

ROCON LIFT INTERFACE PANEL



R
C RoboConnect

LET YOUR ROBOTS TAKE THE LIFT

The Rocon Lift Interface Panel allows mobile robots to safely and efficiently use lifts. By using standard signals found in most lift controllers, the interface can commonly be achieved with a minimum of changes to the lift controller.

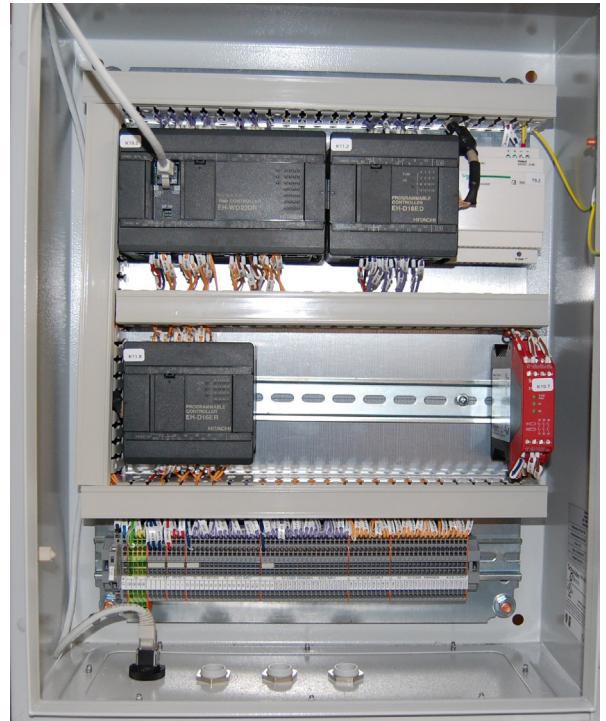


Your benefits

- Your employees save valuable time and can be redeployed for higher-value tasks when your mobile robot transport items across floors
- The Lift Interface Panel handles all communication with the lift controller and the robot
- The Lift Interface Panel uses standard signals and can therefore be installed in most lift controllers

Specifications

Input Voltage Range:	VAC 240
Input Voltage Frequency:	HZ 50-60
Input Current:	A 2
Lift Signal Voltage Range:	VDC/VAC 24-240
Enclosure:	Schneider
Assembly environment max :	53°
Enclosure Dimension mm:	500x400x210
Enclosure Weight:	12 kg



A Rocon Lift Interface Panel installed in lift controller

RobotConnect ensures a smooth installation

The Rocon Lift Interface Panel can be installed by the lift adjuster/technician with support from a RoboConnect technician

Only skilled and qualified technicians are allowed to install Rocon 100

When installing the Lift Interface Panel, it will typically be mounted on the wall close to the lift controller and it needs to be connected to power and a network. The lift adjuster/technician will connect the cables in the lift controller with the Lift Interface Panel.

The installation takes approximately 4-8 hours where the lift will be out of operation. The lift adjuster/technician will verify all signals after installing the Lift Interface Panel.

Rocon 100 is only for use, as an interface between MiR AGV's and lift controllers.

No maintenance is required

How does it work?

-Let's go through the signal process

The robot arrives at the lift lobby

1. The Rocon Lift Interface Panel uses Disable Hall Call signal for starting the process and being unavailable for hall calls (from humans)
2. The Rocon Lift Interface Panel waits for the Lift is moving signal to release, and the Floor Level signals that indicates the current lift position and the All Door Closed signal to indicate that the doors are closed, and then wait 15 seconds, to be sure that the lift is empty
Car calls signal should still be active. The doors close on their own

The empty lift is available for the robot

3. The robot drives to the lift door
4. The Rocon Lift Interface Panel uses the Car Call Signal to detect the robot's pickup floor, and the lift travels to the pickup floor
5. The Rocon Lift Interface Panel releases the Car Call signal (from step 4) to the lift controller as soon as the Floor Level signal changes ,or after 5 seconds- so the lift is now moving.
6. The Rocon Lift Interface Panel waits for the Floor Level Signals to indicate that the lift has reached the robot's pickup floor
7. The Rocon Lift Interface Panel waits for the Door Open Limit signal (either rear or front) to ensure that the door is open

The robot enters the lift

8. The Rocon Lift Interface Panel activates the Hold Door Open signal (from step 7) to hold the door open and the robot enters the lift
9. The Rocon Lift Interface Panel waits for the All Door Closed signal to indicate that the doors are closed

The robot is traveling alone inside the lift

10. The Rocon Lift Interface Panel activates the Car Call signal for the robot's destination floor.

The lift travels to the robot's destination floor

11. The Rocon Lift Interface Panel releases the Car Call signal (from step 10) as soon as the Floor Level signal indicates that the lift is moving



12. The Rocon Lift Interface Panel waits for the Floor Level Signals to indicate that the lift has reached the robots destination floor and after arrival, the Door Open Limit signal (front or rear) indicates that the doors are fully open.

The robot exits the lift

13. The Rocon Lift Interface Panel activates the Hold Door Open signal, when arriving to the destination floor , and exits the lift
14. The Rocon Lift Interface Panel releases the Hold Door Open signal
15. The task is done and the Rocon Lift Interface Panel releases all signals.

The MiR robots transport items in the industry and healthcare sector autonomously - even between floors via the Rocon Lift Interface Panel

