# Specification Sheet Opera<sup>TI</sup> - SH



## Nema 4/12 & 4X

- Includes car wash/watertight/oiltight/ dust tight components or corrosion-resistant components
- Nema 4/12 or Nema 4X control enclosure with hinged cover
- Cast iron pillow block bearings on input and output shafts
- Solenoid brake
- Manual chain hoist with electrical cut-out

Opera<sup>™</sup>-SHW/C, fills the gap between regular jackshafts and gear heads. This is an ultra high-end, heavy duty, V-belt drive operator for industrial high & vertical lift sectional doors or rolling doors and grilles. It can be wall, hood, or shelf mounted. It incorporates a chain hoist for manual operation with floor level engagement device.

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



### Opera<sup>™</sup>-SH Nema 4/12 & Nema 4X modification

## **Jackshaft Operator**

25 cycles/hour >80 cycles a day

#### Standard Features

**Motor:** 60 Hz, high starting torque, continuousduty single phase capacitor start or 3 phase motor, totally enclosed (TEFC or TENV), protected against overload.

**Reduction:** first step in reduction to be 5L/B V-belt drive, additional steps by chain and sprockets. Input shaft is 3/4" supported by cast iron pillow block bearings. Output shaft is 1" with 1/4" keyway, supported by cast iron pillow block bearings. Output shaft speed: 41 rpm.

**Friction Clutch:** easily adjustable slip clutch, ideally positioned on input shaft.

**Drive:** #50 roller chain with a 50B12 sprocket on operator drive shaft. Door sprocket to be selected for a door travel of 6"/s to 12"/s.

**Brake:** electrically activated drum type solenoid brake.

**Manual Operation:** chain hoist with electrical cut-off and floor level engagement device for manual operation. Hand chain on right or left (3 phase), right only (1 phase).

**Electrical Enclosure:** all electrical components are in a Nema 4/12 or Nema 4X enclosure. Electrical enclosure cover is hinged.

Limit Switches: rotary-type with 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 a long lasting enamel finish. Fiber glass control box. All shafts protected by yellow chromate coating.

Mounting: wall, hood, or shelf mounted.

#### • Operator Range

2 Year Warranty

Current	Consumption	(Amp.)
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2	1 1 1 /								
V12	Horse Power	115V 1 Ph	230V 1Ph	208/ 230V 3 Ph	460V 3 Ph	575V 3 Ph			
Nema 4/12	1/2	6.6	3.3	2.2	1.1	0.9			
Ne	3/4	11.0	5.5	2.8	1.4	1.1	line		
	1	13.4	6.7	3.6	1.8	1.5	Guideline		
¢X	Horse Power	115V 1 Ph	230V 1Ph	208/ 230V 3 Ph	460V 3 Ph	575V 3 Ph	General		
Nema 4X	1/2	8.0	4.0	1.6	0.8	0.6			
Ne	3/4	11.0	5.5	2.2	1.1	0.9			
	1	12.8	6.4	3.2	1.6	1.3			

*Toll free number: 800 - 361 - 2260 www.manaras.com* 

#### Motor Control

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

or

**ECB Units:** 24Vbc relaying and 5Vbc logic circuit with a 40VA class II transformer, non-volatile memory. Features included: 1.5s delay on reverse, programmable maximum run timer, mid-stop, timer to close, programmable advance close system, test buttons, reverse wiring detection and door lock sensor. Operating mode selectable on site: C2, B2, D1, E2, T or TS.

#### Main Options

**Control Accessories:** terminal strip allows connection of 3-button stations (one supplied with the operator), sensing edges, photo cells, one push-button radio control, ceiling pull and key switches, loop detectors, external interlocks. 2A fuse protected 24VAc output is available for accessory power supply.

**Mechanical Accessories:** wall mounting stud, chain spreader, etc..., consult inside sales.

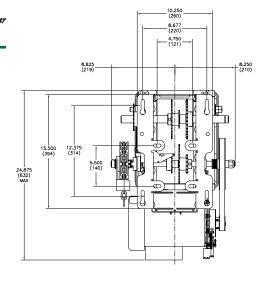
#### Maximum Size of Door in Square Feet

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	Rolling Doors				Sectional Doors						
Horse Power	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	

#### Dimensions

Motor Selection

Clearance: Side room required 18" (457 mm)



Manaras-Opera reserves the right to make specification or design changes without prior notice.

Approx. shipping weight: 135 lbs - 61 kg

