

SDC QuietDuo™

# LR100 Series

Retrofit Electric  
Latch Retraction Kits



SDC's QuietDuo™ LR100 series retrofit electric latch retraction kits enable electric access control and dogging of panic and fire rated mechanical exit devices. When energized the motor retracts the exit device latch and pulls the pushpad into the dogged (depressed) position enabling momentary or sustained push and pull operation of the door. The latch retraction mechanism may be activated by an access control, remote control device or building automation system. No door sequencer required for a pair of manual doors when connected to a suitable power supply. The exit device always provides uninhibited egress.

The patented design was the first retrofit motorized electric latch retraction kit brought to market and has been recognized as the market leader ever since. **The use of a motorized electric latch retraction device provides several advantages over solenoids including lower current draw, quieter operation and greater durability over time.** Designed with cost savings in mind, SDC's LR100 series retrofit ELR kits not only eliminate the need for costly replacements of existing exit devices, but also provide **cost savings on installation and power requirements due to significantly less labor time and current draw** when compared to competitive retrofit kits. LR100 kits retrofit select exit device brands without removing the device from the door.

**LR100 models are one unit completely housed within the rail of the device behind the access cover, whereas LR100-EM models are two piece space saver units,** intended to gain up to one inch in spacing within the device, placing the controller board externally to accommodate smaller field cut devices for smaller openings or where space is limited within the rail.

## MODELS

- LR100** Motorized Electric Latch Retraction Kit
- LR100-EM** Motorized Electric Latch Retraction Kit, External Module

## STANDARD FEATURES

- Motorized electric latch retraction and dogging
- Panic and fire rated devices
- Simultaneous latch retraction, dogging and pushpad depression\*
- High traffic use
- Low current draw
- Low energy operator compatible

\* Select models do not retract pushpad, only retract the latch. See chart in applications.



## APPLICATIONS

SDC's retrofit motorized electric latch retraction kits are designed to be field installed. However, SDC also offers to install the kit at SDC's factory. Simply send the mechanical exit device

brand of your choice to SDC for factory install. The table below outlines exit device compability and part numbers for both field install and factory installed LR100 kits.

Brand	Opening	Rim	SVR	CVR	Mortise	Field Install	Factory Install
Adams Rite	36" - 48"	8800 / 3700	8100 / 8200 / 3100	8500 / 8600 / 3600	-----	LR100ARK*	LR100AR*
Adams Rite	30"	8700 / 8800 / 3700	8100 / 8200 / 3100	8500 / 8600 / 3600	-----	LR100ARK-EM*	LR100AR-EM*
Adams Rite	36" - 48"	EX88 / EX89	-----	EX76	-----	LR100AREXK-EM	LR100AREX-EM
Arrow	36" - 48"	S1250	S1150	-----	-----	LR100AWK	LR100AW
Arrow	36"	ED910	-----	-----	-----	LR100AWK-ED910	LR100AW-ED910
Corbin Russwin	36" - 48"	ED5200 / ED4200	ED5400	ED4800 / ED5800	-----	LR100CRK	LR100CR
Corbin Russwin	30"	ED5200 / ED4200	ED5400	ED4800 / ED5800	-----	LR100CRK-EM	LR100CR-EM
Cal-Royal	36"	7700 / F7700	7760 / F7760	-----	-----	LR100CAK	LR100CA
Cal-Royal	36"	GLS9800	-----	GLSCVR9800	-----	LR100CAK-9800	LR100CA-9800
Cal-Royal	36"	2200 / F2200 / 9800 / F9800	2260 / F2260 / 9860 / F9860	-----	-----	LR100CAK-EM	LR100CA-EM
Design Hardware	36"	1000R	1000V	-----	-----	LR100DHK	LR100DH
Detex	36"	10 / 40	20 / 50	80 / 81 / 62 / 63	-----	LR100DXK	LR100DX
Dorma	36"	9300 / F9300	9400 / F9400	-----	-----	LR100DAK	LR100DA
Dor-O-Matic	36"	1790	-----	1690	-----	LR100FAK**	LR100FA**
Dor-O-Matic	33"	1790	-----	1690	-----	LR100FAK-EM**	LR100FA-EM**
Dor-O-Matic	36"	1590	-----	1490	-----	LR100DMK	LR100DM
Falcon	36"	25-R / F-25-R / 24-R / F-24-R	25-V / F-25-V / 24-V / F-24-V	25-C / F-25-C / 24-C / F-24-C	-----	LR100FRK	LR100FR
First Choice	36"	3790	-----	3690	-----	LR100FCK**	LR100FC**
First Choice	30"	3790	-----	3690	-----	LR100FCK-EM**	LR100FC-EM**
Hager	36" - 48"	4501-RIM	4501-SVR	-----	-----	LR100HK	LR100H
Hager	30"	4501-RIM	4501-SVR	-----	-----	LR100HK-EM	LR100H-EM
IDC	36" - 48"	8610 / 8180 / 8510 / 8710	8630 / 8830 / 8530 / 8730	8650 / 8850 / 8550 / 8750	8620 / 8820	LR100IDCK	LR100IDC
IDC	30"	8610 / 8180 / 8510 / 8710	8630 / 8830 / 8530 / 8730	8650 / 8850 / 8550 / 8750	8620 / 8820	LR100IDCK-EM	LR100IDC-EM
Jackson	36"	2095	2085	-----	-----	LR100JAK**	LR100JA**
Kawneer	36"	1786	-----	-----	-----	LR100KWK-EM	LR100KW-EM
Marks	36"	M9900	M9900VR	-----	-----	LR100MDK	LR100MD
Marshall Best	36"	Q1100 / QF1100	Q1200 / QF1200	-----	-----	LR100MBSK	LR100MBS
Marshall Best	30"	Q1100 / QF1100	Q1200 / QF1200	-----	-----	LR100MBSK-EM	LR100MBS-EM
Pamex	36" - 48"	EF9000	EF9000V	EF9020V	-----	LR100PAK	LR100PA
Pamex	30"	EF9000	EF9000V	EF9020V	-----	LR100PAK-EM	LR100PA-EM
PDQ	36" - 48"	6200R	6200V	-----	-----	LR100PDQK	LR100PDQ
PHI (Precision)	36" - 48"	2100 / 2400 / 5100	2200LBR / 5200LBR	2800LBR / 2600	-----	LR100PDK	LR100PD

\* Models do not retract pushpad, only retract the latch.

\*\* Models require a higher 1 Amp inrush current draw.

*Continued on next page.*

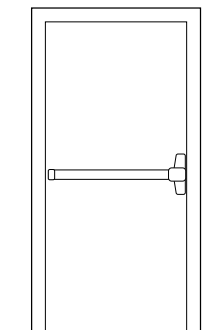
## APPLICATIONS

SDC's retrofit motorized electric latch retraction kits are designed to be field installed. However, SDC also offers to install the kit at SDC's factory. Simply send the mechanical exit device

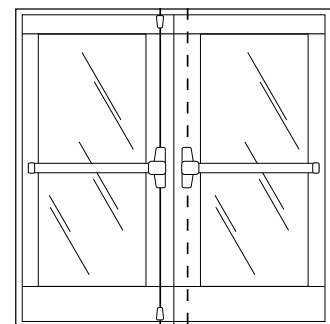
brand of your choice to SDC for factory install. The table below outlines exit device compatibility and part numbers for both field install and factory installed LR100 kits.

Brand	Opening	Rim	SVR	CVR	Mortise	Field Install	Factory Install
Sargent	36" - 48"	8500 / 8800	8700	8400 / 8600	8300 / 8900	LR100SGK	LR100SG
Sargent	30"	8500 / 8800	8700	8400 / 8600	8300 / 8900	LR100SGK-EM	LR100SG-EM
SDC	36" - 48"	S6100	S6200	S6800	S6300	LR100SDCK	LR100SDC
SDC	30"	S6100	S6200	S6800	S6300	LR100SDCK-EM	LR100SDC-EM
Stanley K2	36" - 48"	QED111	QED114	QED124	-----	LR100K2K	LR100K2
Stanley K2	30"	QED111	QED114	QED124	-----	LR100K2K-EM	LR100K2-EM
Tell	36"	9500	9400	-----	-----	LR100TEK	LR100TE
TownSteel	36" - 48"	ED1100	ED1200	ED1300	-----	LR100TSK	LR100TS
TownSteel	30"	ED1100	ED1200	ED1300	-----	LR100TSK-EM	LR100TS-EM
TownSteel	36"	ED5500	ED5600	-----	-----	LR100TSK-55/56	LR100TS-55/56
TownSteel	36"	ED6500	ED6700	-----	-----	LR100TSK-65/67	LR100TS-65/67
Von Duprin	36" - 48"	22	2227	-----	-----	LR100VDK-22*	LR100VD-22*
Von Duprin	30"	22	2227	-----	-----	LR100VDK-22-EM*	LR100VD-22-EM*
Von Duprin	36" - 48"	22	2227	-----	-----	LR100VDK-22V2	LR100VD-22V2
Von Duprin	30"	22	2227	-----	-----	LR100VDK-22V2-EM	LR100VD-22V2-EM
Von Duprin	36" - 48"	98 / 99 / 33A / 35A	9827 / 9927 / 3327A / 3527A	9847 / 9947 / 3347A / 3547A	9875 / 9975	LR100VDK	LR100VD
Von Duprin	30"	98 / 99 / 33A / 35A	9827 / 9927 / 3327A / 3527A	9847 / 9947 / 3347A / 3547A	9875 / 9975	LR100VDK-EM	LR100VD-EM
Yale	36" - 48"	7100 / 7100-2 / 7200	7110 / 7210	7120 / 7220	-----	LR100YDK	LR100YD
Yale	30"	7100 / 7100-2 / 7200	7110 / 7210	7120 / 7220	-----	LR100YDK-EM	LR100YD-EM
Yale	36" - 48"	6100ED	-----	-----	-----	LR100Y6K	LR100Y6
Yale	30"	6100ED	-----	-----	-----	LR100Y6K-EM	LR100Y6-EM

\* For Von Duprin 22 models manufactured in 2021 or earlier.

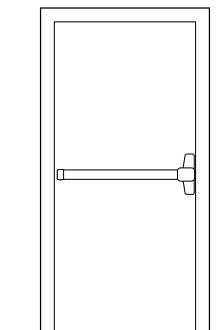


Rim



SVR

CVR

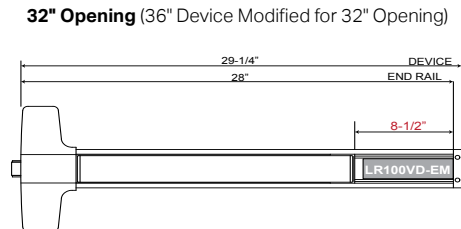
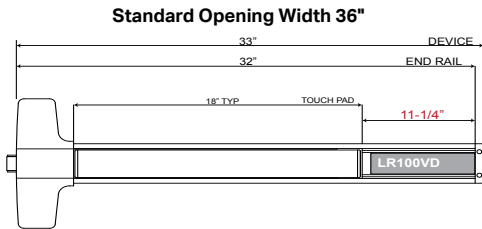
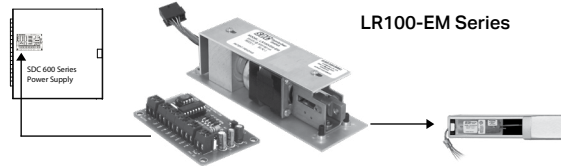
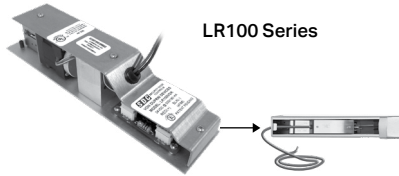


Mortise

# SDC SPECIFICATIONS

	<b>LR100</b>	<b>LR100-EM</b>
<b>Type</b>	Retrofit ELR Kit	Retrofit ELR Kit, External Module
<b>Input</b>	24 VDC $\pm$ 10%	24 VDC $\pm$ 10%
<b>Current Draw</b>	700 mA Inrush* 200 mA Continuous	700 mA Inrush* 200 mA Continuous
<b>Latch Retraction</b>	Motorized	Motorized

\* LR100FA, LR100FC and LR100JA models require a higher 1 Amp inrush.



Measurements above are example only - all devices vary



## CERTIFICATIONS

UL 305 Panic Hardware  
 UL 10C Positive Pressure Fire Tests  
 ULC-S104 Standard Method for Fire Tests of Door Assemblies  
 ANSI/BHMA A156.3 Grade 1



## HOW TO ORDER

### FOLLOW STEPS FOR ORDERING

Designates optional step

### 1| SPECIFY MODEL\*

#### FIELD INSTALL KITS

Adams Rite	<b>LR100ARK</b>	<b>LR100ARK-EM</b>	<b>LR100AREXK-EM</b>	----
Arrow	<b>LR100AWK</b>	<b>LR100AWK-ED910</b>	----	----
Corbin Russwin	<b>LR100CRK</b>	<b>LR100CRK-EM</b>	----	----
Cal-Royal	<b>LR100CAK</b>	<b>LR100CAK-9800</b>	<b>LR100CAK-EM</b>	----
Design Hardware	<b>LR100DHK</b>	----	----	----
Detex	<b>LR100DXK</b>	----	----	----
Dorma	<b>LR100DAK</b>	----	----	----
Dor-O-Matic	<b>LR100FAK</b>	<b>LR100FAK-EM</b>	<b>LR100DMK</b>	----
Falcon	<b>LR100FRK</b>	----	----	----
First Choice	<b>LR100FCK</b>	<b>LR100FCK-EM</b>	----	----
Hager	<b>LR100HK</b>	<b>LR100HK-EM</b>	----	----
IDC	<b>LR100IDCK</b>	<b>LR100IDCK-EM</b>	----	----
Jackson	<b>LR100JAK</b>	----	----	----
Kawneer	<b>LR100KWK-EM</b>	----	----	----
Marks	<b>LR100MDK</b>	----	----	----
Marshall Best	<b>LR100MBSK</b>	<b>LR100MBSK-EM</b>	----	----
Pamex	<b>LR100PAK</b>	<b>LR100PAK-EM</b>	----	----
PDQ	<b>LR100PDQK</b>	----	----	----
PHI (Precision)	<b>LR100PDK</b>	----	----	----
Sargent	<b>LR100SGK</b>	<b>LR100SGK-EM</b>	----	----
SDC	<b>LR100SDCK</b>	<b>LR100SDCK-EM</b>	----	----
Stanley K2	<b>LR100K2K</b>	<b>LR100K2K-EM</b>	----	----
Tell	<b>LR100TEK</b>	----	----	----
Townsteel	<b>LR100TSK</b>	<b>LR100TSK-EM</b>	<b>LR100TSK-55/56</b>	<b>LR100TSK-65/67</b>
Von Duprin	<b>LR100VDK-22**</b> <b>LR100VDK-22V2</b>	<b>LR100-VDK-22-EM**</b> <b>LR100-VDK-22V2-EM</b>	<b>LR100VDK</b>	<b>LR100VDK-EM</b>
Yale	<b>LR100YDK</b> <b>LR100Y6K</b>	<b>LR100YDK-EM</b> <b>LR100Y6K-EM</b>	<b>LR100YDK-42/48</b>	----

\* See chart in applications for complete for complete details on exit device compatibility.

\*\* For Von Duprin 22 models manufactured in 2021 or earlier.

STEP NUMBER: 1


ORDERING EXAMPLE: **LR100VDK**

## CERTIFICATIONS

UL 305 Panic Hardware  
 UL 10C Positive Pressure Fire Tests  
 ULC-S104 Standard Method for Fire Tests of Door Assemblies  
 ANSI/BHMA A156.3 Grade 1

## HOW TO ORDER

## FOLLOW STEPS FOR ORDERING

 Designates optional step

### 1| SPECIFY MODEL\*

#### FACTORY INSTALL KITS\*\*

Adams Rite	<b>LR100AR</b>	<b>LR100AR-EM</b>	<b>LR100AREX-EM</b>	----
Arrow	<b>LR100AW</b>	<b>LR100AW-ED910</b>	----	----
Corbin Russwin	<b>LR100CR</b>	<b>LR100CR-EM</b>	----	----
Cal-Royal	<b>LR100CA</b>	<b>LR100CA-9800</b>	<b>LR100CA-EM</b>	----
Design Hardware	<b>LR100DH</b>	----	----	----
Detex	<b>LR100DX</b>	----	----	----
Dorma	<b>LR100DA</b>	----	----	----
Dor-O-Matic	<b>LR100FA</b>	<b>LR100FA-EM</b>	<b>LR100DM</b>	----
Falcon	<b>LR100FR</b>	----	----	----
First Choice	<b>LR100FC</b>	<b>LR100FC-EM</b>	----	----
Hager	<b>LR100H</b>	<b>LR100H-EM</b>	----	----
IDC	<b>LR100IDC</b>	<b>LR100IDC-EM</b>	----	----
Jackson	<b>LR100JA</b>	----	----	----
Kawneer	<b>LR100KW-EM</b>	----	----	----
Marks	<b>LR100MD</b>	----	----	----
Marshall Best	<b>LR100MBS</b>	<b>LR100MBS-EM</b>	----	----
Pamex	<b>LR100PA</b>	<b>LR100PA-EM</b>	----	----
PDQ	<b>LR100PDQ</b>	----	----	----
PHI (Precision)	<b>LR100PD</b>	----	----	----
Sargent	<b>LR100SG</b>	<b>LR100SG-EM</b>	----	----
SDC	<b>LR100SDC</b>	<b>LR100SDC-EM</b>	----	----
Stanley K2	<b>LR100K2</b>	<b>LR100K2-EM</b>	----	----
Tell	<b>LR100TE</b>	----	----	----
Townsteel	<b>LR100TS</b>	<b>LR100TS-EM</b>	<b>LR100TS-55/56</b>	<b>LR100TS-65/67</b>
Von Duprin	<b>LR100VD-22***</b>	<b>LR100-VD-22-EM***</b>	<b>LR100VD</b>	<b>LR100VD-EM</b>
	<b>LR100VD-22V2</b>	<b>LR100-VD-22V2-EM</b>		
Yale	<b>LR100YD</b>	<b>LR100YD-EM</b>	<b>LR100YD-42/48</b>	----
	<b>LR100Y6</b>	<b>LR100Y6</b>		

\* See chart in applications or complete details on exit device compatibility.

\*\* SDC does not supply exit device. Factory installed kits require a mechanical exit device to be sent to SDC's factory for installation.

\*\*\* For Von Duprin 22 models manufactured in 2021 or earlier.

STEP NUMBER: 1

ORDERING EXAMPLE: LR100VD

## RELATED PRODUCTS

### RETROFIT MONITORING KITS

In addition to retrofit motorized electric latch retraction kits, SDC also offers a variety of retrofit monitoring kits for field installation. Request-to-exit (REX) monitoring kits can be used to monitor

the pushpad/dogged status on an exit device. The table below outlines exit device compatibility and part numbers for both request-to-exit (REX) and latch status (LS) monitoring kits.

Brand	Rim	SVR	CVR	Mortise	REX	LS
Adams Rite	8700 / 8800 / 3700	8100 / 8200 / 3100	8500 / 8600 / 3600	-----	LRAR1R	-----
Adams Rite	EX88 / EX89	-----	EX76	-----	LRAREX1R	-----
Corbin Russwin	ED5200 / ED4200	ED5400	ED4800 / ED5800	-----	LRCR1R	LRCR1L
Cal-Royal	7700 / F7700	7760 / F7760	-----	-----	LRCA2R	-----
Cal-Royal	9800	-----	GLSCVR9800	-----	LRCA1R	-----
Detex	10 / 40	20 / 50	80 / 81 / 62 / 63	-----	LRDX1R	-----
Dorma	9300 / F9300	9400 / F9400	-----	-----	LRDA1R	-----
Dor-O-Matic	1790	-----	1690	-----	LRFA1R	-----
Falcon	25-R / F-25-R / 24-R / F-24-R	25-V / F-25-V / 24-V / F-24-V	25-C / F-25-C / 24-C / F-24-C	-----	LRFR1R	-----
First Choice	3790	-----	3690	-----	LRFC1R	-----
Hager	4501-RIM	4501-SVR	-----	-----	LRH1R	LRH1L
IDC	8610 / 8180 / 8510 / 8710	8630 / 8830 / 8530 / 8730	8650 / 8850 / 8550 / 8750	8620 / 8820	LRIDC1R	LRIDC1L
Kawneer	1786	-----	-----	-----	LRKWK1R	LRKWK1L
Marks	M9900	M9900VR	-----	-----	LRMD1R	-----
Pamex	EF9000	EF9000V	EF9020V	-----	LRPA1R	LRPA1R
Pamex	EF9000	EF9000V	EF9020V	-----	LRPA1RL*	LRPA1RL*
PHI (Precision)	2100 / 2400	-----	-----	-----	LRP1R	LRP1L
PHI (Precision)	-----	2200LBR	2800LBR / 2600	-----	LRP1R	LRP2L
Sargent	8800	8700	-----	-----	LRSG1R	-----
Sargent	8500 / 8800	8700	8400 / 8600	8300 / 8900	LRSG2R	-----
SDC	S6100	S6200	S6800	S6300	LRSDC1R	LRSDC1L
Stanley K2	QED111	QED114	QED124	-----	LRK2R	-----
TownSteel	ED1100	ED1200	ED1300	-----	LRTS1R	-----
TownSteel	ED5500	ED5600	-----	-----	LRTS2R	-----
Von Duprin	22	2227	-----	-----	LRVD2R	LRVD1L
Von Duprin	98 / 99	9827 / 9927 / 9857 / 9957	9847 / 9947	9875 / 9975	LRVD1R	LRVD1L
Von Duprin	33A / 35A	3327A / 3527A	3347A / 3547A	-----	LRVD1R	LRVD2L*
Yale	7100 / 7100-2 / 7200	7110 / 7210	7120 / 7220	-----	LRV1R	LRV1L
Yale	6100ED	-----	-----	-----	LRV61R	-----

\* The Pamex LRPA1RL kit is both request-to-exit (REX) and latch status (LS).

\*\* Available for 33A/35A rim devices only.

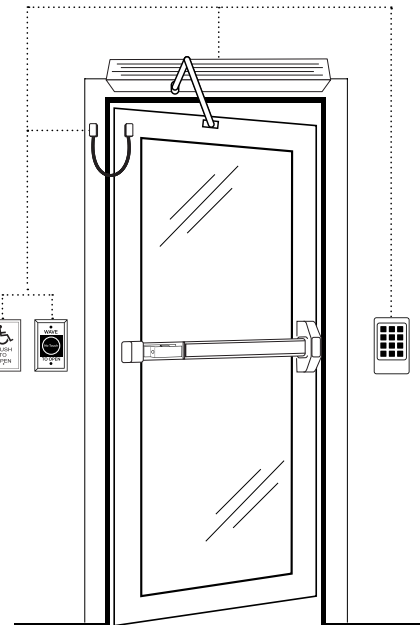
## COMPONENT CONSIDERATIONS

### LOW ENERGY OPERATORS

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SDC's low energy swing door operators are designed for applications requiring ADA compliance, user convenience and touchless solutions. The state-of-the-art microprocessor-based operator is self-tuning and self-learning while offering non-handed operation, full mechanical stops, door sequencing and a variety of interface options for sensors, push-plates, fire alarms and electrified locks. A built-in 1 Amp power supply allows users to power electric latch retraction directly from the operator.



### PUSH PLATES & PANELS

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SDC's push plates and panels combined with SDC's operators, bollards and locking devices allow for complete access and egress solutions for ADA compliant applications. Included are round and square push plates, as well as wall mount and full-size push panels. All types can be wireless or hardwired, bollard or wall mounted. ADA compliant solutions work seamlessly with low energy swing door operators like Auto EntryControl™.

### KEYPADS & READERS

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SDC has a variety of digital keypad and proximity card access control system equipment to meet any need. SDC's keypads and readers are engineered to provide real-world door control of a single opening up to 100 doors, such as indoor, outdoor and PC-based systems, while ensuring fire and life safety code compliance along with superior expandability and flexibility in authorization identification, authentication, access approval and accountability of entities through login credentials.

### POWER CONTROLLERS

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SDC access control power supplies have been developed specifically to support access controls and electric locking hardware. They are UL listed and provide filtered and regulated linear DC power, with optional control logic, component interface, alarm interface and battery back-up to meet the requirements of single and multiple access-controlled openings. The circuitry design is ideal for the inductive loads generated by access control hardware for high performance and longevity.

### POWER TRANSFER DEVICES

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Electrified power transfer hinges (PTH Series), loops (PT Series) and mortise devices (PTM Series) provide both surface and concealed methods for running wires from the frame to transfer power and monitoring signals to doors equipped with electric locks and exit devices. Wireless power transfer devices (WPT Series) wirelessly transfer power and monitor latch bolt status, REX or data signals to electrified locks and latches.

### DOOR CONTROLS & BACKUP BATTERIES

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SDC's door control relay modules ensure compatibility of access hardware components and simplify system installation and troubleshooting. Different modules may be specified for one power supply. The isolated relay design allows trigger signals over small gauge cable runs of 22 gauge wire up to 1,000 feet from the trigger device to the module. SDC's engineered system design services are available when you purchase SDC locks, control modules and power controllers for your door opening applications.