Features

ML20900 ECL & ML20600NAC

Features

Handing

Handed; quick reversible. The lockset can be re-handed without disassembling the lockcase.

Door Thickness

1-3/4" (44mm) standard. Optional door thicknesses available; see Quick Codes, page 70.

Backset

2-3/4" (70mm).

Lockcase

Heavy-gauge steel, 5-7/8" (149mm) x 4" (102mm) x 15/16" (24mm).

Front

Heavy gauge steel, 8" (203mm) x 1-1/4" (32mm) x 3/32" (2mm).

Accommodates flat doors and doors beveled 1/8" (3mm) in 2" (51mm).

Armored Front

Wrought brass, bronze or stainless steel attached by machine screws to lockcase front

Latchbolt

2-piece mechanical anti-friction insert, 5/8" (16mm) x l" (25mm) x 3/4" (19mm) throw.

Auxiliary Latchbolt

9/16" (14mm) effective throw and 3/8" (10mm) effective auxiliary latch deadlocking.

Hub

- Knob: stainless steel, 9/32 " (7mm) x 9/32 " (7mm).
- Lever: steel, 5/16" (8mm). (Including (VR))
- (HS) 3/8" (10mm) stainless steel.

Spacing

C. to c. knob/lever to cylinder: 3-5/8" (92mm)

C. to c. knob/lever to thumbturn: 2-7/16" (62mm).

Strike

Wrought brass, bronze or stainless steel ANSI straight lip standard, 4-7/8" (124mm) x 1-1/4" (32mm) x 1-1/8" (29mm) lip to center. Optional strikes, lip lengths and ANSI wrought strike box available; see Quick Codes, page 70.

Trim

Available with all ML2000 Series trim designs including the Vineyard™ Collection and the Muséo® Collection. See pages 40-57.

Cylinder

Brass, 6-pin, L4 keyway, 0-bitted standard. Optional cylinders available; see Quick Codes, page 69.

Kevs

Two nickel silver standard.

Warranty

Ten-year limited warranty on ML2000 mortise lockset. Two-year limited warranty on electronic components.

Electrical Specifications (Fail Safe/Fail Secure)

12/24VDC @ 15mA Continuous 12/24VDC Peak current draw = .5A (Maximum of 2 locks per 1A Power Supply)

Monitor Switch Rating: 2 amp @ 24VDC Note: Operating voltage not to exceed +/- 10%.

See Quick Codes, page 71.

Monitor Options - ML20900 ECL Only

M91 - Latchbolt Monitor

Latchbolt monitoring is a SPDT switch which monitors the full extension of the main latch.

M92 - Request to Exit Monitor

Request to Exit monitoring is a SPDT switch which monitors the activation of the trim. (Both levers activate switch)

M105 - Security Monitor

Security Monitor is two switches in series that monitors lock status (locked or unlocked) and Auxiliary Latch position. Note: Monitoring options may only be ordered together as

follows: M91xM92, M92xM105.

Monitor Options – ML20600 NAC only

Internal End-of-Line Monitoring

Monitors the line from the access control panel to the lock, eliminating the risk of undetected tampering or damage.

PHR – Deadbolt Privacy Function

Engaging deadbolt disables remote access control unlocking (keypad or card reader) or scheduled unlock.

Certification/Compliance

ANSI/BHMA

Certified A156.13 Series 1000, operational and security Grade 1. Meets A117.1 Accessibility Code.

Federal

Meets FF-H-106C.

UL/cUL

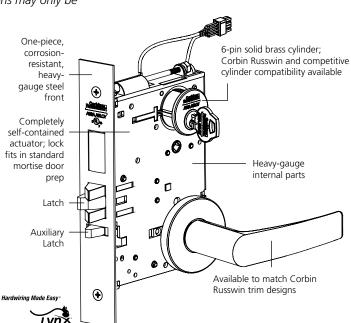
All locks listed for A label and lesser class doors, $4' \times 10'$ single or $8' \times 10'$ pair. Letter F and UL symbol on armored front indicate listing. Meets requirements of UL1034.

Any retrofit or other field modification to a fire rated opening can potentially impact the fire rating of the opening, and Corbin Russwin, Inc. makes no representations or warranties concerning what such impact may be in any specific situation. When retrofitting any portion of an existing firerated opening, or specifying and installing a new fire-rated opening, please consult with a code specialist or local code official (Authority Having Jurisdiction) to ensure compliance with all applicable codes and ratings.

California State Reference Code

(Formerly Title 19, California State Fire Marshal Standard)

All levers with returns comply; levers return to within 1/2" of door face.



ASSA ABLOY, the global leader in door opening solutions

Overview

ML20900 ECL

ML20900 ECL Series Electrified Mortise Lockset

Simplicity

Combine simplicity and access control with the Corbin Russwin ML20900 ECL series electrically controlled mortise lock. Utilizing the proven ML2000 Series mortise lockset with the patented quick reversible latchbolt, the ML20900 series provides remote locking and unlocking. The electrified lock can be installed in a standard mortise prep with slight modification by door manufacturer. The ML20900 ECL is ideal for use where increased security is necessary at all times, such as tenant space, pharmacies, computer rooms, and high security areas.

Security

In applications where increased security is required, look no further than the ML2000VR Vandal Resistant Trim. This cast stainless steel trim features tapered edges, double through bolts, torx-pin tamper resistant screws and the lever remains attached to the escutcheon when the spindle is broken.

Aesthetics

Access control doesn't mean a loss of visual appeal. The VineyardTM Collection and the Muséo® Collection feature beautifully designed levers, perfect for high-profile applications where pleasing aesthetics is a must.

Additional Features

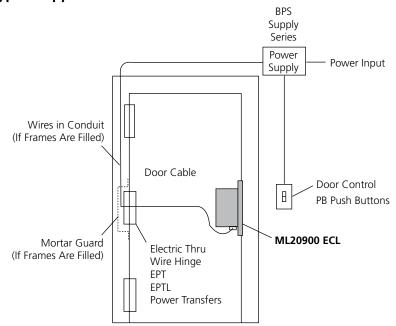
- Mechanical key override
- Patented Quick Reversible latchbolt, Patent # 6,349,982

Featuring EcoFlex™ Technology*:

- Reduces energy consumption up to 96%, as certified by GreenCircle
 - Lower operating costs
 - Assists with load reduction in optimizing energy performance credit in LEED
 - Reduces number of power supplies required
- Field configurable to fail-safe or failsecure
- Operates from 12-24VDC, offering greater flexibility in system design
- Innovative actuator design provides superior reliability
 - Higher performance and reduced maintenance
 - Ability to have longer cable runs without negatively impacting lock function
 - Reduces risk of voltage drops and eliminates inductive kickback
 - Lower total cost of ownership

* Patent Pending

Typical Application

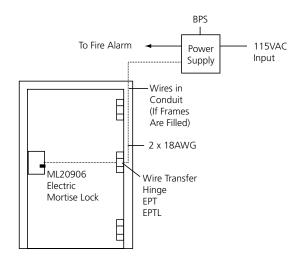




Typical System Components (For Reference Only)

ML20900 ECL

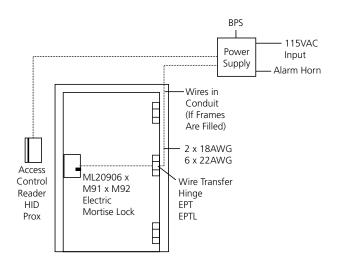
Tower Stairwell



Operation:

Free egress at all times. Door is locked at all times preventing entry from the stairwell to a floor. Fire alarm activation will allow re-entry from the stairwell to the floor. Power failure will allow re-entry from the stairwell to the floor.

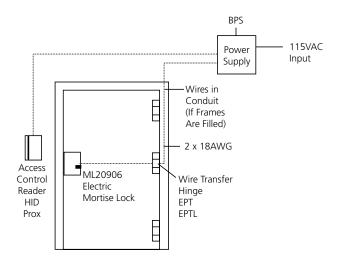
Controlled Entry With Alarm



Operation:

Free egress at all times. User exits through the door which triggers the M92 switch which shunts the alarm. Door is locked at all times preventing unauthorized entry. Authorized entry is permitted by presenting a valid user card. Forced entry will trigger M91 switch and activate alarm. Alarm is deactivated by a valid user card.

Access Control on Employee Entrance

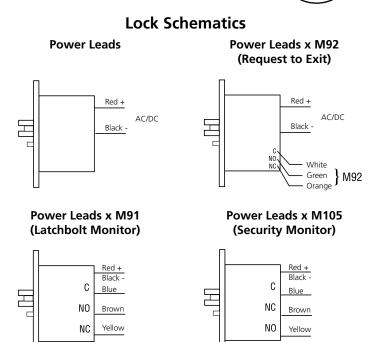


Operation:

Free egress at all times. Door is locked at all times preventing unauthorized entry. Authorized entry is permitted by presenting a valid user card.



ElectroLynx®, a system of universal Molex® plug-in connectors and standardized color-coded wiring, makes installing electrified doorway components a snap!



Consult factory for electrical system layouts, riser and wiring diagrams.



Functions

ML20900 ECL

Fail Safe

The following functions are unlocked when power is off and locked when the power is on.

| Outsi | ide In: | side | Series/Function | Description |
|-------|---------|------|-----------------|--|
| | | | ML20907 x SAF | Latchbolt by grip either side, unless outside grip is locked by energizing lock. Inside grip always free. Auxiliary latch deadlocks latchbolt. |
| | | | ML20915 x SAF | Latchbolt by grip either side, unless both grips are locked by energizing lock. Auxiliary latch deadlocks latchbolt. |
| A01 | | | ML20914 x SAF | Latchbolt by grip either side, unless both grips are locked by energizing lock. Latchbolt by key outside when lock is energized. Auxiliary latch deadlocks latchbolt. |
| A01 | | A01 | ML20932 x SAF | Latchbolt by grip either side, unless both grips are locked by energizing lock. Latchbolt by key inside or outside when lock is energized. Auxiliary latch deadlocks latchbolt. |
| A01 | | | ML20906 x SAF | Latchbolt by grip either side, unless outside grip is locked by energizing lock. Latchbolt by key outside when lock is energized. Inside grip always free. Auxiliary latch deadlocks latchbolt. |

Fail Secure

The following functions are locked when power is off and unlocked when the power is on.

| Outside | e Insid | le | Series/Function | Description |
|---------|---------|-----|----------------------------|---|
| | | | ML20907 x SEC | Latchbolt by grip either side only when lock is energized. Outside grip locked when lock is not energized. Inside grip always free. Auxiliary latch deadlocks latchbolt. |
| | | | ML20915 x SEC | Latchbolt by grip either side only when lock is energized. Both grips locked when lock is not energized. Auxiliary latch deadlocks latchbolt. |
| A01 | | | ML20914 x SEC | Latchbolt by grip either side only when lock is energized. Both grips locked when lock is not energized. Latchbolt by key outside when lock is not energized. Auxiliary latch deadlocks latchbolt. |
| A01 | | A01 | ML20932 x SEC | Latchbolt by grip either side only when lock is energized. Both grips locked when lock is not energized. Latchbolt by key inside or outside when lock is not energized. Auxiliary latch deadlocks latchbolt |
| A01 | | | ML20906 x SEC (VR) (HS) | Latchbolt by grip either side only when lock is energized. Outside grip locked when lock is not energized. Latchbolt by key outside when lock is not energized. Inside grip always free. Auxiliary latch deadlocks latchbolt. |



Trim Designs

ML2000 Series, ML20900 ECL and ML20600 NAC



Citation

- Brass, bronze or stainless steel
- Laser engraving option (See Custom Laser Engraving brochure)



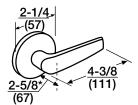


CSA

Lever: Cast Rose: Wrought

CSB

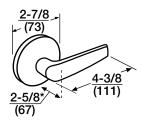
Lever: Cast Rose: Cast





CSF

Lever: Cast Rose: Cast



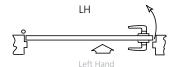
*Dimension from face of door, not surface of rose or escutcheon.

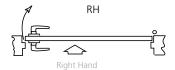


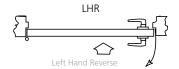
How to Order

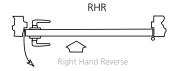
ML2000 Series

Ordering Examples - ML2000 Series









Note: Arrow indicates secure side of door.

Stock Order

| Quantity | Series/Function | Trim | Finish | Hand |
|----------|-----------------|------|--------|------|
| 100 | ML2055 | LWA | 626 | RHR |
| 50 | ML2055HS | SST | 626 | LHR |

Split Trim / Finish Order

| Quantity | Series/ | Tr | im | Fin | Hand | |
|----------|----------|---------|--------|---------|--------|------|
| Quantity | Function | Outside | Inside | Outside | Inside | пани |
| 12 | ML2055 | LWA | GRC | 626 | 625 | RHR |
| 6 | ML2055HS | SST | _ | 626 | 606 | LHR |
| 12 | ML2055 | ZSL | _ | 626 | 625 | RHR |
| 24 | ML2051 | MSG | _ | 605 | 625 | LH |
| 12 | ML2055 | 102U | _ | 626 | 606 | RHR |
| 24 | ML2051 | 122R | 110R | 605 | 625 | LH |

Contract / Detailed Order

| Quantity | Keyset | Series/ Function | Trim | Finish | Hand | Door Thickness | Optional Strike | Misc. Options | Optional Cylinder | Keying |
|----------|--------|---------------------|------|--------|------|-------------------|--------------------|------------------|----------------------|--------|
| 24 | AA1 | ML2055 | LWA | 626 | RHR | D214 | SA200 | M17-M26 | C7 | VKC3 |
| 12 | AA1 | ML2055HS | SST | 626 | LHR | D214 | SS200 | M07 | C6 | VKC1 |
| 6 | AA1 | ML2055VR | NSV | 630 | RH | D214 | SS114 | M17 | PCHS | VKC1 |

Working Trim Only

| Quantity | Function Only | Trim | Finish | Hand | Door Thickness | Misc. Options |
|----------|---------------|------|--------|------|----------------|---------------|
| 6 | ML2055 | LWA | 626 | RHR | D214 | M31 |
| 3 | ML2055HS | SST | 626 | LHR | D214 | M31 |
| 1 | ML2055VR | NSV | 630 | RH | D214 | M31 |

(Includes grip and spindle, rose or escutcheon, thumbturn lever, emergency key plate, adapters and screws)

ordering information and Quick Codes

Where to find

| ML2000 Series/Function | 5-9 |
|-----------------------------|-------|
| ML20900 ECL Series/Function | 13 |
| Trim Designs | 14-54 |
| Cylinder and Keying | 69 |
| Finish | 69 |
| Strikes | 70 |
| Miscellaneous Options | 70 |
| Door Thickness | 70 |
| Handing | 71 |



Quick Codes

ML2000 Series, ML20900 ECL and ML20600 NAC

Cylinder and Keying

| Description | Specify |
|--|--------------|
| Conventional 6-pin 🐵 🐨 | (standard) |
| Conventional 7-pin 🐵 🐨 | 7P |
| Less cylinder(s) (19) | LC |
| IC 6-pin 🐵 🕅 | C6 |
| IC 6-pin with temporary construction core (19) | |
| Red | CT6R |
| Blue | CT6B |
| Green | CT6G |
| IC 6-pin less core (#9)(#) | CL6 |
| SFIC 6-pin with SFIC disposable temporary core ¹ (19) (19) | CT6SD |
| SFIC 6-pin with Less Core ¹ (19) (19) | CLS6 |
| IC 7-pin 🐵 🕅 | C7 |
| IC 7-pin with temporary construction core (19) | |
| Red | CT7R |
| Blue | СТ7В |
| Green | CT7G |
| IC 7-pin less core 🐵 ® | CL7 |
| SFIC 7-pin with SFIC disposable temporary core ¹ (19) (19) | CT7SD |
| SFIC 7-pin with Less Core ¹ (19) (19) | CLS7 |
| Security 🐵 🔞 | HS |
| Security IC ®® | CHS |
| Access 3 - Patented ®® | AP |
| Access 3 - Security 🖽 🕅 | AS |
| Access 3 - High Security 🐵 🐨 | AHS |
| Access 3 IC - Patented (19) | ACP |
| Access 3 IC - Security 🖽 🕅 | ACS |
| Access 3 IC- High Security (19) (18) | ACHS |
| UL IC 6-Pin Housing Less Core | CL6AH |
| UL IC 6-Pin Housing with Disposable Core | CTAHD |
| UL IC 6-Pin Housing with (Red/Blue/Green) Temporary | CT6AH(R/B/G) |
| Construction Core | |
| Pyramid High Security Fixed Core (1968) | PHS |
| Pyramid High Security IC 1969 | PCHS |
| Pyramid IC Less Core (19 / 19 / 19 / 19 / 19 / 19 / 19 / 19 | CLP |
| construction core | СТР |
| Pyramid Security (19)(19) | PS |
| Pyramid Security IC (HS) (FR) | PCS |
| Pyramid Disposable Core (19) (IP) | CTPD |
| 6-Pin Disposable Core (195) | CT6D |
| 7-Pin Disposable Core 🖽 🕮 | CT7D |
| Master ring ² ⁽¹⁵⁾ ⁽¹⁸⁾ | MR |
| Blockout function cylinder (5) (7) | ВО |
| Flex head cylinder, 6-pin (sectional trim) | FX6 |
| Flex head cylinder, 7-pin (sectional trim) | FX7 |
| Flex head cylinder, master ring ² (sectional trim) | FXM |
| Plug only to show, 6-pin (concealed shell; M and R | PO6 |
| escutcheons only, single cylinder only) | 1 30 |
| Plug only to show, 7-pin (concealed shell; M and R escutcheons only, single cylinder only) | PO7 |
| Plug only, less cylinder | PO-LC |
| | |

| Description | Specify |
|--|-------------------------------|
| Keyed random 🐵 🕅 | KR |
| Construction master keyed (not available for Pyramid) (19) | CMK |
| Visual key control (19/18) | |
| No keying data stamped on key or cylinder | VKC0 |
| - Keys only | VKC1 |
| - Cylinders and keys (not for HS, CHS, PHS, PCHS, AS, ACS, AHS, or ACHS) | VKC2 |
| - Cylinders only (not for HS, CHS, PHS, PCHS, AP, ACP, AS, ACS, AHS or ACHS) | VKC3 |
| Concealed key control (CKC) 🖽 🔞 | |
| - CKC cylinders with VKC keys | CKC2 |
| - CKC cylinders only (not for HS, CHS, PHS, PCHS, AP, ACP, AS, ACS, AHS or ACHS) | CKC3 |
| 2 keys per lock More than 2 keys | (standard) KY# (e.g., KY6) |

^{1.} Not available with ML2029.

Finishes

| ANSI/BHMA 605 (US3) | (HS) | Bright Brass |
|-----------------------|-----------|---|
| ANSI/BHMA 606 (US4) | HS | Satin Brass |
| ANSI/BHMA 611 (US9) | (HS) | Bright Bronze |
| ANSI/BHMA 612 (US10) | HS | Satin Bronze |
| ANSI/BHMA 613 (US10B) | HS | Oxidized Bronze, oil rubbed |
| 613E (US10BE) | | Dark Oxidized Satin Bronze - Equivalent |
| 613L | | Dark Oxidized Satin Bronze, Clear Coated |
| ANSI/BHMA 618 (US14) | | Bright Nickel Plated |
| ANSI/BHMA 619 (US15) | HS | Satin Nickel Plated |
| ANSI/BHMA 625 (US26) | HS | Bright Chromium Plated |
| ANSI/BHMA 626 (US26D) | | Satin Chromium Plated |
| 626C | | Satin Chromium Plated with MicroShield® |
| ANSI/BHMA 629 (US32) | (HS) | Bright Stainless Steel |
| ANSI/BHMA 630 (US32D) | (HS) (VR) | Satin Stainless Steel |
| 630C | | Satin Stainless Steel with MicroShield® |
| 722 | | Black Oxidized Bronze, oil rubbed |

^{2.} Not available for ML2017, ML2029, ML2000HS or ML2000VR.

VR Indicates availability with ML200VR lockset



Quick Codes

ML2000 Series, ML20900 ECL and ML20600 NAC

Handing

| Hand | Specify |
|--------------------|---------|
| Right Hand | RH |
| Left Hand | LH |
| Right Hand Reverse | RHR |
| Left Hand Reverse | LHR |

Fail Safe/Fail Secure

| Description | Specify |
|-------------|---------|
| Fail safe | SAF |
| Fail secure | SEC |

Electric Monitor Options (ML20900 Series Only)

| Description | Specify |
|-------------------|---------|
| Latchbolt Monitor | M91 |
| Request to Exit | M92 |
| Security Monitor | M105 |

These options may be ordered together only as follows: M91xM92, M92xM105.

Panel Applications (Material added to the door face, increasing the overall door thickness)

| Description | Specify |
|---|---------|
| Centerline of lockcase to edge of panel not to exceed 2 " | PNL |

Thumbturns

| Description | Specify |
|---------------------|---------|
| Ergonomic | M34 |
| Decorative | MT1 |
| Decorative Square | MT2 |
| Decorative Cylinder | MT2 |

See page 40 for images of decorative thumbturns

Electric Accessories

| Description | Specify |
|--------------------------------------|----------|
| Power supply 1.0 Amp @ 12 VDC output | BPS-12-1 |
| Power supply 3.0 Amp @ 12 VDC output | BPS-12-3 |
| Power supply 1.0 Amp @ 24 VDC output | BPS-24-1 |
| Power supply 2.0 Amp @ 24 VDC output | BPS-24-2 |
| Power supply 4.0 Amp @ 24 VDC output | BPS-24-4 |

ML20600NAC - End-of-Line Resistors and Deadbolt Privacy Quick Code

| Description | Specify |
|---|---------|
| No End-of-Line Resistors | Blank |
| Mercury / Lenel $1K\Omega/2K\Omega$ | R01 |
| Software House $1K\Omega/2K\Omega$ | R03 |
| AMAG 4-State Supervision | R04 |
| Deadbolt Privacy | PHR |
| Deadbolt Privacy and Mercury / Lenel 1K Ω /2K Ω | PHRR01 |
| Deadbolt Privacy and Software House $1 K\Omega/2 K\Omega$ | PHRR03 |
| Deadbolt Privacy and AMAG 4-State | PHRR04 |
| | |