

Cardax FT Feature Information

Elevator High Level Interfaces

The Cardax FT Elevator High Level Interface (HLI) feature provides the ability for Cardax FT to control access to floors from elevator cars.

KONE & OTIS ELEVATOR HLI

Cardax FT Elevator Control allows access to floors to be granted or denied via a Cardax reader installed in an elevator car. When using the Cardax FT Elevator HLI, this is achieved without the heavy I/O usage of a low level interface. Cardax FT Command Centre is used for configuration of the Elevator HLI.

Elevator control requires one reader (Prox or Prox Plus PIN) for each elevator car. The elevator car readers can be connected to any Cardax FT Controller within the system.

An access zone is assigned to each floor that an elevator car travels to. The floor select buttons are normally enabled if the corresponding access zone is in free access, or disabled if the corresponding access zone is secure.

When a cardholder makes a valid access attempt at the elevator car reader, and access is granted, Cardax FT sends a message to the elevator control system to enable the floor select buttons for those floors (i.e. the associated access zones) to which the passenger is allowed access.

Floor Selection Reporting

Cardax FT Command Centre will report the floor that was selected following an access granted event at an elevator car. These events are recorded in the Cardax FT Event database.

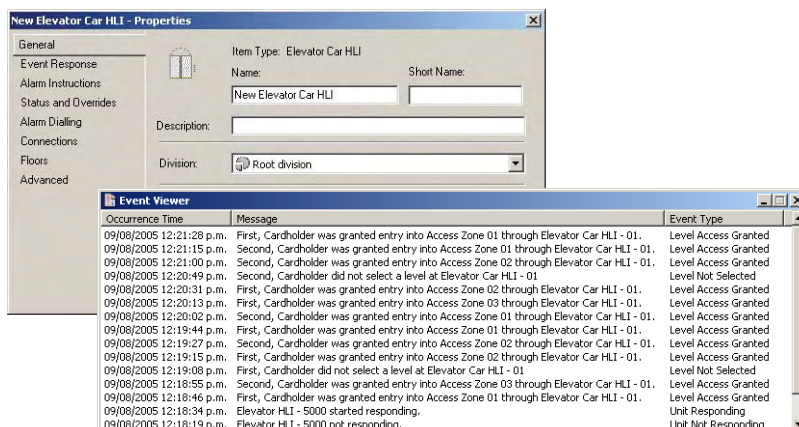
Communications

A high level (RS232) communications link is established between Cardax FT and the elevator control system. The

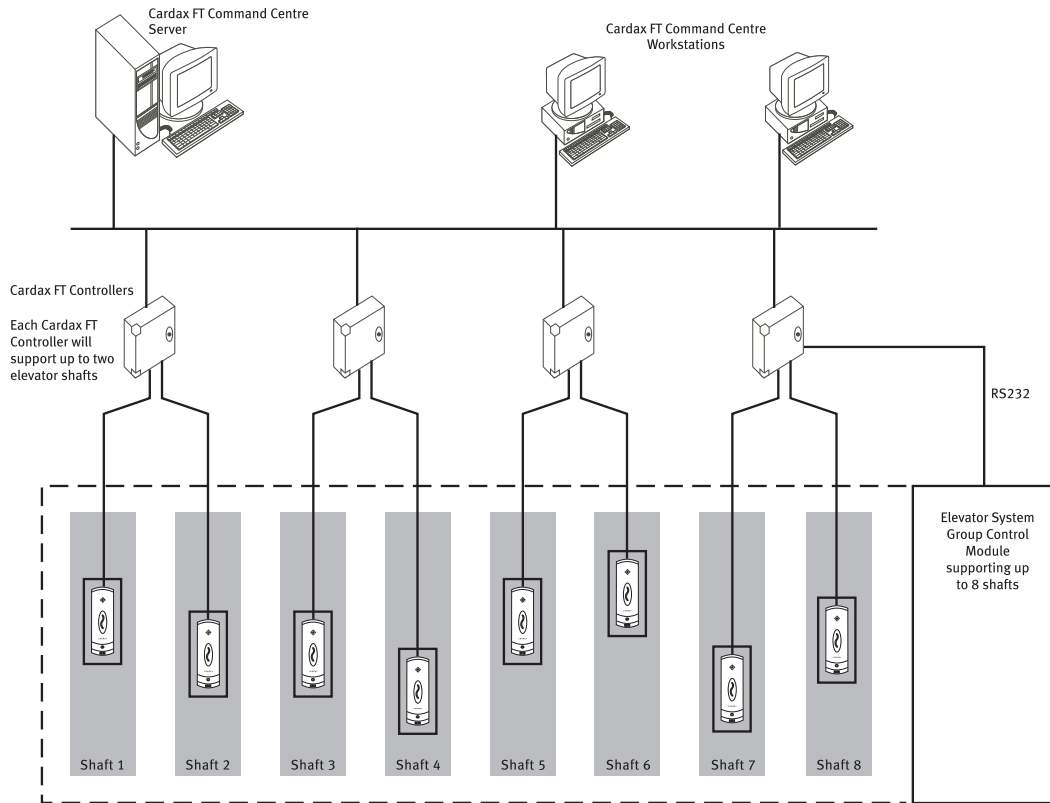
Cardax FT Controller (3000 or 5000GL) is the hardware device that provides the physical communication interface between the elevator control system and Cardax FT.

Data and Tamper Protection

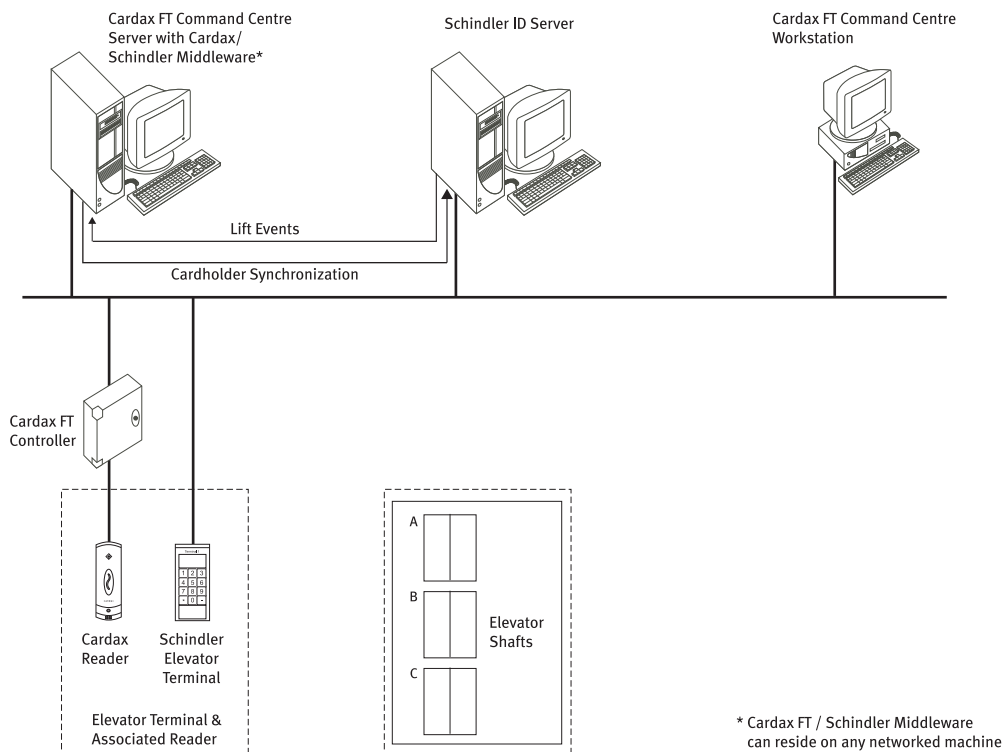
Security is enhanced by monitoring of the communications data between the Cardax FT Controller and the Elevator Group Control Module. An alarm will be raised at the Cardax FT Command Centre workstation if the Cardax FT Controller fails to receive a response from the Elevator Group Control Module.



Connectivity Diagram - Kone & Otis



Connectivity Diagram - Schindler



SCHINDLER ELEVATOR HLI

Schindler Miconics Elevator Interface

The Schindler-Miconics Elevator Interface supports the following:

- Automated synchronisation of cardholders from Cardax FT to the SchindlerID Server database, with assignment of elevator access
- Logging of all elevator events in the Cardax FT Event Log
- Allowing Cardax readers to be used at Elevator Terminals to identify the cardholder to the Schindler system

Elevator Terminal Reader Interface

Elevator access can be controlled via a Cardax reader located at each Schindler elevator terminal. Unlike some elevators, the Schindler-Miconics system uses control terminals located outside the elevator car, in the foyer. To access an elevator, a cardholder presents their card at the reader associated with the elevator terminal. The cardholder selects a floor and if access is allowed the elevator terminal responds with instructions on which elevator car to use.

The floors a person may access are determined by the user template assigned to the cardholder in Cardax FT Command Centre. This information is synchronised to the Schindler system as described in the following section.

Synchronisation of Cardholder Database

The Schindler Elevator HLI allows the Schindler cardholder database to be established from Cardax FT. Multiple elevator systems can be supported via this interface.

Access to elevators is controlled via a user template. The user template is held in a Personal Data Field (PDF) in Cardax and synchronised to the Schindler

system. The Schindler system converts this template to a set of floors and time periods in which the cardholder has access. If multiple elevator systems are interfaced with Cardax FT, each can use its own template.

Actions in Cardax FT which change cardholder information related to elevator access automatically generate update messages to the Schindler system.

For example, assigning a user template and enabling a card will enable a cardholder's elevator access. Likewise, a card expiring, a cardholder being de-authorised, or a user template being removed from a cardholder will remove their elevator access.

The synchronisation of information happens automatically and in real time.

Floor Selection Reporting

When access is granted at an elevator terminal, Cardax FT Command Centre receives and logs events identifying the floor the cardholder travelled from and to. These events are recorded in the Cardax FT event database.

Secure / Free Floor Control

This interface allows Cardax FT to change the secure or free status of a floor accessed by an elevator.

The status of the floor can be changed between secure (requires authorization) or free (available to all) based on a schedule or from a macro or operator override.

Communications

Three interface protocols are used for communication between Cardax FT and the Schindler elevator system. Synchronisation of the cardholder database and reporting

of elevator access events occurs via a TCP/IP connection between the Cardax FT and SchindlerID servers.

The Call Interface protocol is used to enable Cardax readers to be used at elevator terminals. This interface requires a TCP/IP connection between the Cardax FT Controller (3000 or 5000GL) and a middleware PC. The middleware can be located on any server and communicates with the SchindlerID server to enable elevator access in response to presentation of a card at a Cardax reader associated with an elevator terminal.

Security is enhanced by monitoring communication and reporting offline status between Cardax FT and the SchindlerID server for all three communication protocols. An alarm will be raised at the Cardax FT Command Centre workstation if communication between Cardax FT and the SchindlerID server is lost.

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TECHNICAL SPECIFICATIONS

KONE & OTIS ELEVATORS

Systems Supported	Kone* Otis*
Maximum number of Cardax FT Controllers per Elevator High Level Interface	1
Maximum number of Floors controlled per Elevator High Level Interface	64
Maximum number of Elevator Shafts per Group Control Module	8

TECHNICAL SPECIFICATIONS

SCHINDLER ELEVATORS

Systems Supported	SchindlerID v1.1.296*
Cardax FT Command Centre	vEL5.20.xxx (or later version)
Operating System	Microsoft Windows XP Professional, Service Pack 3

Support for other systems will be developed as required. Please contact Gallagher Security Management Systems for more information.

* Please contact Gallagher Security Management Systems for information on version compatibility.

System configuration, network capacities and the volume of system activity affect performance. Please contact Gallagher Security Management Systems for advice.



www.gallaghersms.com

Gallagher Security Management Systems

Kahikatea Drive
Private Bag 3026
Hamilton
New Zealand
Phone: +64-7-838 9800
Fax: +64-7-838 9801
Email: cdxsales@cardax.com

Offices / Distributors are located in:

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