

MIDEL



HRS

HOTEL ROOM SYSTEM



New, intelligent and effective solution



Feel the control...

STANDARD CONTROLLERS PROCEDURES

Existing controllers for room automation (from world known manufacturers - brands), work almost on the same way and allow the hotel personnel to control heating and cooling through centralized access to each controller so that:

- To Check-In a guest in a room, and get cards for entry into that room.
- Read the Digital Input for the presence in the room, to turn off the heating when there is no one in the room.
- Set the maximum temperature in the heating mode (minimum temperature - in the cooling mode)
- Read the status of the exterior windows and doors, and define their role of the control of heating.
- Read the emergency input from each and every room (SOS button)
- Switch on heating/cooling in a room without card (for preheating of the room).
- Presenting the status of the room (occupied/not occupied).

MIDEL HRS ADVANTAGED CONTROLLER GOALS

MIDEL HRS controller has all of these functionalities , which are provided by all room controllers for controlling of hotel room, and their limitation for smarter use of the resources of the hotel for:



Increase of energy efficiency,



Control over the work of the staff and protection against "stealing",



Control over the quality of the overall operation and hygiene for all of the employees,



Increase the comfort of the guests,



Protection of hotel installations from potential damages,



Safety in hotel rooms,



Reduction of the initial investment during the construction of the hotel.

MIDEL DECIDED TO START DEVELOPING ITS OWN ROOM CONTROLLER, WHICH IN 7 WAYS IMPROVES THE OPERATION OF A HOTEL, UNLIKE EXISTING TECHNOLOGIES.

STANDARD CONTROLLERS

The "CARD-Holders" used in today's hotels are usually with a mechanical switch, or by photo-switch, and there are also those with "RFId" technology, in which the output to the room is limited to **does** or **does not have** a card. In this way, the room controller cannot know if there is a staff member or a guest in the room. Therefore, whenever he receives information that there is "someone" present, it gives him all the privileges.

MIDEL HRS CONTROLLER

Our controller has a communication link with the "CARD-Holder", so the controller can know who is in the room, and depending on the privileges of the card used, the system allows only functionalities of that type of staff (cleaning staff, maintenance and repair of installations, construction maintenance, checking and maintenance of furniture, refilling the mini-bar, reception, management, ...)

TOP ADVANTAGES

COMMUNICATION LINK

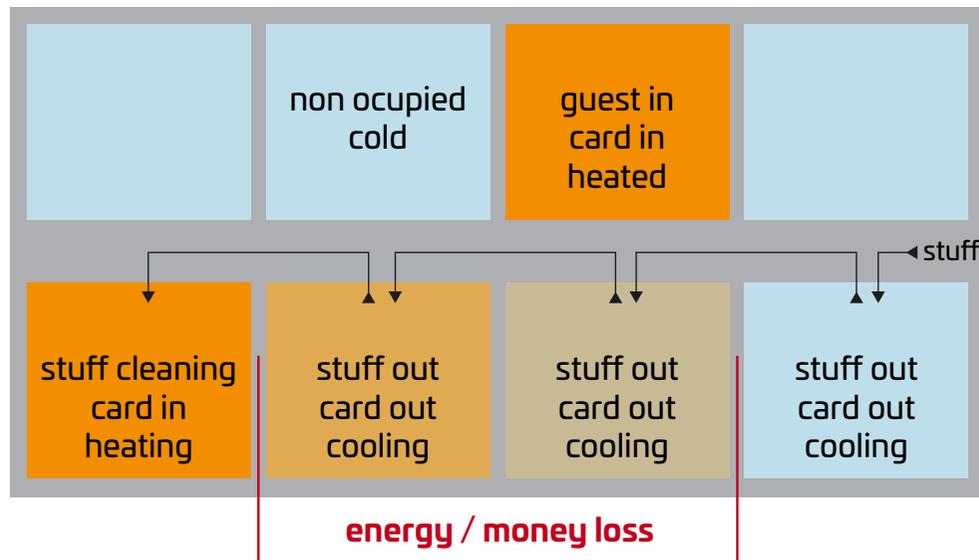
CARDS WITH PRIVILEGES

INTEGRATED SYSTEM

STUFF CONTROL

EXAMPLE OF AN EXISTING TYPE OF CONTROLLERS

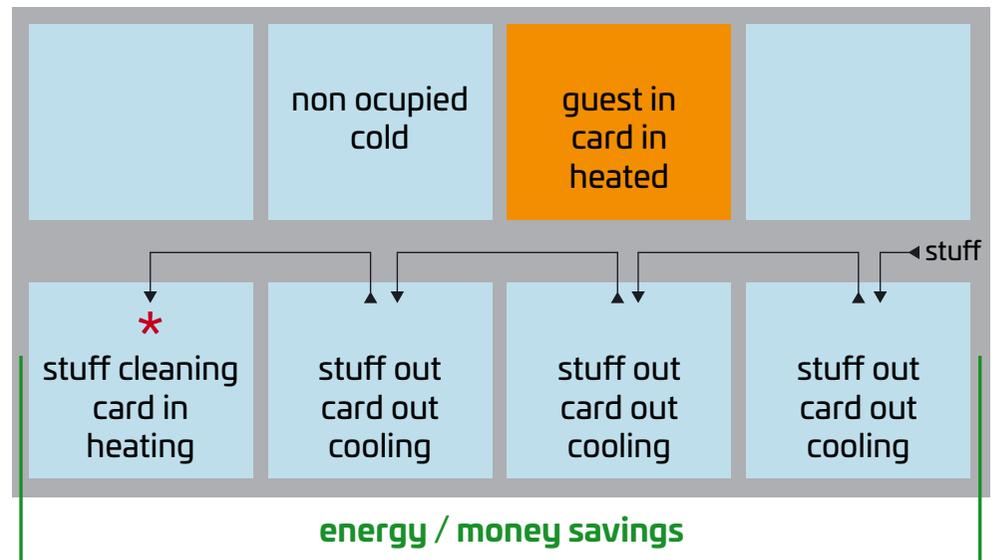
We have a Hotel of 100 rooms. In a given period of the year, only 20% of the total capacity of the hotel is used. Every day, the cleaning-staff enters each of the rooms, at lease to clean the dust in the room. With the entry of cleaning staff and the placement of their cards in the "CARD-Holder", the existing controllers will include heating in the room. In this way, every day the hotel heats all the rooms individually, and because they heat up with fan coilers, they quickly reach the temperature, and in this way we have huge losses of the energy in the hotel, even most of the rooms are not occupied.



EXAMPLE OF MIDEL HRS CONTROLLER

In the same Hotel of 100 rooms. When the cleaning staff passes through each of the rooms that are not issued, the MIDEL controller recognizes that it is staff from the hotel and does not allow it to warm the room, thus preventing energy scatter and smart use of the hotel's resources.

* Midel HRS recognize stuff card and not activate heating for regular maintenance

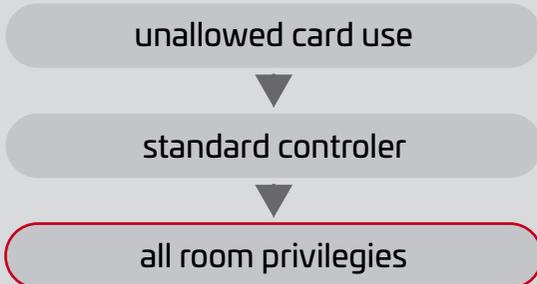


STANDARD CONTROLLERS



We have a situation that some guests ask for an "un-checked" room in order to pay a lower bill or the staff give to the guest an "un-checked" room, they will not have to report to management, most often do this by giving their card or card to one of the colleagues with whom the guest can enter and stay in the room. Because the room controllers do not make a difference, the guest gets all the privileges.

To discover those activity, the hotel management must make often controls how their people work.



NO PROFIT / LOSSES

MIDEL HRS CONTROLLER



"STEALING" PROTECTION

In rooms controlled by MIDEL controller, at any time the system knows who use the room, and if the room itself does not register as issued, the system will allow the entry of the "staff" but will not allow the use:

- Hot water
- Heating and cooling in the room
- Turn off all electrical outlets
- block the usage of the TV

If the hotel staff card is longer than 30 minutes in the "CARD-Holder" - it will immediately turn off the lights for inspection and cleaning of the room, and room controller starts sending e-mail-s to all relevant parties (management, reception, hotel security,

In this way, our controller prevents "un-checked" use of the rooms without the need for controls, because nobody wants to stay in a room that does not have heating, hot water, TV or electricity.



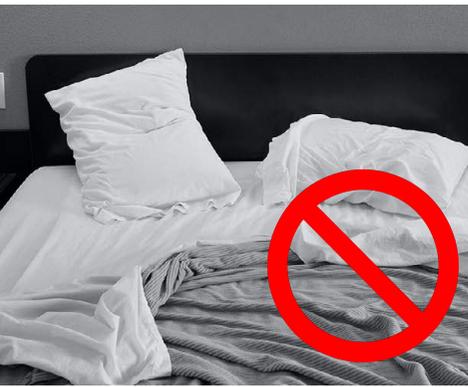
STANDARD CONTROLLERS

Existing systems of room automation do not care about re-issuing of the rooms and do not have strict list of staff who has arranged a room, and if there are complaints from customers to know exactly which employee is responsible for that "mistake". In addition to this system, neither the speed nor the performance of each employee can be seen, nor the summary list of complaints from guests by employee.

MIDEL HRS CONTROLLER

After check-out of the guest, our controller put the room in the status "unclean" and in this way it can not be mistakenly issued to a newly arrived guest. Transferring the room from "dirty" to "ready for use" is done by inserting a personal card from one of the employees in "CARD-Holder", and from that moment we know which employee guarantees for the correctness and hygiene of the room. From our controllers we can see the speed and efficiency of each employee, as well as a summary list of complaints from guests per employee.

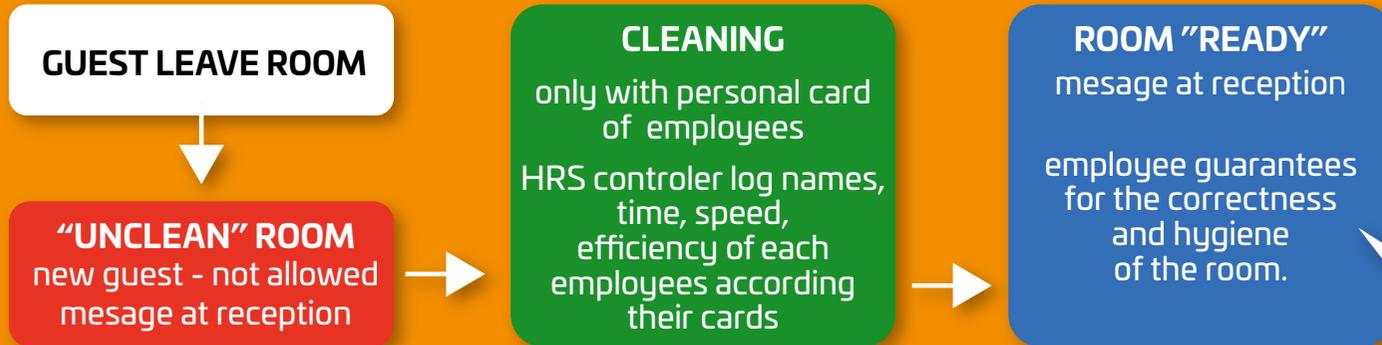
EXAMPLE OF AN EXISTING TYPE OF CONTROLLERS



If the staff does not prepare the room again after the guestcheck-out, the reception-personnel by mistake or intentionally can issue the room to a newcomer and thus disturb the reputation and credibility of the hotel, which all other employees had already built. The hotel management can not prove which staff person had confirmed the "readiness" of the rooms.

EXAMPLE OF MIDEL HRS CONTROLLER

In rooms controlled by the MIDEL controller, when the guest leaves the room, the room controller places this room in the "unclean" room and the controller will not allow the same room to be issued to a new guest, but on the application where the receptionist try to check-in the guests, a pop-up window will appear and informs that the room can not be issued because it has not been cleaned. The management will always know for each room - which guest is using - from which employee prepared.



STANDARD
CONTROLLERS



Existing room automation systems are based on “switching off” and “switching on” of heating/cooling based on information if there is anyone in the room and whether the windows/doors are closed, and to maximize/minimize the set-point of room temperatures. Heating of the rooms before the guests arrive is done by software and/or hardware bypass of the digital input for that room on the room-controller.

At the already issued rooms, the temperature control is left to the guest, and when he is not in the room, the heating / cooling in his room is off. If the guest leaves the room early in the morning and returns late in the evening, in most cases it enters a cold room, which is lost from the comfort / commodity of the guest, or the heating is working all the time, and the card is used to control the lighting and electrical sockets in the room.



MIDEL HRS CONTROLLER

MIDEL HRS unlike the existing systems, the controller, has more energy modes for each room:

ROOM OFF

In this mode, the heating of the rooms does not turn off, but only decreases the set-point (example 12 ° C), in order to maintain the minimum temperature in each room separately.

If the temperature falls below the given critical value (eg 5°C), the system immediately begins to send e-mails to the affected list of users.

PREPARED FOR ISSUING

In this mode, a small number of rooms (3-5 / 3 to 5 rooms) keep the temperature set for this mode (Example 15 ° C).

If one of these rooms is issued, one of pool of “Room off” is immediately raised in this mode.

ISSUED WITHOUT GUEST

In this mode enter each issued room when the guest leaves the room and does not check-out, the controller automatically switches to this mode (instead of switching off the heating) and maintains the temperature at 18 ° C.

ISSUED BY GUEST

This mode comes when the room is issued and the guest is present. Then the guest has all the privileges to use all the resources. If the guest sets the room temperature above the limits (eg. 34°C and the limit is 23°C), the system will warm the room to the limit, or if the required temperature does not exceed the limit, then it will heat the room to the required temperature. The room display will show a set temperature of 34°C, and 23°C measured temperature.



STANDARD CONTROLLERS

Existing room automation systems are based on switching off and switching on heating/cooling to the level of whether there is anyone in the room and whether the windows/doors are closed.



If you do not intentionally leave an open window or door when the outside temperatures are very unfavorable (far below 0° C), whether the guest is present or not (ie his card), the systems keep the heat off.

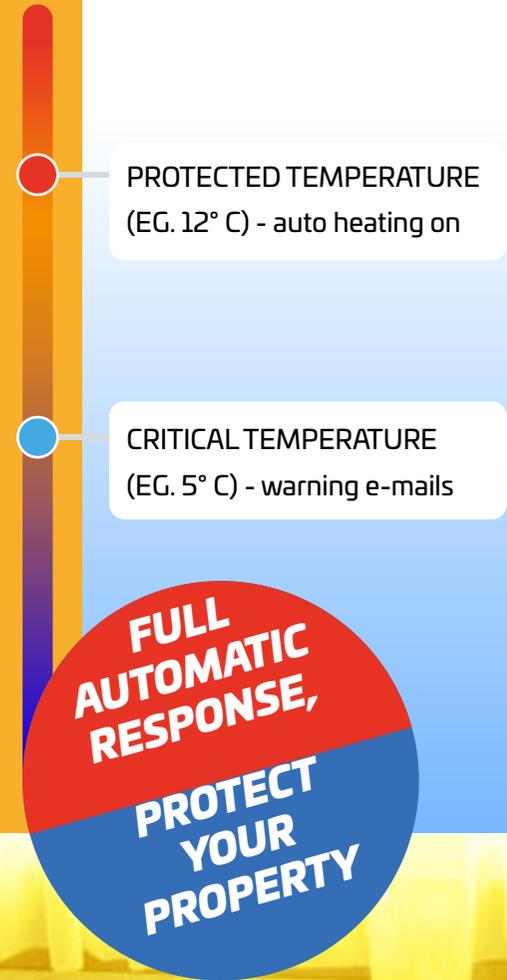


This adverse external conditions can lead to the freezing of the water installation and making a flood in the hotel.

MIDEL HRS CONTROLLER

Our controller for all rooms has some protected temperature (eg. 12° C), and if the temperature in the room falls below this temperature, although the guest is not present or the windows are open, our system will include heating in the room (hot water through the pipes), and this way protects water installations from freezing.

If the room temperature does not succeed in maintaining the heating temperature. And it falls far below the critical temperature (eg 5° C), in that case the system begins to send e-mails to all stakeholders (management, maintenance, reception, security, ...)



STANDARD CONTROLLERS

Existing systems of room automation regarding the safety of guests in hotel rooms are most often left to other systems (Fire alarm systems, alarm systems).

Only the emergency Help system ("SOS") that can be located in the bathroom and / or beside the bed can be supported by the room controller. In these systems, at the reception an alert is immediately prompted and one of the employees is sent from the reception to check for checking what kind of assistance is requested and to give a necessary help, or just to notify (as very often it is happened), to be accidentally activated signal. Sometimes from reception they use to deactivate the SOS signal for help in the hotel room, because very often it is a wrong signal.



MIDEL HRS CONTROLLER

The Midel controller regarding the safety of the Guest in the Hotel Room is more complete and does not allow any assumptions on any level. It is recommended that the fire extinguishers are installed with an auxiliary relay that is provided for signaling in front of the door. This signal is connected to dedicated digital input for fire alarm, and if the fire alarm for any reason is not active or is defective, this controller automatically turn-off the power in that room and immediately calls for a "possible fire" to the reception (in conjunction with the regular fire alarm system).

Regarding the SOS signal to assist the guest in the Hotel Room, this controller does not allow a guessing and deactivation of this signal, but to deactivate the SOS signal for assistance in hotel room, you must call some employe to enter that hotel room, to take out the guest card, and in its place, put his card and then return the guest card to "CARD-Holder." So we know exactly who made the security check in the hotel room where assistance was requested. We avoid situation that we did not know who came to check the request for assistance and deactivate the SOS signal (and whether it was a false/accidental trigger of this signal, or someone really need a help).

The last thing that is foreseen by the MIDEL's own controller is that in each room you can incorporate sound and light signaling for danger and leaving the hotel room (Light signaling should be "flash" that will alert people with hearing problems). These systems, except by fire when they can be activated automatically, allow the system to be activated from reception for other possible hazardous situations (earthquake, flood, ...). (if we have sensors for other urgent situations (earthquake, flood, ...), they can be connected to one of the controllers, and automatically activate the alarm in the Hotel rooms).

NOT ACTIVE/ DEFECTIVE FIREALARM

MIDEL HRS CONTROLLER

POSSIBLE FIRE ALERT

at reception

SOS SIGNAL

EMPLOYE MUST ENTER ROOM, PUT CARD IN, CHECK PROBLEM, RETURN GUEST CARD

MIDEL HRS CONTROLLER

SOUND SIGNALING

LIGHT SIGNALING

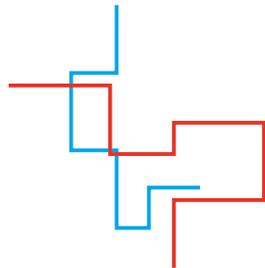
for hazardous situation activated automaticly or at reception

In order for not buying a huge generator, due to its price and then during the work of a larger generator consumes more fuel, the hotels are projected to have 2 (two) independent power distribution networks, both aggregate and "(grid) energy network". When we already have a controller in each room, the MIDEL controller can read the condition of the Generator, and in that it allow and/or restrict certain consumers and utilities that do not have permission to work on auxiliary power generator. Each of these networks has (1. main power cables from the input panel to each floor, 2. electrical distribution cabinet on each floor with fuses for each output, and 3. cable from each distribution cabinet on both of the networks to each room).

no big expensive generator



no need of two power networks (grid & aggregate)



MIDEL HRS CONTROLLER



ONLY ONE POWER NETWORK



INITIAL SAVINGS

INTELEGENT CONTROL FOR ALL CONSUMERS

GRID AND AGREGATE MODE FOR EACH CONSUMER

REMOTE CONTROL OF REDISTRIBUTION OF CONSUMERS

NO NEED OF INTERVENTION IN ROOMS



STANDARD CONTROLLERS

Existing systems and controllers for room automation in the Hotel rooms do not generally treat the energy distribution to consumers of aggregate and grid consumers. This segment is left to be resolved by the designer / contractor of energy installation.

MIDEL HRS CONTROLLER

The MIDEL controller is able to read the status of the ATS of the diesel generator (via auxiliary contact within the ATS) and, depending on its condition, to allow and/or switch off consumers in a hotel room. In this way, it is avoided making two parallel networks for energy distribution to the each floor and from the electrical cabinets to each room, but the entire distribution of energy goes through one network, and the controller is the one who is in charge to exclude all consumers who are not provided for working in aggregate mode. If during the operation of the hotel there is a need for redistribution of aggregate and non-aggregate consumers, in this case there is no need for any physical intervention in any of the installations, nor in the electrical cabinets, but only a person with certain rights to log-in in the system, and redefine all aggregate mode of each consumer (primary lighting, comfort lighting, heating, hot water, TV, refrigerator, sockets, ...), without any need for intervention in rooms.

In a nutshell...

main advantages

MIDEL

HRS

HOTEL ROOM SYSTEM

**ENERGY
EFFICIENCY**

**STAFF
CONTROL**

**QUALITY
HYGIENE**

**GUESTS
COMFORT**

**HOTEL
PROTECTION**

**INCREASED
SAFETY**

**COST
REDUCTION**



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HOTEL ROOM SYSTEM

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