TSB151M, TSB152M

Overload Protection Plus Impact Detection

ACTUAL LOAD METER

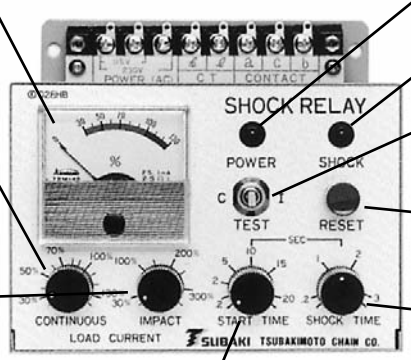
Actual current of the motor is indicated in percentages, which makes it easy to set "LOAD CURRENT," regardless of the value of the actual current load.

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.

IMPACT SET POINT

This presets the point at which an Impact Shock Load is deemed dangerous. When the actual load current exceeds this level for more than 5/100 of a second, the SHOCK RELAY trips to break the motor circuit.



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.

RESET BUTTON (manual)

Reset can be done quickly whenever a cycle 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.

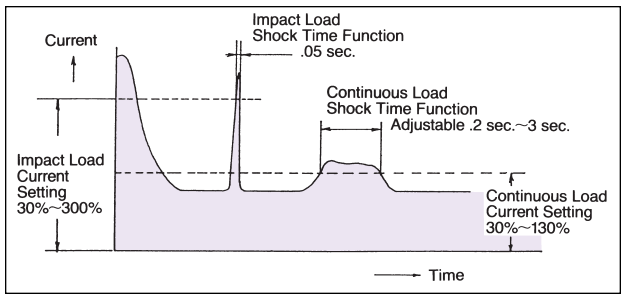
START TIME

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.

SPECIFICATIONS

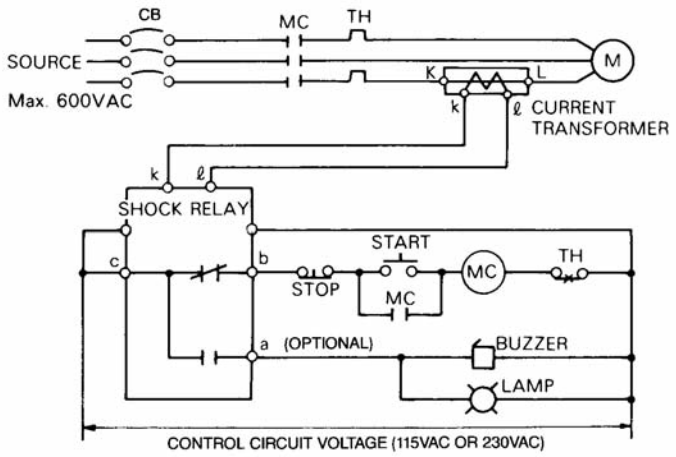
Load Current Setting	**For Impact Load**	**30% ~ 300%**
	For Continuous Load	**30% ~ 130%**
Shock Time Setting	**For Impact Load**	**.05 sec. (fixed)**
	For Continuous Load	**.2 sec. ~ 3 sec.**

DIAGRAM OF OPERATION



TYPICAL CONNECTING DIAGRAM

TSB151M, TSB152M



M Motor
MC Electromagnetic Contactor
TH Thermal Overload Relay
CB Circuit Breaker

Note: Refer to Specifications on page D-16.

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