

# 9 selection criteria for charging station

## Electrical



<b>Power per socket</b>	<b>3.7 kW - 7.4 kW</b> ▲ Single-phase main supply.	<b>11 kW - 22 kW</b> ▲ Three-phase main supply.	<b>22 kW (AC) - 24 kW (DC)</b>	
<b>Charging mode</b>	<b>Mode 2</b> ▲ Use of charging cable equipped with its control interface.	<b>Mode 3</b> ▲ Advanced charging control with communication between station and vehicle. Use of direct charging cable.	<b>Mode 4</b> ▲ Advanced charging control with communication between station and vehicle for DC charging mode.	
<b>Socket outlet</b>	<b>Domestic</b> ▲ Up to 2.3 kW	<b>Type 2</b> ▲ Up to 22 kW	<b>Attached cable type 1</b> <b>Attached cable type 2</b> ▲ AC type 1: up to 7.4 kW ▲ AC type 2: up to 22 kW	<b>Combo 2 CHAdeMO</b> ▲ 24 kW

## Usage






<b>Socket outlet access</b>	<b>Free access</b>	<b>Key</b> ▲ Key lock.	<b>Authentication</b> ▲ Access with RFID badge or via Smartphone apps for connected stations. Function depending whether connected station or not.	
<b>Load management</b>	<b>Optimized Cost &amp; Service continuity</b> ▲ C1-type: 'Optimized cost' > delayed start or temporary current limitation. ▲ C2-type: 'Opt. cost + Service continuity' > delayed start or temporary current limitation > real-time max charging current control.	<b>Optimized charging time</b> ▲ For not connected charging station. Remaining available power is split between the 2 cars, giving priority to the one with less energy or time already allocated, to prevent tripping.	<b>Optimized charging station management</b> ▲ For charging station cluster connected to a facility network. A global energy management is provided (facility network + stations) in order to preserve site or building services availability and optimize vehicle charging.	
<b>Connectivity</b>	<b>Yes - No</b> ▲ Enabling communication (wired, 3G/4G modem) to the cloud-based supervision.			

## Installation



<b>Mounting</b>	<b>On Wall</b> ▲ Cabinet fixed on wall.		<b>On Floor</b> ▲ Cabinet with integrated or separate pole.	
<b>Protection</b>	<b>Electrical</b> ▲ D-type: built-in DC fault current detection (RDC-DD) ▲ I-type: protection devices can be installed on pedestal; ▲ F-type: factory mounted protection device.		<b>Mechanical IP54</b> ▲ Protection from dust, splashing water. Outdoor use is possible.	<b>Mechanical IK10</b> ▲ Resistance to pendulum shock: mass of 5 kg, 40 cm string.
<b>Aspect</b>	<b>Stylish</b> ▲ White resistant plastic casing.	<b>Robust</b> ▲ Metallic casing.	<b>Robust +</b> ▲ Antivandalism features. Metallic casing, extra keyboard protection.	

For eligible countries

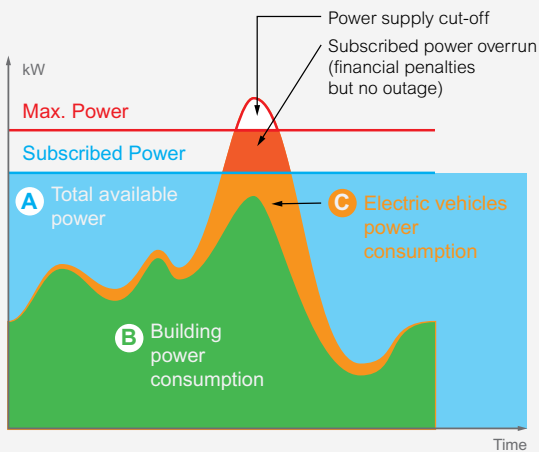
	EVlink Wallbox		EVlink Smart Wallbox	EVlink Parking	EVlink DC Fast Charge
	'Standard'	'Plus'	 Cloud-connectable	 Cloud-connectable	 Cloud-connectable
<b>Charging power (kW)</b>	3.7 11	7.4 22	7.4 22	7.4 22	22 (AC) 24 (DC)
<b>Charging mode</b>	3	3	2 3	2 3	3 4
2 Mode 2 3 Mode 3 4 Mode 4					
<b>Socket outlet Attached cable</b>	T2 ACT1 ACT2	T2 ACT1 ACT2	T2 T2+D ACT1 ACT2	T2 T2+D T2+T2	ACT CHAdemo ACT Combo 2 T2 22 kW (AC)
D Domestic ACT1 Att. cable with plug Type 1 ACT2 Att. cable with plug Type 2 T2 Plug type 2 (optional shutter)					
<b>Charging access</b>	F K	F K	F K A	F A	F A
F Free access K Key lock A Authentication					
<b>Load management</b>	C1	C2	C1+M	C1+T+M	M
C1 Optimized Cost C2 Opt. Cost + Service Continuity T Opt. Charging Time M Opt. Station Management					
<b>Connectivity</b>	N	N	N Y	N Y	N Y
Y Yes (ready to connectivity) N No					
<b>Mounting</b>	W F	W F	W F	W F	W F
W Wall F Floor					
<b>Protection</b>	Elec IP IK 54/10	D 54/10	I 54/10	I 54/10	F 54/10
D Built-in DC filter I Possible on-site mounting F Factory-mounted 54 Dust + splashing water 10 5 kg shock					
<b>Aspect</b>	S	S	S	R	R+
S Stylish R Robust R+ Robust +					

# Energy management

How to optimize the impact of consumption of a charging solution on an electrical installation

## > The problem

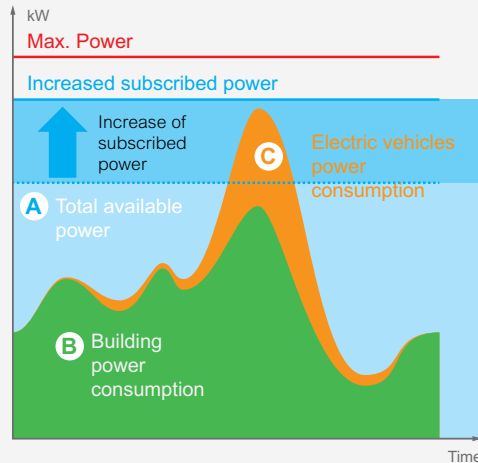
Initial situation



The installation of charging stations in an existing electrical installation can have a significant impact due to the power level required by electric vehicles to charge.

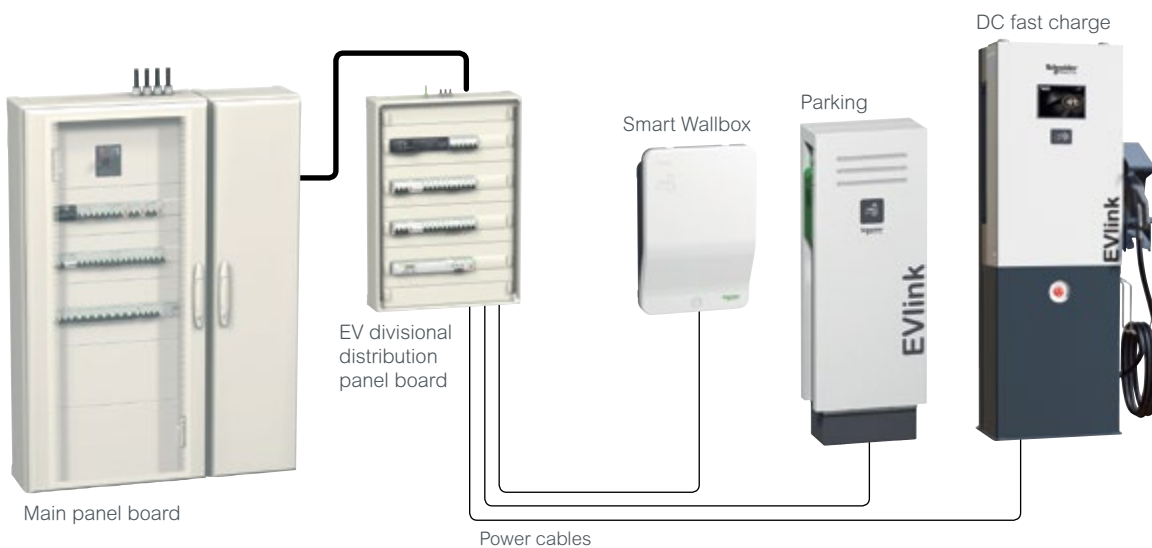
## > Solution without energy management

Increase of subscribed power



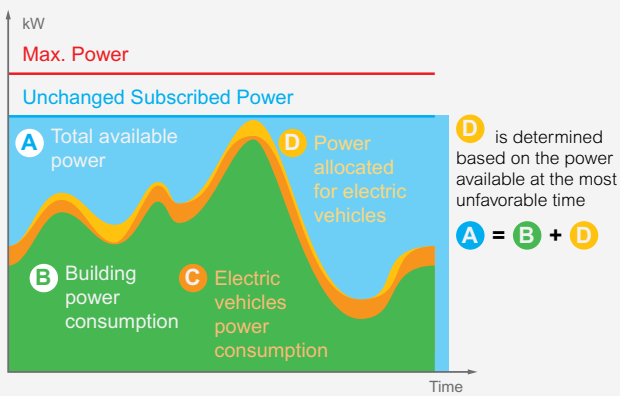
This solution consists of increasing the power subscribed to the energy supplier to maintain the same consumption model. It implies an increase in the cost of the subscription and does not guarantee that the trigger threshold will never be exceeded. Thus the continuity of service of the building is not guaranteed.

## Electrical installation without energy management



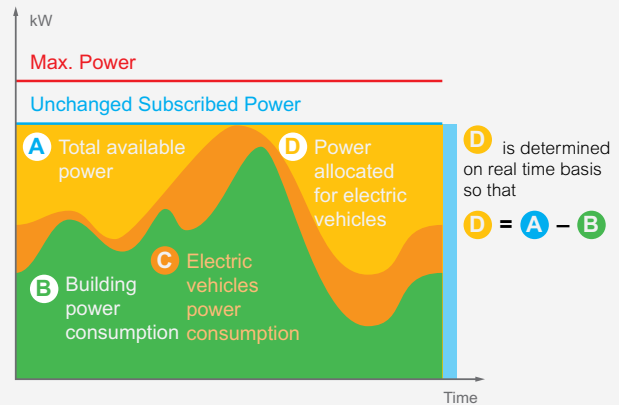
## > Schneider Electric solutions

### Static energy management



Setpoint "D" is fixed. The power is distributed between all connected vehicles.

### Dynamic energy management



Setpoint "D" is adjusted in real time according to the consumption of the rest of loads in the building, to maximize the power allocated to charging electric vehicles.

## Electrical installation with energy management

From 1 to 1000 charging stations depending on the EVlink LMS (Load Management System) model selected.



EVlink Load Management System has been awarded with the prestigious "Solar impulse Efficient Solution" label.



Find out more here

