Datasheet RCXXYY
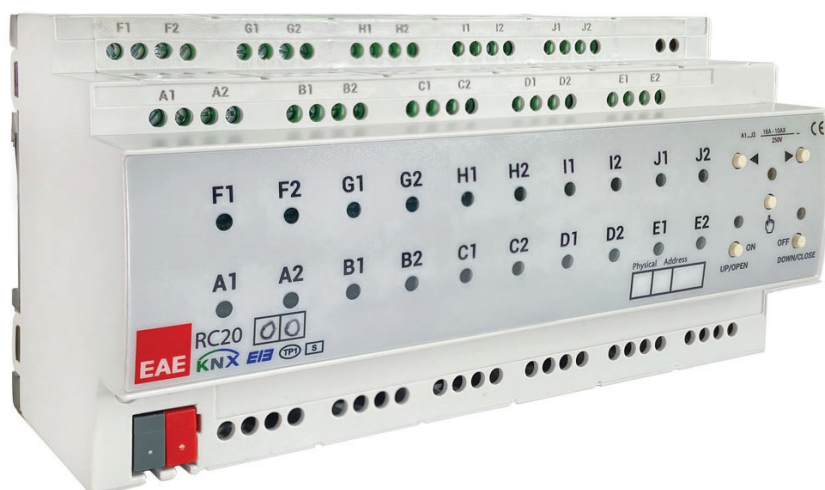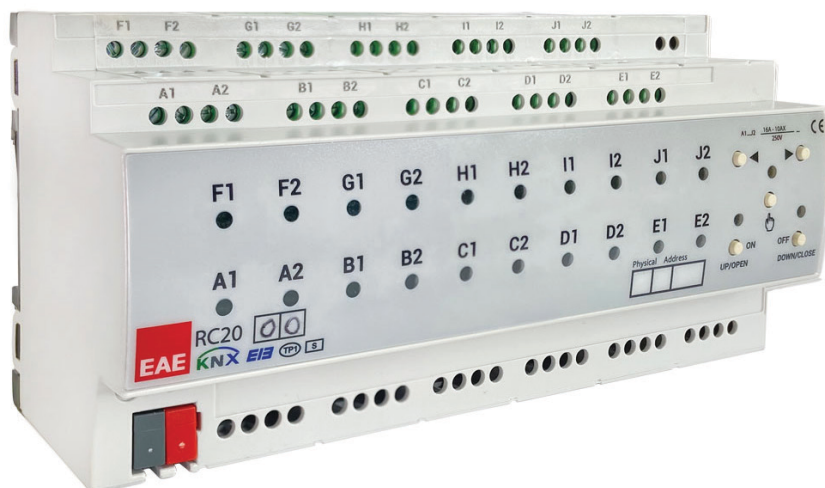## EAE KNX Room Control Unit

All you need is EAE

General Description

Available versions of EAE RC Series:

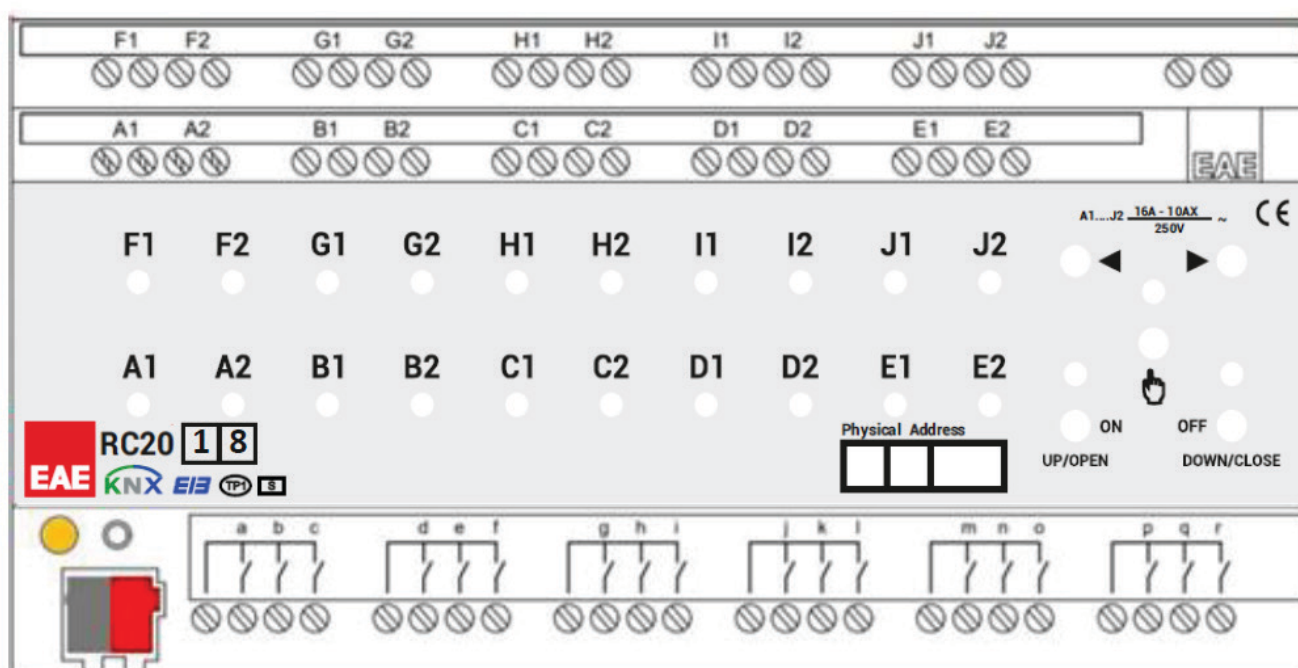|	
RCU2018	RCU2000
RCU2016	RCU2000
RCU1212	RCU1200
RCU0808	RCU0800

Note: RCUXXYY where XX denotes the number of outputs and YY number of inputs.

- Room Control Unit has multiple 16A relay outputs. These outputs are grouped as 5/4/3/2 independent output channel groups for XX = 20/16/12/8 respectively. Each channel group can be configured to have different modes of operation as follows;

  - Switching output x4
  - AC Blind   x2
  - DC Blind   x1
  - On/Off (2-point) valve   x2
  - 3-point valve   x2

- Room Control Unit has optional multiple independent input channels. Each input is galvanically isolated. Input channels operate as universal interface to KNX bus with following functions;

  - Switch / push button input
  - Dimmer control
  - Control of shutter/blinds
  - Value sending
  - Scene control
  - Counter for count pulse

- Room Control Unit RCU Series are designed as an all in one product for different room layouts such as apartments, hotel rooms, hospitals and residences.

- Room Control Unit covers all requirements of the electrical installation of room applications and offers following functions in a one product.

  - Switching lighting control
  - Switching load control
  - Controlling AC/DC blinds
  - Controlling fan coils (On/Off & 3-point valve)
  - Dry contact inputs

- Suitable for switching resistive, capacitive and inductive loads as well as fluorescent lamp loads according to EN 60 669. As a switch output device provides following function list,

  - Staircase
  - External logic
  - Internal logic
  - Priority
  - Threshold
  - Operating hour
  - Sweep

- Manual control is possible for each channel through the built-in button panel.

- 220V auxiliary power is NOT required.

R3.0

Technical Data RCU Series

Type of protection	IP 20	EN 60529	
Safety class	II	EN 61140	
Power supply :	– Voltage	21V... 30V DC, SELV	
	– Current consumption	≤ 15 mA	
External supply	–	–	
Connections	– Screw terminals	0,05...4 mm solid and stranded wire 0,05...2,5 mm stranded wire with ferrule	
	– Max tightening torque	0.8 Nm	
	– KNX	Bus connect terminal	
Output	Quantity	20 output (RCU2018, RCU2000) 16 output (RCU1616, RCU1600)	
	Switching ratings	16A 250VAC / 6x103 OPS (Resistive) 3500W 277VAC / 1.2x104 OPS (Incandescent lamp)	
	Max. Inrush current	492A/1.5ms – 165A/20ms	
	Maximum switching power	4000VA	
	Mechanical life	2 x 106	
Type of contact	potential-free, bistable		
Input	Quantity	18 binary inputs 16 binary input	
	Scanning voltage	32V pulsed	
	Current	0.1 mA	
	Cable length	<300 m	
Installation	35 mm mounting rail	EN 60715	
Operating elements	LED (red) and button	For physical address	
Temperature range	Operation	–5° C + 45° C	
	Storage	–25° C + 55° C	
Dimensions	H x W x D Width W (mm) Width W (unit)	90 mm x W x 66 mm 180 mm 10x18 mm modules	90 mm x W x 66 108 mm 6x18 mm modules
Weight	0.65 kg		
Box	Plastic, polycarbonate, grey		
CE	In accordance with the EMC guideline and low voltage		

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Grouping Topology Visual

	Lighting	AC Blind	DC Blind	Fan Coil Fan Control	Valve Control
RCU20YY	A1A2–B1B2… J1J2	A–B–C–D–E–F–G–H–I–J	AB – CD – EF- GH – IJ	AB – CD – EF- GH – IJ	AB – CD – EF- GH – IJ
RCU16YY	A1A2–B1B2… H1H2	A–B–C–D–E–F–G–H	AB – CD – EF- GH	AB – CD – EF- GH	AB – CD – EF- GH
RCU12YY	A1A2–B1B2… F1F2	A–B–C–D–E–F	AB – CD – EF	AB – CD – EF	AB – CD – EF
RCU08YY	A1A2–B1B2… D1D2	A–B–C–D	AB – CD	AB – CD	AB – CD

For lighting and AC Blinds;
- Channels can be used individually, in example: A1 & A2 can be used as a switch for lighting and B1 & B2 can be used as an AC Blind etc.

For DC Blind, Fan Coil Fan Control and Valve Control;
- Subsequent channels are linked together, in example: G1G2 and H1H2 have to be used together for DC Blind etc.
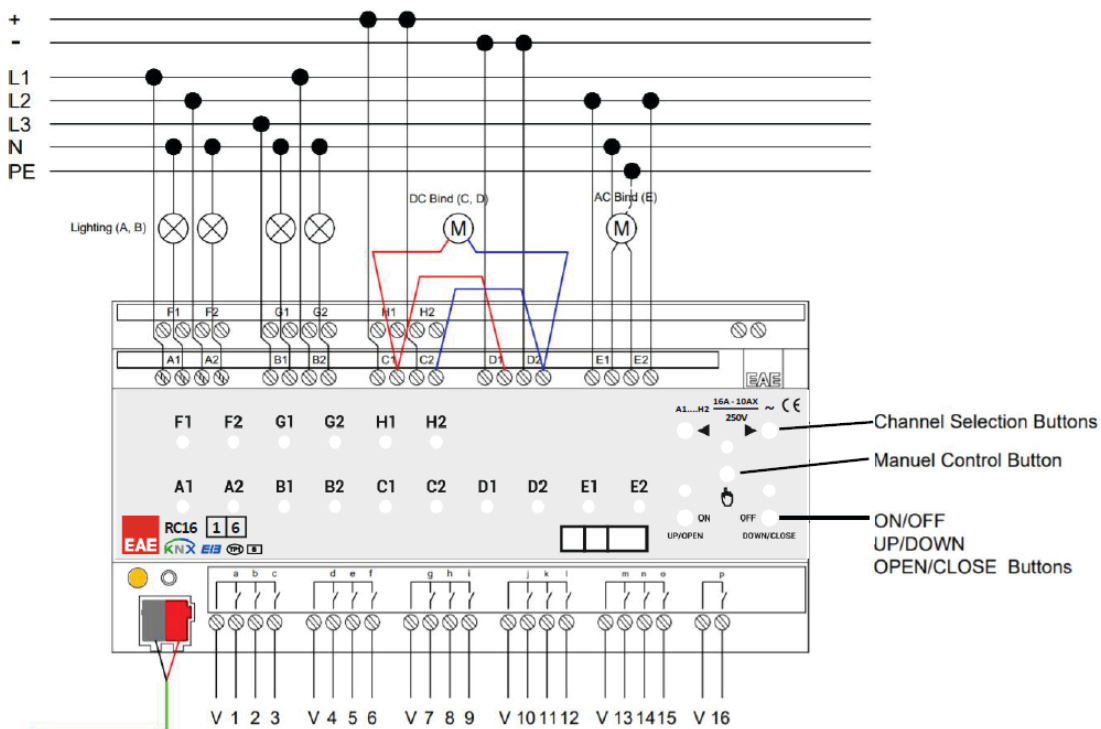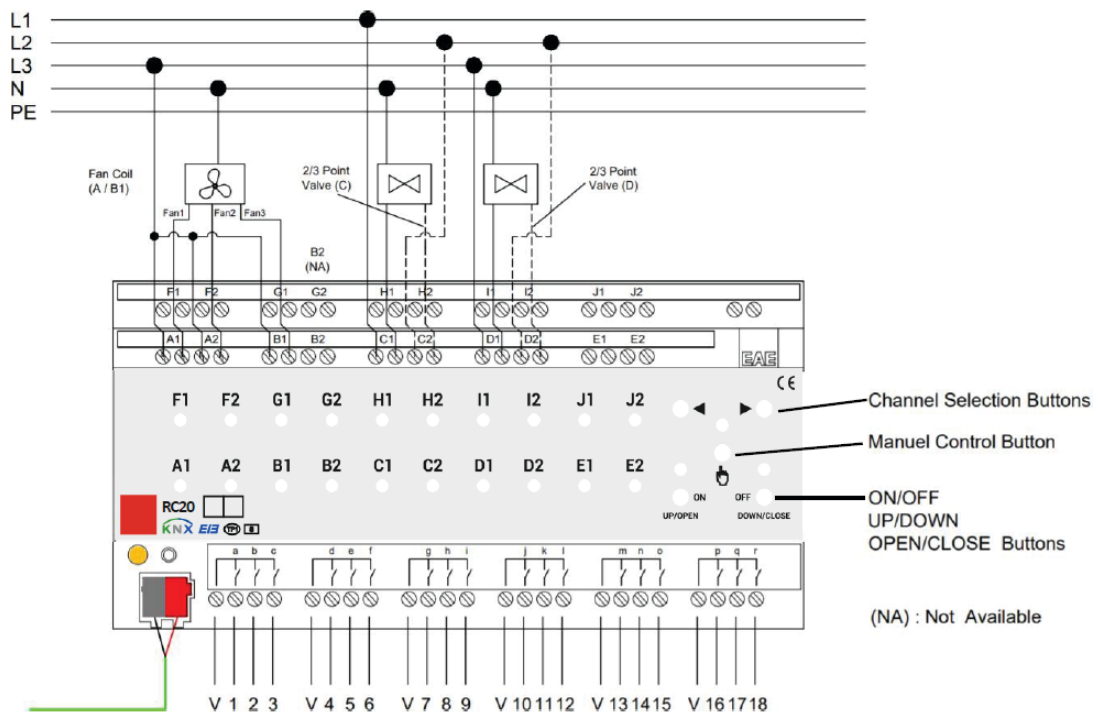
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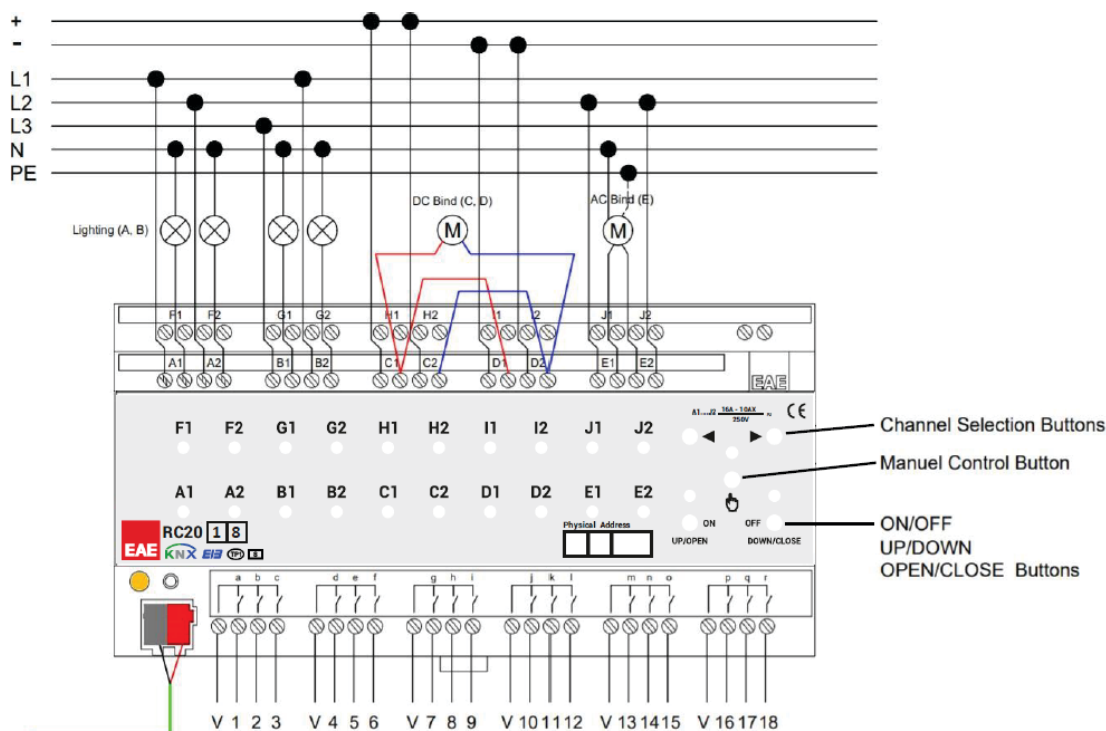# Connection Examples

RC1616

Connection Diagram 5

Connection Diagram 6

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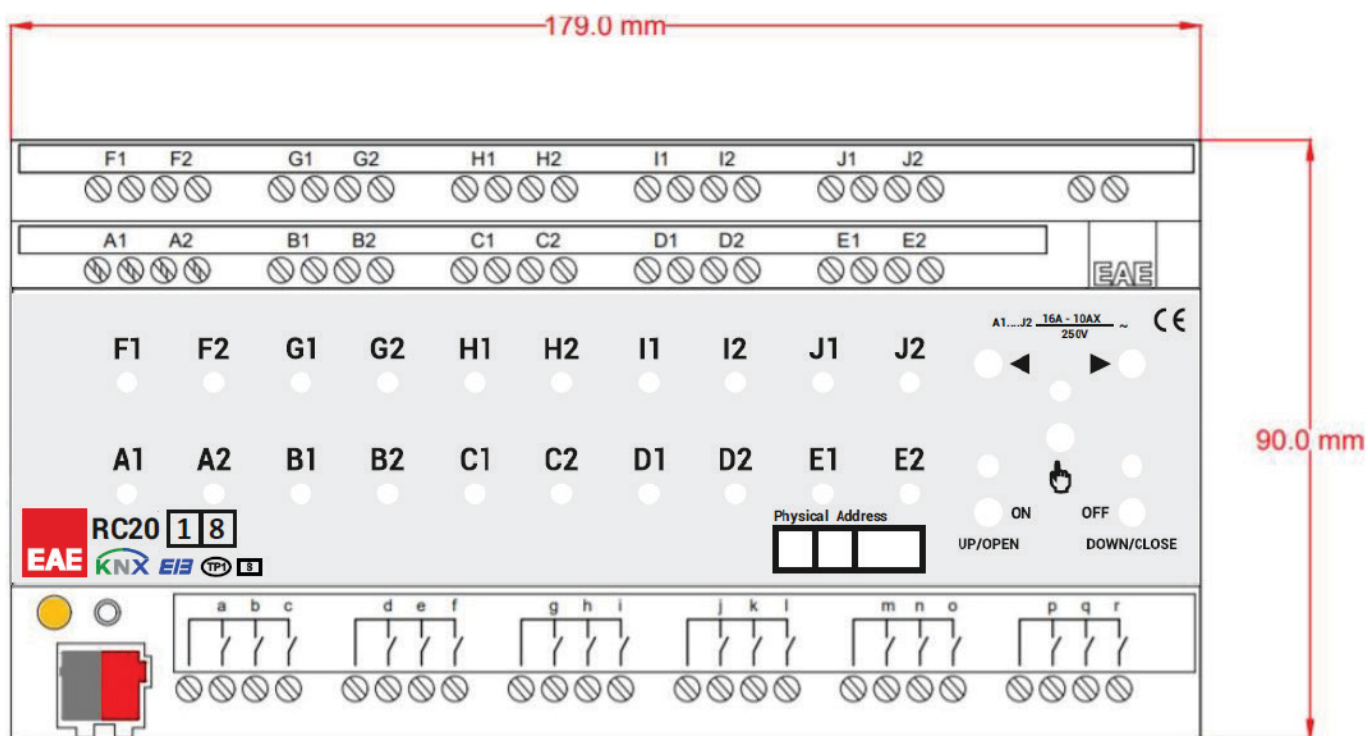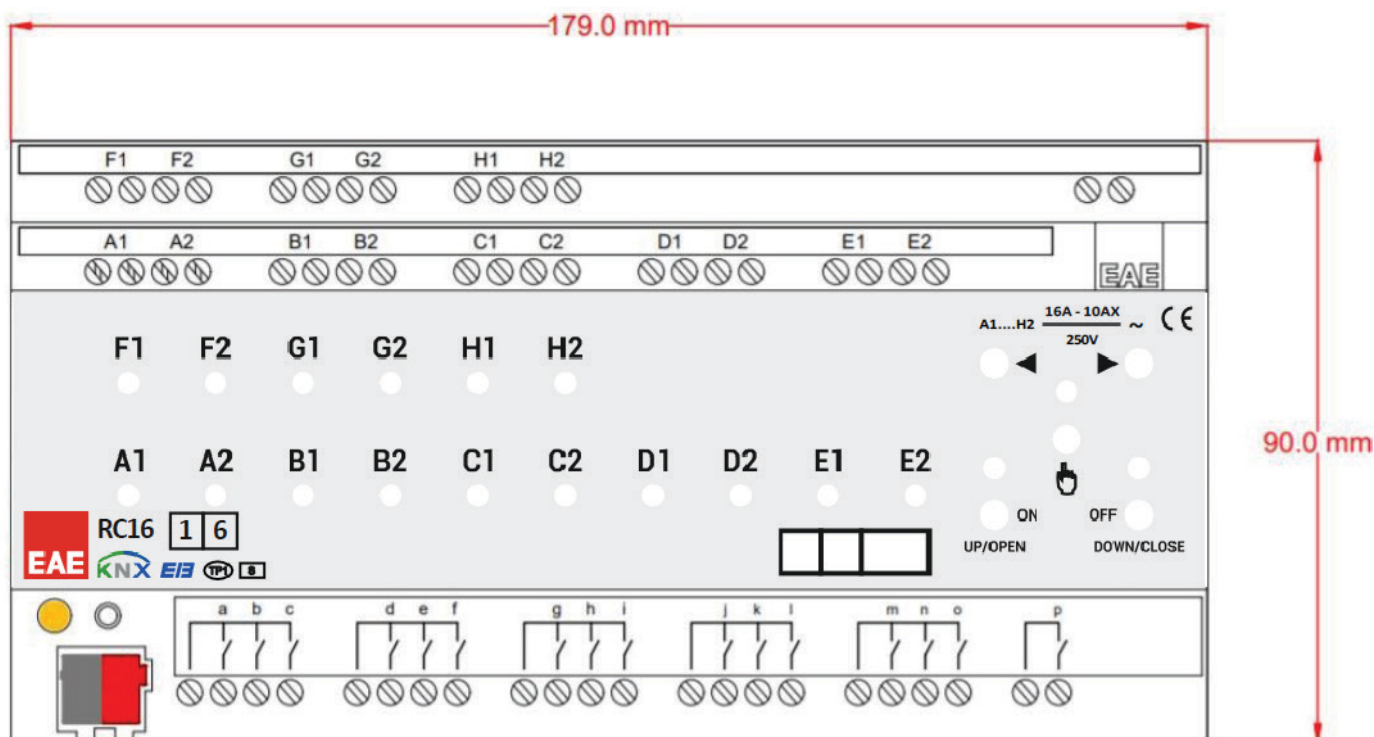# Connection Examples

RC2018

Connection Diagram 7

Connection Diagram 8

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Scale Drawings RCUXXYY

RC2018

RC1616

Scale Dimensions RCUXXYY