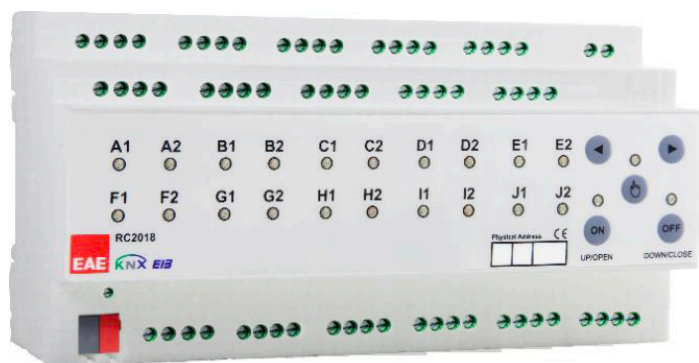


# Datasheet RCUXYY

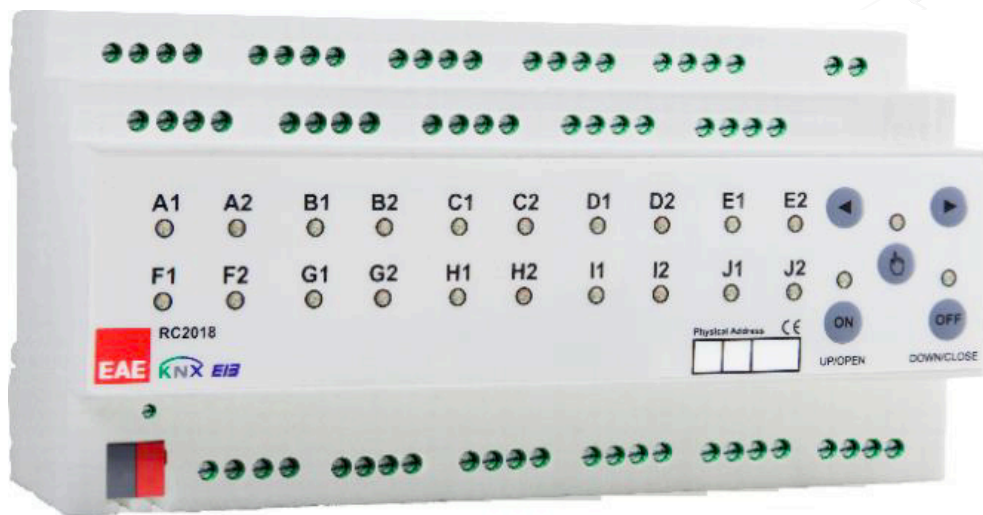
## **EAE KNX Room Control Unit**

---

*All you need is EAE*



### General Features



Available versions of EAE RCU Series:

RCU2018	RCU2000
RCU2016	RCU2000
RCU1212	RCU1200
RCU0808	RCU0800

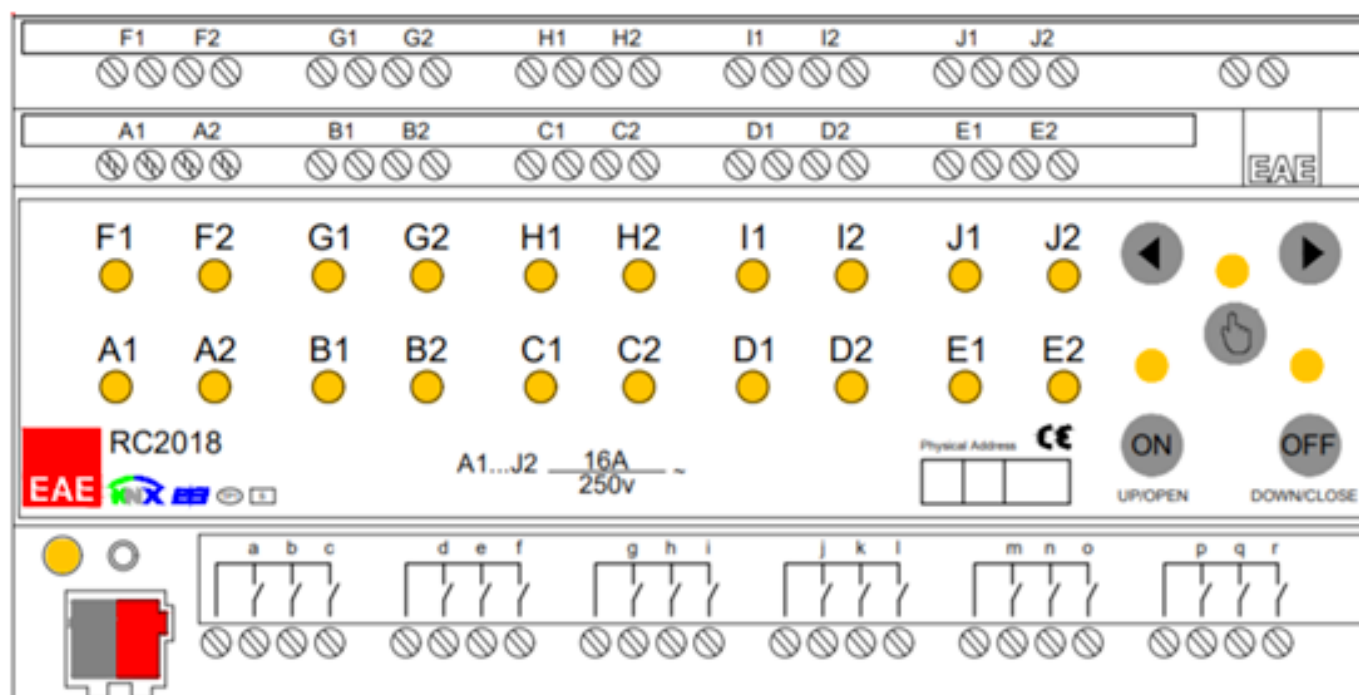
Note: RCUXYY where XX denotes the number of outputs and YY number of inputs.

- 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.

### Technical Data RCU Series

<b>Protection Grade</b>	IP 20	EN 60 529
<b>Safety Class</b>	II	EN 61 140
<b>Power Supply</b>	Voltage	21V... 30V DC, SELV
	Current consumption	≤ 10 mA
<b>External Supply</b>	-	-
<b>Connections</b>	Screw terminals	0,5...3,31 mm <sup>2</sup> solid and stranded wire 0,5...3,31 mm <sup>2</sup> stranded wire with ferrule 0.5 Nm
	Max tightening torque	
	KNX	Bus connect terminal
<b>Output</b>	Number	XX output
	Switching voltage	250 V AC; 50/60 Hz
	Switching current 250 V AC	16A / AC 1
	Switching current 250 V AC, capacitive loads	16A (200μF)
	Maximum switching power	4000 VA
	Mechanical life	> 1 x 10 <sup>6</sup>
<b>Type of load</b>	Incandescent lamp	4000 W
	Halogen lamp	4000 W
	Inductive loads, transformer	2000 W
	Electronic drivers	1500 W
<b>Type of contact</b>	Potential-free, bistable, isolated	
<b>Input</b>	Number	YY binary inputs
	Scanning voltage	5 V
	Current	1 mA
	Cable length	< 300 m
<b>Installation</b>	35mm mounting rail	EN 60 715
<b>Operating Elements</b>	LED (red) and button	For physical address
<b>Temperature Range</b>	Ambient	-5° C + 45° C
	Storage	-25° C + 55° C
<b>Humidity</b>	max. air humidity	85 % no moisture condensation
<b>Dimensions</b>	Width W in mm	66 x W x 90mm
	Width W in units (18 mm modules)	180 mm 10 units
<b>Weight</b>	0,65 kg	
<b>Material</b>	Plastic, polycarbonate, colour grey	
<b>CE</b>	In accordance with the EMC guideline and low voltage	

### Grouping Topology Visual



	Lighting	AC Blind	DC Blind	Fan Coil Fan Control	Valve Control
<b>RCU20YY</b>	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
<b>RCU16YY</b>	A1A2-B1B2... H1H2	A-B-C-D-E-F- G-H	AB - CD - EF- GH	AB - CD - EF- GH	AB - CD - EF- GH
<b>RCU12YY</b>	A1A2-B1B2... F1F2	A-B-C-D-E-F	AB - CD - EF	AB - CD - EF	AB - CD - EF
<b>RCU08YY</b>	A1A2-B1B2... D1D2	A-B-C-D	AB - CD	AB - CD	AB - CD

#### For lighting and AC Blinds;

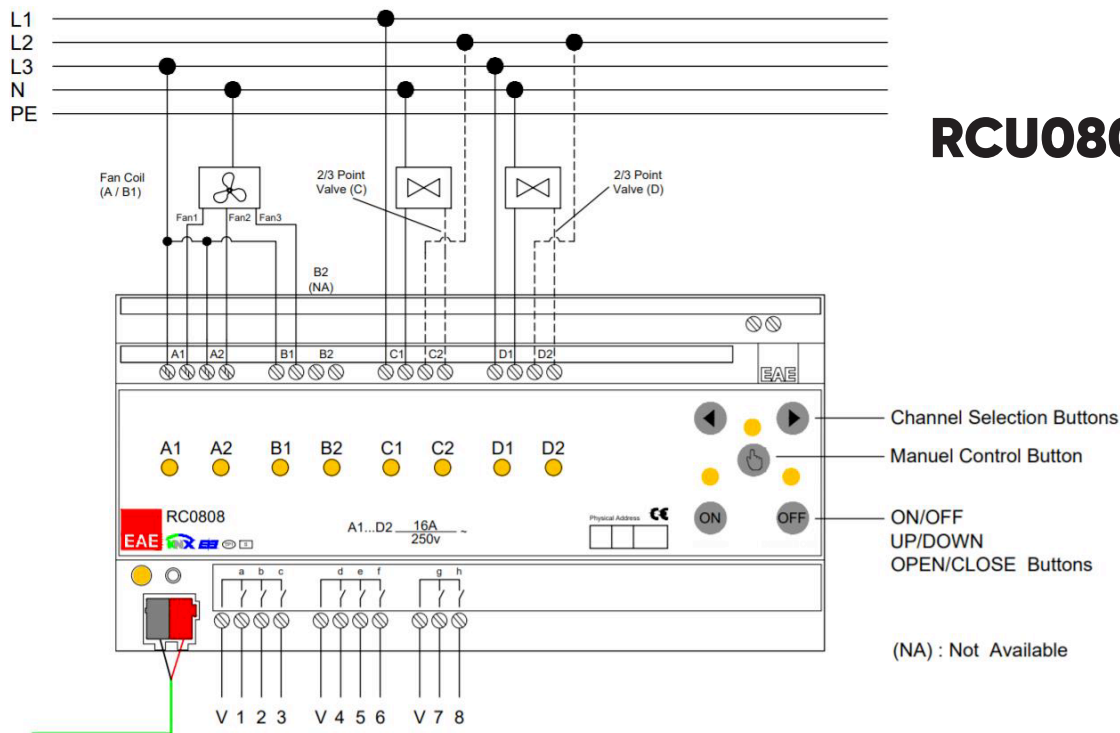
- Channels can be used individually, in example: A1 & A2 can be used as a switch for lighting and B1 & B2 can be used as an AC Blind etc. as shown with **red coloured** drawings in above visual

#### For DC Blind, Fan Coil Fan Control and Valve Control;

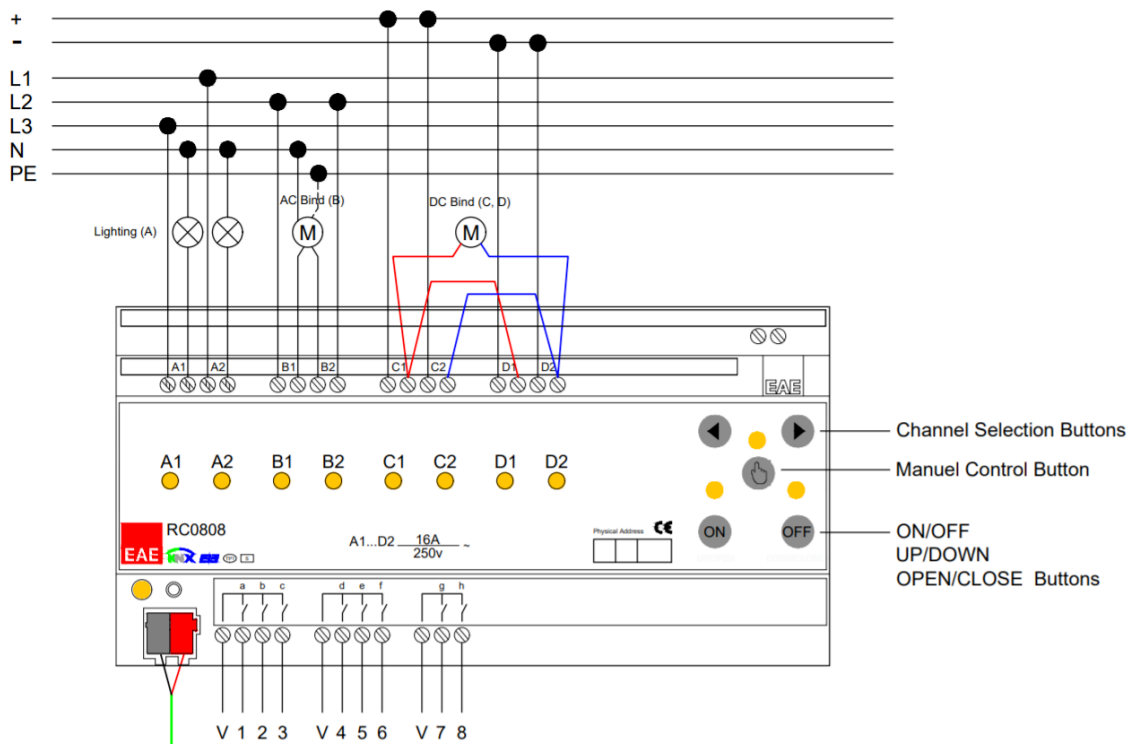
- Subsequent channels are linked together, in example: G1G2 and H1H2 have to be used together for DC Blind etc. as shown with **blue coloured** drawings in above visual

### Connections

## RCU0808



Connections 1

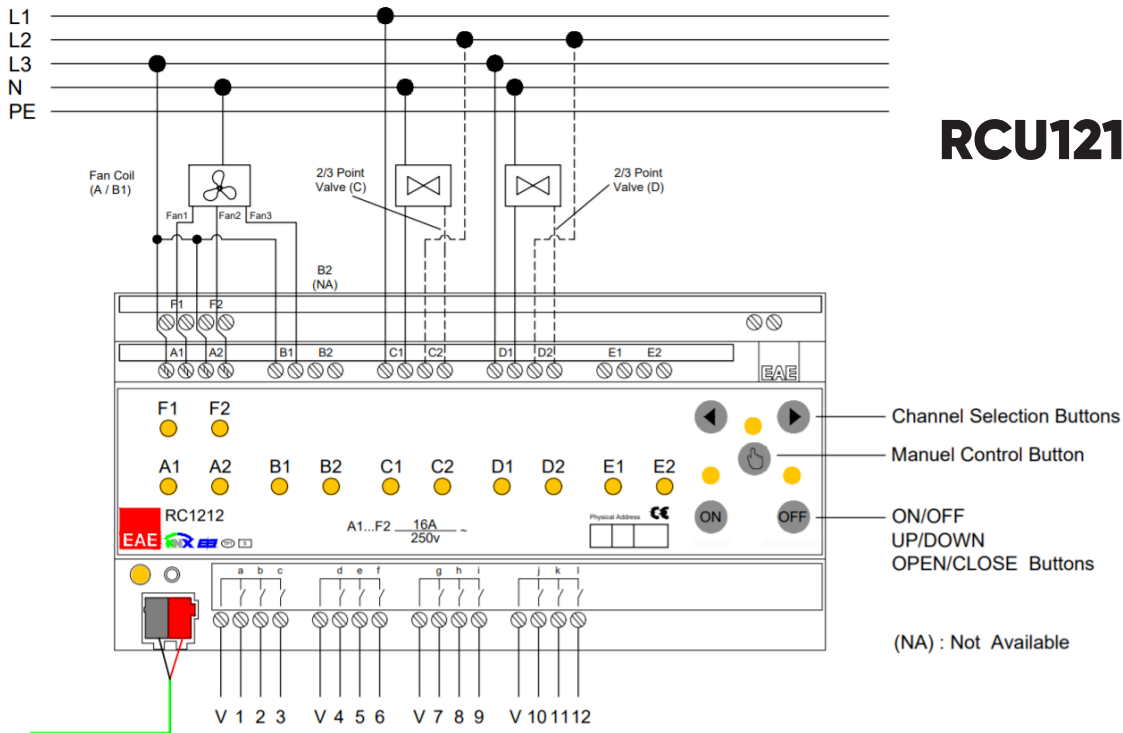


Connections 2

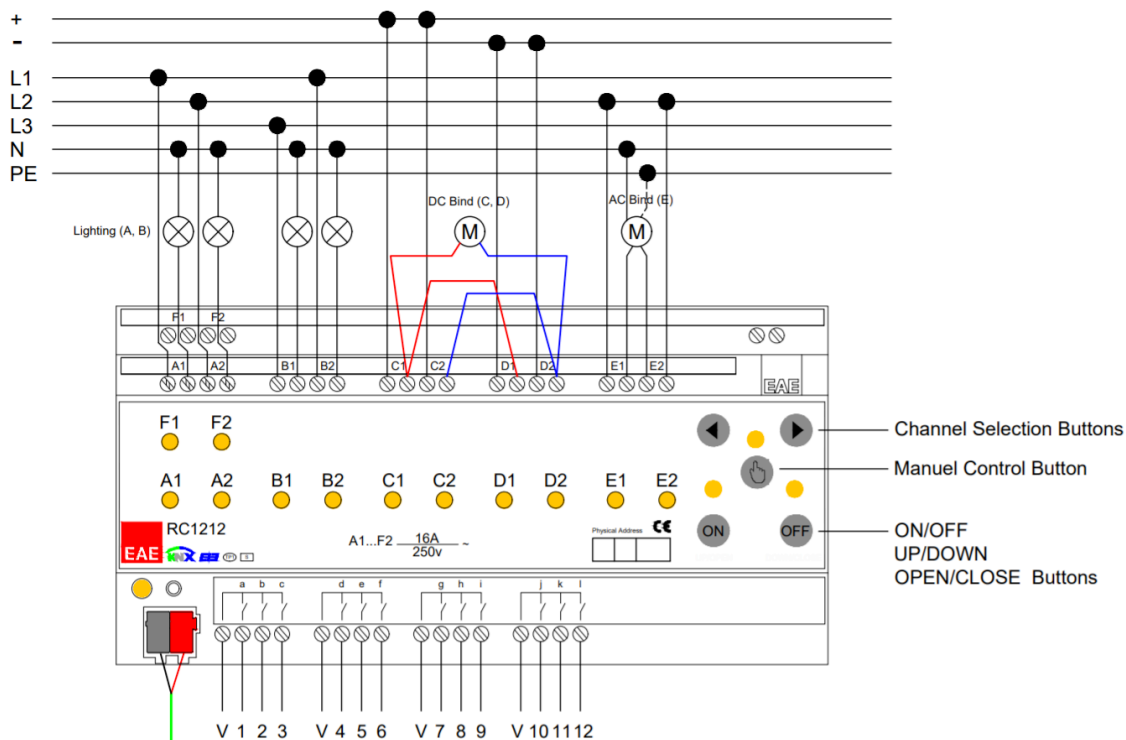


### Connections

### RCU1212



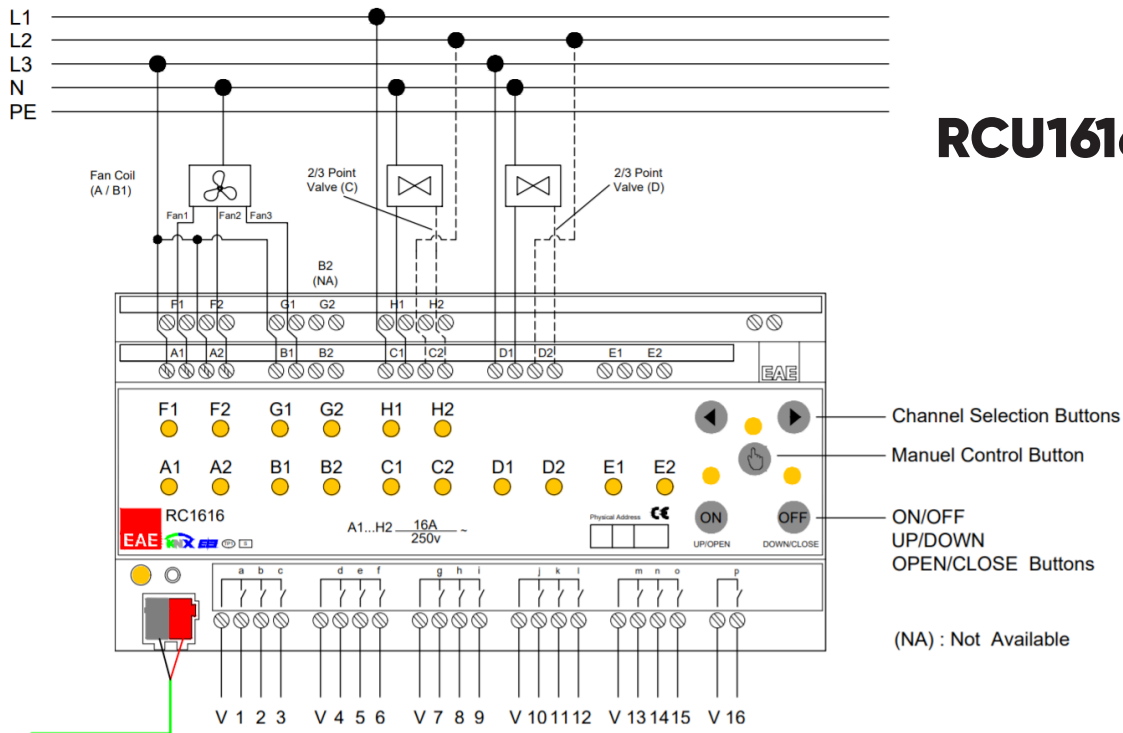
#### Connections 3



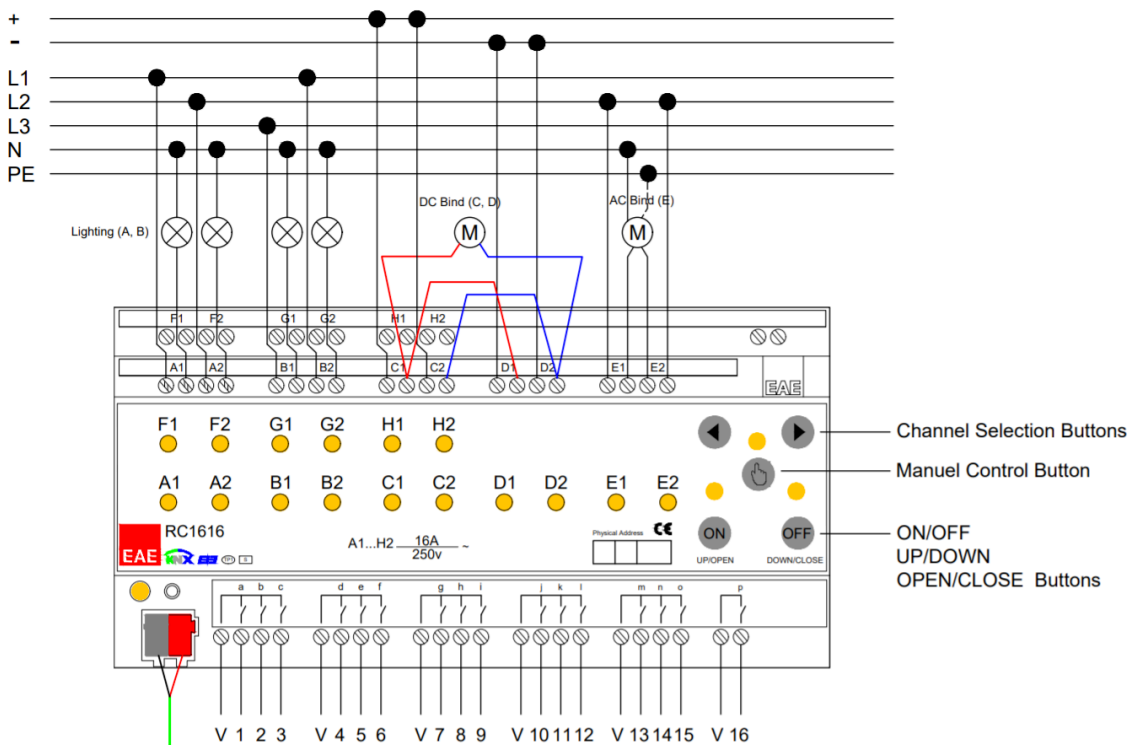
#### Connections 4

### Connections

### RCU1616



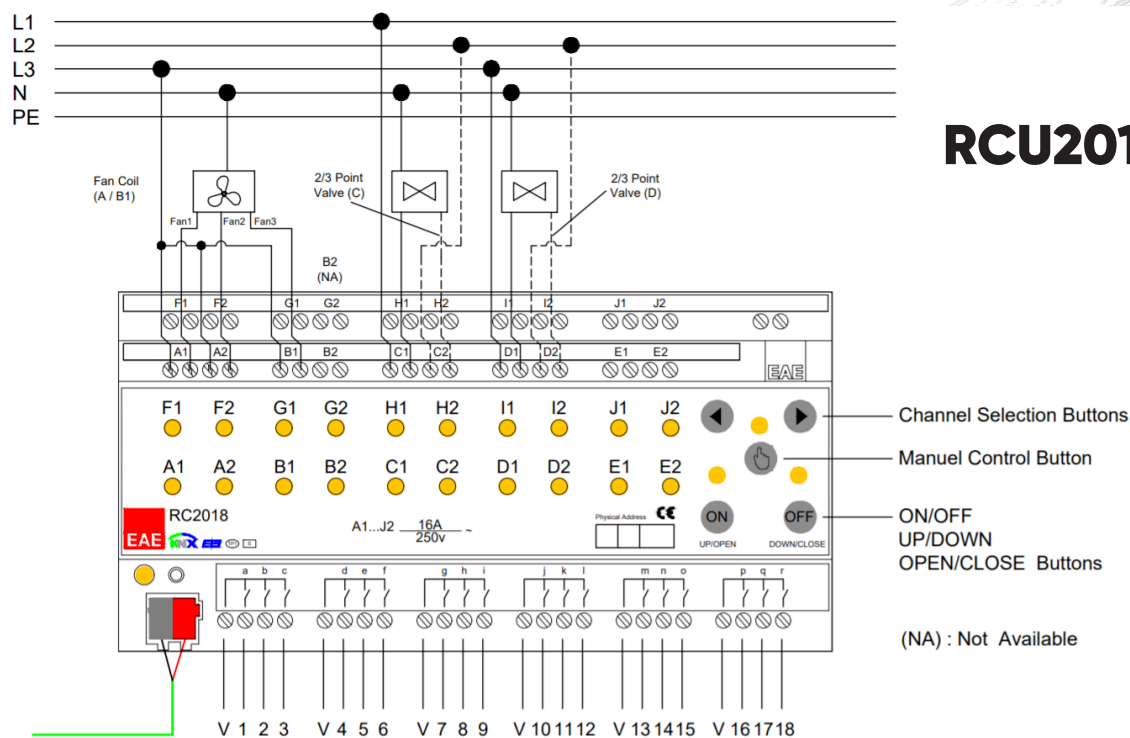
#### Connections 5



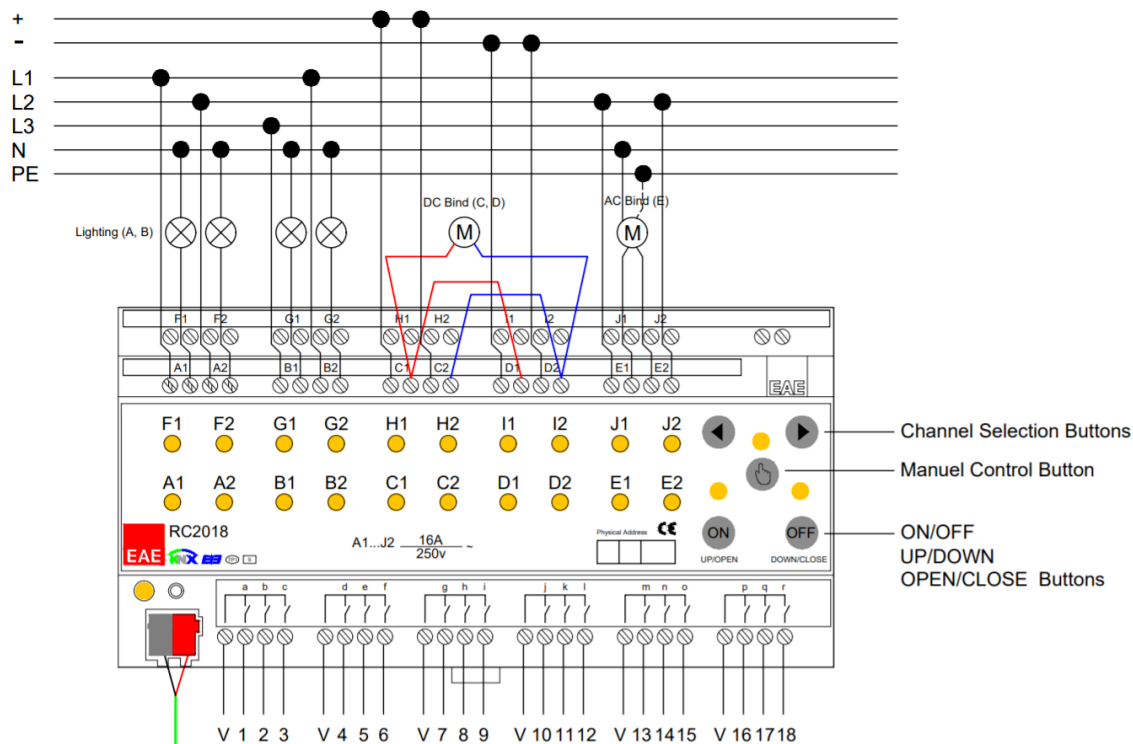
#### Connections 6

### Connections

### RCU2018



#### Connections 7

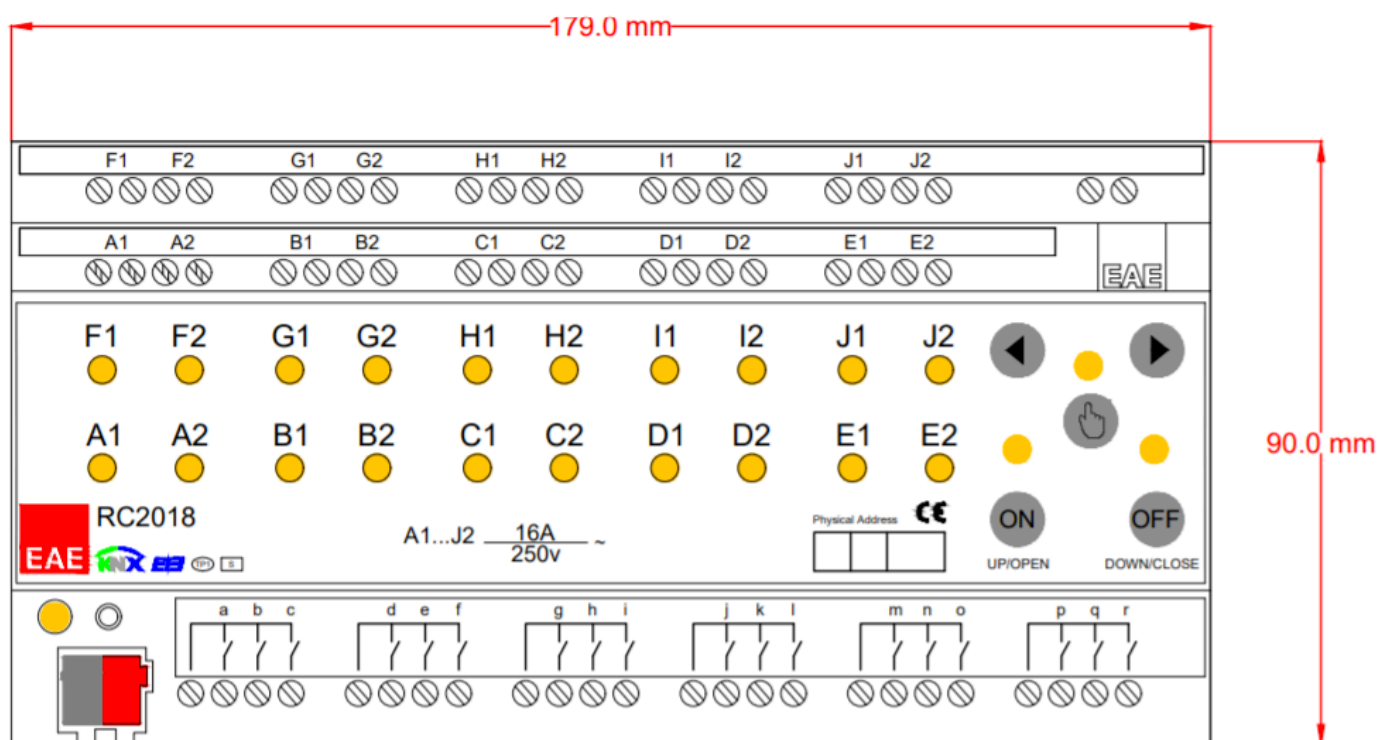


#### Connections 8

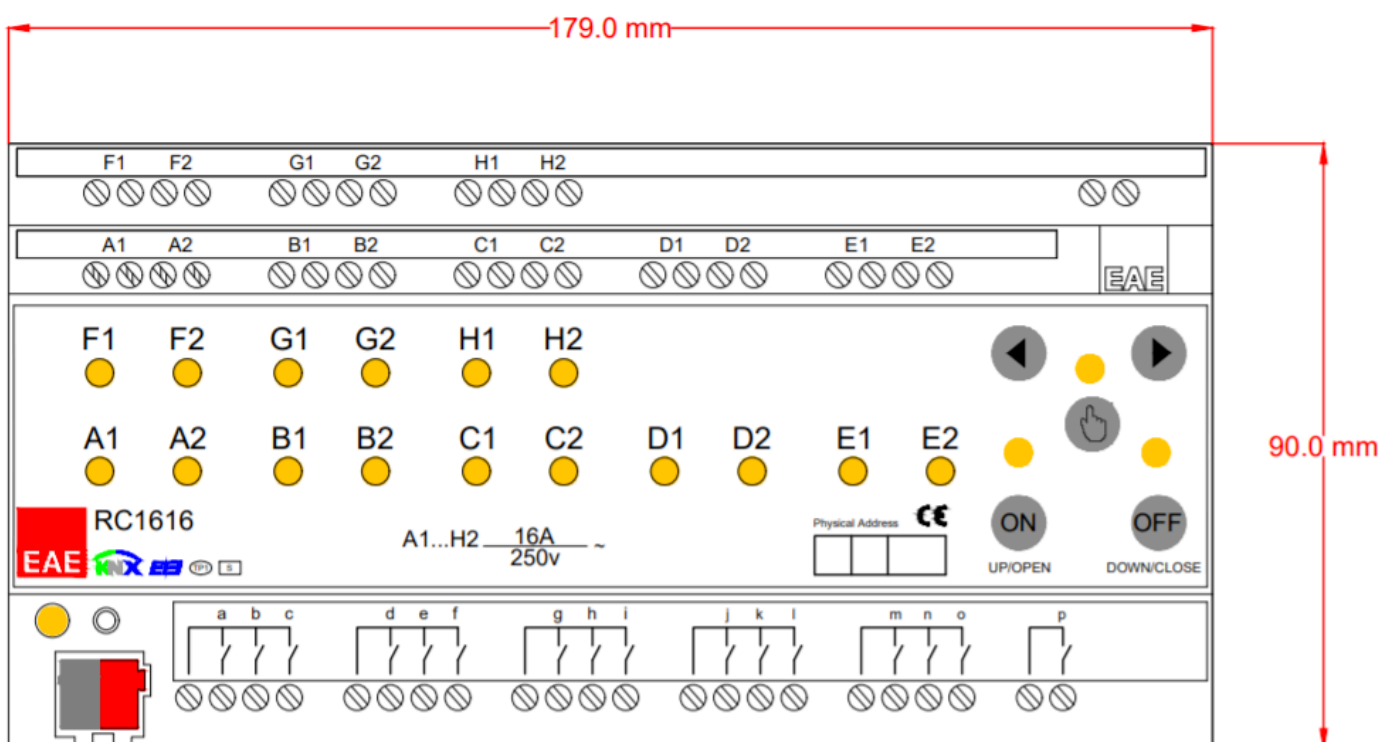


## Technical Drawings RCUXYY

### RCU2018

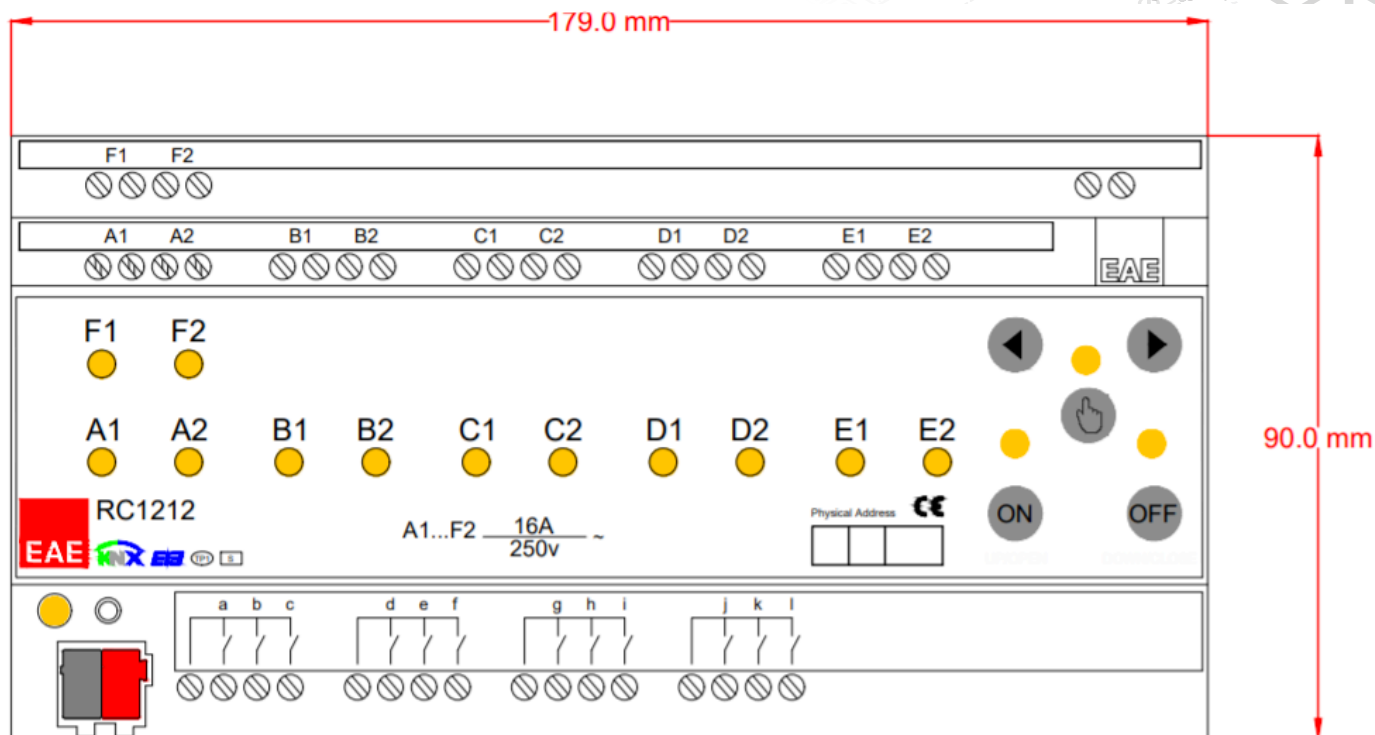


### RCU1616

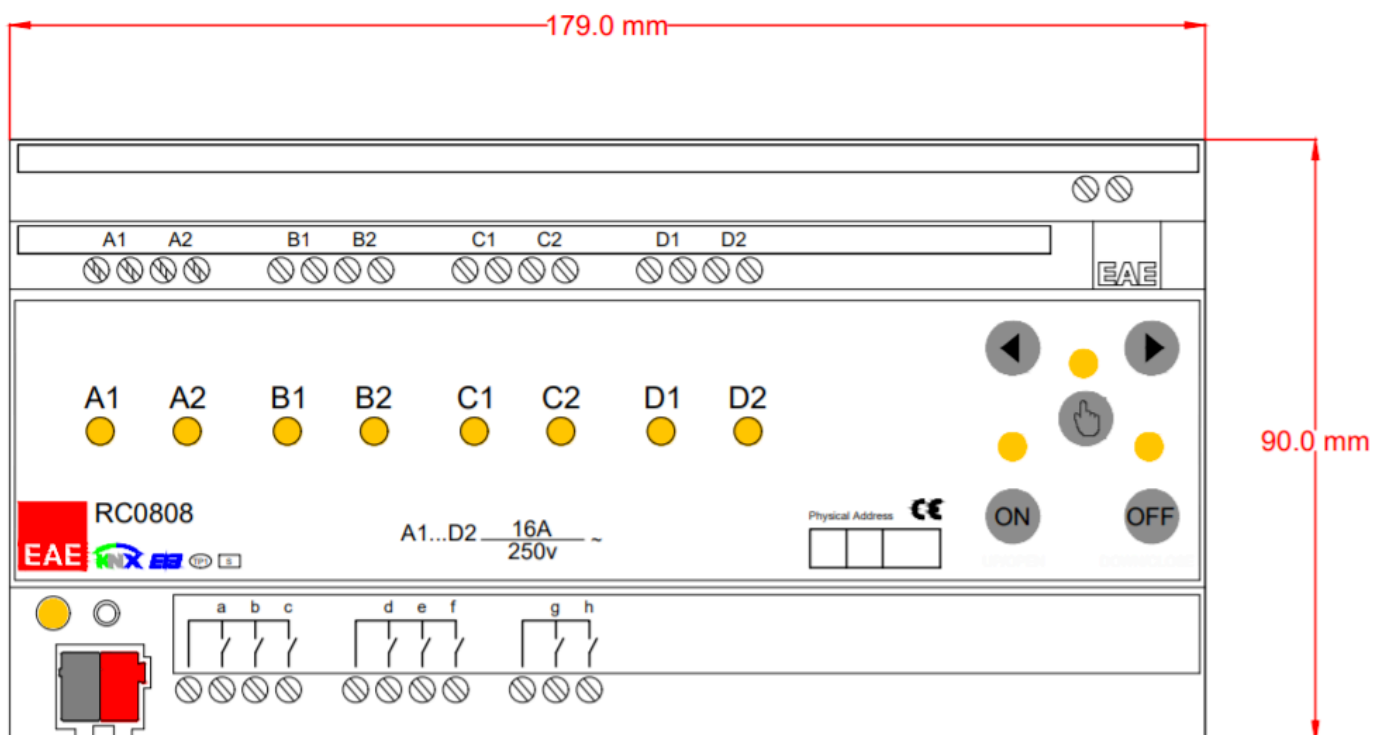


## Technical Drawings RCUXYY

### RCU1212



### RCU0808



## Scale Dimensions RCUXYY

