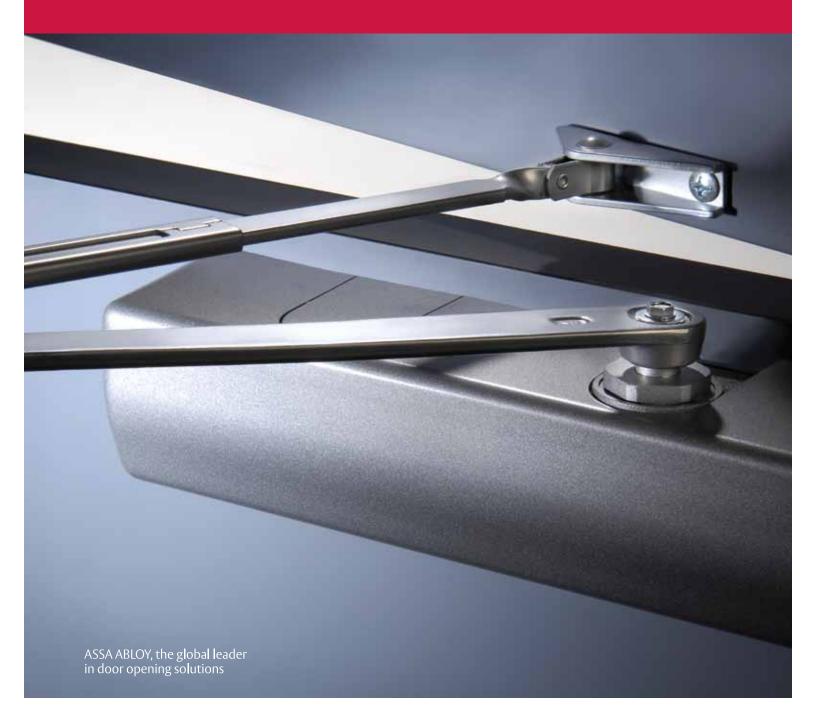


# DC3000 Series

Door Closers





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# Applications

### DC3000 Series

### Applications

The mid-priced, cost-effective choice for high-traffic situations. The DC3000 Series Door Closers fulfill security and life safety requirements by ensuring reliable latching for access control and fire code compliance, along with ease of operation and precise adjustability for barrier-free code compliance. Ideal for virtually all door openings and draft conditions in both new construction and renovations, including:

- Schools and universities
- Health care
- Government
- Commercial and industrial
- Office and retail
- Transportation and utilities
- Hotels and conference centers
- Religious

### Advantages

- Meets or exceeds ANSI/BHMA A156.4 Grade 1 requirements
- Compliance with building and barrier-free codes
  Up to full 180° door opening



- One-piece seamless steel spring tube seals in hydraulic fluid
- Tapered valves allow precise adjustment
- Cast iron body
- Quik-Install<sup>™</sup> mounting bracket speeds installation, reducing cost and errors
- 15-year limited warranty
- UL10C, UBC
- Powder painted arms and retrofit plates

#### www.corbinrusswin.com

## Features DC3000

### **Overview of Features**

Features	DC3200 Closers
Spring power	Multi-sized; Adjustable 1-6
Latching speed valve	Standard
Closing speed valve	Standard
Backcheck intensity valve	Standard
Delayed action valve	Optional
Parallel arm mounting	Optional
Top jamb mounting	Optional
Hold open	Optional
Sex nuts and bolts (SNBs)	Optional
Corrosion protection	Optional
Full cover	Standard
15-year warranty	Standard
Heavy-duty regular arm	Optional
Heavy-duty parallel arm	Optional
Backstop arm	Optional

Finishes				
Old Designation	Description	Specify		
USP	Primed	600		
SBL	Silver Aluminum	689		
LBL	Dark Bronze	690		
DBL	Light Bronze	691		
FBL	Black	693		
GBL	Satin Brass	696		

### Features DC3000

### Features

### Spring Power

Multi-sized; fully adjustable 1 through 6.

### Handing

Non-handed.

### Body

Cast iron case with seamless cold-headed steel spring tube.

### Arm

Standard: forged steel. Optional arms, pages 7 and 8.

### Spindle

Cold-headed heat-treated steel.

### Piston

1-3/8" diameter; Precision machined, heattreated steel.

### Springs

Chrome silicon wire.

### Valves

Latching speed, closing speed and backcheck intensity valves standard. Delayed action valve optional (preset for 20 seconds; between 90° and 70° for all mountings.) To order, specify M71.

### Seals

"O" rings.

### Fluid

Standard high lubricity extreme temperature hydraulic fluid.

### Degree of Opening

Up to full 180° opening standard for regular, top jamb and parallel arm mountings, conditions permitting.

### Power Adjustment Arm Bracket

15% adjustment standard.

### Cover

Non-metallic full cover.

### Mountings

Standard: regular arm and top jamb. Parallel arm or tri-style packaging - specify DC3210 Optional mountings; see page 6.

### Mounting Bracket

Quik-Install<sup>™</sup> mounting bracket standard.

### Fasteners

Standard: self-drilling screws. Optional: sex nuts and bolts (SNBs); Specify M54.

### **Corrosion Protection**

Painted protective coating on all metal surfaces for use in corrosive environments. Specify M75.

### Warranty

15-year limited warranty. Refer to Corbin Russwin price book for details.

### Certification/Compliance



#### Barrier-Free Code Compliance

The DC3000 Series Door Closers listed below conform to the 5 lbf. maximum door opening force requirement for non-fire-rated interior hinged doors, according to:

### Americans with Disabilities Act (ADA)

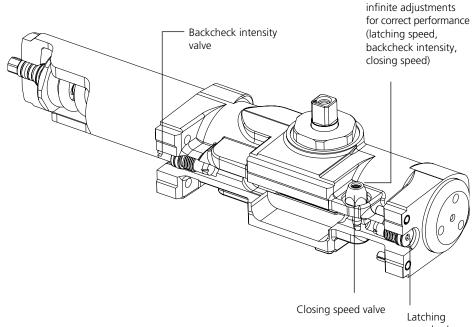
Complies with the Accessibility Guidelines for Buildings and Facilities, Section 4.13.11.

### ANSI/BHMA Certified

A156.4, Grade 1. A117.1.

### UL/ULC/UL10C

Listed for fire and cycle requirements.



speed valve

Tapered valves allow

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Mountings DC3000



### DC3200 Regular Arm Mounting

- Most common mounting, providing the greatest closing efficiency
- Closer is mounted on the pull side, with the arm perpendicular to the face of the door
- Arm bracket is attached to the door frame



### **DC3210** Parallel Arm Mounting

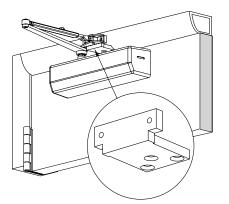
- Allows inside application of closer on out-swinging doors
- Closer is mounted on the push side, with the arm parallel to the face of the door
- Arm does not project from the opening



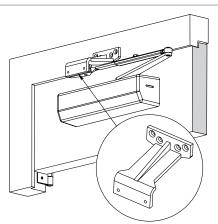
### DC3220 Top Jamb Mounting

- Accommodates reveals up to 3-1/4" (83mm)
- Closer is mounted on the push side, with the arm perpendicular to the face of the door
- Arm bracket is mounted on the door
- Minimum 1-3/4" (44mm) top jamb required

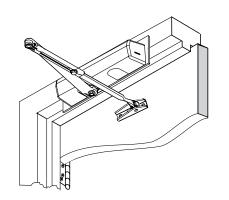
## Mountings DC3000



**Regular Arm Mounting with Mortise Arm Bracket** Used on inadequately reinforced frames, such as those with bull nose trims.

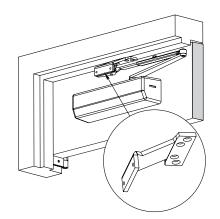


Parallel Arm Mounting with Flush Transom Bracket Allows parallel arm mounting on flush transom applications.

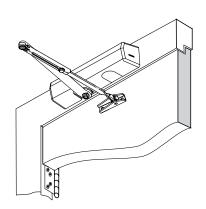


**Narrow Frame Mounting** 

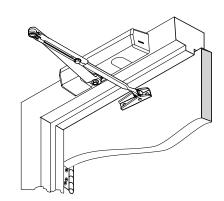
For use when the frame is too narrow for a normal top jamb or top jamb track mounting. (Shown with 188F65 drop plate)



**Parallel Arm with Offset Angle Bracket Mounting** Allows parallel arm mounting when used with an overhead door holder.



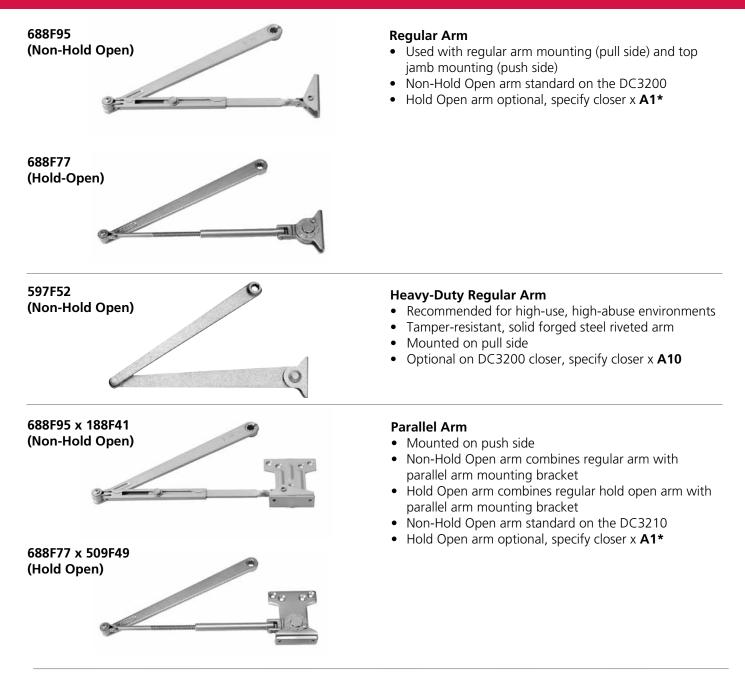
**Top Jamb Flush Transom Mounting** Closer is top jamb mounted on the push side; arm is attached to the door.



**Top Jamb Deep Reveal Mounting** For reveals greater than 3-1/4" (83mm), up to 7-1/4" (184mm).

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# Door Closer Arms DC3000



\*Not allowed by code on fire doors.

# Door Closer Arms

### DC3000



### **Top Jamb**

- Used with top jamb mounting (push side); for reveals up to 3-3/4" (95 mm)
- Non-Hold Open arm standard on the DC3220
- Hold Open arm optional, specify closer x A1\*



### 689F02 (Non-Hold Open)



### **Heavy-Duty Parallel Arm**

- Recommended for high-use, high-abuse environments
- Tamper-resistant, solid forged steel riveted arm
- Mounted on push side
- Optional on DC3210 closers
- Non-hold open arm, specify closer x A3
- Hold open arm, specify closer x A2\*. Hold-open range 85° to 110°

689F01 (Hold Open)



### 689F03 (Non-Hold Open)



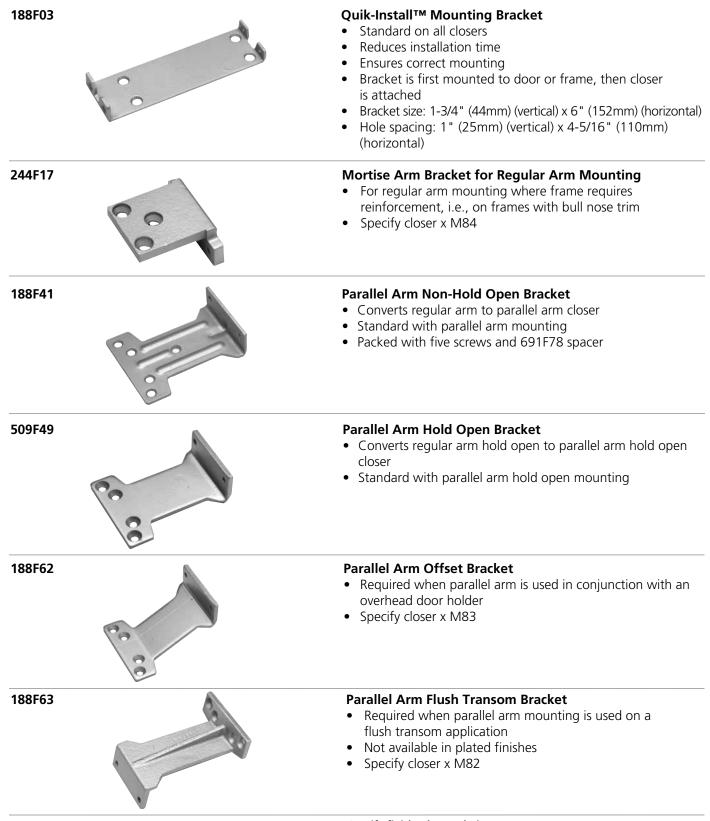


### Heavy-Duty Reversible Backstop Parallel Arm

- Recommended for high-use, high-abuse environments
- Tamper-resistant, solid forged steel riveted arm (mounted on push side)
- Field-reversible steel lug restricts degree of opening to protect door, wall and hardware
- Requires both backcheck valves on closer
- Shipped standard as left hand. Handing can be reversed in the field
- Optional on DC3210 closers
- Non-hold open arm, specify closer x A4. Door stop range 85° to 110°
- Hold open arm, specify closer x **A5**\*. Door stop/hold open range 85° to 110°

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# Mounting Brackets DC3000



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# Brackets and Covers

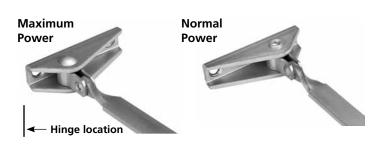
DC3000



### Drop Plate (Option M80)

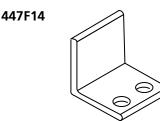
Permits parallel arm or top jamb mounting on door when top rail is too narrow to install closer in the regular manner. Minimum 2" top rail required. Optional on DC3000 closers; see Quick Codes, page 13. To order separately, specify drop plate number x Finish

Closer Series	Drop Plates
Closer series	Full Cover
DC3210	597F58
DC3220	188F65



### **Power Adjustment Arm Bracket**

Standard on all closers without hold open. In regular arm or top jamb mounting, bracket may be reversed to increase closing power 15%.



### Angle Support Bracket and Spacer

- Available separately for mounting of A2, A3, A4 and A5 heavy-duty arms on narrow frame or soffit conditions
- Specify closer x M85

597F78



### Full Cover

- Standard on all DC3000 series door closers
- Completely covers closer body
- Non-handed
- Dimensions: 11-5/8" (295mm) x 3" (76mm) x 2-3/4" (70mm) deep

## Size and Handing DC3000

### Factors in Determining Closer Size

### 1 - Weight and Height of Door

Doors vary in weight from light hollow-core wood doors to heavy metal doors. Door sizes listed in the chart are based on doors of standard weight and height. Extra-light or extra-heavy weight or unusual height must be compensated for.

### 2 - Draft and Wind Conditions

Draft and wind conditions are perhaps the most important factors to consider in determining the closer size required. Sizes listed in the chart apply to normal conditions. Stairwells, air conditioning, building construction, and door location can cause strong draft and wind conditions; these may necessitate adjusting spring power to a larger size or using a closer one size larger.

### 3 - Code Compliance

A multi-sized, fully adjustable closer such as the DC3200 closer provides the greatest flexibility in balancing barrier-free access, security and life safety codes. However, when a manual closer is installed and adjusted to comply with ADA or any other reduced opening force requirements, it may no longer have sufficient power to close and latch the door reliably.

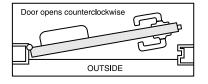
Recommended Door Closer Sizes					
		Recommended			
Mounting	Interior	Exterior In-swinging	Exterior, Out-swinging	Closer Size Adjusted	
	2'4"	-	-	1	
	3'0"	-	-	2	
Regular or Top	3'6'	2'6"	3'0"	3	
Jamb	4'0"	3'0"	3'6"	4	
	4'6"	3'6"	4'0"	5	
	5'0"	4'0"	4'6"	6	
	2'4"	-	-	1	
	2'6"	-	-	2	
Parallel Arm	3'0'	-	2'6"	3	
	3'6"	-	3'0"	4	
	4'0"	-	3'6"	5	
	4'6"	-	4'0"	6	

### Handing

Refers to the direction a door swings; always determined from the outside of the door.

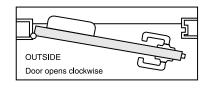
### Regular Mounting

Door: left hand Closer: left hand pull side



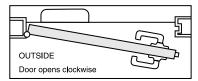
### Parallel Arm Mounting

Door: left hand reverse bevel Closer: right hand push side

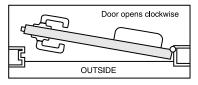


### **Top Jamb Mounting**

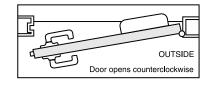
Door: left hand reverse bevel Closer: right hand push side



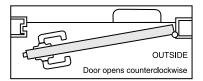
Door: right hand Closer: right hand pull side



Door: right hand reverse bevel Closer: left hand push side



Door: right hand reverse bevel Closer: left hand push side



# How to Order

### **ANSI/BHMA A156.4 Certified Closer Cross Reference**

ANSI/BHMA Number	Function	Series	PT 4A 15% Power Adjustment	PT 4B 35% Power Adjustment	PT 4C 50% Power Adjustment	PT 4D Adjustable Backcheck	PT 4F Delayed Action PT	4G Dead Stop PT	4H Fully Adjustable
CO2011 (PT1)	Hinge Side Mounting	DC3200	5	5	S	S	0	N/A	S
CO2051 (PT1)	Hinge Side Mounting Holder Arm	DC3200-A1	S	S	S	S	0	N/A	S
CO2021 (PT1)	Parallel Arm Mounting	DC3210	S	S	S	S	0	0	S
CO2061 (PT1)	Parallel Arm Mounting Holder Arm	DC3210-A1	S	S	S	S	0	0	S
CO2041 (PT1)	Top Jamb Mounting	DC3220	S	S	S	S	0	N/A	S
CO2081 (PT1)	Top Jamb Mounting Holder Arm	DC3220-A1	S	S	S	S	0	N/A	S
CO2191 (PT1)	Drop Plate for Frames or Narrow Top Rail Doors	DC3220 w/ 188F65	S	S	S	S	0	N/A	S
CO2201 (PT1)	Drop Plate for Parallel Arm Mounting on Narrow Top Rail Doors	DC3210 w/ 188F65 or 597F58	S	S	S	S	0	0	S

ANSI Performance Requirements: (PT 1)- 2,000,000 cycles N/A = not available S = standard O = option available

### **Ordering Examples**

	Stock Order		Contract Order						
Quantity	Series	Finish	Quantity	Series	Arm	Finish	Hand	Door Thickness	Misc. Options
50	DC3200	689	150	DC3220	A1	690	RH	D138	M54

Consult factory if door weight exceeds 250lbs.

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# Quick Codes

Series/Mounting/Size				
Description	Mounting	Specify		
DC3200 Closers Multi-sized; full adjustability from size 1-6	Regular Arm	DC3200		
	Parallel Arm	DC3210		
	Top Jamb	DC3220		

Arm	
Description	Specify
Regular non-hold open	(standard)
Hold open	A1*
Heavy-duty parallel with hold open	A2*
Heavy-duty parallel non-hold open	A3
Heavy-duty backstop non-hold open	A4
Heavy-duty backstop with hold open	A5*
Heavy-duty regular non-hold open	A10

\* Hold Open arms cannot be used on fire doors.

Handing	
Hand	Specify
Right Hand/Left Hand Reverse	RH
Left Hand/Right Hand Reverse	LH

	Finish				
	Description	Specify			
USP	Primed for Painting	600			
SBL	Silver Aluminum Painted	689			
LBL	Dark Bronze Painted	690			
DBL	Light Bronze Painted	691			
FBL	Black Painted	693			
GBL	Satin Brass Painted	696			

Door Thickness			
Door Thickness	Specify		
1-3/4" (44mm)	(standard)		
2" (51mm)	D200		
2-1/4" (57mm)	D214		

Miscellaneous Options	
Description	Specify
Sex nuts and bolts (SNBs) (1-3/4" minimum thickness)	M54
Delayed action	M71
Full cover	(standard)
Corrosion protection	M75
Heavy-duty parallel arm flush transom bracket (499F30) used with A2, A3, A4, A5 arms	M79
Parallel arm flush transom bracket (parallel or A1)	M82
Parallel arm offset bracket	M83
Mortise arm bracket (for regular arm mounting)	M84
Angle support bracket	M85
Extreme temperature fluid	(standard)

Drop Plates - order by number (formerly M80)		
Closer Series	Drop Plate	
DC3210 (parallel)	597F58	
DC3220 (top jamb)	188F65	

Paint (cans)		
Description	Specify	
Silver Aluminum	597F94	
Dark Bronze	597F95	
Light Bronze	597F96	
Satin Brass	597F97	

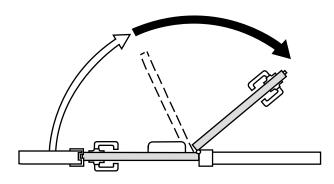
# Helpful Terms DC3000

### Arm

The linkage of a closer that connects the body to the door or frame.

### Backcheck

Slows a door during the opening cycle, by providing cushioned resistance to a forceful opening. Designed to protect people and objects behind the door and to prevent damage to the closer, hardware, and wall. Intensity can be increased or decreased. Not intended to act as a stop.



### **Closing Speed**

The speed at which a door swings from the open position to within a few degrees of latching. See Latching Speed.

### **Corrosion Protection**

Additional painted covering on all external parts to deter oxidation and corrosion.

### **Door Stop**

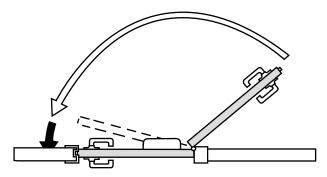
A device to stop the swing of a door.

### **Hold Open**

Maintains door at a particular degree of opening. A mechanical hold open may not be used on labeled fire doors, which must be self-closing.

### Latching Speed

The speed of the door during the last few degrees of closing. Allows latching and prevents slamming.



### Mounting

The method by which a closer is attached to the door and frame.

### **Multi-Sized Closer**

A closer whose spring tube design allows full adjustment of the spring power size from 1 through 6.

### Quik-Install<sup>™</sup> Mounting Bracket

Unique bracket that simplifies installation and minimizes installer fatigue.

### Sex Nuts and Bolts (SNBs)

Thru-bolts required for all non-steel-reinforced fire doors, and recommended for non-reinforced wood and mineral core doors.

#### **Spring Power**

A measurement of closing force, or the ability to overcome draft, air pressure, weight or other resistance to door closing.

### Star Punch

An eight-sided socket hole in the closer arm, permitting spindle pre-loading. Provides full functioning of backcheck and delayed action valves, and additional closing force, on parallel arm mountings.

### **Universal Mounting**

The ability of a closer to accommodate either hand of door for regular, top jamb or parallel arm mounting.

# How to Specify DC3000

### **Suggested Specifications**

All door closers shall be DC3000 Series Door Closers as manufactured by Corbin Russwin Architectural Hardware.

Closers shall be of rack and pinion construction with a triple heat treated cold-formed steel spindle and a steel piston, heat treated and precision machined. Cases shall be of cast iron with a one-piece seamless forged spring tube. A two-piece or seamed spring tube shall not be acceptable. Springs shall be double heat treated and tempered. Closers shall have a heavy-duty, forged steel main arm.

Optional arms shall include parallel, hold open, heavy-duty, heavy-duty hold open, heavy-duty reversible backstop and heavy-duty reversible backstop with hold open.

Closers shall be multi-sized with adjustable spring power to accommodate sizes 1 through 6 in one closer body, such as the Corbin Russwin DC3200 closer. Closing shall be controlled by two valves - one to control closing speed and one to control latching speed. Valves shall be concealed against unauthorized adjustment and shall be non-critical with "O" rings.

Closers shall be available with an adjustable backcheck intensity valve. Delayed action shall be available and accomplished with a separate valve. Valves shall be accessible without removing the closer from the door.

Closers shall be surface applied with rectangular cover, and shall be devoid of manufacturer's trademarks.

Closers shall not project over 2-3/4", and shall be capable of mounting on a 1-3/4" top rail (or top jamb for inverted mounting). Full cover shall be standard. Non-hold open closers shall be regularly furnished with a power adjustment arm bracket capable of providing a 15% power adjustment. A Quik-Install<sup>™</sup> mounting bracket to attach the closer shall be regularly furnished. High lubricity hydraulic fluid shall be furnished. Closers mounted top jamb and parallel arm shall allow for full 180° door opening.

Closers shall be listed by Underwriters' Laboratories for closers with non-hold open arms.

Certification: ANSI/BHMA A156.4, Grade 1

ICC/ANSI A117.1 Closers shall carry a 15-year limited warranty.





#### In U.S.

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ASSA ABLOY Door Security Solutions Canada 160 Four Valley Drive Vaughan, Ontario Canada L4K 4T9 Phone: 800-461-3007 Fax: 905-738-2478 www.assaabloy.ca

For more information regarding Corbin Russwin Locksets, Exit Devices, Door Controls and Key Systems, contact your authorized Corbin Russwin Distributor or Sales Representative.

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