

MANARAS-OPERA: MGH

## Super-Duty Industrial Gear Head Operator With Hoist

25 CYCLES/HOUR >80 CYCLES/DAY

Model MGH is a very heavy-duty worm gear industrial operator designed for use on industrial, high and vertical lift sectional doors or rolling doors and grilles. It incorporates a chain hoist for manual operation with a floor level engaging device with electrical cut-out.

### STANDARD FEATURES

- **Motor:**

60Hz high starting torque, continuous-duty industrial type, single phase capacitor start or 3 phase motor, open drip proof with enclosed ends or drip cover, protected against overload. Also available with 50Hz 220V 1 phase and 380V 3 phase motor, consult inside sales.

- **Reduction:**

40:1 worm gear in oil bath reducer with air breather and sealed ball bearings. Output shaft is 1-1/4" with 1/4" keyway up to 1-1/2HP, 1-3/8" output shaft with 5/16" keyway above 1-1/2 HP. Output shaft is supported by cast iron flanged pillow block bearings. Output shaft speed: 43 rpm.

- **Drive:**

#50 roller chain with a 50B12 sprocket for the operator drive shaft (up to 1-1/2HP), 50B15 sprocket for the drive shaft (above 1-1/2HP). #60 roller chain optional. Door sprocket selected for a door travel of 6"/s to 12"/s.

- **Brake:**

Electrically activated drum-band type solenoid brake.  
Option: brake motor.

- **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 the chain hoist is engaged. Hoist on right is standard, but it can be easily moved to the left in the field.

- **Electrical Enclosure:**

All electrical components are in a Nema 1 enclosure. Simple side-off cover.

- **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:**

Reducer, control enclosure and frames protected by baked on, long lasting enamel finish.

- **Mounting:**

Right or left wall mounting.

- **Dimensions:**

Clearance: side room required 17" (432 mm)  
With Friction Clutch (up to 1-1/2HP) Add: 2.375" (60 mm)

With Friction Clutch (above 1-1/2HP) Add: 1.875" (48 mm)

For more details, please consult our [Dimensions Drawing \(up to 1-1/2HP\)](#) or our [Dimensions Drawing \(2HP to 5HP\)](#).

• **Shipping Weight:**

Approx. 137 Lbs - 62 Kg.

• **Warranty:**

2 Years, per section 6 of our [Terms and Conditions of Sale](#).

## CONTROL OPTIONS

• **ECB (BOARD 070):**

24VDC relaying circuit with a 40VA class II transformer, non-volatile memory. Features available: 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.

• **Electronic Monitored (M) Version:**

Provides the monitoring of Primary External Entrapment Protection Devices. Includes monitored photo cells (PHOTO 062 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: CSA C22.2-247.92 and UL325.



• **Electronic (E) Version:**

No monitoring function.

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



• **Contactors 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 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:**

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, plug-in radio card and 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, NEMA 4X and NEMA 7/9 enclosures.

- **Friction Clutch (Optional):**

Easily adjustable slip clutch, ideally positioned on output shaft. Recommended for sectional doors.

- **Mechanical Accessories:**

Chain spreader, hand crank, etc...consult inside sales.

- **Mechanical Modifications:**

Left hand chain hoist, brake motor, #60 roller chain and sprocket on final drive, etc...consult inside sales.