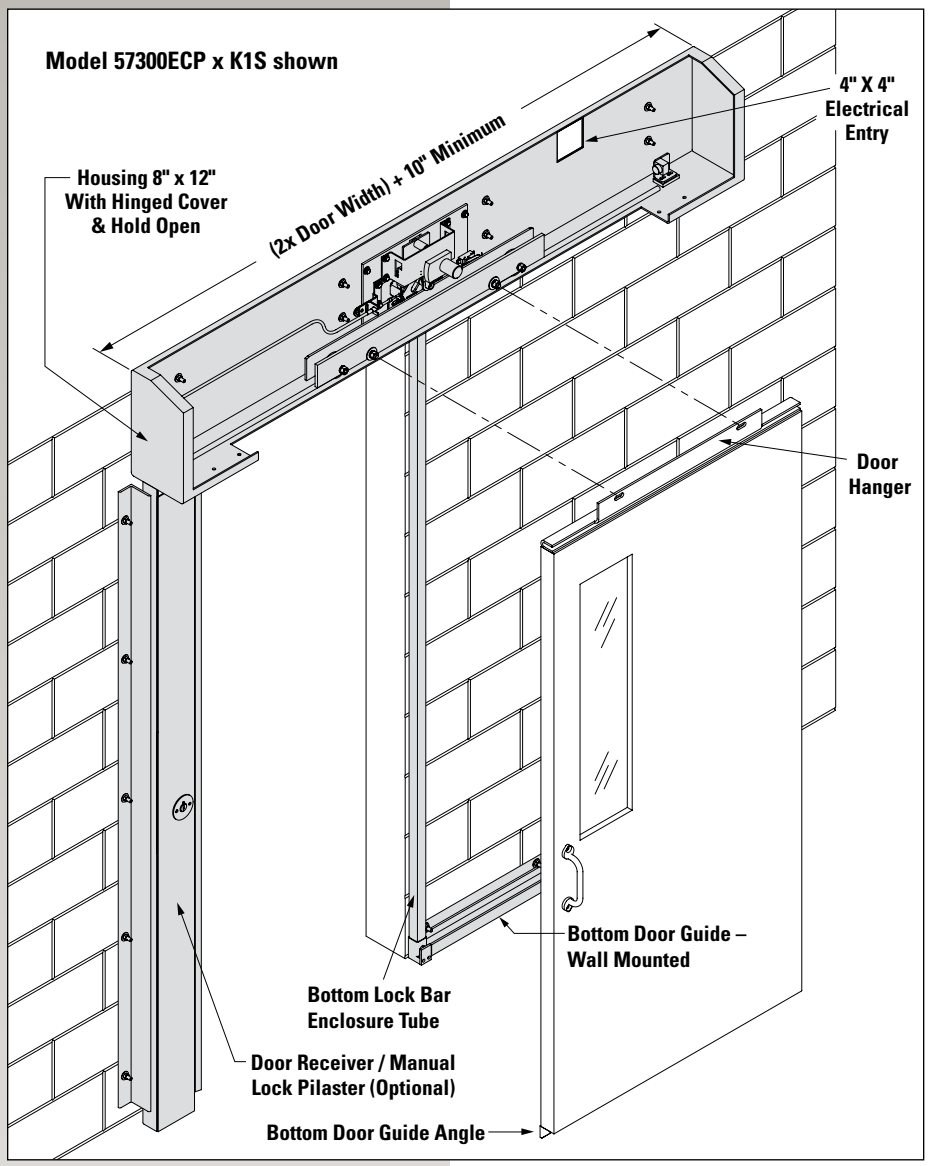
57300

Sliding Door Electric Unlock/Manual Move System

For Medium Security Housing Room Doors in Correctional Facilities



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Operation and Applications

The 57300 is an electric release/manually moved sliding door locking system (a.k.a. "Kick Release Device") for medium security cells in a correctional institution. Two point, concealed deadlocking is effected at the edge of the door – top and bottom. When electrically activated, the motorized mechanism unlocks a door whereupon it is moved a few inches via a spring loaded plunger door starter, which also serves to dampen the impact of a closing door. The door can then be fully opened and closed manually. Upon closing, the door deadlocks automatically. An adjustable rubber bumper fixes the open door position.

For new construction, the locking mechanism for each door is contained in a fabricated sheet steel housing that wall mounts (see the 57300 schematic drawing at left).

The 57300 must be specified to deadlock in the door closed position only or when in both closed and opened positions. The latter feature is indicated when it is desired to leave cell doors open during certain periods. However, if an open door must first be unlocked either by key or remotely from the control panel before it can be closed and locked, it may impede the ability of a correctional officer to deal with a recalcitrant inmate.

Typically, individual door remote electrical operation of the 57300 is activated from a control room switch console. Cell door rows can be controlled simultane ously or in a pre-selected group. Limit switches located on the mechanism plate serve to signal door condition (i.e. closed/deadlocked or open/unlocked) by pilot lights at the control panel.

A manual means is always provided to enable unlock ing without electric power. For cell doors, a remote - manual group release and/or individual door unlocking from the horizontal housing via a tool are typical. Also, individual manual cell door unlocking can be provided via a cable linkage from a hip-high paracentric key lock located in a door receiver pilaster. Likewise, individual electric cell door unlocking can be provided via a hip-high key switch located in a door receiver pilaster (see ordering information below).

Unitary Design

Electrical and mechanical parts associated with the unlocking of a door are contained on a single plate that is non-handed and, thus, easily replaced irrespective of door travel direction. This feature allows the user to stock one spare mechanism plate as a precaution against a breakdown.

Built for Durability

All functional components of the 57300 are designed/ selected to provide a long life cycle consistent with the frequent use and infrequent maintenance typical in many correctional facility installations. Stamped steel parts are electroplated for corrosion resistance. The door rollers are of hardened steel fitted with perma nently lubricated ball bearings.

The gearmotor and switches are standard products of domestic manufacturers and are recognized by independent testing laboratories. They are factory wired to quick-disconnect plugs or terminal strips allowing ease of replacement. The standard 57300 unit operates on 115VAC line voltage (24VDC is optional).

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Component Specification

Standard (and optional) Door Locking and Operating Mechanism Components

- Mechanism Plate – steel plate (9" x 15" x 1/4") contains all functional components for locking and indicating status of a door. The assembly is non-handed and is easily accessible and removable.
- Gearmotor –standard 115VAC & 3 amp – (24VDC & 1 amp available)
- Track – cold drawn steel round (9/16" diameter) welded in place.
- Door hanger – 1/4" formed steel construction with 3/16" vertical adjustment via eccentric bushings (2) and 1" horizontal slotted adjustment to compensate for field misalignments.
- Door rollers – two turned steel wheels (2-3/4" O.D.) fitted with double shielded, permanently lubricated ball bearings. Attachment to door carriage via a high tensile strength steel bolt/lock washer/hex nut.
- Bottom door guide angle and wall guide – 1/4" thick steel construction.
- Top lock bolt – 7/8" diameter stainless steel
- Bottom lock – cast iron body encloses 13/16" diameter stainless steel locking ball.
- Door status indication switch – 15 amp @ 125/250VAC

Standard Mechanism Housing Material and Construction (w/ 57300)

- Horizontal housing – formed from 3/16" thick steel sheet. Openings are baffled to block the insertion of foreign objects.
- Mechanism access cover – formed from 1/8" thick steel sheet and hinged for easy access. Attachment to the horizontal housing is via pinned Torx® security screws.
- Vertical lock bar enclosure – 10 gauge x 1-1/2" square steel tube
- Vertical door receiver/manual lock pilaster (furnished with manual key and/or key switch release optional features) – formed from 3/16" sheet steel with 1/8" steel cover plates attached with pinned Torx® security screws. Hard rubber bumpers (2) are incorporated in the 10 gauge receiver surface to cushion the impact of a closing door.
- Housing components – primed for paint.

Ordering Information:

1. Consult R.R. Brink Locking Systems technical service personnel when planning a 57300 installation. Provide door construction, size and approximate weight. Unless otherwise agreed, it is the responsibility of the R.R. Brink Locking Systems customer (e.g.contractor, end user) to provide accurate field dimensions. Upon acceptance of an order, R.R. Brink Locking Systems will prepare and issue a setting plan drawing for customer approval prior to initial fabrication.

   NOTICE: Unless specifically included by an RRBLS bill of material and/or quotation, miscellaneous metalwork (e.g. masonry mounting plate embeds, closure plates, and shims) is by others
2. The standard R.R. Brink Locking Systems product warranty is for one (1) year from the project turnover date inclusive of defects in factory supplied labor and material only and excludes operational failure due to faulty installation labor by others and/or abusive use.
3. When ordering or specifying the 57300, indicate design choices:
   * Line voltage (115VAC standard – 24VDC optional) -
   * Door deadlocked when closed only or both closed and opened -
   * Remote mechanical cell row (gang) release from an end-of-row cabinet
   * Feature options, as follows:

   a) No. 57300CD/F or U typically specified for cell doors with bent plate door receiver (i.e. no vertical manual lock/door receiver pilaster) and mechanical door unlocking from the overhead horizontal mechanism housing. For latter means, select either unlocking access from the front of the housing via tool from a lockable port (suffix "F") or via paracentric key from the underside of the housing (suffix "U"). (Add a lockable mechanical release cabinet(s) for a cell row(s) requiring all door remote mechanical unlocking. Add wire raceway(s) and, if required, harness(s) for a cell row(s) not designed with individual conduit feeds.)

   b) No. 57300ECP x K1S (or K2S) – with hip high manual paracentric key lock release in front door receiver pilaster – keyed one (K1S) or two (K2S) sides of doorway.

   c) No. 57300ECP x K1S (or K2S) x 1KSC (or 2KSC) – same as b) with the addition of a commercial cylinder key switch(s) on one or two sides of doorway.

   d) No. 57300ECP x K1S (or K2S) x 1KSM (or 2KSM) – same as b) with the addition of a RRBLS mogul cylinder key switch(s) on one or two sides of doorway.

   e) No. 57300ECP x K1S (or K2S) x 1KSP (or 2KSP) – same as b) with the addition of a RRBLS paracentric cylinder key switch(s) on one or two sides of doorway.

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