

AC5020M

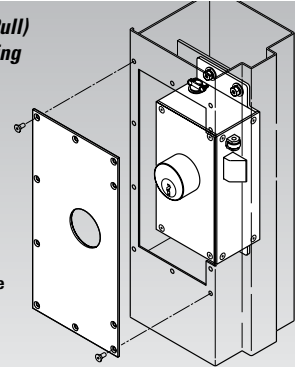
Electromechanical 1" Throw Automatic Deadlocking Latch – High Security and Impact Resistant

24 VDC or 120 VAC Motor Power and Manual Key Unlocking – Jamb Mounted



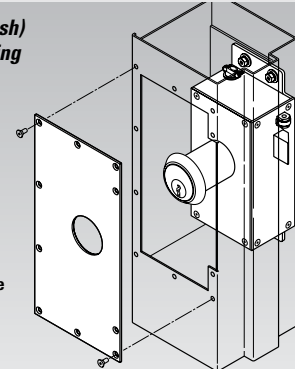
**Hinge-Side (Pull)
Frame Mounting**

Locate removable
cover plate on
non-secure side
of frame



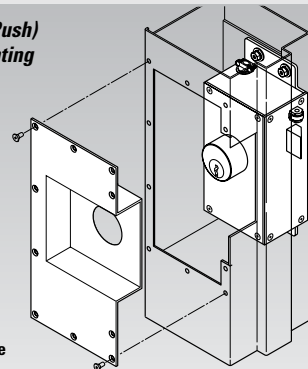
**Stop-Side (Push)
Frame Mounting
with KCE**

Locate removable
cover plate on
non-secure side
of frame



**Stop-Side (Push)
Frame Mounting
with Pocket**

Locate
removable
cover plate on
non-secure side
of frame



Application

- The 5020M is widely used in medium and maximum security detention facilities for remotely controlled electric unlocking of inmate room and passage doors.
- This lock is ideal as a component in attack resistant security perimeters in sensitive areas of commercial, governmental, and industrial buildings.
- Electric unlocking is by either 24VDC or 120VAC motor. Latch retraction is quiet and capable of overcoming abnormally high side loads (e.g. someone leaning or pulling on the door to prevent unlocking).
- Mechanical latch retraction by pin tumbler key cylinder—commercial size or “Prison Mogul” types.
- The Model 5020M normally is jamb mounted in a steel door frame (14 gauge recommended minimum) in a specially fabricated and reinforced lock pocket (or mortar box).
- The lock mechanism can be accessed without removal from the frame via an access plate on the non-secure side of the frame.
- Impact tested to Security Grade 1 per ASTM F1450 and F1577.
- When used in exterior locations, moisture proofing of the lock enclosure is essential and an internal resistance heating strip is recommended when the lock may be subjected to extreme freezing conditions.

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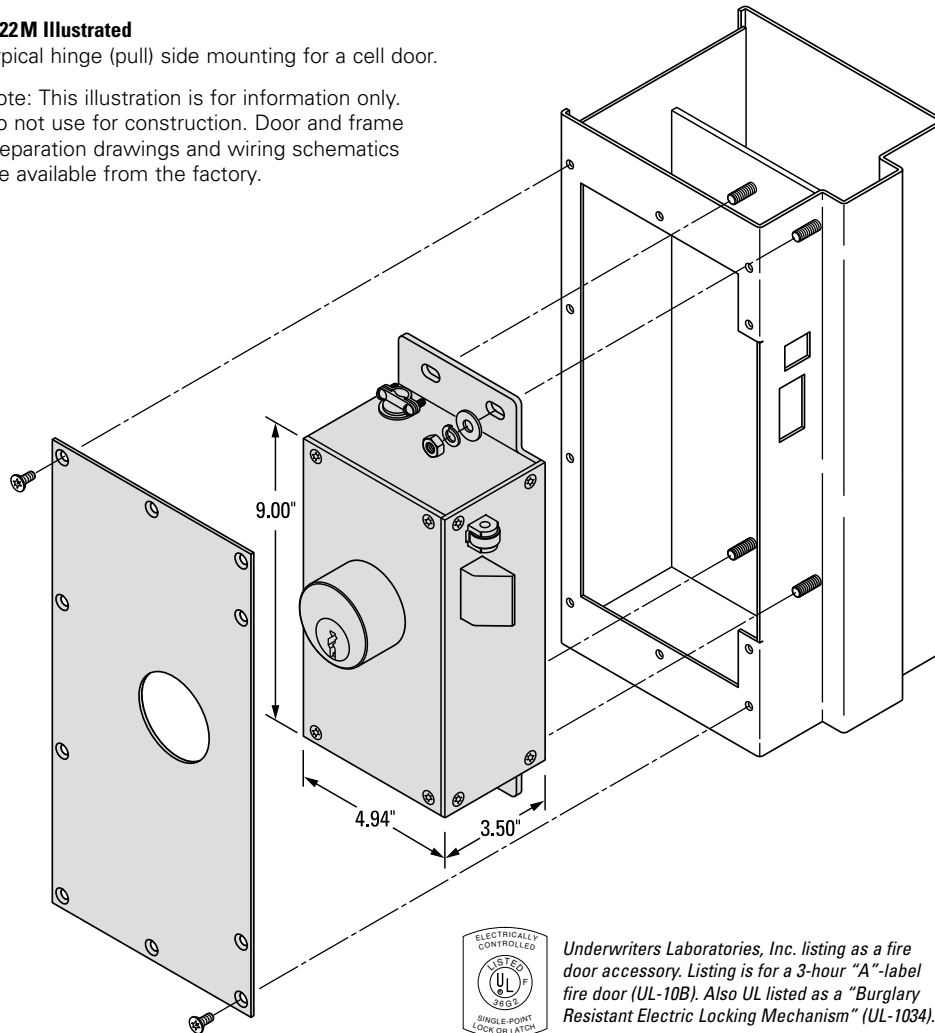
Electromechanical 1" Throw Automatic Deadlocking Latch High Security/Impact Resistant

24 VDC or 120 VAC Motor Power and Manual Key Unlocking – Jamb Mounted

5022M Illustrated

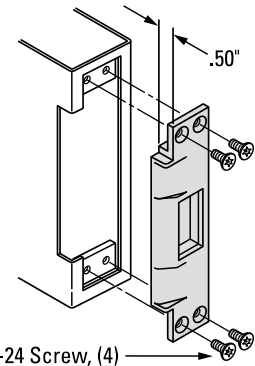
Typical hinge (pull) side mounting for a cell door.

Note: This illustration is for information only. Do not use for construction. Door and frame preparation drawings and wiring schematics are available from the factory.



Underwriters Laboratories, Inc. listing as a fire door accessory. Listing is for a 3-hour "A"-label fire door (UL-10B). Also UL listed as a "Burglary Resistant Electric Locking Mechanism" (UL-1034).

Frame Preparation



Door Preparation

Standard Features

- Lock case and cover made of 10 gauge steel, electroplated for corrosion resistance
- Beveled latch made of saw-resistant hardened steel with a full 1" throw and 3/4" x 1-1/2" cross section.
- Cast stainless steel strike plate.
- All internal parts are cast, fabricated or turned stainless steel.
- Maintained Switch Latch Holdback (**MSLH**) function (see "Function Guide for Motorized Locks")
- Lock status switch (**LSS**) trips when the latch is in a deadlocked condition. Used in a signal circuit to indicate lock status – unlocked or deadlocked – via control panel lights and/or alarm devices. The LSS is also used to control an electrical interlock, which permits only one of a group of doors

to be unlocked electrically at any time. *Note: For positive, tamper resistant signaling of a closed and deadlocked door, a sensitive door position (DPS) switch must be wired in combination with the LSS. Our DPS Nos. 201023 or 201030 are recommended.*

- Fitted for mechanical operation via either RRBLs proprietary "Mogul" or user's commercial key cylinder. (Factory supplied commercial key cylinder optional.) For stop side only or both side frame keying, the frame manufacturer must provide stop (push) side cylinder access or optional "key cylinder extension" (**KCE**). Key cylinder(s) must be factory assembled in lock.
- Available cylinder finish – Satin Chrome (ANSI 626, US26D)

- Plug connectors are provided for ease in wiring and removal.
- Exposed fasteners – pinned "Torx" head

Electrical Data

- Motor – 24VDC, 1.0 amp or 120VAC, 3 amp
- Lock Status Switch – 125/250VAC, 5 amp, SPDT (Form C)

CERTIFICATIONS

- The Model 5020M complies with all test standards (Grade 1 where applicable) set forth in ASTM F1577 – "Standard Test Methods for Detention Locks for Swinging Doors." Copies of the independent third party testing laboratory certification reports are available on request.
- Fire Rated to 3 Hour per UL10B.

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Optional Features and Ordering

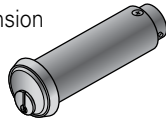
Optional Features

- **FKC** – Factory supplied high security commercial key cylinder with collar. Keys are ordered separately

- **MOG** – Supplied with RRBLS Mogul proprietary 2" diameter 6-pin cylinder. UL listed locking cylinder (UL-437). Keys are ordered separately.

- **KCE** – Key Cylinder Extension

In lieu of a conventional stop (push) side key cylinder access opening in the frame, a key cylinder extension extends the working length of a commercial or Mogul key cylinder to adapt to outside jamb depths. This option applies to one side stop or both side keying only. Customer supplied cylinders must be factory fitted to each KCE. (Jamb depth dimension required with order.)



- **CKS** – Controlled Key Switch

An internal limit switch enables electrical unlocking by one-way only rotation of a change level key (factory cylinder modification required). The change key unlock circuit can be disabled at the lock control panel. Mechanical unlocking is by a master level key. This feature is used to select periods when change key unlocking is permitted, e.g. by prison inmates who carry a key to their cell.

- **MLH** – Mechanical Latch Holdback Key operation, counter to standard spring return latch rotation, enables maintained latch holdback (i.e. unlocked condition) with the key removed. **Relocking is by key only.** Optionally, keying for this feature can be unique since its rotation is opposite that for standard unlocking and, therefore, enables restricted staff usage of this function.

The MLH feature is useful in a detention facility to allow flexibility of operational policies. For example:

- 1) The MLH facilitates freedom of inmate movement from their sleeping room within a designated space (e.g. dayroom) and time period.
- 2) The MLH requires correctional officers to interact personally with inmates when performing cell key lock/unlock duties as opposed to remote control panel switching.
- 3) In addition, the MLH feature helps to prevent a commonplace open cell door lock abuse scenario whereby an inmate surreptitiously wedges the lock's auxiliary latch to a retracted position to produce a dead latched condition and then forcibly and repeatedly slams the door against the immovable latch in an attempt to inflict damage to the lock mechanism.

- **MLHRR** – Mechanical Latch Holdback with Remote Release. (Patent: US 10,947,756 B2) This feature is an enhancement to the MLH option above to enable relocking of a door(s) by either a key **or electrically** from a control panel. This ability to override the MLH feature from a remote location is applicable in a detention facility when, in an emergency situation, it is necessary to institute a quick lockdown and preclude the time consuming need to relock doors locally by key.

- **TMS** – Tamper Monitor Switch
A limit switch that signals (e.g. via light and/or audible alarm) manipulation of the lock's auxiliary bolt (a.k.a. roller bolt) when a door is ajar. The purpose is to alert correctional officers to suspicious activity at a door (e.g. lock abuse). (Not available with the MCLH-E function.)

Ordering Information 5020M – Motor Power Series

Model	Description
5022M	5020M keyed hinge side only
5026M	5020M keyed both sides

Consult with our technical service personnel regarding custom applications such as retrofits to existing lock installations and special mounting situations.

Example: 5022 M – 24VDC – MSLH – MOG – RHR – Hinge-Side (PULL) – US26D

Model & Keying	Voltage	Function	Optional Features	Hand of Lock	Removable Cover Plate Frame Side	Key Cylinder Finish
5022M Keyed hinge side	24VDC	See our "Function Guide for Motorized Locks" for a full description of available lock functions.	See the "Optional Features" section above for description and symbol.	See our "Hand of Locks Reference Guide" for description and symbol.	Hinge-Side (PULL) Stop-Side (PUSH)	US26D (Satin chrome plate on brass)
5026M Keyed both sides	120VAC					

