

Pod Point Array Charging System

System Description

The Pod Point Array charging system allows multiple chargers to manage their individual and total charging load within the limits of a fixed supply. An Array system allows many more chargers to be fitted than would normally be the case as each charger will de-rate as necessary to never overload the incoming mains feed. The system consists of suitable cabinets containing the Pod Point Array controller electronics and MCBs. A chosen number of Pod Point double socketed chargers are wired to these cabinets (up to 4 for a single phase system or up to 12 for a three phase system).

System Requirements

- A Wi-Fi network must be available where the Pod Point double socketed EVCPs are installed
- The total amount of Pod Point double socketed EVCPs allowed must be calculated with a safety contingency based on the supply
- The Array Charging system can be installed on single phase supply or three phase supply

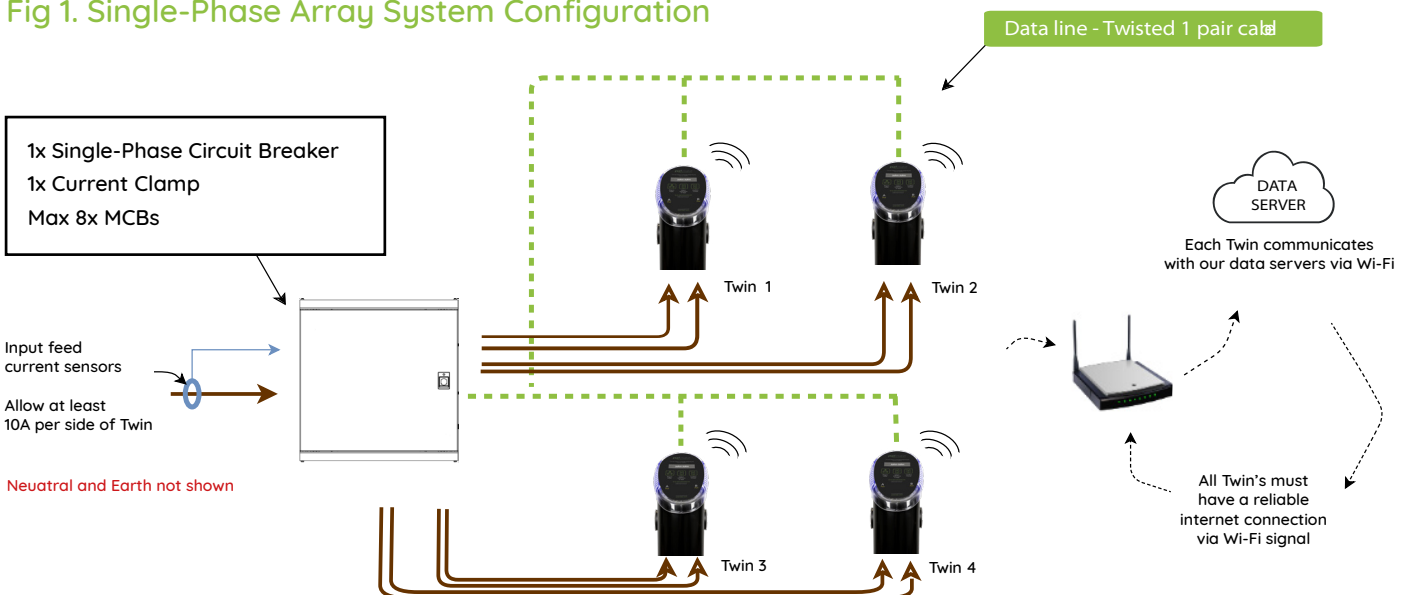
System Diagram

Array Charging is available in different options to cover most system requirements. Pod Point are able to advise on suitable configurations.

Single-Phase supply – up to 4 double socketed Pod Points (Fig. 1)

For a supply of 100A up to 4 double socketed Pod Point EVCPs (8 outlets) can be installed (depending on maximum available supply - See Table 1)

Fig 1. Single-Phase Array System Configuration

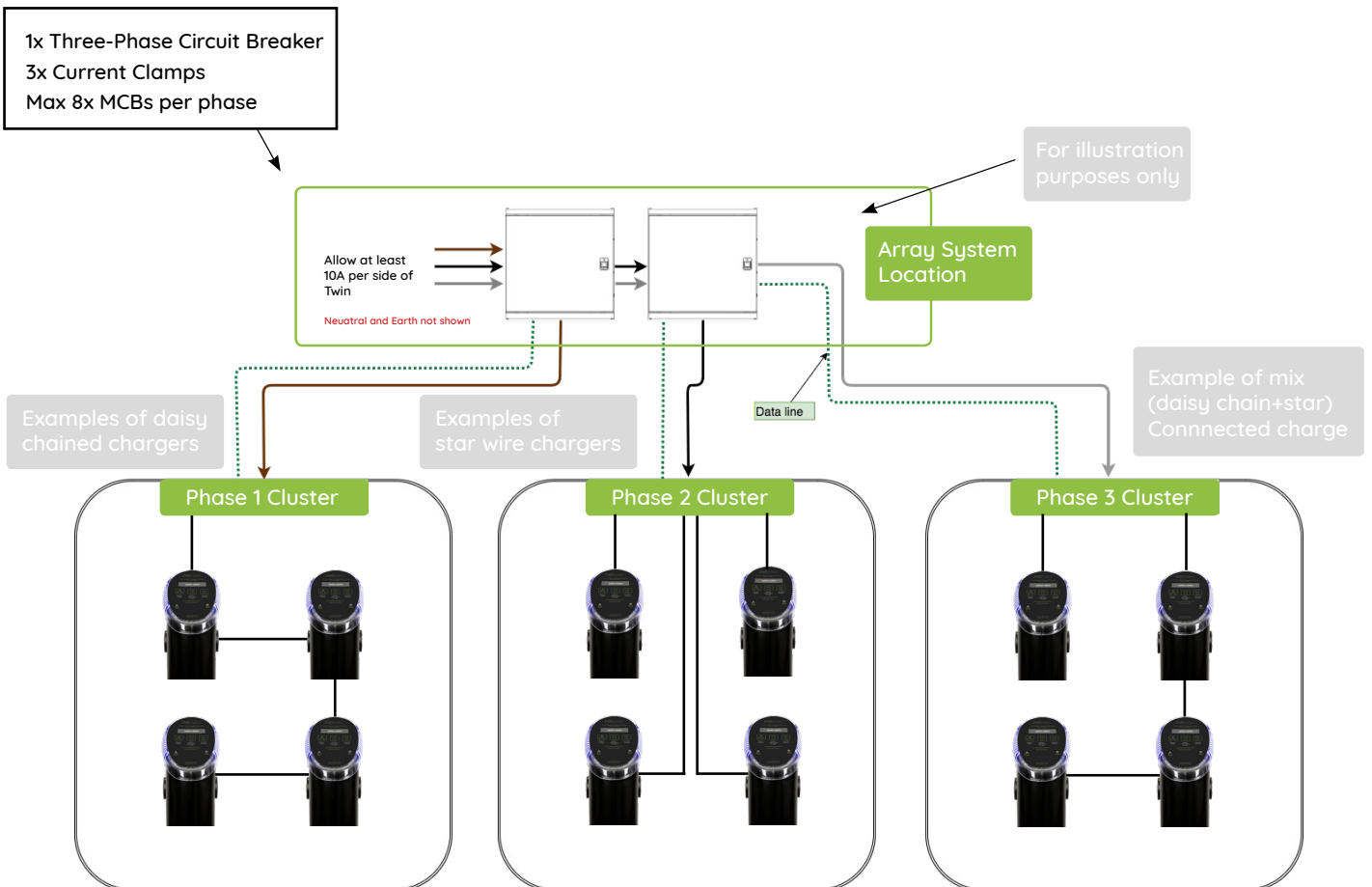


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Three-Phase supply – up to 12 double socketed Pod Points (Fig. 2)

Option 2 is Pod Point's preferred option. It allows load management of up to 12 double socketed Pod Point EVCPs on a 100A TPN (Three-Phase) supply. On a 100A TPN system (Fig 2), the Pod Point EVCPs must be installed in clusters of a maximum of 4 units per phase. Each cluster connects to one phase of the supply.

Fig 2. Three-Phase Array System Configuration



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Array Charging Distribution Board

- Fully assembled three-phase system includes: 40A 2-pole MCBs, 3x current clamps, 1x three-phase circuit breaker and Array controllers
- Up to 4x double socketed Pod Point EVCPs per phase (for 100A supply). See Table 1 for different supplies and amount of Pod Point EVCPs allowed

Table 1. Maximum supplies available for Array Charging System

Max supply	Single-Phase system	Three-Phase system
	Amount of double socketed POD Point EVCPs per system	
40A	1	3 (1 per phase)
60A	2	6 (2 per phase)
80A	3	9 (3 per phase)
100A (default)	4	12 (4 per phase)

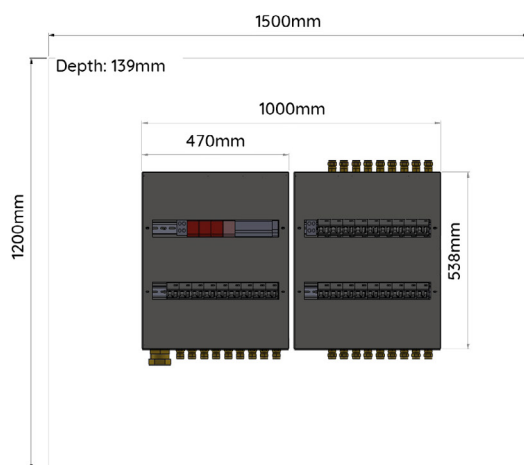


Fig 3. Horizontal installation of Three-Phase system

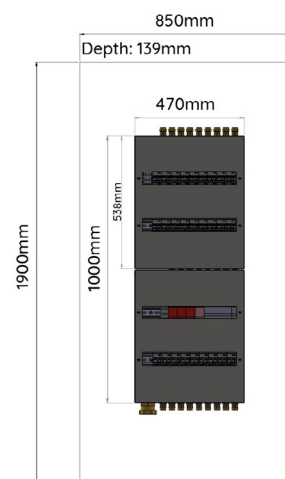


Fig 4. Vertical installation of Three-Phase system

Table 2. Dimensions of Array System Installation

System	Height	Width	Depth
Three-Phase Horizontal (Fig 3)	1200	1500	139
Three-Phase Vertical (Fig 4)	1900	800	139

*Single-phase system comprises of one DB box