EV charging station block diagram using Creasol **DomBusEVSE** module working with **Domoticz** home automation system

Operating mode:
OFF: charging disabled
SOLAR: use only energy from renewable plant (**power from grid = 0**)
25%: max 25% of available power from grid
50%: max 50% of power from grid
75%: max 75% of power from grid
100%: use all available pwoer from grid
MANAGED: current value set by domotic controller (automation script for custom charging)

Connect an energy meter to the main circuit breaker, to get all information about power/energy usage/return (imported and exported energy)

Build your smart wallbox, single phase, 8kW!
All parts are available in our store.

Main switchbox

Main circuit breaker

DDS238-2 ZN/S Modbus energy meter

Not needed, but recommended

Twisted pair or alarm cable to connect energy meters

DomBusEVSE module can be connected to a Domoticz home automation system to control wallbox from smartphone and web browser, display power/energy charts, ...
CP is the control pilot, a +/-12V signal used to communicate with the vehicle.
EV Relays is connected to the 40A contactor coil, to enable mains power supply to the vehicle.
RL2 is an additional general purpose relay
EV Supply is used to sense power supply on the vehicle.

DomBus or Domotic controller with USB/RS485 adapter

Long-down: disable charging
UP/Down: select charging mode

Up/Down external button

4k7

External button (optional)

40A RCCB Type-B

I-ON

13.6V power supply

Vo Adj.

DDS238-2 ZN/S Modbus energy meter

Not needed, but recommended

Contactor single-phase 40A

Creasol DomBusEVSE

Made in EU
www.creasol.it

RL EV | RL2 | In EV

EV Relay | RL2 | EV Supply

PE
CP | PP
N | L1
L3 | L2

Type-2 EV cable

Smart Wallbox using DomBusEVSE