

# PD97ES

ELECTRIFIED MORTISE LOCK WITH AUTO-LOCKING & MONITORING FOR SLIDING DOORS

Designed to easily integrate with all standard access control systems and monitoring terminals. Can be paired with glass or wood sliding doors.



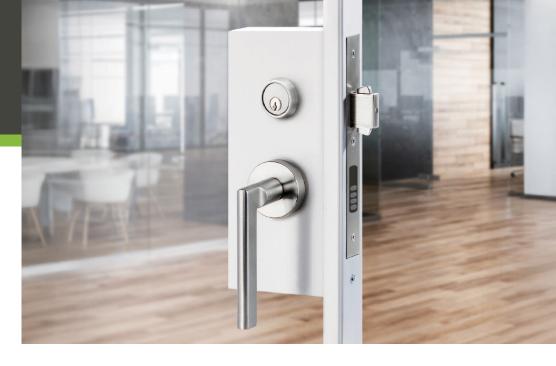
- UL1034 Burglary-Resistant Electric Locking Mechanisms
- UL294 Standard for Access Control System Units
- ANSI/BHMA A156.25 Electrified Mortise Locks
- ANSI/BHMA A156.18 Finishes
- ANSI A117.1 ADA Accessibility

ELECTRICAL SPECS		
Lock Body	≤560 mA	
Strike	≤40 mA	
Keypad	≤90 mA	
Handwave	≤30 mA	
Relay	≤30 mA	
Monitor	≤30 mA	

Maximum current for individual parts when in operation at 12/24V.

### **FINISHES**





## **FEATURES**

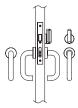
- Stepper motor-driven 12/24V electrified lock for sliding doors
- Built-in Door Position Switch (DPS) and Deadbolt Monitoring Switch (DBM) sensors, enabling auto-latching and auto-locking functions
- Supports touchless opening solutions when paired with an auto-operator
- Fail secure lock remains mechanically locked during power failure, ensuring security
- Compliant with UL Standards for UL294 (Safety Access Control System Units) Testing

SPECIFICATIONS				
Door Thickness	1-3/4" (45mm) Standard			
	1-3/8" (35mm) Thin Door Kit			
	2" to 2-1/4" (50mm to 57mm); Thick Door Kit available			
Backset	2-3/4" (70mm)			
	2-1/2" (63.5mm)			
Spindle Hub Size	Lever: 8mm x 8mm square			
	Thumbturn: 5mm x 5mm square			
Center-to-Center Distance	Lever to Cylinder: 3-7/8" (98mm)			
	Lever to Thumbturn: 2-11/16" (68mm)			
Cylinder	Schlage C keyway 6 pin			
	1-1/4" mortise cylinder w/ 2 keys (standard)			
	Optional SFIC and LFIC housing and cores available			
CAM	CAM01-SCL Clover Cam			
Material	Trim: Stainless Steel Lockcase: Heavy gauge Steel			
	Bolt: Brass and Stainless Steel Cylinder: Solid Brass			
	Faceplate/Strike: Stainless Steel			

#### **FUNCTIONS**

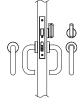
PD97ES Functions are **Fail Secure**. Deadbolt auto-locks once door is closed; during power failure, deadbolt remains mechanically locked from outside. PD97ATL includes the following monitoring sensors:

- REX = Request-to-Exit Monitoring Switch
- DBM = Deadbolt Monitoring Switch
- DPS = Door Position Switch



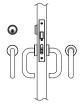
#### **ENTRANCE 53**

- Deadbolt projected/retracted by built-in stepper motor when energized by 12/24V DC power transferred through contacts on lock and strike
- Thumbturn inside throws/retracts deadbolt to lock/unlock door
- Outside lever is rigid at all times
- Inside lever always unlocks deadbolt for emergency egress



#### PATIO / EXIT 60

- Deadbolt projected/retracted by built-in stepper motor when energized by 12/24V DC power transferred through contacts on lock and strike
- Thumbturn inside throws/retracts deadbolt to lock/unlock door
- · Outside lever is rigid at all times
- Inside lever always unlocks deadbolt for emergency egress



## STOREROOM 80

- Latchbolt projected/retracted by built-in stepper motor when energized by 12/24V DC power transferred through contacts on lock and strike
- Key from outside to throw/retract latchbolt to lock/unlock door
- Door cannot be locked from inside
- · Outside lever is rigid at all times
- Inside lever always unlocks latchbolt for emergency egress

## **FUNCTION TABLES**

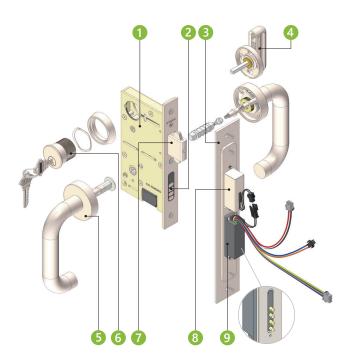
## MAIN FEATURES

	Entrance	Storeroom	Patio/Exit
Outside Lever	✓	✓	✓
Inside Lever	✓	✓	✓
Lockcase	✓	✓	✓
Cylinder	✓	✓	X
Thumbturn	✓	X	✓

### **OPTIONAL ACCESSORIES**

	Entrance	Storeroom	Patio/Exit
Switch	✓	✓	✓
Power Supply	✓	✓	✓
Keypad (Relay)	✓	✓	✓
Push Button	✓	✓	✓
Handwave	✓	✓	✓

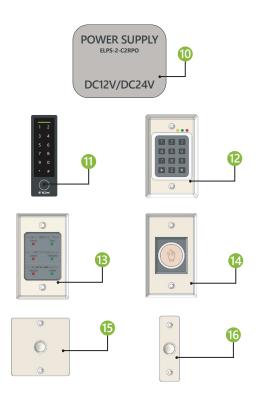
#### COMPONENTS



- PD97ES-lockcase and faceplate
  PD97ES-234 2-3/4" backset or
  PD97ES-212 2-1/2" backset
- Faceplate contacts; Auto-locking, Door Positioning Switches (DPS), and Power Transfer
- 3D Adjustable Strike with reinforcement plate for door frame
- 4 ADA Compliant thumbturn
- 6 Heavy-duty Stainless Steel cast rose with choice of X-Series lever design
- 6 Schlage C keyway, 6 pin 1-1/4" mortise cylinder
- 7 1" (25.4mm) heavy-duty brass bolt throw with self-retracting non-marring hooks
- 8 Dust box with Deadbolt Monitoring Sensor (DBM)
- 9 Power Transfer Strike with spring-loaded prongs

**NOTE:** PD97ES locks only require 3-6 seconds of continuous power to engage or retract deadbolt; time varies subject to soft close or weatherstripping conditions on sliding door. Continuous power longer than required will damage the motor, so make certain that your connected relay has a timed function.

## **OPTIONAL INOX ACCESS CONTROL ACCESSORIES**

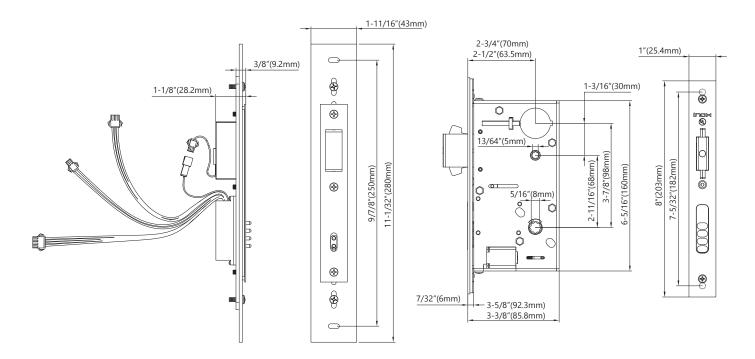


\*Order as a seperate line item.

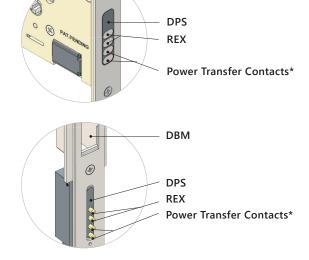
- (INX-ELPS-2-C2RPO) Power Supply with built-in surge protection, Voltage: 1.75A @ 12/24V DC, 1.75A @ 115VAC
- (1) ISK-B300 Multi-Credential Reader / Controller Dimensions: 5-7/8" x 1-3/4" x 7/8"
- **AC-KP1200** Stainless Steel keypad faceplate for indoor electrically locked door application

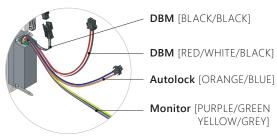
  Voltage: 12/24V DC Dimensions: 4-1/2" x 2-3/4" x 1-1/4"
- (B) AC-MP100 Stainless Steel Monitoring Panel Dimensions: 4-1/2" x 2-3/4" x 3/4"
- AC-IR1100 Handwave sensor with illuminated display Voltage: 2A @ 12/24V DC Dimensions: 4-1/2" x 2-3/4" x 1"
- (5) AC-PB200 Wide Push Button with illuminated display Dimensions: 3-3/8" x 3-3/8" x 3/4"
- **AC-PB100** Narrow Push Button with no illuminated display Dimensions: 3-1/2" x 1-1/8" x 1"

#### **DIMENSIONS**



#### **BUILT-IN MONITORING SWITCHES**





\*Power transfer to the lock occurs on contact with the pogo pins on the strike.

#### **AUTO-LOCKING FUNCTION [ORANGE/BLUE]**

- When the door is closed, the DPS will send power to the motor for auto-locking.
- When the DBM detects the deadbolt is not fully engaged, the DPS indicates
  the door is still closed; the auto-locking switch will trigger the power to be
  sent to the lock for auto-relocking again. If this verification process is repeated
  3 times, an alarm sound will be activated unless user re-opens the door.

#### DPS (DOOR POSITION SWITCH) [YELLOW/PURPLE]

- Monitoring signal showing the position of the door either as closed or open.
- When door is closed, the DPS signal will trigger an auto-locking switch function.

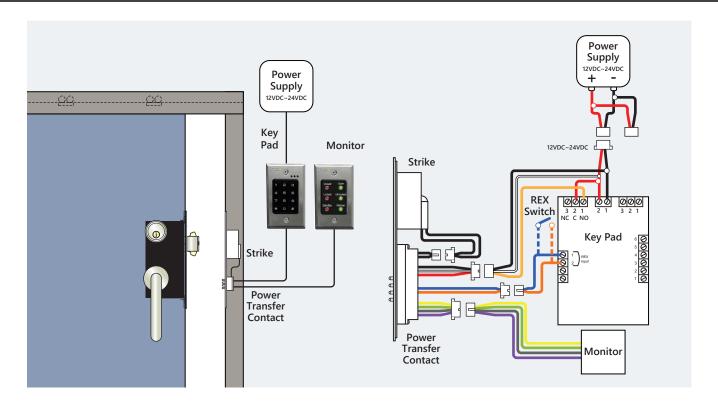
## DBM (DEADBOLT MONITORING SWITCH) [GREEN/PURPLE]

- Monitoring signal showing the position of the deadbolt as locked or unlocked.
- If the deadbolt is not fully engaged in the strike after a locking cycle, the DBM signal will trigger a relocking cycle.
- After 3 failed attempts to lock, an integrated speaker will chime 60 seconds to notify user that the door failed to lock.

## REX / INSIDE LEVER MONITORING SWITCH [GREY/PURPLE]

- Monitoring signal alerts that someone is using the lever, intending to exit from within secure area. someone intending to exit from within the secure area.
- Send a signal to the relay requesting power transfer to re-lock deadbolt.

#### WIRING DIAGRAM: ENTRANCE 53 FUNCTION



For UL compliance, this product shall be used with UL Listed access control and buglar alarm control panels / peripheral devices. Accessories are shown for reference only and not evaluated for UL294 or UL1034.

PD97ES Electrified Locks are designed to operate at 12/24V. Complete INOX system maximum current draw is 780 mA. INOX breakdown of individual items:

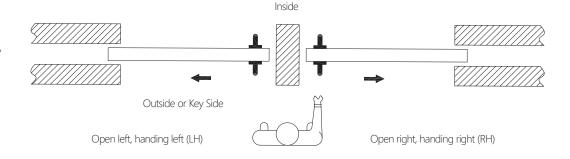
- Lock Body ≤560 mA
- Handwave ≤30 mA
- Strike ≤40 mA
- Relay ≤30 mA
- Keypad ≤90 mA
- Monitor ≤30 mA

For UL compliance the product is to be powered via a UL294 or UL603 or UL2610 power supply with a class 2 power limited output suitable for the power requirement of the product.

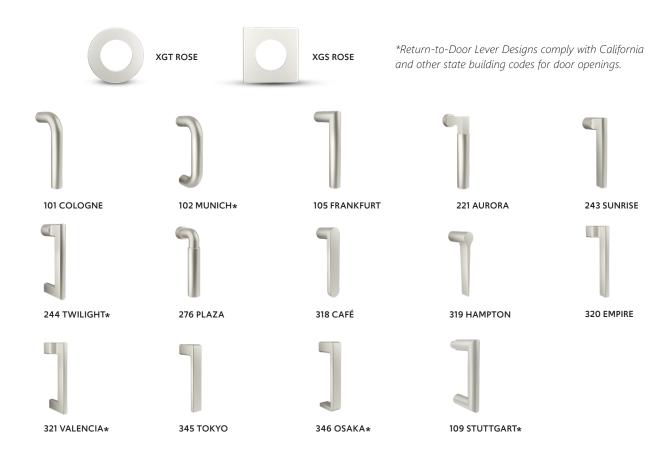
Door Position Switch (DPS) and the Deadbolt Monitoring Switch (DBM) with operation resistive load of 250K cycles.

#### **HANDING**

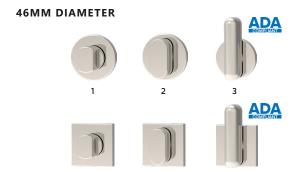
- Handing refers to the direction the door slides open. Example: If the door slides to the left to open, it is a left-handed door.
- Determine door direction from the exterior or key side of the door when facing into the room.



## **ROSE & LEVER DESIGNS**



## THUMBTURN OPTIONS



REF	DESCRIPTION	PART NUMBER
1	TT02 Thumbturn in Round Rosette	GR02
2	TT04 Thumbturn in Round Rosette	GR04
3	ADA TT07 Thumbturn in Round Rosette	GR07
4	TT02 Thumbturn in Square Rosette	SR02
5	TT04 Thumbturn in Square Rosette	SR04
6	ADA TT07 Thumbturn in Square Rosette	e SR07

		AGAMENTAL MANAGEMENT AND AGAMENT AND AGAME
1	2	3
		COMPLIANT

**53MM DIAMETER** 

REF	DESCRIPTION	PART NUMBER
1	TT02 Thumbturn in Round Rosette	GT02
2	TT04 Thumbturn in Round Rosette	GT04
3	ADA TT07 Thumbturn in Round Rosette	e <b>GT07</b>
4	TT02 Thumbturn in Square Rosette	GS02
5	TT04 Thumbturn in Square Rosette	GS04
6	ADA TT07 Thumbturn in Square Rosett	e GS07

## **ELECTRIFIED LOCKS COMPARISON**

LOCK SERIES	PD97	PD97PT	PD97ATL	PD97ATLC1	PD97ES
Interior Emergency Egress	✓	✓	✓	✓	✓
Easy Zero-Door-Channel Installation	X	✓	✓	✓	✓
Anti-Binding Winged Hook Bolt	✓	✓	✓	✓	✓
Auto-Latching, Auto-Locking	✓	✓	✓	✓	✓
Locking Failure Switch (LFS)	X	X	X	✓	✓
Deadbolt Monitoring Switch (DBM)	X	X	✓	✓	✓
Lever Positioning Switch (LPS)	X	Х	X	X	✓
Door Positioning Switch (DPS)	X	X	✓	✓	✓
Request-to-Exit (REX)	X	Х	X	X	✓
ANSI/BHMA A156.25 Electrified Locking Device	✓	✓	✓	✓	✓
UL1034 Burglary Resistant Electric Lock Mechanism	✓	✓	✓	✓	✓
UL1784 Air Leakage Test for Draft, Smoke Door Assembly	X	✓	✓	✓	✓
UL294 Safety and Security for Access Control System	X	✓	✓	✓	✓

\*PD97 and PD97PT can be integrated with advance relay switch and door positioning magnet to achieve auto-latching or auto-locking function.





## **HOW TO ORDER STANDARD LOCKSETS**

To order locksets with a non-standard specification, please describe the additional requirements in the same sequence as below.

Please see price book for parts or additional service upcharge.

PLATE	LEVER	LOCK	FUNCTION	BACKSET	CYLINDER	THUMBTURN	FINISH	HANDING
XGT	243	-PD97ES	60	А	-\$6	-GR04	-32D	-LH
0	2	3	4	5	6	7	8	9
L								
ROSE		LEVEF	₹			LOCK	FUNCTION	
						-PD97ES	53 Entrance	
		201	202	205	221 243		60 Patio/Exit	
XRA	XGT		>				80 Storeroon	n
		244	4 276	318	319 320			
XSE	XGS	6	-					
		321	345	346	509			

## 5 BACKSET

- Blank = 2-3/4''
- A = 2-1/2''

## 6 CYLINDER AND HOUSING (INCLUDES COLLAR)

- LC = Less Cylinder
- Blank = Standard Mortise 1-1/4" Cylinder
- S6 = Small Format Interchangeable Cylinder (SFIC) Housing 1-1/4", 6-Pin, Less Core, L Clover Cam
- S7 = Small Format Interchangeable Cylinder (SFIC) Housing 1-3/8", 7-Pin, Less Core, L Clover Cam
- L6 = Large Format Interchangeable Cylinder (LFIC) Housing 1-1/2", 6-Pin, Less Core, L Clover Cam
- Order IC Cores and Thick Door Kits (TDKs) separately. (See Price Book)

#### 7 THUMBTURN 8 FINISHES\* (STANDARD) 9 HANDING -RH = Right Hand • 32D Satin Stainless Steel Ceramax Flat Black (C19) **ADA** -LH = Left Hand • 32 Bright Stainless Steel • Ceramax Stormy Grey (CGY) GR02 GR04 GR07 (Blank) Ceramax Dark Bronze (CDB) • 19G Graphite Black 0 **ADA** • PVD4 Satin Brass • Ceramax Burnt Bronze (CBB) SR02 SR04 SR07 • Ceramax Graphite Black (C19G) \*Please see Finish Solutions on INOX website for special order finishes. GT02 GT04 GT07 GT02 GT04 GT07