Interguard IG222



The IG222 is a bi-directional two door interlock where the decision to grant entry can be made by a supervisor to confirm identity via a vision panel or CCTV. The unit is powered by12/24vdc. The front panel incorporates pushbuttons for entry or egress and visual indication of door status. Lock dwell time can be preset (0 - 20 secs). An integral buzzer gives warning of Door Open Too Long (DOTL) adjustable from 20 - 60 secs., and breech conditions. A keyswitch with volt free DPCO contacts is fitted to the front panel for user/engineer defined purposes.

An emergency door release unit should be fitted to allow egress without resorting to supervisor control. This should be wired directly to the locking device.

Inputs

inputs are provided for door/lock status contacts (IN3 & IN4), door release buttons (IN1 & IN2) for unsupervised use. Secure devices such as fingerprint readers could be used.

Outputs

Volt free SPCO relay contacts are provided for lock control (Lock A & Lock B) and signalling breech conditions to remote locations. Outputs are also available for remote door status LEDs (L2,4,5 & 7)

Operation

There are three modes of operation.

Mode 1. Standard door strikes/mag locks and door contacts for door status monitoring

Mode 2. Monitored door strikes/mag locks and/or automatic door openers/closers.

Mode 3. Un-secured door mode for hands free un-supervised operation.





Mode 1. Standard mode. (IN5 open circuit)

On power up the breech relay energises and no door LEDs are illuminated. Normally both doors are closed and locked to prevent entry or egress.

1. To pass through the airlock from say door A button A is pressed:-

- a. Lock A relay is energised to release door A.
- b. The green LED for door A is illuminated.
- c. The red LED for door B is illuminated.

2. The visitor then passes into the airlock, closing door A:-

- a. Both LEDs are extinguished
- b. Lock relay A is de-energised to lock door A (The visitor is now in the airlock)

3. Release button B is then pressed:-

- a. Lock B relay is energised to release door B.
- b. The green LED for door B is illuminated.
- c. The red LED for door B is extinguished.

4. The visitor passes through and door B is closed:-

- a. All LEDs are extinguished.
- b. Lock relay B is de-energised to lock door B.

Mode 2. Monitored device mode. (IN5 closed circuit)

1. To pass through the airlock from say door A button A is pressed:-

- a. Lock A relay is energised to release door A.
- b. The green LED for door A is illuminated.
- c. The red LED for door B is illuminated.

2. Door A is then opened and the visitor passes into the airlock:-

- a. Lock relay A remains energised for the dwell time to allow door A to be used.(The visitor is now in the airlock. If the door A is not closed then the DOTL timer commences. During this period the lock relay will follow presses of button A)
- When door A closes and locks: a. The LEDs are extinguished.
- 4. Release button B is then pressed:a. Lock B relay is energised to
 - release (and open) door B b. The green LED for door B is illuminated
 - c. The red LED for door A is illuminated.
- 5. Door B is opened and the visitor to passes out of the airlock:-

a. Lock relay B remains
energised for the dwell time
to allow door B to be used.

When door B is closed and locked: a. All LEDs are extinguished.

These procedures work in reverse to allow egress through door B.

Mode 3. Un-secured door mode. (IN1 and IN2 closed permanently)

Both doors are fitted with locking devices and conventional door contacts. If any one door is opened the other is immediately locked and can only be opened when the first to open has closed. The second to open then locks the first. This is used for hands free unsupervised operation eg. cleanrooms or temperature controlled areas. Well fitting locks, door contacts and closers are essential.

Door Open To Long - DOTL If a door is released and opened but not re-closed within the DOTL period two red flashing LEDs and the relevant green LED give indication along with an audible bleep. Normality is resumed when the door is closed. If the door is not closed then the breech relay de-energises.

Breeched If a door is forcibly opened both red LEDs will flash alternately with the relevant green LED and audible warning will be given for about 90 seconds. The breech relay will de-energise to signal to a remote point if necessary. If the second door is then forcibly opened both green LEDs will flash alternately with the red LEDs.



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