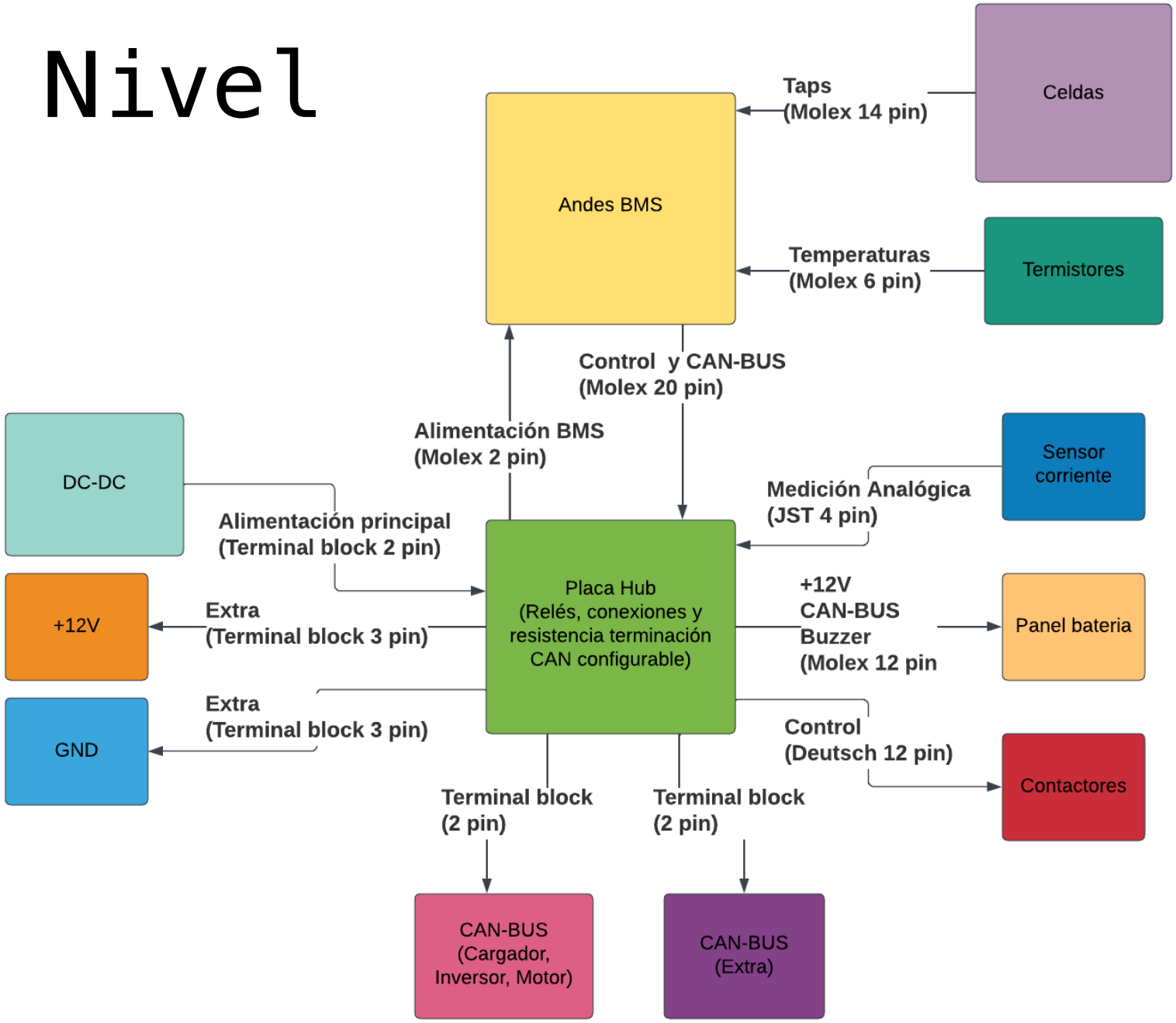
Diagramas Andes Environment

1.0.0

Alto Nivel


Andes BMS
Taps
(Molex 14 pin)
Celdas
Temperaturas
(Molex 6 pin)
Termistores
Control y CAN-BUS
(Molex 20 pin)
Alimentación BMS
(Molex 2 pin)
DC-DC
Alimentación principal
(Terminal block 2 pin)
Sensor corriente
Medición Analógica
(JST 4 pin)
Placa Hub
(Relés, conexiones y resistencia terminación CAN configurable)
+12V
Extra
(Terminal block 3 pin)
+12V
CAN-BUS
Buzzer
(Molex 12 pin
Panel bateria
GND
Extra
(Terminal block 3 pin)
Control
(Deutsch 12 pin)
Contactores
Terminal block
(2 pin)
Terminal block
(2 pin)
CAN-BUS
(Cargador,
Inversor, Motor)
CAN-BUS
(Extra)

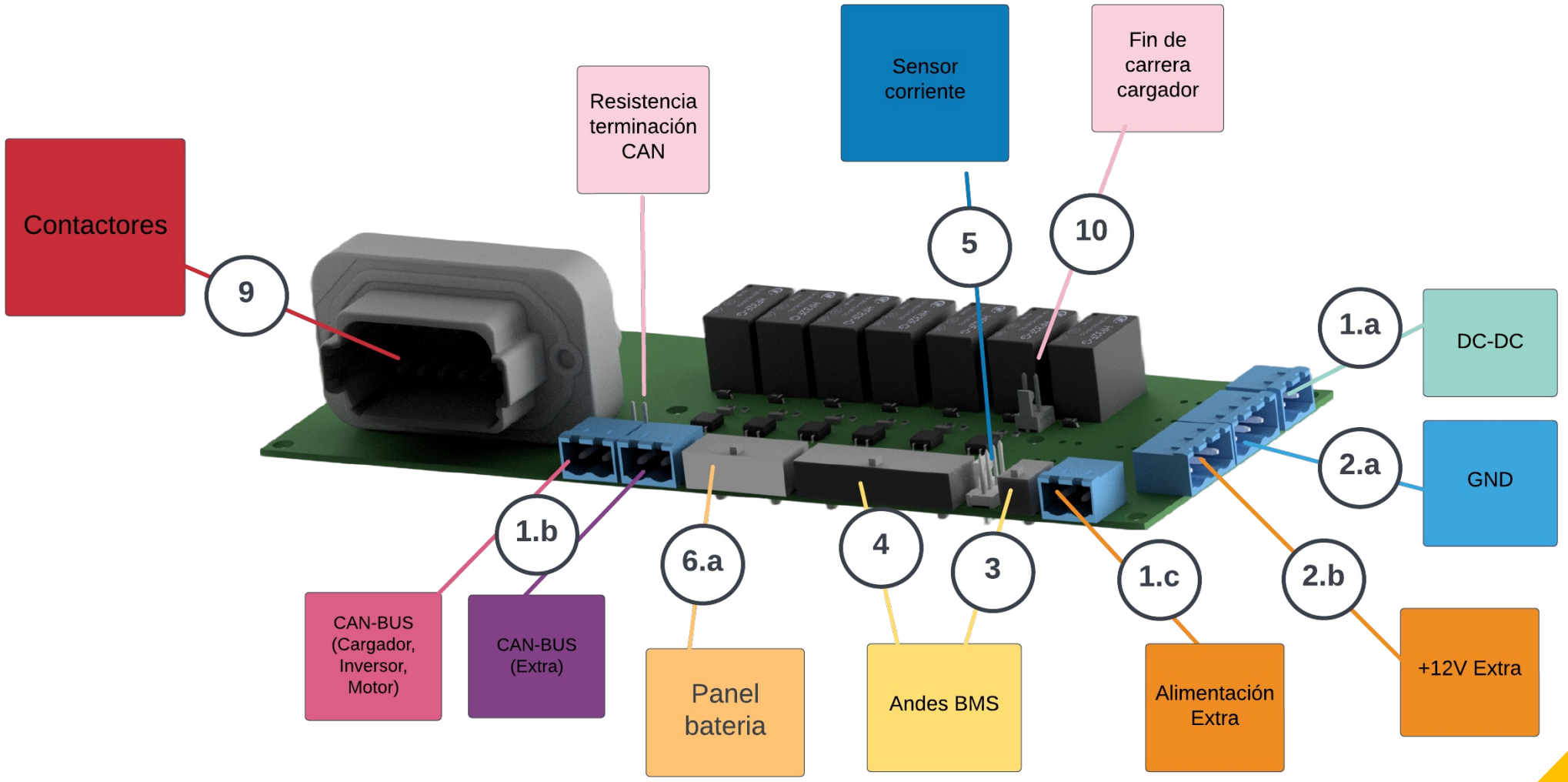
Alto Nivel

- Los colores del diagrama anterior se extienden a los siguientes, como indicador de las conexiones entre los componentes involucrados.

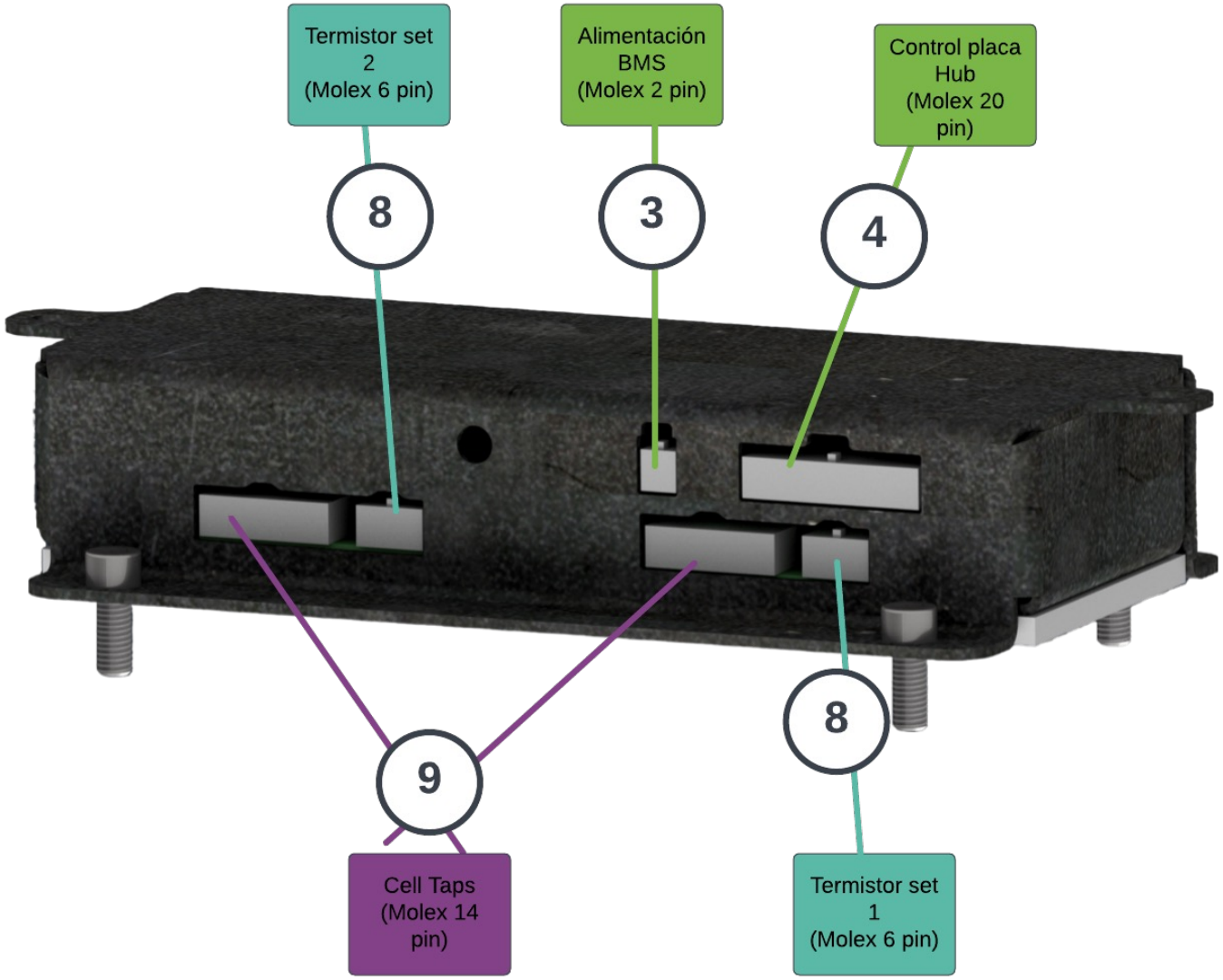
Dispositivos

- Los diagramas a continuación resumen los dispositivos pertenciencientes al entorno Andes Electronics y sus conexiones específicas.
- Se incluye en cada conexión una viñeta enumerada para la posterior identificación de su pinout.

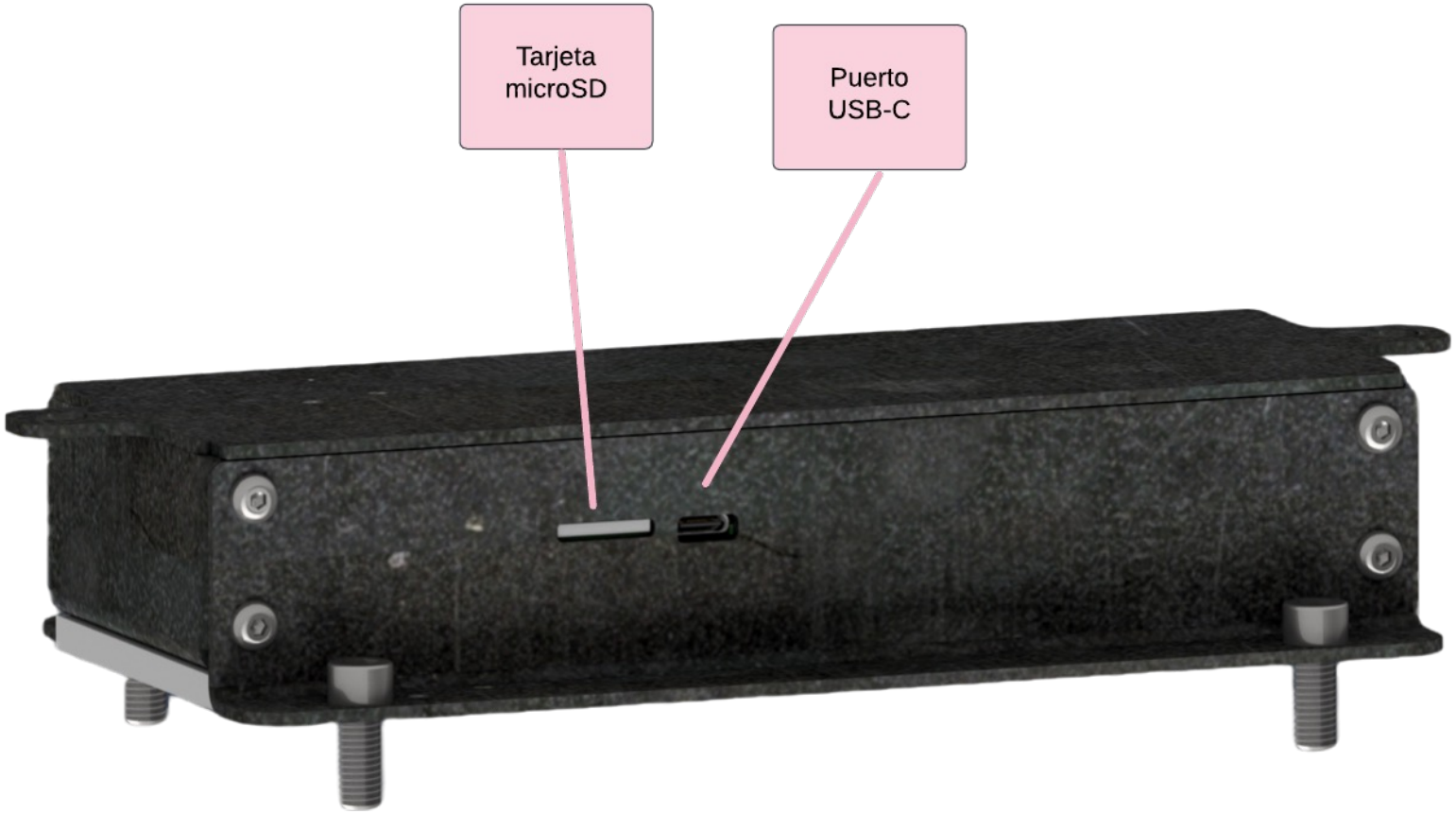
Placa HUB


Contactores
9
Resistencia terminación CAN
Sensor corriente
5
Fin de carrera cargador
10
1.a
DC-DC
2.a
GND
1.b
CAN-BUS (Cargador, Inversor, Motor)
CAN-BUS (Extra)
6.a
Panel bateria
4
Andes BMS
3
1.c
Alimentación Extra
2.b
+12V Extra

Frente BMS

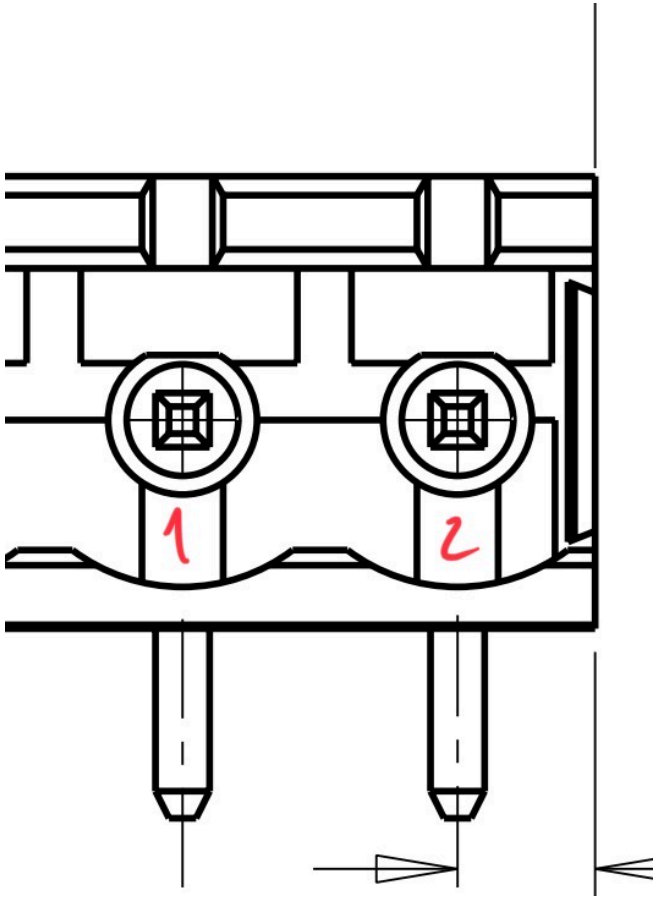

Termistor set 2 (Molex 6 pin)
Alimentación BMS (Molex 2 pin)
Control placa Hub (Molex 20 pin)
8
3
4
9
8
Cell Taps (Molex 14 pin)
Termistor set 1 (Molex 6 pin)

Reverso BMS



(1.a) Terminal block 2 pin

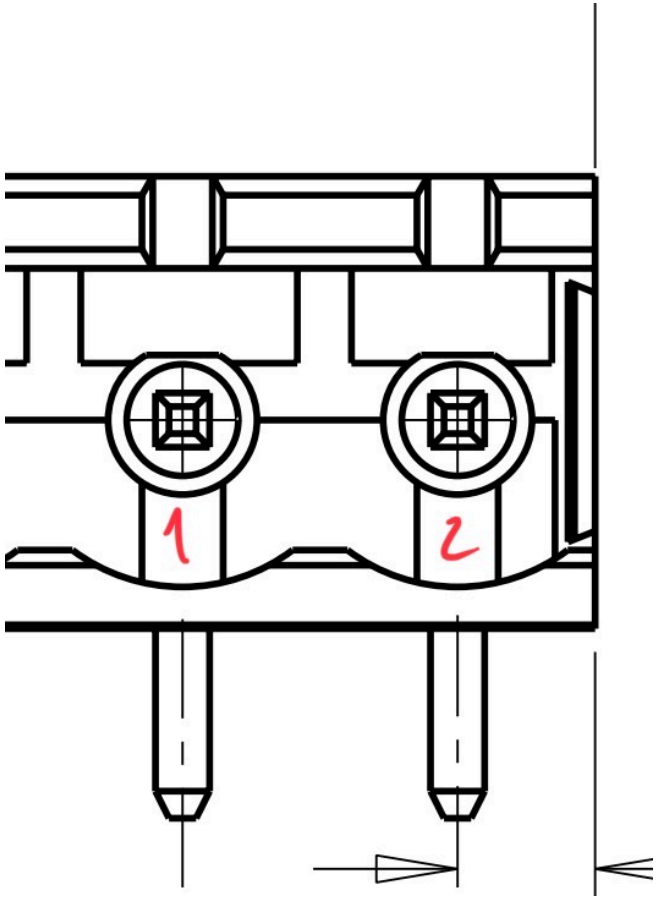
- Alimentación placa HUB



Pin	Función
1	+12V
2	GND

(1.b) Terminal block 2 pin

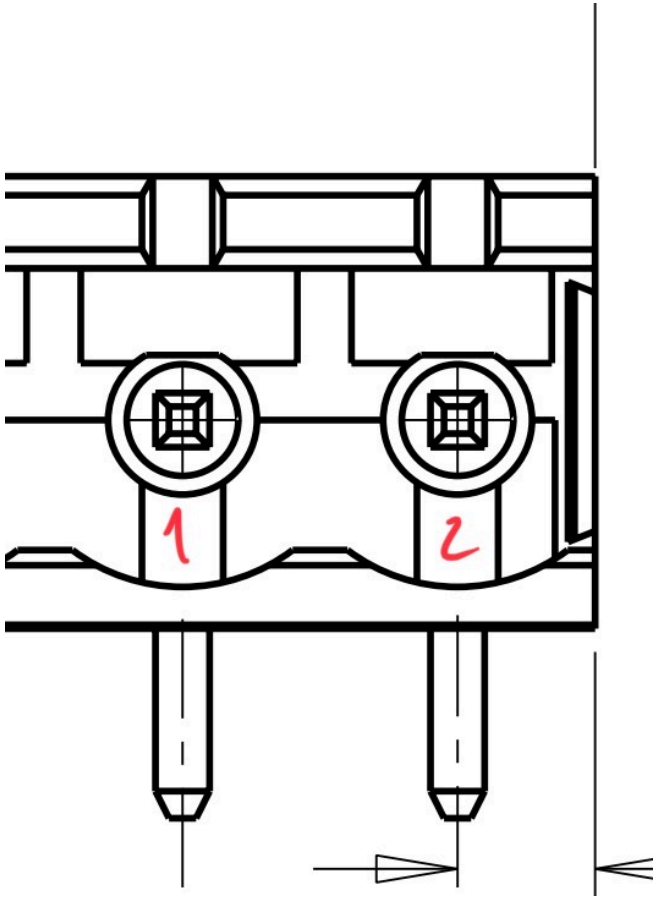
- CAN-BUS placa HUB



Pin	Función
1	CAN-H
2	CAN-L

(1.c) Terminal block 2 pin

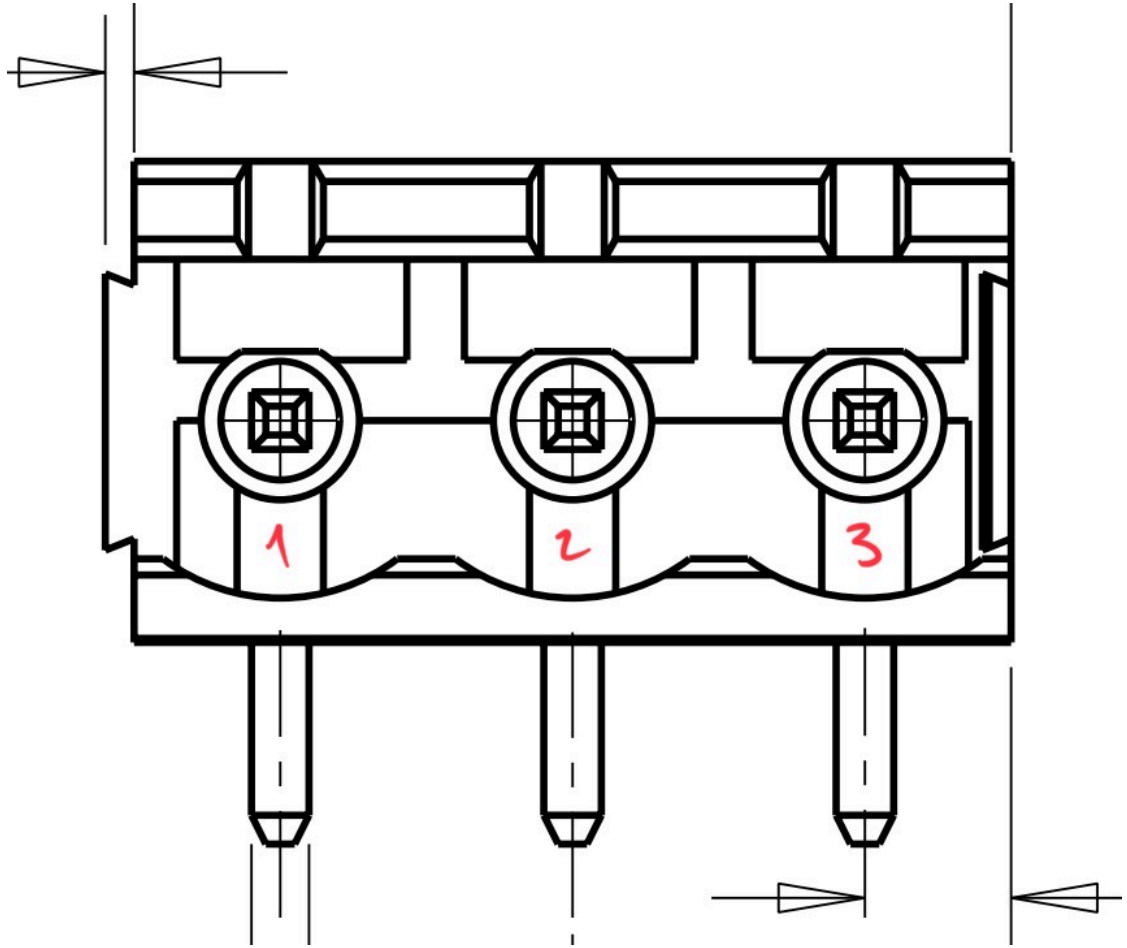
- Alimentación de salida placa HUB



Pin	Función
1	+12V
2	GND

(2.a) Terminal block 3 pin

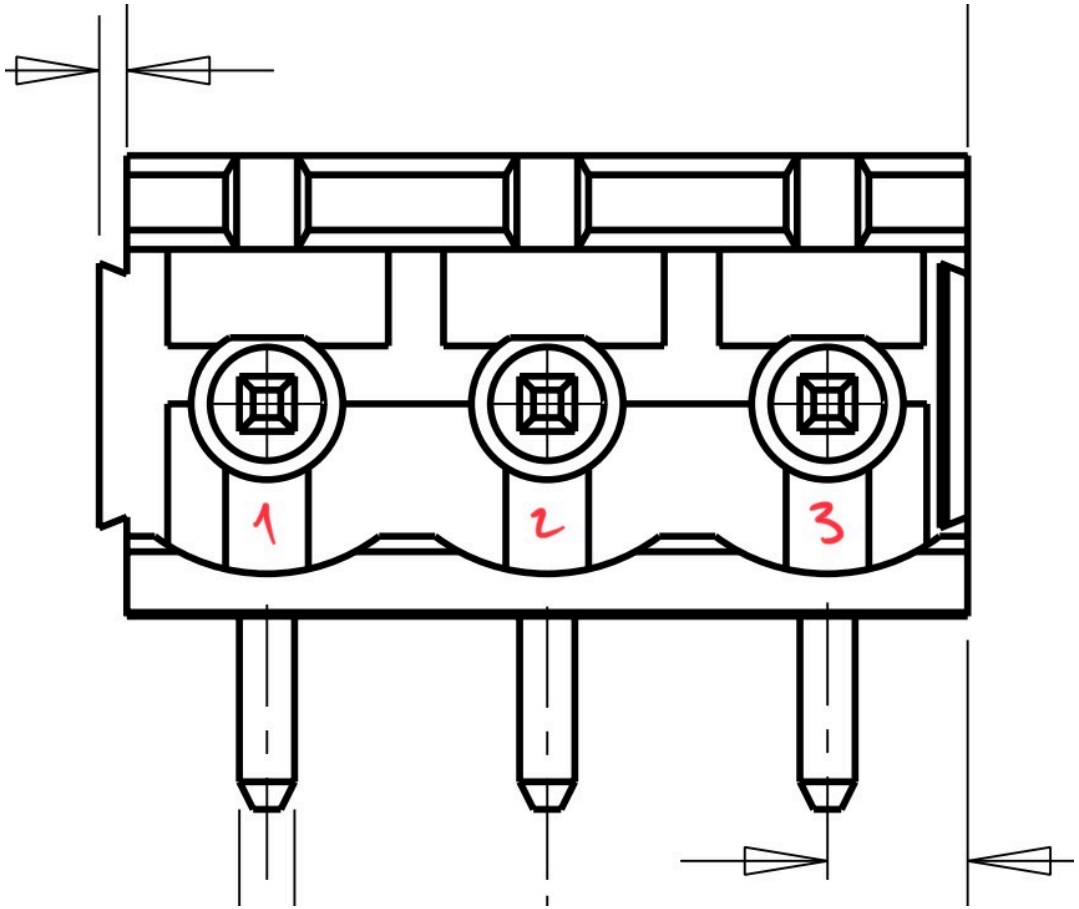
- Puerto GND placa HUB



Pin	Función
1	GND
2	GND
3	GND

(2.b) Terminal block 3 pin

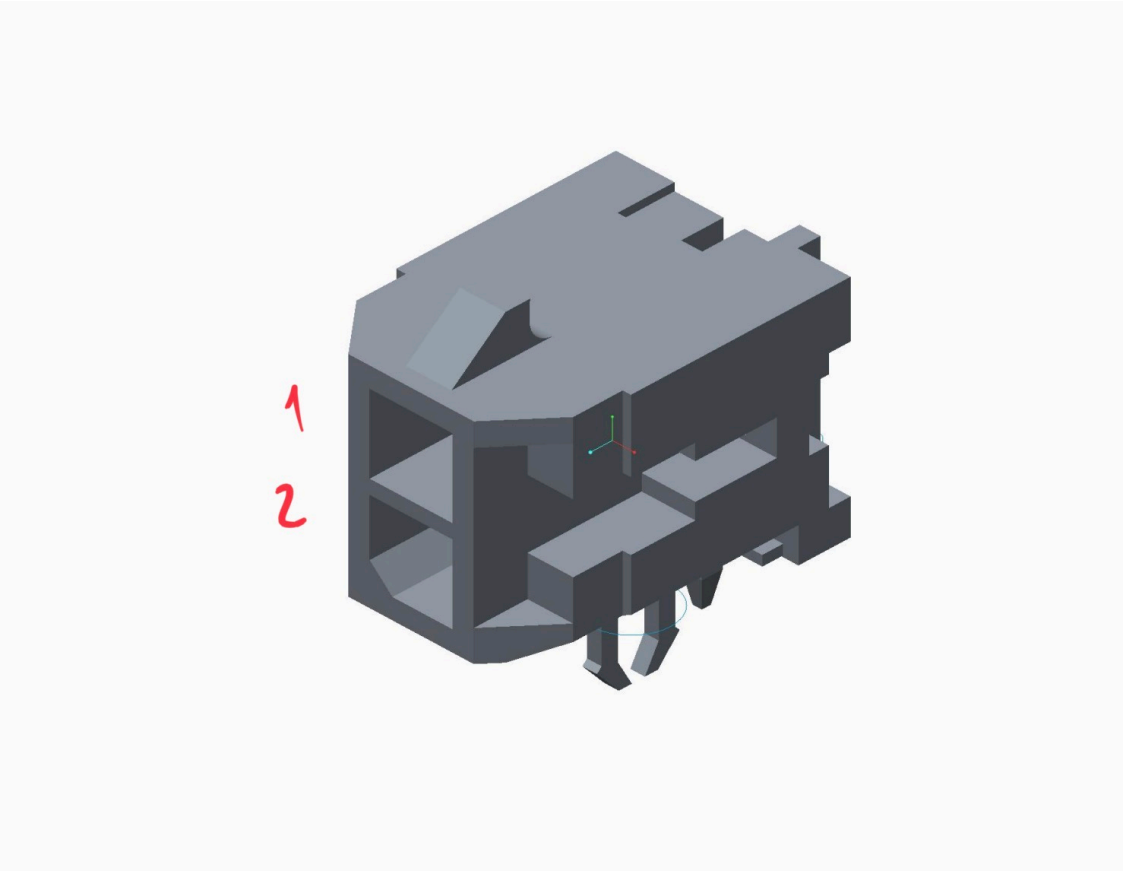
- Puerto +12V placa HUB



Pin	Función
1	+12V
2	+12V
3	+12V

(3) Alimentación BMS

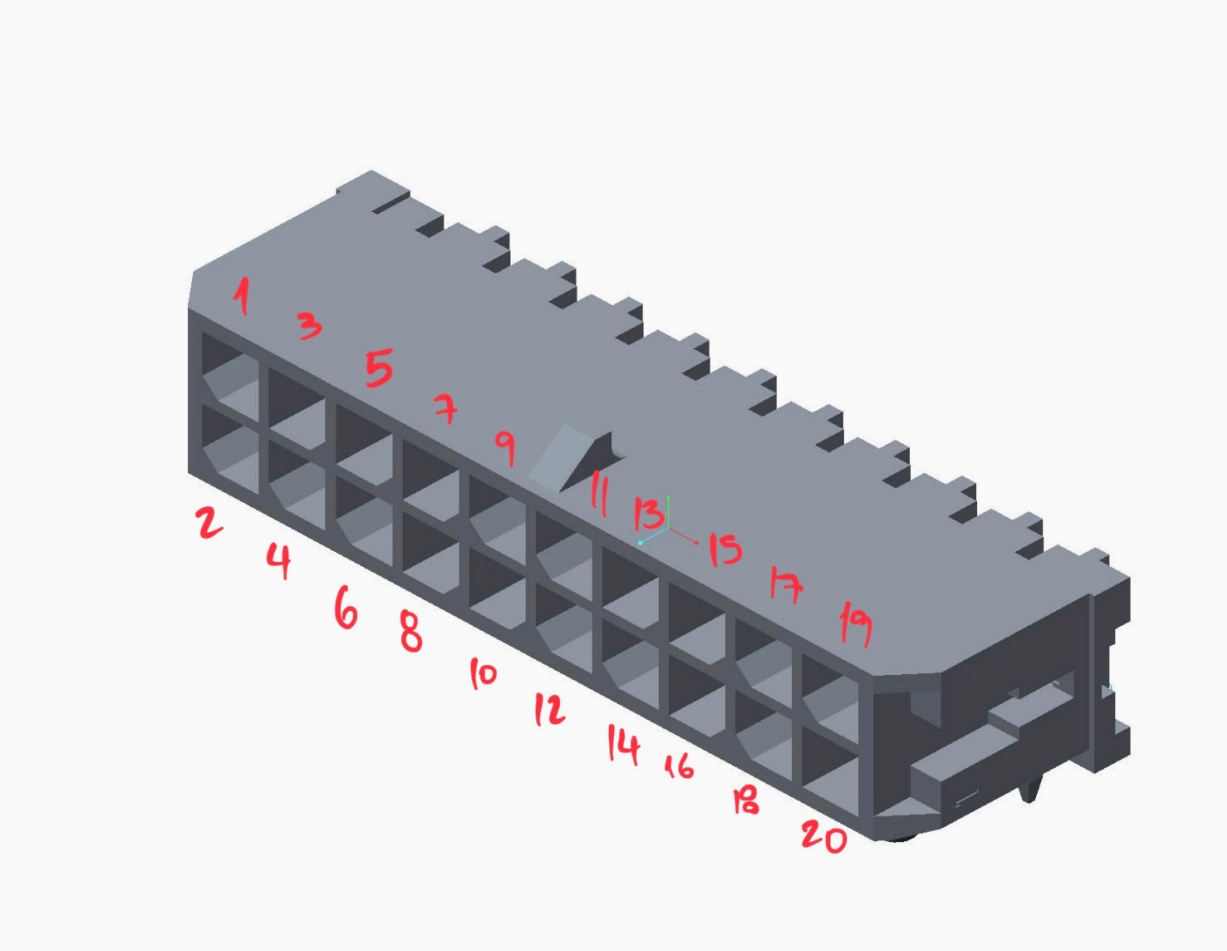
- Molex 2 pin



Pin	Función
1	+12V
2	GND

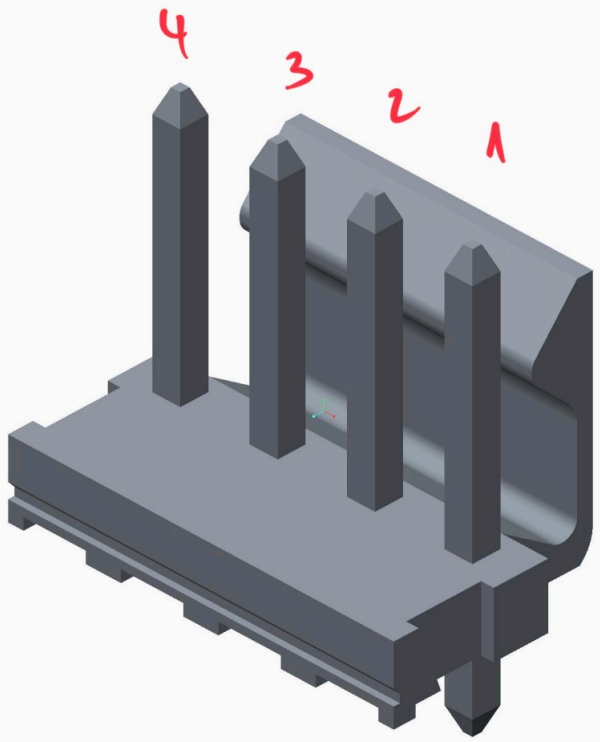
(4) Control BMS

- Molex 20 pin



Pin	Función
1	CAN-H
2	CAN-L
3	NC
4	NC
5	NC
6	GND
7	MPIO_2
8	GND
9	MPIO_1
10	GND
11	SAFETY
12	GND
13	DISCHARG
14	GND
15	CHARGE
16	GND
17	SENSOR_REF
18	GND_SENSOR
19	+5V_SENSOR
20	MEASURE

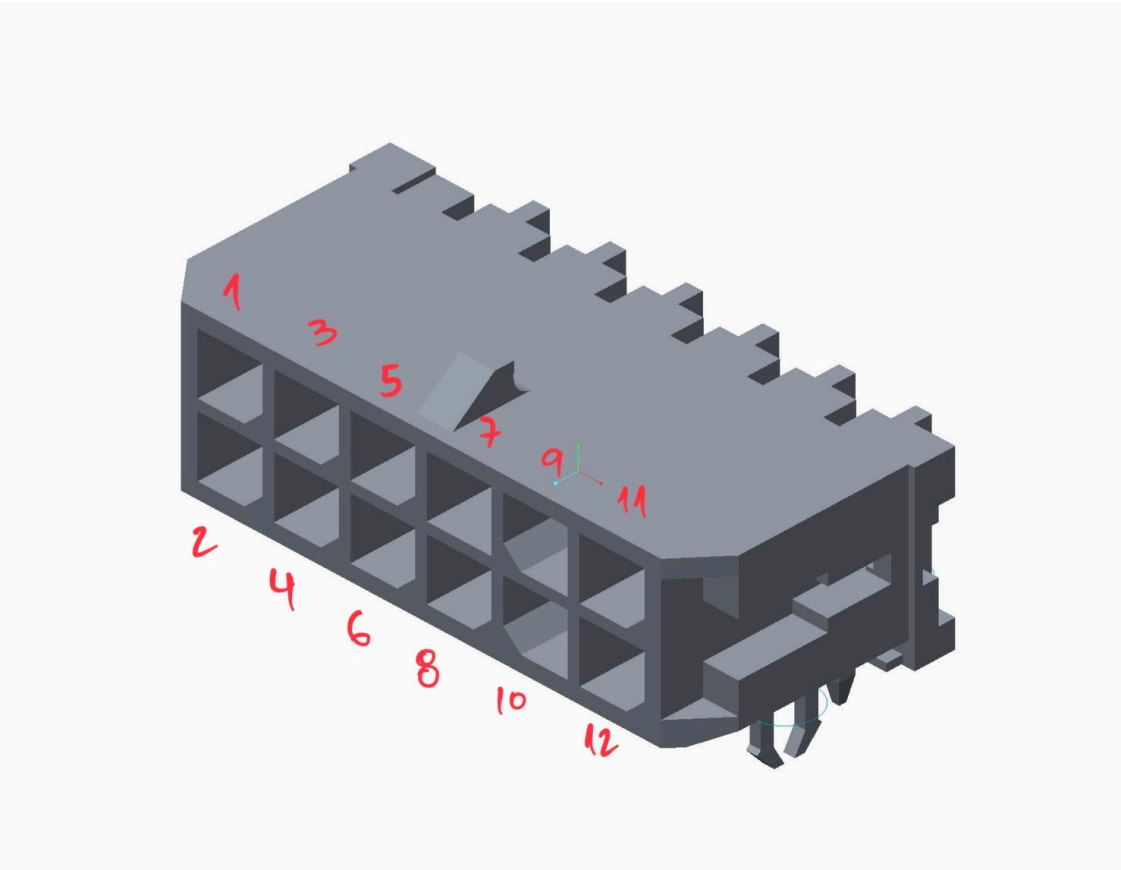
(5) Sensor de corriente



Pin	Función
1	+5V
2	MEASURE
3	GND
4	N.C

(6.a) Panel cajón

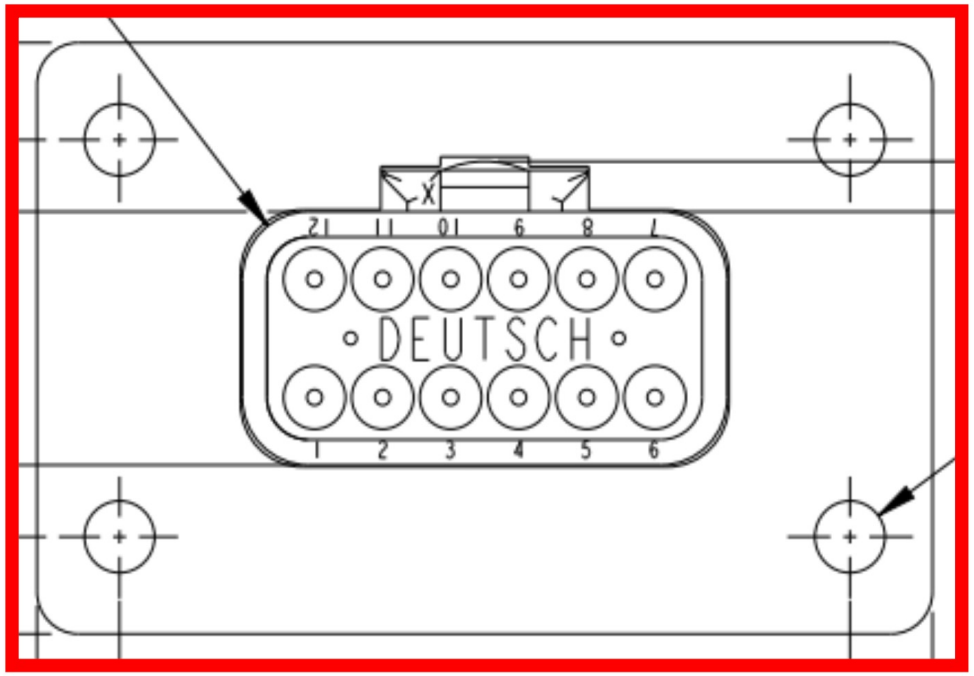
- Molex 12 pin



Pin	Función
1	+12V
2	CAN-H
3	+_BUZZER
4	CAN-L
5	GND
6	NC
7	NC
8	NC
9	NC
10	NC
11	NC
12	NC

(6.b) Panel cajón

- (CONFIRMAR CON R.A)



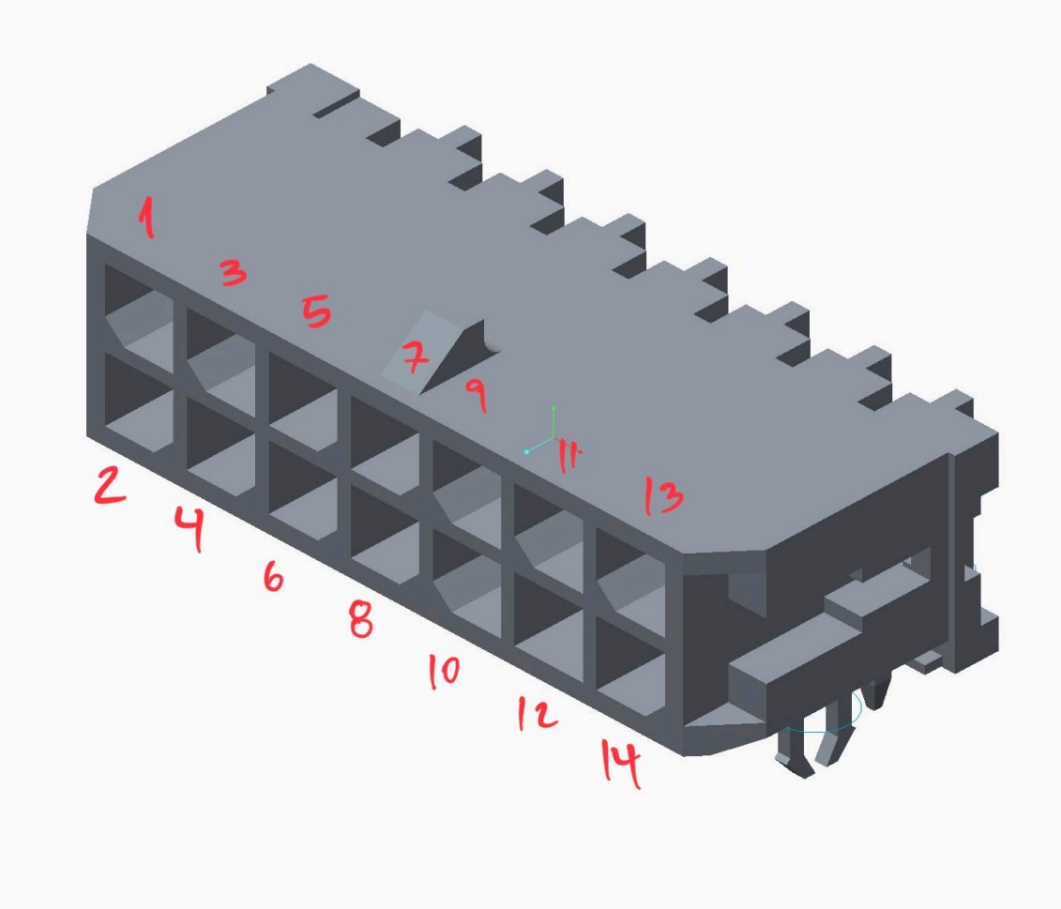
Pin	Functión
1	+12V
2	NC
3	GND
4	NC
5	NC
6	NC
7	+_BUZZ
8	NC
9	NC
10	NC
11	CAN-L
12	CAN-H

Equivalencia (6.a)/(6.b)

6.a	6.b	Función
1	1	+12V
2	12	CAN-H
3	7	+_BUZZER
4	11	CAN-L
5	3	GND
6	10	NC
7	4	NC
8	9	NC
9	5	NC
10	8	NC
11	7	NC
12	6	NC

(7) Cell Taps

- Molex 14 pin

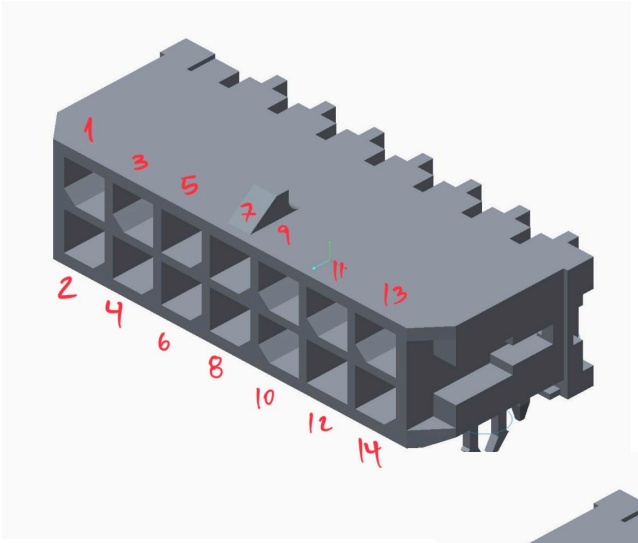


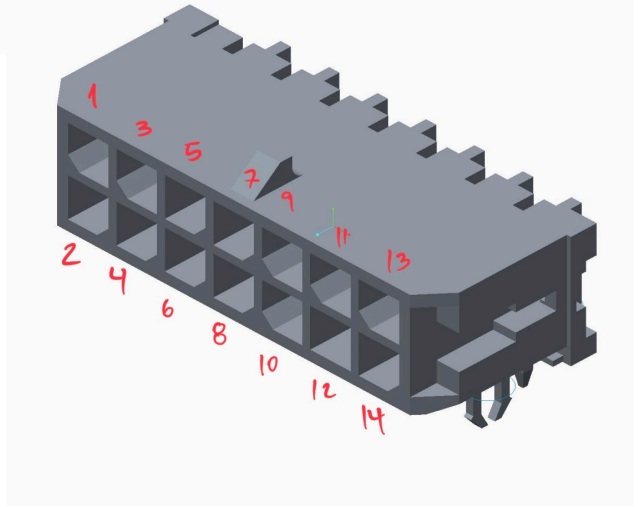
Pin	Función
1	Tap_12
2	Tap_6
3	Tap_11
4	Tap_5
5	Tap_10
6	Tap_4
7	Tap_9
8	Tap_3
9	Tap_8
10	Tap_2
11	Tap_7
12	Tap_1
13	Tap_-7
14	Tap_-1

Función	Pin
Tap_-1	14
Tap_1	12
Tap_2	10
Tap_3	8
Tap_4	6
Tap_5	4
Tap_6	2
Tap_-7	13
Tap_7	11
Tap_8	9
Tap_9	7
Tap_10	5
Tap_11	3
Tap_12	12

(7) Cell Taps

- Molex 14 pin



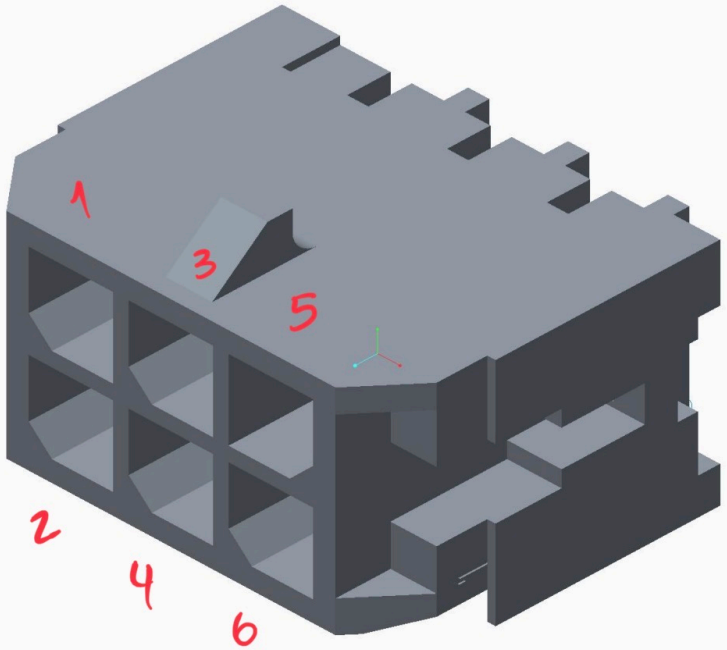


Pin	Función
1	Tap_12
2	Tap_6
3	Tap_11
4	Tap_5
5	Tap_10
6	Tap_4
7	Tap_9
8	Tap_3
9	Tap_8
10	Tap_2
11	Tap_7
12	Tap_1
13	Tap_-7
14	Tap_-1

Función	Pin
Tap_-1	14
Tap_1	12
Tap_2	10
Tap_3	8
Tap_4	6
Tap_5	4
Tap_6	2
Tap_-7	13
Tap_7	11
Tap_8	9
Tap_9	7
Tap_10	5
Tap_11	3
Tap_12	12

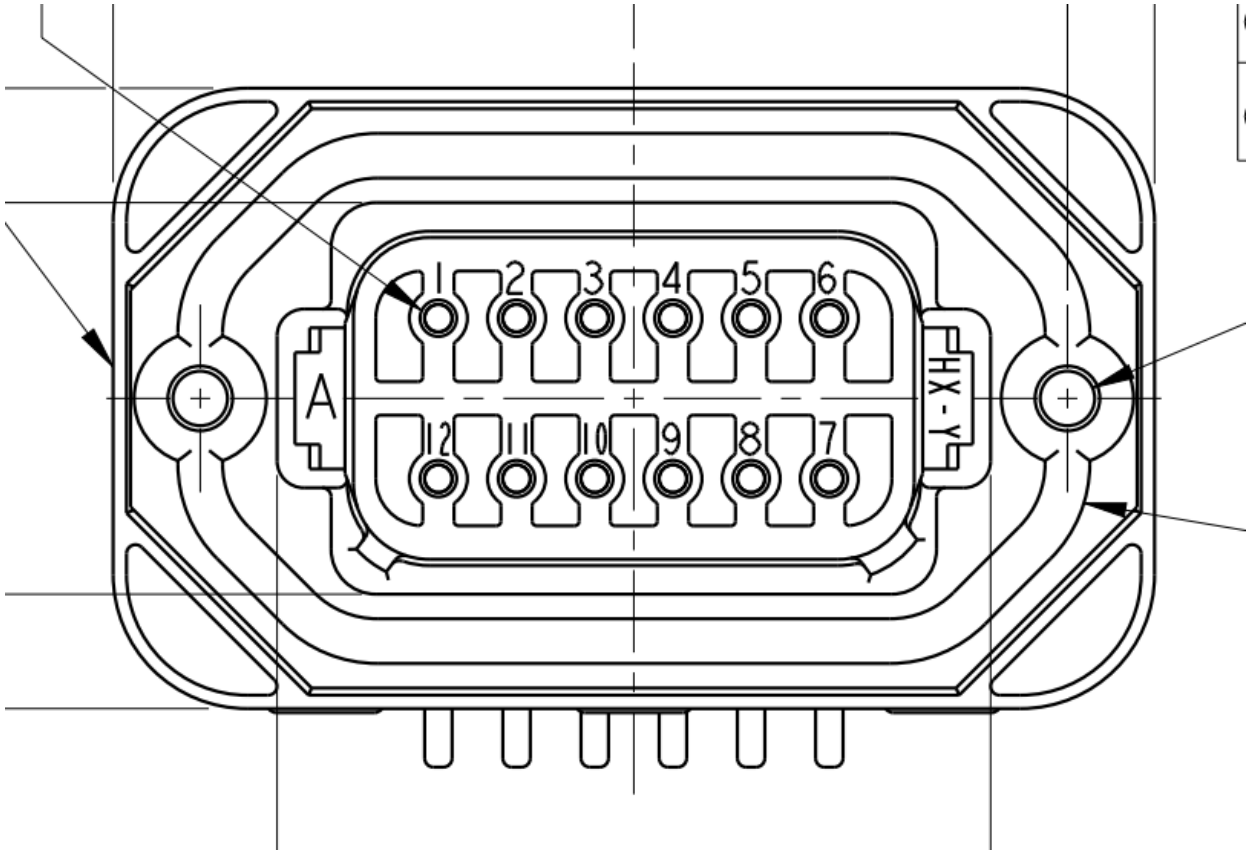
(8) Termistores

- Molex 6 pin



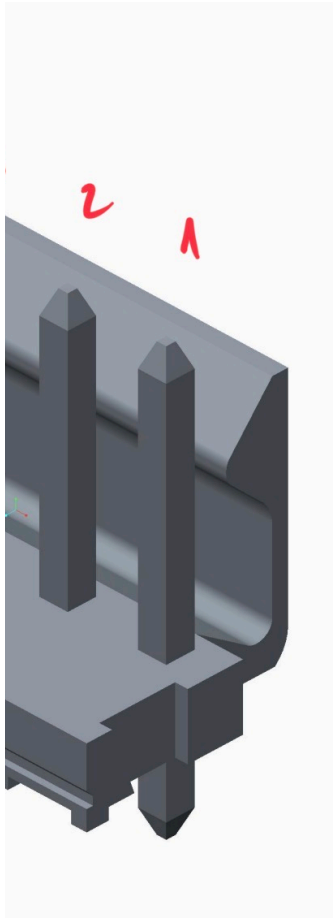
Pin	Función
1	Termistor 1_A
2	Termistor 1_B
3	Termistor 2_A
4	Termistor 2_B
5	Termistor 3_A
6	Termistor 3_B

(9) Contactores



Pin	Función
1	Descarga
2	Aux Carga
3	Carga
4	GP3_NORM_OPEN
5	GP3_COM
6	GP3_NORM_CLOSED
7	GND
8	GND
9	GND
10	GP3_NORM_CLOSE
11	GP2_COM
12	GP3_NORM_OPEN

(10) Fin carrera



Pin	Función
1	EOR_A
2	EOR_B

Diagramas Andes Environment

1.0.0