# **GS705N-30** Shear Lock Installation Instruction

#### Important Notes

Make sure that the door and frame is wide and deep enough to install the shear lock and run the wires. Make sure the central lines on the door frame and door leaf align. Install the magnet assembly in the door frame before installing the armature assembly in the door leaf.

Before installation, make sure the door, especially double-action doors, always return to the dead center after it is opened. Use door hinges if necessary.

#### Specifications

| Holding Force     | Up to 1200 lbs (545 Kg) in shear.   |
|-------------------|---|
| Power Input       | 12/24 VDC selectable via jumpers +10% over voltage is acceptable , under voltage will reduce holding force. |
| Current Draw      | 420mA/12 VDC; 210mA/24 VDC The unit does not require initial voltage increase to operate.                   |
| Finish            | Magnet and Armature: Zinc plated<br>Housing: Black powder coated  |
| Monitoring Output | Magnet bond sensor output, SPDT rating 0.5A/125VAC, 1A/24VDC  |
| Door Gap          | 2mm   |
| Operating Temper. | -30°C to +50°C  |

Magnet Assembly

## **Connecting Diagram**

Dimensions



### Caution:

Make sure that the "+" and "-" wires are connected correctly. Failure to observe polarity will result in a short circuit and is not covered by product warranty.

Install the magnet assembly into the door frame before installation the armature assembly into the door leaf. The magnet assembly requires space to run wires, as wall as space for the recesses portion of the unit. Make sure that the position selected for the magnet assembly leaves enough room on the door to install the armature assembly.







Flat Lugs is used when the door frame is deep, and to prevent the Electromagnetic Lock or the Armature Plate caved in, add flat lugs to raise the plane (level) of the Electromagnetic Lock face or the Armature Plate face to the door frame surface.



For Vertical Installation Change the spring which is provided in the screw pack. 1. Make sure the gap between the door top rail and the frame header is within 2 mm.

2. Test the door operator on a single swing door to see if it works. Check double swing doors to see if the central lines on the door frame and door leaf align.

3. Mark the central lines on the door and frame where the magnet assembly and armature assembly will be installed.

4. Attach the templates to the door and frame.

5. Cut and drill holes where the templates indicate. Connect the wires. Install the magnet assembly and armature assembly towards the leading edge of the door.

6. Connect to the power and check the unit.

A. For proper operation, the armature assembly must be close and parallel to the magnet assembly, without interfering with opening and closing of the door. Keep a distance of 2 mm between the armature assembly and the magnet assembly.

B. If the lock bolt attracts the armature assembly when the door is not in position, please adjust the door operator and floor hinges.

C. If there is no output from the bond sensor, please remove secondary diode installed across the magnet assembly. Also adjust the surfaces of the magnet and the armature assembly.



Proper operation cannot be expected with more than 2 mm gap between the armature and the magnet. Use the key wrench provided to adjust the armature vertical adjustment screws.