

Product Specification Sheet



MSJ

ULTRA HEAVY-DUTY JACKSHAFT OPERATOR

STANDARD FEATURES

- **Motor:**
60hz high starting torque, continuous-duty, single phase capacitor start or 3 phase motor, open drip proof, protected against overload. Also available with 50hz 220V 1 phase and 380V 3 phase motor, consult inside sales.
- **Reduction:**
First step in reduction Bx section cogged V-belt drive, additional steps by chain and sprockets. Input shaft is 3/4", supported by cast iron flanged pillow block bearings. Intermediary and output shafts are 1" with 1/4" keyway, supported by cast iron flanged pillow block bearings. Output shaft speed: 46 rpm.
- **Clutch:**
Friction type, positioned on input shaft, easily adjustable from outside.
- **Drive:**
#50 roller chain with a 50B12 sprocket for the operator drive shaft. Door sprocket selected for a door travel of 6"/s to 12"/s.
- **Brake:**
Electrically activated drum-band type solenoid brake.
- **Manual Operation:**
Emergency manual chain hoist. Floor level chain hoist engaging device with electrical cut-out. An electrical interlock automatically disconnects power to the motor operator when chain hoist is engaged. Hoist on right is standard.
- **Electrical Enclosure:**
All electrical components are in a Nema 1 enclosure. Hinged electrical enclosure cover with stable opened position.
- **Limit System:**
Rotary-type oil-impregnated steel cams, commercial grade switches. Limit shaft is supported by self-lubricating bronze bushings for increased precision. Remains in time when there is a manual operation or after the motor has been removed.
- **Accu-cam® Feature:**
Precise and quick one-handed adjustment of the limits.
- **Corrosion Protection:**
Frame and control enclosure protected by baked on, long lasting enamel finish. Polymer control box cover. All shafts protected by yellow chromate coating.
- **Mounting:**
Wall, hood, or shelf mounted on the right or on the left of the door. For indoor use only.
- **Shipping Weight:**
Approx. 98 Lbs - 45 kg.
- **Warranty**
2 Years.

Cast Iron Pillow Block Bearings

Flanged pillow block bearings on the input, intermediary and output shafts

Solenoid Brake

Drum-band type solenoid brake

Accu-cam® Limit Feature

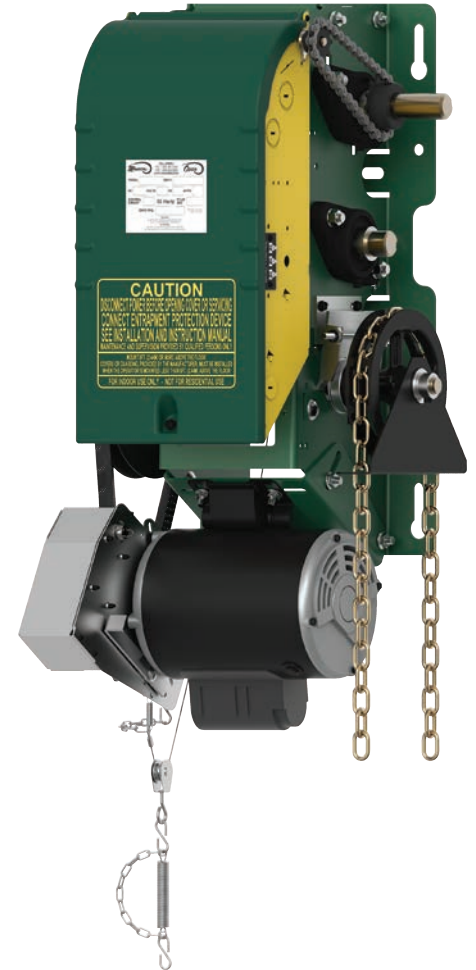
For precise and quick one-hand limit setting adjustments

Emergency Manual Chain Hoist

With floor level chain hoist engaging device and electrical cut-out

Hinged Cover with Stable Opened Position

For easy access to components and wiring



The MSJ is an ultra high-end heavy-duty V-belt drive industrial operator designed for use on large standard, high and vertical lift sectional doors or rolling doors and grilles.

The operator can be wall, hood, or shelf mounted on either side of the door. It incorporates an emergency chain hoist for manual operation, with a floor level engaging device.

The operator is available with the Electronic Control Board (BOARD 070) with or without the option of electrical control for MONITORED external entrapment protection devices (ANSI/CAN/UL325 compliant).



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CONTROL OPTIONS

• ECB Units (BOARD 070):

24Vdc relaying circuit with a 40VA class II transformer, non-volatile memory. Features available: On-board radio receiver, 1.5s delay on reverse, programmable maximum run timer, mid-stop, timer to close (suspension possible from floor level), independent input loop terminal, advance close system, test buttons, reverse wiring detection and door lock sensor. Operating mode selectable on site: C2, B2, D1, E2, T or TS.

• "M" Version:

Provides the monitoring of Primary External Entrapment Protection Devices. Includes monitored Nema 4X photo cells (PHOTO 070 standard). In this mode, Ancillary Entrapment Protection Devices (optional) may be used to supplement primary entrapment protection, such as non-monitored photo cells, 2-wire non-monitored sensing edges and pneumatic sensing edges. Certifications: ANSI/CAN/UL325 and CAN-CSA C22.2 No. 247.

• "E" Version:

No monitoring function. Certifications: CAN-CSA C22.2 No. 247 and compliant to UL325 5th Ed. PRIOR to August 2010 revision.

• Contactor Units:

24VAC control circuit, 40VA class II transformer, fuse protected on output, heavy-duty across-the-line linear reversing contactor with mechanical interlock.

• B2/C2 Units:

C2 wiring is standard. B2 can be set very easily by moving one wire. Available options: delay on reverse, timer to close, double limits, etc... Certifications: CAN-CSA C22.2 No. 247 and compliant to UL325 5th Ed. PRIOR to August 2010 revision.

Note: ANSI/CAN/UL325 and CAN-CSA C22.2 No. 247 apply to units intended to be used in ordinary locations in accordance with the Canadian electrical code, part I and the National electrical code, NFPA 70, respectively.

MAIN OPTIONS

• Control Accessories:

Angled terminal strip allows for the connection of 3-button stations (one supplied with the operator), non-monitored sensing edges, non-monitored photo cells, one push-button radio control (external strip), ceiling pull switches, key switches, loop detectors, external interlocks, universal auxiliary output module. 2A fuse protected 24VAC output is available for accessory power supply. Nema 4/12 or Nema 4X protected monitored photo cells upgrade available.

• Environmental Modifications:

Nema 4/12 and Nema 4X enclosures. For Nema 7/9, consult inside sales.

• Mechanical Accessories:

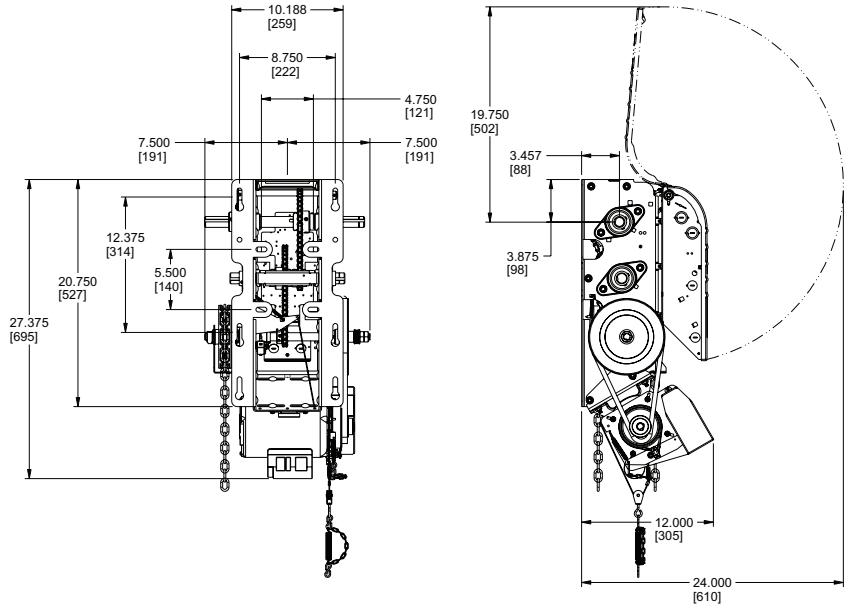
Wall or hood mounting bracket, chain spreader, etc... consult inside sales.

• Mechanical Modifications:

Left hand chain hoist, limit shaft speed-up, etc... consult inside sales.

DIMENSIONS

Clearance: Side room required 16" (460mm)



MOTOR SELECTION

Maximum Size of Door in Square Feet

Horse Power	Rolling Doors					Sectional Doors				
	Insulated Steel	16 ga. Steel	Steel Grilles 20 ga. Steel	Alu. Door 22 ga. Steel	Alu. Grilles 24 ga. Steel	Steel 18 ga. ins.	Steel 18 ga. 20 ga. ins.	Wood Steel 20 ga. 22 & 24 ga. ins.	Aluminum Steel 22 & 24 ga.	Fiberglass
1/2	157	236	260	319	358	196	245	314	343	392
3/4	206	294	358	451	515	270	319	441	490	549
1	255	358	446	574	613	294	392	490	564	613

General Guideline

OPERATOR RANGE

Current Consumption (Amp.)

Horse Power	120V 1 Ph	240V 1 Ph	208V/240V 3 Ph	480V 3 Ph	600V 3 Ph
1/2	8.0	4.0	2.1	1.0	0.8
3/4	11.2	5.6	3.2	1.5	1.2
1	13.6	6.8	4.4	2.1	1.6

General Guideline

