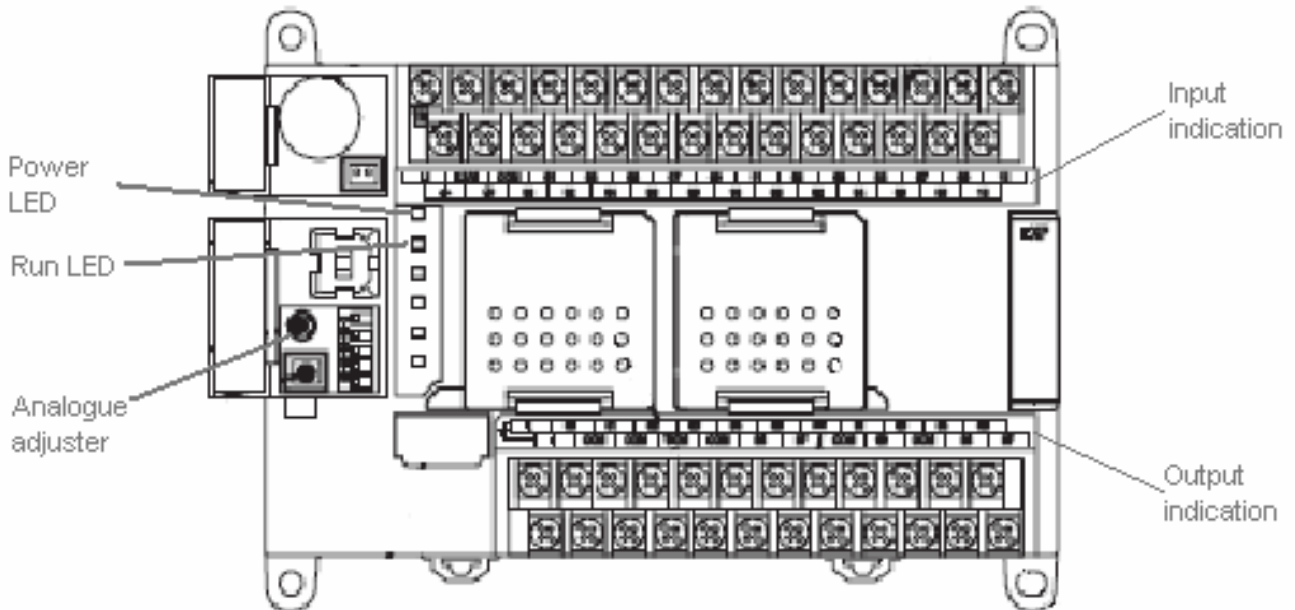


PLC Layout



Analogue adjustment

The analogue adjuster can be located underneath the peripheral cover.

- **Door close timer** – The door open dwell time is adjustable from 1 to 26 seconds.

Operation

The PLC program contains a number of fault condition circuits and continually monitors operation of the lift components to check for correct operation. Should a component fail to operate or operate in a faulty manner, the controller will prevent a hazardous condition and a fault is indicated by flashing a call accept output with the relevant number of flashes for that fault condition with a 3 second pause between.

1 Flash – Thermistor unit

- The motor is running too hot causing the thermistors unit to trip.

The lift will then stop at the next floor, cancel all calls not allowing any new calls into the system and go out of service showing the fault. The controller goes back into service when motor has cooled sufficiently.

2 Flashes – Door fault (power doors only)

- Safety circuit and gate locks do not make when the doors are fully closed. The doors will pump open and closed 10 times before showing the fault.
- Door close protection timer has elapsed. The doors will have a time of 10 or 20 seconds depending on door type. If the doors do not close within this time then the doors will stop driving shut and show the fault.
- Door open protection timer has elapsed. The doors will have a time of 10 or 20 seconds depending on door type. If the doors do not close within this time then the doors will stop driving shut and show the fault.
- Safety edge has been operated whilst the doors are closing. If this happens 10 times in succession then the doors will park open and show the fault.

When door fault occurs the controller is reset by registering a car call.

3 Flashes – Proximity failure

- Complete tape head failure. The lift will then drive to the terminal floors twice, stopping at the second terminal floor.
- When the controller sees a stepping signal and level signal simultaneously. The lift will stop at the next terminal floor

When proximity fault occurs the controller cancels all calls and goes out of service showing the fault. The controller has to be powered off to reset.

4 Flashes – Re-level failure

- The re-level zone proximity is either not energized or has been broken whilst the lift is trying to re-level
- The lift is trying to re-level but hasn't made LU and LD within 12 seconds. The lift controller then trips on the re-level protection timer

When re-level failure occurs the lift will stop instantaneously showing the fault. The controller has to be powered off to reset.

5 Flashes – Traveling failure

- The lift has energised to travel, but the lift has not passed through a step signal or floor before the drive time has elapsed.
- Failure to drop the pump

When Traveling failure occurs the lift will stop instantaneously showing the fault. The controller has to be powered off to reset.

6 Flashes – Up final limit broken

- The lift has travelled and the up final limit has operated.

When this occurs, the lift will stop instantaneously and showing a fault of 6 flashes. The controller has to be powered off to reset.

8 Flashes – Hydraulic failure

- The lift has re-leveled with doors closed 5 times within a 5 minute period.

The control panel undergoes a 5 minute check on the down valve.
If it re-levels 5 times within this period then there is a problem with the valve.

- The lift has not completed a down valve check within 15 minutes at the bottom floor
At the bottom floor, if the 5 minute down valve check has not been completed within 15 minutes then it will go in to fault as result of re-leveling too many times.

(If A3 lock valve fitted)

- The lift sinks from floor level with doors open.
On leaving floor level with the doors open, the A3 valve shall close stopping the lift and indicating a fault.
- The lift has re-levelled with doors closed 2 times within a 5 minute period
At the bottom floor there is a 5 minute check on the A3 lock valve after the 5 minute check on the down valve has been completed.
Still with the doors closed, if it re-levels 2 times within this second 5 minute period then there is a problem with the A3 valve.

All hydraulic failure faults put the lift out of service. The controller has to be powered off to reset.

NOTE: Faults 1, 3, 4, 5 and 6 will return the lift to the bottom floor to rest, unless it is a down drive failure fault.