



# **EM**

Premium Electromagnetic Locks

> Premium Electromagnetic Locks

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# **EM – Premium Electromagnetic Locks**

EM premium electromagnetic locks range offers a wide range of locking solution for variety of door situations. All EM range products are using materials in premium quality, which enables excellent performance against remanence and corrosion.

#### **Customer Benefits**

- Easy Installation
- Reliable holding strength
- · No residual magnetism
- 1.000.000 test cycles
- High corrosion resistance: grade 3 according to EN 1670 (salt spray tested to 96 hours)
- 10-year warranty for premium standard locks and weather-resistant locks; 2-year warranty for Shear locks and hybrid locks.
- · RoHS and REACH compliant, CE marked

Туре	Features					Door type	•				
						Single/ Double- leaf doors	Outswing doors	Inswing doors	Glass doors	Non-drill through	
	Holding force class	Installa- tion	Dual voltage 12/24 V DC	green /red LED	Lock status sensor		L bracket	L+Z bracket	U bracket	Armature plate holder	Order No.
Premium Standard	Locks										
EM 1800 AH	1800 N	Surface	•	-	•	Single	-	•	•		19860000
EM 1800 AM	1800 N	Mortise	•	-	•	Single	-	-	-	-	19860001
EM 3000-GL AH	3000 N	Surface	•	•	•	Single	•	•	•	•	19860103
EM 3000-T AM	2500 N	Mortise	•	-	•	Single	-	-	-	-	19860110
EM 5300-GL AH	5300 N	Surface	•	•	•	Single	•	•	-	•	19860206
EM 5300-2 GL AH	5300 N x2	Surface	•	•	•	Double	•	•	-	•	19860203
Weather-resistant	Locks										
EM 7500-F AH	7500 N	Surface	•	-	•	Single	-	-	-	-	19860300
EM 7500-S AH	7500 N	Surface	•	-	•	Single	-	-	-	-	19860301
Shear Locks											
EM 7500-D AM	7500 N	Mortise	•	-	•	Single	-	-	-	-	19860320
EM 15000-D AM	15000 N	Mortise	•	-	•	Single	-	-	-	-	19860420
Hybrid Locks											
EM 6900-GL AH B	15000 N	Surface	•	•	•	Single	-	-	-	-	19860241
EM 6900 AM B	15000 N	Mortise	•	-	•	Single	-	-	-	-	19860242

yes - no

Note: The holding force on the door is dependent on the specific type of installation.

#### Article designations, abbreviations

The article designation indicates the holding force and the characteristics of the electromagnetic locks, e.g. EM 1800 AH = 1800 N holding force with feedback function (A), designed for surfacemounting (H).

#### A = Lock Status Sensor

#### B = Buzzer

A built-in buzzer generates audible alarm.

#### D = Shear lock magnets

The special future of these magnets lies in their electromechanical retention system (shear lock). Because of their design, they are also suitable for double-action doors.

#### F = Front mounted

#### GL = Electromagnetic lock with LED light panel

A Mega LED indicates the status.

H = Surface-mounted

M = Mortise-mounted

#### S = Side-mounted

Instead of being mounted on the front face, the electromagnetic lock is loated at  $90^{\circ}-$  e.g. for use on sliding doors.

#### T = Slender design

Because of its particularly narrow width of 35.5 mm, the electromagnetic lock can also be installed in slender narrow-stile profiles.

#### **Early Warning**

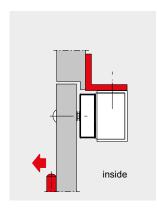
A maglock fitted with pressure sensor allows the unit to send an alarm before the access would be forced without authorization. This locking model warns before the access is breached, which generates a unique advantage for door security.

#### 2 = double lock

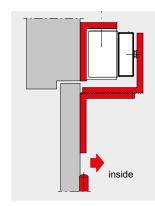
#### Regular installation



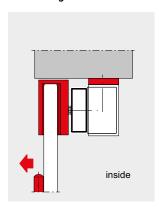
L-bracket for narrow door frame



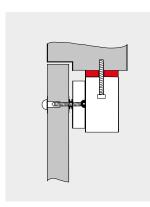
L+Z bracket for inswing doors



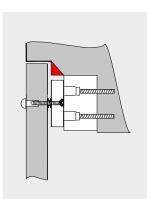
U-bracket for frameless glass doors



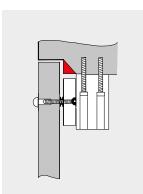
H version



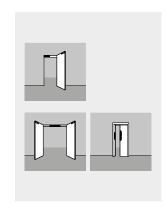
F version



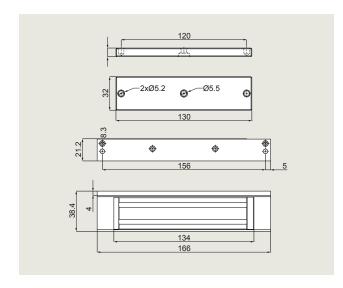
S version



M version



# **EM 1800 AH**



Technical data	
Holding force	1800 N
Installation	Surface-mounted
Magnet housing dimensions	166L x 39W x 21H mm
Armature plate dimensions	130L x 31W x 8H mm
Operation principle	Fail-safe (power to lock)
Power supply	12/ 24 V DC
Current	370/ 185 mA
Lock status sensor	yes
LED indication LSS	no
Operation temperature	-40 to 60°C
IP class	20
Certification	RoHS, REACH, CE
Warranty	10 years
Application	Interior (light internal doors, glass doors, cabinets, drawers, etc.)

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#### EM 1800 AH

Single surface-mounted electromagnetic lock with up to 1800 N holding force, with lock status sensor, anodized aluminium finish

19860000



**AMZL 1800** 

L+Z bracket for EM 1800 AH

19860090



#### **UBG-10 1800**

U-formed glass door bracket for fixing armature plate on 10 mm thick toughened glass doors, suitable for EM 1800 AH  $\,$ 

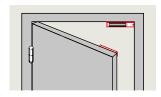
19860092

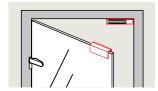


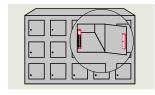
# UBG-12 1800

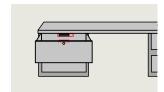
U-formed glass door bracket for fixing armature plate on 12 mm thick toughened glass doors, suitable for EM 1800 AH  $\,$ 

19860093

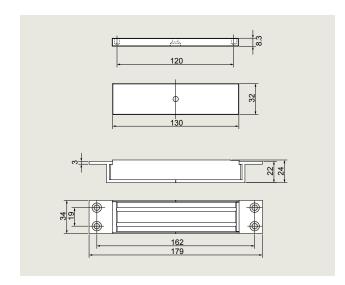








# **EM 1800 AM**



Technical data	
Holding force	1800 N
Installation	Mortise-mounted
Magnet housing dimensions	179L x 34W x 24H mm
Armature plate dimensions	130L x 32W x 9H mm
Operation principle	Fail-safe (power to lock)
Power supply	12/24 V DC
Current	370/185 mA
Lock status sensor	yes
LED indication LSS	no
Operation temperature	-40 to 60°C
IP class	20
Certification	RoHS, CE
Warranty	10 years
Application	Interior (light internal doors, cabi- nets, drawers, etc.)

# **Specification text**

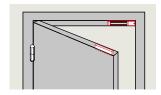
Order No.



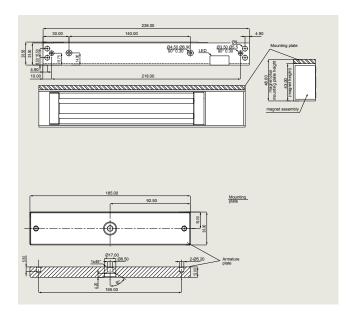
#### EM 1800 AM

Single mortise-mounted electromagnetic lock with up to 1800 N holding force, with lock status sensor

19860001



# **EM 3000-GL AH**



Technical data	
Holding force	3000 N
Installation	Surface-mounted
Magnet housing dimensions	238L x 48W x 26,55H mm
Armature plate dimensions	185L x 38W x12H mm
Operation principle	Fail-safe (power to lock)
Power supply	12/ 24 V DC
Current	480/240 mA
Lock status sensor	yes
LED indication LSS	yes
Operation temperature	-40 to 60°C
IP class	IP 43 (installed)
Certification	RoHS, REACH, CE
Warranty	10 years
Application	Interior (sliding doors,
	internal swing doors with
	access control equipment
	which does not have to be
	resistant to heavy attacks)

Sno	-:4:-	:-	 





#### EM 3000-GL AH

Single surface-mounted electromagnetic lock with up to 3000 N holding force, with lock status sensor and mega-LED status indicator, anodized aluminium finish

19860103



AML 3000-GL

L bracket for EM 3000-GL AH

19860185



**AMZL 3000-GL** 

L+Z bracket for EM 3000-GL AH

19860186



AMF 3000

Armature plate holder for EM 3000

19860192



Consideration toyt	Order No.
Specification text	Order No.



#### **UBG-10 3000**

U-formed glass door bracket for fixing armature plate on 10 mm thick glass doors, suitable for EM 3000

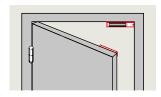
19860194

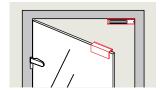


#### **UBG-12 3000**

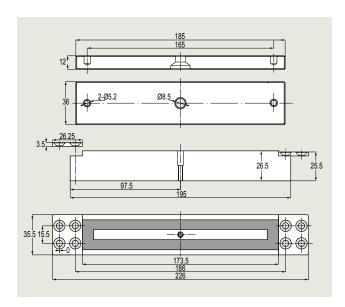
U-formed glass door bracket for fixing armature plate on 12 mm thick glass doors, suitable for EM 3000

19860195





# **EM 3000-T AM**



Technical data	
Holding force	2500 N
Installation	Mortise-mounted
Magnet housing dimensions	195L x 35,5W x 25,5H mm
Armature plate dimensions	185L x 36W x12H mm
Operation principle	Fail-safe (power to lock)
Power supply	12/24 V DC
Current	480/240 mA
Lock status sensor	yes
LED indication LSS	no
Operation temperature	-40 to 60°C
IP class	IP 43 installed
Certification	RoHS, REACH, REACH, CE
Warranty	10 years
Application	Interior sliding doors, internal
	aluminium profile doors
	which does not have to be
	resistant to heavy attacks)

# Specification text

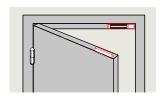
# Order No.

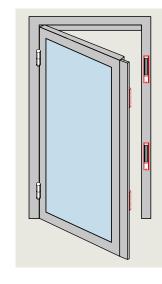


### EM 3000-T AM

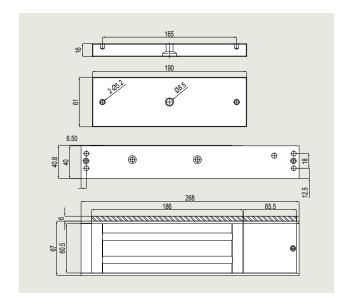
Single mortise-mounted electromagnetic lock with up to 2500 N holding force, with lock status sensor, with slender design

19860110





# **EM 5300-GL AH**



Technical data	
Holding force	5300 N
Installation	Surface-mounted
Magnet housing dimensions	268L x 73W x 40H mm
Armature plate dimensions	190L x 61W x 16H mm
Operation principle	Fail-safe (power to lock)
Power supply	12/24 V DC
Current	480/240 mA
Lock status sensor	yes
LED indication LSS	yes
Operation temperature	-40 to 60°C
IP class	IP 43 installed
Certification	RoHS, REACH, CE
Warranty	10 years
Applicaton	Interior
	(entry doors fitted with
	access control systems)

#### **Specification text**





#### EM 5300-GL AH

Single surface-mounted electromagnetic lock with up to 5300 N holding force, with lock status sensor and mega-LED indicator, anodized aluminium finish

19860206



#### AML 5300-GL

L-bracket for EM 5300-GL AH and EM 5300-2 AH Two L-brackets are required for EM 5300-2 AH 19860291



#### **AMZL 5300-GL**

L+Z bracket for EM 5300-GL AH and EM 5300-2 AH Two L+Z brackets are required for EM 5300-2 AH

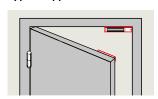
19860290



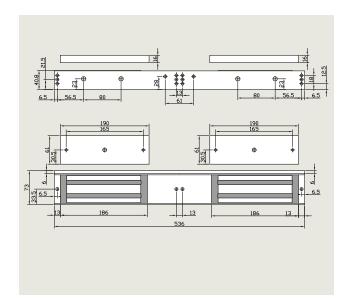
# AMF 5300

Armature plate holder for EM 5300-GL AH and EM 5300-2 AH Two armature plate holder are required for EM 5300-2 AH

19860292



# **EM 5300-2 GL AH**



echnical data	
olding force	5300 N x 2 mag
stallation	Surface-mounted
lagnet housing dimensions	536L x 73W x 41H mm
rmature plate dimensions	190L x 61W x 16H mm x 2 pcs.
peration principle	Fail-safe (power to lock)
ower supply	12/24 V DC
urrent	480 mA/ 240 mA (each mag)
ock status sensor	yes (each mag)
ED indication LSS	yes (each mag)
peration temperature	-40 to 60°C
o class	IP 43 installed
ertification	RoHS, REACH, CE
/arranty	10 years
pplicaton	Interior for double-leaf high
	resistant swing doors,
	entry doors fitted with high
	,
	•
per status sensor ED indication LSS peration temperature class ertification //arranty	yes (each mag) yes (each mag) -40 to 60°C IP 43 installed RoHS, REACH, CE 10 years Interior for double-leaf hig resistant swing doors,

#### **Specification text**





#### EM 5300-2 GL AH

Double surface-mounted electromagnetic lock with up to 5300 N holding force per mag, for double-leaf door, with lock status sensor and LED indicator, anodized aluminium finish

19860203



#### AML 5300-GL

L-bracket for EM 5300-GL AH and EM 5300-2 AH Two L-brackets are required for EM 5300-2 AH 19860291



#### **AMZL 5300-GL**

L+Z bracket for EM 5300-GL AH and EM 5300-2 AH Two L+Z brackets are required for EM 5300-2 AH

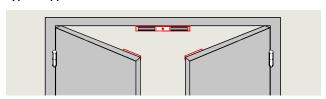
19860290



# AMF 5300

Armature plate holder for EM 5300-GL AH and EM 5300-2 AH Two armature plate holder are required for EM 5300-2 AH

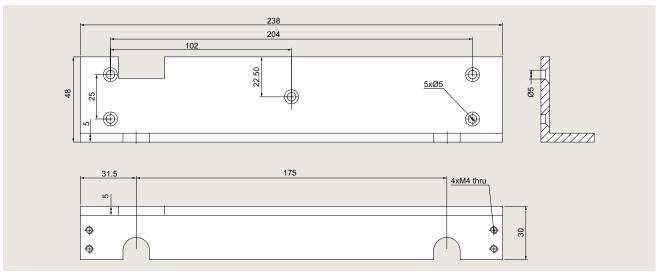
19860292



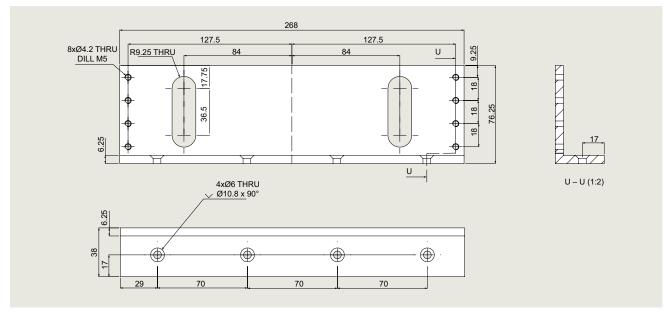
# Accessories for premium standard locks

#### AML - L brackets

AML 3000-GL (Order No. 19860185)

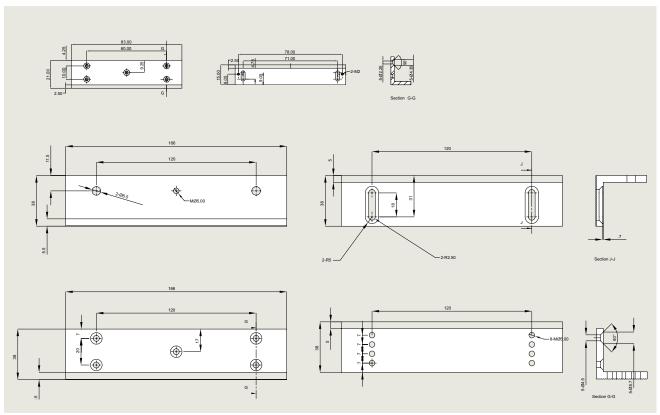


AML 5300-GL (Order No. 19860291)

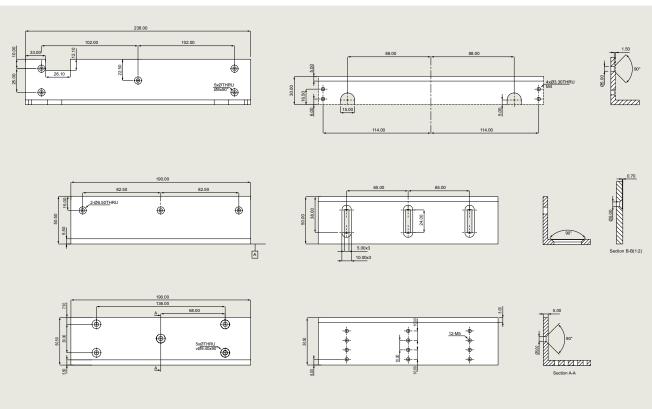


# AMZL - L+Z brackets

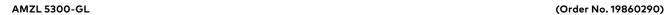
AMZL 1800 (Order No. 19860090)

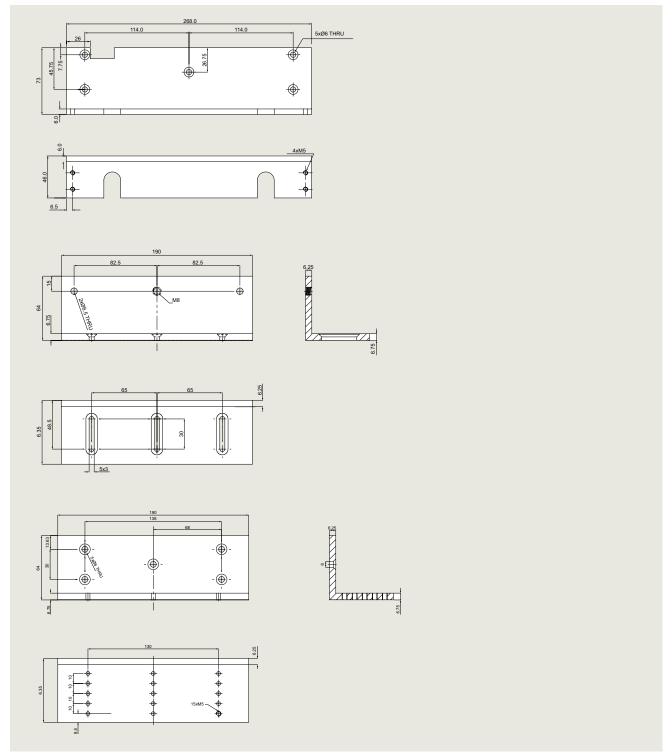


AMZL 3000-GL (Order No. 19860186)



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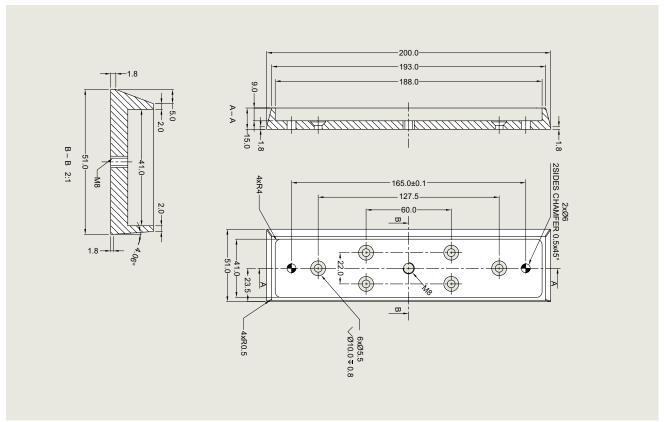




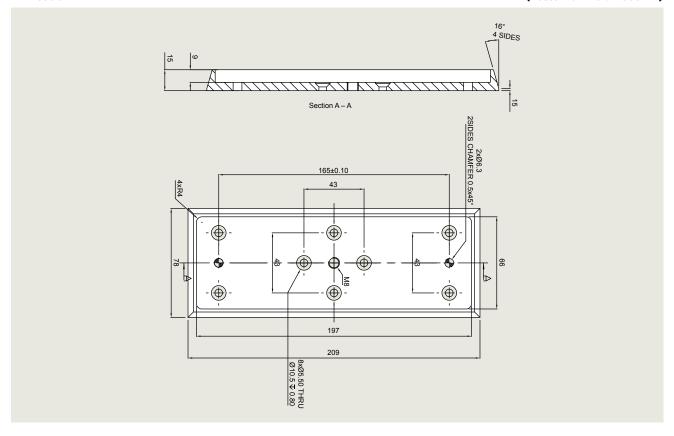
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AMF – Armature plate holder





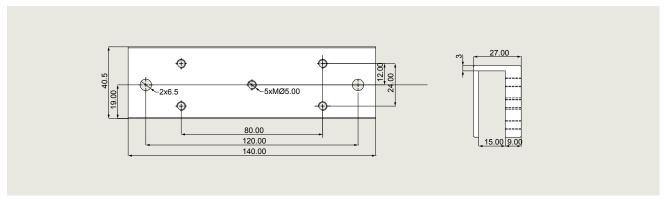
# AMF 5300 (Bestellnummer: 19860292)



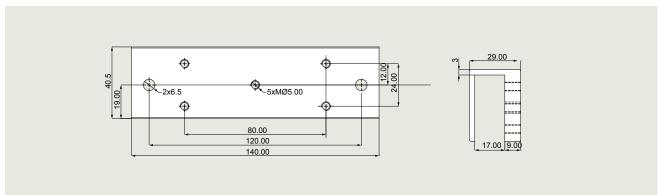
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# **UBG** – Glass door bracket

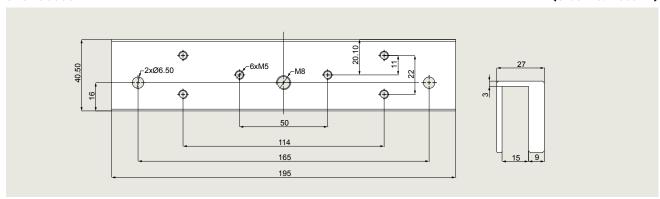




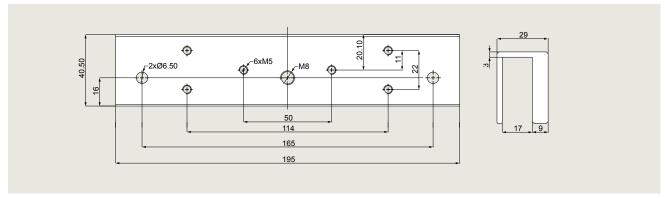
UBG-12 1800 (Order No. 19860093)



UBG-10 3000 (Order No. 19860194)



UBG-12 3000 (Order No. 19860195)



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# **Weather-resistant Locks**

- All-in-one lock with large holding force
- Robust and anti-corrosion with completely sealed stainless steel housing
- For external applications and hostile environment (IP 66)
- · Easy installation

Technical data	
Holding force	7500 N
Installation	Surface-mounted (front/side)
Magnet housing dimensions	225L x 63W x 44H mm
Armature plate dimensions	190L x 61W x 16H mm
Operation principle	Fail-safe (power to lock)
Power supply	12/24 V DC
Current	480 mA/ 240 mA
Lock status sensor	yes
LED indication LSS	no
Operation temperature	-40 to 60°C
IP class	66
Certification	RoHS, REACH, CE
Warranty	10 years
Application	Exterior doors or gates, doors in hostile environment

#### **Specification text**

#### Order No.



#### EM 7500-F AH

Weather-resistant electromagnetic lock with up to 7500 N holding force, with lock status sensor, stainless steel housing, front-mounted for swing doors

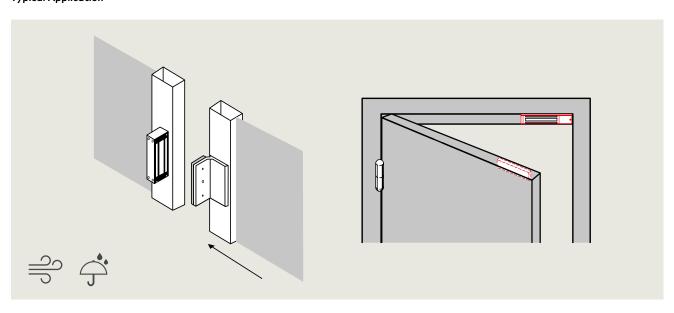
19860300



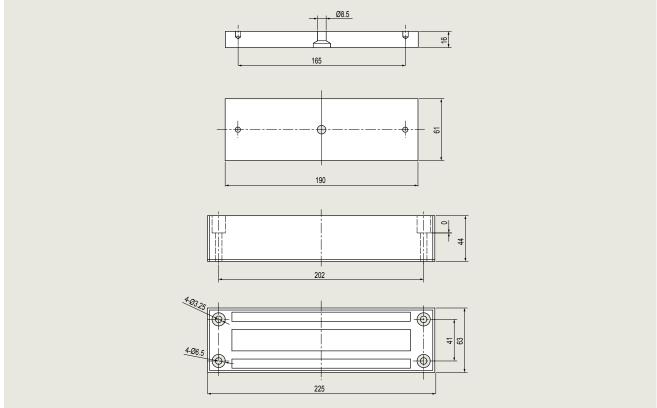
#### EM 7500-S AH

Weather-resistant electromagnetic lock with up to 7500 N holding force, with lock status sensor, stainless steel housing, side-mounted for sliding doors

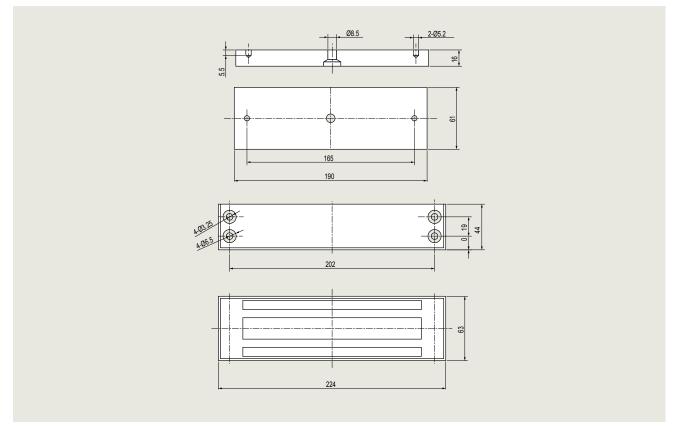
19860301







# EM 7500-S AH (Order No. 19860301)



11/18

# **Shear Locks**

- Concealed solution thanks to minimal dimension
- Large shear holding force
- The unique solution for double action swing doors

EM 7500-D AM	EM 15000-D AM
7500 N	15000 N
Mortise-mounted	Mortise-mounted
129L x 31W x 19H mm	152L x 32W x 24H mm
129L x 26W x 21H mm	152L x 30W x 28H mm
Fail-safe (power to lock)	Fail-safe
12/ 24 V DC	12/24 V DC
1500/750 mA	1500/750 mA
yes	yes
no	no
-40 to 60°C	-40 to 60°C
IP 43 installed	IP 43 installed
RoHS, REACH, CE	RoHS, REACH, CE
2 years	2 years
Interior swing doors, double action doors	Interior swing doors, double action doors
	Mortise-mounted  129L x 31W x 19H mm  129L x 26W x 21H mm  Fail-safe (power to lock)  12/ 24 V DC  1500/750 mA  yes  no  -40 to 60°C  IP 43 installed  RoHS, REACH, CE  2 years  Interior swing doors, double

#### **Specification text**

Order No.



#### EM 7500-D AM

Shear lock with up to 7500 N holding force, mortise-mounted, with lock status sensor, suitable for double-action doors

19860320

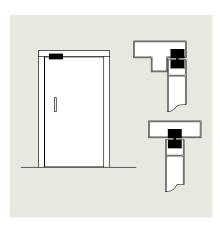


#### EM 15000-D AM

Shear lock with up to 15000 N holding force, mortise-mounted, with lock status sensor, suitable for double-action doors

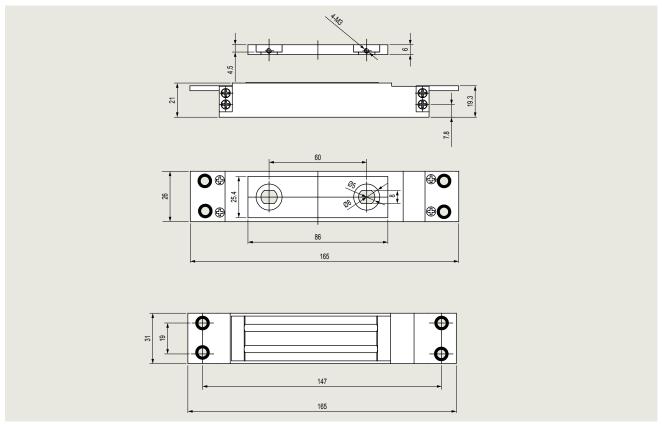
19860420

#### **Typical Application**

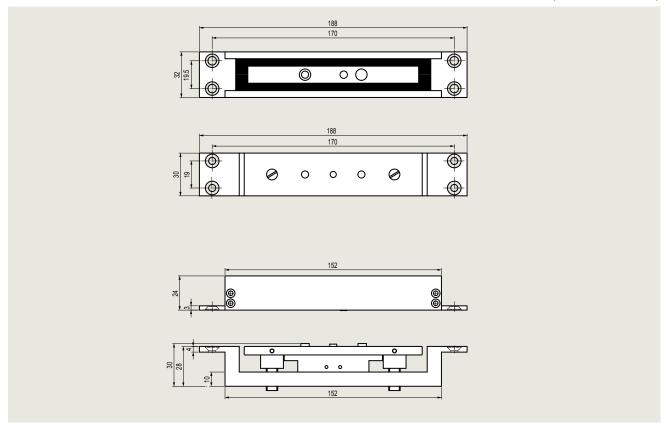


Note: for double-action door application we recommend to use shear lock in combination with heavy duty floor spring.





# EM 15000-D AM (Order No. 19860420)



# **Hybrid Locks**

The EM 6900 series offers advanced mini electromagnets with 15000 N holding force for high security doors. The locks feature an integrated lock status sensor, a door status sensor, an Early Warning detector and a built-in buzzer.

- Maximum holding force level: > 15000 N
- Minimal size (surface version -30.5 / mortise version -35.5 mm width) for universal installation
- Highest security: The Early
   Warning detector will generate a remote alarm and activate the built-in buzzer before
   unauthorized access occurs.
- Innovative hybrid solution combining mechanical and electromagnetic holding force
- With tamper-proof armature plate bracket
- Energy-saving: Less power consumption than conventional electromagnetic locks

Technical data	EM 6900 GL-AH B	EM 6900 AM B	
Holding force	> 15000 N > 15000 N		
Installation	Surface-mounted	Mortise-mounted	
Magnet housing dimensions	218L x 30.5W x 30H mm	195L x 35.5W x 25.7 H mm	
Armature plate dimensions	$256L \times 30W \times 38H$ mm (incl. bracket)	(incl. bracket) 195L x 35.5W x 24H mm	
Operation principle	Fail-safe (power to lock)	Fail-safe (power to lock)	
Power supply	12 / 24 V DC	12 / 24 V DC	
Current	400 / 200 mA	400 / 200 mA	
Lock status sensor	yes	yes	
Mega LED indication LSS	yes	no	
Early warning alarm	Reed + built-in buzzer	Reed + built-in buzzer	
Operation temperature	-40 to 60°C	-40 to 60°C	
IP class	IP 43 installed	IP 43 installed	
Certification	RoHS, REACH, CE	RoHS, REACH, CE	
Warranty	2 years	2 years	
Application	Interior	Interior	
	(doors fitted with security access	(doors fitted with security access	
	control systems)	control systems)	

Specii	ication	text	

Order No.



#### EM 6900 GL-AH B

Single surface-mounted hybrid electromagnetic lock with more than 15000 N holding force, with lock status sensor and MegaLed, door status sensor, Early Warning detector and built-in buzzer, anodized aluminium finish

19860241

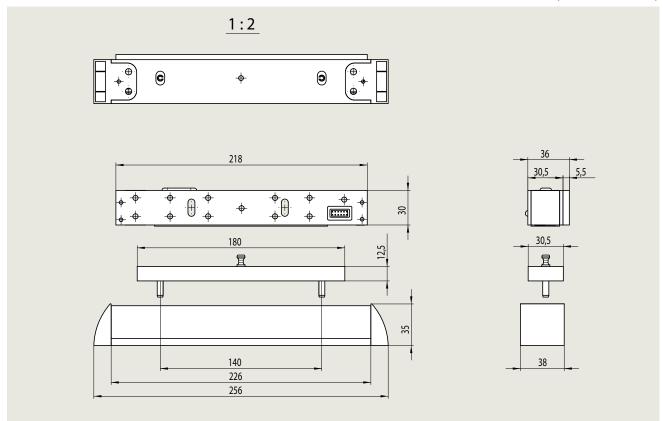


### EM 6900 AM B

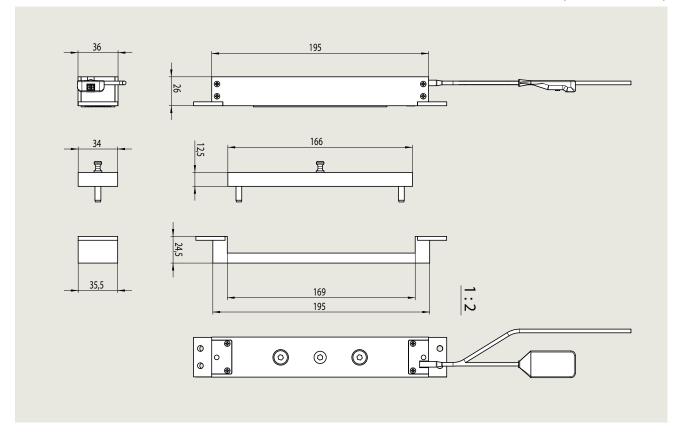
Single mortise-mounted hybrid electromagnetic lock with more than 15000 N holding force, with lock status sensor, doors status sensor, Early Warning detector and built-in buzzer

19860242





# EM 6900 AM B (Order no. 19860242)





Door Hardware



Electronic Access & Data



Mechanical Key Systems



**Lodging Systems** 



Entrance Systems



Interior Glass Systems



Safe Locks



Service

dormakaba International Holding AG Hofwisenstrasse 24

Hofwisenstrasse 24 CH-8153 Rümlang T +41 44 818 90 11 info@dormakaba.com www.dormakaba.com