

The Genuine. The Original.



## RSX™ Commercial Operator

An innovative line of Standard Duty Commercial Operators that improve the productivity of any facility.

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# RSX™ Operator

## Standard Duty Commercial Operator

Advanced Innovation and Superior Functionality

RSX™ Standard Duty Operators provide easy operation with superior functionality for the most stringent applications.

### The RSX™ offers new state-of-the-art performance features:

- **Easy limit setting with Limit Lock™** – a patent-pending electro/mechanical limit sensor that makes it easy to set and maintain limits\*
- **Voltage freedom with Voltamatic™** – one unit for single phase voltages (115/208/230V), one unit for three phase voltages (208/230/460V) and one unit for three phase 575V
- **Extra door system durability with Progressive Braking\*\*** – DC brake system brings the door to a soft stop for less wear and tear on the system
- **Easy installation and trouble-shooting with Einstein Logic™** – intelligent menu structure and expanded self-diagnostics
- **Extra safety and security with Advanced Radio Receiver System** – stores up to 250 CodeDodger® transmitters including the new commercial dual frequency cycling versions\*
- **No adjustment needed with Super Belt™** – automatically adjusts itself to the correct tension\*



\*patent pending

\*\*patents # 6,737,823 and # 6,388,412

## RSX™ Advantages

### Mounting

A wide variety of mounting options are available to fit any application including:

**Sectional Doors:** Trolley, Sidemount Trolley, and Dual Trolley. Trolley available with or without brake (no brake models available in 1/2 horsepower models only). Sidemount and Centermount direct couple to the door shaft with or without hoist. Hoist models are left-hand or right-hand.

**Rolling Steel Doors:** With or without hoist, front of hood, top of hood, wall-mount. Hoist models are left-hand or right-hand.

### Motor

Continuous duty motor available in 1/2, 3/4 and 1 horsepower, single or three-phase. Totally enclosed non-ventilated (TENV) construction and totally enclosed fan cooled (TEFC) construction units are available as options.

### On Board Radio Receiver

This standard feature can add radio functionality to every job with no additional cost for the receiver.

### Drive Reduction

Primary reduction is Super Belt™, an auto tension poly-V flex belt that does not require adjustment. Secondary reduction is by chain and sprocket.

### Direct Coupling

Provides fast, easy installation with fewer parts and better structured support. Prevents chain slacking. Available on sectional side/centermount jackshaft and hoist units.

### Mechanical Brake System

24V DC Disc Brake. Fewer mechanical parts for improved reliability.

### Clutch

Adjustable disc-type helps protect door and operator from major damage should the door meet an obstruction.

### Cycle Counter

LCD (Liquid Crystal Display) clearly indicates the exact number of cycles logged for easy maintenance support.

### Adjustable Shaft

Output shaft can be moved from one side to the other, providing flexible installation options.

### Trolley Rail Assembly

High strength 2 inches rolled angle track for added strength and durability.

### NEMA 4/4X Operators (Optional)

Available for wet, dusty and corrosive environments.

### New CodeDodger® Commercial Dual Frequency Cycling Transmitters (Optional)

Available in 1, 2, 3, 4-button and Open/Close/Stop versions. Automatically operates at both 315 and 390 MHz every time a button is pressed.

### Warranty

RSX™ operator features a 2-year or 20,000 cycle limited warranty. See installation manual for complete limitations and details.

# RSX™ Operator

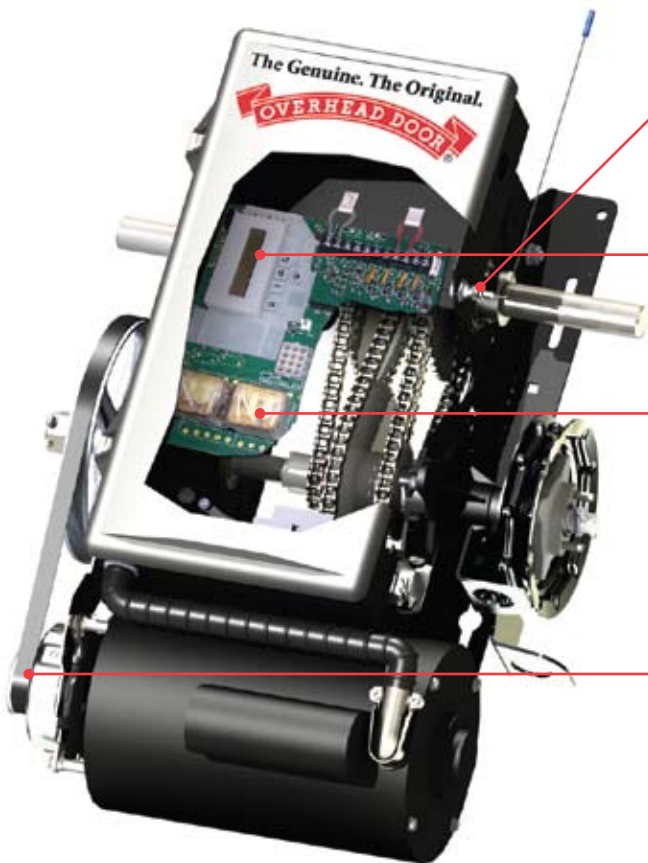
## Standard Duty Commercial Operator

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### Advanced Radio Receiver System

Provides additional safety and security.

### Einstein Logic™

Simplifies installation and troubleshooting.

### Voltage freedom with Voltamatic™

Voltamatic™ provides 115/208/230V single phase in one unit, and 208/230/460V three phase in another unit. A separate 575V three phase unit is also available.

### Super Belt™ Auto-Tensioning Belt

Automatically adjusts itself to the correct tension so no adjustments are needed.

### Progressive Braking

An advanced DC brake system similar to "anti-lock" brakes bringing the door to a soft stop for less wear and tear on the system.

### Limit Lock™

Makes setting and maintaining limits easy.

# RSX™ Operator Selection Charts

## RSX™ Sectional Door Chart (Sq. Ft.)

Model	HP	UL Listed	Commercial Steel Insulated & Non-Insulated										Thermacore						Aluminum		
			Door Series >		416	418	420	422	424	426	430	432	591	592	593	594	595	598	599	511	521
			Mounting Type	Max. Door Weight (Lbs)	16GA. Flush Steel	16GA. Flush Steel Insulated	20GA. Ribbed Steel	20GA. Ribbed Steel Insulated	24GA. Ribbed Steel	24GA. Ribbed Steel Insulated	Nominal 24GA. Ribbed Steel	Nominal 24GA. Ribbed Steel Insulated	Ribbed Steel 1 5/8"	Ribbed Steel 2"	Ribbed Steel 1 3/8"	Raised Panel Steel 1 3/8"	20GA. Flush Steel 1 5/8"	Ribbed Steel 1"	Flush Steel 2"		
RSX™	1/2	Yes	TSC	1120	294	230	366	294	448	330	326	326	406	406	326	326	366	200	406	326	406
RSX™	3/4	Yes	TSC	1370	366	294	448	366	490	406	326	326	490	448	326	326	406	200	448	326	506
RSX™	1	Yes	TSC	1620	448	366	536	448	536	490	326	326	591	494	326	326	450	200	494	326	526

T = Trolley

S = Jackshaft, Side Mount

C = Jackshaft, Center Mount

**Note:** Total door weight, and not the square footage, is the critical factor in selecting the proper operator. Square foot measurements are based on "square doors" (Example = 16' x 16')

**Note:** Doors that require special windloading and wide doors normally require increased strutting (reinforcement). Strutting doors can significantly increase door weight, beyond maximum weight shown. Consult the technical support group at 1-800-275-6187.

## RSX™ Rolling Steel Door Chart (Sq. Ft.)





Model	HP	UL Listed	Rolling Steel Doors										Rolling Fire Doors/Fire Shutters				Counter Doors	Grilles	
			600	610/620			615/616	625				630**/631**/634**				640/641	650/651/652	670	671
			Collaway	22GA.	20GA.	18GA.	24GA.	24GA.	22GA.	20GA.	18GA.	24GA.	22GA.	20GA.	18GA.	22GA.	22GA./Alum	Alum	Steel
RSX™	1/2	Yes	256*	292	255	194	267	179	156	145	123	172	168	255	194	N/A	All*	450	156
RSX™	3/4	Yes	256*	375	327	249	267	230	200	185	158	172	168	327	249	N/A	All*	500	215
RSX™	1	Yes	256*	480	419	319	267	294	256	237	202	172	168	419	319	N/A	All*	600	285

**Note:** RSX™ Maximum Door Height 24 ft.

\* Operator must be wall mounted.

\*\* Must use the Auxiliary Input/Output Module part number OPABIOX.S.

## Optional Accessories

Accessory	Description
 <p>Transmitters</p>	<p>The RSX operator features a build-in Radio Receiver System that can store up to 250 transmitters, giving the customer the ability to identify which transmitters have been operating the door. Radio transmitters may be single-button, two-button, three-button, four-button, or Open-Close-Stop. They are easily programmed or erased using the LCD display. The patented CodeDodger® technology cycles between 315 and 390 MHz with the touch of a button.</p>
 <p>Motors</p>	<p>The following motors are available when specified:</p> <ul style="list-style-type: none"> <li>Totally Enclosed Non Ventilated (TENV)</li> <li>Totally Enclosed Fan Cooled (TEFV)</li> </ul>
 <p>Auxiliary Modules</p>	<ul style="list-style-type: none"> <li><b>Timer to Close Module</b> – provides auxiliary control inputs, auxiliary safety inputs auxiliary timer hold input, and an automatic door closing feature with a user-selectable time delay. Safety inputs can be enabled or disabled using the on board keypad. A sensing device must be used with this module.</li> <li><b>Auxiliary Output Module</b> – this plug-in module will provide several auxiliary sets of dry contacts that are microprocessor controlled. Outputs can be configured using the on-board keypad.</li> </ul>
 <p>Sensing Devices</p>	<ul style="list-style-type: none"> <li><b>Safe-T-Beam®</b> – senses an obstruction and signals the operator to stop or reverse the door.</li> <li><b>Bottom Sensing Edge</b> – stop and reverses the door upon contact with an obstruction.</li> </ul>



## Standard Duty Commercial Operator

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### Specifications

#### Part 1 – General

- |                        |  |
|------------------------|--|
| 1.01 Work Included     | A Provide electric door operator(s) of size and capacity recommended for door(s) as provided by door manufacturer with electric motor and factory pre-wired motor controls, starter, reduction unit, band brake (option on trolley units for without brake model), clutch, control devices, and accessories required for proper operation. |
| 1.02 Related Work      | A Opening preparation, miscellaneous or structural metal work, access, field electrical wiring, wire, conduit, fuses and disconnect switches are in the Scope of Work of other divisions or trades.  |
| 1.03 Quality Assurance | A In accordance with accepted quality assurance guidelines for motor-operated doors, both the door and electric operator shall be manufactured by a single-source producer of door systems, such as by Overhead Door Corporation.  |

#### Part 2 – Product

- |   |  |
|---|--|
| 2.01 General                                    | <p>A The electric door operator shall be the standard-duty Model RSX™ door control system for a (standard lift) (lift-clearance), (full-vertical) sectional door and /or (rolling steel door) and /or (rolling steel grille) as manufactured by Overhead Door Corporation and suitable for the type and size of door specified.</p> <p>B The electric operator shall be (single phase) (three phase) with Voltamatic™ - the ability to adjust to the correct voltage of (115/208/230 for single phase) (208/230/460 for three phase) without removal/addition of any parts. (The electric operator shall be 575vac three phase).</p> <p>C All components to have corrosion resistant coatings.</p> <p>D The operator shall be suited for NEMA ICS 6 Type 1 (NEMA ICS 6 Type 4) (NEMA ICS 6 Type 4X) environment.</p> |
| 2.02 Motor                                      | <p>A Motor shall be:</p> <ul style="list-style-type: none"> <li>a. (1/2 horsepower single phase or three phase with automatic thermal reset overload)</li> <li>b. (3/4 horsepower or 1 horsepower single phase with manual reset thermal overload)</li> <li>c. (3/4 horsepower or 1 horsepower three phase with automatic thermal reset overload)</li> </ul> <p>Motor frame shall comply with NEMA (48 for 1/2hp single phase) (56 for 1/2 three phase, ¾ &amp; 1hp all phases), (open drip-proof construction) (Totally Enclosed Non Ventilated – TENV construction) (Totally Enclosed Fan Cooled – TEFC construction).</p>   |
| 2.03 Reduction                                  | A Primary reduction is Super Belt™, an auto tension poly-V flex belt that does not require adjustment. Secondary reduction is by chain and sprocket.   |
| 2.04 Duty Cycle                                 | A Duty cycle shall accommodate standard duty usage up to 60 cycles per hour during peak usage periods.   |
| 2.05 Brake (Optional without on certain models) | A Brake shall be a DC Disc type with selectable Progressive Braking for smooth stopping.   |
| 2.06 Clutch                                     | A Clutch shall be adjustable friction disc type standard on all versions.  |
| 2.07 Limit System                               | A The Limit Lock™ limit system shall be magnetic type providing absolute positioning with push to set and remote setting capabilities for initial installation. The Limit System shall remain synchronized with the door during manual operation and supply power interruptions.   |

## Specifications (continued)

### Part 2 – Product (continued)

2.08 Control System	<p>A The control system shall be microprocessor based with relay motor controls on a single board. This system will incorporate Einstein Logic™, with a 16 character Liquid Crystal Display (LCD) to display the system status. This system shall be capable of monitoring and reporting on a variety of operating conditions, including: Current operating status, Current command status, Motor movement status, Current error status (if applicable), Hoist Interlock status (if applicable), External Interlock status, 24 VDC status.</p> <p>B The control system shall feature a delay-on-reverse operating protocol.</p> <p>C The system shall include maximum run timers in both directions of travel that limit motor run time in the event the clutch slips or some other problem occurs.</p> <p>D It shall include provisions for the connection of a 2-wire monitored photocell system as well as standard 2-wire sensing edges, photocells or other entrapment protection devices.</p> <p>E The system shall include provisions for connection of single and/or 3-button control stations.</p> <p>F The control system will include a CodeDodger® radio receiver that is dual frequency cycling at 315 MHz and 390 MHz capable of storing 250 single button and/or 250 Open-Close-Stop transmitters with the ability to add and/or delete transmitters individually, identify and store activating transmitter ID(s).</p> <p>G The system shall include provisions for connection of an external 3-wire radio controls and related control devices.</p> <p>H The control system shall include on board open, close and stop control keys.</p> <p>I Trolley operators shall include an inherent secondary reversal system.</p>
2.09 Mounting	<p>A Mounting for Sectional doors shall be by (Jackshaft that is side-mounted with (chain/sprocket) (direct shaft-to-shaft) coupling to door) (Trolley) (Side-mount trolley) (Dual trolley).</p> <p>B Mounting for Rolling Steel doors shall be (front of hood) (top of hood) (wall- mount) and chain/sprocket coupling to door.</p> <p>C Mounting for Hoist models shall be (Left Hand) (Right Hand).</p> <p>D (Side-mount) (Center-mount) operator shall be adjustable for mounting directly, shaft to shaft, to the door shaft center distance off the wall at (3-3/4") (5") (6").</p>
2.10 Release	<p>A (Release shall be a pull and hold type mechanism with single cable operation and an integrated interlock switch on hoist units.) (Release shall consist of a manual disconnect door arm on trolley units.)</p>
2.11 Hoist (Optional)	<p>A Chain hoist shall consist of chain pocket wheel, chain guard and smooth hand chain on hoist units.</p>
2.12 Secondary Reversal	<p>A Trolley version only shall include an integral electronic reversing system that will stop and reverse a closing door upon detection of an obstruction and designed to accept an optional external reversing device.</p> <p>B (Jackshaft) (Hoist) (Rolling Steel) versions shall be designed to accept an optional external reversing device. <b>NOT FOR RESIDENTIAL USE</b></p>
2.13 Optional Control Accessories	<p>A Operator Accessories shall be Timer to Close and will provide auxiliary control inputs, auxiliary safety inputs, auxiliary timer hold input, and an automatic door closing feature with a user selectable time delay. Safety inputs are to be enabled or disabled using the on board keypad.</p> <p>B Control accessories: In (lieu of) (addition to) (interior pushbutton control station) (exterior pushbutton control station) (interior key switches) (exterior key switches) (radio control) (OHD monitored photo electric eyes) (commercial photo electric eyes) (floor loops) (motion sensors).</p> <p>C Operator Accessories shall be Auxiliary Output Module and will provide several auxiliary sets of dry contacts that are microprocessor controlled. Outputs can be configured using the on board keypad.</p>

### Part 3 – Execution

The Model RSX™ shall be installed in accordance with Overhead Door Corporation instructions and standards. Installation will be by a trained and authorized Overhead Door Corporation representatives.

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**Note to specifier:**

This specification is a suggested guide. Available options are shown in parentheses.

## The Service and Support You Need – When You Need Them

When you select an Overhead Door product, you get more than advanced product design and manufacturing superiority – you get unmatched support and fast response through our nationwide network of nearly 500 certified Ribbon Distributors. For over four generations, Ribbon Distributors have provided the industry's single-source solution for commercial and industrial door and operator systems specifically designed for integrated applications. From design and application consulting to installation and ongoing maintenance, Overhead Door Ribbon Distributors give you the service and support you need – when you need them.

### Warranty



RSX™ Commercial Operator is guaranteed with a 2-year or 20,000 cycle limited warranty. See complete warranty terms for full limitations and details.

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**1-800-929-DOOR**  
**www.OverheadDoor.com**

**Technical Support**  
**1-800-275-6187**



Complies with UL 325  
as of manufactured date.  
FCC Certified.

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