

# PD97ES

# Electrified Mortise Locks with Auto-locking & Monitoring for Sliding Doors

- Motor Driven 12/24V electrified lock for sliding doors
- Built-in DPS & 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
- Designed for easy integration with access control and monitoring systems

#### **SPECIFICATIONS**

- CHICAHON	
Door Thickness	1-3/4" (45mm) Standard 1-3/8" (35mm) Thin Door Kit available for XGT only 2" to 2-1/4" (50mm to 57mm) Thick Door Kit available
Backset	2-3/4" (70mm) 2-1/2" (63.5mm)
Lever Spindle	8 x 8mm square
Thumbturn Spindle	5 x 5mm square
Center to Center Distance	Lever to Cylinder: 3-7/8" (98mm) Lever to Thumbturn:
Handing	2-11/16" (68mm)
Handing	Specify handing when ordering
Cylinder	Schlage C keyway 6 pin, 1-1/4" mortise cylinder with 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 Faceplate/Strike: Stainless Steel Cylinder: Solid Brass

#### **ELECTRICAL SPECIFICATIONS**

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

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#### **CODE COMPLIANCE**

- 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

#### **FINISH**

- 32D Satin Stainless Steel
- 32 Bright Stainless Steel
- PVD4 Satin Brass (243 and 276 levers)
- CeraMax Ceramic Coating: C19G Graphite Black,
   C19 Flat Black, CGY Stormy Grey, CDB Dark Bronze
- Please see Finish Solutions on INOX Website for special order finishes

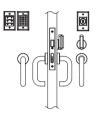


#### **FUNCTION**

PD97ES Functions are **Fail Secure**. Deadbolt auto-locks once door is closed; during power failure, deadbolt remains mechanically locked from outside.

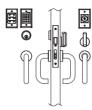
PD97ES includes the following monitoring sensors:

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



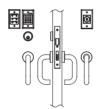
#### Patio/Exit 60

- 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



#### **Entrance 53**

- 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
- Thumbturn inside throws/retracts latchbolt to lock/unlock door
- · Outside lever is rigid at all times
- Inside lever always unlocks latchbolt for emergency egress



#### Storeroom 80

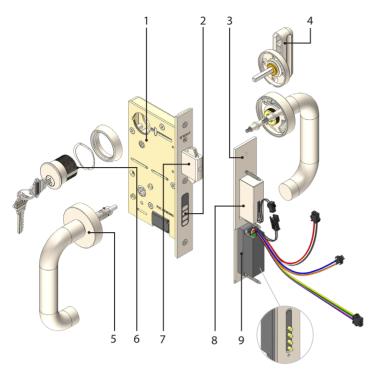
- Latchbolt projected/retracted by built-in stepper motor when energized by 12/24V DC power transferred through contacts on lock and strike
- Key from outside to throw/retract latchbolt to lock/unlock door
- Door cannot be locked from inside
- Outside lever is rigid at all times
- Inside lever always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

#### **FUNCTION TABLE**

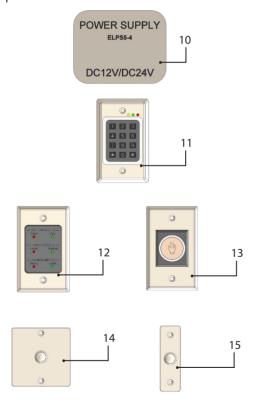
	Entrance	Storeroom	Patio/Exit		
Outside Lever	✓	✓	✓		
Inside Lever	✓	✓	✓		
Lockcase	✓	✓	✓		
Cylinder	✓	✓	x		
Inside Thumbturn	✓	ж	✓		
	Optional Accesso	ories			
Switch	✓	✓	✓		
Power Supply	✓	✓	✓		
Keypad w/Built-in Relay	✓	✓	✓		
Push Button	✓	✓	✓		
Handwave	✓	✓	✓		



#### **COMPONENTS**



**Optional INOX Access Control Accessories** 



#### Description

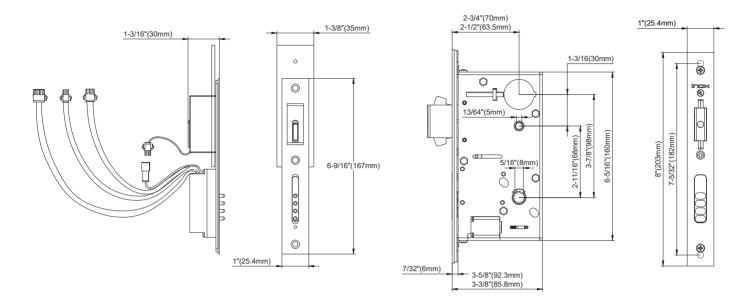
- PD97ES lockcase and faceplate; 2-3/4" backset PD97ES-234 or 2-1/2" backset PD97ES-212
- 2 Faceplate contacts; Auto-locking, DPS (Door Positioning Switches), Power Transfer
- 3 Strike with reinforcement plate for door frame
- 4 TT07-ADA ADA Compliant thumbturn
- Heavy-duty Stainless Steel cast rose with choice of X Series lever design
- 6 Schlage C keyway, 6 pin 1-1/4" mortise cylinder CMR1146
- 7 1" (25.4mm) heavy-duty brass bolt throw with self-retracting non-marring hooks
- 8 Dust box with DBM (Deadbolt Monitoring Sensor)
- 9 Power Transfer Strike with spring-loaded prongs PD97ES-ADJ-STRK 6-9/16"x1"x3/16"

Optional Accessories, use the part numbers below as new line items.

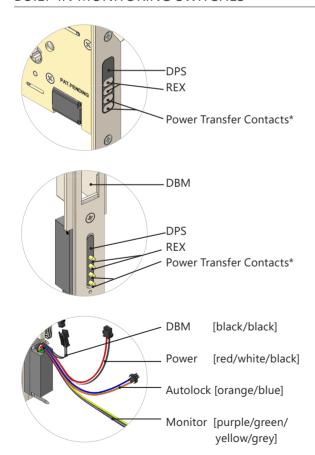
- 10 **ELPS5-4** Power Supply with built-in surge protection, Voltage: 2A@12/24V DC, Dimension: 11"x11"x4"
- AC-KP1200 Stainless Steel keypad faceplate
  for indoor electrically locked door application,
  Voltage: 12/24V DC, Dimension: 4-1/2 x2-3/4"x1-1/4"
- AC-MP100 Stainless Steel Monitoring Panel Dimension: 4-1/2"x2-3/4"x3/4"
- AC-IR1100 Handwave sensor with illuminated display, Voltage: 2A@12/24V DC, Dimension: 4-1/2"x2-3/4"x1"
- AC-PB200 Wide Push Button with illuminated display, Dimension: 3-3/8"x3-3/8"x3/4"
- AC-PB100 Narrow Push Button with no illuminated display, Dimension: 3-1/2"x1-1/8"x1"

**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.

#### **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]

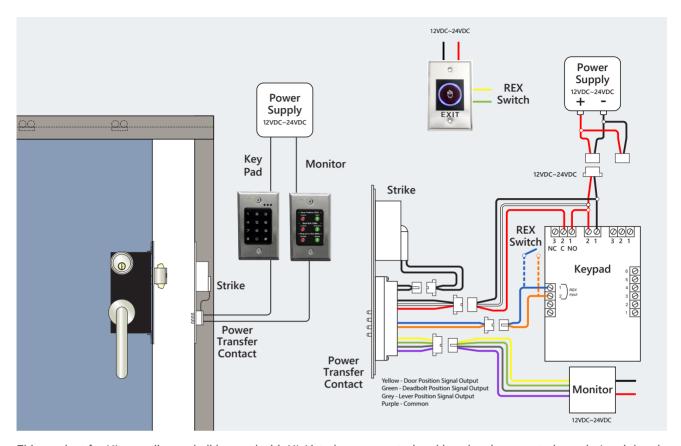
- Monitoring signal showing the position of the deadbolt as locked or unlocked.
- If the deadbolt is not fully engaged in the strike after a locking cycle, the DBM signal will trigger a relocking cycle.
- After 3 failed attempts to lock, an integrated speaker will chime 60 seconds to notify user that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



#### WIRING DIAGRAM



This product for UL compliance shall be used with UL Listed access control and burglar 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
 ≤560mA

 Strike
 ≤40 mA

 Keypad
 ≤90 mA

 Handwave
 ≤30 mA

 Relay
 ≤30 mA

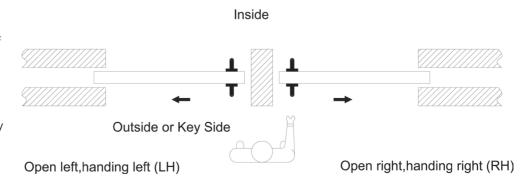
 Monitor
 ≤30 mA

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), Deadbolt Monitoring Switch (DBM): 250K cycles of operation resistive load.

#### **HANDING**

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



#### **ROSE & LEVER DESIGN**





XGT Rose

XGS Rose

\*Return-to-Door Lever Designs comply with California and other state building codes for door openings













201 COLOGNE

202 MUNICH\*

205 FRANKFURT

221 AURORA

243 SUNRISE







276 PLAZA



318 CAFE



319 HAMPTON









346 OSAKA\*

#### THUMBTURN OPTIONS













Ref.	Description	Part Number	
1	TT02 Thumbturn in Round Rosette	EC-R460TT02	
2	TT02 Thumbturn in Square Rosette	EC-S420TT02	
3	TT04 Thumbturn in Round Rosette	EC-R460TT04	
4	TT04 Thumbturn in Square Rosette	EC-S420TT04	
5	ADA TT07 Thumbturn in Round Rosette	EC-R460TT07-ADA	
6	ADA TT07 Thumbturn in Square Rosette	EC-S420TT07-ADA	

#### PD97ES ELECTRIFIED SLIDING DOOR MORTISE LOCK

### **ELECTRIFIED LOCKS COMPARISON**

Trim	PD97	PD97PT	PD97ATL	PD97ES
X Series Trim	✓	✓	✓	✓
Outside Surface Pull with Inside Lever for Egress	✓	✓	✓	✓
Performance Capabilities				
Touchless Unlocking	✓	✓	✓	✓
Built-in Power Transfer within Lockset	ж	✓	✓	✓
Self-latching/Auto-locking*	ж	ж	✓	✓
Auto-locking with Monitoring Panel	ж	ж	ж	✓
Compliance Certification				
UL294 Safety and Security for Access Control System	ж	✓	✓	✓
UL1784 Air Leakage Test for Draft, Smoke Door Assembly	x	ж	✓	✓
UL1034 Burglary Resistant Electric Lock Mechanism	✓	✓	✓	✓
ANSI/BHMA A156.25 Electrified Locking Device	<b>√</b>	✓	<b>√</b>	✓

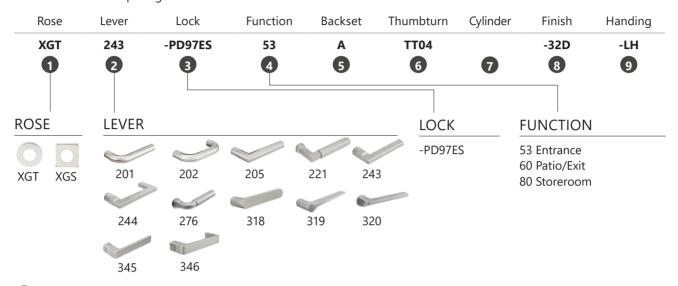
<sup>\*</sup> Passage or Office Function only





#### **HOW TO ORDER LOCKSETS**

To order locksets, please describe the additional requirements in the same sequence as below. Please see price book for parts or additional service upcharge.



#### **5** BACKSET

Backset Blank = 2-3/4"

Backset A = 2-1/2"

#### **6** THUMBTURN



#### **7** CYLINDER AND HOUSING

Blank = Standard Cylinder (CMB1146-FINISH-KD)

- -SFIC6 = Small Format Interchangeable Housing 6-Pin (CMB1146-ICBA-HUS-FINISH)
- -SFIC7 = Small Format Interchangeable Housing 7-Pin (CMB1387-ICBA-HUS-FINISH)
- -LFIC6 = Large Format Interchangeable Housing 6-Pin (CMB1126-LFIC-HUS-FINISH) (Order IC Cores separately)

#### 8 FINISH



PVD4 finish available in the 243 and 276 lever design

## 9 HANDING

-RH = Right Hand

-LH = Left Hand