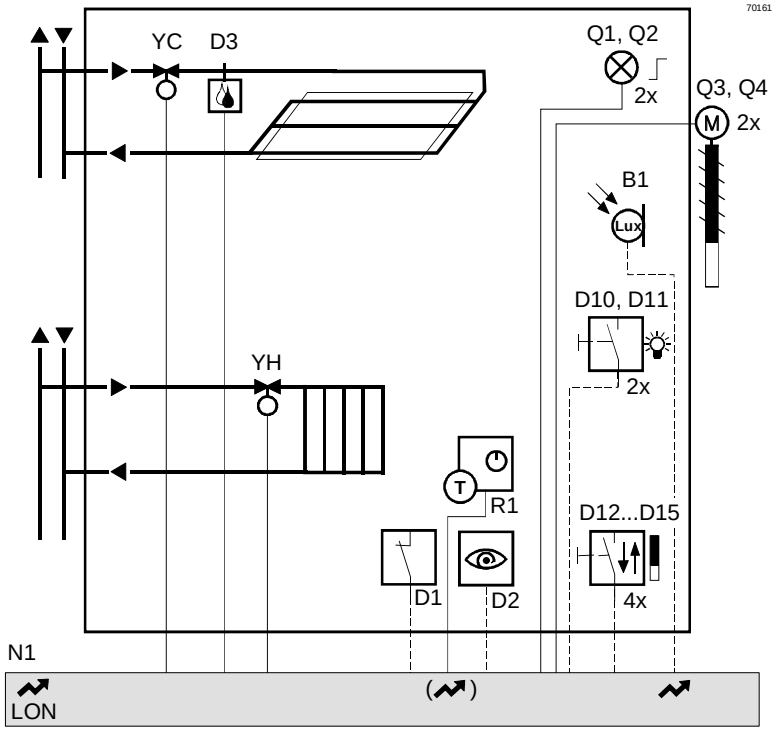
- Chilled ceiling and radiator (CLC04) INT04
- 2 lighting groups, on/off
- 2 blinds, up/down

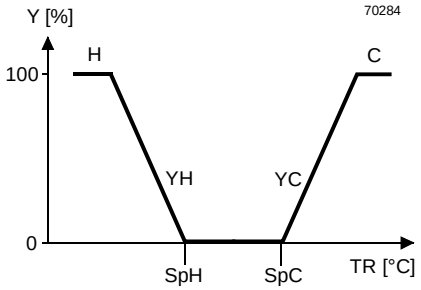
- **Heating with radiator and cooling with chilled ceiling**
- **Modulating heating and cooling valves**
- **Dew point monitoring**
- **On/off control of two lighting groups**
- **Control of two motorised window-blinds (up/down)**
- **Lighting and blinds operated with momentary-contact switches, or**
- **Lighting and blinds 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
D12...D15	Momentary-contact switches for 2 blinds, up/down
D10, D11	Momentary-contact switches for 2 lighting groups, on/off
B1	Daylight sensor via LON bus
YH	Heating valve
YC	Cooling valve
Q1, Q2	2 lighting groups
Q3, Q4	2 motors for blinds

Operating diagram



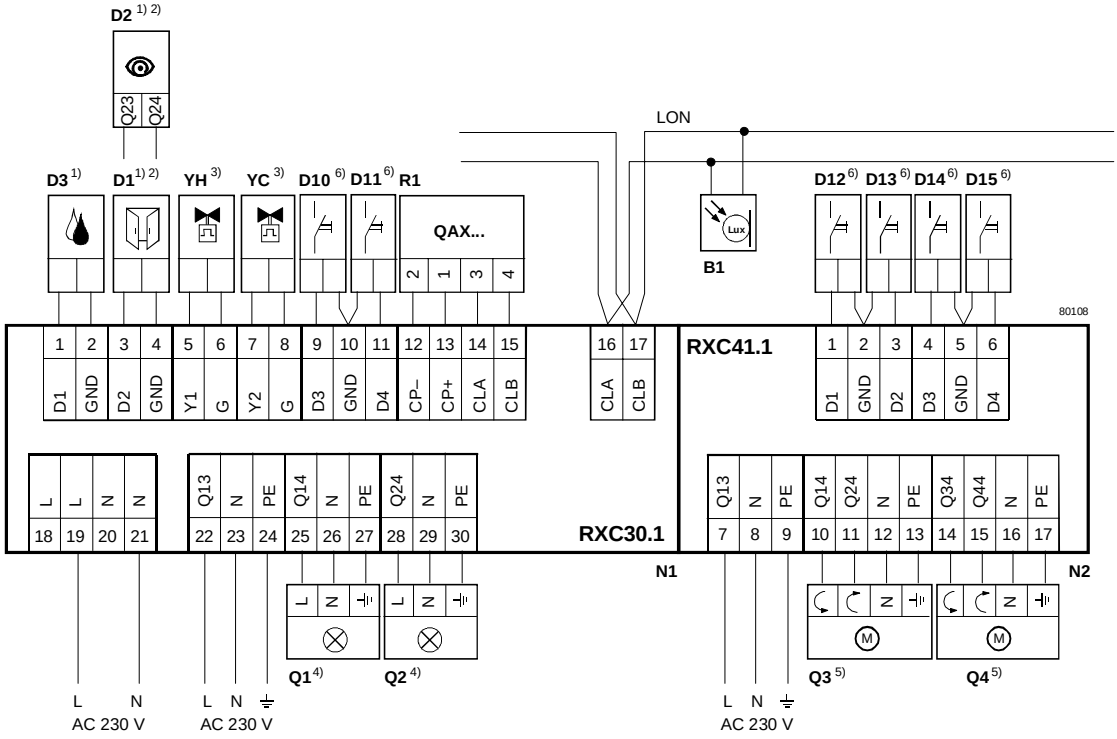
Y	Output signal
TR	Room temperature
SpH	Effective heating setpoint
SpC	Effective cooling setpoint
H	Heating sequence
C	Cooling sequence
YH	Heating valve
YC	Cooling valve

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	3.2, 3.4 3.4, 3.6 3.6 3.6
2 blinds, up/down	– Manual operation with momentary-contact switches – Manual operation via LON bus – Control signals – Blind control	4.2, 4.4 4.4, 4.6 4.6 4.3, 4.4
Compatible controllers	INT04 requires the RXC30.1 basic controller and extension module RXC41.1	

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) Max. load for both motors together: AC 250V, 3 A (limited with fine-wire fuse)
6) 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 or blind controlled
D10	D3 (RXC30.1)	Q14 (RXC30.1)	Q1
D11	D4 (RXC30.1)	Q24 (RXC30.1)	Q2
D12	D1 (RXC41.1)	Q14 (RXC41.1)	Q3 Up
D13	D2 (RXC41.1)	Q24 (RXC41.1)	Q3 Down
D14	D3 (RXC41.1)	Q34 (RXC41.1)	Q4 Up
D15	D4 (RXC41.1)	Q44 (RXC41.1)	Q4 Down

Equipment list

Ref.	Description	Type	Data sheet
N1	Room controller	**RXC30.1**	3840
N2	Extension module for control of blinds	**RXC41.1**	3843
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[6)]	Third-party	–
D12...D15	Momentary-contact switches for blinds (up/down)[6)]	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 [4)]	Third-party	–
Q3, Q4	Motors for blinds [5)]	Third-party	–

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4) Max. load per output: filament lamps: 2.5 kW, fluorescent lamps: 1.5 kVA
5) Max. load for both motors together: AC 250V, 3 A (limited with fine-wire fuse)
6) Momentary-contact switches (without mechanical lock)

Configuration

Application INT04 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
Daylight	*Off threshold (A)*	On/Off hysteresis (B) ... 2500 Lux	750 Lux
	On/Off hysteresis (B)	0 ... Off threshold (A)	100 Lux
	Switch-on delay	0 ... 60 min	10 s
	Switch-off delay	0 ... 60 min	10 s
Blinds	*Run time*	5 s... 10 min	10 s
	Blind Slats	With / Without	With
	Step time	0.10 s ... 1.00 s	0.20 s
	Slat steps after closing	0 ... 5 steps	3 steps
	Disable auto-open when closed	Enabled / Disabled	Disabled
	Close when building not in use	Enabled / Disabled	Enabled
	Close when room unoccupied	Enabled / Disabled	Disabled
	Mode	Master / Slave	Master
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 INT04**	**RXC30.1/INT04**
15	**Extension modules for control of blinds**	**RXC41.1**

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 control of blinds**	**RXC41.1**

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