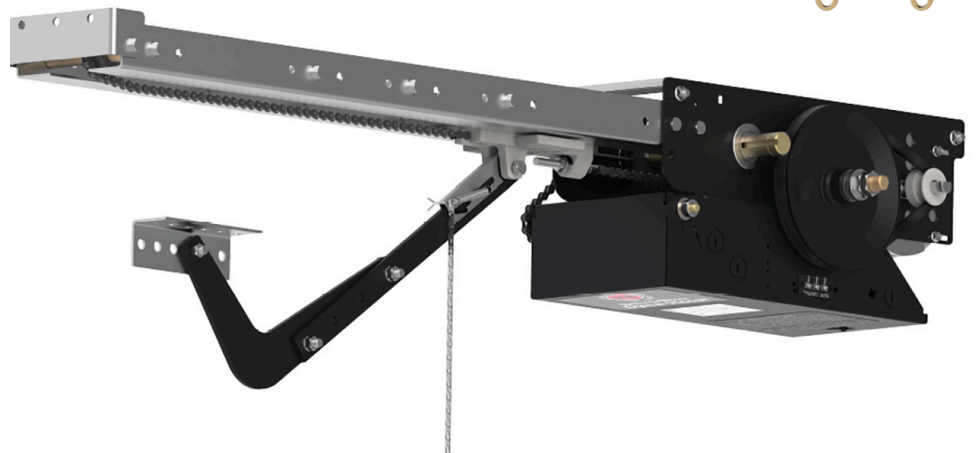
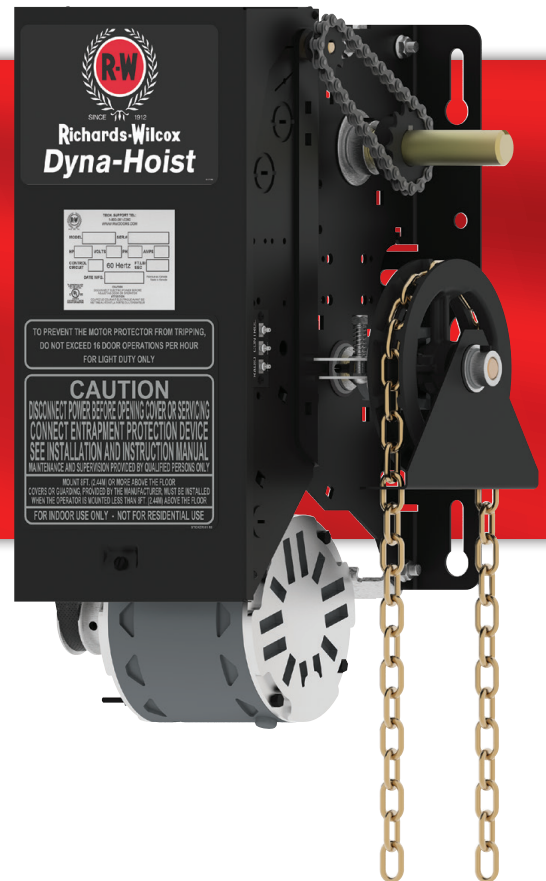




Richards-Wilcox

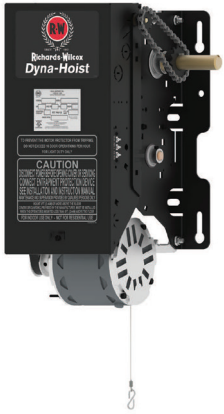
Engineered For Life

DYNA-HOIST AC SERIES **PRODUCT CATALOGUE**



www.rwdoors.com/dynahoist

PRODUCT OVERVIEW



DYNA-HOIST AC SERIES MO-OMJ (Page 4 & 5)

The MO-OMJ model is a medium-duty operator designed for use on standard, high and vertical lift sectional doors or small rolling doors and grilles.

The operator can be wall, hood, or shelf mounted on either side of the door. It incorporates a floor level disconnect mechanism for manual operation.

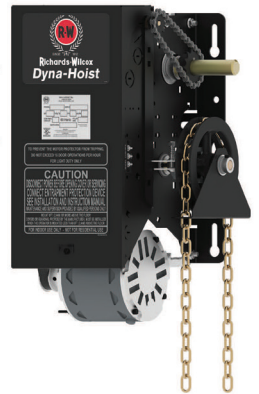
Max Cycles/Day: **50**

DYNA-HOIST AC SERIES MO-OMH (Pages 6 & 7)

The MO-OMH model is a medium-duty operator designed for use on standard, high and vertical lift sectional doors or small rolling doors and grilles.

The operator can be wall, hood, or shelf mounted on either side of the door. It incorporates the patented Hoist-a-matic®, a self-engaging chain hoist for manual operation, which simplifies operation and installation.

Cycles/Day: **50**



DYNA-HOIST AC SERIES MO-OPJ (Pages 8 & 9)

The MO-OPJ model is a heavy-duty industrial operator designed for use on standard, high and vertical lift sectional doors or rolling doors and grilles.

The operator can be wall, hood, or shelf mounted on either side of the door. It incorporates a floor level disconnect mechanism for manual operation.

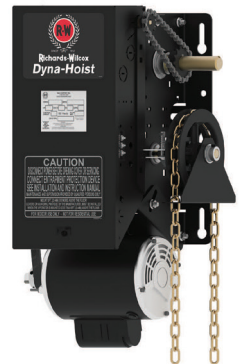
Max Cycles/Day: **100**

DYNA-HOIST AC SERIES MO-OPH (Pages 10 & 11)

The MO-OPH model is a heavy-duty industrial operator designed for use on standard, high and vertical lift sectional doors or rolling doors and grilles.

The operator can be wall, hood, or shelf mounted on either side of the door. It incorporates the patented Hoist-a-matic®, a self-engaging chain hoist for manual operation, which simplifies operation and installation.

Max Cycles/Day: **100**



PRODUCT OVERVIEW



DYNA-HOIST AC SERIES MO-OSH (Page 12 & 13)

The MO-OSH model fills the gap between regular jackshaft and gearhead operators. This is an ultra high-end heavy-duty V-belt drive industrial operator designed for use on standard, high and vertical lift sectional doors or rolling doors and grilles.

The operator can be wall, hood, or shelf mounted on either side of the door. It incorporates a chain hoist for manual operation, with a floor level engaging device.

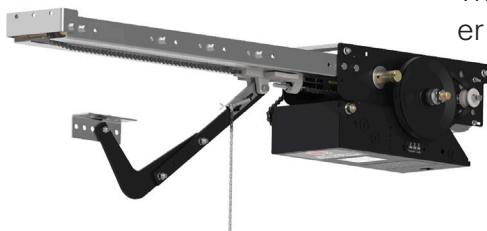
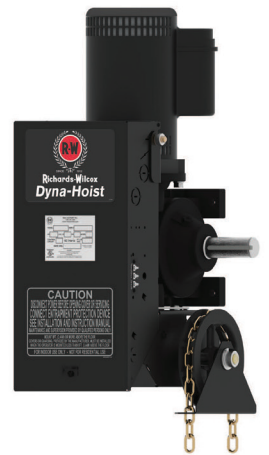
Max Cycles/Day: **100**

DYNA-HOIST AC SERIES MO-OGH (Pages 14 & 15)

The MO-OGH model is a heavy-duty worm gear industrial operator designed for use on industrial standard, high and vertical lift sectional doors or rolling doors and grilles.

The operator can be wall, hood, or shelf mounted on either side of the door. It incorporates the patented Hoist-a-matic®, a self-engaging chain hoist for manual operation, which simplifies operation and installation.

Max Cycles/Day: **80**



DYNA-HOIST AC SERIES MO-OMT (Pages 16 & 17)

The MO-OMT model is a medium-duty trolley operator designed for use on smaller and low-cycling industrial standard lift sectional doors.

It features a high starting torque intermittent-duty industrial type motor and a quick release disconnect arm.

Max Cycles/Day: **50**

DYNA-HOIST AC SERIES MO-OTBH (Pages 18 & 19)

The MO-OTBH model 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.

The operator is available with the Electronic Control Board (BOARD 070) with or without the option of electrical control for monitored external entrapment protection devices (UL325-2010 compliant).

Max Cycles per hour **25** ▪ Max Cycles/Day: **80**



Product Specification Sheet

Model MO-OMJ Jackshaft Operator

Dyna-Hoist®



Standard Features

- **Motor:**

1/2HP, 120V single phase intermittent-duty open type motor with instant reverse and internal automatic reset thermal overload protection (60Hz). Removable without affecting limit switch settings.

- **Reduction:**

First step in reduction 5L/B V-belt drive, additional steps by chain and sprockets. Input shaft is 5/8", supported by precision ball bearings. Output shaft is 1" with 1/4" keyway, supported by ball bearings. Output shaft speed: 36 rpm.

- **Clutch:**

Friction type, positioned on input shaft, easily adjustable from outside.

- **Drive:**

#41 roller chain with a 41B12 sprocket for the operator drive shaft. Door sprocket selected for a door travel of 6"/s to 12"/s.

- **Brake:**

Mechanical brake.

- **Manual Operation:**

A floor level disconnect mechanism which must be engaged 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:**

Wall, hood, or shelf mounted on the right or on the left of the door. For indoor use only.

- **Shipping Weight:**

Approx. 60 lbs - 27 kg.

- **Warranty:**

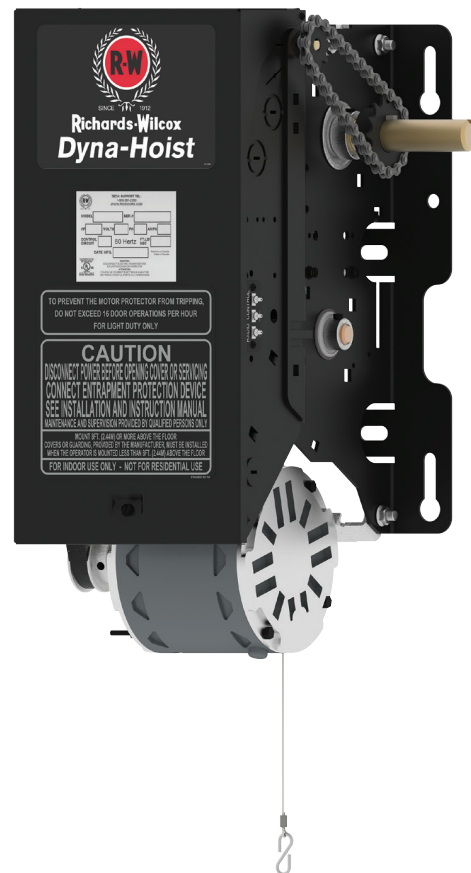
2 Years.

Floor Level Disconnect

Disconnect mechanism for manual operation

Accu-cam® Limit Feature

For precise and quick one-hand limit setting adjustments



The MO-OMJ model is a medium-duty operator designed for use on standard, high and vertical lift sectional doors or small rolling doors⁽¹⁾ and grilles.

The operator can be wall, hood, or shelf mounted on either side of the door. It incorporates a floor level disconnect mechanism for manual operation.

The operator is available with the Electronic Control Board (BOARD 070) with or without the option of electrical control for monitored external entrapment protection devices (ANSI/CAN/UL325 compliant).

⁽¹⁾ For properly balanced rolling steel doors with less than 80 lbs of imbalance, rolling sheet doors, vinyl doors or equivalents. For larger rolling doors, we recommend using a MO-OPJ operator equipped with an electrically activated drum-band type solenoid brake.

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: ANSI/CAN/UL325 and CAN-CSA C22.2 No.247.

• "E" Version:

No monitoring function.

Certifications: CAN-CSA C22.2 No.247 and compliant to UL325 5th Ed. PRIOR to August 2010 revision.

Note: ANSI/CAN/UL325 and CAN-CSA C22.2 No.247 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, 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.

• Mechanical Accessories:

Wall or hood mounting bracket, chain spreader, etc...consult inside sales.

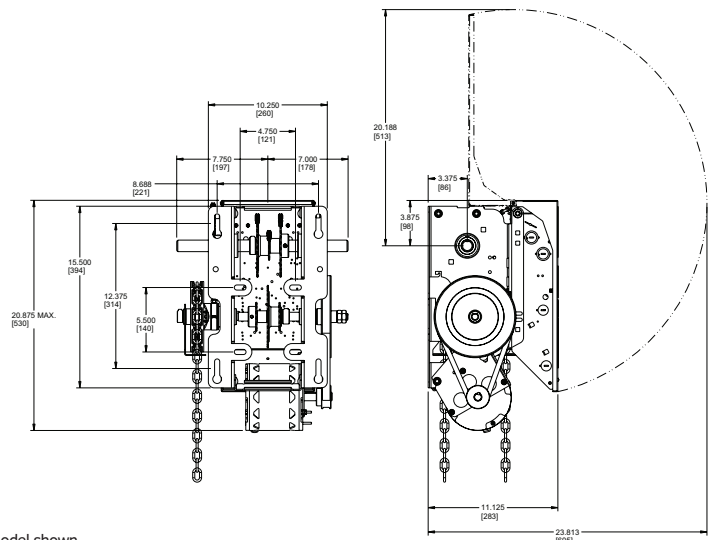
• Mechanical Modifications:

#50 roller chain, sprocket on final drive and limit shaft speed-up, etc...consult inside sales.

Dimensions

Clearance: Side room required 15" (380 mm)

Maximum Door Height: 14' (4260 mm)



MO-OMH model shown

Operator Range and Pricing (Ex: MO-OMJ-6112-0E00)

Code	Circuit Type	HP	Volts	Ph	Amp
MO-OMJ-6112-0	E	1/2	120	1	5.0

Door sprocket up to 41B36 (1-1/4" Bore, 1/4" Keyway)

Other sprocket combinations

CHAIKIT002	Disc. chain 14' extention
CHAIKIT004	Disc. chain 28' extention

Options

Code	Description
(M) Version	Monit.+N1 M-Photo Cells
SPREADER001	Spreader for 1" / 1" ⁽¹⁾
SPREADER002	Spreader for 1" / 1-1/4" ⁽¹⁾
RADIOEM101	1-button transmitter
RADIOEM102	3-button key chain transmitter
RADIOEM103	3-button transmitter (SD/MD)
RADIOEM104	4-button transmitter, 4 doors
RADIOEM144	3-button transmitter, 144 doors

⁽¹⁾ **Note:** The use of a chain spreader is recommended on all jackshaft operators.

Product Specification Sheet

Model MO-OMH Jackshaft Operator

Dyna-Hoist®



Standard Features

- **Motor:**

1/2HP, 120V single phase intermittent-duty, open type motor with instant reverse and internal automatic reset thermal overload protection (60Hz). Removable without affecting limit switch settings.

- **Reduction:**

First step in reduction 5L/B V-belt drive, additional steps by chain and sprockets. Input shaft is 5/8", supported by precision ball bearings. Output shaft is 1" with 1/4" keyway, supported by ball bearings. Output shaft speed: 36 rpm.

- **Clutch:**

Friction type, positioned on input shaft, easily adjustable from outside.

- **Drive:**

#41 roller chain with a 41B12 sprocket for the operator drive shaft. Door sprocket selected for a door travel of 6"/s to 12"/s.

- **Brake:**

Mechanical brake.

- **Manual Operation:**

Hoist-a-matic® self-engaging hoist (floor level engagement device is not required to operate) for manual chain operation. An electrical interlock automatically disconnects power to the motor operator when the chain hoist is engaged. Hoist on right is standard.

- **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:**

Wall, hood, or shelf mounted on the right or on the left of the door. For indoor use only.

- **Shipping Weight:**

Approx. 68 lbs - 31 kg.

- **Warranty:**

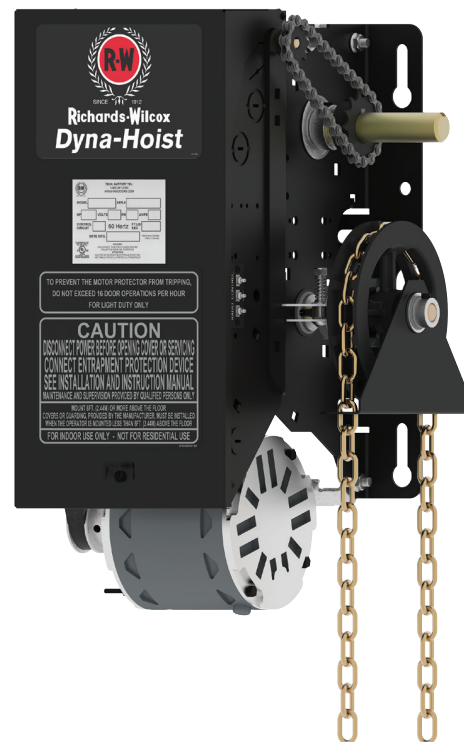
2 Years.

Hoist-a-matic®

Self-engaging chain hoist with automatic cut-off

Accu-cam® Limit Feature

For precise and quick one-hand limit setting adjustments



The MO-OMH model is a medium-duty operator designed for use on standard, high and vertical lift sectional doors or small rolling doors⁽¹⁾ and grilles.

The operator can be wall, hood, or shelf mounted on either side of the door. It incorporates the patented Hoist-a-matic®, a self-engaging chain hoist for manual operation, which simplifies operation and installation.

The operator is available with the Electronic Control Board (BOARD 070) with or without the option of electrical control for monitored external entrapment protection devices (ANSI/CAN/UL325 compliant).

⁽¹⁾ For properly balanced rolling steel doors with less than 80 lbs of imbalance, rolling sheet doors, vinyl doors or equivalents. For larger rolling doors, we recommend using a MO-OPH operator equipped with an electrically activated drum-band type solenoid brake.

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: ANSI/CAN/UL325 and CAN-CSA C22.2 No.247.

• "E" Version:

No monitoring function.

Certifications: CAN-CSA C22.2 No.247 and compliant to UL325 5th Ed. PRIOR to August 2010 revision.

Note: ANSI/CAN/UL325 and CAN-CSA C22.2 No.247 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, 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.

• Mechanical Accessories:

Wall or hood mounting bracket, chain spreader, etc...consult inside sales.

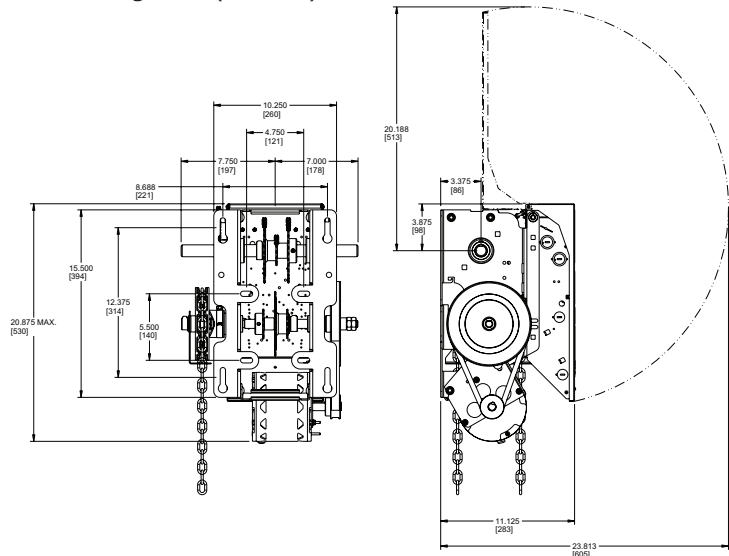
• Mechanical Modifications:

Left hand chain hoist, #50 roller chain, sprocket on final drive and limit shaft speed-up, etc...consult inside sales.

Dimensions

Clearance: Side room required 15" (380 mm)

Maximum Door Height: 14' (4260 mm)



Operator Range and Pricing (Ex: MO-OMH-6112-0E00)

Code	Circuit Type	HP	Volts	Ph	Amp
MO-OMH-6112-0	E	1/2	120	1	5.0

Door sprocket up to 41B36 (1-1/4" Bore, 1/4" Keyway)

Other sprocket combinations

Hand chain for door shaft >14'

Options

Code	Description
(M) Version	Monit.+N1 M-Photo Cells
SPREADER001	Spreader for 1" / 1" ⁽¹⁾
SPREADER002	Spreader for 1" / 1-1/4" ⁽¹⁾
RADIOEM101	1-button transmitter
RADIOEM102	3-button key chain transmitter
RADIOEM103	3-button transmitter (SD/MD)
RADIOEM104	4-button transmitter, 4 doors
RADIOEM144	3-button transmitter, 144 doors

⁽¹⁾ **Note:** The use of a chain spreader is recommended on all jackshaft operators.

Product Specification Sheet

Model MO-OPJ Jackshaft Operator

Dyna-Hoist®



Standard Features

- **Motor:**

60Hz high starting torque, continuous-duty, single phase capacitor start or 3 phase motor, open drip proof, protected against overload.

- **Reduction:**

First step in reduction 5L/B V-belt drive, additional steps by chain and sprockets. Input shaft is 5/8", supported by precision ball bearings. Output shaft is 1" with 1/4" keyway, supported by ball bearings. Output shaft speed: 41 rpm.

- **Clutch:**

Friction type, positioned on input shaft, easily adjustable from outside.

- **Drive:**

#50 roller chain with a 50B12 sprocket for the operator drive shaft. Door sprocket selected for a door travel of 6"/s to 12"/s.

- **Brake:**

Mechanical brake.

- **Manual Operation:**

A floor level disconnect mechanism which must be engaged for manual push-up operation. An electrical interlock automatically disconnects power to the motor operator when the manual operation is engaged.

- **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:**

Wall, hood, or shelf mounted on the right or on the left of the door. For indoor use only.

- **Shipping Weight:**

Approx. 65 lbs - 30 kg.

- **Warranty:**

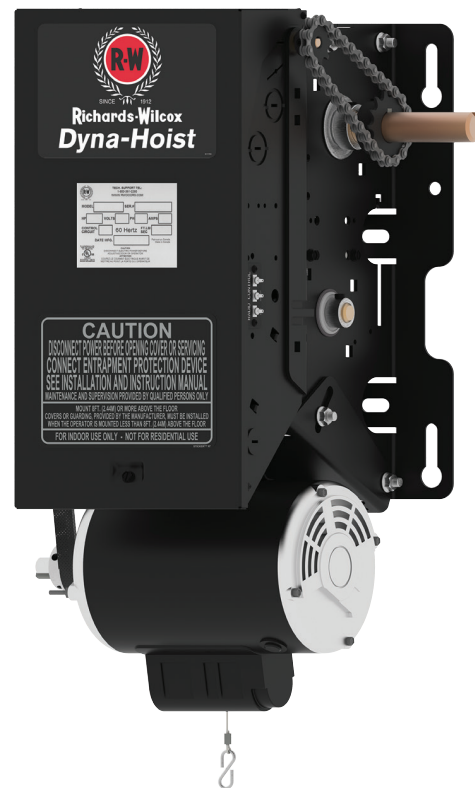
2 Years.

Floor Level Disconnect

Disconnect mechanism for manual operation

Accu-cam® Limit Feature

For precise and quick one-hand limit setting adjustments



The MO-OPJ model is a heavy-duty industrial operator designed for use on standard, high and vertical lift sectional doors or rolling doors and grilles.

The operator can be wall, hood, or shelf mounted on either side of the door. It incorporates a floor level disconnect mechanism for manual operation.

The operator is available with the Electronic Control Board (BOARD 070) with or without the option of electrical control for monitored external entrapment protection devices (ANSI/CAN/UL325 compliant).

(1) For properly balanced rolling steel doors with less than 80 lbs of imbalance, rolling sheet doors, vinyl doors or equivalents. For larger rolling doors, we recommend using an electrically activated drum-band type solenoid brake, see Mechanical Modifications.

Product Specification Sheet

Model MO-OPJ
25 cycles/hour 100 cycles/day

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: ANSI/CAN/UL325 and CAN-CSA C22.2 No.247.

• "E" Version:

No monitoring function.

Certifications: CAN-CSA C22.2 No.247 and compliant to UL325 5th Ed. PRIOR to August 2010 revision.

Note: ANSI/CAN/UL325 and CAN-CSA C22.2 No.247 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, 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.

• Mechanical Accessories:

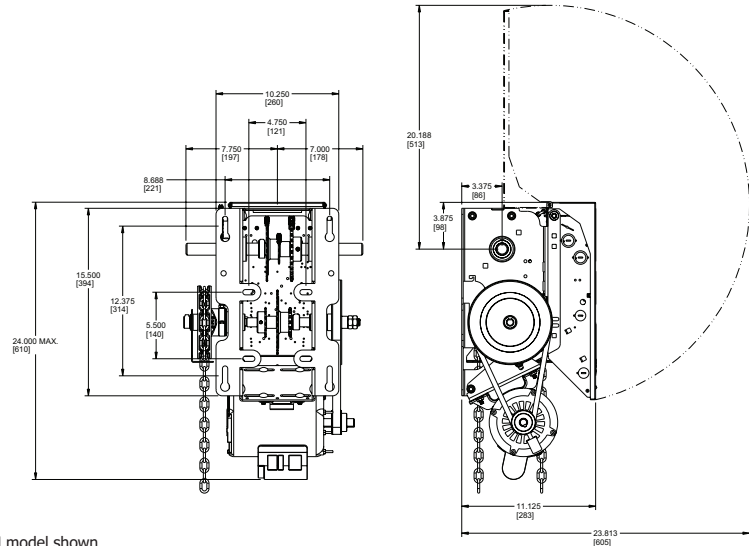
Wall or hood mounting bracket, chain spreader, etc...consult inside sales.

• Mechanical Modifications:

Electrically activated drum-band type solenoid brake, cast iron flanged pillow block bearings on output shaft, limit shaft speed-up, etc...consult inside sales.

Dimensions

Clearance: Side room required 15" (380 mm)



MO-OPH model shown

Operator Range and Pricing (Ex: MO-OPJ-6112-0E00)

Code	Circuit Type	HP	Volts	Ph	Amp
MO-OPJ-6112-0	E	1/2	120	1	8.0
MO-OPJ-6212-0	E	1/2	240	1	4.0
MO-OPJ-6232-0	E	1/2	208	3	2.1
MO-OPJ-6432-0	E	1/2	480	3	1.0
MO-OPJ-6532-0	E	1/2	600	3	0.8
MO-OPJ-6113-0	E	3/4	120	1	11.2
MO-OPJ-6213-0	E	3/4	240	1	5.6
MO-OPJ-6233-0	E	3/4	208	3	3.2
MO-OPJ-6433-0	E	3/4	480	3	1.5
MO-OPJ-6533-0	E	3/4	600	3	1.2
MO-OPJ-6114-0	E	1	120	1	13.6
MO-OPJ-6214-0	E	1	240	1	6.8
MO-OPJ-6234-0	E	1	208	3	4.4
MO-OPJ-6434-0	E	1	480	3	2.1
MO-OPJ-6534-0	E	1	600	3	1.6

Door sprocket up to 50B42 (1-1/4" Bore, 1/4" Keyway)

Other sprocket combinations

CHAINKIT002 Disc. chain 14' extension
CHAINKIT004 Disc. chain 28' extension

Options

Code	Description
(M) Version	Monit.+N1 M-Photo Cells
SPREADER001	Spreader for 1" / 1" ⁽¹⁾
SPREADER002	Spreader for 1" / 1-1/4" ⁽¹⁾
RADIOEM101	1-button transmitter
RADIOEM102	3-button key chain transmitter
RADIOEM103	3-button transmitter (SD/MD)
RADIOEM104	4-button transmitter, 4 doors
RADIOEM144	3-button transmitter, 144 doors

⁽¹⁾ **Note:** The use of a chain spreader is recommended on all jackshaft operators.

Accu-Cam is a Registered T.M. of Manaras-Opera
Dyna-Hoist is a Registered T.M. of Raynor Canada Corp.

Richards-Wilcox Dyna-Hoist®
SS MO-OPJ 2020/01/01 Rev 0 - Printed in Canada
Pricing and technical data subject to change without notice

Product Specification Sheet

Model MO-OPH Jackshaft Operator

Dyna-Hoist®



Standard Features

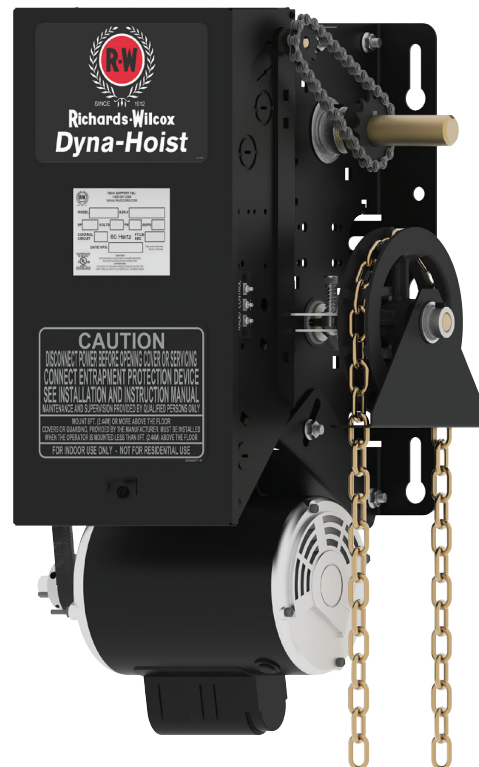
- **Motor:**
60Hz high starting torque, continuous-duty, single phase capacitor start or 3 phase motor, open drip proof, protected against overload.
- **Reduction:**
First step in reduction 5L/B V-belt drive, additional steps by chain and sprockets. Input shaft is 5/8", supported by precision ball bearings. Output shaft is 1" with 1/4" keyway, supported by ball bearings. Output shaft speed: 41 rpm.
- **Clutch:**
Friction type, positioned on input shaft, easily adjustable from outside.
- **Drive:**
#50 roller chain with a 50B12 sprocket for the operator drive shaft. Door sprocket selected for a door travel of 6"/s to 12"/s.
- **Brake:**
Mechanical brake.
- **Manual Operation:**
Hoist-a-matic® self-engaging hoist (floor level engagement device is not required to operate) for manual chain operation. An electrical interlock automatically disconnects power to the motor operator when the chain hoist is engaged. Hoist on right is standard.
- **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:**
Wall, hood, or shelf mounted on the right or on the left of the door. For indoor use only.
- **Shipping Weight:**
Approx. 86 lbs - 39 kg.
- **Warranty:**
2 Years.

Hoist-a-matic®

Self-engaging chain hoist with automatic cut-off

Accu-cam® Limit Feature

For precise and quick one-hand limit setting adjustments



The MO-OPH model is a heavy-duty industrial operator designed for use on standard, high and vertical lift sectional doors or rolling doors⁽¹⁾ and grilles.

The operator can be wall, hood, or shelf mounted on either side of the door. It incorporates the patented Hoist-a-matic®, a self-engaging chain hoist for manual operation, which simplifies operation and installation.

The operator is available with the Electronic Control Board (BOARD 070) with or without the option of electrical control for monitored external entrapment protection devices (ANSI/CAN/UL325 compliant).

⁽¹⁾ For properly balanced rolling steel doors with less than 80 lbs of imbalance, rolling sheet doors, vinyl doors or equivalents. For larger rolling doors, we recommend using an electrically activated drum-band type solenoid brake, see Mechanical Modifications.

Product Specification Sheet

Model MO-OPH
25 cycles/hour 100 cycles/day

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: ANSI/CAN/UL325 and CAN-CSA C22.2 No.247.

• "E" Version:



No monitoring function.

Certifications: CAN-CSA C22.2 No.247 and compliant to UL325 5th Ed. PRIOR to August 2010 revision.

Note: ANSI/CAN/UL325 and CAN-CSA C22.2 No.247 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, universal auxiliary output module. 2A fuse protected 24Vdc output is available for accessory power supply. NEMA 4/12 or NEMA 4X protected monitored photo cells upgrade available.

• Mechanical Accessories:

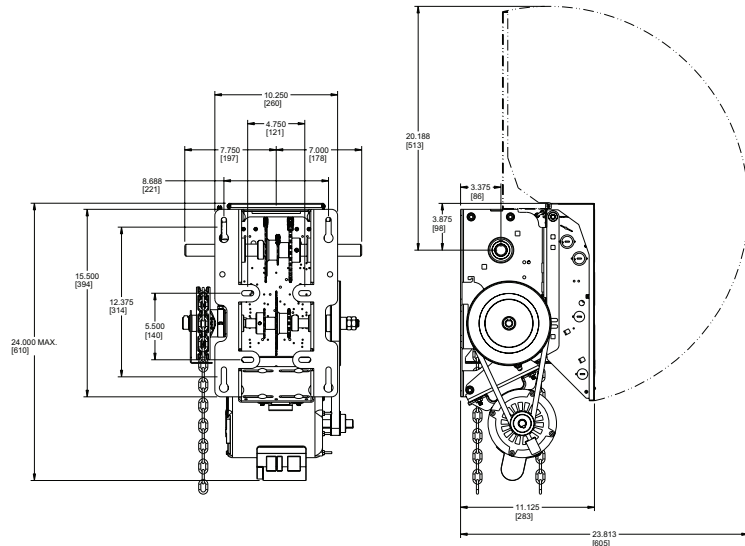
Wall or hood mounting bracket, chain spreader, etc...consult inside sales.

• Mechanical Modifications:

Left hand chain hoist, electrically activated drum-band type solenoid brake, cast iron flanged pillow block bearings on output shaft, limit shaft speed-up, etc...consult inside sales.

Dimensions

Clearance: Side room required 15" (380 mm)



Operator Range and Pricing (Ex: MO-OPH-6112-0E00)

Code	Circuit Type	HP	Volts	Ph	Amp
MO-OPH-6112-0	E	1/2	120	1	8.0
MO-OPH-6212-0	E	1/2	240	1	4.0
MO-OPH-6232-0	E	1/2	208	3	2.1
MO-OPH-6432-0	E	1/2	480	3	1.0
MO-OPH-6532-0	E	1/2	600	3	0.8
MO-OPH-6113-0	E	3/4	120	1	11.2
MO-OPH-6213-0	E	3/4	240	1	5.6
MO-OPH-6233-0	E	3/4	208	3	3.2
MO-OPH-6433-0	E	3/4	480	3	1.5
MO-OPH-6533-0	E	3/4	600	3	1.2
MO-OPH-6114-0	E	1	120	1	13.6
MO-OPH-6214-0	E	1	240	1	6.8
MO-OPH-6234-0	E	1	208	3	4.4
MO-OPH-6434-0	E	1	480	3	2.1
MO-OPH-6534-0	E	1	600	3	1.6

Door sprocket up to 50B42 (1-1/4" Bore, 1/4" Keyway)
Other sprocket combinations
Hand chain for door shaft >14'

Options

Code	Description
(M) Version	Monit.+N1 M-Photo Cells
SPREADER001	Spreader for 1" / 1" ⁽¹⁾
SPREADER002	Spreader for 1" / 1-1/4" ⁽¹⁾
RADIOEM101	1-button transmitter
RADIOEM102	3-button key chain transmitter
RADIOEM103	3-button transmitter (SD/MD)
RADIOEM104	4-button transmitter, 4 doors
RADIOEM144	3-button transmitter, 144 doors

⁽¹⁾ **Note:** The use of a chain spreader is recommended on all jackshaft operators.

Product Specification Sheet

Model MO-OSH Jackshaft Operator

Dyna-Hoist®



Standard Features

- **Motor:**

60Hz high starting torque, continuous-duty, single phase capacitor start or 3 phase motor, open drip proof, protected against overload.

- **Reduction:**

First step in reduction 5L/B V-belt drive, additional steps by chain and sprockets. Input shaft is 3/4", supported by cast iron flanged pillow block bearings. Output shaft is 1" with 1/4" keyway, supported by cast iron flanged pillow block bearings. Output shaft speed: 41 rpm.

- **Clutch:**

Friction type, positioned on input shaft, easily adjustable from outside.

- **Drive:**

#50 roller chain with a 50B12 sprocket for the operator drive shaft. Door sprocket selected for a door travel of 6"/s to 12"/s.

- **Brake:**

Electrically activated drum-band type solenoid brake.

- **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 chain hoist is engaged. Hoist on right is standard.

- **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:**

Wall, hood, or shelf mounted on the right or on the left of the door. For indoor use only.

- **Shipping Weight:**

Approx. 96 lbs - 44 kg.

- **Warranty:**

2 Years.

Cast Iron Pillow Block Bearings

Flanged pillow block bearings on the input and output shafts

Solenoid Brake

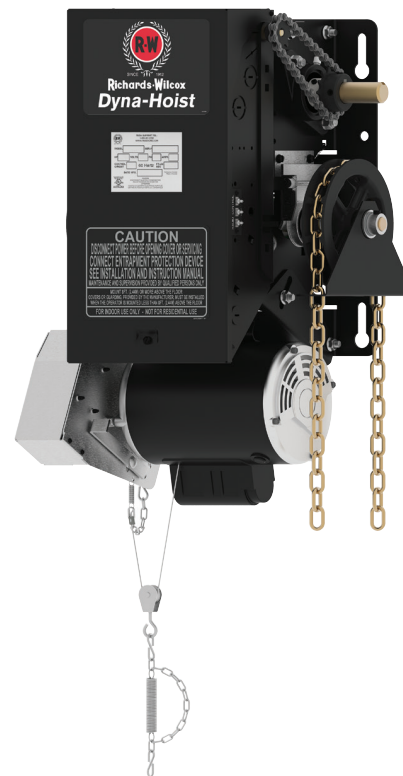
Drum-band type solenoid brake

Accu-cam® Limit Feature

For precise and quick one-hand limit setting adjustments

Emergency Manual Chain Hoist

With floor level chain hoist engaging device and electrical cut-out



The MO-OSH model fills the gap between regular jackshaft and gearhead operators. This is an ultra high-end heavy-duty V-belt drive industrial operator designed for use on standard, high and vertical lift sectional doors or rolling doors and grilles.

The operator can be wall, hood, or shelf mounted on either side of the door. It incorporates a solenoid brake and a chain hoist for manual operation, with a floor level engaging device.

The operator is available with the Electronic Control Board (BOARD 070) with or without the option of electrical control for monitored external entrapment protection devices (ANSI/CAN/UL325 compliant).

Product Specification Sheet

Model MO-OSH
25 cycles/hour >100 cycles/day

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: ANSI/CAN/UL325 and CAN-CSA C22.2 No.247.

• "E" Version:

No monitoring function.

Certifications: CAN-CSA C22.2 No.247 and compliant to UL325 5th Ed. PRIOR to August 2010 revision.

Note: ANSI/CAN/UL325 and CAN-CSA C22.2 No.247 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, 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.

• Mechanical Accessories:

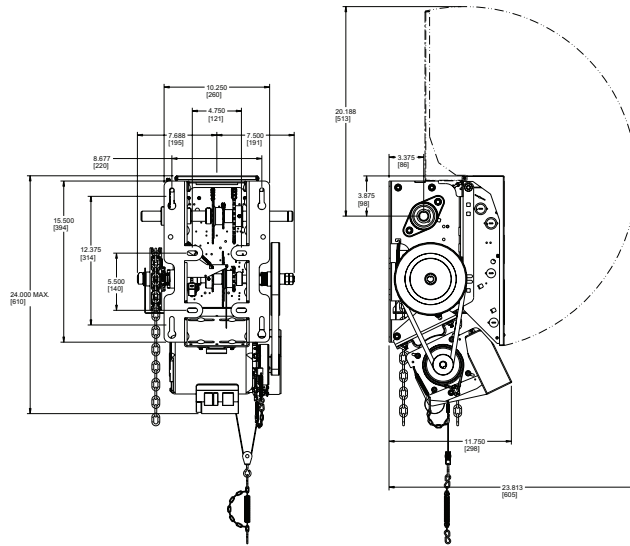
Wall or hood mounting bracket, chain spreader, etc...consult inside sales.

• Mechanical Modifications:

Left hand chain hoist, limit shaft speed-up, cogged v-belt, etc...consult inside sales.

Dimensions

Clearance: Side room required 16" (460 mm)



Operator Range and Pricing (Ex: MO-OSH-6112-0E00)

Code	Circuit Type	HP	Volts	Ph	Amp
MO-OSH-6112-0	E	1/2	120	1	8.0
MO-OSH-6212-0	E	1/2	240	1	4.0
MO-OSH-6232-0	E	1/2	208	3	2.1
MO-OSH-6432-0	E	1/2	480	3	1.0
MO-OSH-6532-0	E	1/2	600	3	0.8
MO-OSH-6113-0	E	3/4	120	1	11.2
MO-OSH-6213-0	E	3/4	240	1	5.6
MO-OSH-6233-0	E	3/4	208	3	3.2
MO-OSH-6433-0	E	3/4	480	3	1.5
MO-OSH-6533-0	E	3/4	600	3	1.2
MO-OSH-6114-0	E	1	120	1	13.6
MO-OSH-6214-0	E	1	240	1	6.8
MO-OSH-6234-0	E	1	208	3	4.4
MO-OSH-6434-0	E	1	480	3	2.1
MO-OSH-6534-0	E	1	600	3	1.6

Door sprocket up to 50B42 (1-1/4" Bore, 1/4" Keyway)

Other sprocket combinations

Hand chain for door shaft >14'

CHAINKIT002 Disc. chain 14' extension

CHAINKIT004 Disc. chain 28' extension

Options

Code	Description
(M) Version	Monit.+N1 M-Photo Cells
SPREADER001	Spreader for 1" / 1" ⁽¹⁾
SPREADER002	Spreader for 1" / 1-1/4" ⁽¹⁾
RADIOEM101	1-button transmitter
RADIOEM102	3-button key chain transmitter
RADIOEM103	3-button transmitter (SD/MD)
RADIOEM104	4-button transmitter, 4 doors
RADIOEM144	3-button transmitter, 144 doors

⁽¹⁾ **Note:** The use of a chain spreader is recommended on all jackshaft operators.

Accu-Cam is a Registered T.M. of Manaras-Opera
Dyna-Hoist is a Registered T.M. of Raynor Canada Corp.

Richards-Wilcox Dyna-Hoist®
SS MO-OSH 2020/01/01 Rev 0 - Printed in Canada
Pricing and technical data subject to change without notice

Product Specification Sheet

Model MO-OGH Jackshaft Operator

Dyna-Hoist®



Standard Features

- **Motor:**

60Hz high starting torque, continuous-duty, single phase capacitor start or 3 phase motor, open drip proof with enclosed ends or drip cover, 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 for the operator drive shaft. Door sprocket selected for a door travel of 6"/s to 12"/s.

- **Brake:**

Electrically activated drum-band type solenoid brake.

- **Manual Operation:**

Hoist-a-matic® self-engaging hoist (floor level engagement device is not required to operate), for manual chain operation. An electrical interlock automatically disconnects power to the motor operator when 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. 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:**

Reducer, control enclosure and frames protected by baked on, long lasting enamel finish. Limit and hoist shafts protected by yellow chromate coating.

- **Mounting:**

Wall mounted, vertical front of hood mounted or horizontal top of hood mounted, on the right or the left of the door. The use of a wall mounting bracket is recommended. For indoor use only.

- **Shipping Weight:**

Approx. 122 lbs - 55 kg.

- **Warranty:**

2 Years.

Hoist-a-matic®

Self-engaging chain hoist with automatic cut-off

Accu-cam® Limit Feature

For precise and quick one-hand limit setting adjustments



The MO-OGH model is a heavy-duty worm gear industrial operator designed for use on industrial standard, high and vertical lift sectional doors or rolling doors and grilles.

The operator can be wall, hood, or shelf mounted on either side of the door. It incorporates the patented Hoist-a-matic®, a self-engaging chain hoist for manual operation, which simplifies operation and installation.

The operator is available with the Electronic Control Board (BOARD 070) with or without the option of electrical control for monitored external entrapment protection devices (ANSI/CAN/UL325 compliant).

Product Specification Sheet

Model MO-OGH
25 cycles/hour >80 cycles/day

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: ANSI/CAN/UL325 and CAN-CSA C22.2 No.247.

• "E" Version:

No monitoring function.
Certifications: CAN-CSA C22.2 No.247 and compliant to UL325 5th Ed. PRIOR to August 2010 revision.

Note: ANSI/CAN/UL325 and CAN-CSA C22.2 No.247 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, 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.

• Friction Clutch (Optional):

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

• Mechanical Accessories:

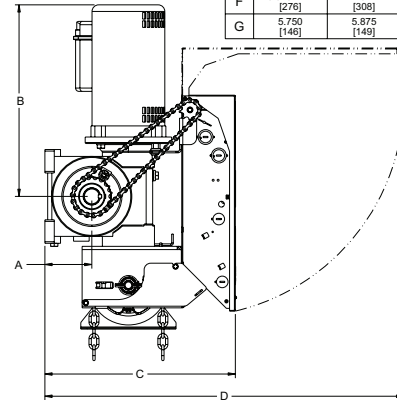
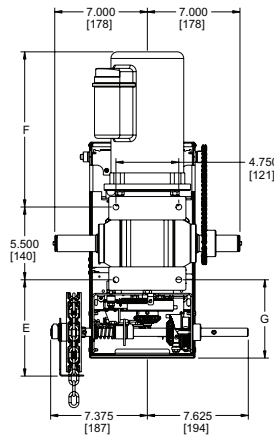
Wall or hood mounting bracket, chain spreader, etc...consult inside sales.

• Mechanical Modifications:

Left hand chain hoist, #60 roller chain, sprocket on final drive, limit shaft speed-up, etc... consult inside sales.

Dimensions

Clearance: Side room required 15" (380 mm)
With friction clutch add: 1.5" (38 mm)



	UP TO 1 HP	1.5 & 2 HP
A	3.000 [76]	3.500 [89]
B	13.625 MAX. [346]	14.875 MAX. [378]
C	14.000 [356]	14.625 [371]
D	26.500 [673]	27.125 [689]
E	7.250 [184]	7.375 [187]
F	10.875 MAX. [276]	12.125 MAX. [308]
G	5.750 [146]	5.875 [149]

Operator Range and Pricing (Ex: MO-OGH-6112-0E00)

Code	Circuit Type	HP	Volts	Ph	Amp
MO-OGH-6112-0	E	1/2	120	1	8.6
MO-OGH-6212-0	E	1/2	240	1	4.1
MO-OGH-6232-0	E	1/2	208	3	2.2
MO-OGH-6432-0	E	1/2	480	3	1.1
MO-OGH-6113-0	E	3/4	120	1	10.4
MO-OGH-6213-0	E	3/4	240	1	5.2
MO-OGH-6233-0	E	3/4	208	3	2.8
MO-OGH-6433-0	E	3/4	480	3	1.4
MO-OGH-6533-0	E	3/4	600	3	1.1
MO-OGH-6114-0	E	1	120	1	13.4
MO-OGH-6214-0	E	1	240	1	6.7
MO-OGH-6234-0	E	1	208	3	3.4
MO-OGH-6434-0	E	1	480	3	1.7
MO-OGH-6534-0	E	1	600	3	1.4
MO-OGH-6115-0	E	1-1/2	120	1	18.6
MO-OGH-6215-0	E	1-1/2	240	1	9.3
MO-OGH-6235-0	E	1-1/2	208	3	4.8
MO-OGH-6435-0	E	1-1/2	480	3	2.4
MO-OGH-6535-0	E	1-1/2	600	3	1.9
MO-OGH-6236-0	E	2	208	3	6.2
MO-OGH-6436-0	E	2	480	3	3.1
MO-OGH-6536-0	E	2	600	3	2.5

Door sprocket up to 50B42 (1-1/4" Bore, 1/4" Keyway)
Other sprocket combinations
Hand chain for door shaft >14'

Options

Code	Description
(M) Version	Monit.+N1 M-Photo Cells
BRACKET111	Hood mounting angle bracket
BRACKET112	Wall mounting stud bracket
SPREADER001	Spreader for 1" / 1" ⁽¹⁾
SPREADER002	Spreader for 1" / 1-1/4" ⁽¹⁾
SPREADER003	Spreader for 1-1/4" / 1-1/4" ⁽¹⁾
RADIOEM101	1-button transmitter
RADIOEM102	3-button key chain transmitter
RADIOEM103	3-button transmitter (SD/MD)
RADIOEM104	4-button transmitter, 4 doors
RADIOEM144	3-button transmitter, 144 doors

⁽¹⁾ **Note:** The use of a chain spreader is recommended on all jackshaft operators.
Not available when using a friction clutch.

Accu-Cam / Hoist-a-matic are Registered T.M. of Manaras-Opera
Dyna-Hoist is a Registered T.M. of Raynor Canada Corp.

Richards-Wilcox Dyna-Hoist®
SS MO-OGH 2020/01/01 Rev 0 - Printed in Canada
Pricing and technical data subject to change without notice

Product Specification Sheet

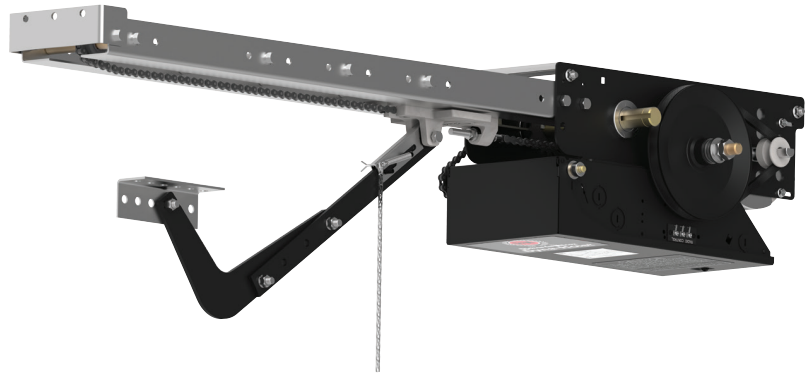
Model MO-OMT Trolley Operator

Dyna-Hoist®



Standard Features

- **Motor:**
1/2HP, 120V single phase intermittent-duty, open type motor with instant reverse and internal automatic reset thermal overload protection (60Hz). Removable without affecting limit switch settings.
- **Reduction:**
First step in reduction 4L/A V-belt drive, additional step by #48 (#410) chain and sprockets. Input shaft is 5/8", supported by ball bearings. Output shaft is 1", supported by ball bearings. Output shaft speed: 112 rpm for a door travel of 11"/s.
- **Drive and Trolley Assembly:**
#48 (#410) 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 14Ft). Track spacers 3/4" steel shaft. Trolley made of cast aluminum alloy including a chain tension adjustment device.
- **Clutch:**
Friction type, positioned on input shaft, easily adjustable from outside.
- **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 6.125" headroom clearance required below the tracks. For indoor use only.
- **Shipping Weight:**
Approx. 60 lbs - 27 kg. + tracks.
- **Warranty:**
2 Years.



Low Headroom Design

Requires only 6.125" of headroom clearance below the tracks

Accu-cam® Limit Feature

For precise and quick one-hand limit setting adjustments

Hinged Cover

For easy access to components and wiring

Instant Reverse Motor

With internal automatic reset thermal overload protection

Quick Release Disconnect Arm

For manual push-up operation

The MO-OMT model is a medium-duty trolley operator designed for use on smaller and low-cycling industrial standard lift sectional doors.

It features a high starting torque intermittent-duty industrial type motor and a quick release disconnect arm.

The operator is available with the Electronic Control Board (BOARD 070) with or without the option of electrical control for monitored external entrapment protection devices (ANSI/CAN/UL325 compliant).

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: ANSI/CAN/UL325 and CAN-CSA C22.2 No.247.

• "E" Version:

No monitoring function. Certifications: CAN-CSA C22.2 No.247 and compliant to UL325 5th Ed. PRIOR to August 2010 revision.

Note: ANSI/CAN/UL325 and CAN-CSA C22.2 No.247 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, universal auxiliary output module. 2A fuse protected 24Vdc output is available for accessory power supply. NEMA 4/12 or NEMA 4X protected monitored photo cells upgrade available.

• Electrical Modifications:

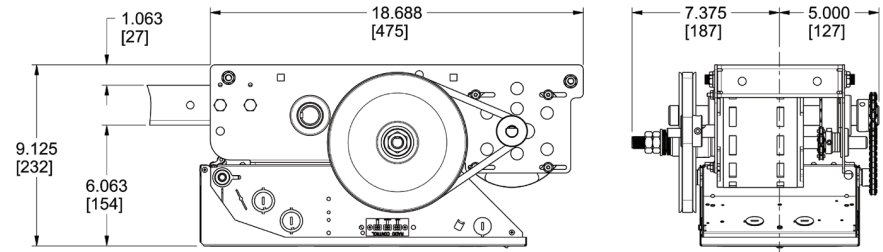
Warning light wiring, etc...consult inside sales.

Dimensions

Maximum Door Height: 14' (4260 mm)

Back Room: Door height + 3'11" (1175 mm)

Head Room For Tracks: 5" (127 mm) above the highest point of door travel



Operator Range and Pricing (Ex: MO-OMT-6112-0E00)

Code	Circuit Type	HP	Volts	Ph	Amp
MO-OMT-6112-0	E	1/2	120	1	5.0

Track Hardware #48 (#410) chain

Track hardware up to 12' door height
Additional track hardware >12' high

Options

Code	Description
(M) Version	Monit.+N1 M-Photo Cells
KEYLESS042	Wireless exterior digital keypad
RADIOEM101	1-button transmitter
RADIOEM102	3-button key chain transmitter
RADIOEM103	3-button transmitter (SD/MD)
RADIOEM104	4-button transmitter, 4 doors
RADIOEM144	3-button transmitter, 144 doors

Product Specification Sheet

Model MO-OTBH Trolley Operator

Dyna-Hoist®



Standard Features

- **Motor:**

60Hz high starting torque, continuous-duty, single phase capacitor start or 3 phase motor, open drip proof, protected against overload.

- **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. For indoor use only.

- **Shipping Weight:**

Approx. 73 lbs - 33 kg + tracks.

- **Warranty:**

2 Years.



Low Headroom Design

Requires only 6.25" of headroom clearance below the tracks

Accu-cam® Limit Feature

For precise and quick one-hand limit setting adjustments

Solenoid Brake

Drum-band type solenoid brake

Hinged Cover

For easy access to components and wiring

The MO-OTBH model 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.

The operator is available with the Electronic Control Board (BOARD 070) with or without the option of electrical control for monitored external entrapment protection devices (ANSI/CAN/UL325 compliant).

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: ANSI/CAN/UL325 and CAN-CSA C22.2 No.247.

• "E" Version:

No monitoring function. Certifications: CAN-CSA C22.2 No.247 and compliant to UL325 5th Ed. PRIOR to August 2010 revision.

Note: ANSI/CAN/UL325 and CAN-CSA C22.2 No.247 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, 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.

• Mechanical Modifications:

Dual trolley drive, trolley hoist, double v-belt, cogged 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, minimum depth mounting, etc...consult inside sales.

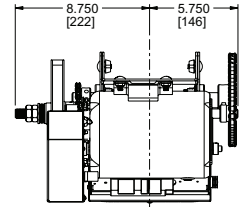
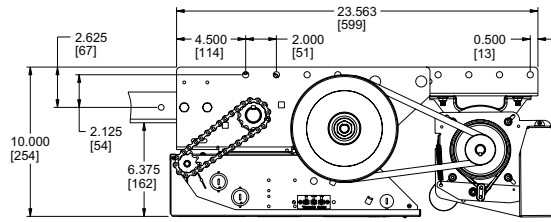
• Electrical Modifications:

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

Dimensions

Back Room: Door height + 4'5" (1350 mm)

Head Room For Tracks: 5.625" (143 mm) above the highest point of door travel



Operator Range and Pricing (Ex: MO-OTBH-6112-0E00)

Code	Circuit Type	HP	Volts	Ph	Amp
MO-OTBH-6112-0	E	1/2	120	1	8.0
MO-OTBH-6212-0	E	1/2	240	1	4.0
MO-OTBH-6232-0	E	1/2	208	3	2.1
MO-OTBH-6432-0	E	1/2	480	3	1.0
MO-OTBH-6532-0	E	1/2	600	3	0.8
MO-OTBH-6113-1	E	3/4	120	1	11.2
MO-OTBH-6213-1	E	3/4	240	1	5.6
MO-OTBH-6233-1	E	3/4	208	3	3.2
MO-OTBH-6433-1	E	3/4	480	3	1.5
MO-OTBH-6533-1	E	3/4	600	3	1.2
MO-OTBH-6114-1	E	1	120	1	13.6
MO-OTBH-6214-1	E	1	240	1	6.8
MO-OTBH-6234-1	E	1	208	3	4.4
MO-OTBH-6434-1	E	1	480	3	2.1
MO-OTBH-6534-1	E	1	600	3	1.6

Track Hardware #48 (#410) chain, 1/2HP #41 chain, 3/4 - 1HP

Track hardware up to 12' door height
Additional track hardware >12' high

Options

Code	Description
(M) Version	Monit.+N1 M-Photo Cells
RADIOEM101	1-button transmitter
RADIOEM102	3-button key chain transmitter
RADIOEM103	3-button transmitter (SD/MD)
RADIOEM104	4-button transmitter, 4 doors
RADIOEM144	3-button transmitter, 144 doors
RADIORE102	Ext. receiver 1000Tx



PART #	DESCRIPTION
PHOTO075	Ip67 Retro-Reflect Photo Cell
PHOTO070	Monitored Photo Tr-Rec N1
PHOTO061	Monitored Photo Tr-Rec N4x + Soft Brkt
PHOTO065	Monitored Retro Reflect Photo Nema 4x
SENSEEDGE045A	Rubber Profile 22mm & Dble C
AIRSWITCH016	Airwave Switch Noc Ip65
AIRSWITCH017	Airwave Wireless Switch Noc N4
MOD084B	Airswitch017 Factory Installed In Operator
COIL001	Curly Cord 2wire 18awg 20ft Ext
COIL005	Curly Cord 2wire 18awg 14ft Ext
REELITE003	Reelite 30' Cord 3 Wire Metal
REELITE005	Metal 20'Cord 2 Wire Reelite
SENSEEDGE044U	Me123-2w Black Univ. Mount
SENSEMOUNT001B	Mt. Channel Me123 "L" Shape
SPREADER001	Spreader Bar 1"-1"
SPREADER002	Spreader Bar 1-11/4
SPREADER003	Spreader Bar 1 1/4-11/4
BRACKET111	Hood Mounting Angle Bracket Ms
BRACKET112	Wall Mounting Stud Bracket
RADIOEM101	1 Button Transmitter
RADIOEM102	3-Buttons Mini Transmitter
RADIOEM103MD	3 Button Transmitter 3x Sb-Config
RADIOEM103SD	3 Button Transmitter O/C/S-Config
RADIOEM104	4-Buttons Transmitter 4x Sb-Config
RADIOEM144	144-Doors Remote Open/Close/Stop
KEYLESS042	Wireless Keypad Tansmitter + Ins
LOOP035A	Loop Detector 9vdc-240vac + Harness
LOOP015	Pre-Formed Pave-Over Loop 4'X8' 50ft Leads
LOOP027	Pre-Formed Sawcut Loop 4'X8' 50ft Leads
TRAFFIC047A	Tr-Light Red&Green 3"3/4 Led 24vdc
LEDSTRIP001	14" Led Strip 24vdc
LEDSTRIP002	27" Led Strip 24vdc
LEDSTRIP003	46" Led Strip 24vdc
LEDSTRIP004	96" Led Strip 24vdc
MOD027B1	Red&Green 24v W.light Control Module
MOD168A	24vdc R&G Ledstrip Control Module