

Failure to follow proper lockout/tagout procedures may present the danger of electrical shock.
TO AVOID INJURY: Disconnect power and lockout/tagout disconnecting means before removing cover or servicing this equipment.

POWER DISTRIBUTION

If multiple hoists are powered through a distro, the following items must be considered:

- When tapping into house power make certain the house voltage is the same as the motors.
- Make certain the house tail used to tie into the power distro is of sufficient size (amperage) to handle the total number of hoists running off the distro.
- Make certain the cable running from the distro to the hoist is sufficient size to handle the current draw, refer to Current Draw Chart. Consideration should be given to the maximum run length and the number of connectors used.

WARNING
Failure to provide a proper power supply system for the hoist may cause hoist damage and offers the potential for a fire.
TO AVOID INJURY: Provide the hoist with a 20 amp, minimum, overcurrent protected power supply system per applicable directives, national codes and local codes.

- After all connections are made, check each hoist for proper phasing. To check for phasing, depress the lowering control button first. If the phasing is correct, the motor should run in the down direction unless the lower limit is tripped. If the lower limit has activated, the hoist will not run when the lowering control button is depressed if the hoist is phased properly. If the hoist runs in the up direction when depressing the down button, the distro is misphased (3 phase systems only) and must be corrected. To correct misphasing switch the A/B switch (if equipped) or interchange any two of the hot leads at the house panel and recheck.

POWER DISTRIBUTION Cont.

WARNING

Allowing the hook block to run into the hoist when raising a load or allowing the chain to become taut between the loose end screw and the frame when lowering a load may break the chain and allow the load to drop.

TO AVOID INJURY:

Do not allow the hook block to contact the hoist or the loose end chain to become taut.

On single phase systems if the hoists are running backward, check the controller for proper connections.

- **CM recommends all cable connectors be inspected on a regular basis for the following items:**
 - **Damaged housings**
 - **Bent blades on male plugs**
 - **Cable properly clamped in strain relief**
 - **Loose connections**
 - **Corrosion at connections both at the screws and at the female contact area.**

Failure to provide minimum voltage at the hoist will cause brake chatter and significantly reduce the electrical life of hoist components.

MINIMUM VOLTAGE CHART

- Inrush/Spike/Peak current draw is approximately 3.5 x's the full load current listed on the hoist nameplate.

NOMINAL CURRENT	MINIMUM STARTING VOLTAGE
115-1-60	98
230-1-60	196
230-3-60	187
460-3-60	396
220-3-50	198
380-3-50	365
415-3-50	399

- Low voltage can also be caused by using an undersize extension cord to supply power to the hoist. The following chart should be used to determine the size wires in the extension cord in order to minimize the voltage drop between the power source and the hoist.

LENGTH OF EXTENSION CORD	SINGLE PHASE HOISTS	THREE PHASE HOISTS
	MINIMUM WIRE SIZE	MINIMUM WIRE SIZE
UP TO 50 FEET	#14 AWG	#16 AWG
80 FEET	#12 AWG	#16 AWG
120 FEET	#10 AWG	#14 AWG