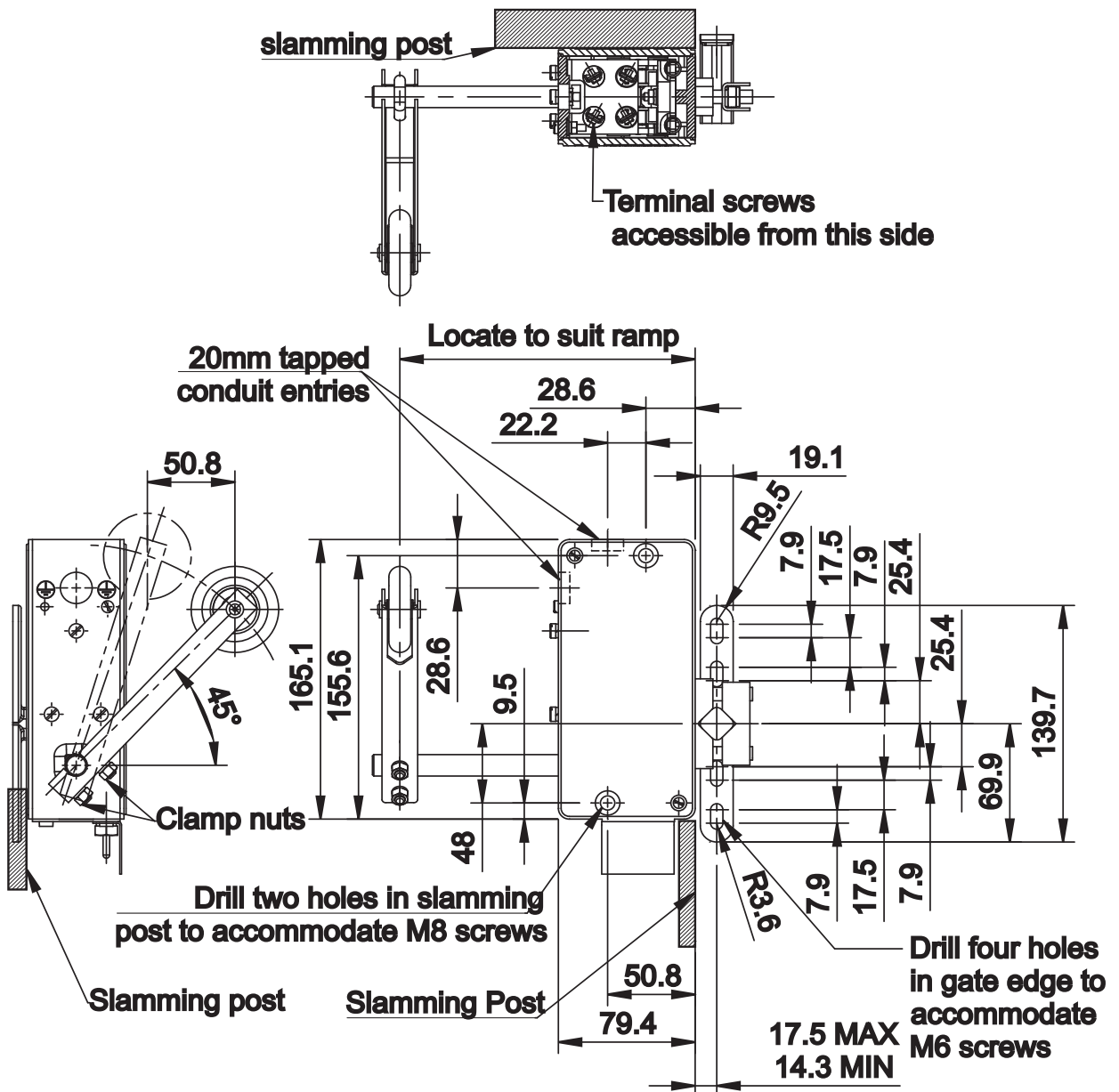


# VL10 Gatelock

## Installation Guide

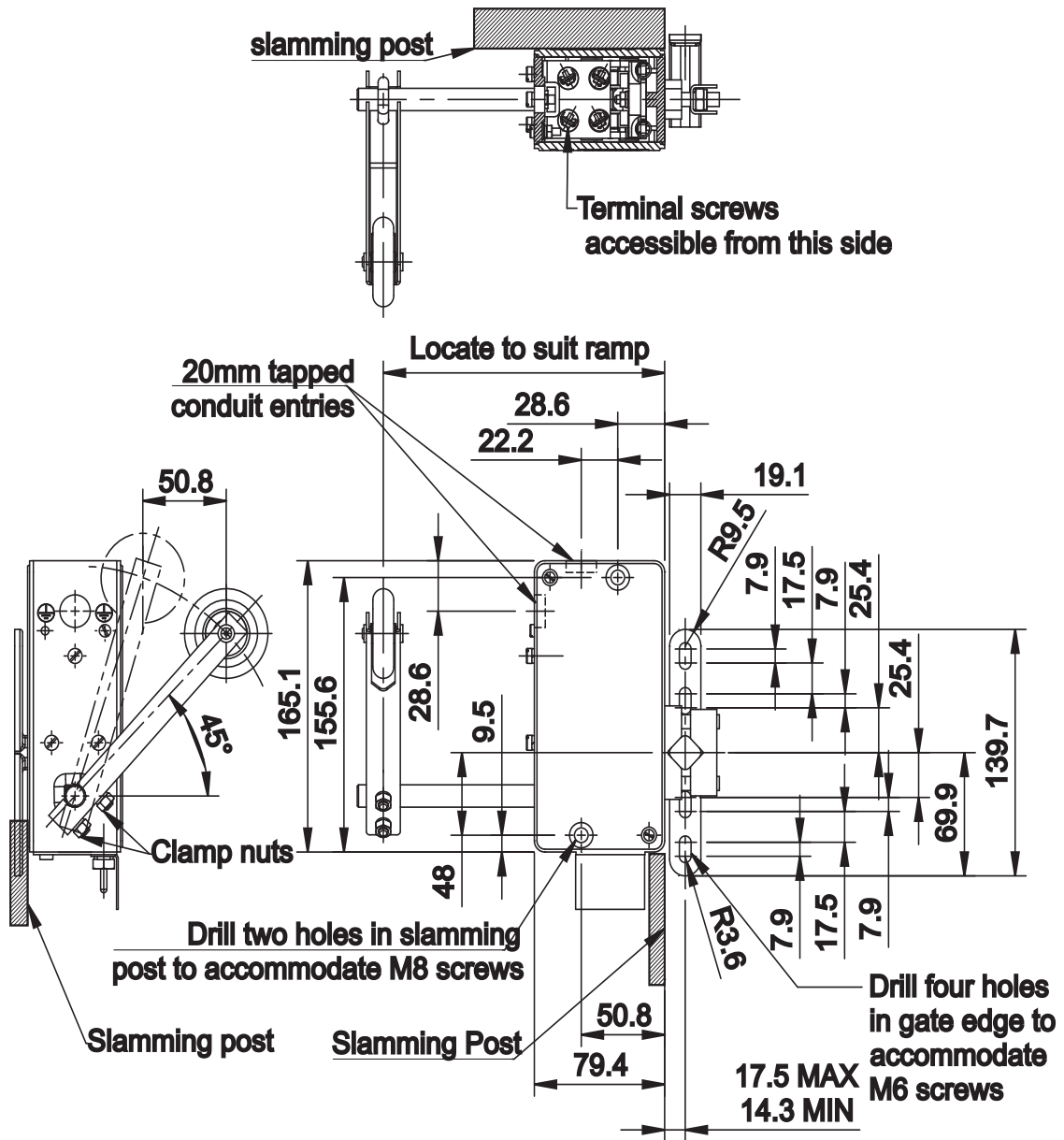
**FIGURE 1**  
**VL10 RIGHT HAND**

**VL10 GATELOCK RIGHT HAND**  
i.e. WITH DOOR CLOSING TO  
RIGHT FACING THE LIFT WELL



**FIGURE 2**  
**VL10 LEFT HAND**

**VL10 GATELOCK RIGHT HAND**  
**i.e. WITH DOOR CLOSING TO**  
**RIGHT FACING THE LIFT WELL**



### **Application**

The VL10 gatelock is robustly constructed for installation on lift landings with side closing single collapsible gates or single sliding doors.

### **Environment**

VL10 is suitable for application in all normal indoor locations. Abnormal locations involving water spraying or splashing, chemical fumes and ignitable or explosive gases or dusts, require more detailed consideration. If in doubt concerning location or installation, consult the manufacturers.

### **Operation**

The gatelock should be used in conjunction with a suitable retiring ramp. (Dewhurst Type FR21 is suitable for this application).

When the landing door/gate is closed, the beak enters the lock and engages with an insulated cam which carries contacts that then complete a primary circuit (A). When the ramp clears the lock roller the operating arm of the gatelock falls forward allowing the locking plate to move downward, trapping the beak in position. The beak locking action is accompanied by the completion of a secondary circuit (B), but only if the primary circuit has been made. Lift movement will only be possible when both circuits are made.

### **Installation**

The VL10 gatelock is robustly constructed for installation on lift landings with side closing single collapsible gates or single sliding doors.

VL10 is suitable for application in all normal indoor locations. Abnormal locations involving water spraying or splashing, chemical fumes and ignitable or explosive gases or dusts, require more detailed consideration. If in doubt concerning location or installation, consult the manufacturers.

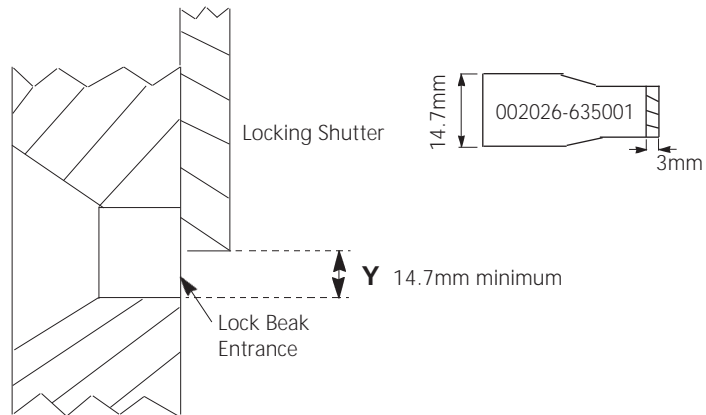
The gatelock should be used in conjunction with a suitable retiring ramp. (Dewhurst Type FR21 is suitable for this application).

When the landing door/gate is closed, the beak enters the lock and engages with an insulated cam which carries contacts that then complete a primary circuit (A). When the ramp clears the lock roller the operating arm of the gatelock falls forward allowing the locking plate to move downward, trapping the beak in position. The beak locking action is accompanied by the completion of a secondary circuit (B), but only if the primary circuit has been made. Lift movement will only be possible when both circuits are made.

## Recommended Maintenance

The periodic maintenance required to ensure safe smooth trouble free operation of the latching and locking mechanism fitted to VL series locks.

- 1) Check lock beak and lock box enclosure are positioned to ensure a free and full engagement in the closed door position.
- 2) Check lock beak for signs of wear due to misalignment. If excessive wear is present the beak should be replaced and the lock retested.
- 3) To check for wear within lockbox check dimension 'Y' shown below.

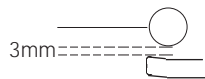


Measure the shutter distance 'Y' relative to the box beak aperture.

Operate the gatelock 6 times manually by pushing and releasing the gatelock operating arm. Dimension 'Y' should be a minimum of 14.7mm after each operation.

The dimensional checks on both 'Y' and the gap of contact set 'B' can be carried out using VL Gatelock gauge 002026-635001. We recommend measurement be part of the annual periodic lock inspection. The gauge should be used with the lock contact voltage isolated.

If dimension 'Y' has been recorded less than 14.7mm the internal contact gap of contact set B needs to be measured. The minimum operational gap is 3mm.



**NOTE: Double Break Contact**

**A contact gap of less than 3mm requires the lock to be replaced.**

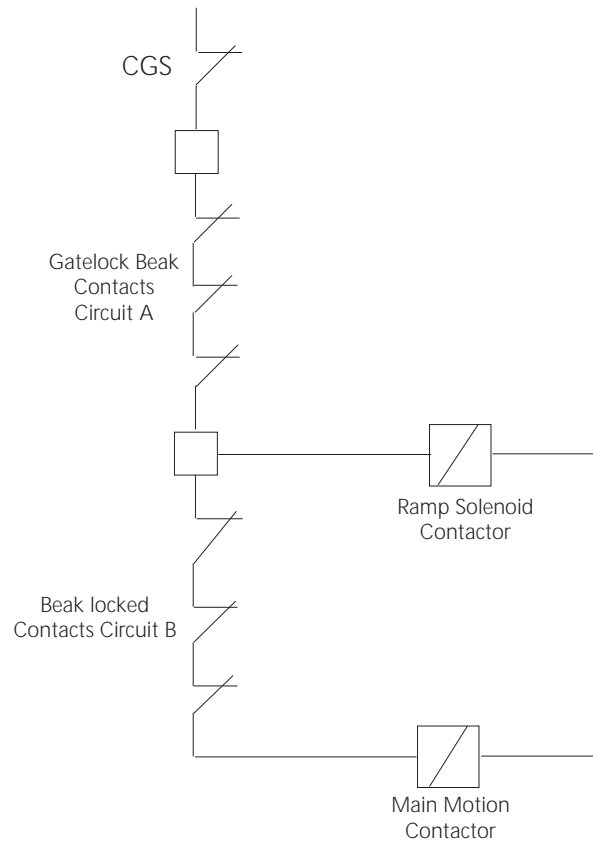
- 4) Check that the operating arm is set to approximately 45°. This should give an operating movement of between 50.8 to 61.9mm maximum. Check clamping nuts for correct torque.
- 5) Check electrical integrity and resistance of the main and prelock contacts, typical resistance 0.2 ohm.
- 6) Grease operating cam located within lock box enclosure, operating lock box shutter mechanism. Recommend Shell Albida RL2 or equivalent.

## Electrical Connections to Lift System

Ensure main and control supplies are isolated.

The lock must be applied to the lift control system in such a way as to prove circuits A and B are both closed and remain closed prior to and during any lift movement.

**FIGURE 3**



Remove front cover from the lock. Utilise one of the two 20mm tapped conduit entries to bring wires into the gatelock. Ensure conduit termination is tight and secure. If flexible conduit is utilised, a separate earth wire must be installed in the conduit and must be securely connected to a suitable earth terminal in the electrical installation. Plug unused conduit entry.

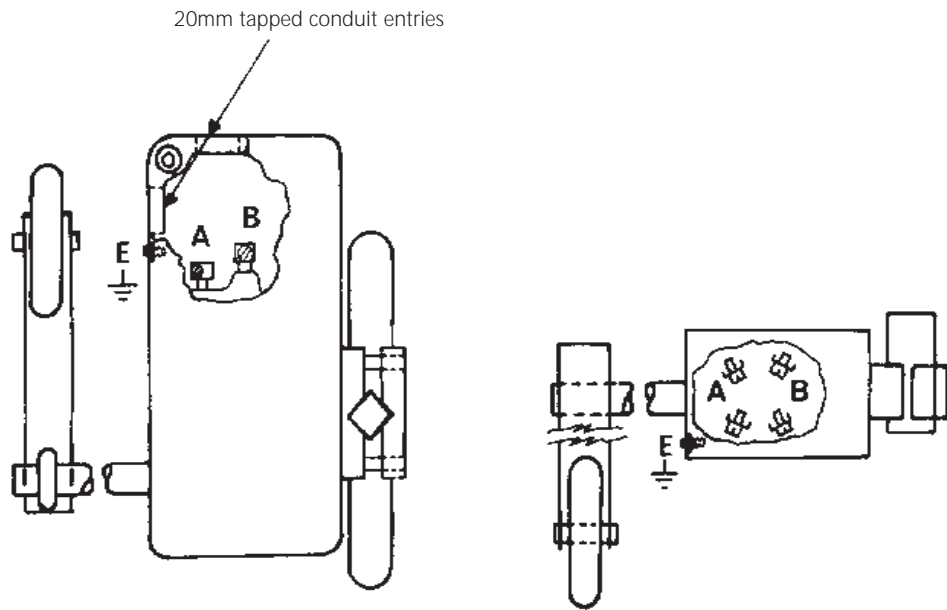
Connect primary circuit using beak contact terminals A and secondary circuit using ramp contact terminals B. Connect earth wire to terminal E. See Figure 4.

Replace front cover and tighten securing screws.

## Contacts

Both sets of contacts are self-aligning and have a self-cleaning action with positive knock-off feature.

**FIGURE 4**



### Notes:

1. Roller operating force 0.9kgf.
2. No cantilever load to be applied to shaft.