

Tesla Model 3 Power Conversion System Controller V2 connector pinout

The controller requires two Molex plugs and pins. One 20 Way plug is used for connecting to the Vehicle and the other 12 way is used for connecting to the PCS.

20 Way plug p/n :33472-2001

12 Way plug p/n:33472-1236

Pin p/n:33012-2002

20 way plug pinout (To Vehicle) :

1	-	Ground
2	-	12V Permanent supply
3	-	Output 1
4	-	Output 2
5	-	Input 1
6	-	Input 2
7	-	EVSE Control Pilot (CP)
8	-	EVSE Proximity (PP)
9	-	CAN Low
10	-	CAN High
11	-	CAN Ground
12	-	Not used
13	-	Not used
14	-	Not used
15	-	Not used
16	-	Not used
17	-	Not used
18	-	Not used
19	-	Not used
20	-	Analog input (optional)

12 way plug pinout (To power conversion system connector X420) :

X420 is a TE 12 way connector used for data connection to the pcs.

Part number :1379662-5

Pins : 1801069-2

1	-	Ground	-W21	X420 pin 12
2	-	12V	-not used	
3	-	5V	-W20	X420 pin 1
4	-	IPC CAN Tx	-W06	X420 pin 2
5	-	IPC CAN Rx	-W05	X420 pin 3
6	-	PCS Enable	-W02	X420 pin 6
7	-	PWM DCDC	-W01	X420 pin 4
8	-	PWM Charger	-W12	X420 pin 5
9	-	CP CAN High	-W19	X420 pin 10
10	-	CP CAN Low	-W11	X420 pin 11
11	-	Not used		
12	-	Not used		