Door interlock state diagram

Variables

S0
Initialization
door_magnet = 0
drive_int_state = 0
ind_light = 1

not (drive_int_state)

S1
IDLE

not (key) | not (door_status)

S2
drive_int_state = 1

not (drive_state)

S6
ind_light = 0
drive_int_state = 0

key & drive_int_state

door_status & key

S5
door_magnet = 1

not (key)

S3
ind_light = 1
door_magnet = 0