

Chair control system

Delivery system

Main valves water, air

Main air
Main water

Chip blower

regulated air

regulated chip air

regulated drive air/cooling air

Air/Water distributor

Proportional valve
water regulation

Valves instrument 1
Valves instrument 2
Valves instrument 3
Valves instrument 4
Valves instrument 5

Water
Drive air/cooling air
Chip air



Valve cup filling

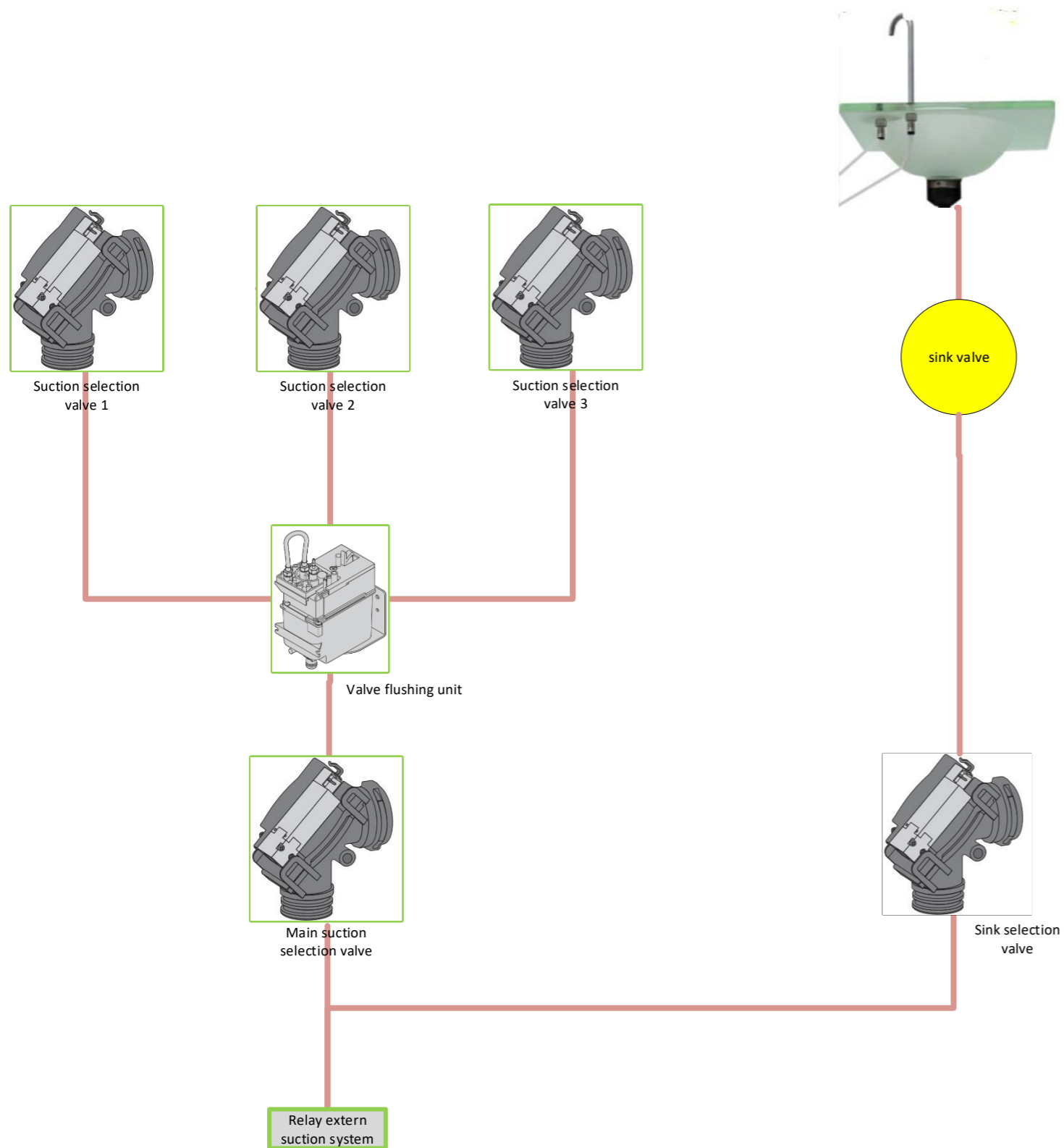


Valve bowl flushing

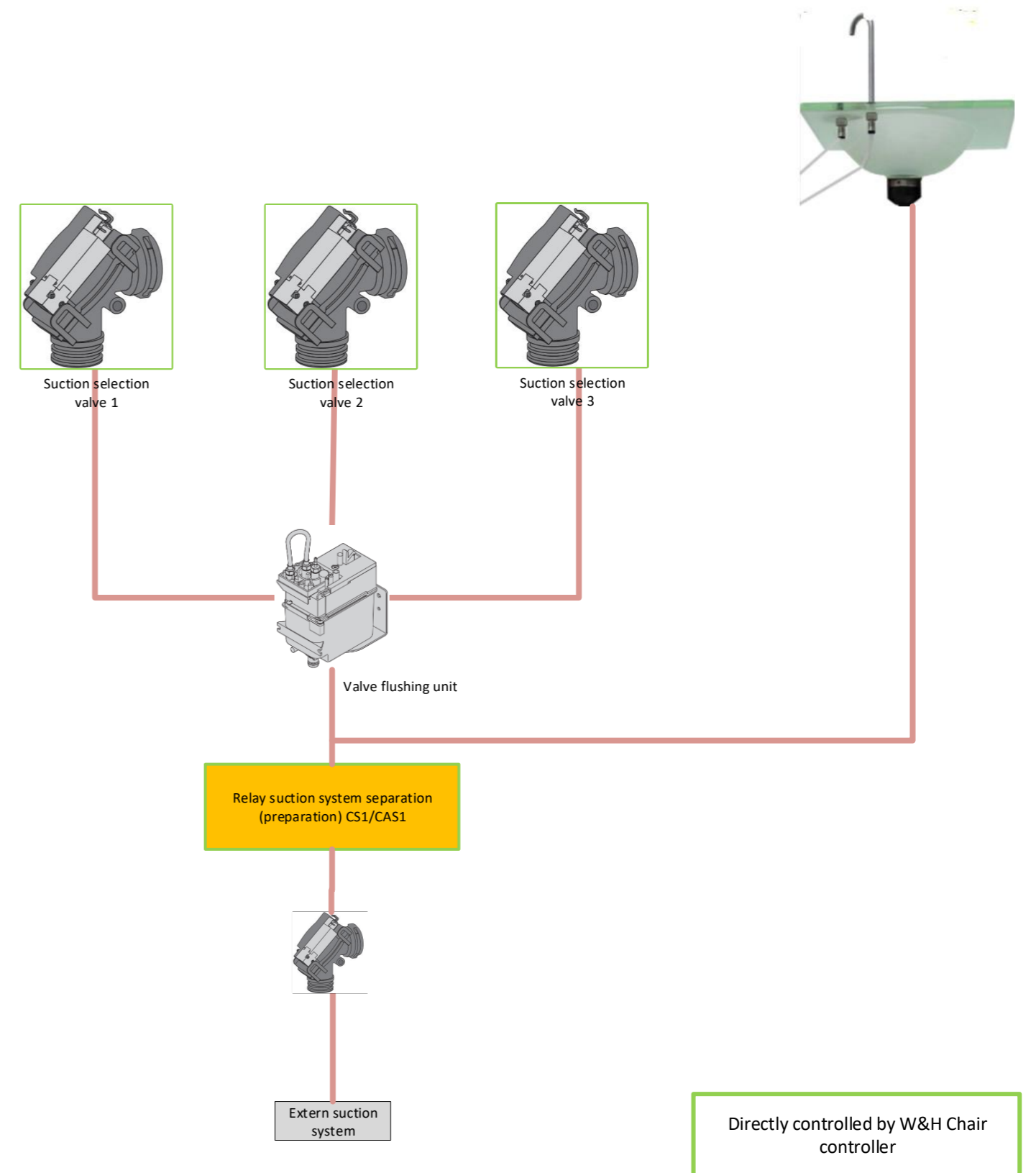
Suction system schematic

Version: V6_1 DKL (13.12.2018)

Wet suction system

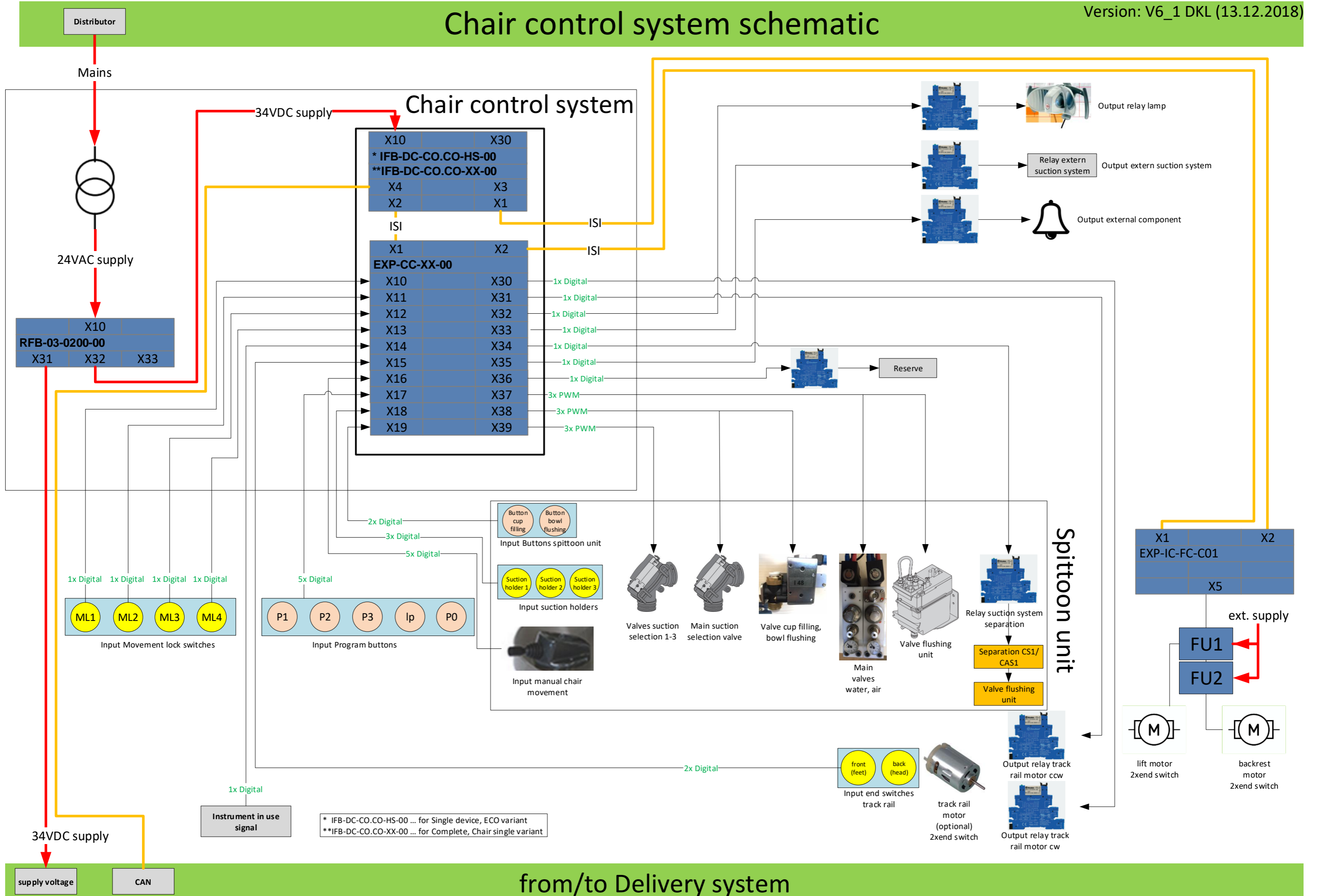


Dry suction system



Chair control system schematic

Version: V6_1 DKL (13.12.2018)

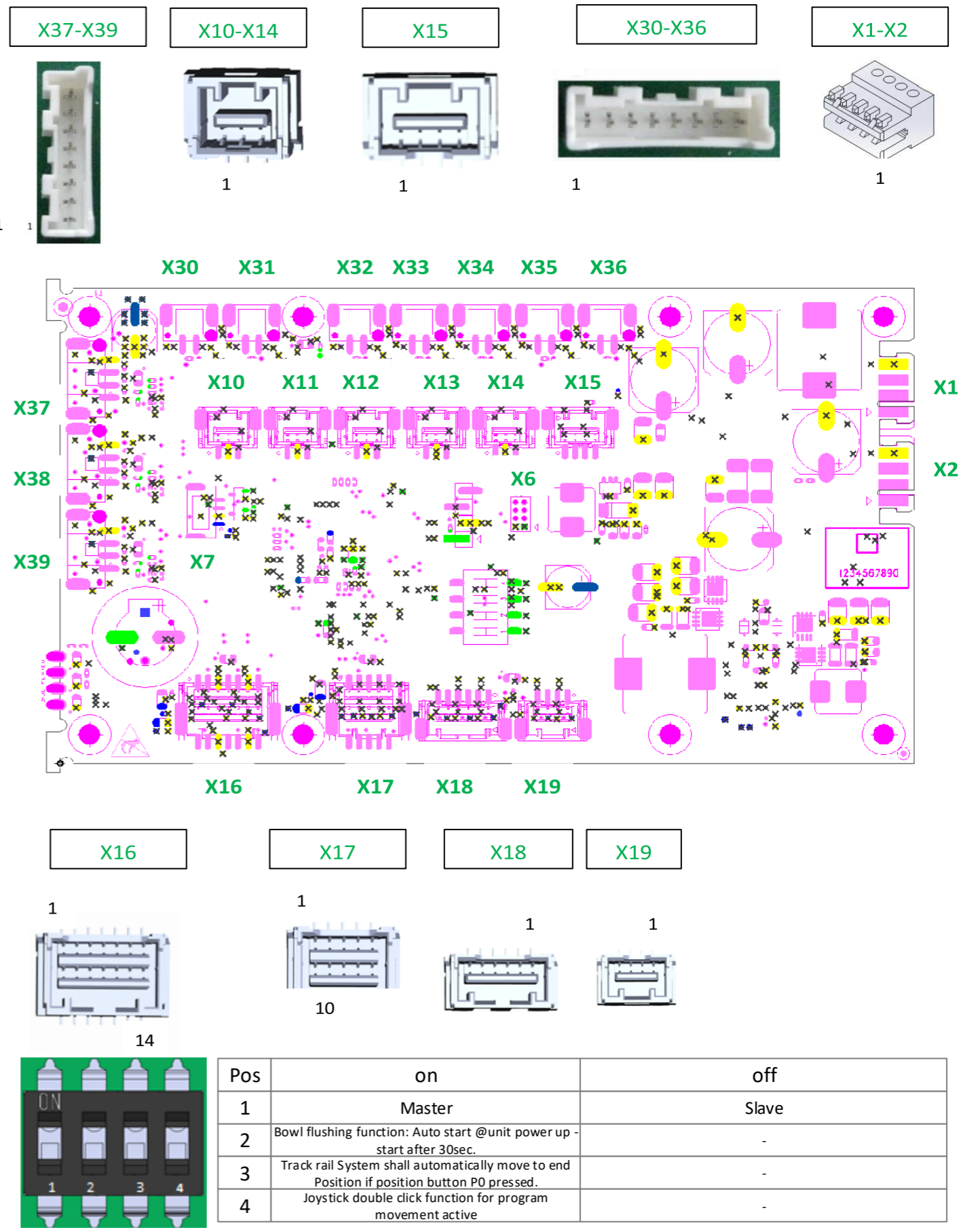


Chair control system information

Version: V6_1 DKL (13.12.2018)

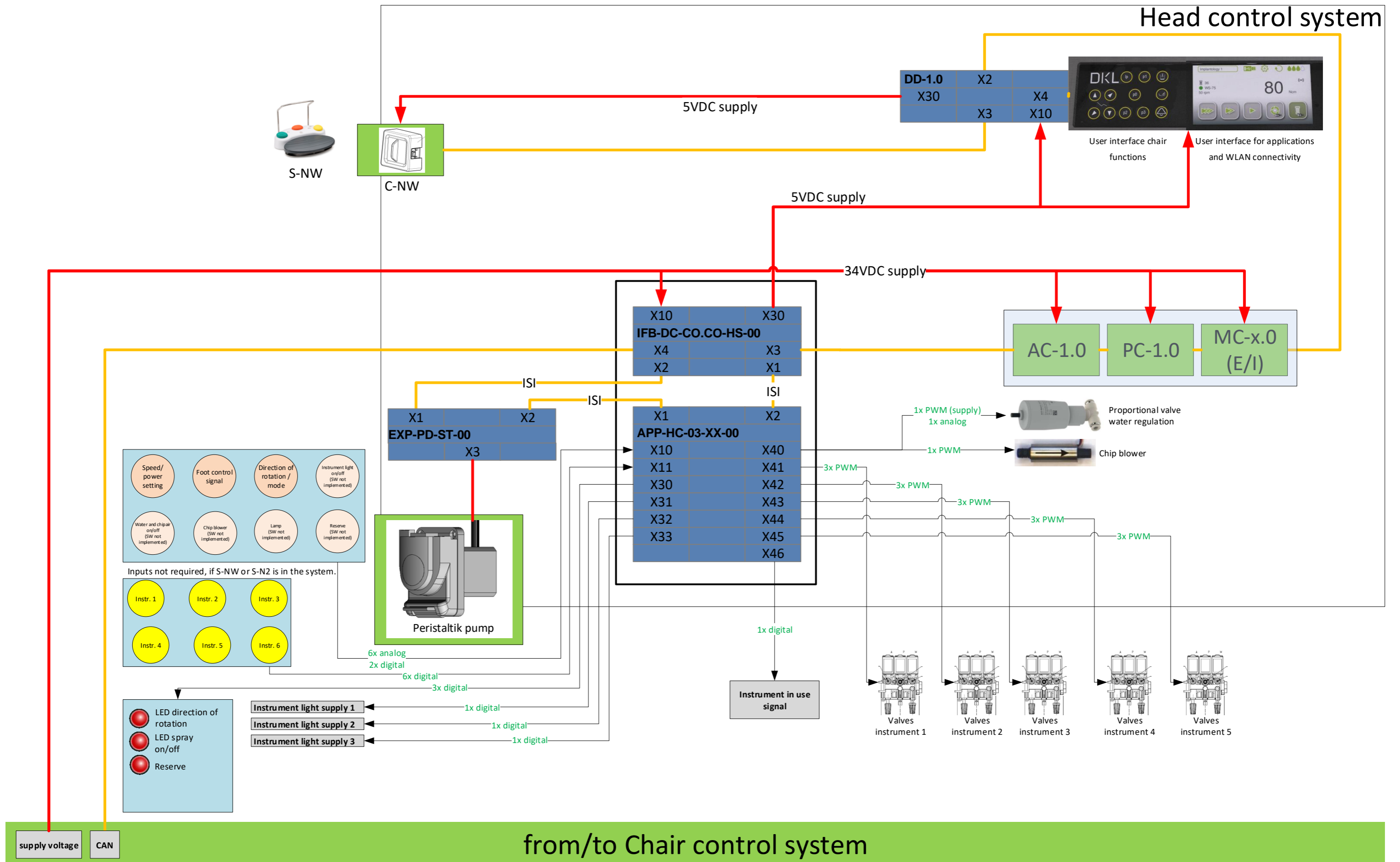
Inputs and outputs of EXP-CC-XX-00

ISI-Supply	Functional Inputs	Functional Outputs
X1 - ISI (OUT)	X15 - Input end switches track rail	X30 - Output relay track rail motor forward
1 +Vref (+5VDC)	1 +Vref (+5VDC)	1 +24VDC
2 CAN high	2 End switch front (feet)	2 Relay track rail motor forward (switched GND)
3 CAN low	3 +Vref (+5VDC)	
4 GND	4 End switch back (head)	X31 - Output relay track rail motor backward
		1 +24VDC
		Relay track rail motor backward (switched GND)
X2 - ISI (IN)	X16 - Input manual chair movement	X32 - Output relay lamp
1 +Vref (+5VDC)	1 +Vref (+5VDC)	1 +24VDC
2 CAN high	2 +Vref (+5VDC)	2 Relay lamp (switched GND)
3 CAN low	3 Chair up	
4 GND	4 Chair down	
	5 GND	
	6 GND	X33 - Output relay extern suction system
Functional Inputs	7 +Vref (+5VDC)	1 +24VDC
	8 +Vref (+5VDC)	2 Relay extern suction system (switched GND)
X10 - Input Movement lock switch swivel	9 Backrest up	
1 +Vref (+5VDC)	10 Backrest down	X34 - Output relay suction system separation (preparation) CS1/CAS1
2 GND	11 GND	1 +24VDC
Movement lock switch raise (Aushebeschutz) or Movement lock switch swivel (Schwenkarm)	12 GND	2 GND
3	13 +Vref (+5VDC)	
	14 Reserve (e.g. "Enter") Software will not be implemented in this project.	X35 - Output relay External component
X11 - Input Movement lock switch backrest		1 +24VDC
1 +Vref (+5VDC)	X17 - Input program buttons	Relay External component (e.g. bell/door opener) (switched GND)
2 GND	1 +Vref (+5VDC)	
3 Movement lock switch backrest (Lehne)	2 Program p3	X36 - Output relay Water separation
	3 +Vref (+5VDC)	1 +24VDC
X12 - Input Movement lock switch feet	4 Program p2	Relay Water separation (switched GND)
1 +Vref (+5VDC)	5 +Vref (+5VDC)	
2 GND	6 Program p1	
3 Movement lock switch feet (Fußteil)	7 +Vref (+5VDC)	X37 - Output main valves air/water
	8 Program lp	1 Valve flushing unit
	9 +Vref (+5VDC)	2 Main valve water
	10 Program p0	3 Main valve air
X13 - Input Movement lock switch seat / raise		2 GND
1 +Vref (+5VDC)	X18 - Input suction holders	X38 - Output valves Spittoon unit
2 GND	1 +Vref (+5VDC)	1 Valve cup filling
3 Movement lock switch seat (Sitz)	2 Suction holder 1	2 Valve bowl flushing
	3 +Vref (+5VDC)	3 Main suction selection valve
	4 Suction holder 2	4 GND
	5 +Vref (+5VDC)	
	6 Suction holder 3	X39 - Output valves suction selection
X14 - Input instrument in use		1 Suction selection valve 1
1 +Vref (+5VDC)	X19 - Input buttons spittoon unit	2 Suction selection valve 2
2 GND	1 +Vref (+5VDC)	3 Suction selection valve 3
3 Instrument in use	2 Button Cup filling	4 GND
	3 +Vref (+5VDC)	
	4 Button Bowl flushing	



Delivery system schematic

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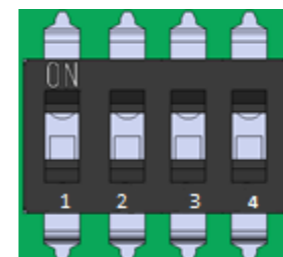
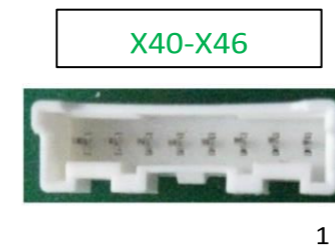
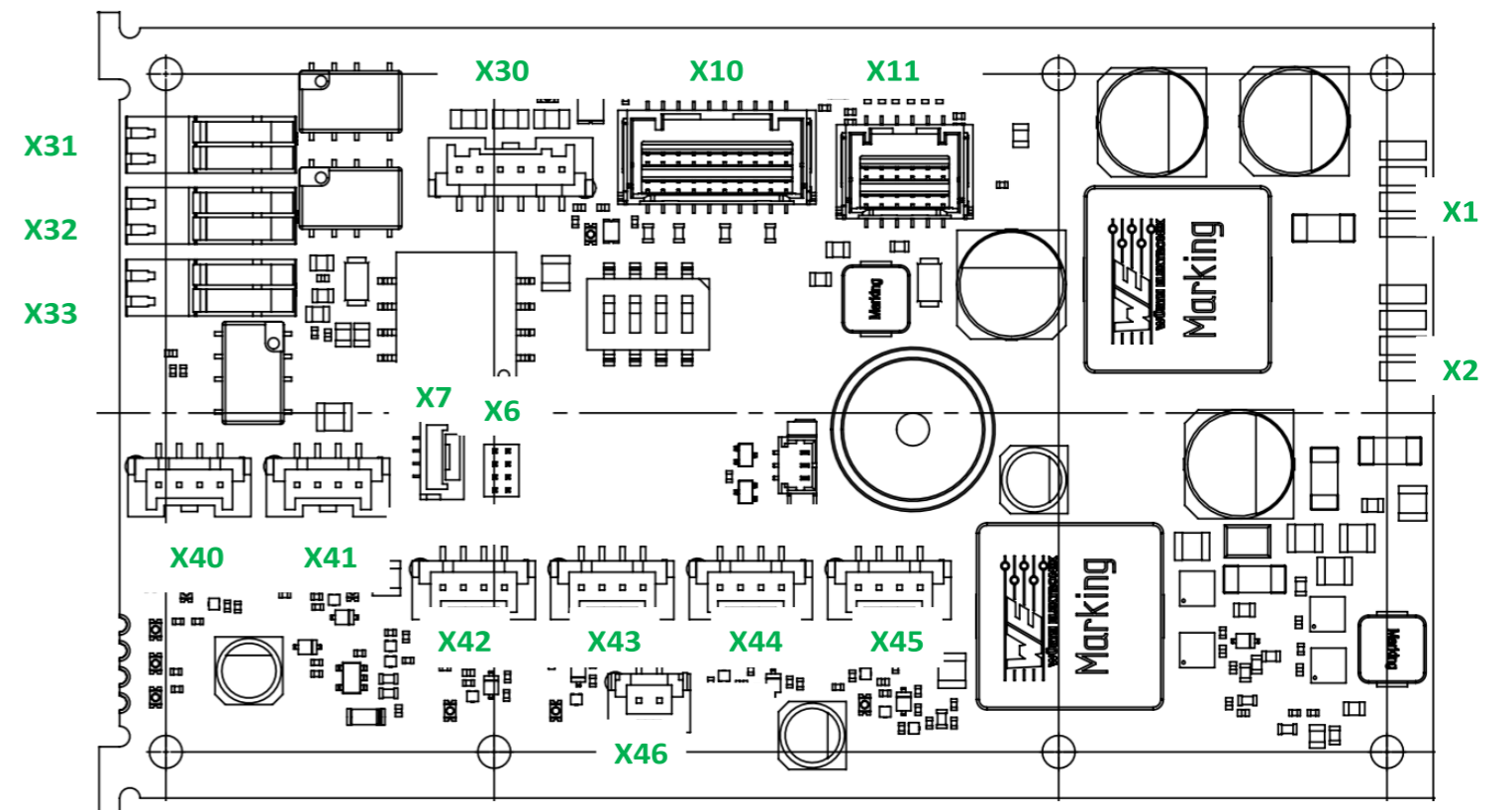
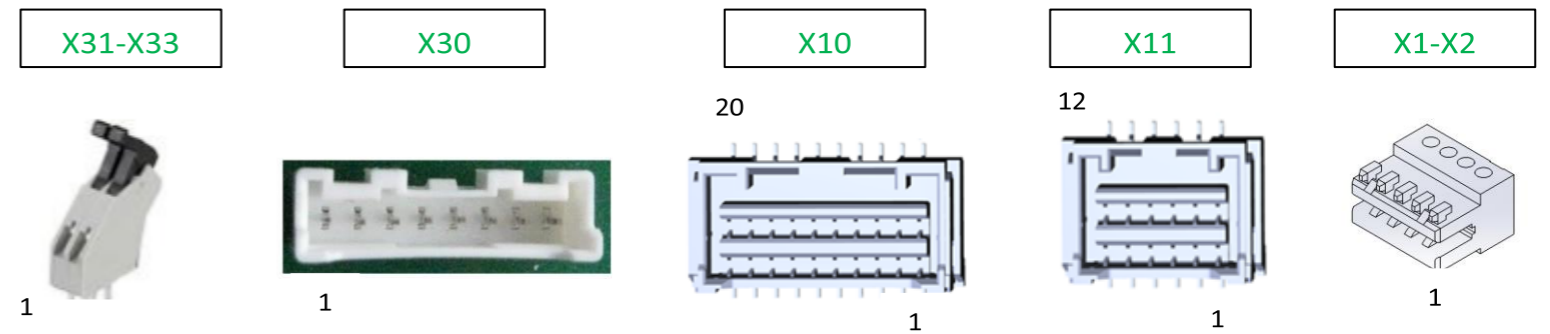


Delivery system information

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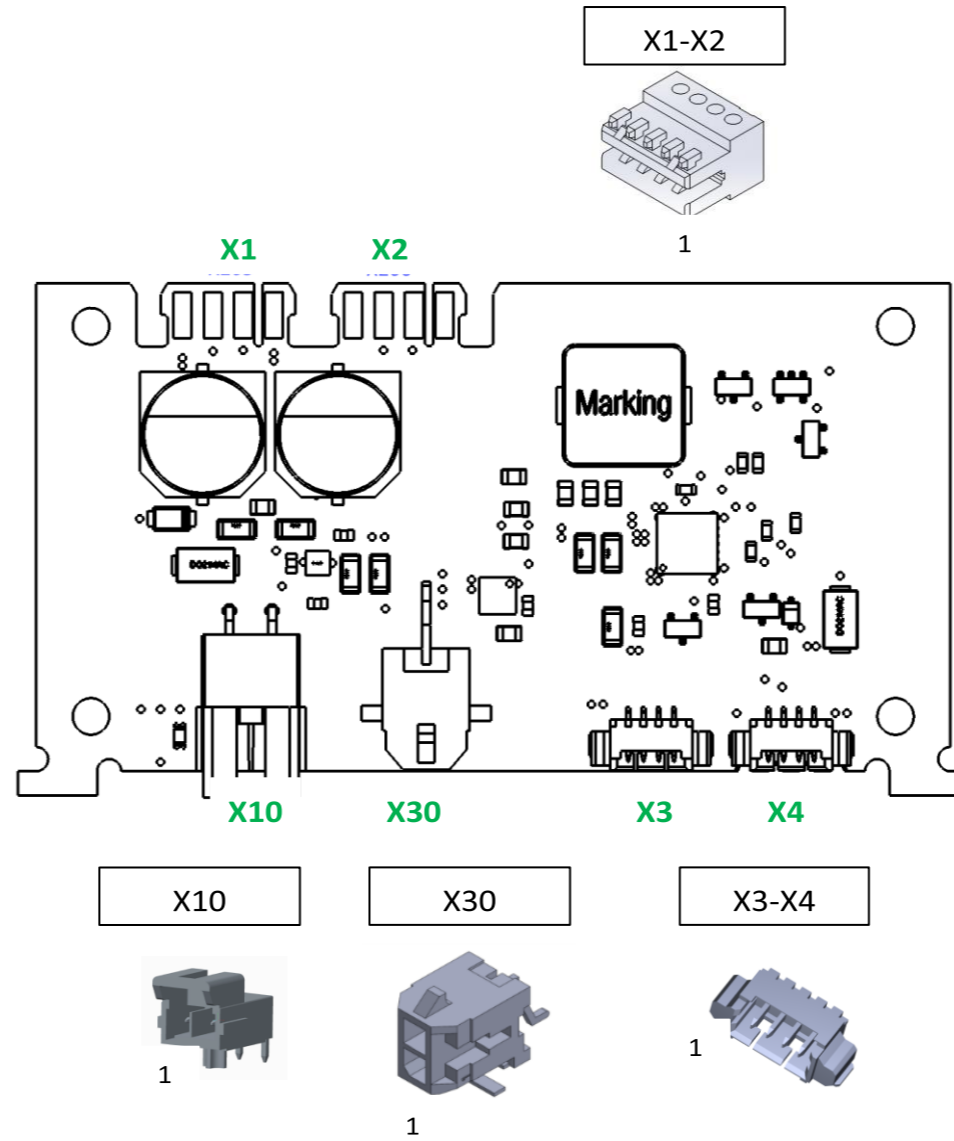
Inputs and outputs of APP-HC-03-XX-00

ISI-Supply	Functional Inputs	Functional Outputs
X1- ISI (OUT)		
1 V+(ISI)	X11- Input instrument holders	X40 - Output proportionate valves
2 CAN high	1 +Vref (+5VDC)	1 Proportional valve water regulation (0-10V)
3 CAN low	2 Instrument holder 1	2 Supply for proportional valve
4 GND	3 +Vref (+5VDC)	3 Chip blower
	4 Instrument holder 2	4 GND
	5 +Vref (+5VDC)	
X2 - ISI (IN)		
1 V+(ISI)	6 Instrument holder 3	X41- Output valve instruments (1)
2 CAN high	7 +Vref (+5VDC)	1 Chip air 1
3 CAN low	8 Instrument holder 4	2 Drive air / Cooling air 1
4 GND	9 +Vref (+5VDC)	3 Water 1
	10 Instrument holder 5	4 GND
	11 +Vref (+5VDC)	
	12 Instrument holder 6	
Functional Inputs		
X10 - Input analog/digital inputs		
1 +Vref (+5VDC)	Functional Outputs	X42 - Output valve instruments (2)
2 +Vref (+5VDC)		1 Chip air 2
3 Speed/power setting - optional		2 Drive air / Cooling air 2
4 Foot control signal - optional		3 Water 2
5 GND		4 GND
6 GND		
7 +Vref (+5VDC)		X43 - Output valve instruments (3)
8 +Vref (+5VDC)		1 Chip air 3
9 Direction of rotation / Mode setting - optional		2 Drive air / Cooling air 3
10 Instrument light on/off @W&H version		3 Water 3
Note: Software will not be implemented in this project.	4 GND	
11 GND	X44 - Output valve instruments (4)	
12 GND	1 Chip air 4	
13 +Vref (+5VDC)	2 Drive air / Cooling air 4	
14 +Vref (+5VDC)	3 Water 4	
15 Water and chipair on/off - optional	4 GND	
Note: Software will not be implemented in this project.		
16 chip blower - optional	X45 - Output valve instruments (5)	
Note: Software will not be implemented in this project.	1 Chip air 5	
17 GND	2 Drive air / Cooling air 5	
18 GND	3 Water 5	
19 Lamp - optional	4 GND	
Note: Software will not be implemented in this project.		
20 Reserve - optional	X46 - Output Instrument in use	
Note: Software will not be implemented in this project.	1 Instrument in use	
	2 GND	

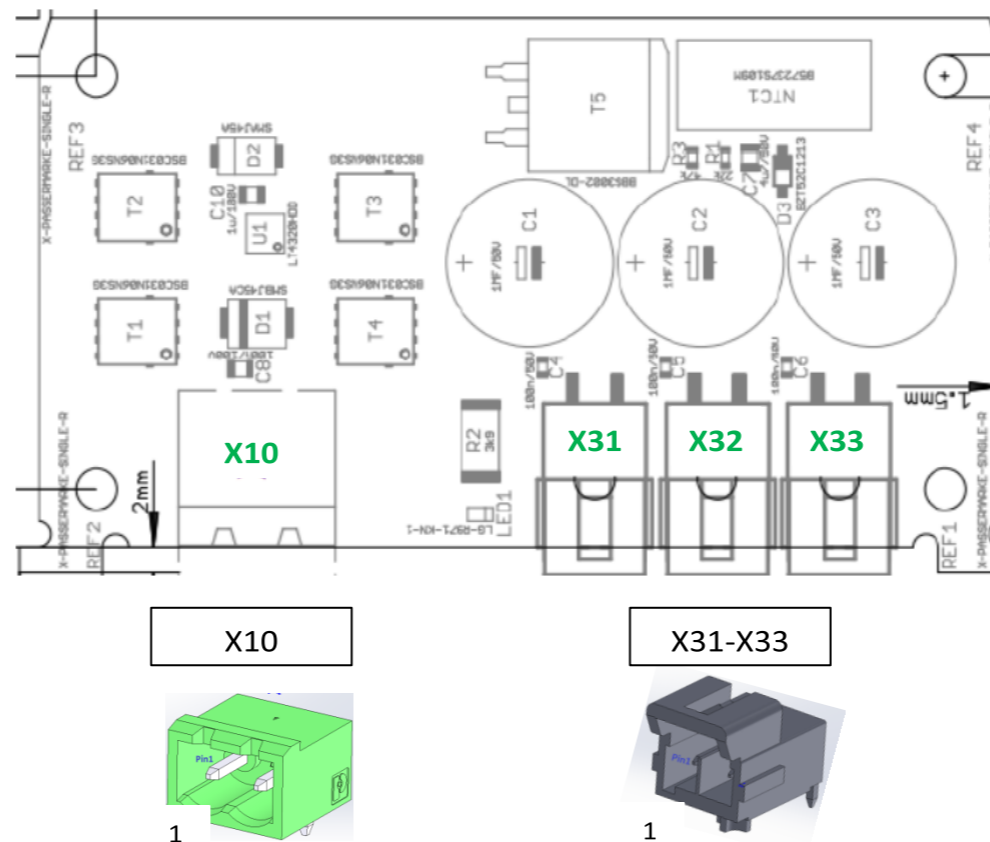


Pos	on	off
1	Master	Slave
2	Water and air way testing mode	-
3	-	-
4	-	-

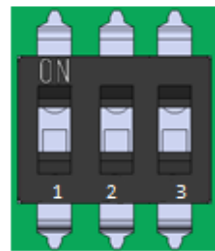
IFB-DC-CO.CO-HS-00	
Supply	Communication
X10 - Power supply input	X3 - CAN
1 +34VDC	1 CAN high
2 GND	2 CAN low
	3
	4
ISI-Supply	X4 - CAN
X1 - ISI (OUT)	1 CAN high
1 V+(ISI)	2 CAN low
2 CAN high	3
3 CAN low	4
4 GND	
X2 - ISI (IN)	Outputs
1 V+(ISI)	X30 - Power supply output
2 CAN high	1 +5VDC
3 CAN low	2 GND
4 GND	



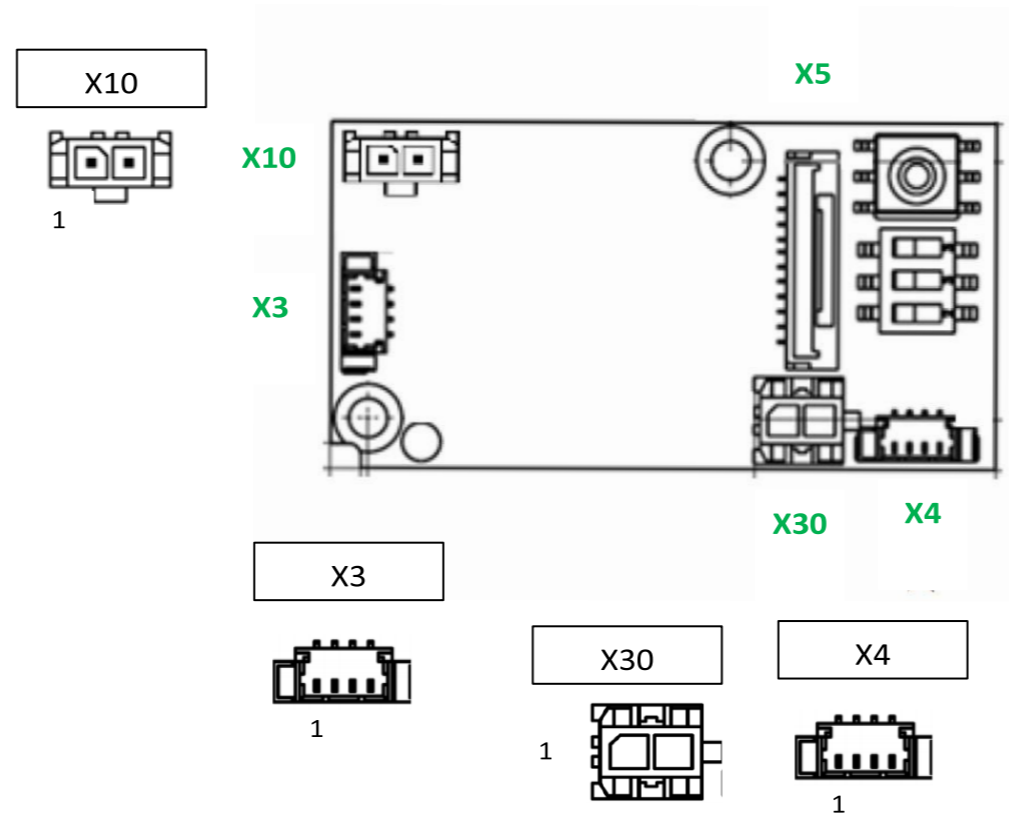
RFB-03-0200-00	
Supply	Outputs
X10 - Power supply input	X31 - Power supply output
1 VAC1	1 +34VDC
2 VAC2	2 GND
	X32 - Power supply output
	1 +34VDC
	2 GND
	X33 - Power supply output
	1 +34VDC
	2 GND



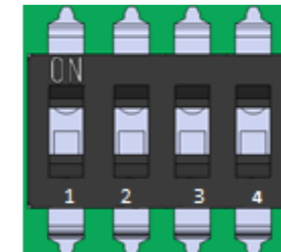
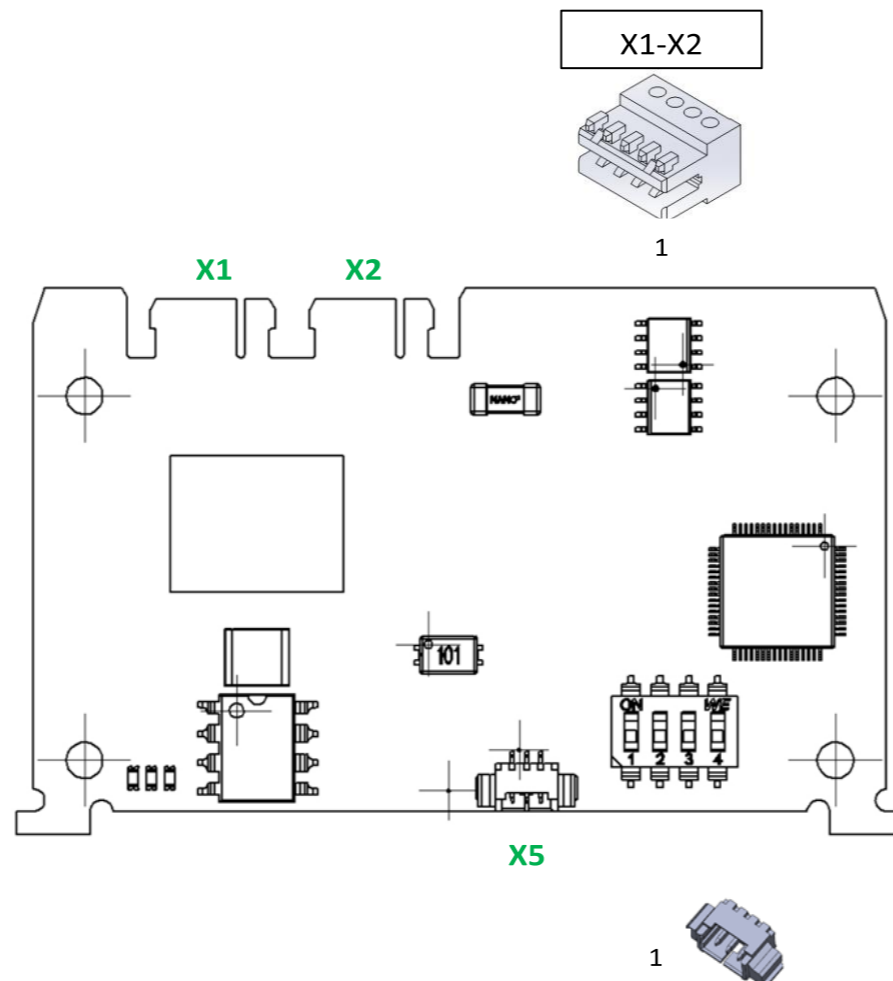
DD-1.0	
Supply	Communication
X10 - Power supply input	X3 - CAN
1 +Vref (+5VDC)	1 CAN high
2 GND	2 CAN low
	3
	4
Outputs	
X30 - Power supply output	X4 - CAN
1 +Vref (+5VDC)	1 CAN high
2 GND	2 CAN low
	3
	4
	X5 - UART
	1 UART TX
	2 UART RX
	3 GND



Pos	on	off
1	Master	Slave
2		
3		



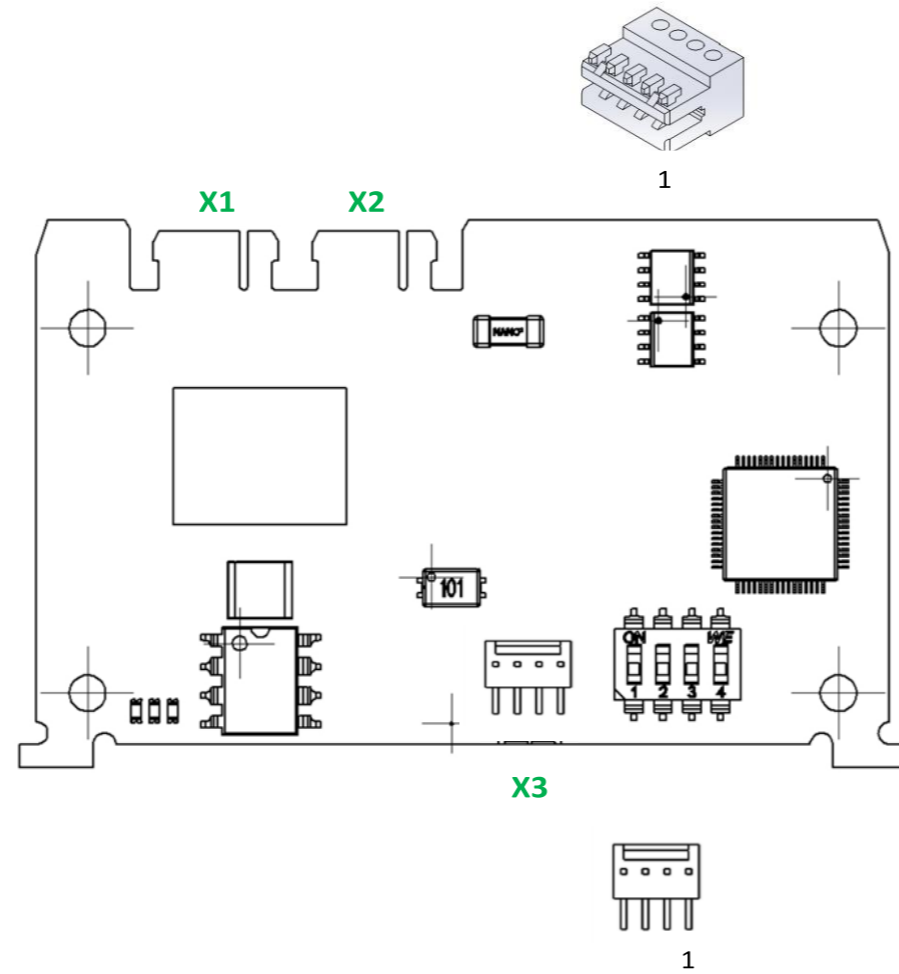
EXP-IC-FC-C01	
ISI-Supply	Communication
X1 - ISI (OUT)	X5 - CAN
1 V+(ISI)	1 CANH
2 CAN high	2 CANL
3 CAN low	3 GND
4 GND	
X2 - ISI (IN)	
1 V+(ISI)	
2 CAN high	
3 CAN low	
4 GND	



Pos	on	off
1	Master	Slave
2	Motor Combination 1	-
3	Motor Combination 2	-
4	Motor Combination 3	-

Motor Combination 1: Lift-Motor: S95-100643356 Backrest-Motor: S80-100643524
Motor Combination 2: Lift-Motor: S95-100643357 Backrest-Motor: S80-100643524
Motor Combination 3: Lift-Motor: S95-100643355 Backrest-Motor: SL56-100643340

EXP-PD-ST-00	
ISI-Supply	Output
- ISI (OUT)	X3 - Motor
V+(ISI)	1 Coil A+ (black)
CAN high	2 Coil A- (green)
CAN low	3 Coil B+ (red)
GND	3 Coil B- (blue)
- ISI (IN)	
V+(ISI)	
CAN high	
CAN low	
GND	



Wiring Track Rail Motor

