

MANARAS-OPERA: OTBH

Heavy-Duty Commercial Trolley Operator With Solenoid Brake

25 CYCLES/HOUR 80 CYCLES/DAY

Model OTBH is a heavy-duty low headroom trolley operator designed for use on industrial standard lift sectional doors. It incorporates a drum-band type solenoid brake.

FEATURES

- **Motor:**

60Hz high starting torque, continuous-duty, single phase capacitor start or 3 phase motor, open drip proof, protected against overload. Also available with 50Hz motor 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 sprockets. Input shaft is 5/8", supported by precision ball bearings. Output shaft is 1", supported by ball bearings. Output shaft speed: 120 rpm for a door travel of 12"/s.

- **Drive and Trolley Assembly:**

#48 (#410) full roller chain drive on 1/2 HP and #41 full roller chain drive on 3/4, 1 HP. 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 30Ft). Track spacers 3/4" steel shaft. Trolley made of cast aluminum alloy with chain tension adjustment device.

- **Clutch:**

Friction type, positioned on input shaft, 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. Hinged electrical enclosure 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:**

Frame and control enclosure protected by baked on, long lasting enamel finish. All shafts protected by yellow chromate coating.

- **Mounting (Low Headroom Design):**

Ceiling-mounted with only 6.25" headroom clearance required below the tracks.

- **Dimensions:**

Back Room: door height + 4'5" (1350 mm)
Head Room For Tracks: 5.625" (143 mm) above the highest point of door travel
For more details, please consult our [Dimensions Drawing](#).

• **Shipping Weight:**

Approx. 73 Lbs - 33 Kg + tracks.

• **Warranty:**

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

CONTROL OPTIONS

• **ECB Units (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:**

24VDC relaying circuit, with a 15VA class II transformer, non-volatile memory. 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.



• **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 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:**

Angled 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 and NEMA 4X enclosures. For NEMA 7/9, consult inside sales.

• **Mechanical Modifications:**

Dual trolley drive, trolley hoist, double v-belt, cast iron flanged pillow block bearings on input/output shafts, drum-shoe type solenoid brake, solenoid anti-vibration mounting, very heavy-duty front idler, minidepth, etc...consult inside sales.

• **Electrical Modifications:**

Warning light wiring, etc...consult inside sales.

• **Options:**

[Trolley Apartment Model](#) or [Premium Trolley Apartment Model](#).