

Datasheet RCUXYY

EAE KNX Room Control Unit

All you need is EAE



General Description



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.

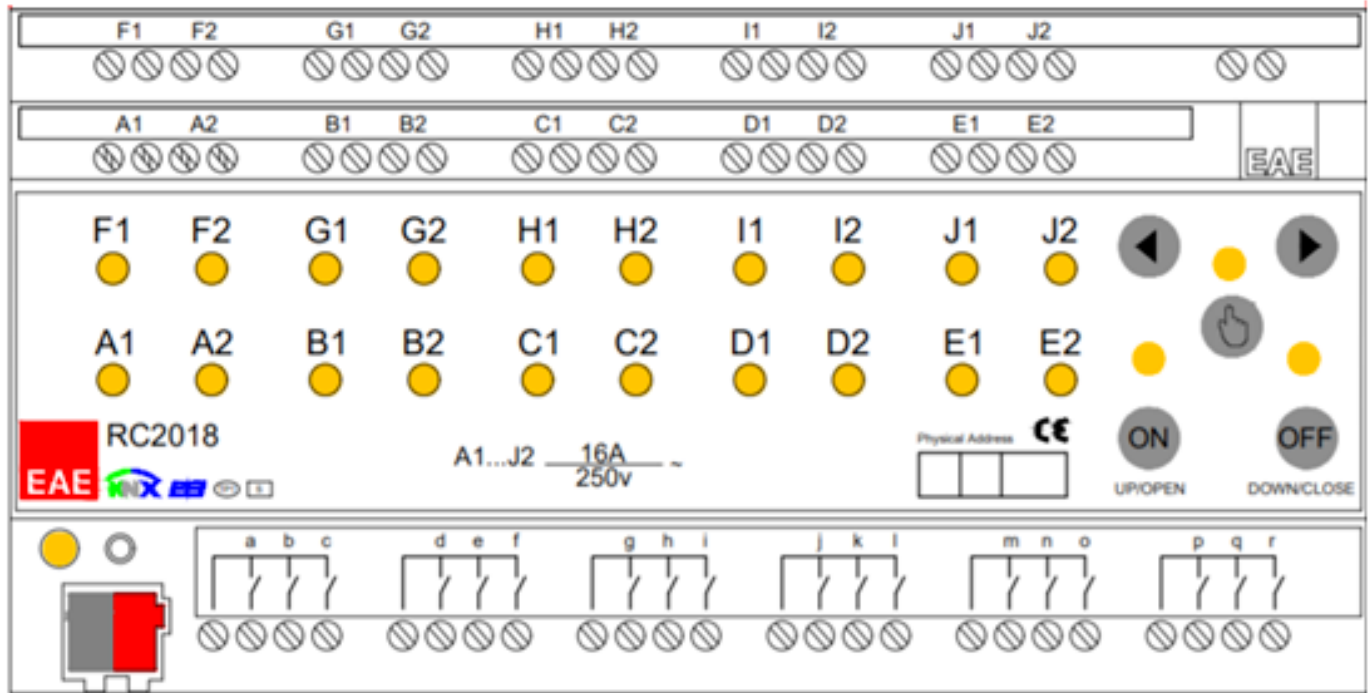
- Room Control Unit has multiple 16A relay outputs. These outputs are grouped as 5/4/3/2 independent output channel groups for XX = 20/16/12/8 respectively. Each channel group can be configured to have different modes of operation as follows;
 - Switching output x4
 - AC Blind x2
 - DC Blind x1
 - On/Off (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

Type of protection	IP 20	EN 60 529	
Safety class	II	EN 61 140	
Power supply :	- Voltage	21V... 30V DC, SELV	
	- Current consumption	≤ 10 mA	
External supply	-	-	
Connections	- Screw terminals	0,5...3,31 mm ² solid and stranded wire 0,5...3,31 mm ² stranded wire with ferrule 0.5 Nm	
	- Max tightening torque		
	- KNX	Bus connect terminal	
Output	- 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 ⁶	
Type of load	- Incandescent lamp	4000 W	
	- Halogen lamp	4000 W	
	- Inductive loads, transformer	2000 W	
	- Electronic drivers	1500 W	
Type of contact	- Potential-free, bistable, isolated		
Input	- Number	YY binary inputs	
	- Scanning voltage	5 V	
	- Current	1 mA	
	- Cable length	< 300 m	
Installation	- 35mm mounting rail	EN 60 715	
Operating elements	- LED (red) and button	For physical address	
Temperature range	- Ambient	-5° C + 45° C	
	- Storage	-25° C + 55° C	
Humidity	- max. air humidity	85 % no moisture condensation	
Dimensions		66 x W x 90mm	
	Width W in mm	180 mm	
	Width W in units (18 mm modules)	10 units	
Weight	0,65 kg		
Box	Plastic, polycarbonate, colour grey		
CE	In accordance with the EMC guideline and low voltage		
Application program	Communications objects	Number of addresses(max)	Number of assignments(max)
	254	255	255

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;

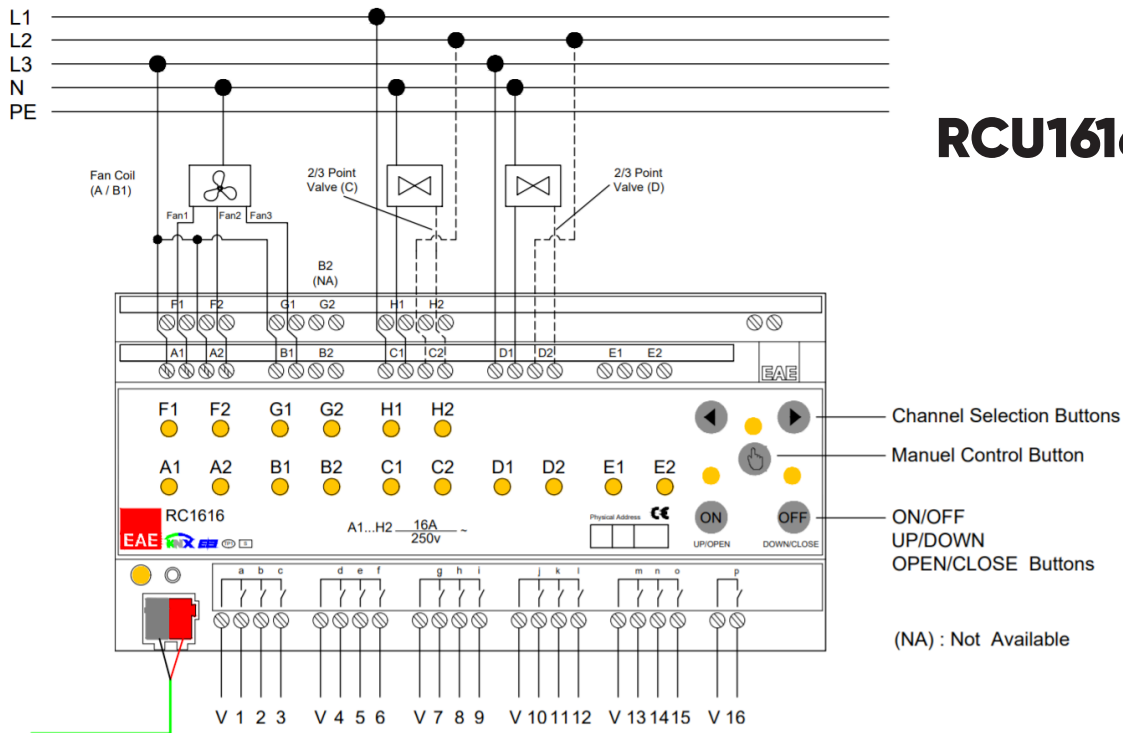
- Channels can be used individually, in example: A1 & A2 can be used as a switch for lighting and B1 & B2 can be used as an AC Blind etc. as shown with **red coloured** drawings in above visual

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

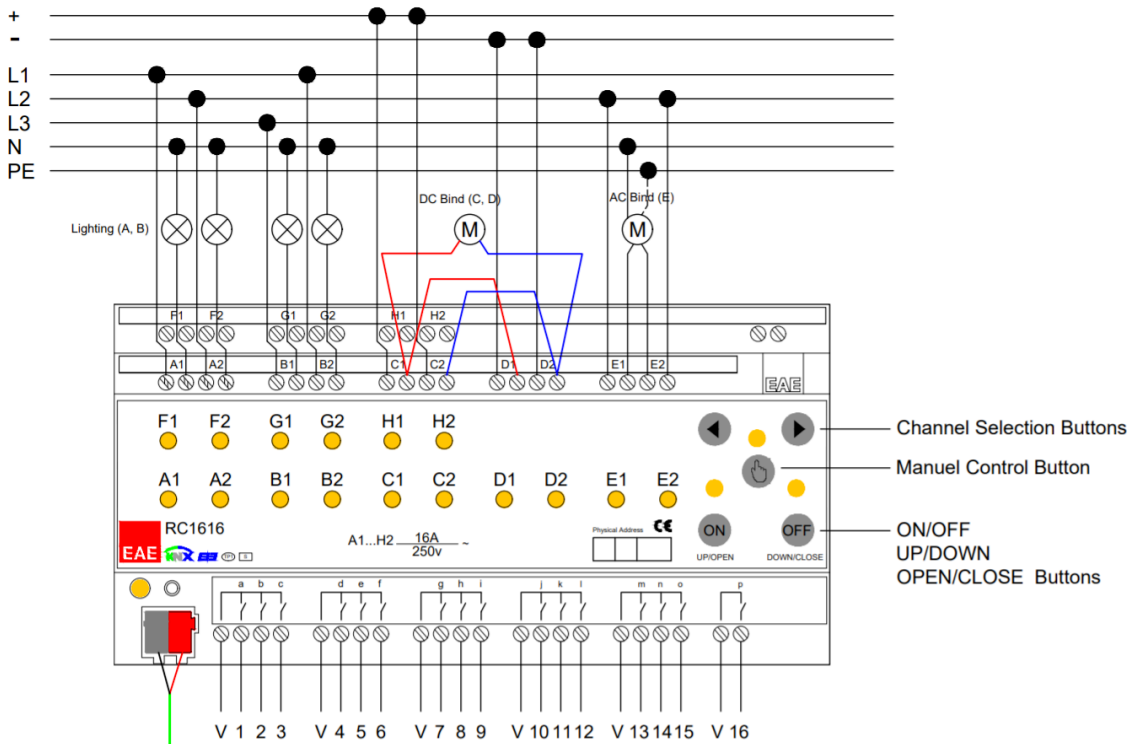
- Subsequent channels are linked together, in example: G1G2 and H1H2 have to be used together for DC Blind etc. as shown with **blue coloured** drawings in above visual

Connection Examples

RCU1616



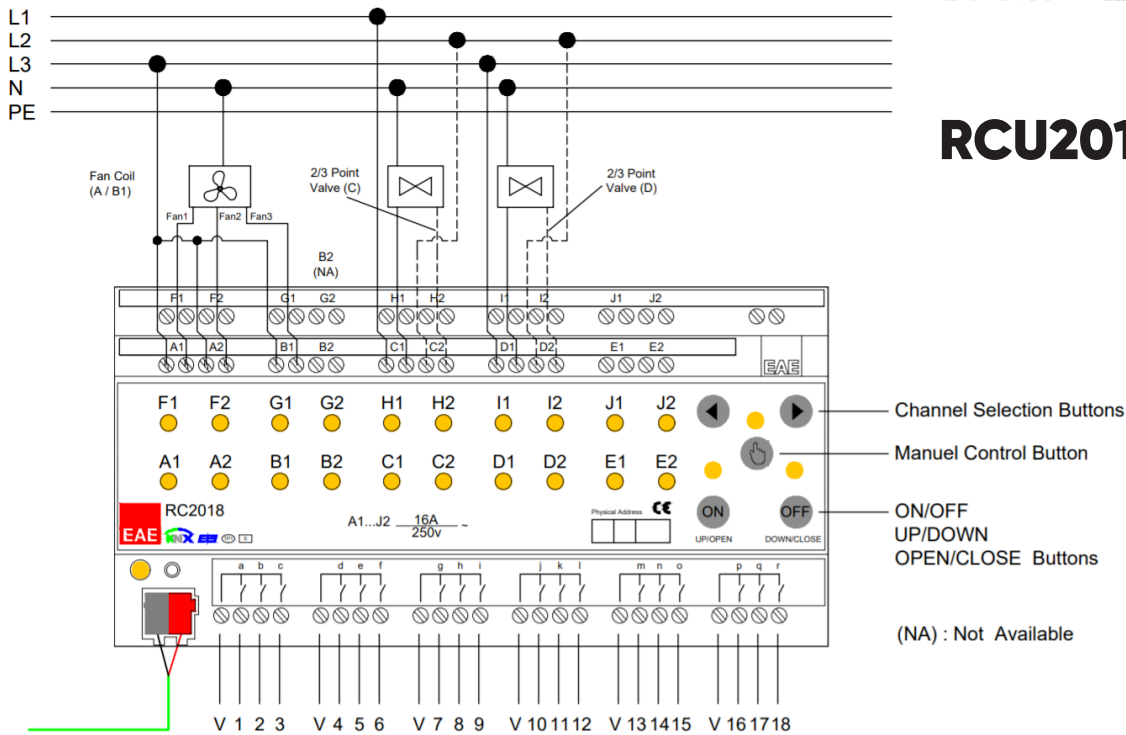
Connection Diagram 5



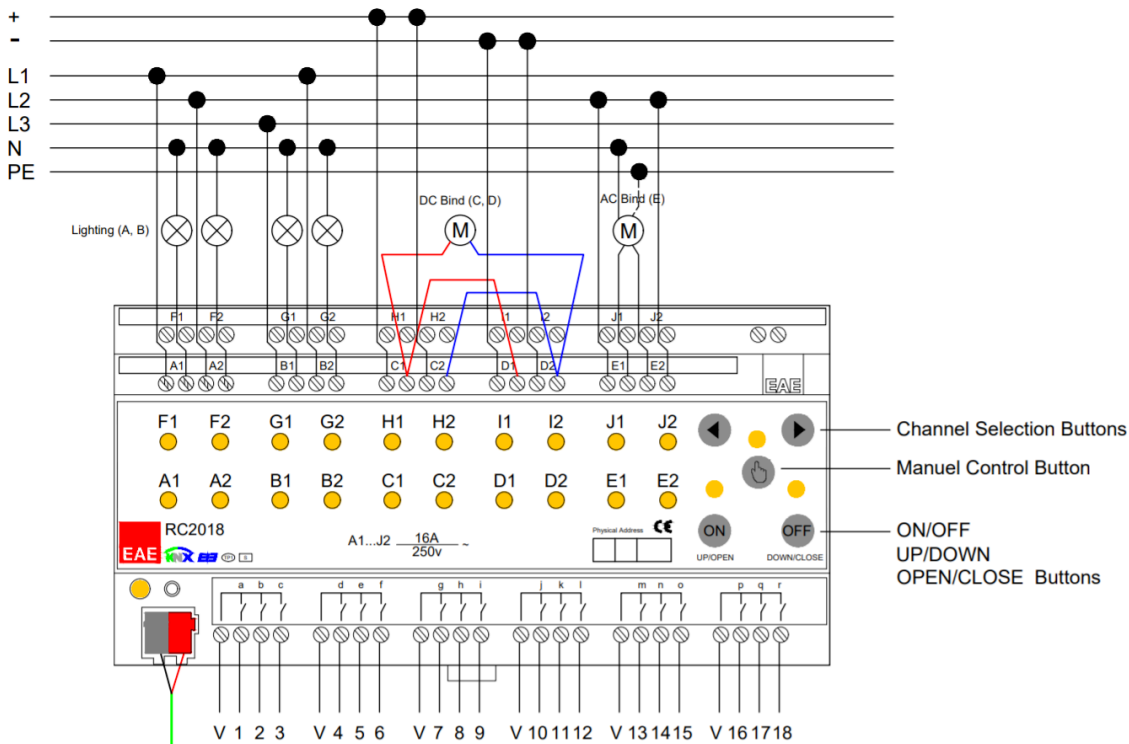
Connection Diagram 6

Connection Examples

RCU2018



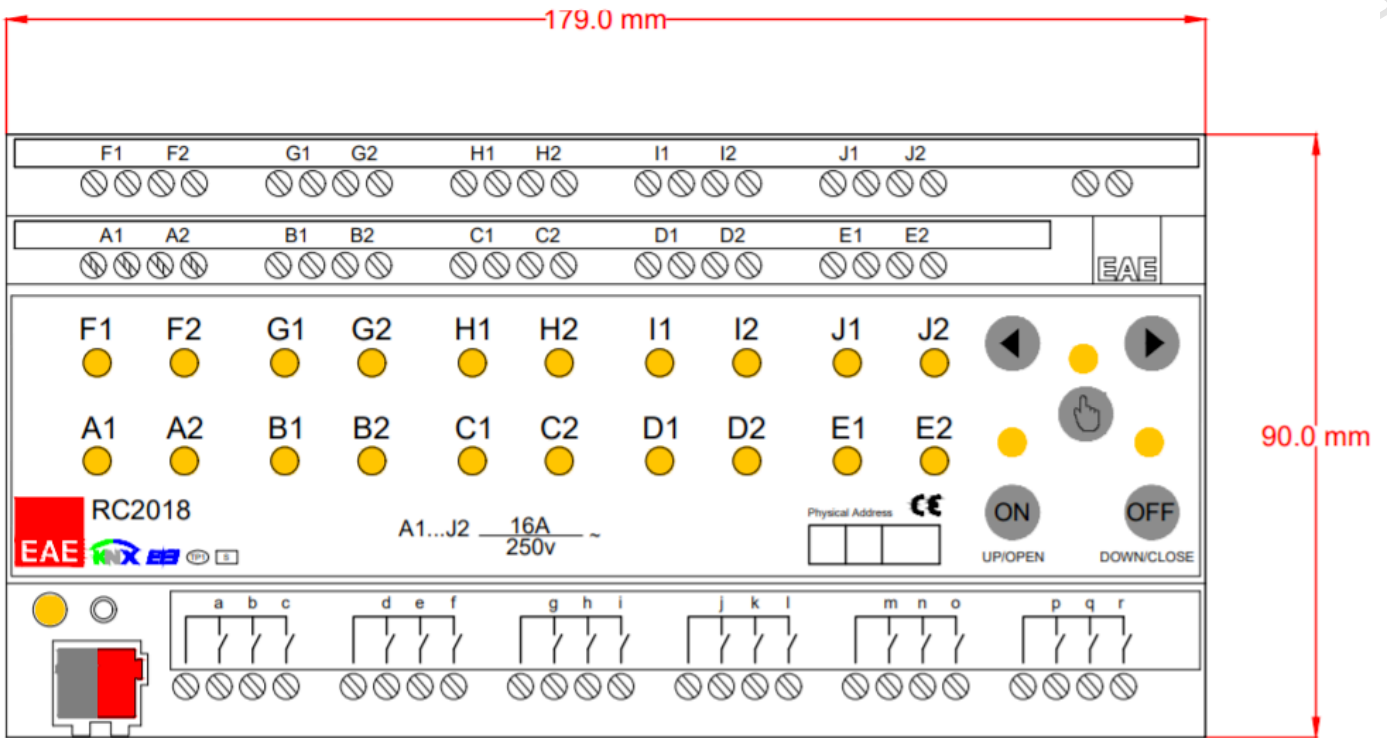
Connection Diagram 7



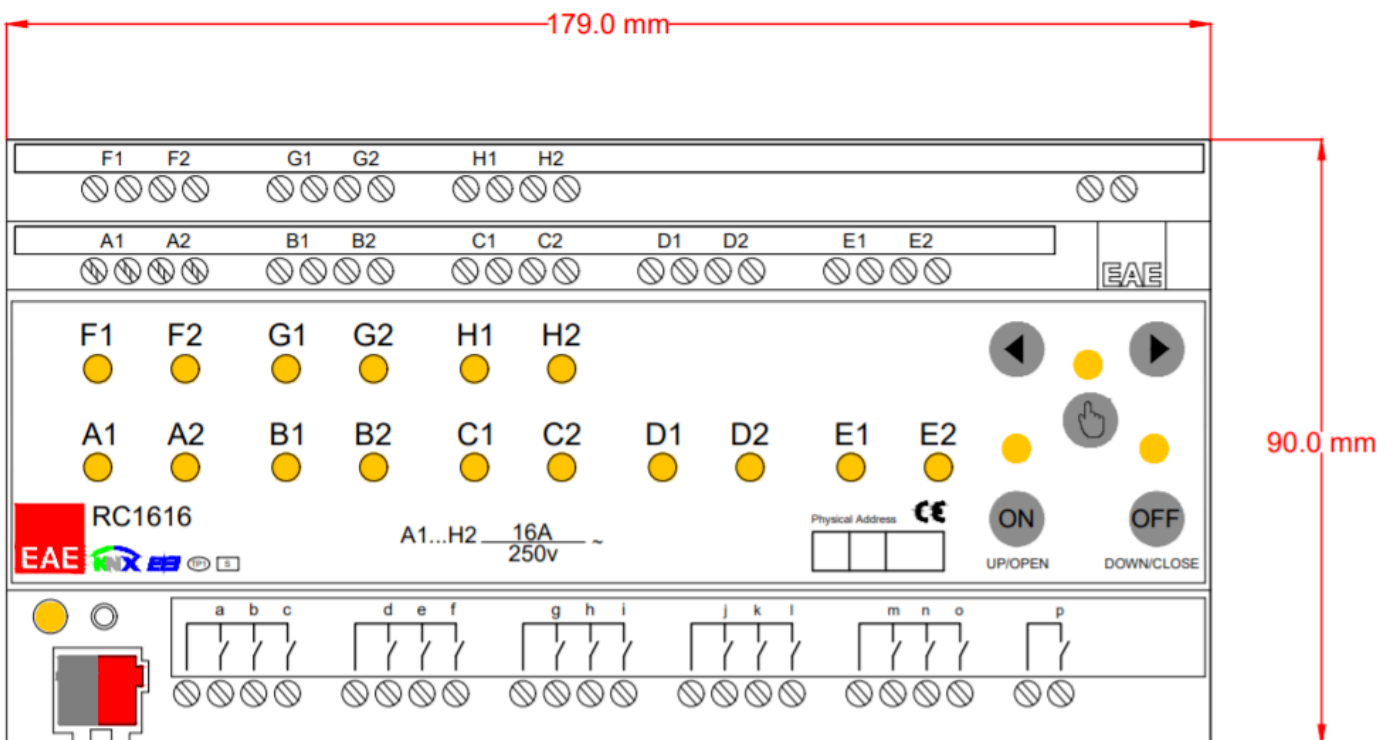
Connection Diagram 8

Scale Drawings RCUXYY

RCU2018



RCU1616





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EAE KNX Room Control Unit



Scale Dimensions RCUXYY

