

# ABB i-bus® KNX Room Solutions

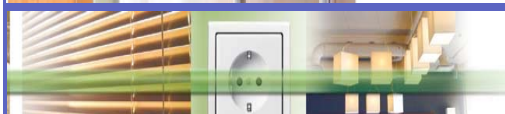




- The Room Master RM/S 1.1 and RM/S 2.1 offers smart home and intelligent building control for hotel rooms and apartments
- Modern buildings need intelligent building control systems in order to operate safely and efficiently.  
The full potential of many buildings worldwide is being achieved only through use of such a networked electrical installation.



- Hotels, hospitals, student residences, assisted living facilities, apartments and many more – the Room Master opens up new possibilities for properties in the residential and hotel sectors.
- The communication of the devices via the KNX bus also enables central control functions and allows emergency signals to be sent from the rooms to a central control station.



- The Room Master was developed for all rooms of this type. It covers all the electrical installation requirements for this application and offers the following functions in a compact unit:
  - Light switching
  - Heating/air-conditioning control
  - Shading (via blinds or curtains)
  - Switching of socket outlets and consumers



- Connection to a hotel management system enables the rooms to be managed and prepared efficiently. For instance, when a guest checks out, the room can automatically be set to stand-by operation.

## In Hotels

The Room Master Premium offers all the functions required in a modern hotel room. Once it is in operation, it provides a whole range of advantages over a conventional installation:

- Convenient and simple operation of the room functions by guests
- Temperature control depending on the time of year, outdoor temperature and occupancy
- Transmission of messages to the reception (e.g. clean room, emergency signal)
- Fast localization of malfunctions in rooms and simplified room maintenance



## In Hotels

The benefits of the Room Master are evident not only in operation, but also in the planning stage:

- Can be used anywhere in the world
- Compact design: can be installed in a simple sub-circuit distribution board together with circuit breakers
- One standard solution for many projects



## In hospitals

When used in hospitals and facilities with a similar purpose, the Room Master boasts an array of functions which support the efficient operation of a modern building:

- Simple operation of the room functions by the patients
- Automatic control of the room environment
- Day/night switching
- Display of visits
- Remote control of the room and display of the room status at the nurses' station
- Fast localization of malfunctions in rooms and simplified room maintenance



## In Assisted Living

The Room Master provides comfort and security in residential homes and supports senior citizens in their daily life:

- Simple operation of the room functions
- Automatic control of the room environment
- Automatic transmission of messages (e.g. emergency calls) to the central control station
- Fast localization of malfunctions in rooms
- Display of the room status at the central control station
- Day/night switching

## In Apartments

The Room Master provides greater attractiveness and improved quality of life for apartment habitants, both of which are deciding factors for sale or rental:

- Automatic switching of different lighting in the room
- Automatic control of heating and air-conditioning
- Shading via blinds or curtains
- Convenient and simple operation of room functions

## Functions in the Room

- **Mains Supply**  
Socket outlets, any electrical load
- **Lighting Control**  
Master switch next to the bed
- **HVAC**  
Radiators, Fan-Coil units
- **Shading**  
Shutter, blinds and curtains
- **Energy**  
Switch off of loads
- **Comfort**  
Hotel room: „Do not disturb“
- **Security**  
Emergency call in the bathroom

## Product overview

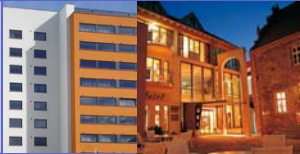


- **Basic**  
**RM/S 1.1**  
(8 MW)

- **Premium**  
**RM/S 2.1**  
(12 MW)

# ABB i-bus® KNX

## Room Solution Room Master, Premium

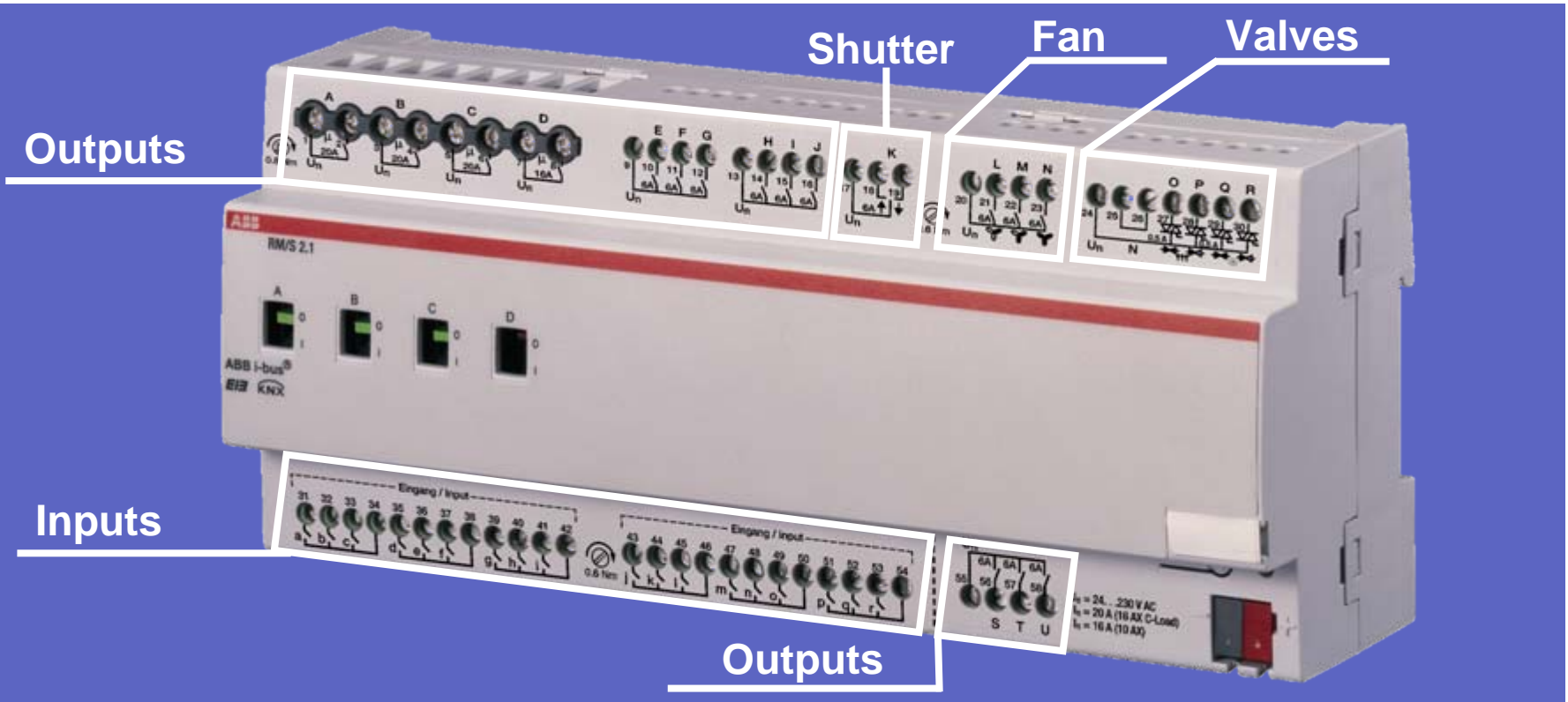


## Room Master Premium RM/S 2.1



- MDRC (12 MW)
- Current consumption maximally 24 mA

## Inputs / Outputs



## Inputs / Outputs overview

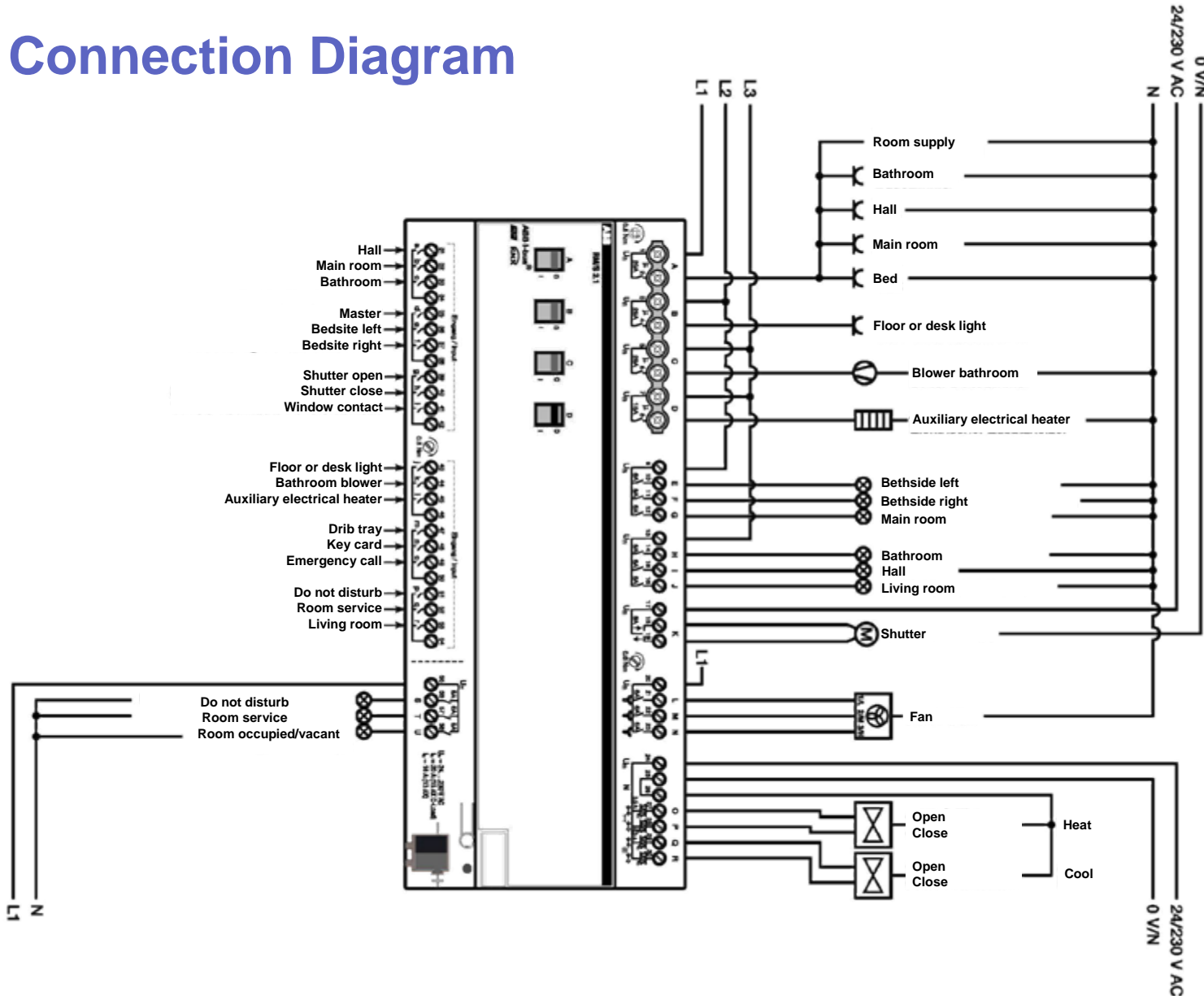
Inputs	Numbers
Binary via contact scanning	18

Outputs	Numbers
Relay 20 A (16 A C-Load)	3
Relay 16 A (10 AX)	1
Relay 6 A	12
Electronic outputs 0.5 A	4
Change over contact 6 A (shutter)	1





## Connection Diagram



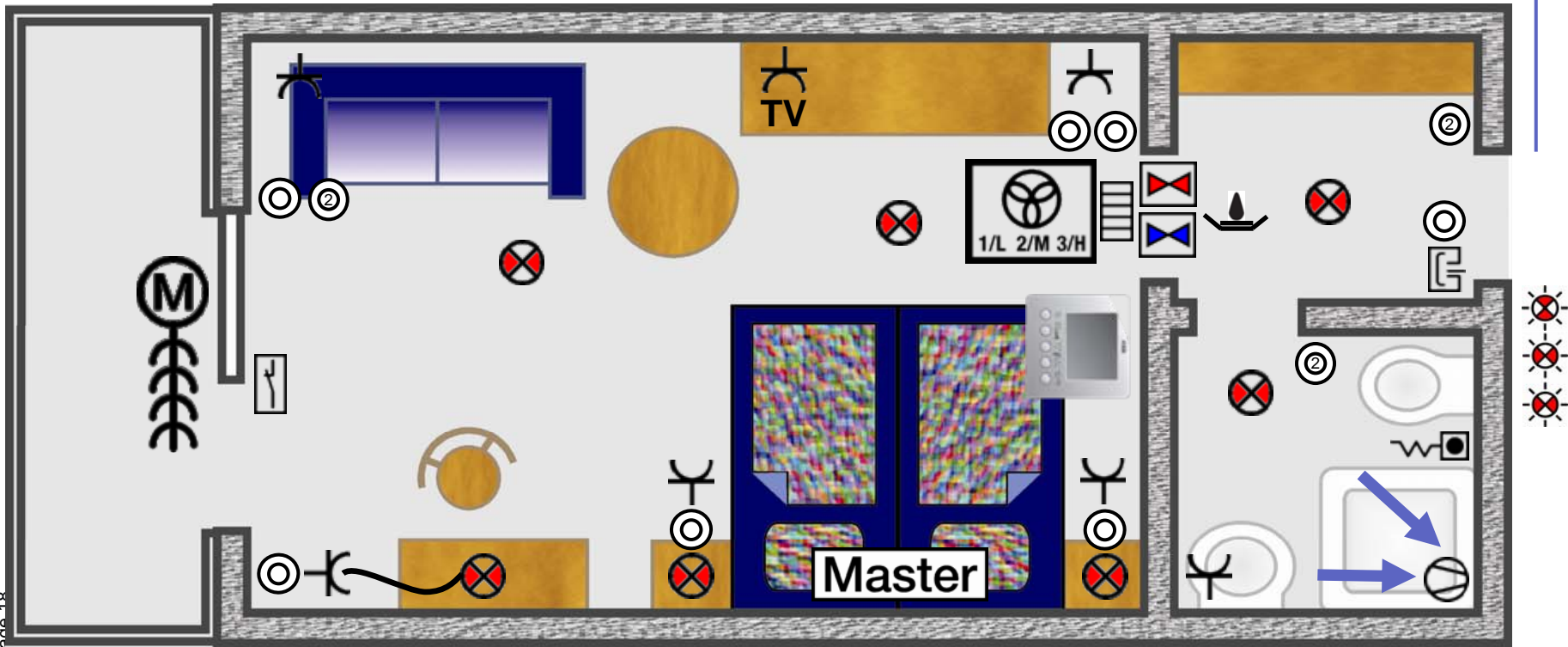
# Room Master Premium

RM/S 2.1

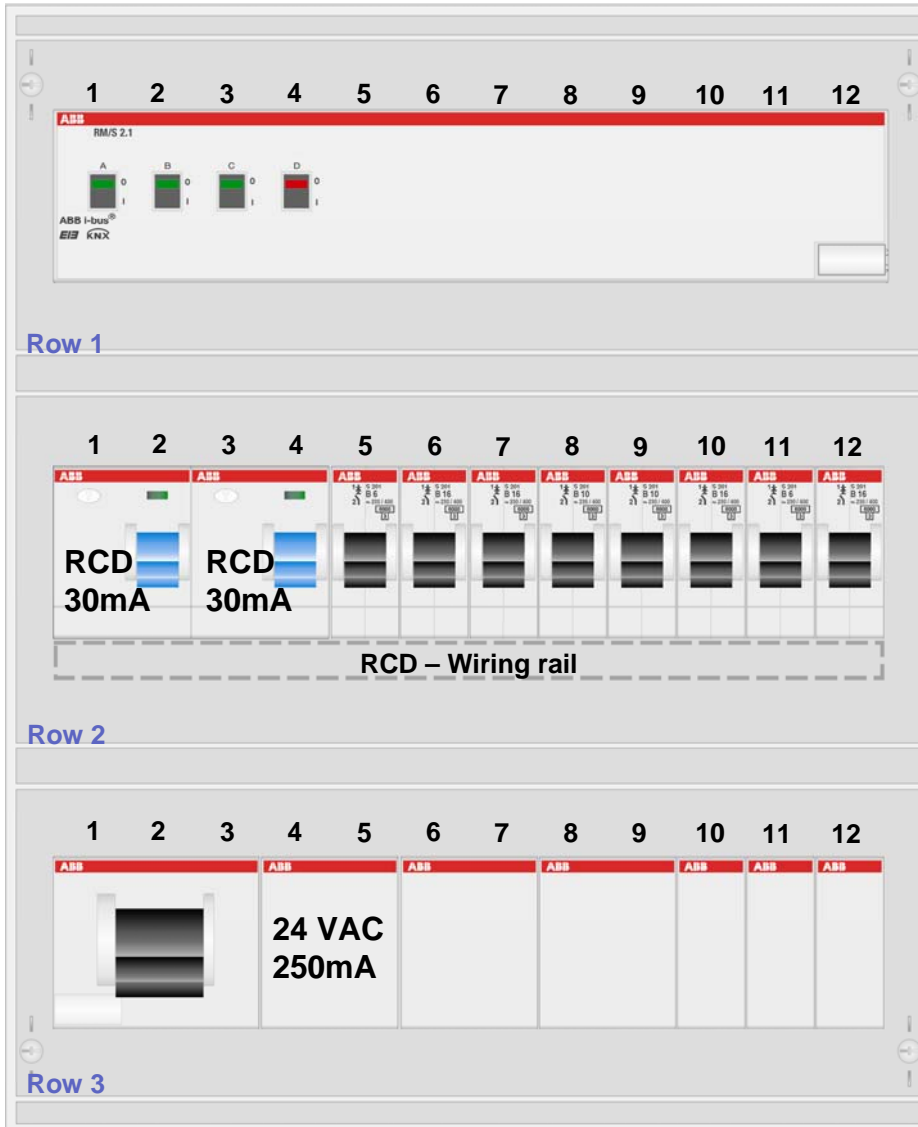
Info: Floor plan

Sighting (bathroom)

Key card (bathroom) lighting  
Sighting (bathroom) lighting



## Overview distribution board



### Row 1:

1 - 12 Room Master

### Row 2:

1 - 4 RCD  
 5 (6A) Main Supply (Bell Transformer)  
 6 (16A) Socket Outlet Circuit  
 7 (16A) Socket Outlet Circuit  
 8 (10A) Electrical. Heater / Auxiliary Contact  
 9 (10A) Lighting Circuit + Shutter  
 10 (16A) Room Supply  
 11 (6A) Fan Coil (HVAC)  
 12 (16A) Blower Bathroom

### Row 3:

1 - 3 Main Switch 16A  
 4 - 5 Bell Transform. (TS24/8-12-24)  
 6 - 12 Dimmer, Audio/Video, etc.



## Summary

- Room Master Premium, RM/S 2.1, 12 MW, MDRC
- 18 inputs, 20 outputs
- RM/S 2.1 supply via bus
- Current consumption maximally 24 mA
- Room solution, one device for all functions
- Independent of design
- Locked shutter output
- VDI 6015 BUS-systems in building installation.  
Application examples *from march 2003*



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## Room Solution Room Master, Basic

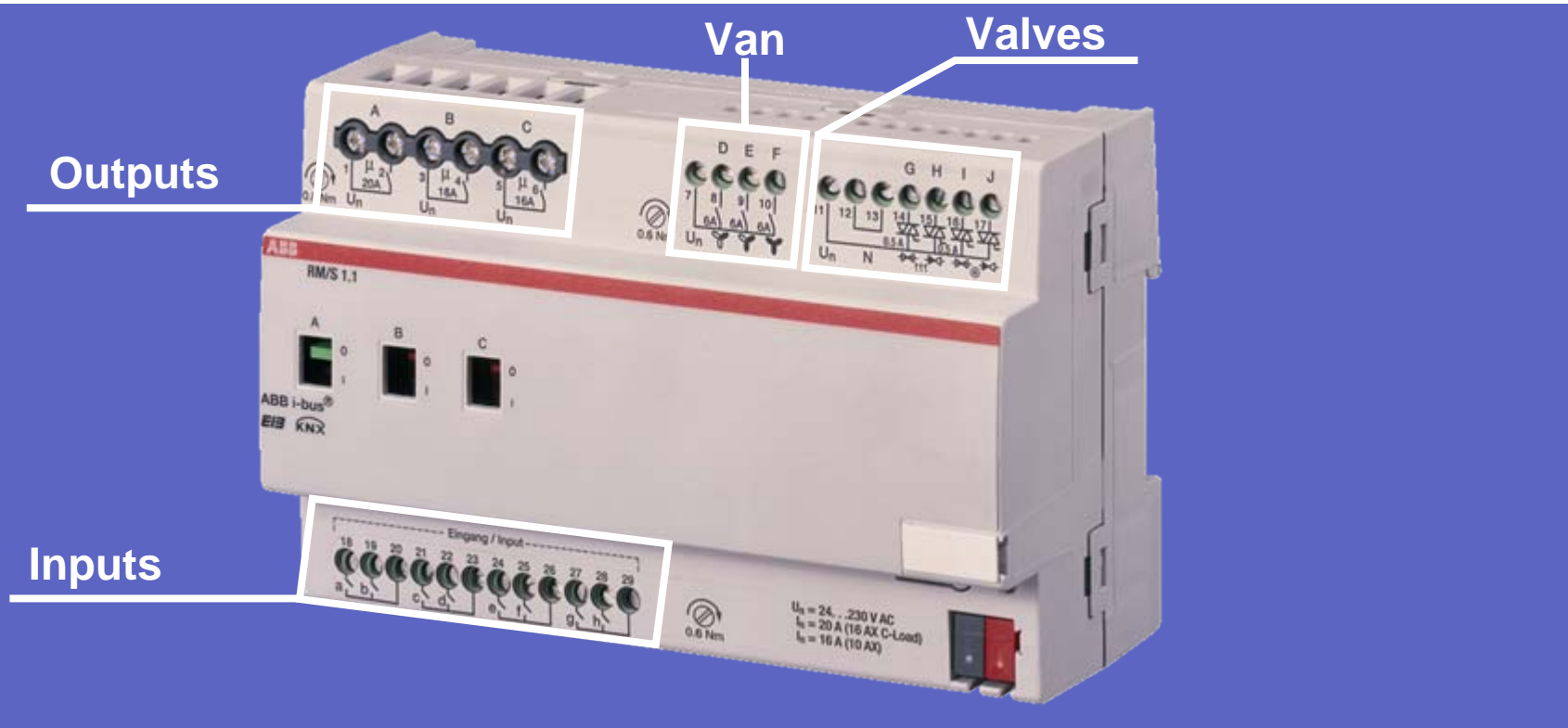


## Room Master Basic RM/S 1.1



- MDRC (8 TE)
- Current consumption maximally 12 mA

## Inputs / Outputs



## Inputs / Outputs Overview

Inputs	Numbers
Binary via contact scanning	8

Outputs	Numbers
Relay 20 A (16 A C-Load)	1
Relay 16 A (10 AX)	2
Relay 6 A	3
Electronic outputs 0.5 A	4

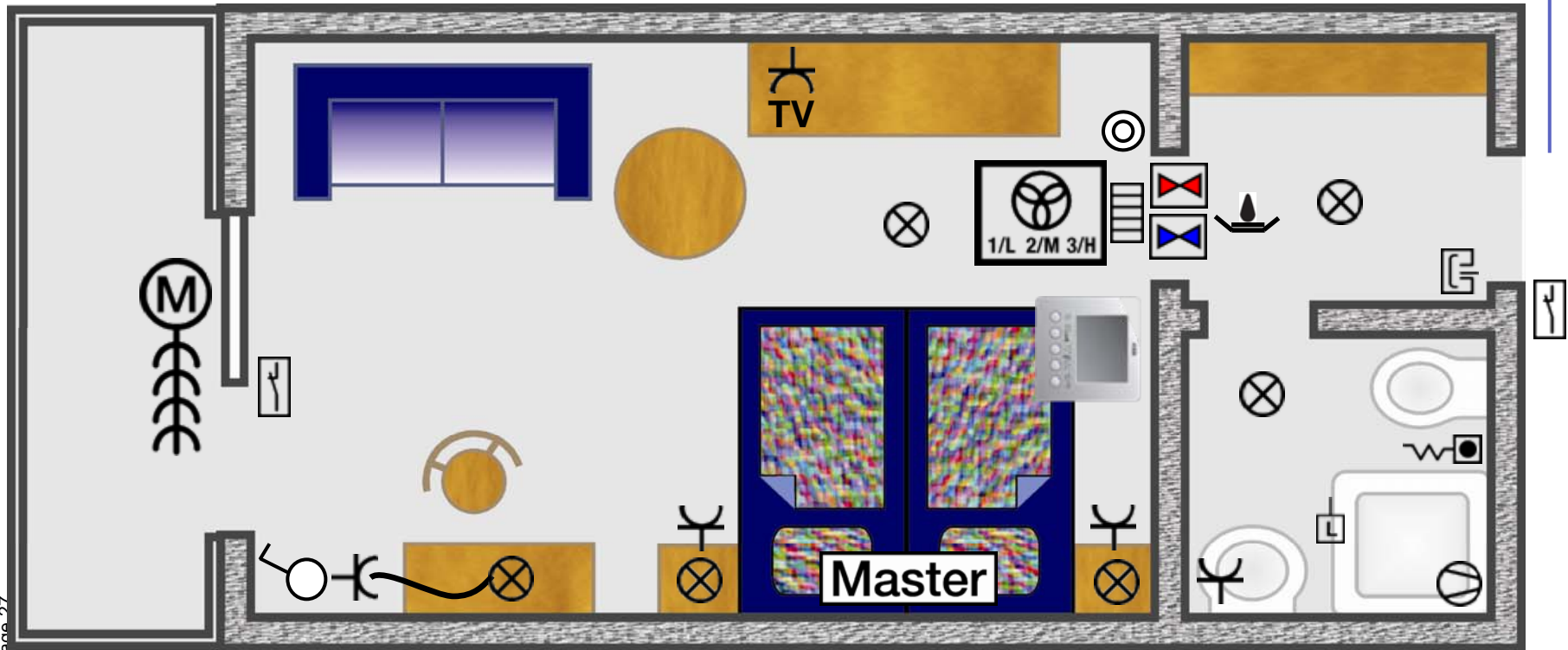




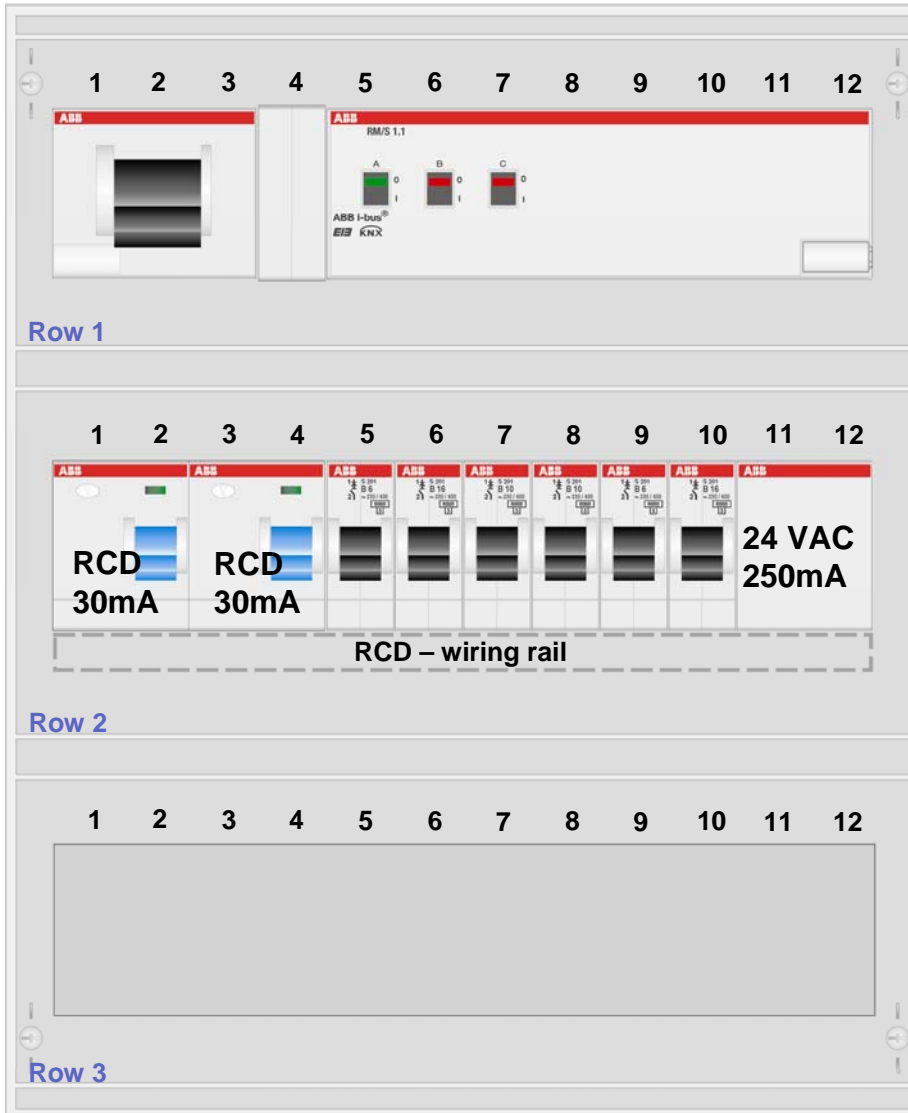
## Info: Floor plan



## Info: Floor plan - completely



## Overview distribution board



### Row 1:

- 1 - 3 Main Switch 16A
- 4 Free
- 5 - 12 Room Master

### Row 2:

- 1 - 4 RCD
- 5 (6A) Main Supply (Bell Transformer)
- 6 (16A) Socket Outlet Circuit
- 7 (10A) Lighting Circuit + Shutter
- 8 (10A) Electrical Heater / Auxiliary Contact
- 9 (6A) Fan Coil (HVAC)
- 10 (16A) Socket Outlet Circuit
- 11 - 12 Bell Transform. (TS24/8-12-24)

### Row 3: (Option)

- 1-12 Free



## Summary

- Room Master, Basic, RM/S 1.1, 8 MW, MDRC
- 8 inputs, 10 outputs
- RM/S 1.1 supply via bus
- Current consumption maximally 12 mA
- Room solution, one device for all functions
- Independent of design



# ABB i-bus<sup>®</sup> KNX

## Room Solution Overview



## Inputs / Outputs overview

<b>Inputs</b>	<b>RM/S 1.1</b>	<b>RM/S 2.1</b>
Binary via contact scanning	8	18

<b>Outputs</b>	<b>RM/S 1.1</b>	<b>RM/S 2.1</b>
Relay 20 A (16 A C-Load)	1	3
Relay 16 A (10 AX)	2	1
Relay 6 A	3	12
Electronic outputs 0.5 A	4	4
Change over contact 6 A (shutter)	-	1



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