

CROWN POWER

CD-K1 ELECTRIC WINCH

TECHNICAL DOCUMENTATION, OPERATING INSTRUCTIONS & SAFETY MANUAL

QUALITY SYSTEM
ISO 9001:2015
CERTIFIED

RATED LOAD CAPACITY

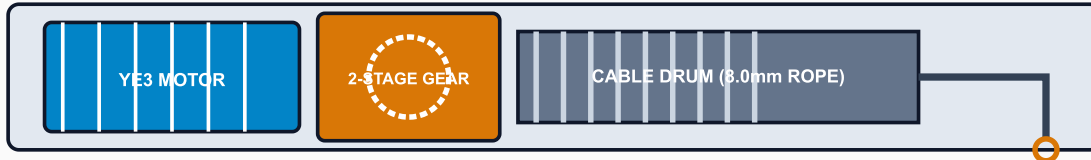
750 / 1500 kg

MAXIMUM LIFTING HEIGHT

70 Meters

WIRE ROPE DIAMETER

8.0 mm



KEY PRODUCT FEATURES

CERTIFIED DATE: APRIL 2026

High-Strength Aluminum Frame

Constructed with high-strength anodized aluminum alloy casing for lightweight mobility, superior corrosion resistance, and rapid thermal heat dissipation.

Two-Stage Gear System

Compact horizontal gear layout lowers machine height and lowers center of gravity. Sealed initial gear stage utilizes oil lubrication for reduced wear, silent operation, and efficient power transmission.

High-Efficiency YE3 Motor

Equipped with premium energy-saving YE3 motor core, providing smooth continuous power output with >10% reduced energy consumption compared to standard models.

Compact & Ergonomic Design

Optimized overall structure for effortless installation, multi-angle mounting, and flexible industrial lifting applications.

SAFE OPERATING RULES & GUIDELINES

CRITICAL SAFETY WARNING: Always read technical instructions thoroughly before installation. Strictly adhere to standard safety codes to prevent equipment damage or personal injury.

1. Ensure mounting superstructure is structurally sound and verified to carry maximum load limits.
2. Never exceed rated load limits. Do not lift buried, anchored, or stuck objects. Use double-rope pulley configuration for heavy lifting to reduce rope stress by 50%.
3. Rated weight applies to standard wire lengths (30m for 380V; 12m for 220V). Reduce load proportionally for extended wire rope lengths.
4. Do not drag or pull loads obliquely. Oblique pulling generates extreme strain on rope drum and frame.
5. Maintain a clean work area. Keep unauthorized personnel clear of the operating field and tensioned wire rope. Never stand beneath suspended loads.
6. Rope replacement must match original factory specifications in size and material. Do not reverse winding direction.
7. Always wear heavy-duty leather safety gloves when handling wire rope to prevent puncture injuries.
8. Never guide wire rope manually onto the drum during spooling or retrieval operations.

SAFE OPERATING RULES (CONTINUED)

- 9. Do not loop the wire rope around objects or hook onto itself. Use approved slings/shackles.
- 10. The limit switch is an emergency cut-off safety device do not use it as a routine travel control switch.
- 11. Strictly prohibited to transport or lift personnel under any circumstances.
- 12. Ensure at least 3 full turns of wire rope remain on the drum at all times during maximum extension.

TROUBLESHOOTING & MAINTENANCE GUIDE

FAULT SYMPTOM	PROBABLE CAUSE	CORRECTIVE ACTION
Motor fails to start under load	1. Power supply line disconnected 2. Low line voltage 3. Motor damage or shaft stuck	1. Inspect power source & connections 2. Verify supply voltage 3. Repair or replace motor unit
Brake slipping / Excessive drift	1. Friction plate worn or oily 2. Pressure spring fatigue	1. Clean oil or replace brake pads 2. Replace pressure spring assembly
Abnormal noise in drum/gearbox	1. Gear/bearing worn or damaged 2. Lack of gear oil lubricant	1. Inspect and replace damaged parts 2. Replenish gear oil lubricant
Housing energized / Electrical shock	1. Stator winding shorted to frame 2. Grounding wire disconnected	1. Inspect motor winding insulation 2. Reconnect and verify ground line
Excessive motor temperature rise	1. Overload operation 2. Dust/oil on cooling fins	1. Reduce load to rated capacity 2. Clean motor heat-dissipation fins

TECHNICAL SPECIFICATIONS

MODEL	VOLTAGE	POWER	ROPE MODE	CAPACITY	SPEED	ROPE DIA.	N.W.
CD-K1 300/600	220V/380V	1.7-3.0 kW	Single / Double	300/600 kg	24/12 m/min	5.0 mm	32-34 kg
CD-K1 350/700	220V/380V	2.2-3.0 kW	Single / Double	350/700 kg	24/12 m/min	5.0 mm	34-36 kg
CD-K1 500/1000	220V/380V	3.0-4.0 kW	Single / Double	500/1000 kg	14/7 m/min	6.0 mm	42 kg
CD-K1 750/1500	220V/380V	4.0 kW	Single / Double	750/1500 kg	14/7 m/min	8.0 mm	48 kg

FACTORY INSPECTION & TEST CERTIFICATE

QUALITY CONTROL CERTIFICATION

This document certifies that the CD-K1 Electric Winch unit has been manufactured and tested under ISO 9001:2015 quality control standards and passed all safety benchmarks.

PASSED & CERTIFIED

REF: NIUG76 LMI