

# Product Specification Sheet



## OPERA-SHW/C

JACKSHAFT OPERATOR WITH  
NEMA 4/12 & 4X MODIFICATION

### STANDARD FEATURES

- **Motor:**  
60Hz high starting torque, continuous-duty, single phase capacitor start or 3 phase motor, totally enclosed (TEFC or TENV), protected against overload.
- **Reduction:**  
First step in reduction 5L/B V-belt drive, additional steps by chain and sprockets. Input shaft is 3/4", supported by cast iron flanged pillow block bearings. Output shaft is 1" with 1/4" keyway, supported by cast iron flanged pillow block bearings. Output shaft speed: 41 rpm.
- **Clutch:**  
Friction type, positioned on input shaft, easily adjustable from outside.
- **Drive:**  
#50 roller chain with a 50B12 sprocket on 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 the chain hoist is engaged. Hand chain available on right or on left (consult inside sales).
- **Electrical Enclosure:**  
All electrical components are in a Nema 4/12 or Nema 4X enclosure. Hinged electrical enclosure cover.
- **Limit System:**  
Rotary-type oil-impregnated steel cams, commercial grade switches. Remains in time when there is a manual operation or after the motor has been removed.
- **Corrosion Protection:**  
Frame protected by baked on, long lasting enamel finish. Fiber glass control box. All shafts protected by yellow chromate coating.
- **Mounting:**  
Wall, hood, or shelf mounted on the right or on the left of the door.
- **Shipping Weight:**  
Approx. 105 Lbs - 48 Kg.
- **Warranty:**  
2 Years.

### Nema 4/12 or 4X Components

Includes watertight / oiltight / dust tight components or corrosion-resistant components

### Nema 4/12 or Nema 4X Control Enclosure

Hinged cover for easy access to components and wiring

### Cast Iron Pillow Block Bearings

Flanged pillow block bearings on the input and output shafts

### Emergency Manual Chain Hoist

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

### Solenoid Brake

Drum-band type solenoid brake



**The Opera-SHW/C fills the gap between regular jackshaft and gear head operators. This is an ultra high-end heavy-duty V-belt drive industrial operator designed for use on 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 a chain hoist for manual operation, with a floor level engaging device.**

**The Nema 4/12 modification is to be used in areas where dust, water spray, oil leaks or any other type of condensation is present. The Nema 4X modification provides additive protection against corrosive environments.**

**The operator is available with the new Electronic Control Board (BOARD 070) with or without the option of electrical control for MONITORED external entrapment protection devices (UL325-2010 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 4/12 photo cells (PHOTO 064 standard) or Nema 4X photo cells (PHOTO 061 standard), according to modification selected. 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: CSA C22.2-247.92 and UL325.

### • "E" Version:

No monitoring function.

Certifications: CSA C22.2-247.92 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: CSA C22.2-247.92 and compliant to UL325 5th Ed. PRIOR to August 2010 revision.

Note: CSA C22.2-247.92 and UL325 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, Nema 4/12 or Nema 4X 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 4X protected monitored photo cells upgrade available.

### • Mechanical Accessories:

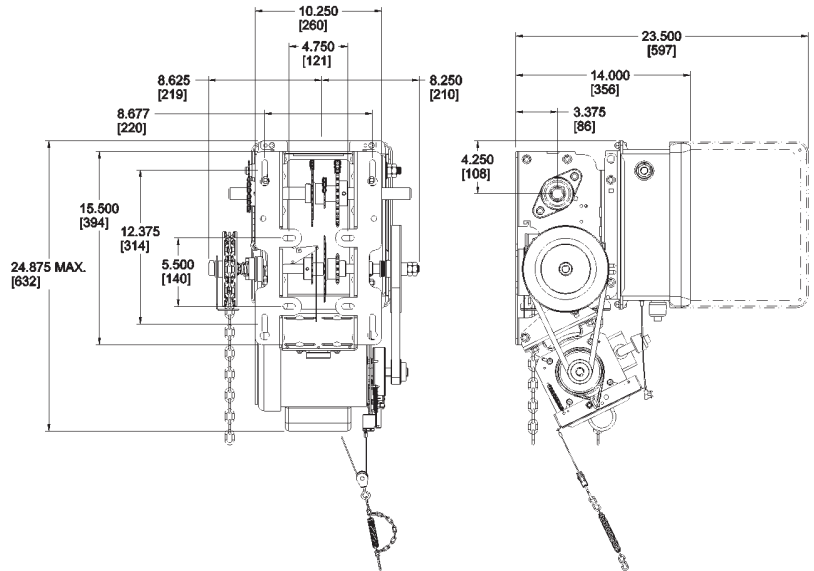
Wall or hood mounting bracket, chain spreader, etc...consult inside sales.

### • Mechanical Modifications:

Left hand chain hoist, etc...consult inside sales.

## DIMENSIONS

Clearance: Side room required 18" (457 mm)



## 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.	Fiber Glass
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 1Ph	208/ 240V 3 Ph	480V 3 Ph	600V 3 Ph
	Nema 4X/12				
1/2	6.6	3.3	2.2	1.1	0.9
3/4	11.0	5.5	2.8	1.4	1.1
1	13.4	6.7	3.6	1.8	1.5
Nema 4 X					
1/2	8.0	4.0	1.6	0.8	0.6
3/4	11.0	5.5	2.2	1.1	0.9
1	12.8	6.4	3.2	1.6	1.3

General Guideline

