



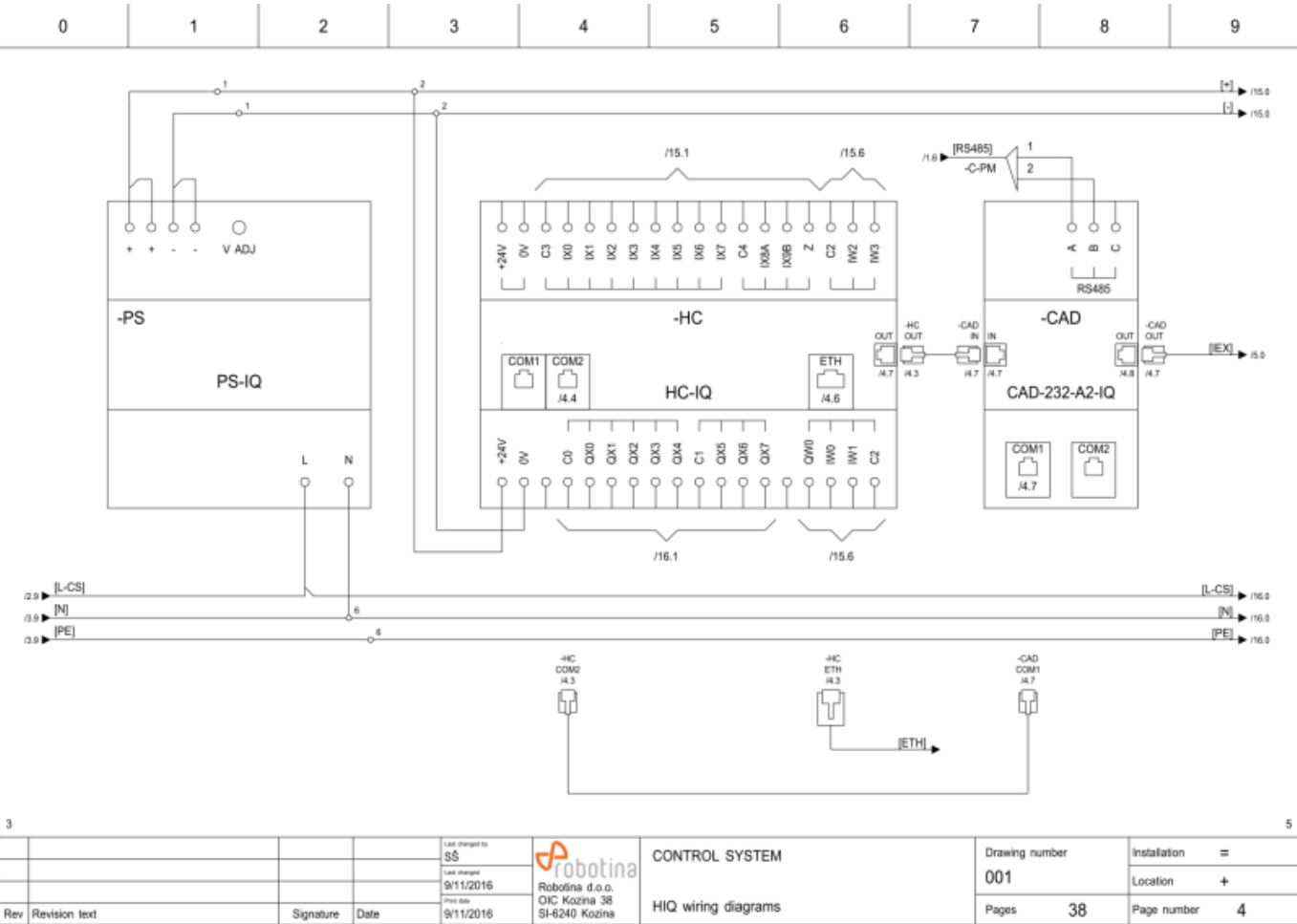
Page 4 - Control System-Power supply, HC, CAD-232

24V power supply (PS) for control system, Home controller and CAD-232-A2-IQ.

24V power supply can be optionally used for LED lighting (up to 2.5A with serial power supply, larger power supply can be used).

Home controller (HC) is the heart of the system. It is connected to the network (ETH) and has optional inputs (connections are on page 15) and outputs (connections are on page 16).

CAD-232-A2-IQ expander is used as communication interface between home controller and power meter (If power meter is not used then the expander is not necessary). It is connected to a home controller through IEX bus, to COM2 on home controller input and to power meter (RS485 communication).



Page 5-6 - CS-Light controller 00 and 01

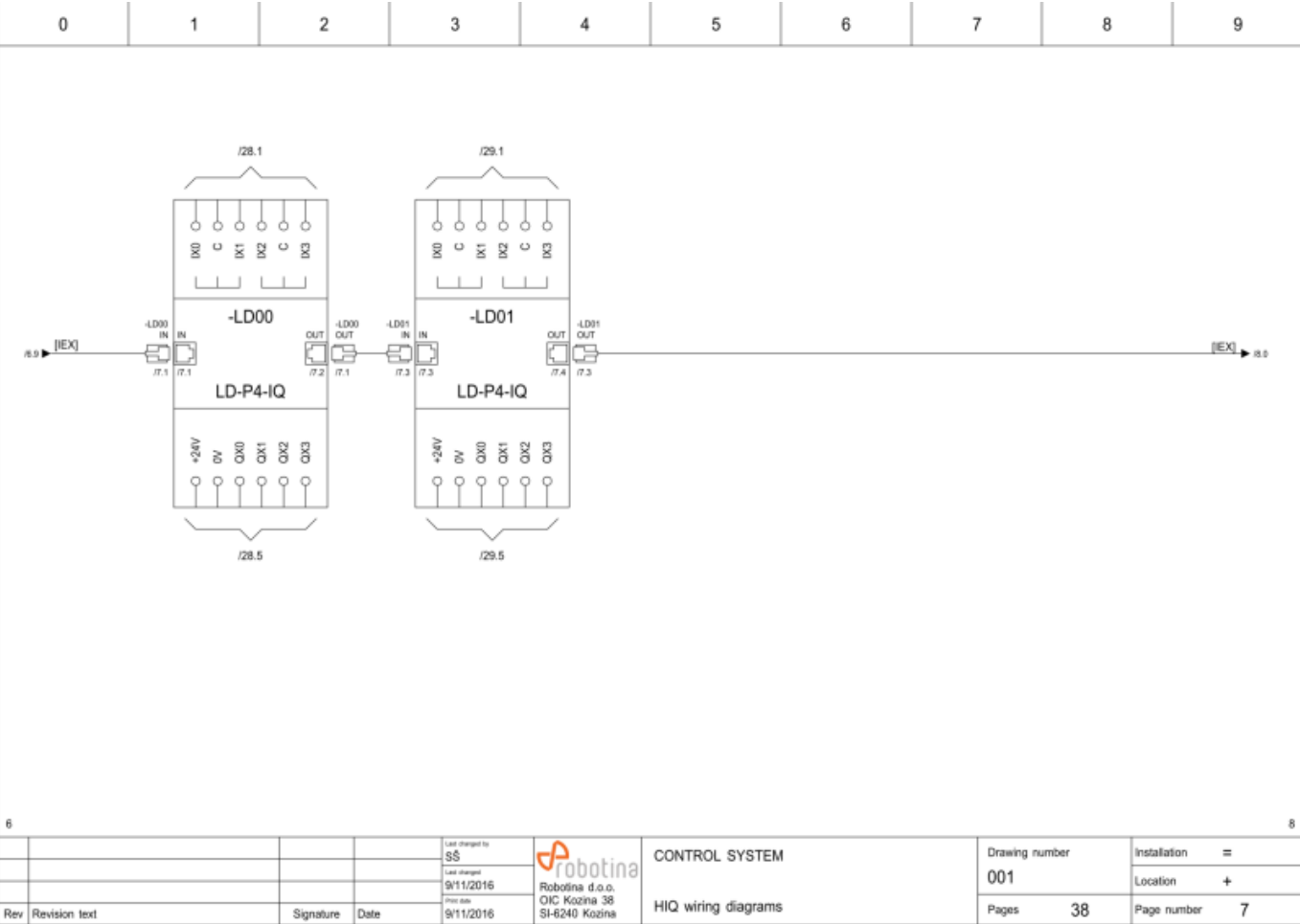
Light controllers (LC) are connected to IEX bus, we can connect up to up 4 LC to 1 home controller. On the top side are inputs and on the bottom side are outputs (connections are on page 17-24).

9

Page 11 of 11

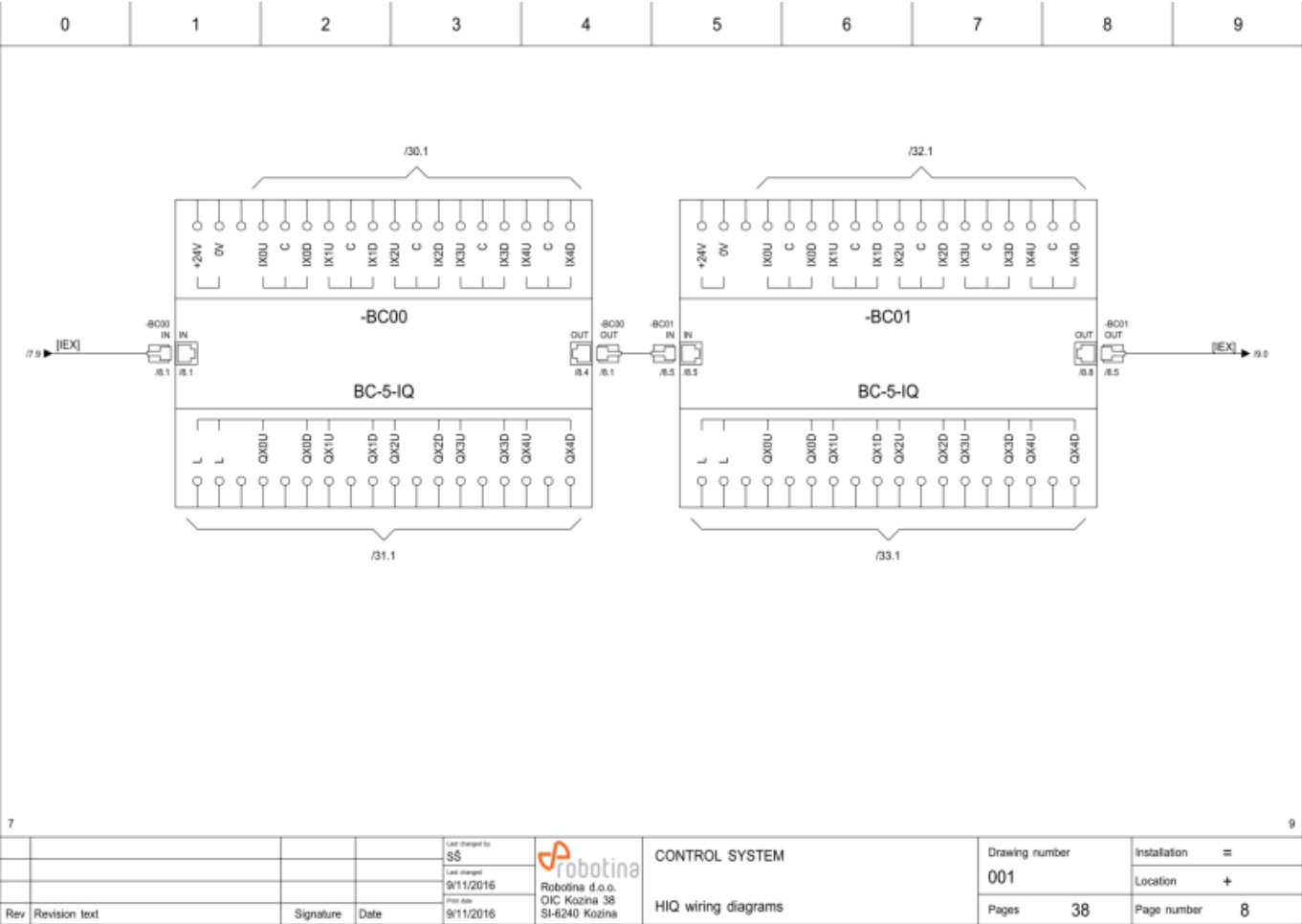
Page 7 - CS - Light dimmer

Up to 4 light dimmers can be connected to 1 HC. On sample plan we use 2 [Light dimmers drivers](#) for [LUD-12](#) universal light dimmers.



Page 8 - CS - Blinds controllers

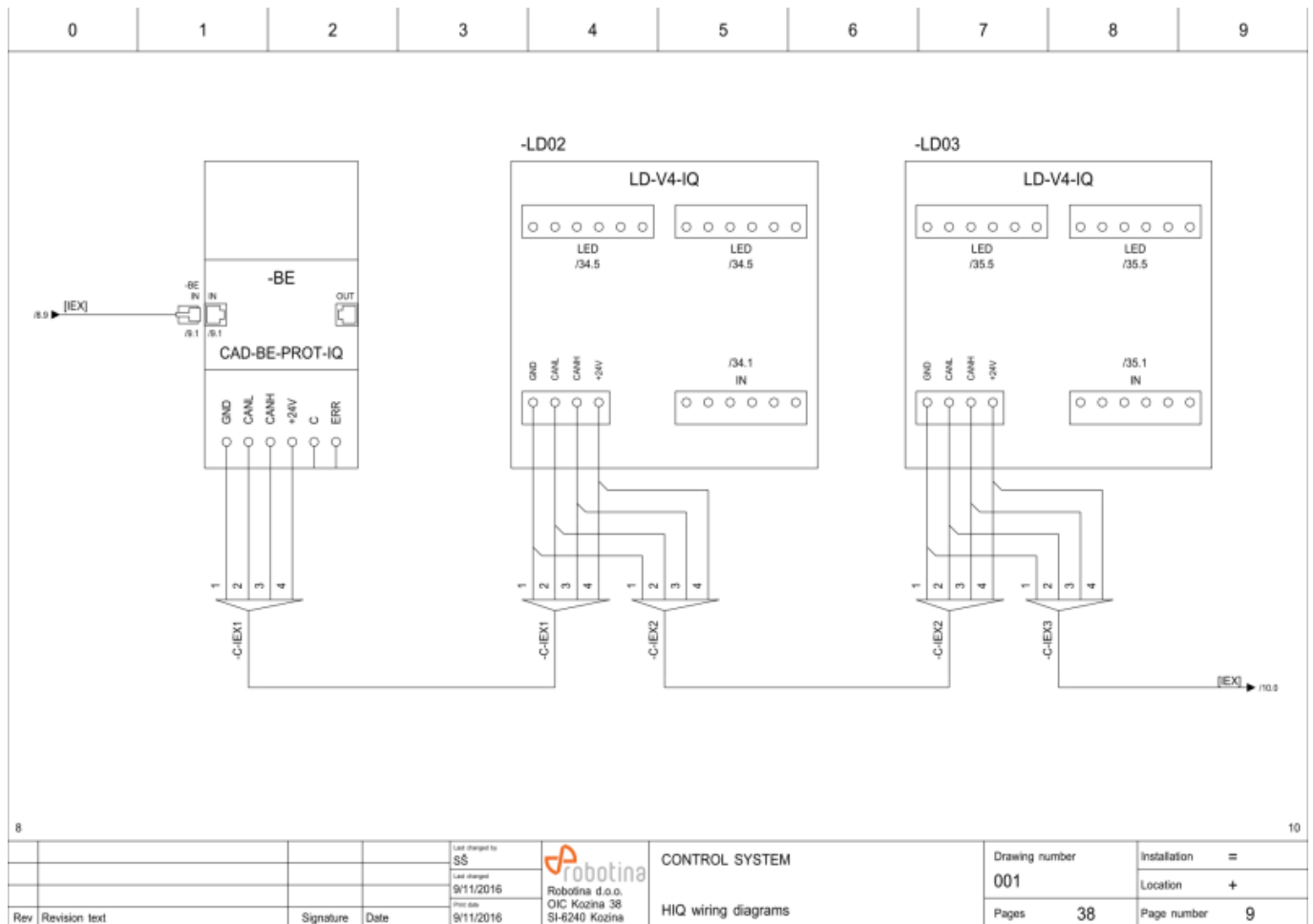
Up to 2 [Blinds controllers \(BC\)](#) can be connected to 1 HC.



Page 9 - CS - bus extender, LED light dimmer

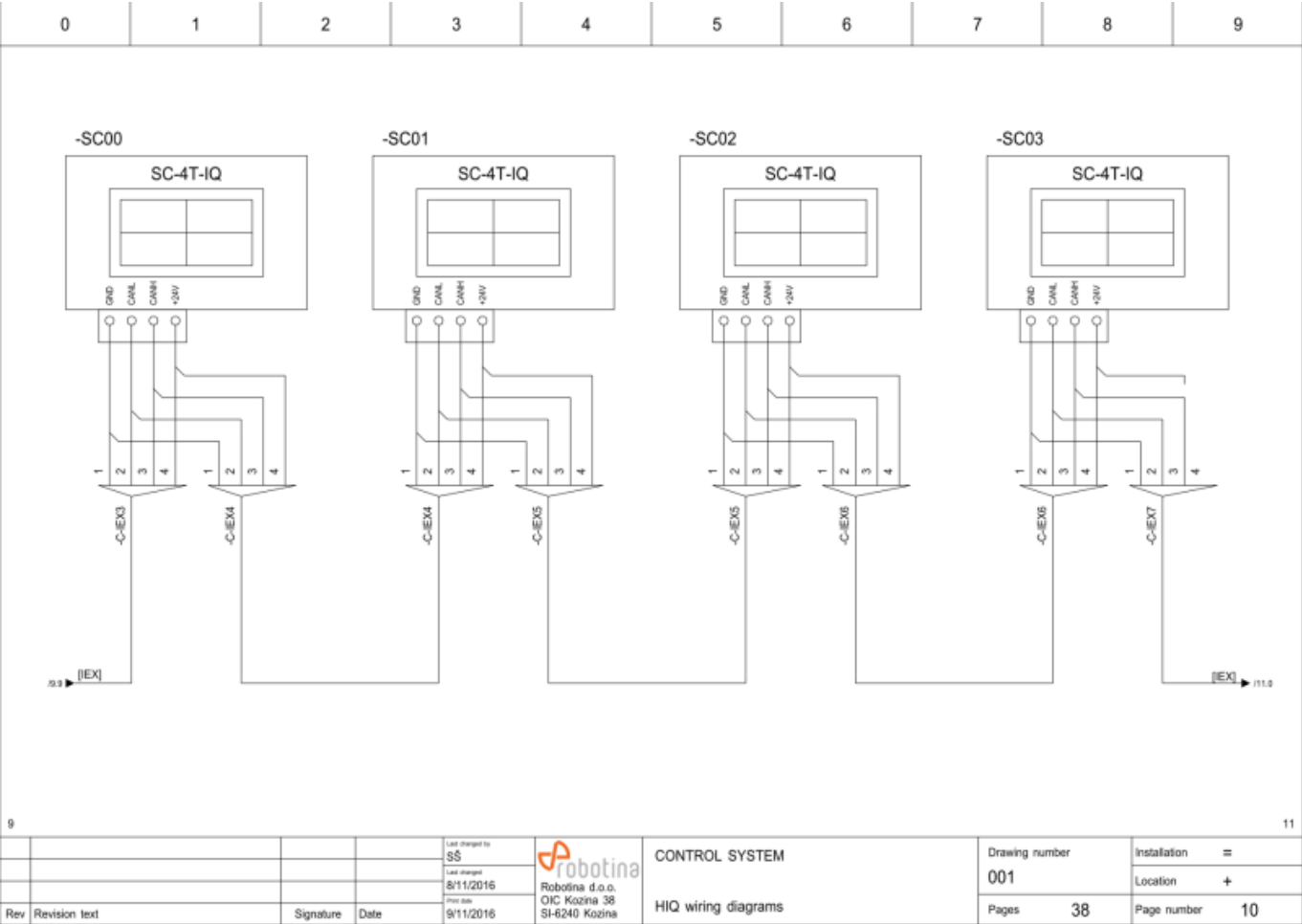
Bus extender (BE) is a passive switch for easy IEX bus interconnection between cabinet and field modules.

Up to 4 light dimmers can be connected to 1 HC. On sample plan we use 2 LED stripe dimmers.



Page 10 - CS - Scene controllers

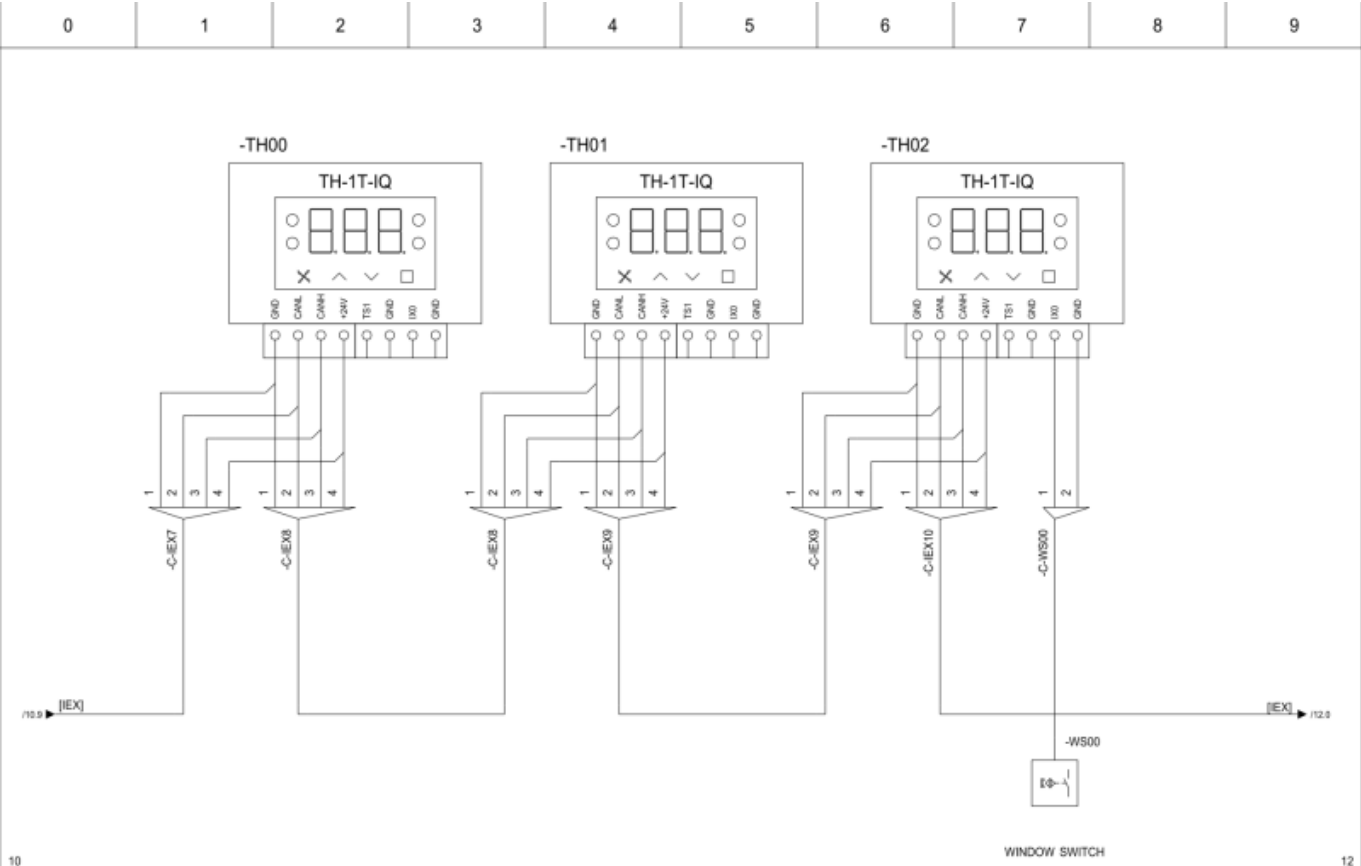
Up to 4 Scene Controllers can be connected to 1 HC. On sample plan are 4 [Scene Touch Panels](#), but also [Scene Panels](#) and [Scene controllers](#) can be connected in the same way.



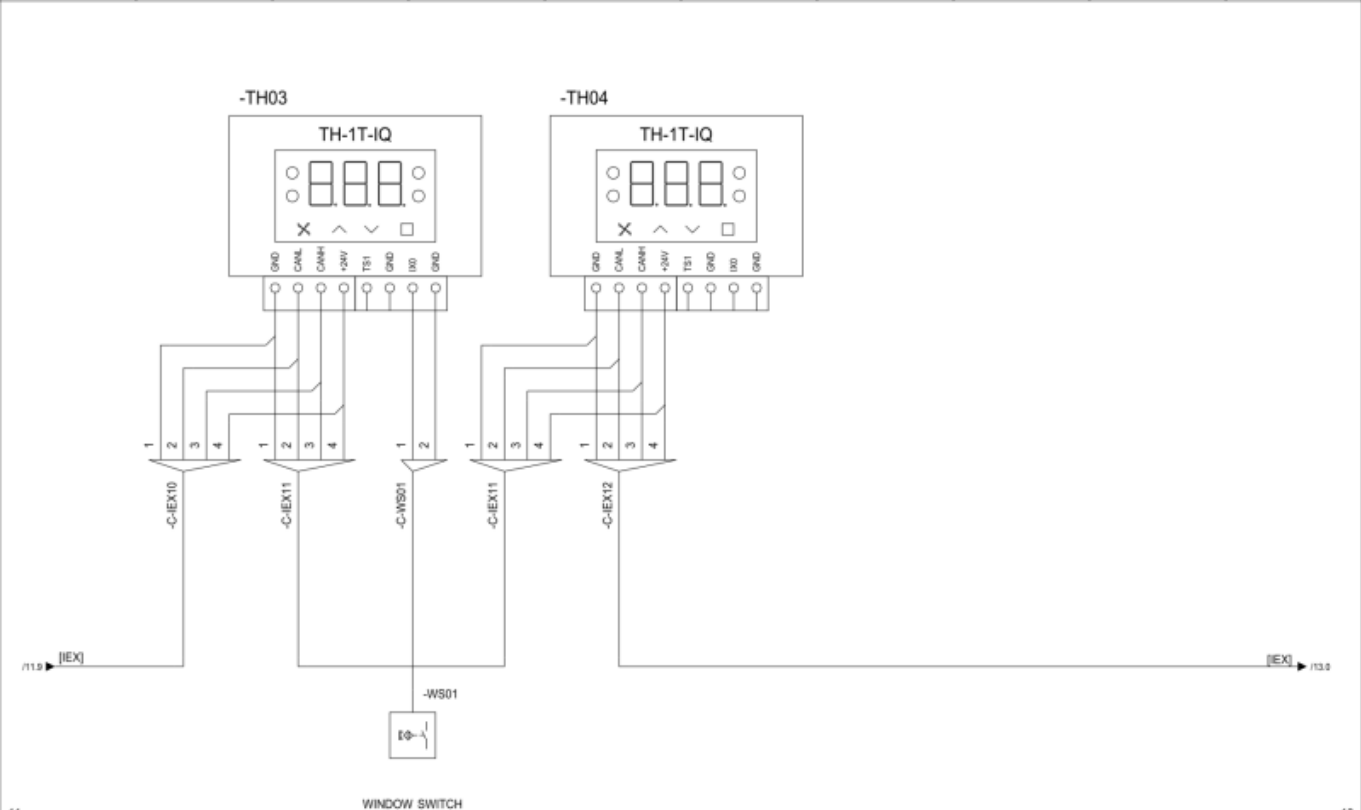
Page 11-12 - CS - Thermostats

Up to 5 Thermostats can be connected to 1 HC. On sample plan we use 5 [Touch buttons electronic thermostats](#), but also ordinary [Electronic thermostats](#) and [Blind electronic thermostats](#) can be connected in a similar way.

Optionally we can connect window switch on each thermostat (sample on -TH02 and -TH03) (not possible with [Blind electronic thermostat](#)).



					Last changed by SS		 Robotina d.o.o. OIC Kozina 38 SI-6240 Kozina	CONTROL SYSTEM			Drawing number 001		Installation =						
					Last changed 8/11/2016								Location +						
Rev			Revision text					HIQ wiring diagrams			Pages 38		Page number 11						
0		1		2		3		4		5		6		7		8		9	

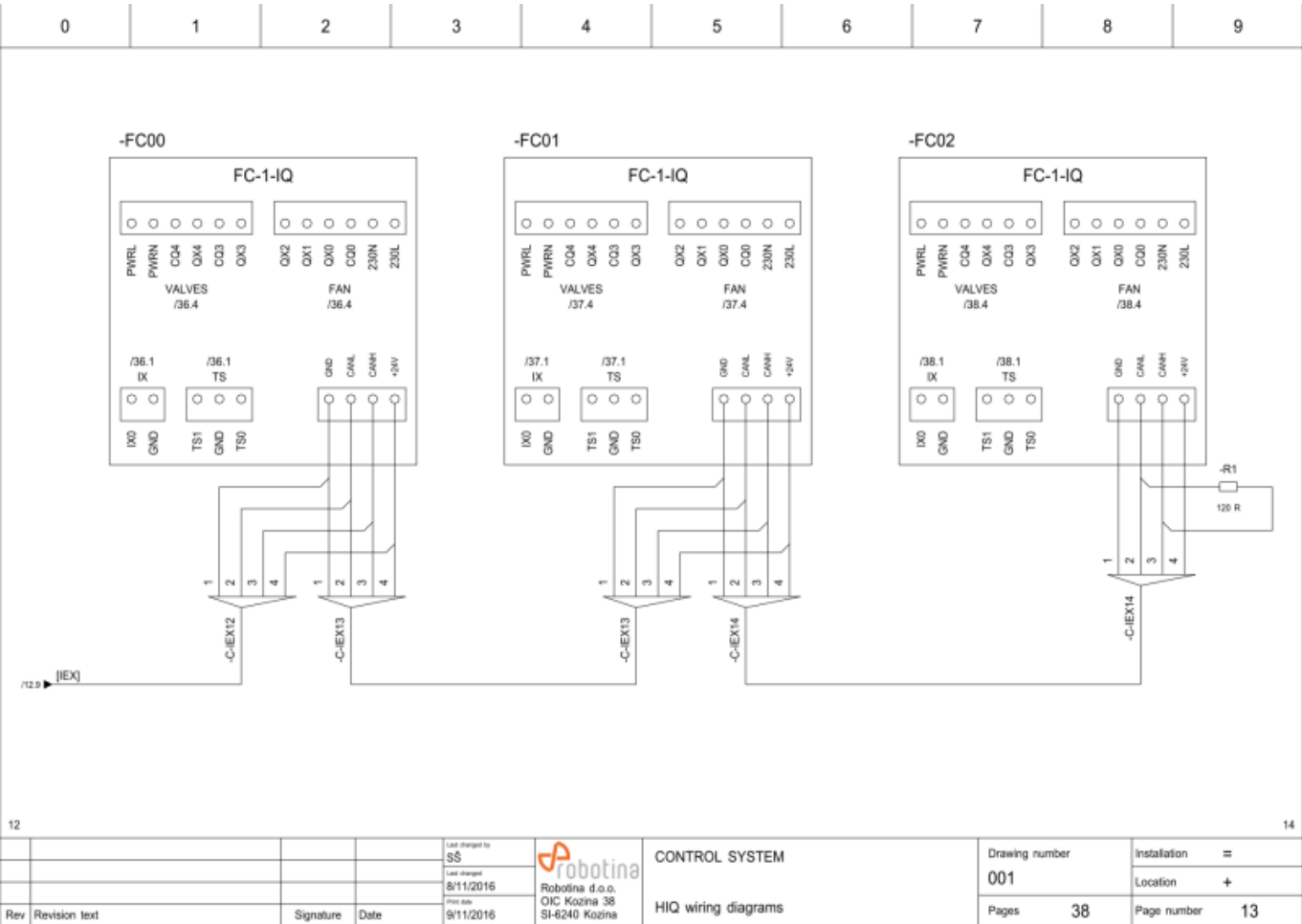


				Last changed by SS		 Robotina d.o.o. OIC Kozina 38 SI-6240 Kozina	CONTROL SYSTEM	Drawing number		Installation =	
				Last changed 8/11/2016				001		Location +	
Rev				Revision text				Pages 38		Page number 12	
0	1	2	3	4	5	6	7	8	9		

Page 13 - CS-Fan-coil

Up to 5 [Fan-coil controllers \(FC\)](#) can be connected to 1 HC. On our sample plan we have 3 FC, 2 thermostats are controlling radiator valves ([page 36-38](#)).

FC controllers are the last items on IEX bus. Longer IEX bus lines (over 100m) must be terminated with a 120ohm resistor between CANL and CANH (-R1).



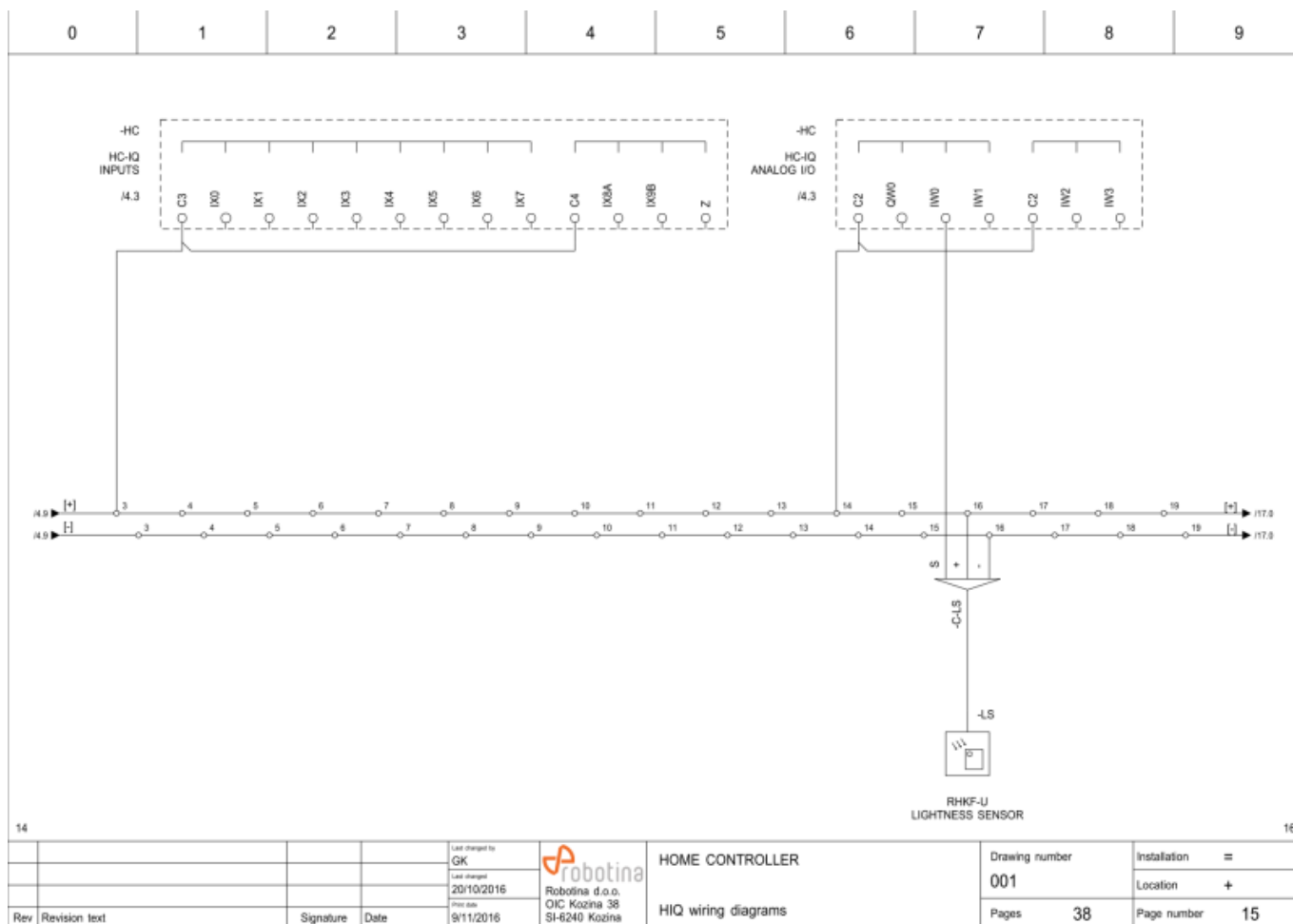
Page 14 - CS-Blank page

Blank page for future extensions.

0	1	2	3	4	5	6	7	8	9
SPARE PAGE - INTENTIONALLY LEFT BLANK									
13									
15									
				Let changed to GK	 Robotina d.o.o. OIC Kozina 38 SI-6240 Kozina	CONTROL SYSTEM		Drawing number	Installation =
				Let changed 19/8/2016				001	Location +
				Drawn by 9/11/2016				Pages 38	Page number 14
Rev	Revision text			Signature		Date	HIQ wiring diagrams		

Page 15 - Home controller inputs

If used, optional [lightness sensor](#) must be connected to IW0 analog input on [home controller](#).
All other inputs are left for custom programming solutions (10 digital inputs IX0-IX7, IX8A, IX9B and 3 8-bit analog inputs IW1-IW3).



Page 16 - Home controller outputs

QX0-QX4 outputs – can be used for radiator valves or to control other heating/cooling devices. Internal relay is used for valves, other loads are recommended to use an additional 16A installation relay.

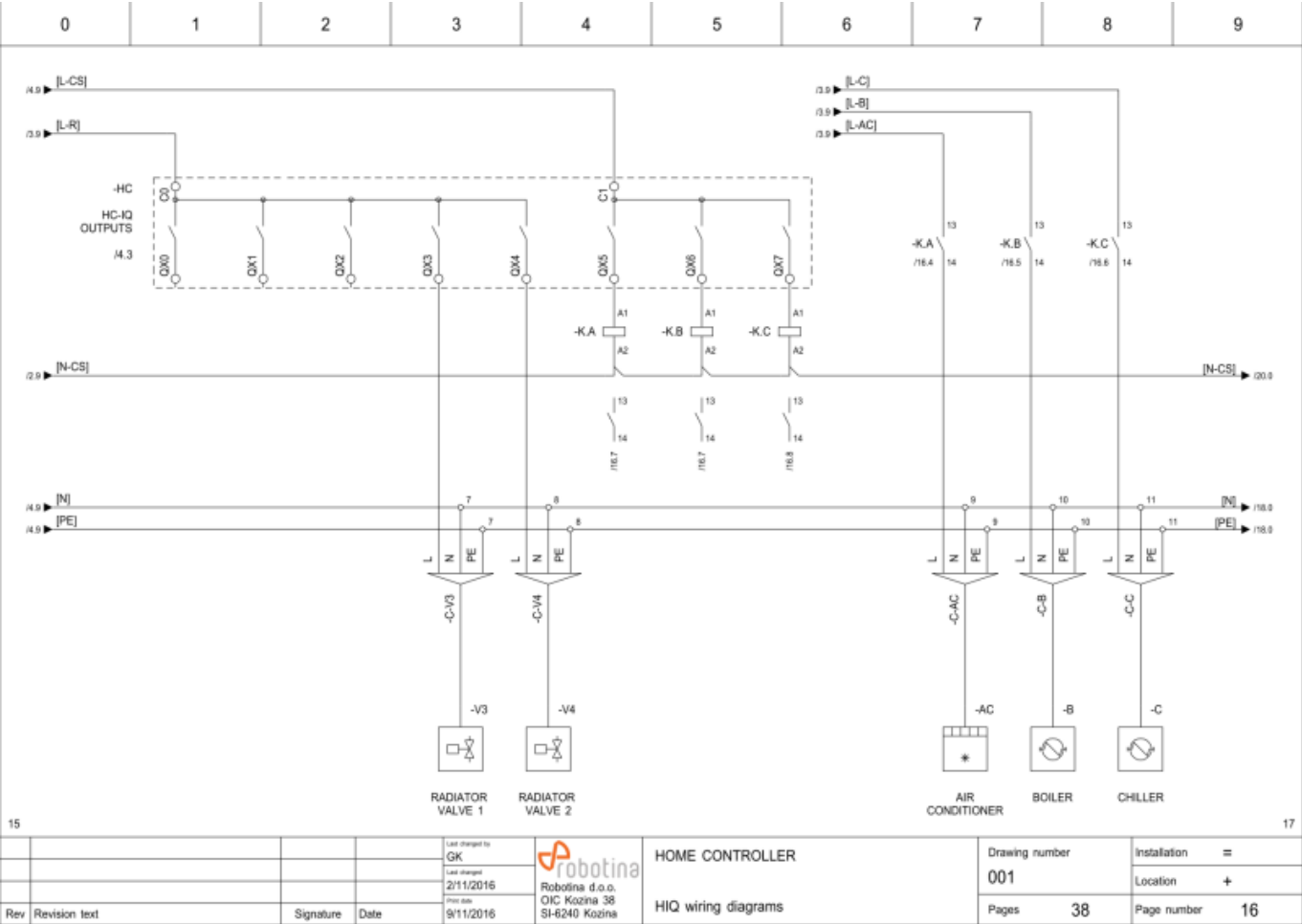
In our plan we use 2 radiator valves (and 3 [Fan-coil controllers](#)).

QX5 output – is used for Air Conditioner.

QX6 output – is used for Boiler.

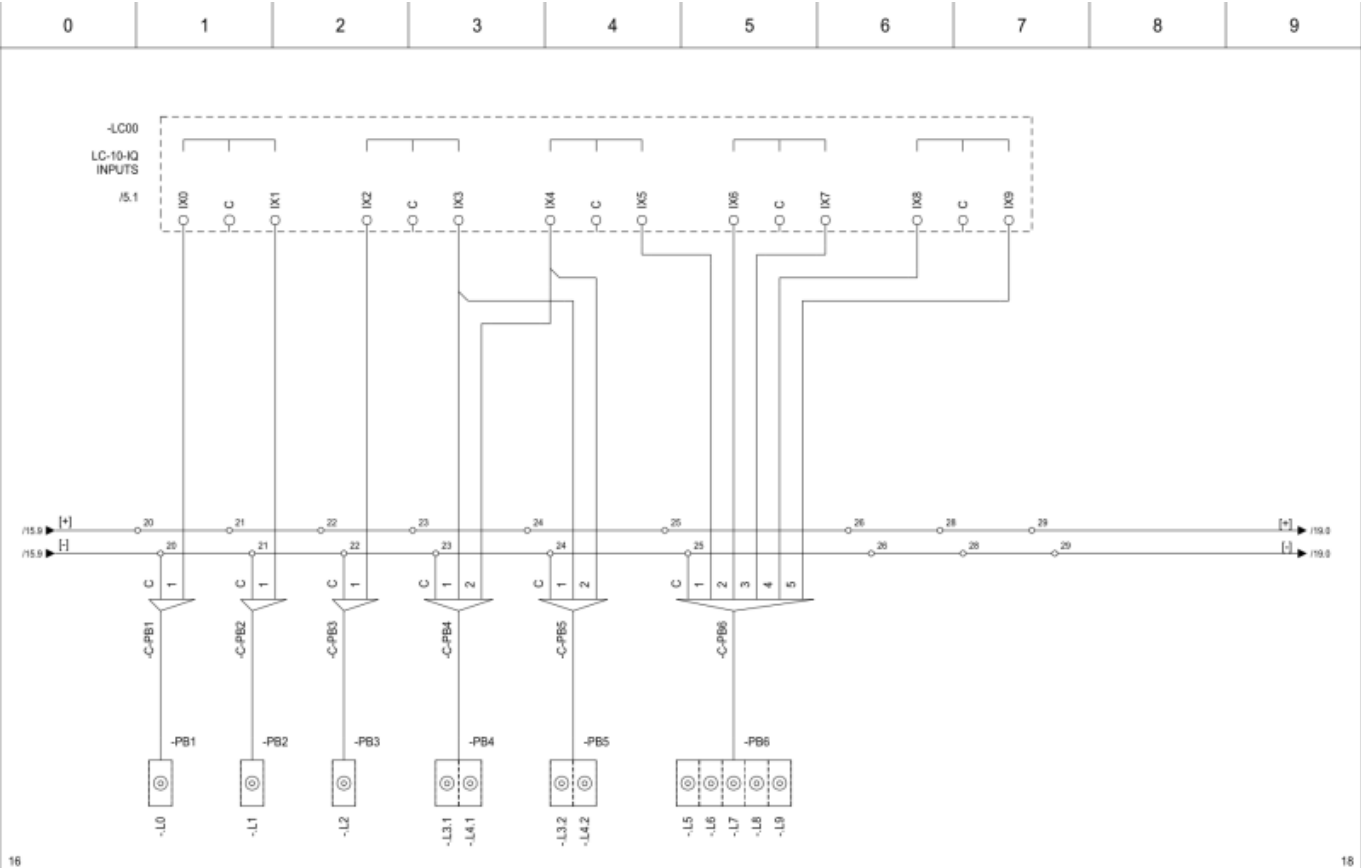
QX7 output – is used for Chiller.

All three outputs are connected to external installation relays (-K.A, -K.B and -K.C) .



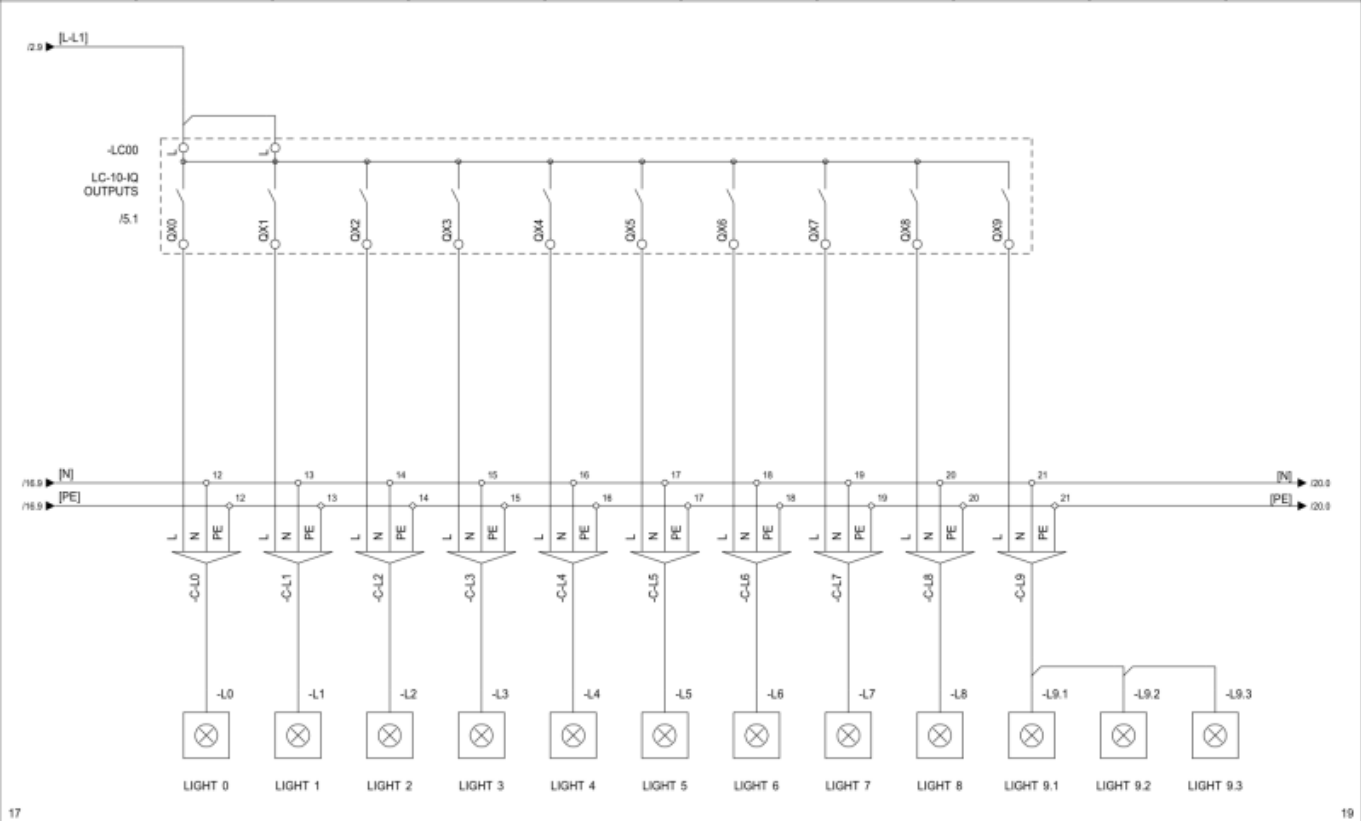
Page 17-24 - Light controller

Lights and managed power sockets are connected to [Light controllers](#) .
Several button combinations are possible.
Managed power sockets should be connected through installation relays (-K12-K14, -K22-K23 and -K30-K33).



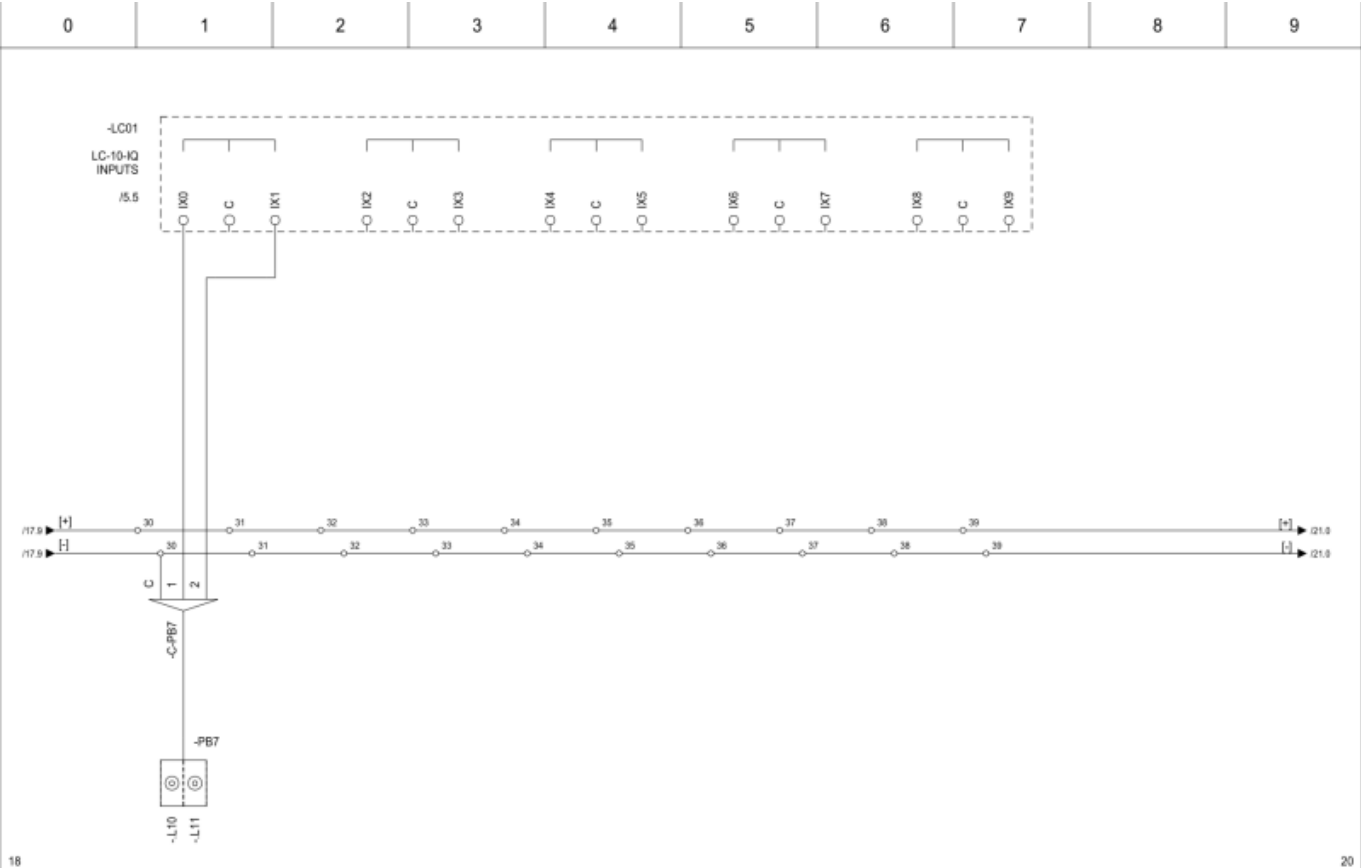
			Last changed by GK			Drawing number			Installation		
			Last changed 20/10/2016			001			=		
			Signature			Pages			Location		
			Date			38			+		
Rev			Revision text			Page number			17		

0	1	2	3	4	5	6	7	8	9
---	---	---	---	---	---	---	---	---	---

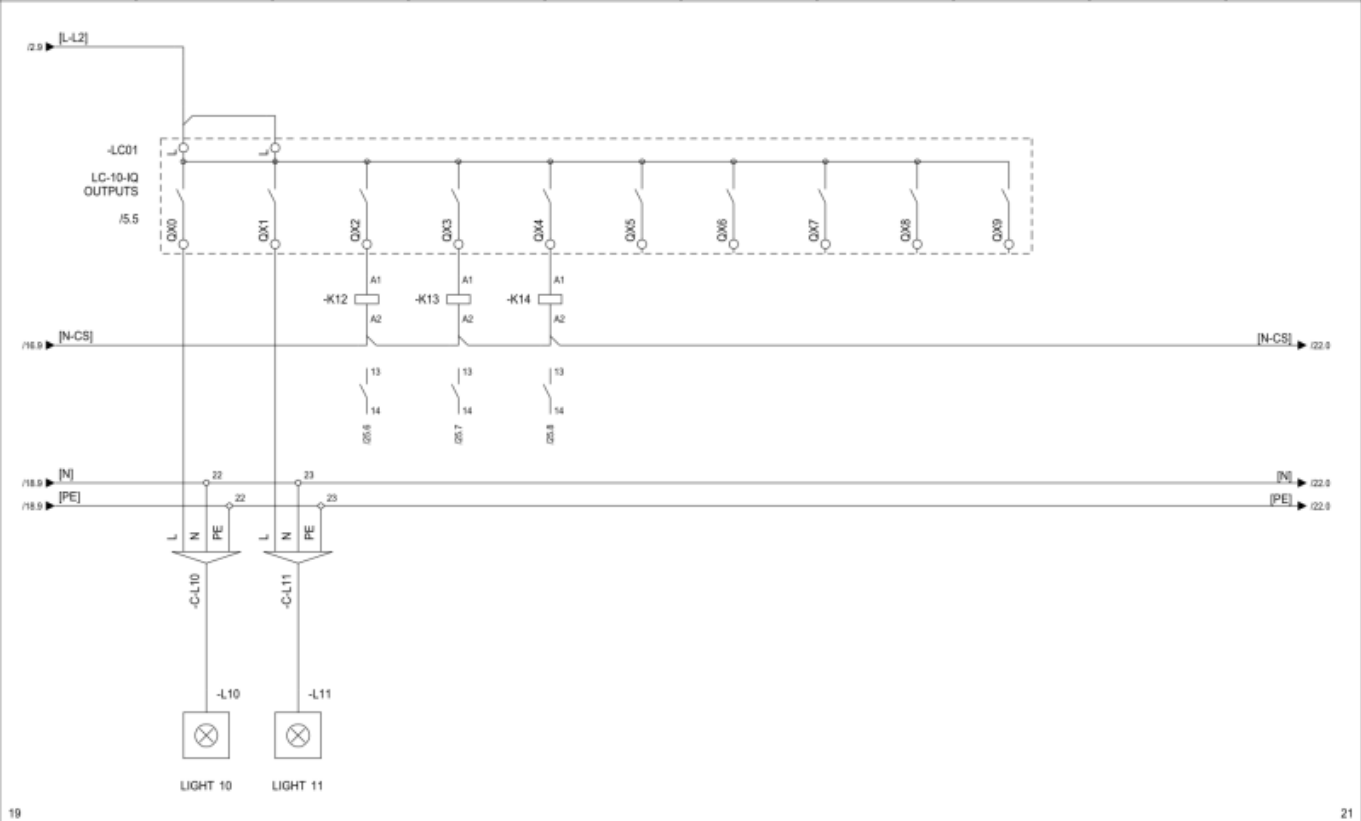


			Last changed by SS			Drawing number			Installation		
			Last changed 8/11/2016			001			=		
			Signature			Pages			Location		
			Date			38			+		
Rev			Revision text			Page number			18		

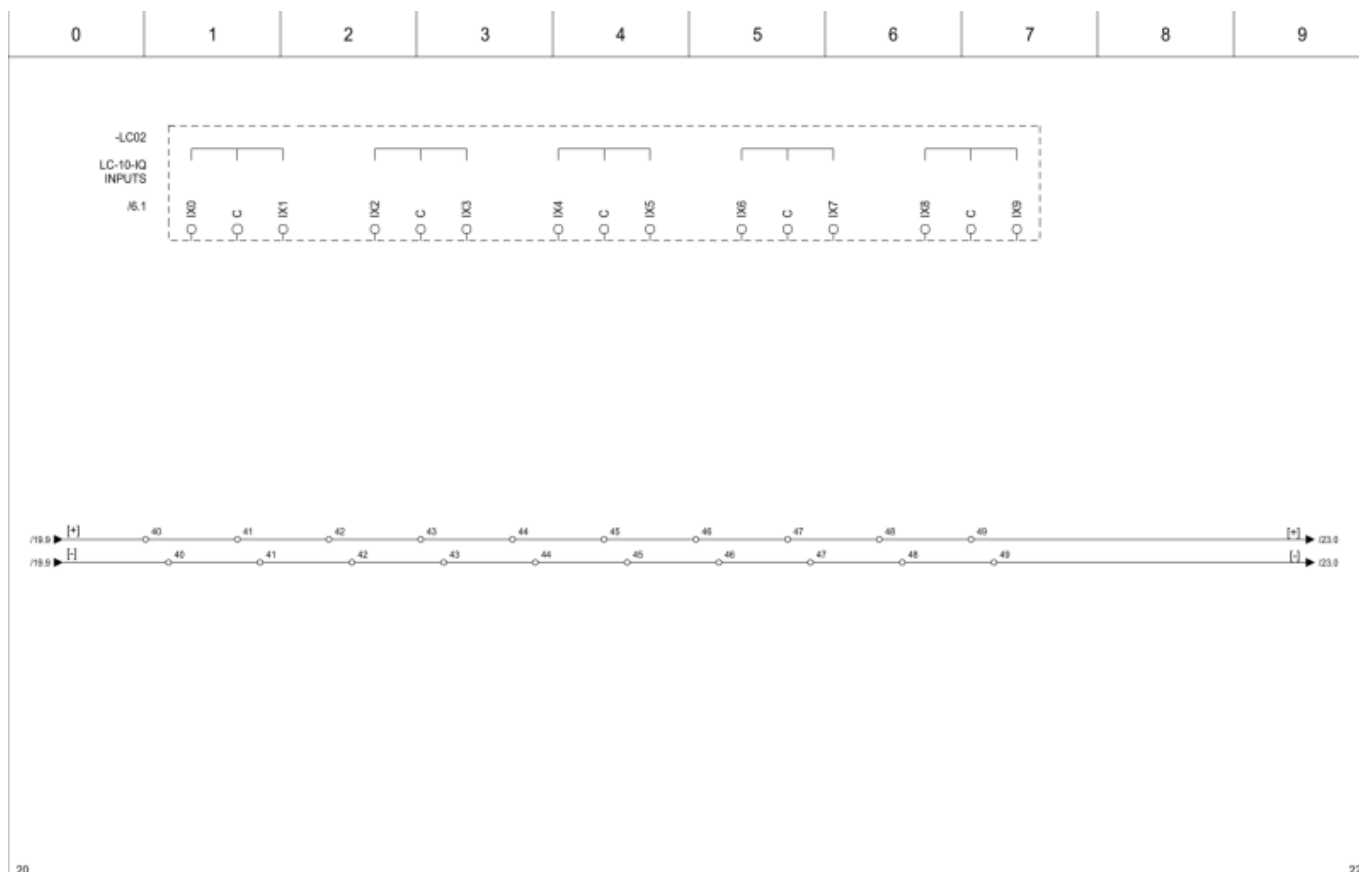
0	1	2	3	4	5	6	7	8	9
---	---	---	---	---	---	---	---	---	---



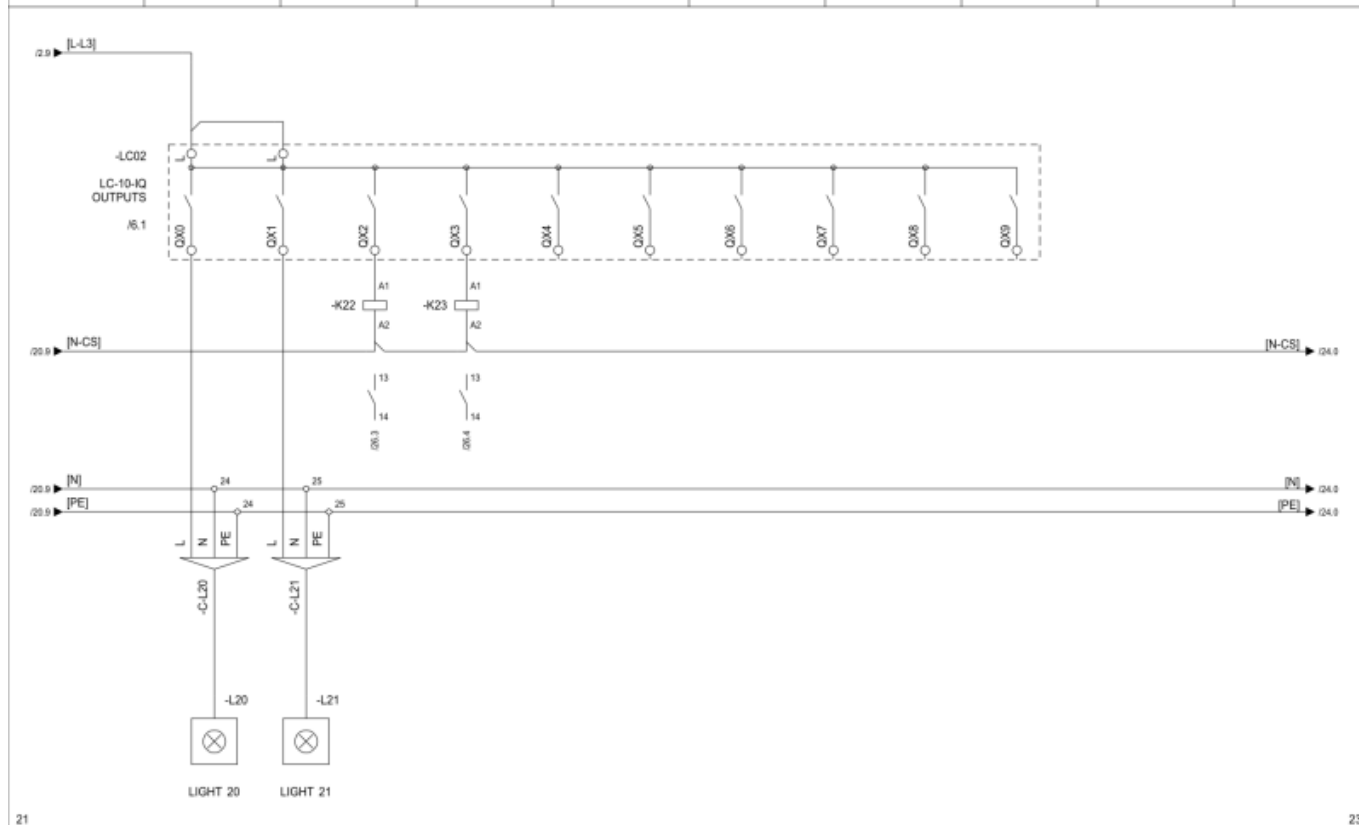
Rev		Revision text	Signature	Date	9/11/2016	Robotina Robotina d.o.o. OIC Kozina 36 SI-6240 Kozina	LIGHT CONTROLLER HIQ wiring diagrams	Drawing number 001	Installation =
Pages		38	Page number		19				



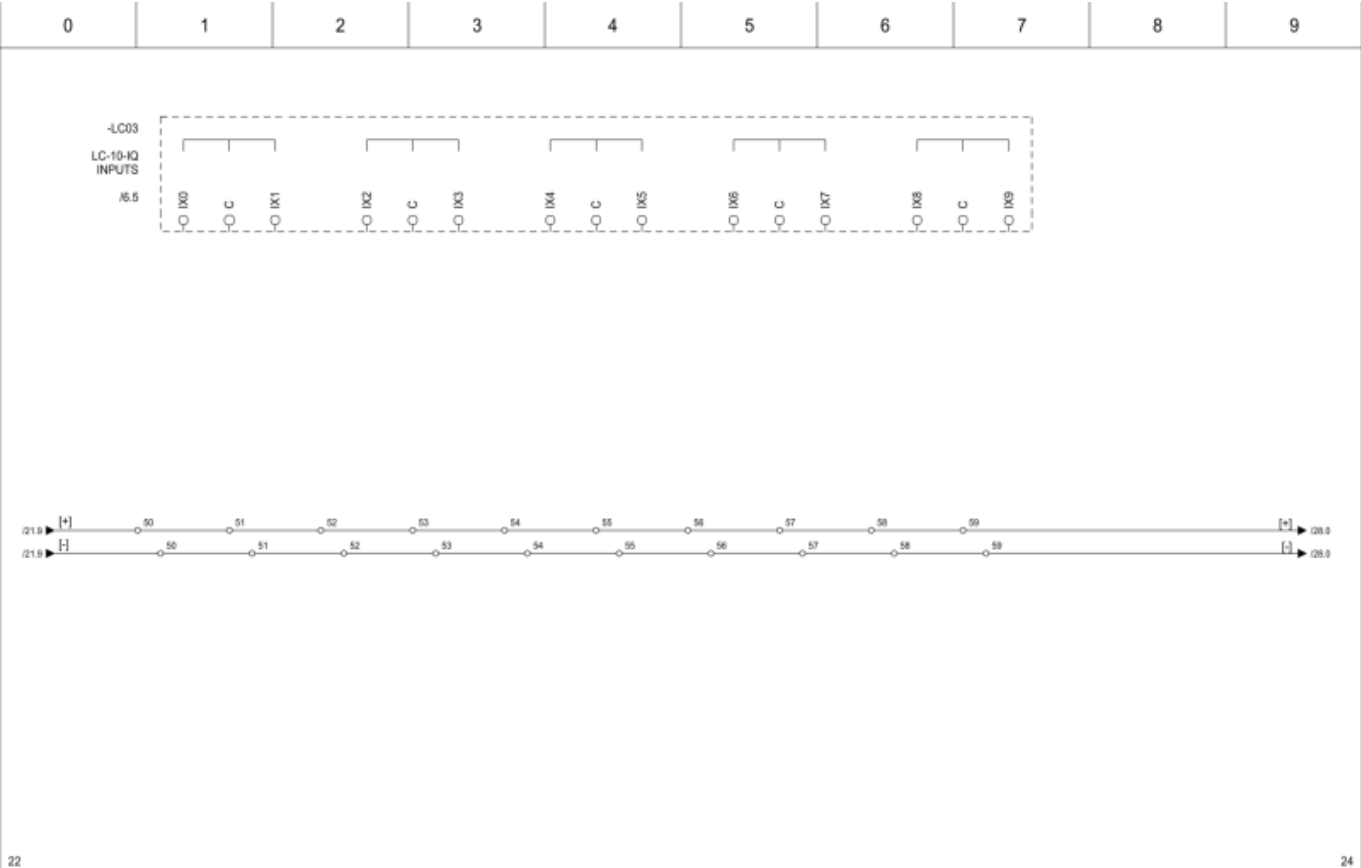
Rev		Revision text	Signature	Date	9/11/2016	Robotina Robotina d.o.o. OIC Kozina 36 SI-6240 Kozina	LIGHT CONTROLLER HIQ wiring diagrams	Drawing number 001	Installation =
Pages		38	Page number		20				



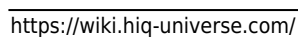
Rev		Revision text	Signature	Date	9/11/2016	Robotina Robotina d.o.o. OIC Kozina 38 SI-6240 Kozina	LIGHT CONTROLLER HIQ wiring diagrams	Drawing number 001	Installation =
Pages		38	Page number		21				Location +

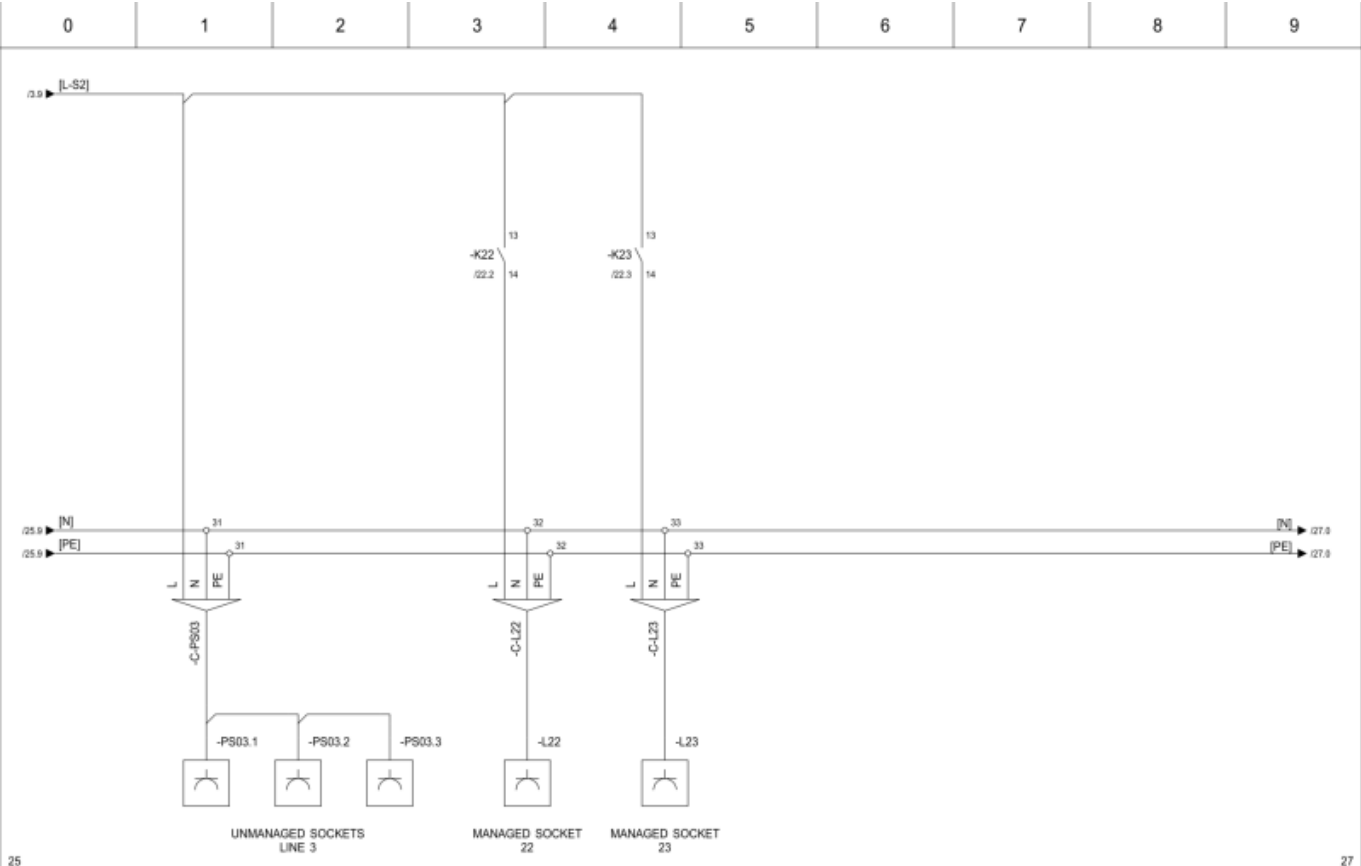


Rev		Revision text	Signature	Date	9/11/2016	Robotina Robotina d.o.o. OIC Kozina 38 SI-6240 Kozina	LIGHT CONTROLLER HIQ wiring diagrams	Drawing number 001	Installation =
Pages		38	Page number		22				Location +



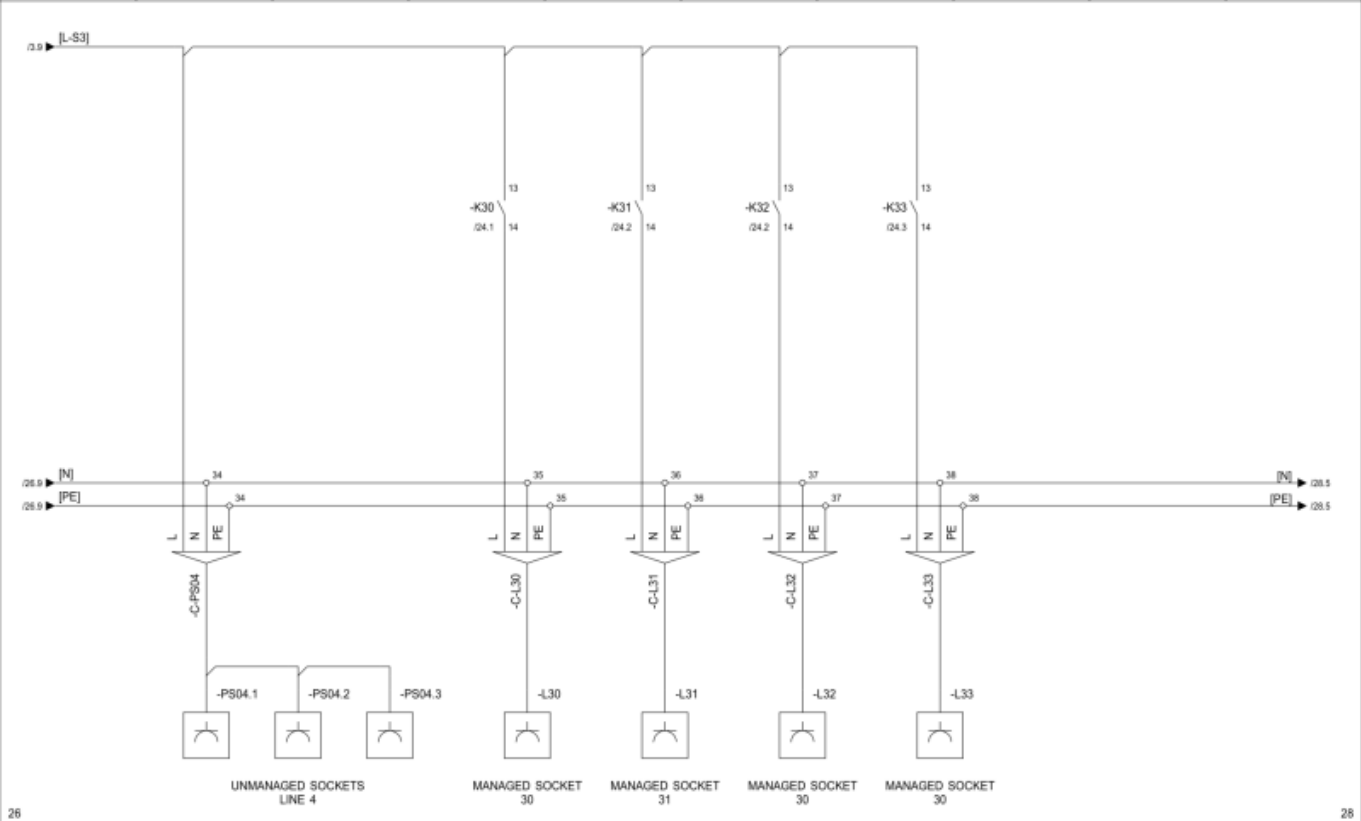
A sample plan assumes use of managed and unmanaged sockets. Managed sockets are connected to [Light controllers](#). External installation relays should be used on Light controller outputs.





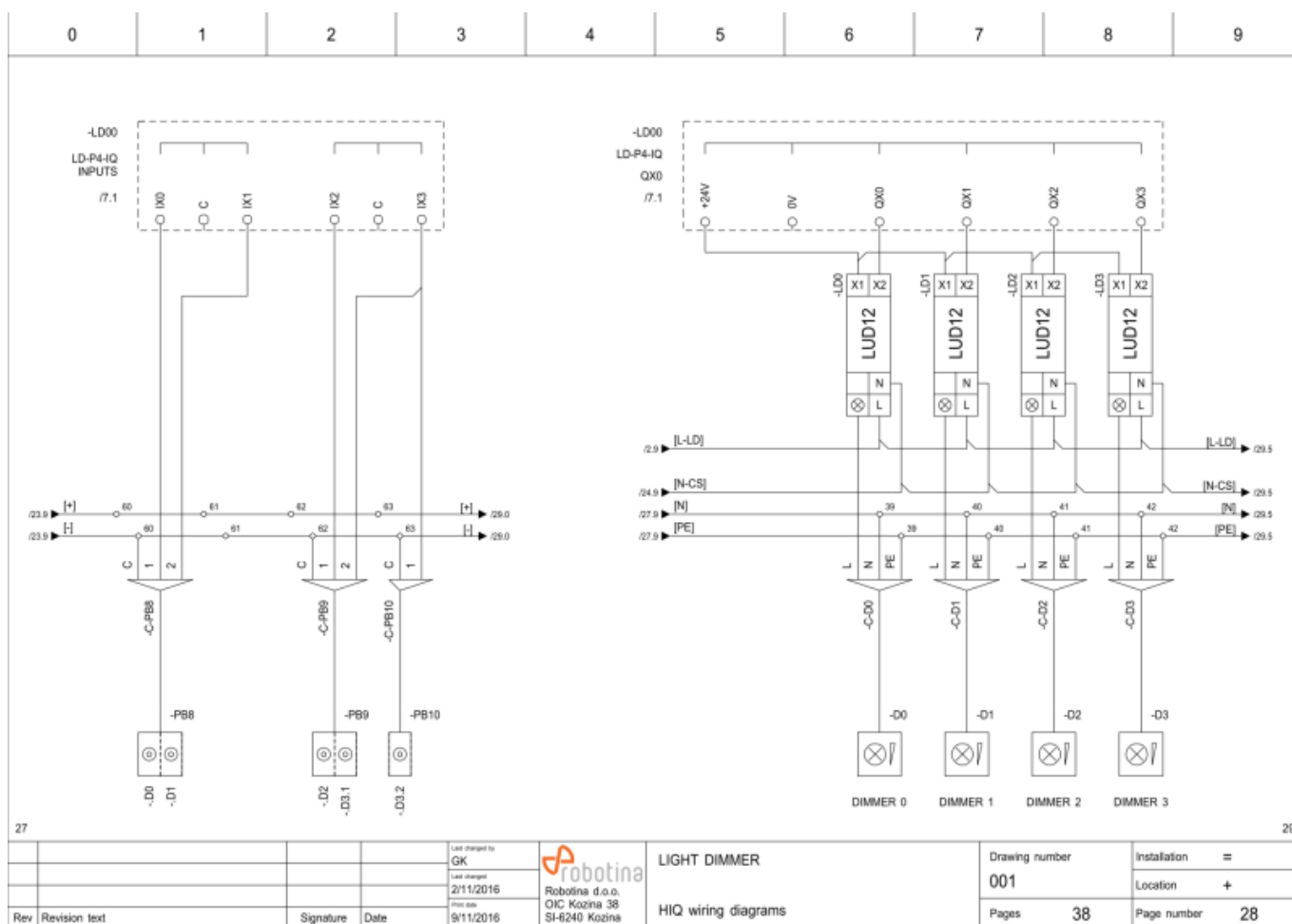
			Last changed by GK		 Robotina d.o.o. OIC Kozina 38 SI-6240 Kozina	POWER SOCKETS		Drawing number 001		Installation =	
			Last changed 2/11/2016			HIQ wiring diagrams		Pages 38		Location +	
Rev			Revision text			Signature		Date		Page number 26	

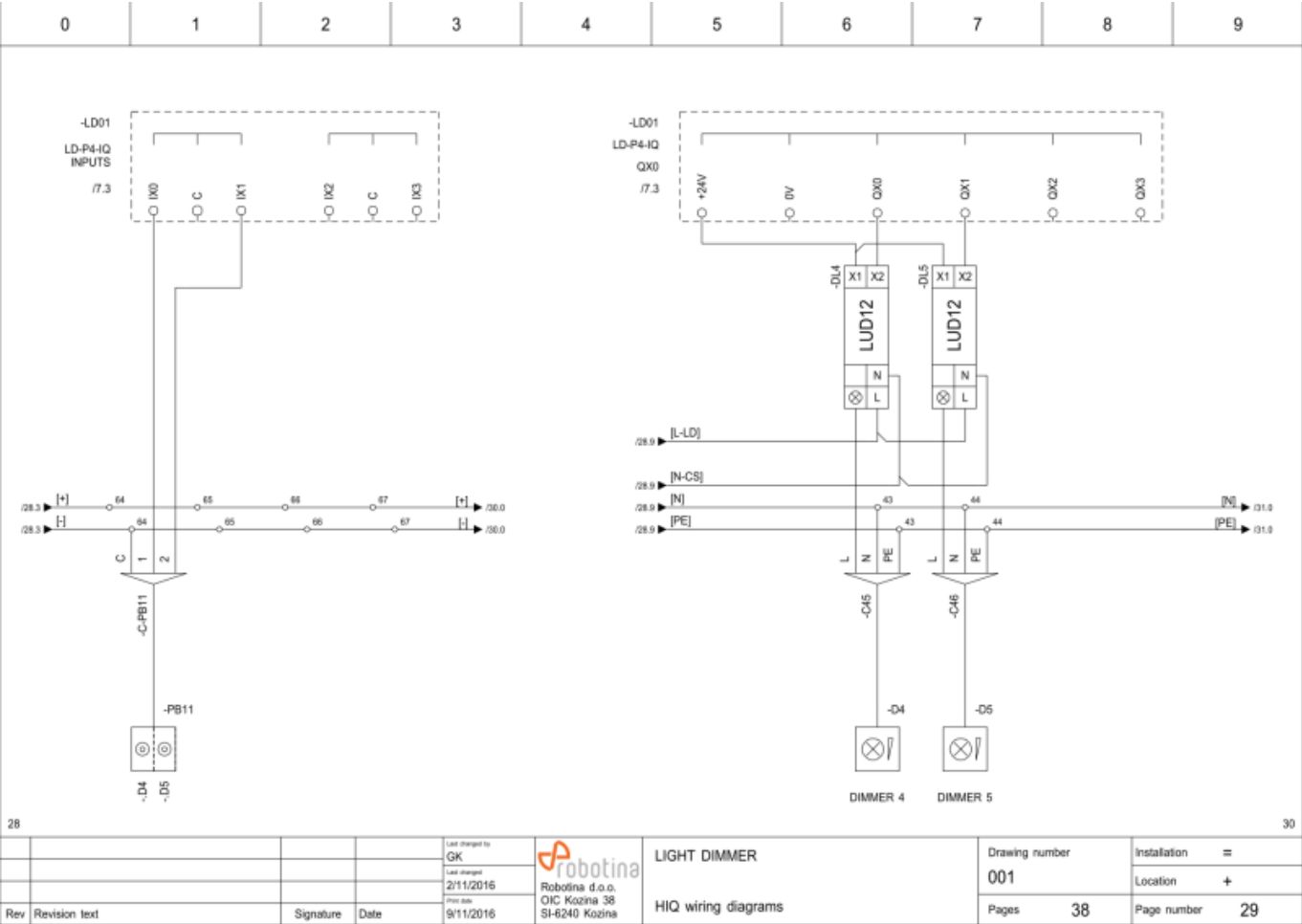
0	1	2	3	4	5	6	7	8	9
---	---	---	---	---	---	---	---	---	---



				Last changed by GK	 Robotina d.o.o. OIC Kozina 38 SI-6240 Kozina	POWER SOCKETS		Drawing number 001		Installation =	
				Last changed 2/11/2016		HIQ wiring diagrams		Pages 38		Location +	
Rev	Revision text		Signature	Date 9/11/2016						Page number 27	

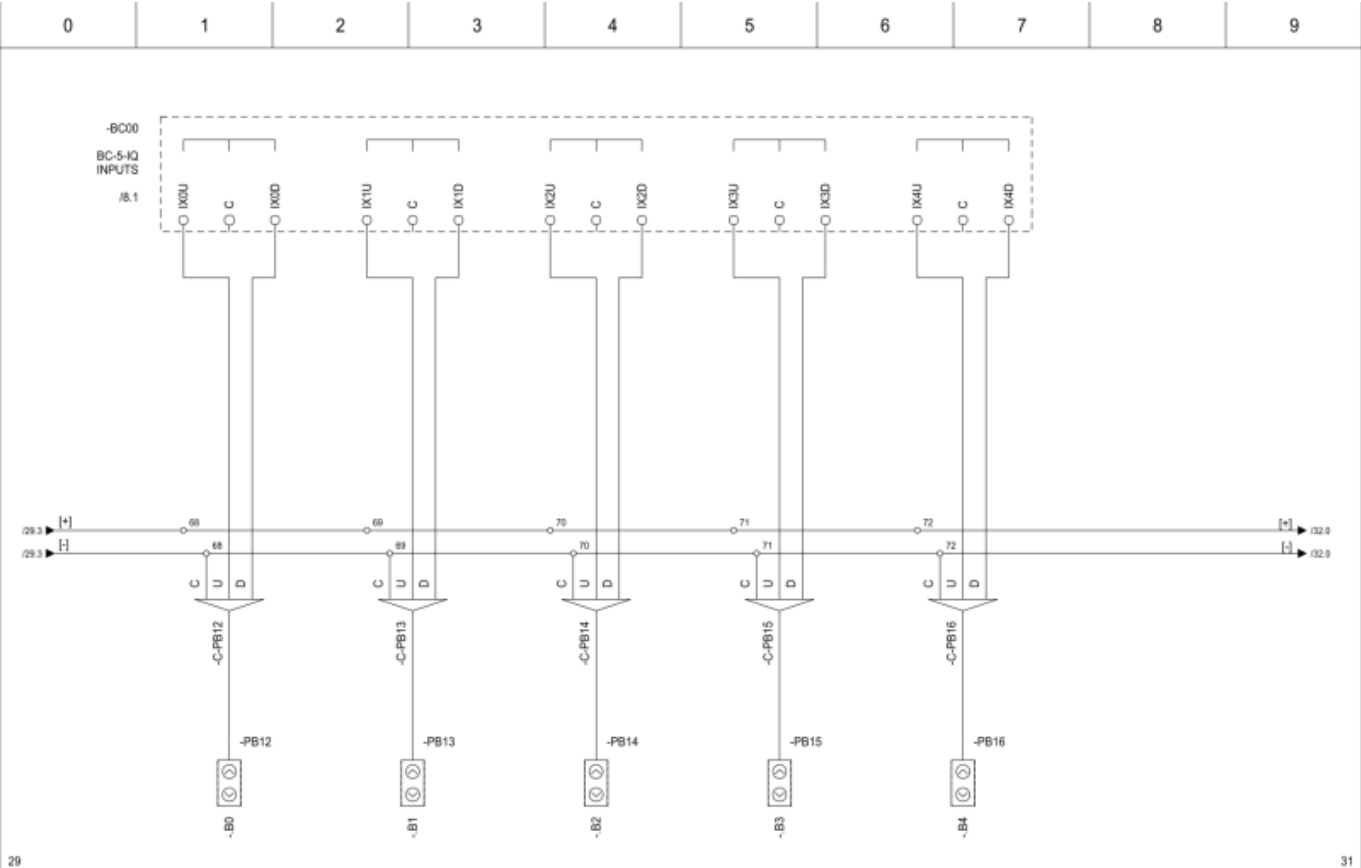
On sample plan we use 2 [Light dimmers drivers](#). On each driver we can connect up to 4 [LUD-12](#) universal light dimmers.



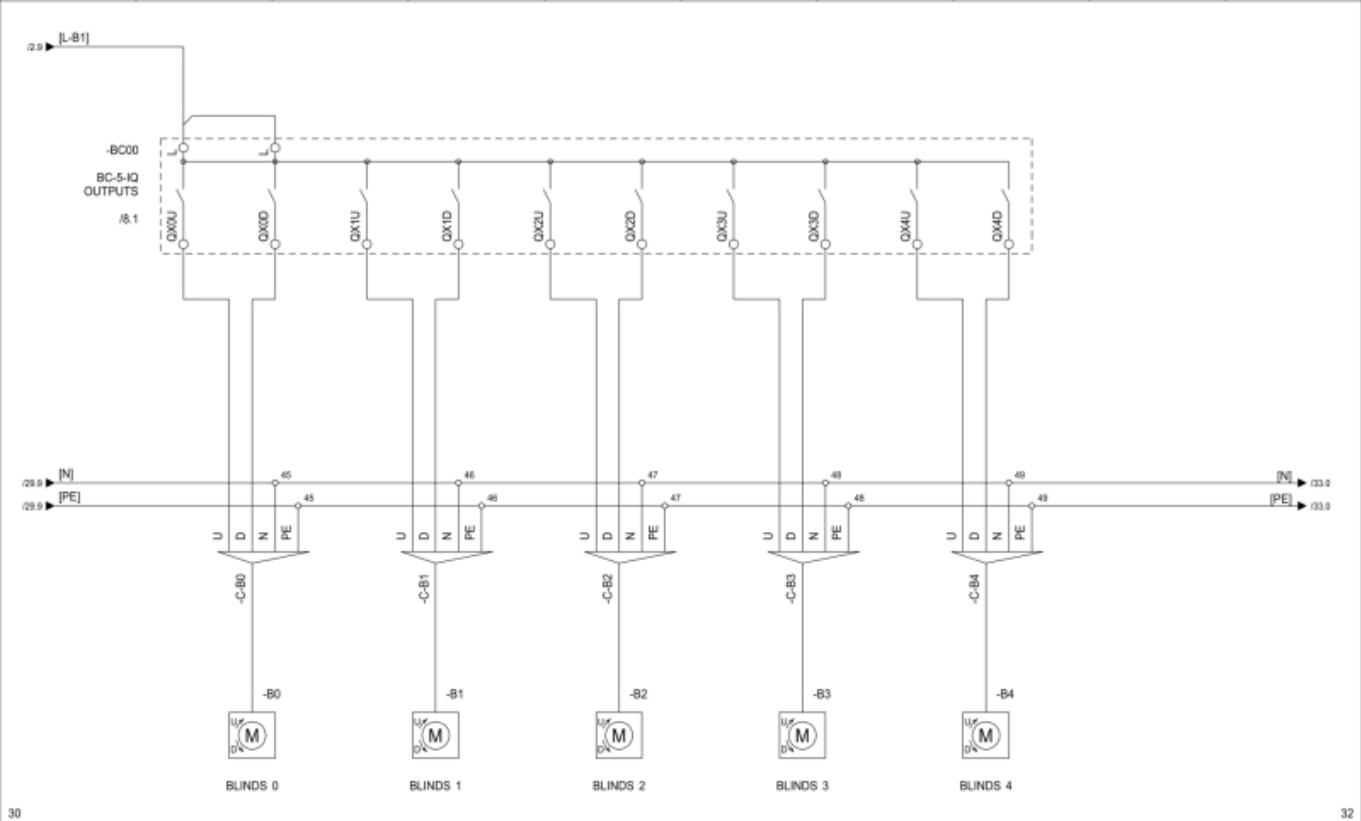


Page 30-33 - Blinds controllers

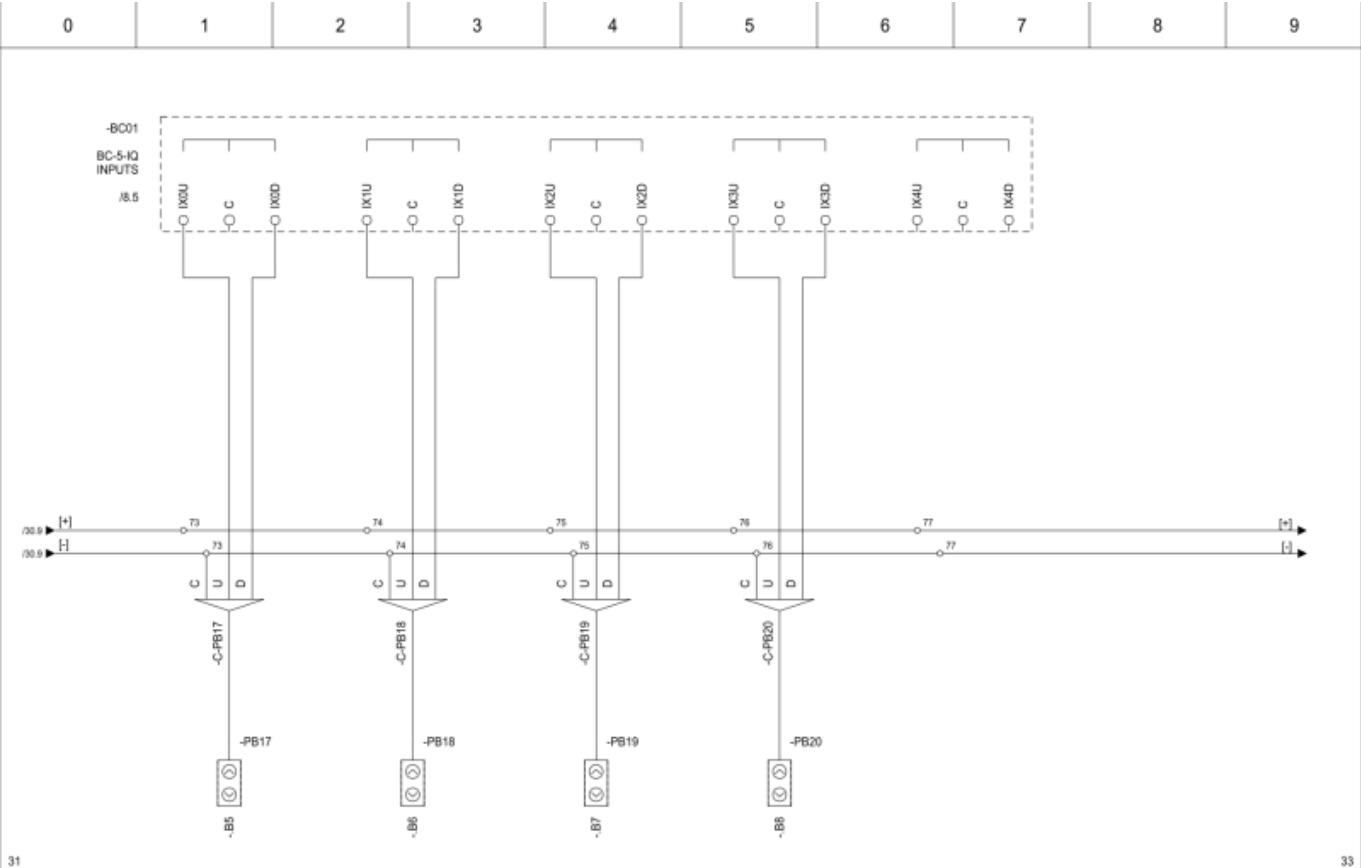
On our sample plan we have 2 Blinds controllers (BC) with 9 blinds and 9 double-push buttons.



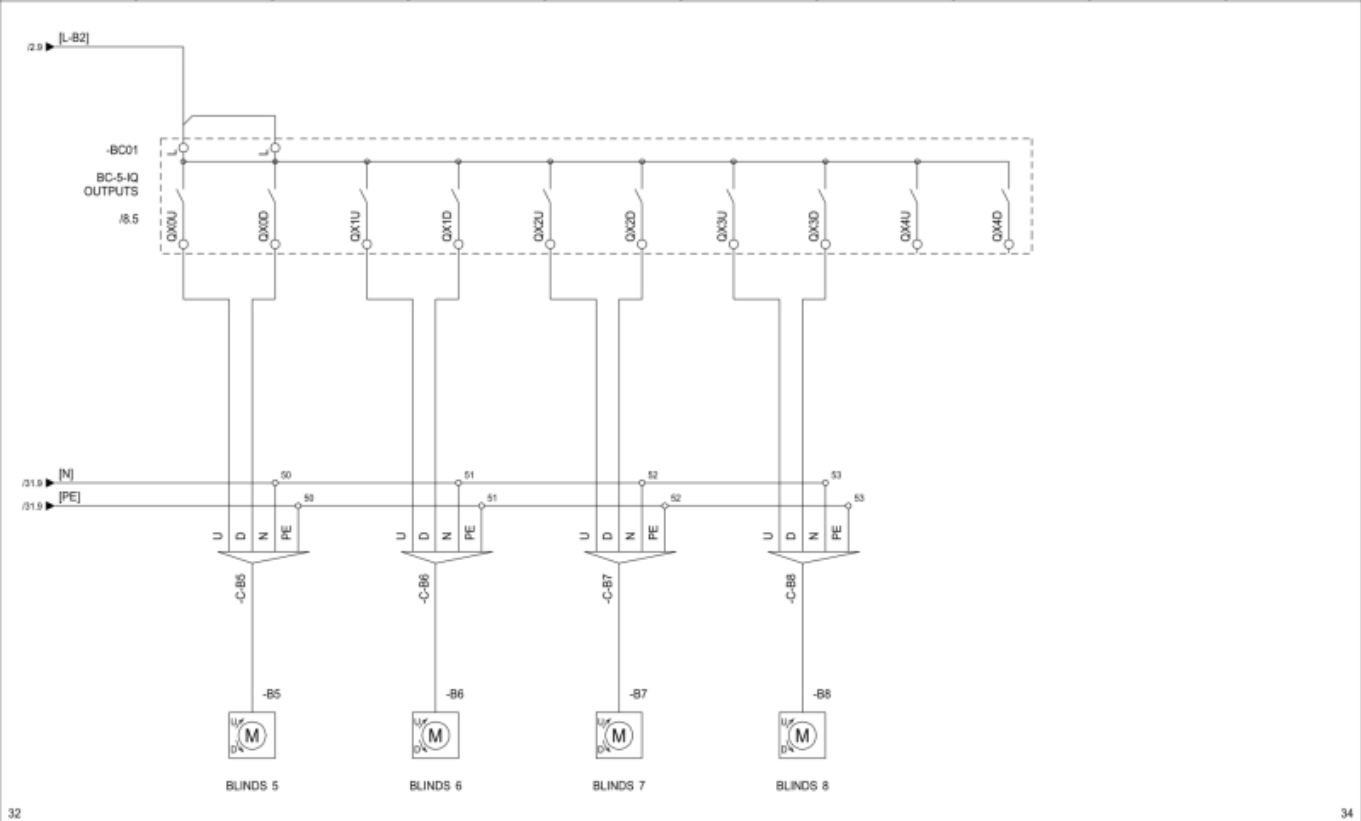
				Last changed by GK		 Robotina d.o.o. OIC Kozina 38 SI-6240 Kozina	BLINDS CONTROLLER		Drawing number		Installation =	
				Last changed 20/10/2016			HIQ wiring diagrams		001		Location +	
Rev		Revision text		Signature			Date		Pages		Page number	
							9/11/2016		38		30	



				Last changed by GK		 Robotina d.o.o. OIC Kozina 38 SI-6240 Kozina	BLINDS CONTROLLER		Drawing number		Installation =	
				Last changed 2/11/2016			HIQ wiring diagrams		001		Location +	
Rev		Revision text		Signature			Date		Pages		Page number	
							9/11/2016		38		31	



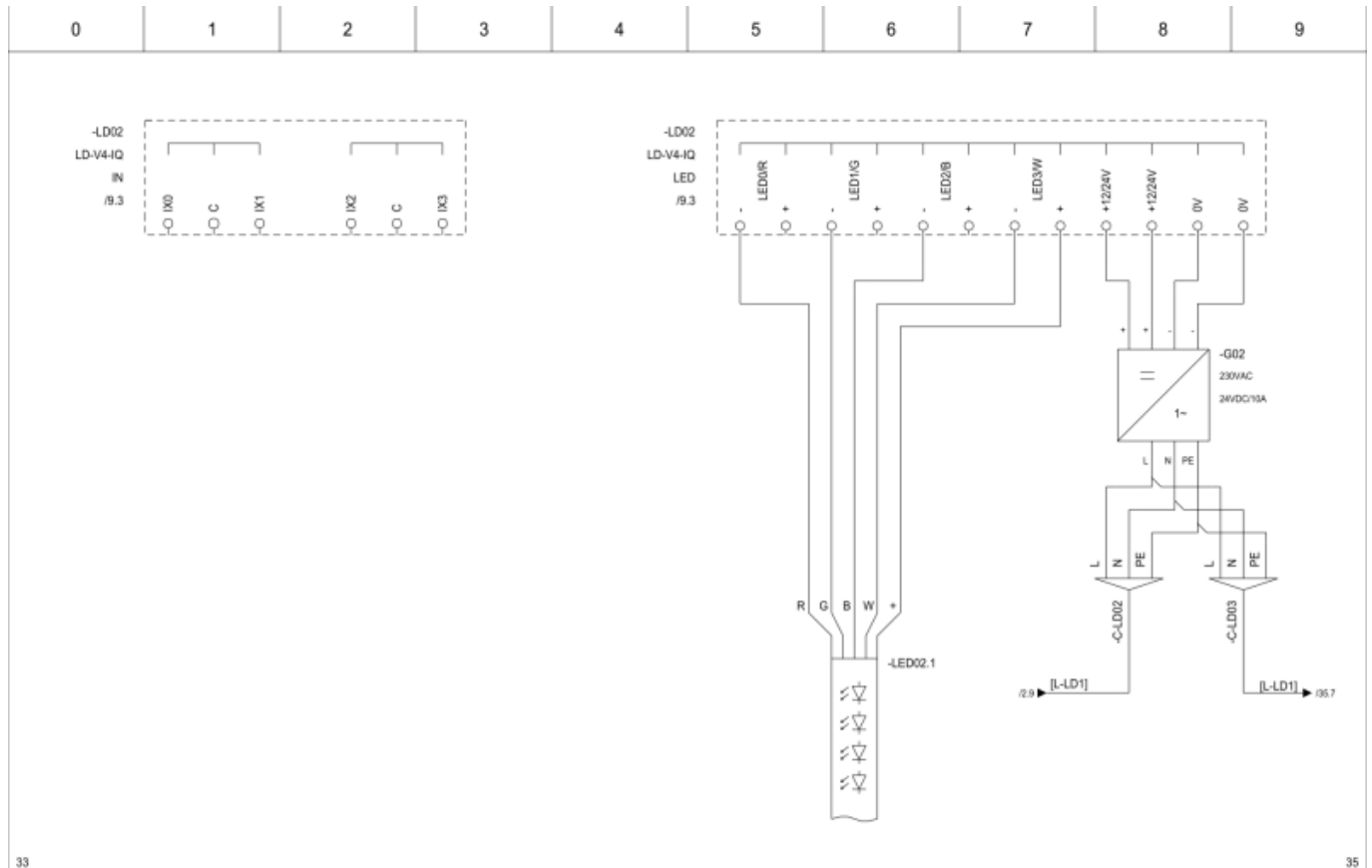
Rev		Revision text	Signature	Date	9/11/2016	Robotina Robotina d.o.o. OIC Kozina 38 SI-6240 Kozina	BLINDS CONTROLLER HIQ wiring diagrams	Drawing number 001	Installation =
Pages		38	Page number	32					



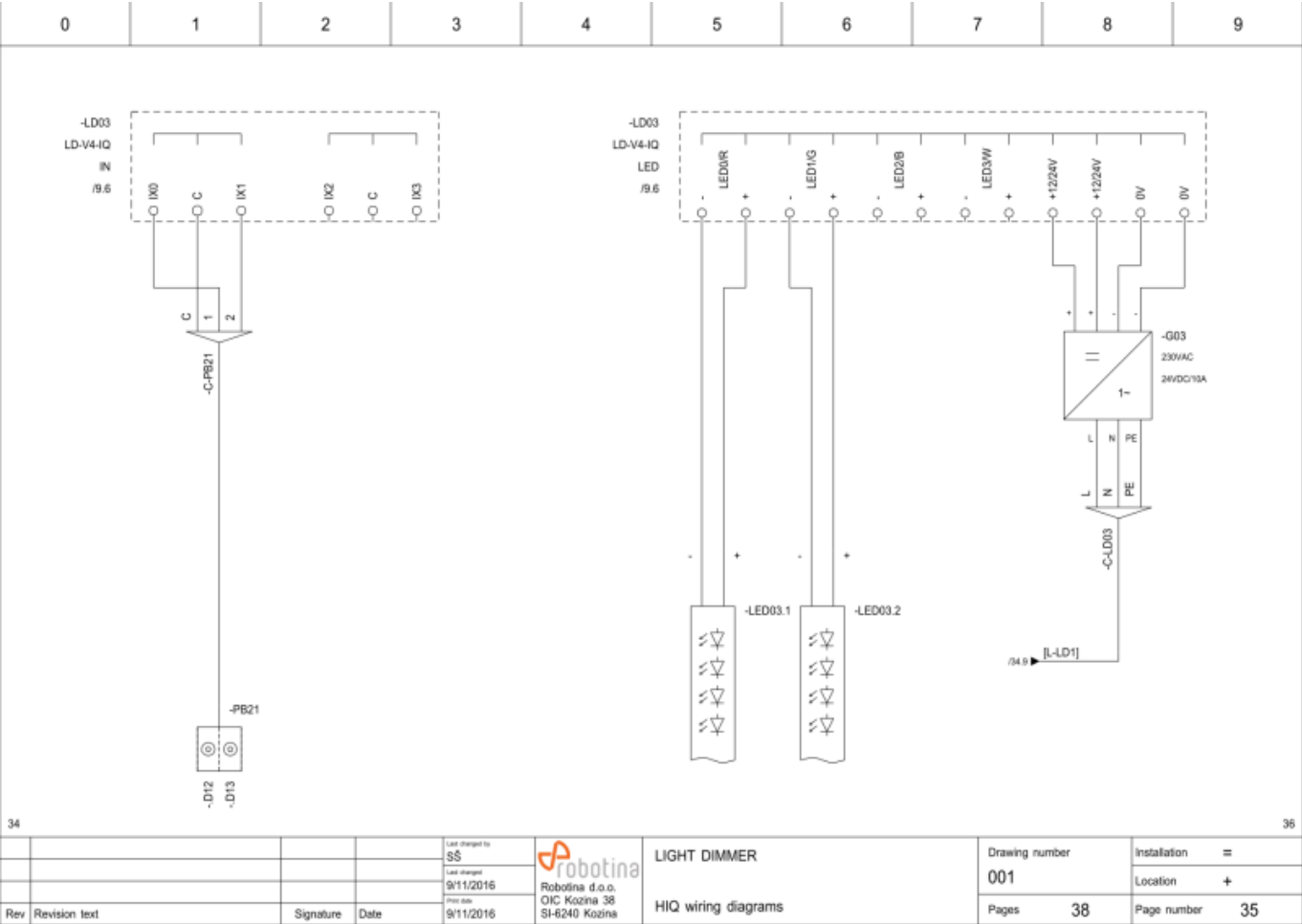
Rev		Revision text	Signature	Date	9/11/2016	Robotina Robotina d.o.o. OIC Kozina 38 SI-6240 Kozina	BLINDS CONTROLLER HIQ wiring diagrams	Drawing number 001	Installation =
Pages		38	Page number	33					

Page 34-35 - LED stripe dimmer

On sample plan we use 2 [LED stripe dimmers](#). RGBW (red-green-blue-white) LED stripe is connected on the first dimmer and the second dimmer controls 2 white LED stripes (2 outputs are empty). 2 push buttons are connected on the second dimmer.

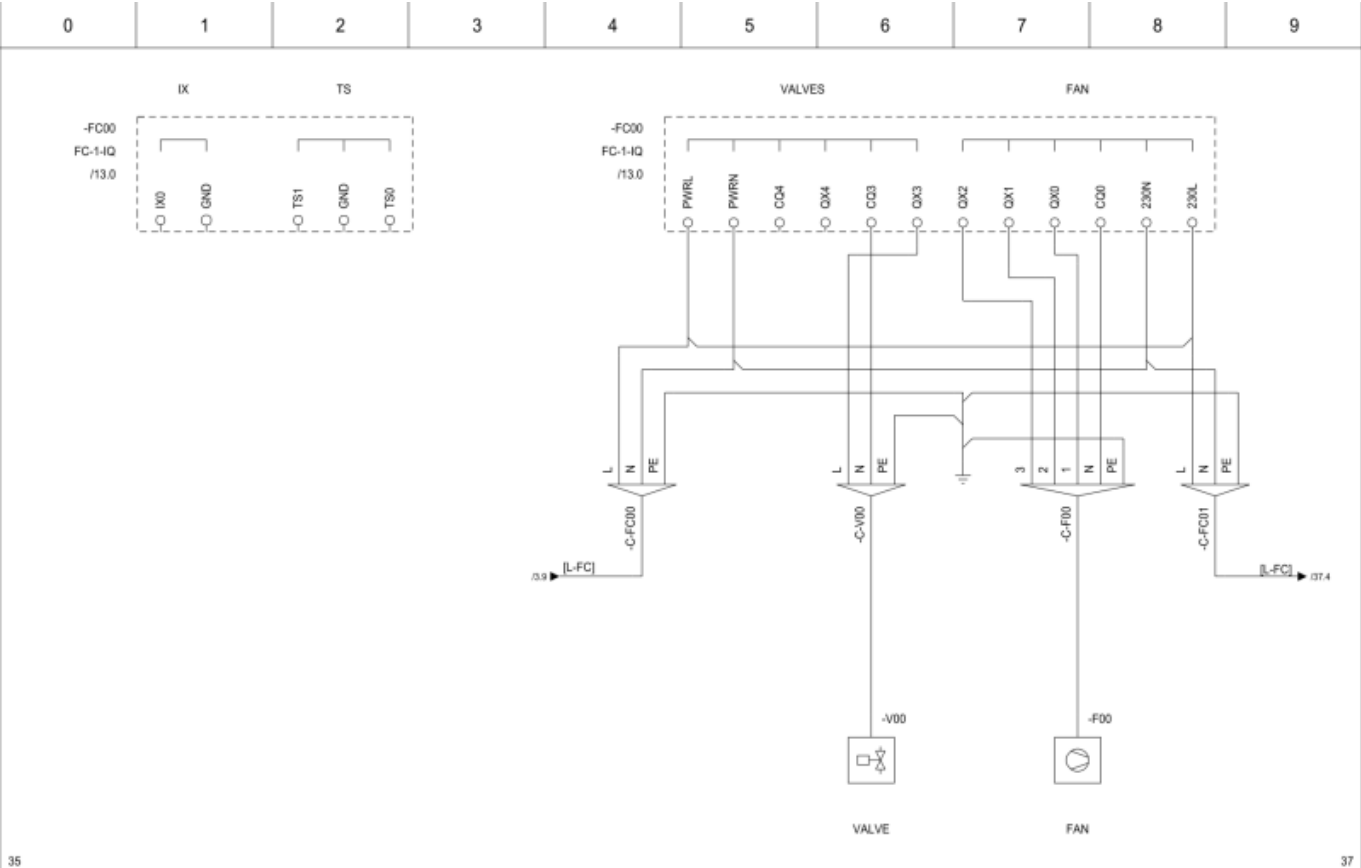


				Last changed to SS	 Robotina d.o.o. OIC Kozina 38 SI-6240 Kozina	LIGHT DIMMER	Drawing number	Installation =
			Last changed 9/11/2016				001	Location +
Rev	Revision text	Signature	Date	Print date 9/11/2016			Pages 38	Page number 34



Page 36-38 - Fan-coil

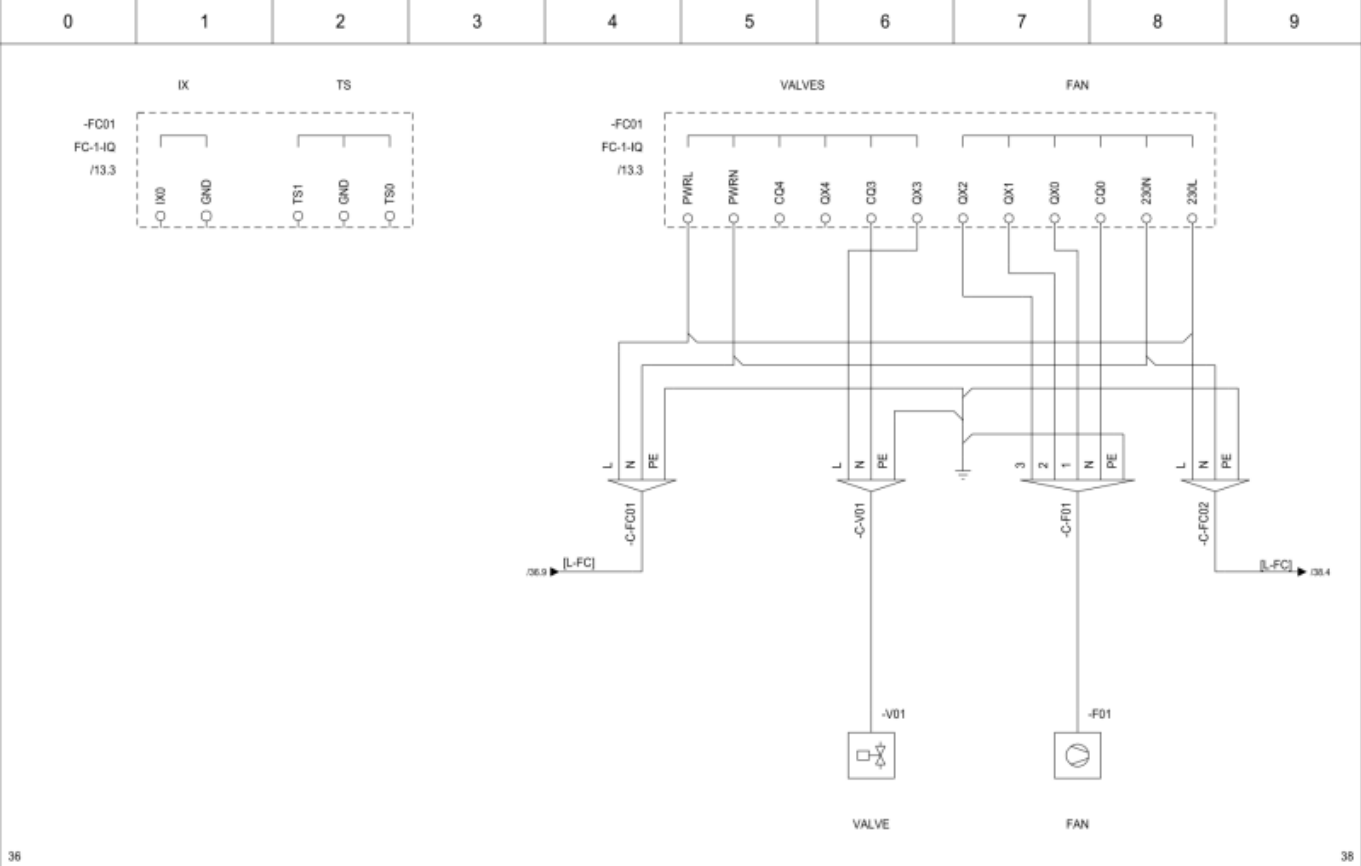
Fan-coil connection.



35

37

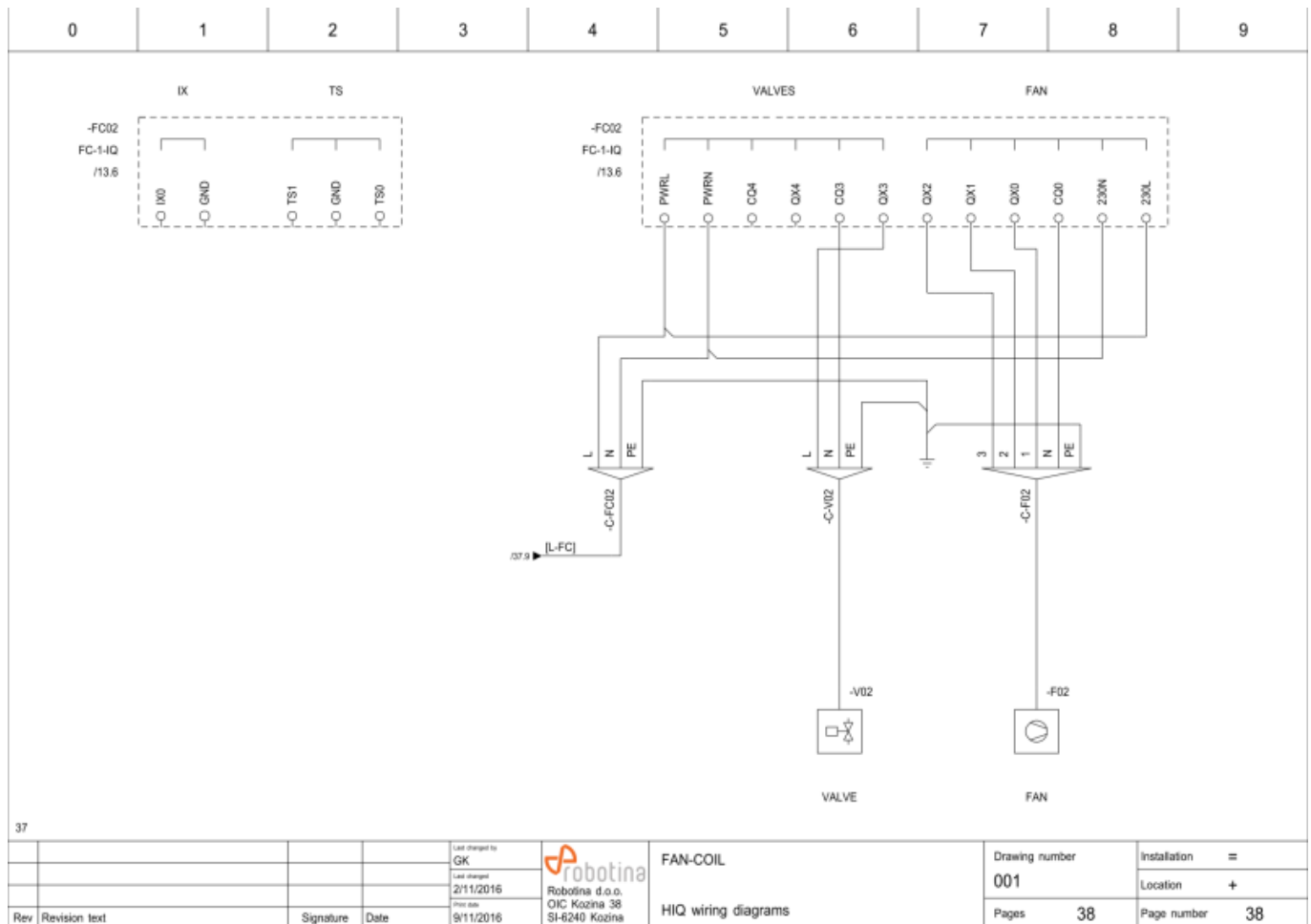
				Last changed by SS	Robotina	FAN-COIL	Drawing number 001	Installation =
				Last changed 9/11/2016	Robotina d.o.o.	HIQ wiring diagrams	Pages 38	Location +
Rev	Revision text	Signature	Date	9/11/2016	Old name OIC Kozina 38 SI-6240 Kozina	HIQ wiring diagrams	Page number 36	



36

38

				Last changed by SS	Robotina	FAN-COIL	Drawing number 001	Installation =
				Last changed 9/11/2016	Robotina d.o.o.	HIQ wiring diagrams	Pages 38	Location +
Rev	Revision text	Signature	Date	9/11/2016	Old name OIC Kozina 38 SI-6240 Kozina	HIQ wiring diagrams	Page number 37	



From:

<https://wiki.hiq-universe.com/> -

Permanent link:

https://wiki.hiq-universe.com/doku.php?id=en:hiq_home:methods:design
Last update: **2019/07/24 06:39**