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

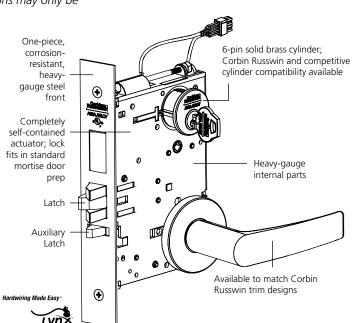
All locks listed for A label and lesser class doors, $4' \times 10'$ single or $8' \times 10'$ pair. Letter F and UL symbol on armored front indicate listing. Meets requirements of UL1034.

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.



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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

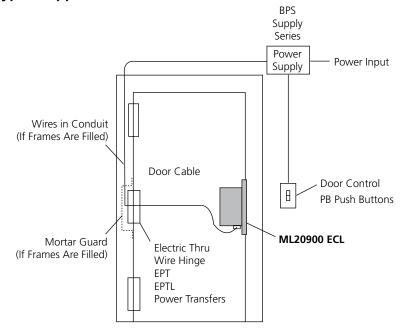
- Mechanical key override
- Patented Quick Reversible latchbolt, Patent # 6,349,982

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

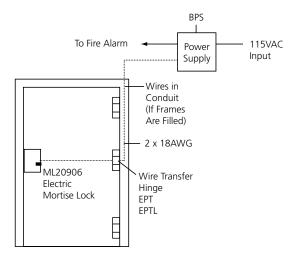




Typical System Components (For Reference Only)

ML20900 ECL

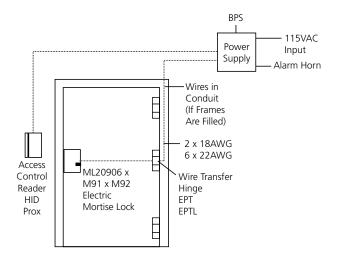
Tower Stairwell



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.

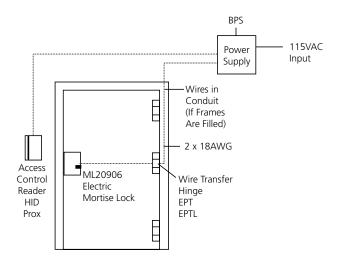
Controlled Entry With Alarm



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

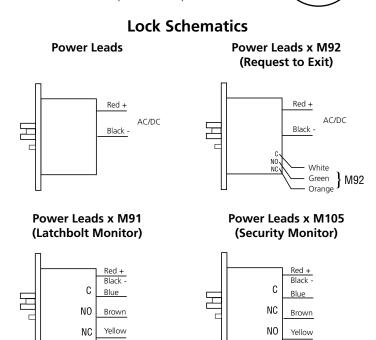


Operation:

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	de Ins	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 (VR) (HS)	 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 Insido	e Serie	es/Function	Description
			0907 x SEC VR (HS)	 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.
			0915 x SEC VR (HS)	 Latchbolt by grip either side only when lock is energized. Both grips locked when lock is not energized. Auxiliary latch deadlocks latchbolt.
A01			0914 x SEC VR) (HS)	 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			0932 x SEC VR (HS)	 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			0906 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.

(HS) Indicates function availability in ML2000HS.

45300-5/17



Trim Designs

ML2000 Series, ML20900 ECL and ML20600 NAC



NSM

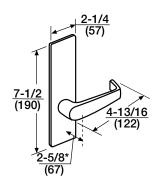
Lever: Cast

Escutcheon: Wrought

Optional:

• Plug only to show; master ring

• Laser engraving on lever or escutcheon



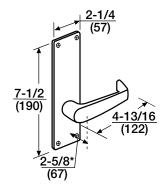


NSN

Lever: Cast

Escutcheon: Wrought

Optional: Laser engraving on lever



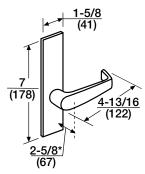


NSP

Lever: Cast

Escutcheon: Wrought

Optional: Laser engraving on lever Note: P Series escutcheon is not compatible with ML20900 ECL or ML20600 NAC mortise locks





NSR

Lever: Cast

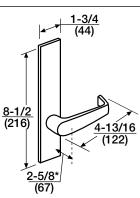
Escutcheon: Solid stainless steel;

forged brass Optional:

• Plug only to show

• Laser engraving on lever Door thickness: 1-3/8" (35mm),

1-3/4" (44mm), 2-1/4" (57mm)



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



5-9

13

69 69

70

70

70

71

14-54

How to Order

Where to find

Quick Codes

Cylinder and Keying

Miscellaneous Options

ML2000 Series/Function

ML20900 ECL Series/Function

information and

ordering

Trim Designs

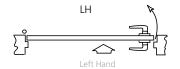
Door Thickness

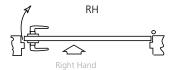
Finish Strikes

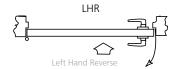
Handing

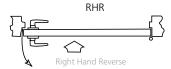
ML2000 Series

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

Overstitus	Series/	Trim		Finish		Hand
Quantity	Function	Outside	Inside	Outside	Inside	nanu
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)

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Quick Codes

ML2000 Series, ML20900 ECL and ML20600 NAC

Cylinder and Keying

Description	Coorify
Description	Specify
Conventional 6-pin 🖽 🔞	(standard)
Conventional 7-pin ®®	7P
Less cylinder(s) [®] ®	LC
IC 6-pin [⊕] ®	C6
IC 6-pin with temporary construction core 🐵 🐵	
Red	CT6R
Blue	CT6B
Green	CT6G
IC 6-pin less core 🐵 🕫	CL6
SFIC 6-pin with SFIC disposable temporary core ¹ (9) (9)	CT6SD
SFIC 6-pin with Less Core ¹ (B) (B)	CLS6
IC 7-pin 199	C7
IC 7-pin with temporary construction core (§)®	
Red	CT7R
Blue	СТ7В
Green	CT7G
IC 7-pin less core (15)(18)	CL7
SFIC 7-pin with SFIC disposable temporary core ¹ (B) (B)	CT7SD CLS7
SFIC 7-pin with Less Core ¹ (19)	
Security (19)	HS
Security IC (1969)	CHS
Access 3 - Patented (196)	AP
Access 3 - Security 🗐 🖫	AS
Access 3 - High Security 🖽 🐨	AHS
Access 3 IC - Patented 🐵 🔞	ACP
Access 3 IC - Security (19) (18)	ACS
Access 3 IC- High Security 🖽 🐨	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 (19/19)	PHS
Pyramid High Security IC (1969)	PCHS
Pyramid IC Less Core (19/19)	CLP
Pyramid with temporary (**) (**) construction core	CTP
Pyramid Security (19) (19)	PS
Pyramid Security IC	PCS
Pyramid Disposable Core (19)(19)	CTPD
6-Pin Disposable Core ®®	CT6D
7-Pin Disposable Core ®®	CT7D
Master ring ² ⁽¹⁹⁾ ⁽¹⁹⁾	MR
Blockout function cylinder ®®	ВО
Flex head cylinder, 6-pin (sectional trim)	FX6
Flex head cylinder, 7-pin (sectional trim)	FX7
Flex head cylinder, 7-pin (sectional tillii)	
(sectional trim)	FXM
Plug only to show, 6-pin (concealed shell; M and R	PO6
escutcheons only, single cylinder only)	100
Plug only to show, 7-pin (concealed shell, M and R	PO7
escutcheons only, single cylinder only)	

Description	Specify
Keyed random 🐵 🕅	KR
Construction master keyed (not available for Pyramid) $^{\textcircled{\tiny{18}}}$	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

Plug only, less cylinder

PO-LC

^{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 $1K\Omega/2K\Omega$	PHRR01
Deadbolt Privacy and Software House 1K Ω /2K Ω	PHRR03
Deadbolt Privacy and AMAG 4-State	PHRR04