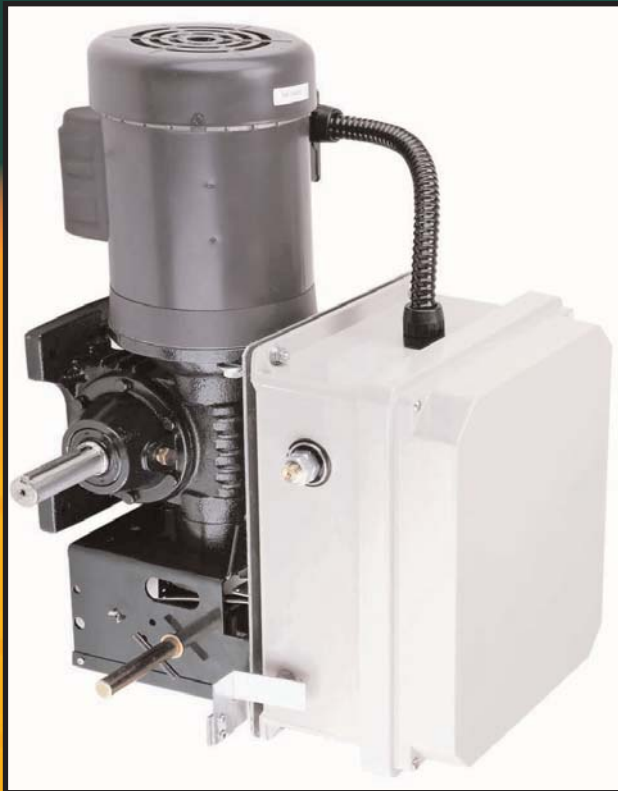


Specification Sheet

GH



Nema 4/12 & 4X modifications

- Includes damp environment/oiltight/dust tight components or corrosion-resistant components
- Nema 4/12 or Nema 4X control enclosure with hinged cover
- Solenoid brake
- Manual chain hoist with electrical cut-out

GHW/C, is a heavy-duty WORM GEAR operator for industrial, high & vertical lift sectional doors, rolling doors and grilles. It can be wall, hood or shelf mounted on either side of the door. It incorporates a chain hoist for manual operation.

The Nema 4/12 modification is 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.

Manaras®

• Standard Features

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

Reduction: 45:1 worm gear in oil bath reducer with air breather and sealed ball bearings. Output shaft is 1" with 1/4" keyway up to 1HP, 1 1/4" output shaft with 1/4" keyway above 1HP. Output shaft speed: 38 rpm.

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 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 .

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. Washdown duty electrical motor for Nema 4X, with epoxy finish and neoprene gaskets.

Mounting: wall mounted, vertical front of hood mounted or horizontal top of hood mounted. On the right or on the left of the door. The use of a wall mounting bracket is recommended.

• Motor Control

Contactors 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: 24Vdc relaying and 5Vdc logic circuit with a 40VA class II transformer, non-volatile memory. Available features: 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.

Friction Clutch: easily adjustable slip clutch, ideally positioned on output shaft. Recommended for sectional doors.

Mechanical Accessories: wall mounting bracket, hood mounting angle brackets, chain spreader, etc..., consult inside sales.

• 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 |
| 1-1/2 | 353 | 486 | 633 | - | - | 373 | 466 | 549 | 613 | - |
| 2 | 451 | 613 | - | - | - | - | - | - | - | - |

General Guideline

2 Year Warranty



• Operator Range

Current Consumption (Amp.)

| Horse Power | 115V 1 Ph | 230V 1Ph | 208/230V 3 Ph | 460V 3 Ph | 575V 3 Ph |
|-------------|-----------|----------|---------------|-----------|-----------|
| | 1/2 | 6.6 | 3.3 | 2.2 | 1.1 |
| 3/4 | 11.0 | 5.5 | 2.8 | 1.4 | 1.1 |
| 1 | 13.4 | 6.7 | 3.3 | 1.6 | 1.1 |
| 1-1/2 | 18.0 | 9.0 | 4.8 | 2.4 | 2.0 |
| 2 | - | - | 6.0 | 2.9 | 2.3 |

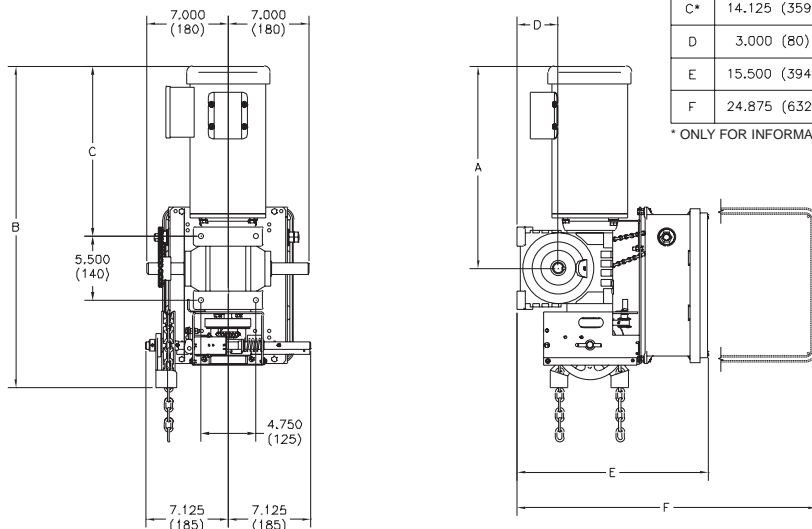
General Guideline

| Horse Power | 115V 1 Ph | 230V 1Ph | 208/230V 3 Ph | 460V 3 Ph | 575V 3 Ph |
|-------------|-----------|----------|---------------|-----------|-----------|
| | 1/2 | 8.8 | 4.4 | 2.1 | 0.8 |
| 3/4 | 11.0 | 5.5 | 2.7 | 1.1 | 0.9 |
| 1 | 12.8 | 6.4 | 3.5 | 1.6 | 1.3 |
| 1-1/2 | - | 9.0 | 4.6 | 2.1 | 2.3 |
| 2 | - | - | 6.5 | 3.1 | 3.0 |

General Guideline

• Dimensions

Clearance: Side room required 15" (381 mm)
With friction clutch add: 1.25" (32 mm)



| | UP TO 1 HP | 1.5 TO 2 HP |
|----|--------------|--------------|
| A* | 16.875 (429) | 17.625 (450) |
| B* | 27.25 (693) | 27.938 (710) |
| C* | 14.125 (359) | 14.875 (380) |
| D | 3,000 (80) | 3,500 (90) |
| E | 15,500 (394) | 16,750 (426) |
| F | 24.875 (632) | 25.875 (658) |

* ONLY FOR INFORMATION - CAN VARY

Approx. shipping weight: 119 lbs - 54 kg for 1/2HP 115V GHW model

