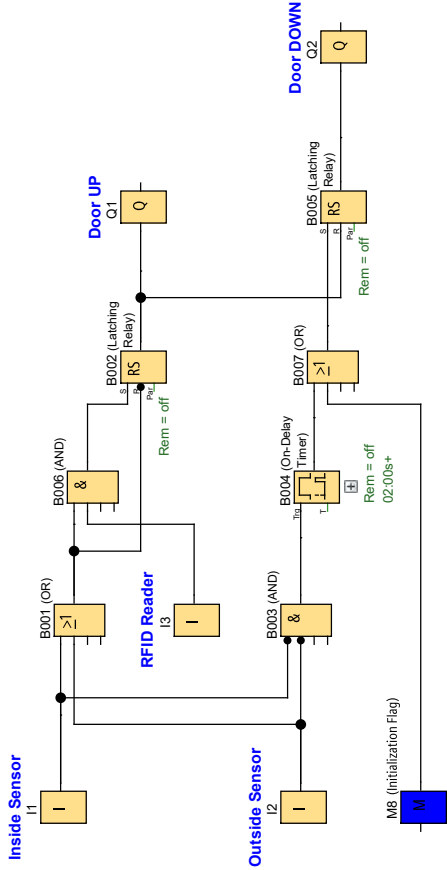


Automatic Roller-Door Control



Requirements:

Ensure that a roller-door can automatically open and close from both sides with access control.
Motion sensors are used to detect a presence at either side of the door.
RFID reader sends a Read-OK signal when an access tag is detected.

LOGO! Solution:

- Motion sensors detect presence at either side of the door with both being ON for a moment while the object passes through.
- RFID Reader is able to detect tags in a wide radius from both sides of the door.
- Door UP is assigned to Q1 and Door Down is assigned to Q2.
- Inside Sensor is connected to I1, Outside Sensor is connected to I2 RFID Reader signal is connected to I3.
- If a presence is detected at either side of the door AND a access tag is read the door will roll up (open).
- The door will remain open until both motion sensors are OFF, at which point it will roll down (close) after 2 seconds.

Note: Initialization Flag is used to ensure that the door is closed on system startup.

Components used:

- LOGO! 230RC
- I1 Motion Sensor
- I2 Motion Sensor
- I3 RFID Reader Signal
- ...
- Q1 Roller-Door UP
- Q2 Roller-Door DOWN

Advantages:

- Project logic can be easily applied to other projects.
- Existing installations are easily modified or adapted.
- Door is only open for authorised persons and for as long as needed, good for situations where rooms are temperature controlled.

Creator:	Admin	Project:	Customer:
Checked:		Installation:	Diagram No.:
Date:	5/12/03 1:15 PM/8/29/25 1:20 PM	File:	automatic_control_of_roller_door_FBD.lsc
			Page: 1 / 3

Block Number (Type)	Parameter
B001(OR) : (OR)	
B002(Latching Relay) : (Latching Relay)	Rem = off
B003(AND) : (AND)	
B004(On-Delay) : (On-Delay Timer)	Rem = off 02:00s+
B005(Latching Relay) : (Latching Relay)	Rem = off
B006(AND) : (AND)	
B007(OR) : (OR)	

Connection	Label
I1	
I2	
I3	
M8	Initialization Flag
Q1	
Q2	