

General Description





Available versions of EAE RC Series:

20 Output – 18 Input	48287
20 Output – No Input	48286
16 Output – 16 Input	48285
16 Output – No Input	48284
12 Output – 12 Input	48283
12 Output – No Input	48282
8 Output – 8 Input	48281
8 Output – No Input	48280
	20 Output – No Input 16 Output – 16 Input 16 Output – No Input 12 Output – 12 Input 12 Output – No Input 8 Output – 8 Input

Note: RCXXYY where XX denotes the number of outputs and YY number of inputs. Input and Output numbers are as in the table.

- 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
 - ➤ 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 RC 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
 - ➤ Logic Function
 - ➤ Priority
 - > Threshold
- Manual control is possible for each channel through the built- in button panel.
- 220V auxiliary power is NOT required



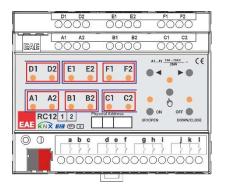
Technical Data RCXXYY Series

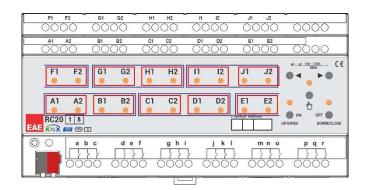
Type of protection:	IP 20	EN 60 529	
Safety class:	II	EN 61 140	
Power supply:	- Voltage	21V 30V DC, SELV	
	- Current consumption	<15 mA	
External supply:	-	-	
Connections:	- Screw terminals	0,054 mm solid and stranded wire 0,052,25 mm stranded wire with ferrule	
	- Max tightening torque	0.8 Nm	
	- KNX	Bus connect terminal	
Output:	- Number	XX output	
	- Switching ratings	16A 250 VAC / 6x10 ³ OPS(Resistive)	
	- Incandescent lamp	3500W	
	- Halogen lamp	3500W	
	- Inductive load, transformer	2000W	
	- Electronic driver	1500W	
	- Max. Inrush current	492A/1.5ms-165A/20ms	
	- Max. switching power	4000VA	
	- Mechanical life	2 x 10 ⁶	
Type of contact:	- Potential-free, bistable		
Input:	- Number	YY binary inputs	
	- Scanning voltage	12 V	
	- Current	0.3 mA	
	- Cable length	< 300 m	
Installation:	- 35mm mounting rail	EN 60 715	
Operating elements:	- LED (red) and button	For physical address	
Temperature range:	- Operation	-5°C +45°C	
	- Storage	-25°C +55°C	
Dimensions:	- RC2018/RC2000/RC1616/RC1600	66 x 180 x 90 mm	
	- RC1212/RC1200/RC0808/RC0800	66 x 108 x 90 mm	
Weight:		0.65 kg	
Box:		Plastic, polycarbonate, colour grey	
CE:		In accordance with the EMC guideline and low voltage	

NOTE: Device factory default physical address is "15.15.255"



Grouping Topology





	Lighting	AC Blind	DC Blind	Fan Coil Fan Control	Valve Control
RC20YY	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
RC16YY	A1A2-B1B2 H1H2	A-B-C-D-E- F-G-H	AB – CD – EF- GH	AB – CD – EF- GH	AB – CD – EF- GH
RC12YY	A1A2-B1B2 F1F2	A-B-C-D-E- F	AB – CD – EF	AB – CD – EF	AB – CD – EF
RC08YY	A1A2-B1B2 D1D2	A-B-C-D	AB – CD	AB – CD	AB – CD

For lighting and AC Blinds;

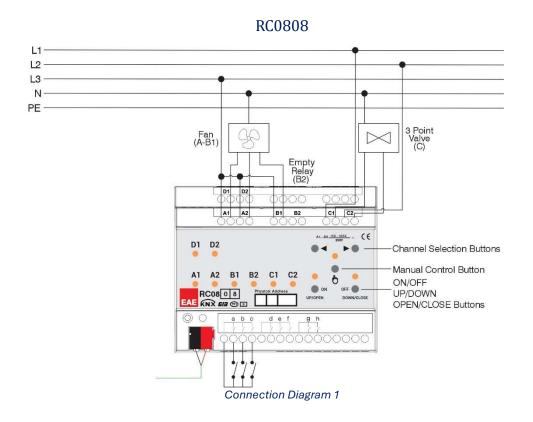
- Channels can be used individually, in example: A1 & A2 can be used as a switch for lighting and B1 & B2 can be used as an AC Blind etc. as shown with **red coloured** drawings in above visual

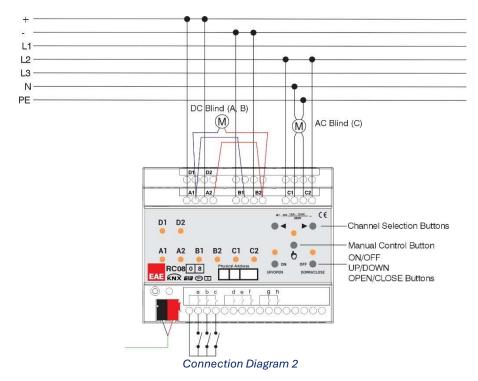
For DC Blind, Fan Coil Fan Control and Valve Control;

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



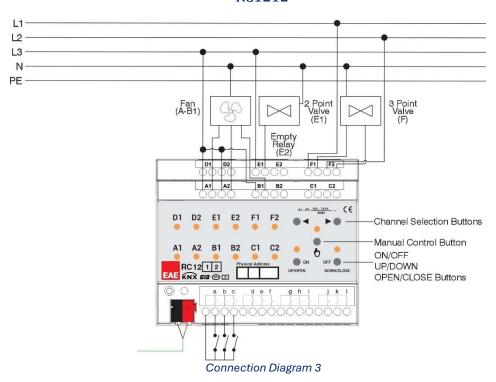
Connection Example

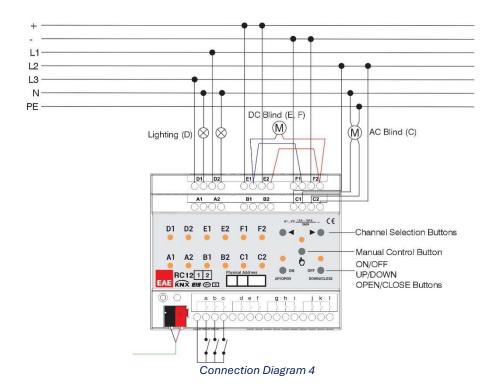






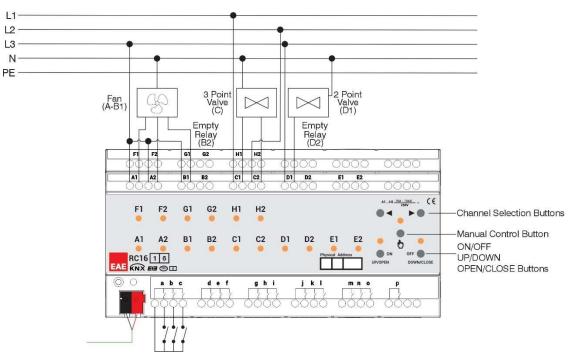
RC1212



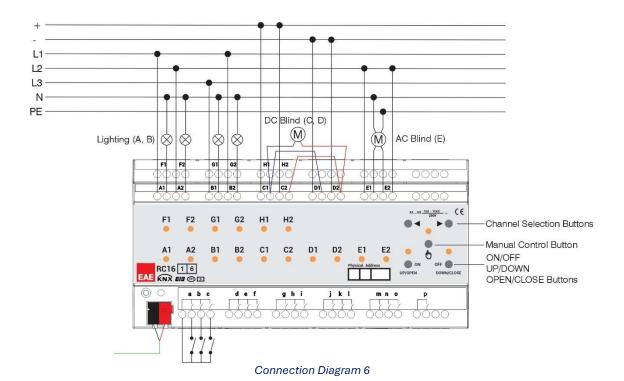




RC1616

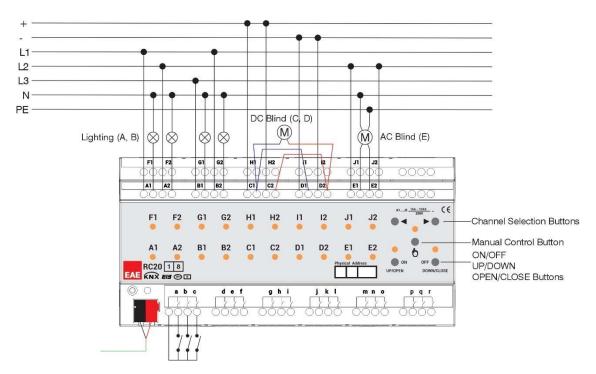


Connection Diagram 5



RC2018 L1 L2 L3 N PE 2 Point Valve (D1) 3 Point Valve (C) Fan (A-B1) Empty Relay (D2) Empty Relay (B2) C1 C2 G2 H1 11 Channel Selection Buttons Manual Control Button A1 A2 В1 B2 C1 C2 D1 D2 E1 E2 ON/OFF UP/DOWN 6 RC20 1 8 EAE KNX EIB @ 3 OFF OPEN/CLOSE Buttons

Connection Diagram 7

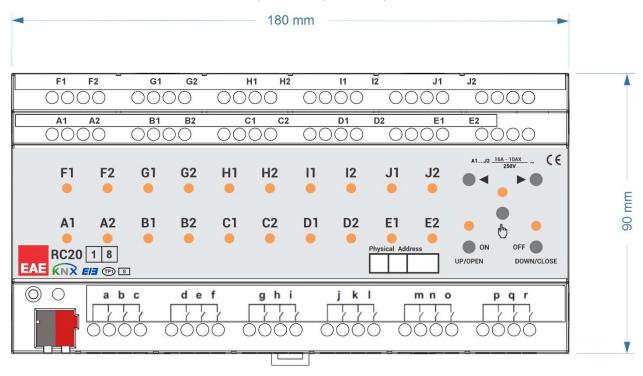


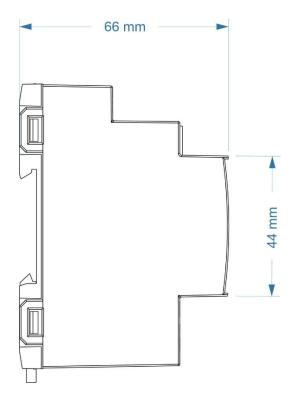
Connection Diagram 8



Scale Drawings

RC2018 / RC2000/RC1616/RC1600







RC1212 / RC1200/RC0808/RC0800

