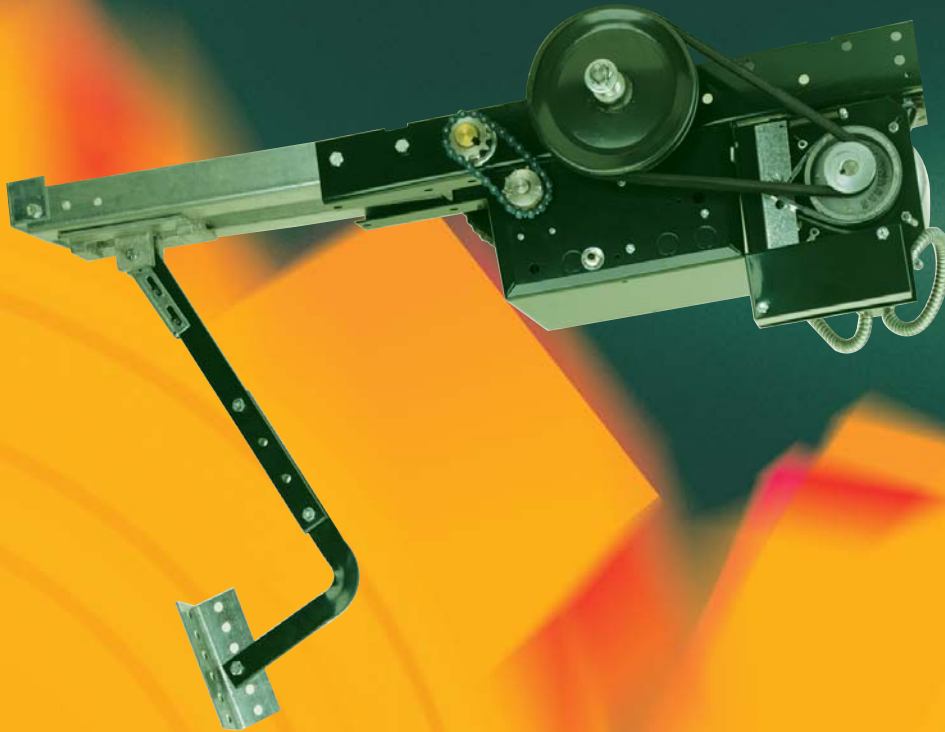


# Specification Sheet

## MTBH



*MTBH, a heavy duty trolley operator for industrial standard lift sectional doors. It incorporates a solenoid brake.*

*Manaras*®

## • Standard Features

**Motor:** 60Hz high starting torque, continuous-duty 1 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:** first step in reduction 5L/B V-belt drive, additional step by #41 chain and sprocket. Input shaft is 5/8" and supported by precision ball bearings. Output shaft is 1" and supported by ball bearings. Door speed: 12"/second.

**Drive and Trolley Assembly:** #48 (#410) full roller chain drive on 1/3 and 1/2 HP and #41 full roller chain drive on 3/4 and 1 HP. Dual, 12 gauge, pre-drilled galvanized tracks. Track spacers 3/4" steel shaft. Trolley made of cast aluminum alloy with possibility of chain tension adjustment.

**Clutch:** friction type, adjustable from outside.

**Brake:** electrically activated drum 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.

**Limit Switches:** rotary-type with oil-impregnated steel cams, commercial grade switches. Limit shaft supported by ball bearings. Remains in time when there is a manual operation or after the motor has been removed.

**Corrosion Protection:** frame and control enclosure protected by a long lasting enamel finish. All shafts protected by yellow chromate coating.

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
1/3*	6.6	3.3	-	-	-
1/2	8.0	4.0	2.1	1.0	0.8
3/4	11.2	5.6	3.2	1.5	1.2
1	13.6	6.8	4.4	2.1	1.6

General Guideline

\* Only available in the US

## • 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 for the connection of 3-button stations (one supplied with the operator), sensing edges, photo cells, one push button radio control (external strip), ceiling pull and key switches, loop detectors, external interlocks. Fuse protected 24VAC output is available for accessory power supply.

**Environmental Modifications:** NEMA 4/12, NEMA 4X and NEMA 7/9 enclosures.

**Mechanical Accessories:** trolley hoist, dual trolley drive, etc..., consult inside sales.

**Apartment Modification:** The apartment garage operator (APE0) incorporates a 4L V-belt, track and #41 drive chain, an electronic control board and pillow block bearings on the input shaft. Door speed is reduced to 9"/s for quieter operation and longer lifetime. For instant reverse operators please consult inside sales. To help extend lifetime, a heavy duty front idler can be installed.

## • Motor Selection

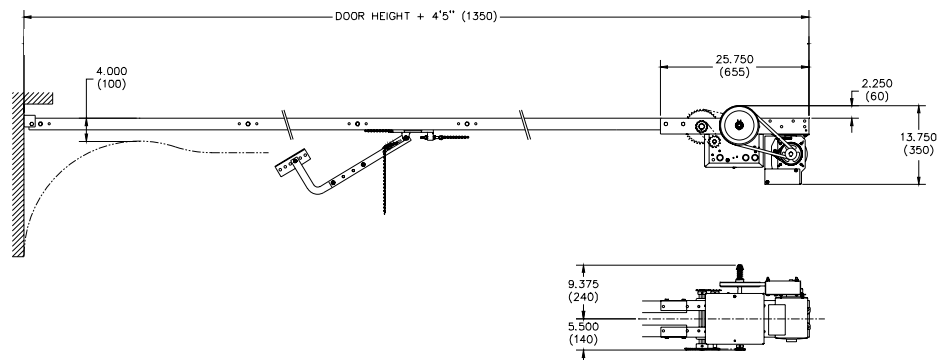
Maximum Size of Door in Square Feet

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
1/3	124	172	255	280	294
1/2	196	245	314	343	392
3/4	270	319	441	490	549
1	294	392	490	564	613

General Guideline

## • Dimensions

**Back room:** door height + 4'5" (1350 mm)  
**Head room for tracks:** 4" (102 mm)



Approx. shipping weight: 73 lbs – 33 kg + op. tracks

Manaras-Opera reserves the right to make specification or design changes without prior notice.  
Reg. T.M. of 9141-0720 Quebec Inc.

