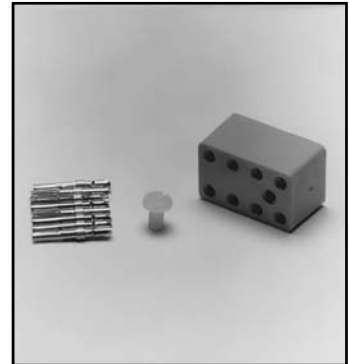
### RS8

The RS8 socket is the most frequently used means of mounting and wiring a MICRO-AMP module. It consists of a socket with two four-terminal connection strips, all wired together onto a PC board. The PC board assembly slides into a 1 inch (25mm) long PVC track which is used to mount the entire assembly. A hold-down screw keys the correct polarity of the module.

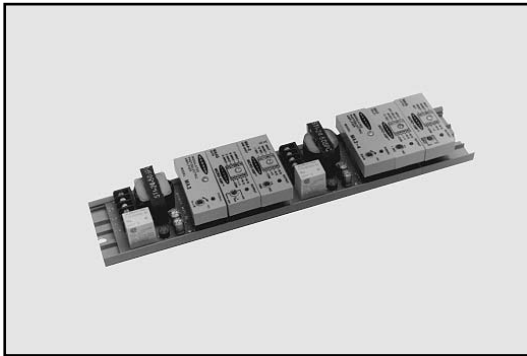


### RS8K

The RS8K is a kit of parts which comprise the socket portion of the RS8 assembly. It is used to provide a socket for MICRO-AMP modules that are installed onto printed circuit boards. The RS8K consists of a molded socket block and 8 individual socket pins. A nylon screw is included to affix the socket block to the PC board. The drill size for the pins is #50 (.070"; 1,8mm). Drill pattern dimensions are included with the RS8K.



## Mounting Track

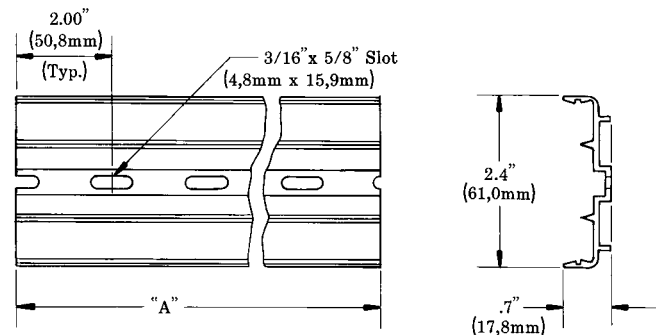


- TR100-1** 1 inch (25mm) long (supplied with RS8 socket)
- TR100-4** 4 inch (100mm) long (supplied with MPS-15 series power supply)
- TR100-6** 6 inch (150mm) long
- TR100-12** 12 inch (300mm) long

PVC mounting track for MICRO-AMP components is available in 6 and 12 inch lengths for systems which use multiple components. For example, a 6-inch length will accommodate one MPS-15 power supply plus two additional RS8 sockets with modules.

Longer lengths of mounting track may be supplied on a quote basis.

### Dimensions, TR-100 Mounting Track



Track Model	"A" Dimension	Minimum number of slots
TR100-1	1" (25mm)	1
TR100-4	4" (100mm)	2
TR100-6	6" (150mm)	3
TR100-12	12" (300mm)	8



**WARNING** MICRO-AMP® Systems do NOT include the self-checking redundant circuitry necessary to allow their use in personnel safety applications. A sensor or module failure or malfunction can result in *either* an energized or a de-energized sensor output condition.

Never use this product as a sensing device for personnel protection. Its use as a safety device may create an unsafe condition which could lead to serious injury or death.

Only MACHINE-GUARD and PERIMETER-GUARD Systems, and other systems so designated, are designed to meet OSHA and ANSI machine safety standards for point-of-operation guarding devices. No other Banner sensors or controls are designed to meet these standards, and they must NOT be used as sensing devices for personnel protection.

**WARRANTY:** Banner Engineering Corporation warrants its products to be free from defects for one year. Banner Engineering Corporation will repair or replace, free of charge, any product of its manufacture found to be defective at the time it is returned to the factory during the warranty period. This warranty does not cover damage or liability for the improper application of Banner products. This warranty is in lieu of any other warranty either expressed or implied.