

- Chilled ceiling and radiator (CLC02)
- 2 lighting groups, on/off
- 2 lighting groups, dimmed
- 2 blinds, up/down

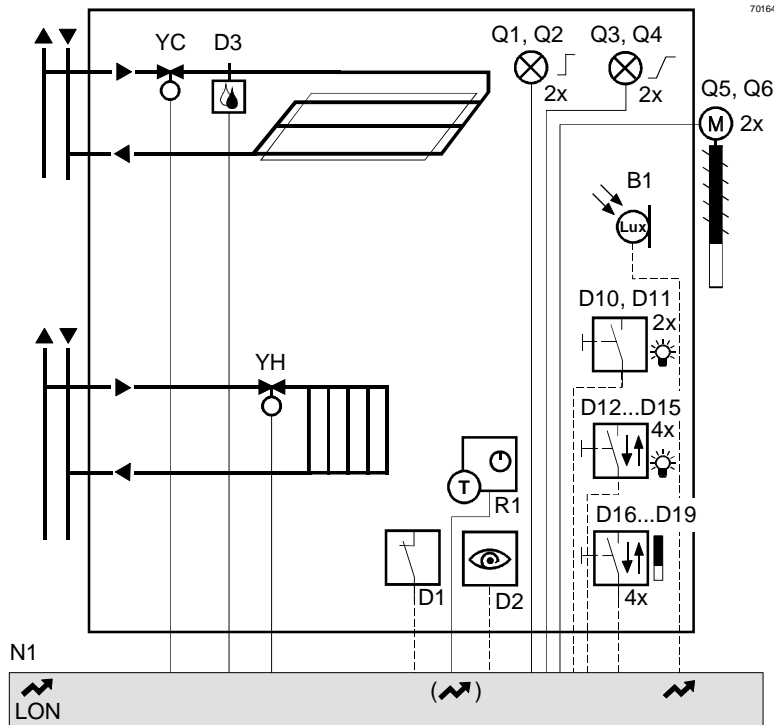
INT07



- Heating with radiator and cooling with chilled ceiling
- Modulating heating and cooling valve
- Dew point monitoring
- On/off control of two lighting groups
- Dimming 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

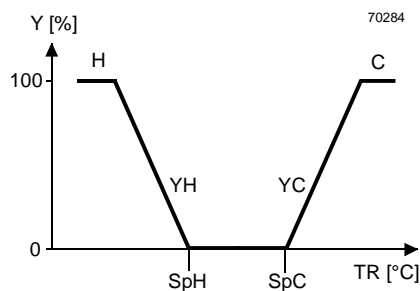
Plant diagram

- N1 Room controller
- R1 Room unit with temperature sensor
- D1 Window switch
- D2 Occupancy sensor
- D3 Dew point sensor
- D10, D11 Momentary-contact switches for 2 on/off lighting groups,
- D12...D15 Momentary-contact switches for 2 lighting groups, dimmed
- D16...D19 Momentary-contact switches for 2 blinds, up/down
- 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
- Q5, Q6 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

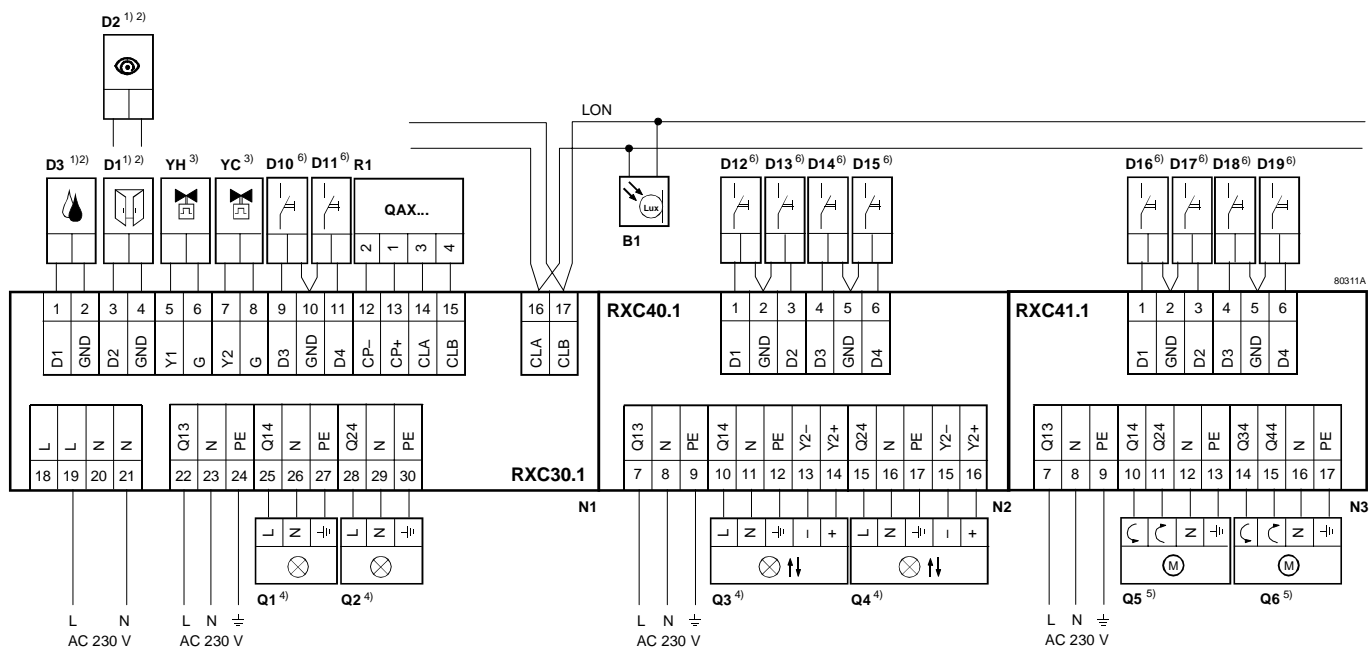


Functions

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 2 lighting groups, dimmed	<ul style="list-style-type: none"> – Manual on/off operation with momentary-contact switches – Manual on/off operation via LON bus – Control signals – Daylight sensor – Dimming 	<p>3.2, 3.4 3.4, 3.6 3.6 3.6 3.3</p>
2 blinds, up/down	<ul style="list-style-type: none"> – Manual operation with momentary-contact switches – Manual operation via LON bus – Control signals – Blind control 	<p>4.2, 4.4 4.4, 4.6 4.6 4.3, 4.4</p>
Compatible controllers	INT07 requires the RXC30.1 basic controller, extension module RXC40.1 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 per extension module: AC250 V, 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 window blind controlled
D10	D3 (RXC30.1)	Q14 (RXC30.1)	Q1
D11	D4 (RXC30.1)	Q24 (RXC30.1)	Q2
D12	D1 (RXC40.1)	Q14, Y1+ , Y1- (RXC40.1)	Q3 Brighter
D13	D2 (RXC40.1)		Q3 Darker
D14	D3 (RXC40.1)	Q24, Y2+ , Y2- (RXC40.1)	Q4 Brighter
D15	D4 (RXC40.1)		Q4 Darker
D16	D1 (RXC41.1)	Q14 (RXC41.1)	Q5 Up
D17	D2 (RXC41.1)	Q24 (RXC41.1)	Q5 Down
D18	D3 (RXC41.1)	Q34 (RXC41.1)	Q6 Up
D19	D4 (RXC41.1)	Q44 (RXC41.1)	Q6 Down

Device list

Ref.	Description	Type	Data sheet
N1	Room controller	RXC30.1	3840
N2	Extension module for control of lighting	RXC40.1	3842
N2	Extension module for control of blinds	RXC41.1	3843
R1	Room unit	QAX30.1	1741
		QAX31.1	1741
		QAX32.1	1641
		QAX34.1	1645
	(or flexible room unit via LON bus)	QAX50.1	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 ⁶⁾	Third-party	–
D16...D19	Momentary-contact switches for blinds, up/down ⁶⁾	Third-party	–
YH	Heating valve, thermic, on/off (PWM) control ³⁾	STE71.1	4874
		STA71	4877
YC	Cooling valve, thermic, on/off (PWM) control ³⁾	T3W..., T4W...	4829
		STE72	4873
		STE71.1	4874
		STA71	4877
Q1, Q2	On/off lighting groups ⁴⁾	Third-party	–
Q3, Q4	Dimmed lighting groups ⁴⁾	Third-party	–
Q5, Q6	Motors for blinds ⁵⁾	Third-party	–

- 1) Type of contact can be selected
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- 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 per extension module: AC250 V, 3 A (limited with fine-wire fuse)
- 6) Momentary-contact switches (without mechanical lock)

Configuration

Application INT07 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 Building not in use	Enabled / Disabled Enabled / Disabled	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 Building not in use	0 ... 100 % 0 ... 100 %	0 % 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	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 INT07	RXC30.1/INT07
	15	Extension modules for lighting control	RXC40.1
	15	Extension module 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 lighting control	RXC40.1
	2	Extension module 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

