

Upon a request, after the door closes, the elevator starts moving in less than 3 seconds

$$\square \text{Idle}; \text{Loading}; \text{moving} \Rightarrow \int \text{loading} < 3$$

after door has been open for 3 seconds, it closes automatically.

$$\square \text{doorOpen}; \neg \text{doorOpen} \Rightarrow \int \text{doorOpen} < 3$$