



Home protection for my Electric Vehicle charging station

EV B type Earth leakage protection

"I want to get the best from my electric car by installing a protected EV charging station at home".



Acti9 iID B type for EV

"Brand new protection solution for EV charging stations"

Customer story

Mr and Mrs Smith own an electric car, but there are not many charging points close to work or home. They always have to check around to charge the car. They don't want to waste more time, so they decided to install an EV charging station at home. They will enjoy full availability at the end of the day, and they can save money by charging at home.

This is a small investment that will bring value to their house and that simplify their daily habits. Of course, they want the solution to be safe, efficient and compliant with standards.

Acti9 iID B type RCCB for EV is certified to protect people (IEC/EN 62423) and is fully compatible with EV charging station for residential application.

Proposed solution

The EV charging station plug is manipulated daily by Mr and Mrs Smith. It is usually installed outside the home, being exposed to rain, snow, dust and humidity. That is why IEC 60364-7-722 standard require a 30 mA residual current protection for direct contact.

RCCB Acti9 iID B type EV is certified for that purpose. It is designed to:

- **Protect people** against **multifrequency** earth leakage current, generated by charging station technology that can cause fibrillation and electrocution.
- **Simplify** operation thanks to Acti9 VisiSafe and VisiTrip.
- **Monitor and control** the electrical panel with PowerTag and Smartlink auxiliaries.

Customer benefits

For Mr and Mrs Smith

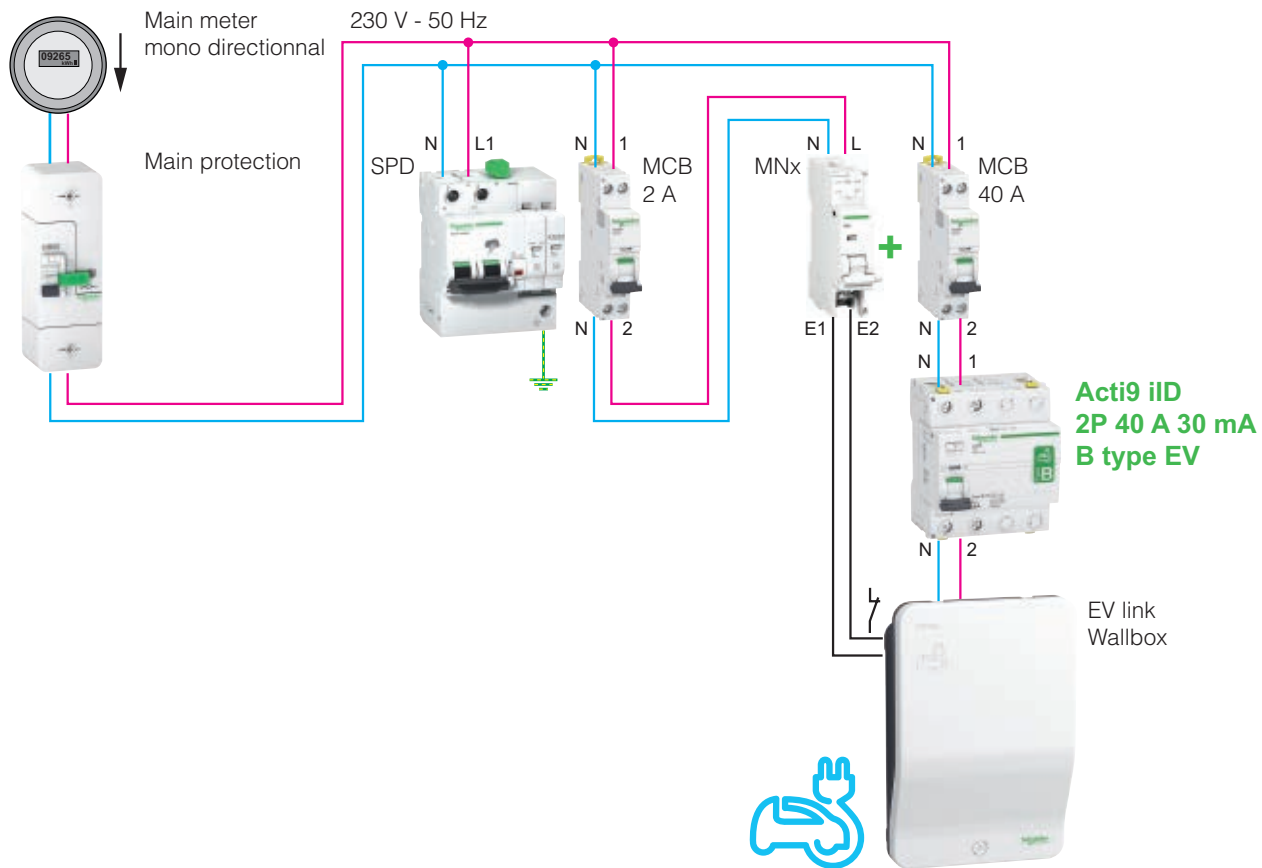
- **Peace of mind:** outside in the garden, exposed to rain and snow, you will be protected from electrical faults when manipulating your EV charging station.
- **Comfort:** charging at home will save you time looking for public station. It will also save you money since home charging is cheaper than in public infrastructure.
- **Improve your house value:** considering the global trend on EV, to invest installing a charging station brings value to your house.

For electricians

- **Efficiency:** one stop shop with Schneider Electric for EV charging station and related electric protections (one guarantee, one technical support).
- **Increase business:** Acti9 accessories and auxiliaries can help you to provide best-in class solution adapted to your customer needs, with metering and local or remote communication.
- **Provide protection for your customers:** Acti9 iID B type is compliant with mandatory standard (IEC/EN 62423).

- Apartment,
- House.

Solution diagram



Note: during design phase, it's essential to define protections to avoid upstream and parallel protection disablement (blinding of upstream and parallel protection due to direct current signal presence).

For more information about selectivity and coordination of protections, refer to earth leakage protection guide reference CA908066E and associated coordination tables.

Products used

Product	Function	Quantity	Reference
Acti9 iQuick PRD 1P+N	Modular surge arrester (SPD)	1	A9L16295
Acti9 iDPN 2 A 1P+N C curve	MCB 2 A	1	A9N21553
Acti9 iDPN 40 A 1P+N C curve	MCB 40 A	1	A9N21561
Acti9 iMNx	Undervoltage release tripping unit	1	A9A26969
Acti9 iID 2P 40 A 30 mA B type EV	RCCB for EV charging station	1	A9Z51240
EVlink Wallbox	EV charging station	1	EVH2S7P04K

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