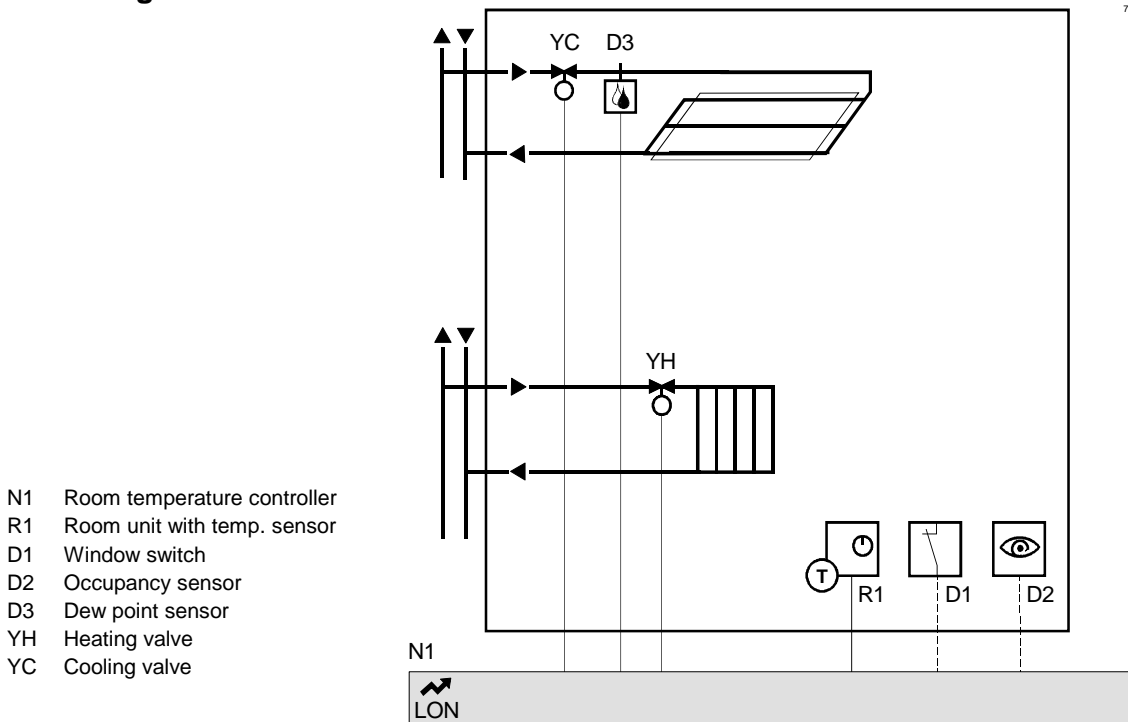


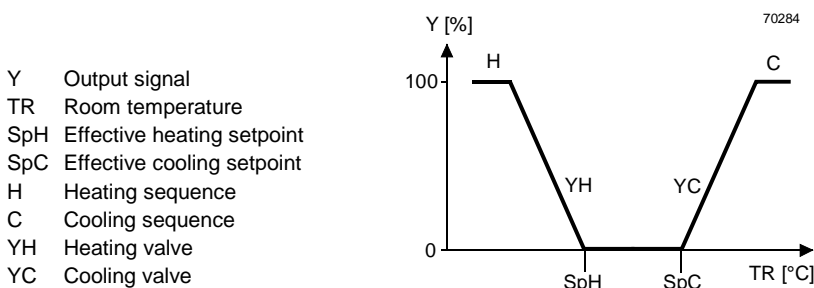


- Heating with radiator and cooling with chilled ceiling
- Modulating control of heating and cooling valve
- Dew point monitoring

## Plant diagram



## Sequence diagram



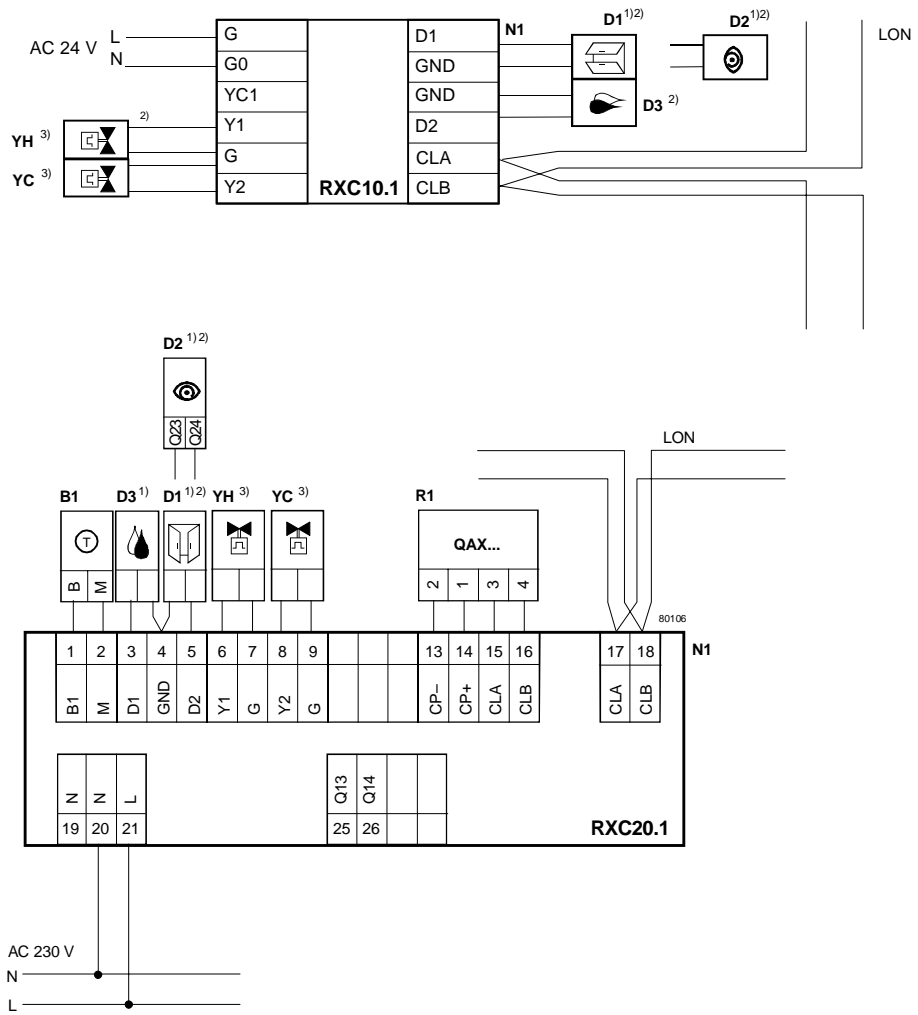
## Functions

For details refer to the “CLC” description of functions at the beginning of this section (CA2A3815E00). Application CLC02 includes the following functions:

Function	Brief description	See CA2A3815E00
Proportional heating and cooling sequence	– PID control	6.1
	– Two proportional control sequences, heating and cooling	6.4
	– Control of thermic valve actuators (AC 24 V, PWM)	6.6
	– Valve exercising feature	
Dew point sensor	– Dew point sensor to prevent condensation formation	6.5
Operating modes	– <i>Comfort, Stand-by, Economy and Building protection</i> – Change of operating mode via ⏻/Auto switch on room unit, occupancy sensor, window contact or central command	2, 3
Setpoint reset	– Locally via room unit or via central command	4
Temperature measurement	– Via room unit or passive temperature sensor	5
General functions	– Occupancy sensor	2.2, 7.4
	– Window switch	2.2, 7.4
	– Master/slave operation	7.2
	– Boost, night cooling	7.6, 7.7
	– etc.	
Room units	– Versions available with temperature sensor, setpoint adjuster, ⏻/Auto switch and LCD display	8
Compatible controllers	CLC02 can be used in conjunction with RXC10.1 and RXC20.1	

# Connection diagrams

00229



## List of equipment

Ref.	Description	Type	Data sheet
N1	Room temperature controller	RXC10.1	3830
		RXC20.1	3834
R1	Room unit	QAX30.1	1741
		QAX31.1	1741
		QAX32.1	1641
		QAX34.1	1645
		QAX39.1	1646
	Wireless room unit Reciever	QAX90.1, 91.1 RXZ90.1	1643 1644
B1	Room temperature sensor	QAA24	1721
D1	Window contact <sup>1) 2)</sup>	Third-party device	–
D2	Occupancy sensor <sup>1) 2)</sup>	Third-party device	–
D3	Dew point sensor <sup>1)</sup> <b>Please provide AC24V supply!</b>	QFX21	1551
YH	Thermic heating valve, 2-position (PWM) control <sup>3)</sup>	STE71.11	4874
		STA71	4877
YC	Thermic cooling valve, 2-position (PWM) control <sup>3)</sup>	T3W..., T4W...	4829
		STE72	4873
		STE71.1	4874
		STA71	4877

- 1) Type of operation (N/O or N/C) can be selected
- 2) **Either** an occupancy sensor **or** a window contact may be connected (but not both)
- 3) Note the maximum load for outputs Y1/Y2: max. 9.5 VA (see RXC20.1, data sheet 3834)

## Configuration

The parameters available with application CLC02 are shown below. They are set in the RXT10.1 commissioning and service tool in the **Device, Configure, Settings** menu option.

Menu	Parameter	Values/range	Basic setting
Temperature setpoints	Comfort heating	10 ... 35 °C	21 °C
	Comfort cooling	10 ... 35 °C	24 °C
	Stand-by heating	10 ... 35 °C	19 °C
	Stand-by cooling	10 ... 35 °C	28 °C
	Economy heating	10 ... 35 °C	15 °C
	Economy cooling	10 ... 35 °C	35 °C
	Building protection heating	10 ... 40 °C	12 °C
	Building protection cooling	10 ... 40 °C	40 °C
Sequences	Valve type	– STE71.1	STE71.1
	Cooling	– STE72	
	Heating	STE71.1	STE71.1
Room unit	Sensor correction	– 3 ... 3 K	0 K
	Setpoint reset range	± 0 ... 10 K	± 3 K
	Display of heating/cooling symbol		Enabled
	Temperature unit	°C or °F	°C
	Temperature display in normal mode	None / room temp. / setpoint	room temp.
	Temperature display in setpoint shift mode	Absolute or relative	Absolute
General functions	Occupancy override time	0 ... 90 min	30 min
	Receiver period	0 ... 105 min.	60 min.
	Send interval (heartbeat)	0 ... 105 min.	45 min.
	Occupancy sensor	Digital input 1 or 2	No occ. sensor
	Type of operation:	Room occupied: Contact open or closed	Closed
	Switch-off delay	0 ... 90 min	5 min
	Switch-on delay	0 ... 90 min	5 min
	Window switch	Digital input 1 or 2	No window switch
	Type of operation:	Window closed: Contact open or closed	Closed
	Dew point sensor	Digital input 1 or 2	No dew point sensor
	Type of operation:	Condensation: Contact open or closed	Closed
	Master/slave	Master or Slave	Master
	Heating demand signal		Enabled
	Cooling demand signal		Enabled
	Morning boost		Enabled
	Night cooling		Enabled
	Service LED		Enabled
Reset shift		Disabled	
LONMARK bindings	See the sections headed "LonMark network variables" and "LonMark binding templates"		

## Ordering

Room controllers may be ordered either with the application described above or with the appropriate basic application. Please state the quantity, DESIGO RXC device name, type code and application.

### Example 1

**15 RXC20.1 individual room controllers with application CLC02 RXC20.1/CLC02**

#### Notes

- The controllers will be delivered with the basic settings shown above.
- Minimum order quantity: 10 controllers

### Example 2

**2 RXC20.1 room controllers RXC20.1 / 00020**

#### Notes

- The controllers will be delivered with the basic application
- The application can be loaded into the controllers by means of the RXT10.1 tool
- Minimum order quantity: 1 controller