

U.S. TSUBAKI SHOCK RELAY

TSB151A, TSB152A

Overload Protection Plus Pre-Alarm Setting

ACTUAL LOAD METER

Actual current of the motor is indicated in percentages, which makes it easy to set "LOAD CURRENT," regardless of the value of the actual current load.

LOAD CURRENT

This presets the load current at the optimum setting in the range from 30% to 130% of the motor's current. When the actual load current exceeds the preset current for the preset SHOCK TIME, the SHOCK RELAY trips to break the motor circuit.

ALARM SET POINT

This presets the level at which an Alarm will sound. The Alarm can provide prior warning of an impending problem that may be correctable prior to the need to shut down the equipment.

START TIME

When starting a motor, the starting current value is greater than the running current. This starting current value continues until the motor reaches normal speed. During this starting period, the time of which mainly depends on the type of load, the function of detecting the overload current is disabled. Adjustable range is from 0.2 to 20 seconds.

POWER INDICATOR

Indicates that the power supply is on.

TRIP INDICATOR

Lamp comes on when SHOCK RELAY trips.

TEST BUTTON

This switch is used to verify SHOCK RELAY operation. The TSB151A and TSB152A have a test switch for both the alarm set point and the overload set point.

RESET BUTTON (manual)

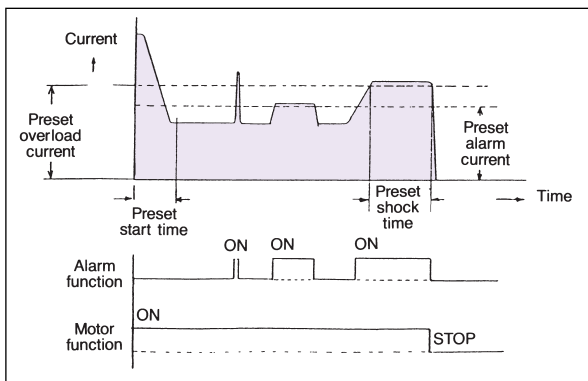
Reset can be done quickly whenever a restart is desired.

SHOCK TIME

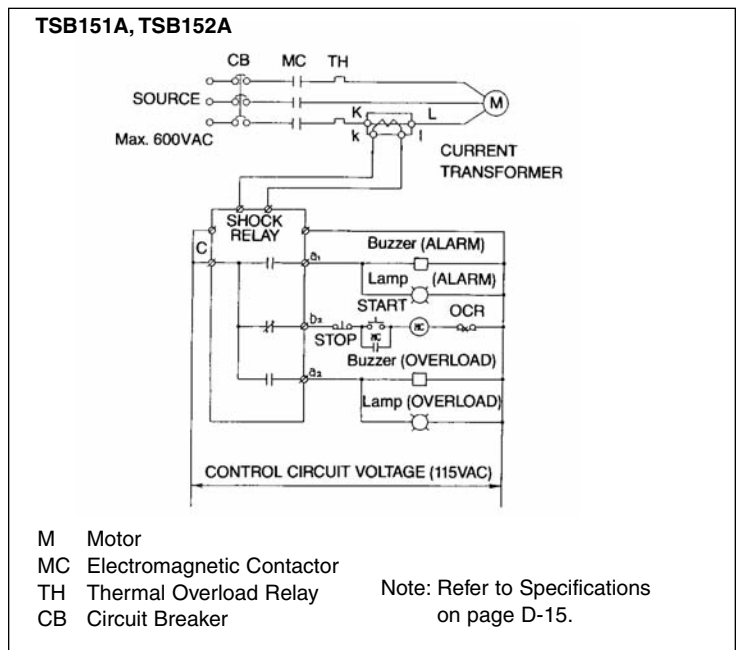
This presets the overload period. Range is variable from 0.2 to 3 seconds. Every momentary load over the preset current with a shorter period than the preset period is ignored. When the overload equals the preset period, the SHOCK RELAY will trip immediately to break the power supply to the motor.



DIAGRAM OF OPERATION



TYPICAL CONNECTING DIAGRAM



Dimensions and current transformer selection are the same as for the TSB151 and TSB152. Refer to page D-8.