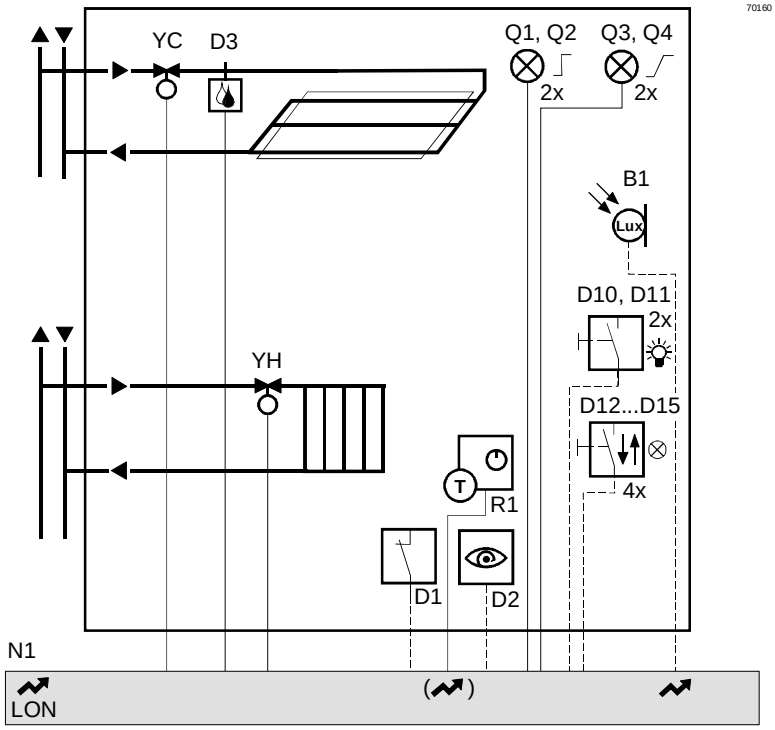
- Chilled ceiling and radiator (CLC02) INT03
- 2 lighting groups on/off
- 2 lighting groups dimmed

- **Heating with radiator and cooling with chilled ceiling**
- **Modulating heating and cooling valves**
- **Dew point monitoring**
- **On/off control of two lighting groups**
- **Dimming control of two lighting groups**
- **Lighting operated with momentary-contact switches, or**
- **Lighting operated with flexible room unit via LON bus**
- **Option: Automatic lighting control based on occupancy and daylight level**

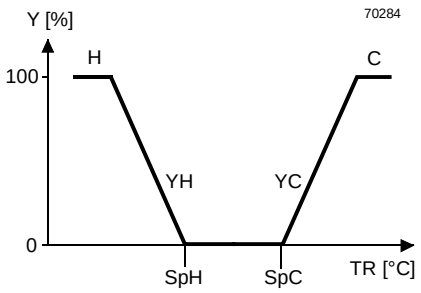
Plant diagram

N1	Room controller
R1	Room unit with temperature sensor
D1	Window switch
D2	Occupancy sensor
D3	Dew point sensor
D10, D11	Momentary-contact switches for 2 lighting groups on/off
D12...D15	Momentary-contact switches for 2 lighting groups, dimmed
B1	Daylight sensor via LON bus
YH	Heating valve
YC	Cooling valve
Q1, Q2	2 lighting groups on/off
Q3, Q4	2 lighting groups dimmed



Operating diagram

Y	Output signal
TR	Room temperature
SpH	Effective heating setpoint
SpC	Effective cooling setpoint
H	Heating sequence
C	Cooling sequence
YH	Heating valve
YC	Cooling valve

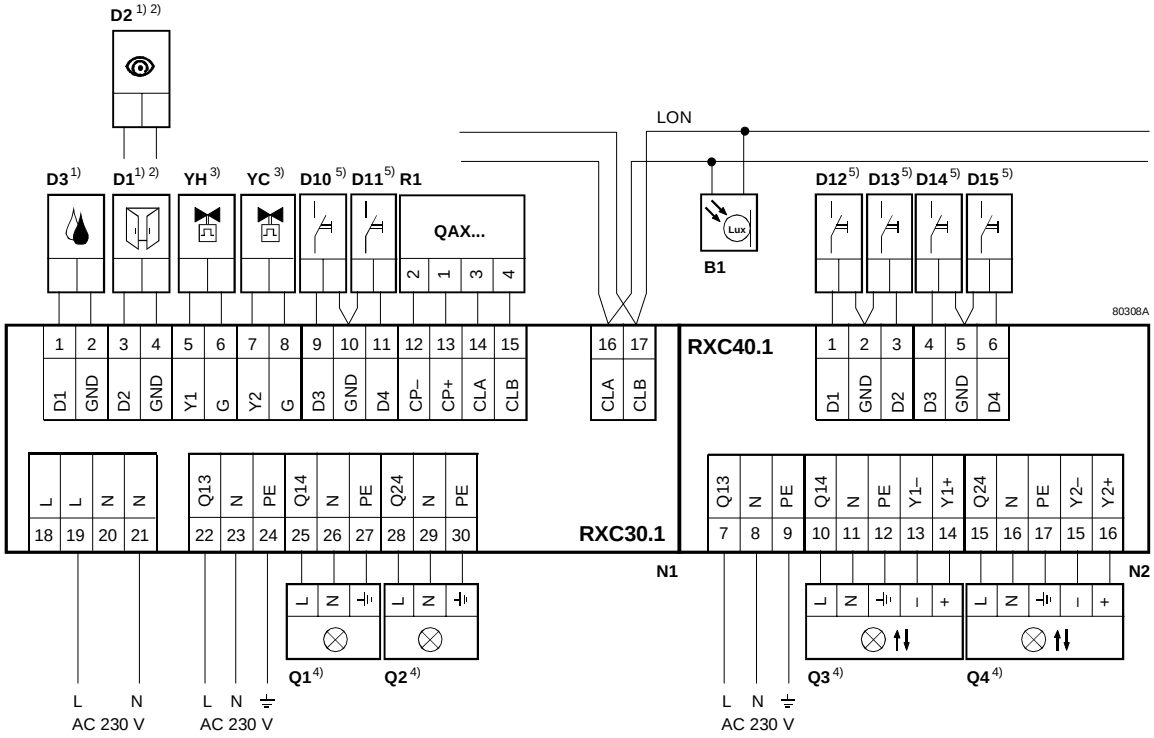


Functions

A detailed description of the lighting and window-blind control functions will be found at the beginning of this section in document CA2A3825E00, “INT – Function description”. The HVAC functions are described in CA2A3815E00, " CLC – Function description".

Function	Brief description	See CA2A3825E00
2 lighting groups On/Off	– Manual on/off operation with momentary-contact switches – Manual on/off operation via LON bus – Control signals – Daylight sensor – Dimming control	3.2, 3.4 3.4, 3.6 3.6 3.6 3.3
Compatible controllers	INT03 requires the RXC30.1 basic controller, and extension module RXC40.1	

Connection diagram



1) Type of contact can be selected
2) Only two of these devices may be connected (either to D1 or D2)
3) Note the maximum simultaneous load on outputs Y1, Y2: Max. 6 VA (RXC30.1, data sheet 3840)
4) Max. load per output: filament lamps: 2.5 kW, fluorescent lamps: 1.5 kVA
5) Momentary-contact switches (without mechanical lock)

Momentary-contact switches

The table shows how the digital inputs for momentary-contact switches are assigned to the outputs. (The original assignments can be changed with the RXT10.1.)

Switch	Digital input	Output	Lighting group controlled
D10	D3 (RXC30.1)	Q14 (RXC30.1)	Q1
D11	D4 (RXC30.1)	Q24 (RXC30.1)	Q2
D12	D1 (RXC40.1)	Q14, Y1+ , Y1-	Q3 brighter
D13	D2 (RXC40.1)	(RXC40.1)	Q3 dimmer
D14	D3 (RXC40.1)	Q24, Y2+, Y2-	Q4 brighter
D15	D4 (RXC40.1)	(RXC40.1)	Q4 dimmer

Equipment list

Ref.	Description	Type	Data sheet
N1	Room controller	**RXC30.1**	3840
N2	Extension module for lighting control	**RXC40.1**	3842
R1	Room unit (or flexible room unit via LON bus)	**QAX30.1** **QAX31.1** **QAX32.1** **QAX34.1** **QAX50.1**	1741 1741 1641 1645 1648
	Wireless room unit Receiver	**QAX90.1, 91.1** **RXZ90.1**	1643 1644
B1	Daylight sensor via LON bus	Third-party	–
D1	Window switch [1) 2)]	Third-party	–
D2	Occupancy sensor [1) 2)]	Third-party	–
D3	Dew point sensor [1) 2)] ***Please provide AC24V supply!***	**QFX21**	1551
D10, D11	Momentary-contact switches for on/off lighting [5)]	Third-party	–
D12...D15	Momentary-contact switches for dimmed lighting[5)]	Third-party	–
YH	Heating valve, thermic, on/off (PWM) control [3)]	**STE71.1** **STA71**	4874 4877
YC	Cooling valve, thermic, on/off (PWM) control [3)]	**T3W..., T4W...** **STE72** **STE71.1** **STA71**	4829 4873 4874 4877
Q1, Q2	Lighting groups, on/off [4)]	Third-party	–
Q3, Q4	Lighting groups, dimmed [4)]	Third-party	–

1) Type of contact can be selected
2) Only two of these devices may be connected (either to D1 or D2)
3) Note the maximum simultaneous load on outputs Y1, Y2: Max. 6 VA (RXC30.1, data sheet 3840)
4) Max. load per output: filament lamps: 2.5 kW, fluorescent lamps: 1.5 kVA
5) Momentary-contact switches (without mechanical lock)

Configuration

Application INT03 incorporates the following parameters, set with the RXT10.1 commissioning and service tool (menu: **Device, Configuration, Settings**).

See CA2A3815E02 (application CLC02) for notes on setting the parameters for the HVAC functions

Menu	Parameters	Values and Range	Default setting
Lighting	*Automatic switch-on* *Building in use*	Enabled / Disabled	Disabled
	Building not in use	Enabled / Disabled	Disabled
	Automatic switch-off	Enabled / Disabled	Enabled
	Off timer	0 ... 90 min	0 min
	Manual off disable	Enabled / Disabled	Disabled
	State after power-up	On / Off / Last state	Last state
	Mode	Master / Slave	Master
	Minimum dim value *Building in use*	0 ... 100 %	0 %
	Building not in use	0 ... 100 %	0 %
Daylight	*Off threshold (A)*	On/Off hysteresis (B) ... 2500 Lux	750 Lux
	On/Off hysteresis (B)	0 ... Off threshold (A)	100 Lux
	100 % threshold (C)	0 ... Off threshold (A)	250 Lux
	Switch-on delay	0 ... 60 min	5 min
	Switch-off delay	0 ... 60 min	5 min
LONMARK bindings	See "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	**RXC30.1 room controllers with application INT03**	**RXC30.1/INT03**
15	**Extension modules for lighting control**	**RXC40.1**

Notes

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

Example 2

2	**RXC30.1 room controllers**	**RXC30.1 / 00030**
2	**Extension modules for lighting control**	**RXC40.1**

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