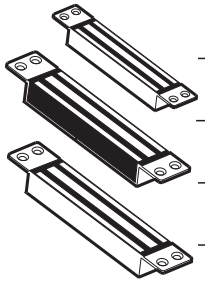
SAFETY & SECURITY JADE

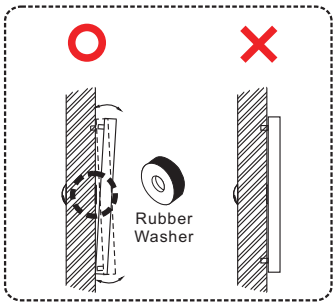
Electromagnetic Lock Installation Instruction (Mortise Series)

Specifications

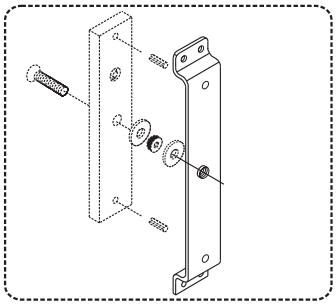


Model	Holding Force	Current Drew	Optional Bracket	Bond Sensor Output
10003M	300 lbs(136 Kg)	300mA/12VDC 250mA/24VDC		
10000	600 lbs(272 Kg)	500mA/12VDC 250mA/24VDC	AMB-300	10000R
10000ST	600 lbs(272 Kg)	500mA/12VDC 250mA/24VDC	AMB-300	10000STR

Installation Diagram

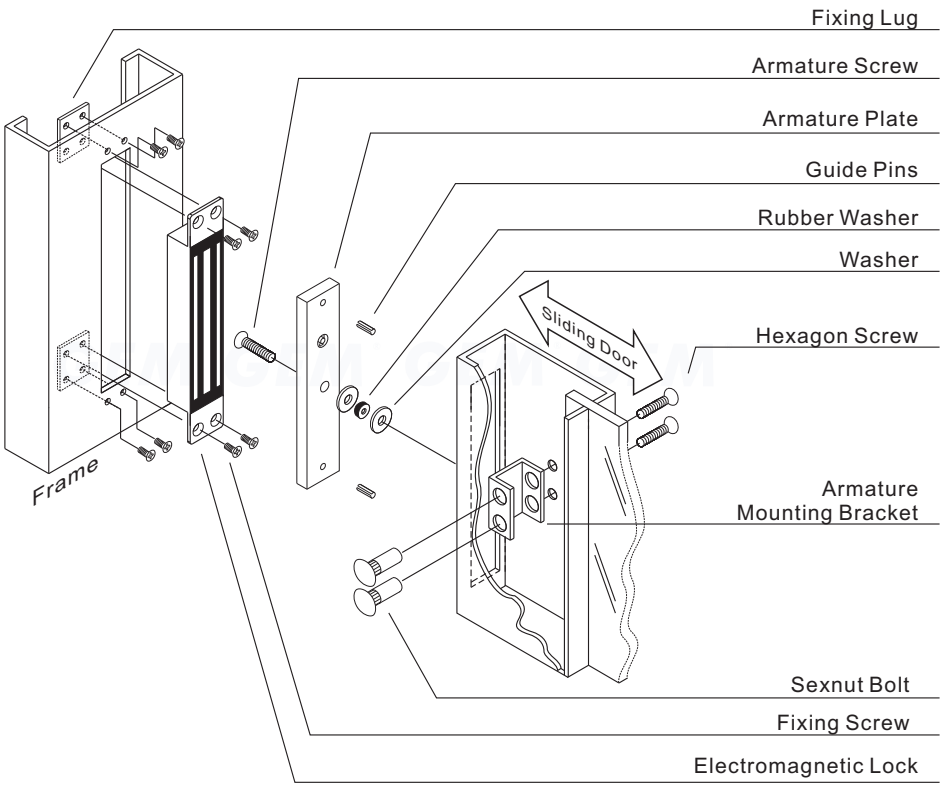


The rubber washer makes the armature plate adjustable in order to reach proper combination with magnet lock.



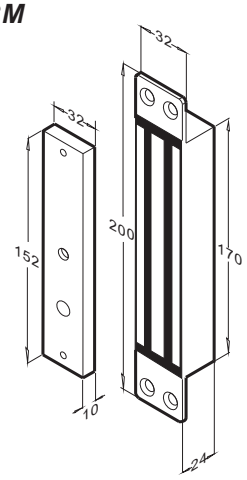
AMB-300 Armature Bracket
(optional for model:10000,10000ST)

The actual accessory pack vary from different models.

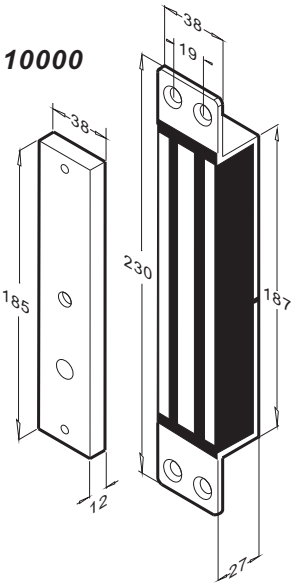


Dimensions

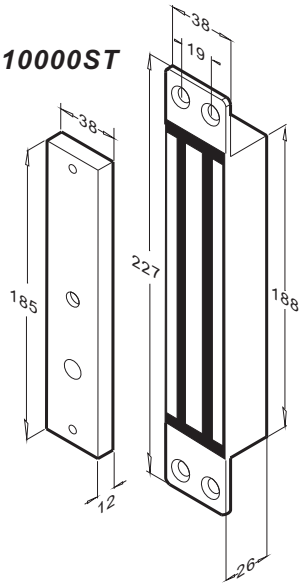
10003M



10000



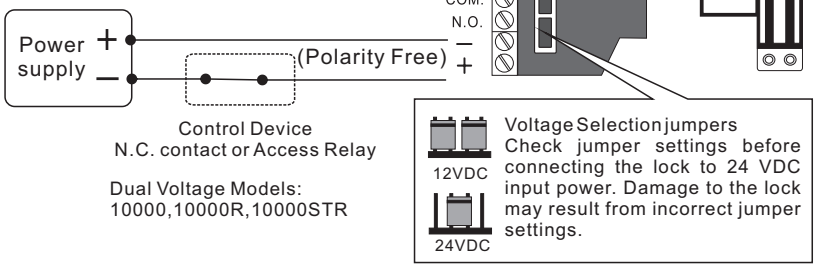
10000ST



Unit: mm

Connecting Diagram

Bond sensor output
N.C contact output: opened status
N.O contact output: locked status
SPDT relay rated: 0.5A/125VAC
1A/24VDC
Models: 10000R, 10000STR

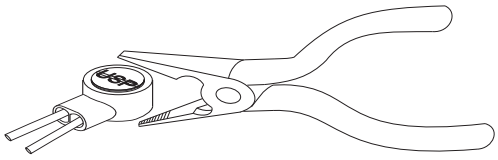


Control Device
N.C. contact or Access Relay

Dual Voltage Models:
10000,10000R,10000STR

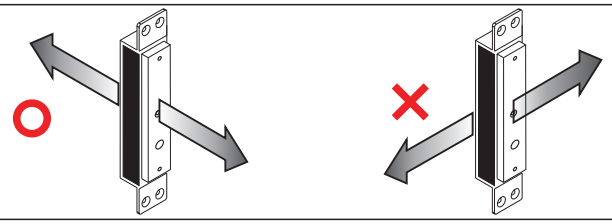
Voltage Selection jumpers
Check jumper settings before connecting the lock to 24 VDC input power. Damage to the lock may result from incorrect jumper settings.

Butt Splice(IDC) Connector

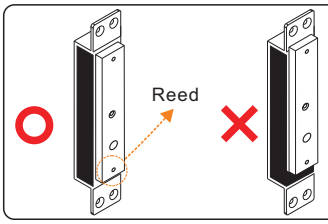


Using crimper or pliers and pressing the header of connector down to even position

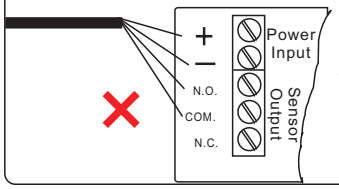
Important Note



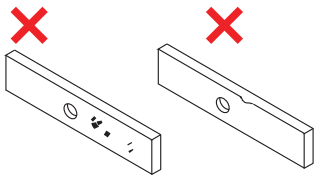
The electromagnetic lock requires a face fitting as shown in Figure. Otherwise, the holding force will be decreased be about 75% (direction of hydraulic press pull must be collinear).



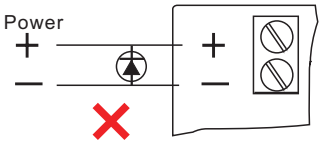
Make sure the contact area of the electromagnetic lock and the armature plate are correct or the bond sensor reed output function will not work.



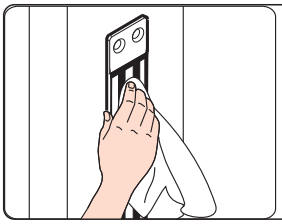
Do not run power wires and signal wire in the same cable or conduit.



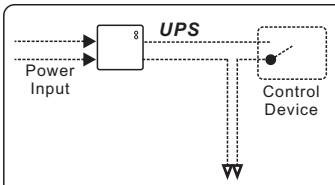
Make sure the contact surfaces of the electromagnet and armature plate are clean and free from dust and foreign material.



Remove any diode installed across the magnet lock for spike suppression. The magnet is in-built with a metal oxide varistor to prevent back EMF.



Wipe the surface of magnet lock with anti-rust oil regularly.



The electromagnet locks are fail safe , therefore it may be required the UPS to remain locked during the power failure.

Trouble Shooting

Problem	Possible Cause	Solution
Door does not lock	No power	Make sure the wires are connected properly
		Check that the power supply is connected and working properly
		Make sure the lock switch is wired correctly
Low holding force	Poor contact between electromagnet and armature plate	Make sure if the armature plate is not deformed?
		Make sure if the rubber washer was used between magnet lock and armature plate
		Make sure the contact surfaces of the electromagnet and armature plate are clean and free from dust and foreign material.
	Low voltage or incorrect voltage setting	Ensure the electromagnetic lock is set for the correct voltage.
		Check for proper voltage at the electromagnetic locks input. If low, determine if the correct wire gauge is being used to prevent excessive voltage drop.
Sensor output is not functioning	A secondary diode was installed across the electromagnet lock	Remove any diode installed across the magnet for "spike" suppression. (The magnet is fitted with a metal oxide varistor to prevent back EMF)
	Misalignment between the armature plate and electromagnet lock	Make sure the armature plate and electromagnetic lock are aligned correctly