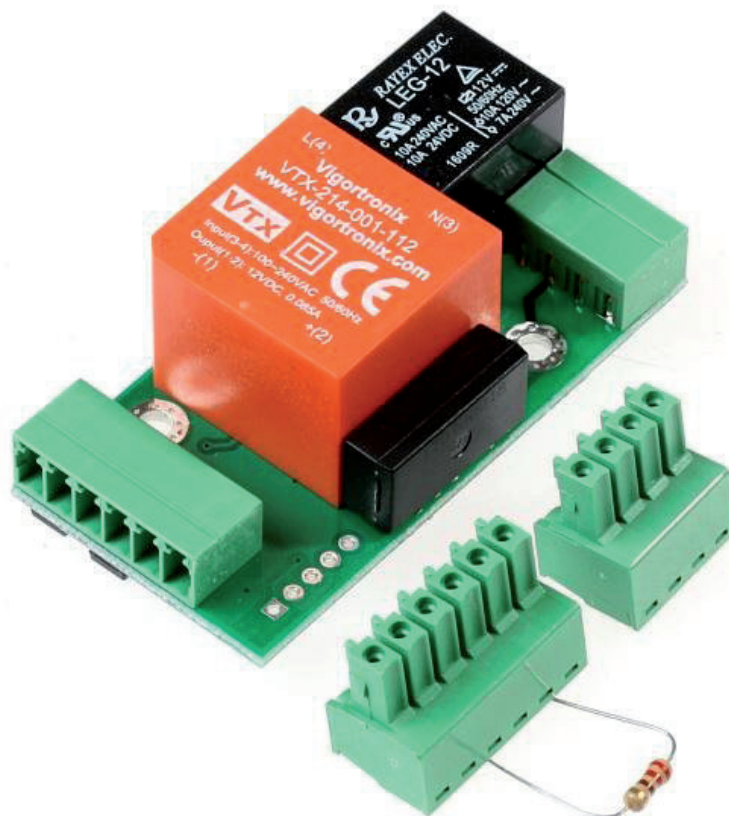


Technical specification

# EVSE Wallbox

EVSE-KIT-WB



PRODUCT WEBPAGE



## EVSE Wallbox

EVSE stands for electric vehicle supply equipment. It is an element that supplies electric energy for the recharging of electric or plug-in vehicles.

The EVSE board is supplied with default 32A settings. 220 Ohm RPP is included with the kit EVSE WB. Pilot signal duty cycle provided by EVSE defines maximum charging capacity. The car can define several states by pulling the pilot signal down to certain voltage levels (3V, 6V, 9V).

Based on this feedback, EVSE will trigger the relay for the vehicle to charge or evaluate the state as an error (electricity will not be provided to the output socket/connector).

### GENERAL DESCRIPTION EVSE WB

Parameters	
Supply voltage	90 – 265 VAC
Power consumption	<1W
AC/DC power	1W or 3W
Operating temperature	-20 to 80 °C
Protection index	IP00
Onboard resistor for external LED	1k
Vehicle compatibility	All vehicles according to IEC 62196
Connection options	HC06 bluetooth, UART-USB converter, wifi ESP8266, ethernet USR-TCP232/GSM, ...

### TECHNICAL SPECIFICATION

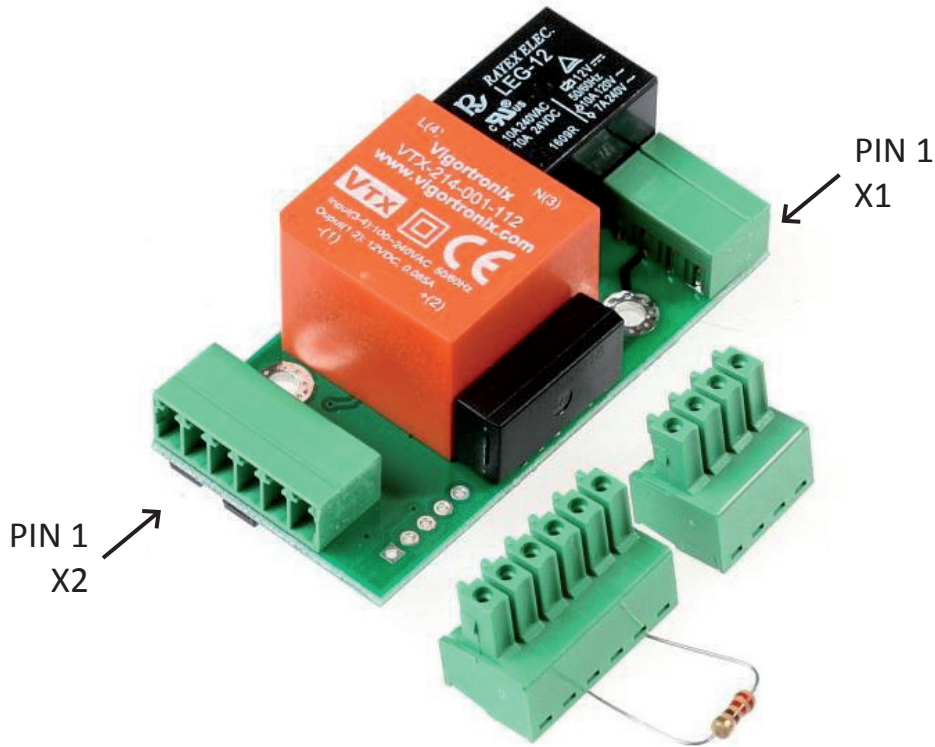
EVSE	WB
DIN rail mounting	yes with 3D printed case *
PP detection	yes
Power relay	no
3phase	yes
Fits inside Type2 or Type1	no
Wiring	easy
Supports vehicles	all
Uart communication	yes
In production	yes

\* 3D data available on request

### EVSE WB - BOARD DESCRIPTION

Parameters	
Dimension (without connectors)	60 x 30 x 25 mm
Mounting holes spacing	30 x 20 mm
Relay	5A 250V
Weight	80 g
Order code	EVSE-WB
Options	HC06 bluetooth, UART-USB converter

EVSE WB board has 2 connectors. 4-pin X1 for high voltage side and 6-pin for signaling wires and control purposes. There is also PROG connector used for flashing new firmware (ICSP), additional communication and can be further used for adjusting EVSE current (see “Customizations” chapter).



## OUTPUTS AND INPUTS:

X1 connector = 4pins

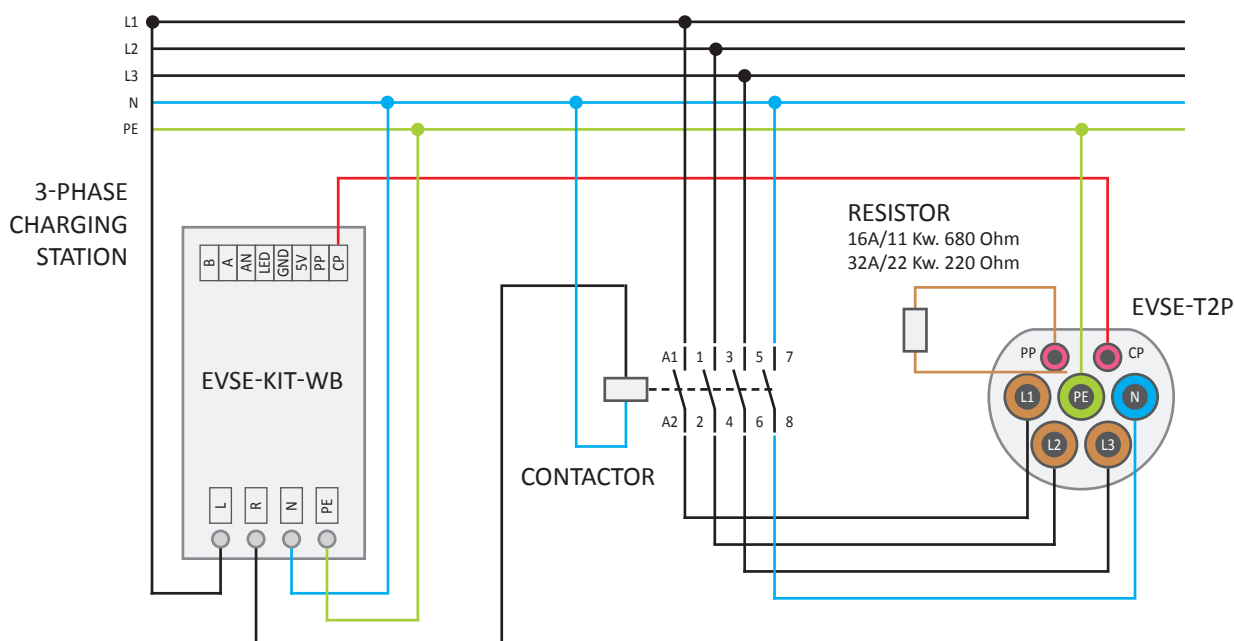
Pin	Name	Description
1: L	phase	230V power supply for EVSE board and external contactor
2: N	neutral	230V power supply for EVSE board and external contactor
3: PE	protection-earth	Ground reference
4: rel	relay output	This output drives coil of an external contactor. Maximum allowed current is 3A.

X2 connector = 6pins

Pin	Name	Description
1: CP	control pilot	To vehicle connector
2: PP	proximity pilot	To vehicle connector
3: 5V	5V power output	Used as a power supply for external components (max 40mA)
4: GND	ground	Ground reference
5: LED	external LED	Includes 1k resistor onboard, connects to LED anode against ground
6: AN	analog input	Used for button or current sensor input

## Application examples

### 3-phase charging station



Simplified connection of the control module to the EV socket (without fuse and fault protection)

### COMPONENTS FOR 3-PHASE CHARGING STATION:

EVSE-KIT-DIN and EVSE-KIT-WB are identical models with only difference that EVSE-KIT-DIN has own housing with possibility to install it on a DIN rail while EVSE-KIT-WB is kit only.

EVSE-T2-32-7 (EVSE-T2P + cable 7m length = set)

EVSE-KIT-WB

EVSE-RL-40A



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