

# Product Specification Sheet



# MGT

## TROLLEY OPERATOR

### STANDARD FEATURES

• **Motor:**

60Hz high starting torque, continuous-duty industrial type, 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:**

40:1 worm gear in oil bath reducer with air breather and sealed ball bearings. Additional step by #41 chain and sprockets. Output shaft is 1", supported by ball bearings. Output shaft speed: 100 rpm for a door travel of 10"/s (1/2 and 3/4HP), 66 rpm for a door travel of 6"/s (1 and 1.5HP).

• **Drive and Trolley Assembly:**

#41 full roller chain drive. Dual, 12 gauge, pre-drilled galvanized tracks provided for doors up to 12Ft in height standard. Additional track lengths are available (max. door height acceptable for the operator limit system is 40Ft). Track spacers 3/4" steel shaft. Trolley made of cast aluminum alloy with chain tension adjustment device.

• **Clutch:**

Friction type, integrated in reducer, easily adjustable from outside.

• **Brake:**

Electrically activated drum-band type solenoid brake.

• **Manual Operation:**

Quick release disconnect arm for manual push-up operation.

• **Electrical Enclosure:**

All electrical components are in a Nema 1 enclosure. Simple slide-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:**

Ceiling-mounted.

• **Shipping Weight:**

Approx. 126 Lbs - 57 Kg. + tracks.

• **Warranty:**

2 Years.



### Accu-cam® Limit Feature

For precise and quick one-hand limit setting adjustments

### Simple Slide-Off Cover

For easy access to components and wiring

### Solenoid Brake

Drum-band type solenoid brake

**The MGT is a heavy-duty worm gear industrial trolley operator designed for use on industrial standard lift sectional doors.**

**It features a high starting torque continuous-duty industrial type motor, the Accu-cam® precise and quick limit adjustment feature, a drum-band type solenoid brake, and a simple slide-off electrical control box cover.**

**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).**



When you think  
Commercial Door OPERATORS,  
**just think OPERA.**

800-361-2260  
info@manaras.com  
www.manaras.com

## 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 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: 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:

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, NEMA 4X and NEMA 7/9 enclosures.

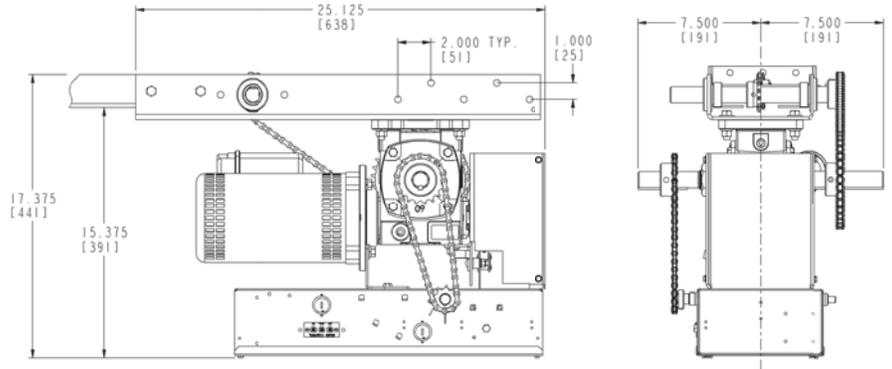
### • Mechanical Modifications:

Dual trolley drive, chain hoist, very heavy-duty front idler, etc... consult inside sales.

## DIMENSIONS

**Back Room:** Door height + 4'6" (1370 mm)

**Head Room For Tracks:** 4" (102 mm) above the highest point of door travel



## MOTOR SELECTION

### Maximum Size of Door in Square Feet

Horse Power	Sectional Doors				
	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	196	245	314	343	392
3/4	270	319	441	490	549
1	294	392	490	564	613
1-1/2	373	466	549	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
1/2	9.0	4.5	2.2	1.1	-
3/4	11.2	5.6	3.2	1.5	1.2
1	13.6	6.8	3.7	1.7	1.4
1-1/2	19.6	9.8	5.3	2.5	2.0

General Guideline

