ATTENTION

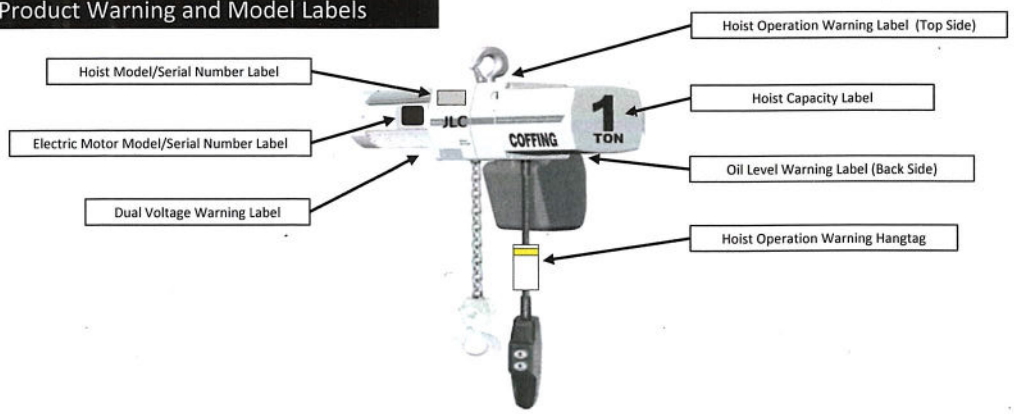
JLC Quick Start

1 Product Specifications

• SPECIFICATIONS •

Capacity (lb.)	Capacity (kg) †	Capacity (Ton)	Model Number	No. of Chains	Motor HP	Lift Speed (fpm) Single	Lift Speed (fpm) Two
250	125	1/8	JLC-0232	1	1/4	32	10.7
500	250	1/4	JLC-0516	1	1/2	16	5.3
500	250	1/4	JLC-0532	1	1/2	32	10.7
1000	500	1/2	JLC-1016	1	1/2	16	5.3
1000	500	1/2	JLC-1032	1	1	32	10.7
2000	1000	1	JLC-2016	1	1	16	5.3
4000	2000	2	JLC-4008	2	1	8	2.7

2 Product Warning and Model Labels



3 Safety Precautions

⚠ WARNING

Improper operation of a hoist can create a potentially hazardous situation which, if not avoided, could result in death or serious injury. To avoid such a potentially hazardous situation, THE OPERATOR SHALL:

1. **NOT** operate a damaged, malfunctioning or unusually performing hoist.
2. **NOT** operate the hoist until you have thoroughly read and understood the manufacturer's Operating and Maintenance Instructions or Manuals.
3. **NOT** operate a hoist which has been modified without the manufacturer's approval or without certification that it is in conformity with ANSI/ASME B30 volumes.
4. **NOT** lift more than rated load for the hoist.
5. **NOT** use hoist with twisted, kinked, damaged, or worn load chain.
6. **NOT** use the hoist to lift, support, or transport people.
7. **NOT** lift loads over people.
8. **NOT** operate a hoist unless all persons are and remain clear of the supported load.
9. **NOT** operate unless load is centered under hoist.
10. **NOT** attempt to lengthen the load chain or repair damaged load chain.
11. Protect the hoist's load chain from weld splatter or other damaging contaminants.
12. **NOT** operate hoist when it is restricted from forming a straight line from hook to hook in the direction of loading.
13. **NOT** use load chain as a sling, or wrap chain around load.
14. **NOT** apply the load to the tip of the hook or to the hook latch.
15. **NOT** apply load unless load chain is properly seated in the chain sprocket(s).
16. **NOT** apply load if bearing prevents equal loading on all load supporting chains.
17. **NOT** operate beyond the limits of the load chain travel.
18. **NOT** leave load supported by the hoist unattended unless specific precautions have been taken.
19. **NOT** allow the load chain or hook to be used as an electrical or welding ground.
20. **NOT** allow the load chain or hook to be touched by a live welding electrode.
21. **NOT** remove or obscure the warnings on the hoist.
22. **NOT** operate a hoist on which the safety placards or decals are missing or illegible.
23. **NOT** operate a hoist unless it has been securely attached to a suitable support.
24. **NOT** operate a hoist unless load slings or other approved single attachments are properly sized and seated in the hook saddle.
25. Take up slack carefully - make sure load is balanced and load holding action is secure before continuing.
26. Shut down a hoist that malfunctions or performs unusually and report such malfunction.
27. Make sure hoist limit switches function properly.
28. Warn personnel of an approaching load.

4 Electrical Requirements

Motor Amperage of 1-Speed Hoist Models

Hoist Horsepower	Full Load Amps 1-Phase 115/230V	208V	3-Phase 230/460V	380V	575V
1/4 HP	4.3/2.2	1.3	1.2/.6	.73	.35
1/2 HP	7.6/3.8	2.3	2/1	1.2	.76
1 HP	14/7*	3.6	3.2/1.6	1.9	1.2

*. The 1HP, 115/230V models must have a dedicated power circuit rated for at least 20A, 125V when they are wired for 115V.

Motor Amperage of 2-Speed Hoist Models

Hoist Horsepower (fast/slow)	Full Load Amps (fast/slow) 3-Phase Only 208V	230V	380V	460V	575V
.25/.083	1.2/1.3	1/1.1	.61/.67	.5/.55	.4/.44
.5/.17	1.9/2.4	1.7/2.1	1.1/1.3	.88/1.1	.7/.85
1/.33	3.6/4.3	3.2/3.8	1.9/2.3	1.6/1.9	1.3/1.5

NOTE: The above data is the nominal motor current at full load. At full load, it is not unusual for the hoist to draw in excess of the values listed when lifting. It is critical to ensure that the voltage at the reversing contactor does not drop below 10% of the nominal voltage while lifting a load. Low voltage will result in higher amp draw, damage to the hoist, and potential fire hazards. Coffing Hoists is not responsible for any damages caused by an inadequate power source.

POWER CORD PRECAUTIONS WITH 1-PHASE HOISTS

Electric hoists require a sufficient power supply. The following are recommendations for the conductor gage size depending on the length, horsepower, and voltage.

HP	Voltage (1-Phase)	Maximum Length of Power Cord In Feet 14 AWG	12 AWG	10 AWG	8 AWG
1/4	115V	75	120	190	300
	230V	350	560	900	
1/2	115V	40	60	100	150
	230V	200	330	520	810
1	115V	0	30	50	75
	230V	120	190	310	490

5 Installation Preparation

Before installing the hoist, check the following:

a. Make sure all supporting structures and attaching devices are strong enough to hold your intended loads. If in doubt, consult a qualified structural engineer.

b. Provide proper branch circuit protection for the hoist as recommended in the National Electrical Code.

c. The power supply should be plus or minus 10% of the voltage specified on the motor nameplate. It is critical to use adequate sized power cables, especially with 1-phase hoists. Be sure dual voltage hoists are connected or wired to correspond with your power supply

d. Installation area must provide operating conditions for the operator including sufficient room for the operator and other personnel to stand clear of the load at all times.

e. For installations where the slack chain hanging from the unit may be objectionable or hazardous, the use of a chain container is recommended

JLCET models come with a Coffing ET-A push-type trolley and an adaptable suspension lug. ET-A trolleys are made to run on American Standard I-Beams and Wide Flange Beams with flange widths up to 8". For assembly refer to the instructions provided with the trolley. The hoist lug must be centered with the sideplates (±1 washer). Due to the lug thickness, the washer placement between each sideplate and the lug may differ by 1 less washer than the generic instructions specify.

For installations where the trolley can not be slid onto the end of a beam, leave the load pin nuts loose enough to get the wheels around the beam flange. Check the flange width setting before tightening the nuts to **125 ft-lbs**. Be sure to have end stops on your beam.

6 Installation Confirmation

Before operating the hoist, be sure to observe the following:

a. ALWAYS DISCONNECT HOIST FROM POWER SUPPLY before removing electrical cover or when making any electrical connection in the hoist or pushbutton station.

b. The ground wire (green colored) of the power cable should always be connected to a suitable ground by means of a screw or clamp. An alligator clip does not make a safe ground connection.

c. When installing a three-phase hoist, make only temporary connections at the power source. Push the "UP" button and observe the direction of the load block. If it raises, the phasing is correct and permanent connections may be made at the power source. If the load block lowers when the "UP" button is pushed, release the button immediately since the limit switches will not operate to protect the hoist from over-travel. Reverse any two wires (except the green ground wire) at the power source to correct the load hook direction (phasing). Do not change connections in the hoist or pushbutton assembly.

d. Make sure load chain is not twisted as it travels into the hoist.

e. Operate hoist in a hanging position only. Hoist should be permitted to align itself for a straight line pull. Do not attempt to pull around corners.

f. Read ASME-B30.16 Safety Code for Hoists.

Lubricate the chain

Check the function of the limit switches. Before placing hoist in operation, check limit switch settings. Operate pushbutton until near stop point and inch into stop limit, both top and bottom.

7 Operation

This hoist is designed for safe operation within the limits of its rated capacity. It is controlled by the "UP" and "DOWN" buttons of the pushbutton station. Two-speed models utilize 2-step buttons, the first step for operating the slow speed and the second for the fast speed. Although the Coffing JLC is built with many features to ensure safety, it is a requirement that a hoist operator understands safe lifting practices. The following points must be observed.

1. Do not overload the hoist.
2. Do not make extreme side pulls with the hoist.
3. Operate the hoist only in a hanging position with adequate support.
4. Do not "sling" the load hook and chain around the load. Use an approved sling.
5. **Be sure there are no twists in the load chain** as it travels into the hoist housing. This condition should be constantly checked on double chain hoists because it is possible for the load block to be "capsized" or turned over one or more times.
6. Before raising a load, always check to see that it is held securely in the hook or sling chains, etc. Raise the load only until the load chain is taut and then double check the rigging before continuing to raise the load.
7. Do not stand beneath a load! Do not move a load in such a manner as to endanger personnel.
8. Don't lower into areas where visibility is obscured unless someone else is guiding the operation.
9. Use common sense at all times when operating a hoist.
10. Do not operate if direction of hook travel is not the same as indicated on button being pushed.
11. Do not operate unless hook travel limit devices function. Test without load each shift.
12. Do not operate when hoist is not centered over load.
13. Do not operate if chain is not seated properly in sprockets or sheave grooves.
14. Do not operate damaged or malfunctioning hoist.

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