

The Room Controller Basis Device RC/A 8.2 can accept up to 8 plug-in modules. It controls their function and communicates as a bus device via the ABB i-bus® KNX.

Any module type can be plugged into every module slot. The inserted module is detected automatically and linked with the internal supply voltage and incoming mains supply if necessary.

The mains supply is connected to the device using a 3-phase supply.

The manual operation facility enables an immediate function test even when bus voltage is not applied.

Technical data

Incoming supply	3-phase: L1, L2, L3, N and PE Voltage range Optional incoming supply	For supplying module slots M1...M8 85...265 V AC 24 V DC, for wiring the direct supply to the 24 V DC modules
Supply	Via phase L1 Voltage range Internal power consumption	85...265 V AC, 50/60 Hz Max. 4 W (without modules)
Bus connection	ABB i-bus® KNX Bus current consumption	< 10 mA
Module slots	Number	8 (M1... M8) for insertion of the required module types
Operating and display elements	LED red and button 4 yellow LEDs and push buttons 1 module selector switch and 8 LEDs	For assignment of the physical address For status display and manual operation of the module function For selecting the module slot to be operated
Connections	Incoming supply KNX Optional incoming supply	5-pole, plug-in screw terminals Conductor cross-section: 0.5...4.0 mm ² 2-pole, plug-in screw terminals 4-pole, plug-in screw terminals Conductor cross-section: 0.2...2.5 mm ² stranded 0.2...4.0 mm ² single core
Enclosure	IP 54	Compliant to EN 60529
Temperature range	Operation Storage Transport	-20 °C...+45 °C -25 °C...+55 °C -25 °C...+70 °C
Environmental conditions	Max. humidity Operation only in enclosed rooms	93 %, no condensation allowed
Design	Type of installation Housing/colour Dimensions (H x W x D) Weight	Surface mounted device, screw fixing Plastic, grey, halogen free 270 x 316 x 50 mm 1.45 kg
Approvals	KNX to EN 50 090-1, -2	Certification
CE mark	In accordance with the EMC guideline and low voltage guideline	

Application program	Maximum number of communication objects	Maximum number of group addresses	Maximum number of associations
Room Controller modular 8f2/1.0	245	254	255

Note

For a detailed description of the application program see “Room Controller Basis Devices, RC/A x.x” product manual. It is available free-of-charge at www.abb.com/knx.

Programming requires ETS3.0 or higher.

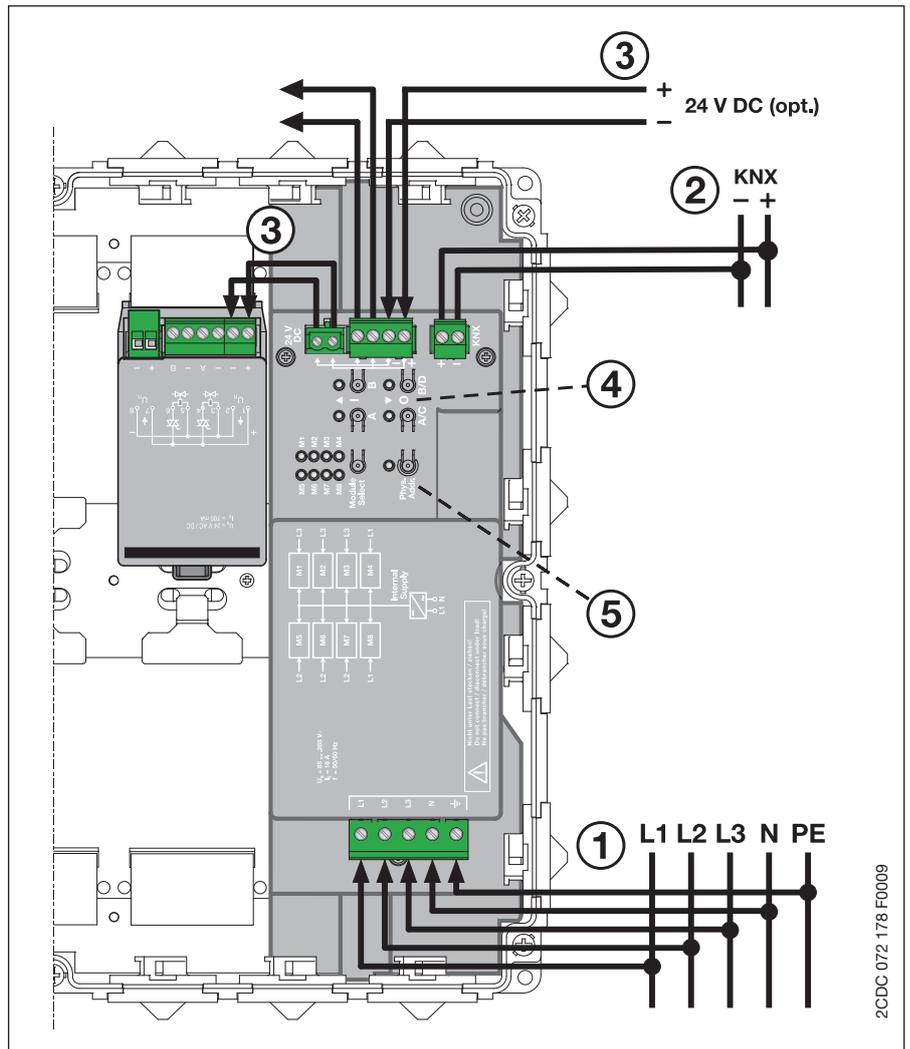
If ETS3 is used, a *.VD3 or higher type file must be imported.

The application program is available in the ETS2 / ETS3 at *ABB/Room automation/Room Controller*.

The devices do not support the closing function of a BA password or a *BCU code* (ETS3) that can assign the devices using the ETS.

This function has no effect on the device. Data can still be read and programmed.

Connection schematic



1 Incoming supply and power supply

The mains supply can be 1-phase, 2-phase or 3-phase (50/60 Hz). The internal power supply for the device and the inserted modules is generated from phase L1. The supply is then routed to the modules. Operation on a 3-phase 230/400 V mains supply is permitted. Multiple connection of the same phase is not allowed, if it is protected by several miniature circuit-breakers (danger of overload of the neutral conductor!).

2 Connection to the ABB i-bus® KNX

3 Additional incoming supply 24 V DC

Some modules, e.g. 24 V DC blind actuators, require a special incoming supply which is connected directly to the modules. To make the wiring simpler, it is possible to connect a 24 V DC supply here which is then led directly along connecting cables to the modules. The connecting cable is supplied with the modules. The terminals can carry a maximum continuous current of 8 A.

4 Manual operation and LED display

To operate the module functions manually, the module must first be selected via the rotary selector switch (Module Select). The module can then be operated via push buttons and the status is displayed via an LED .

If a module is not selected, the state of the bus voltage can be indicated with the aid of the push buttons:
 LED permanently on → Bus voltage OK
 LED flashes → Bus voltage not OK

5 Programming button and LED

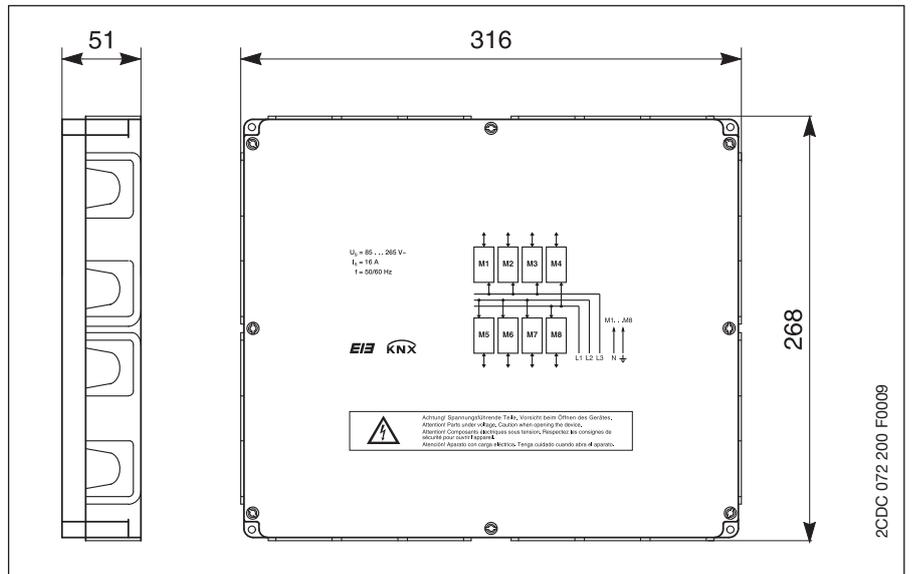
Please note that the programming button and LED only function when the supply voltage is connected.

Background: To ensure that the power consumption of the bus remains low, the device is not supplied by the bus.

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Dimensional drawing



Overview of the module slots

The device has eight module slots which are numbered as M1 to M8 respectively and when inserted, the module is connected to the mains supply voltage provided that the module requires the voltage for operation.

