

Alfen Construction Signoff Form for Driver Management Solution

Customer Information	
Customer name	
Customer contact name	
Customer contact phone	
Customer contact email	

Site Information	
Street and number	
City	
County/Region	
Country	
Postcode Zip code	
Number of chargers to be installed	
Expected start of construction works	
Expected installation and commissioning date	

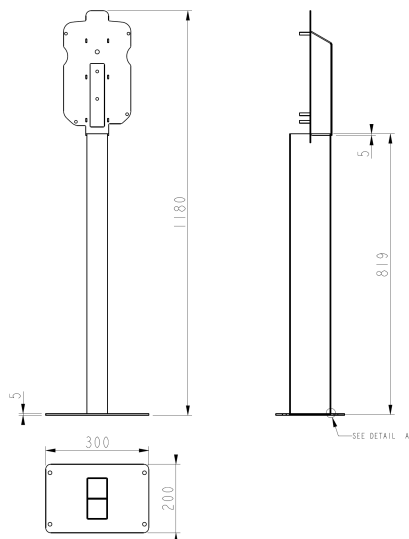
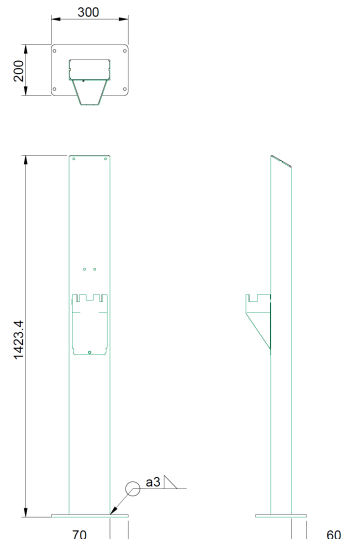
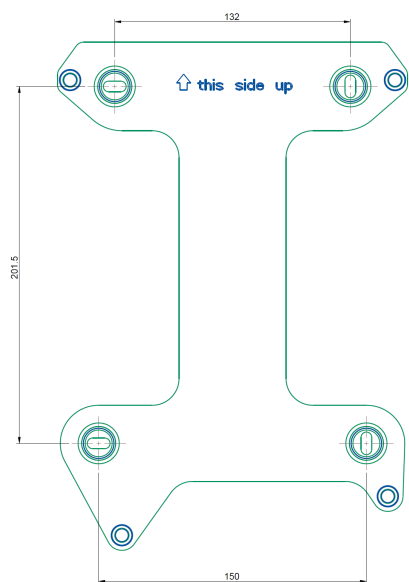
Site Contractor Information	
Contractor type	ChargePoint designated []
	Customer designated []
Contractor company name	
Contractor site lead name	
Contractor site lead phone	
Contractor site lead email	

Installer Information	
Installer type	ChargePoint recommended []
	Customer recommended []
Installation company name	
Installer contact name	
Installer contact phone	
Installer contact email	

1	Installation Location	
	a. Outdoor	
	b. Indoor	
	c. Underground	
	Will the station be exposed to outstanding environmental factors? *	
	*i.e. Dust, high humidity, sea salt, snow, corrosive substances	

2	Network Connectivity		
	Validate Mobile Network and Carrier availability * *2G is only applicable for early versions of the Alfen stations. If applicable, 4G Signal RSSP should be better than -90dB. A minimum of -85dB is recommended for good connectivity and smooth operation.		
	Carrier name	4G (dBi)	3G** (dBi)
	1.		
	2.		
	3.		
	Is a signal repeater necessary? The installation of signal repeaters is recommended for areas with poor cellular connectivity. For UK, devices readily available on the market can be installed. For EU/Continental Europe countries, a repeater should be requested through the local mobile carrier. Are the readings in the table outside an acceptable range?		
	Will the station be connected to a local network* (ethernet connection?) Note: In case of home installation in a garage or where there is no 4G coverage, the station can be connected to internet using an ethernet cable connected to the home LAN (home router/modem)		

3	Location Requirements		
	Are all the minimum clearances available for installation and operation (space and serviceability)?		
	Are the stations pole mounted or wall mounted?		
	Mounting Type	Single Socket (QTY)	Double Socket (QTY)
	Wall mounted		
	Pole mounted		

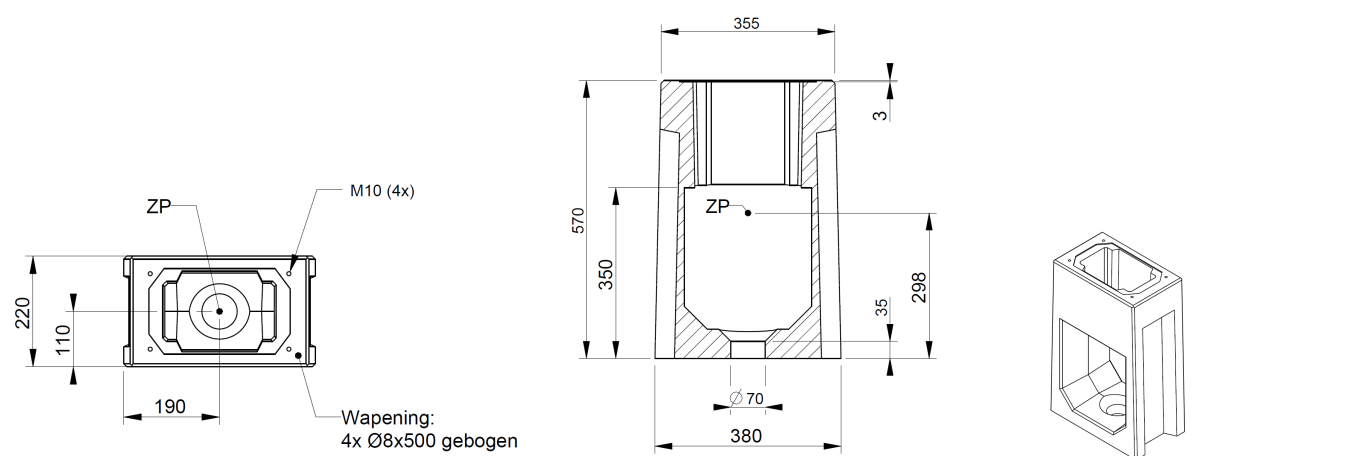
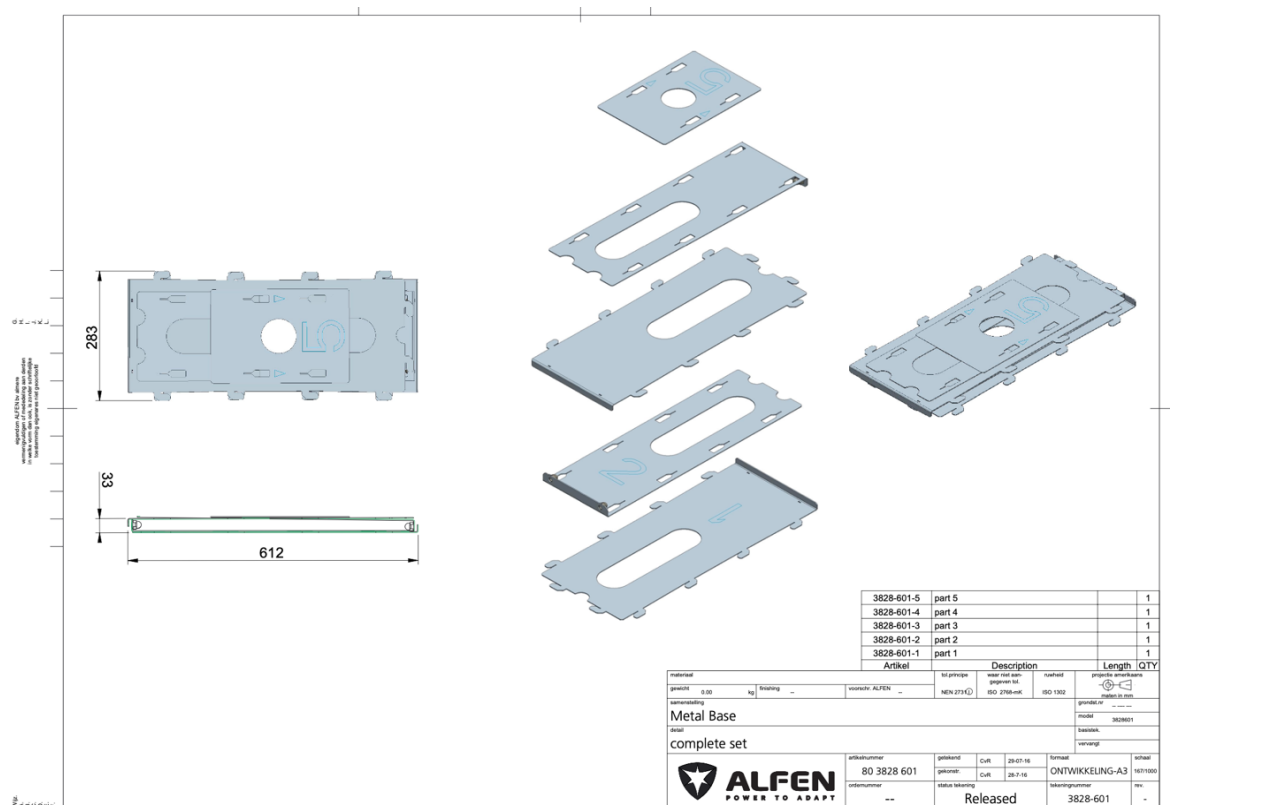
3	Location Requirements	
	Are the height requirements met? * *The height of the stations installed on a pole must be less than 1430 mm	
	Single Pole 	Double (Twin) Pole 
	Wall Mounted 	
	Single Connector	Dual Connector
	- The recommended installation height is 700 to 1200 mm from the ground to the bottom side of the casing. - The gap between the drill holes must be 123.8 mm (top side), 39.6 mm (bottom side), and 434.3 mm (vertical).	

4	Physical Installation
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Was the pre-fab foundation from Alfen used?

a. Metal [1]

b. Concrete []



Slab dimensions (Length x Width x Depth): 380 x 220 x 570 mm

5	Grid Connection	
	What is the power available on site for the chargers? * *Single stations are rated at 16-32 A input current at 400 V (3-Phase). Dual stations are rated at 32 A or 2 x 32 A input current at 400 V (3-Phase) — two independent supply AC circuits required.	[] kVA
	What type of grid system is available?	
	TN-S	
	TN-C	
	TN-CS	
	TT *TT System: a self-installed earth electrode, less than 100 Ohm earth dispersion resistance is required.	
	IT *IT system: Not all the vehicles support the IT system. In that case, or with 3-Phase charging, an isolation transformer is required. Grounding is connected to a shared reference (common earth) with other metal parts.	
	Will a grid connection upgrade be required?	
	Will a new electrical distribution panel be required?	
	Will any power management features be required?	
	a. Power limitation	
	b. Power sharing	
	Will the Alfen Dynamic Power Management feature be required? *Smart Meter connection is only for home installation. If Dynamic Power Management feature is required, specify the manufacturer and model of the Smart Meter that will be connected with the charging station.	
	Smart Meter manufacturer	
	Smart Meter model	

6	AC Supply Guide Installation				
Was the Alfen installation manual followed when designing the electrical supply installation?					
Is the installation ZE Ready compliant?*					
*If EV/ZE Ready compliance is required, only use RCCB's of type A+ (high immunity) or type B.					
For Dual Socket station, is a single or double AC input cable provided?				Single	[]
				Double	[]
What is the wire size of the AC supply cables provided to the stations?					
Station Type	Single Supply Cable (mm²)	QTY	Double Supply Cable (mm²)	QTY	
Single					
Dual					
Cable length necessary for station connection:					
*For stations installed on a pole, at least 1200 mm of cable length should be available from the concrete slab level to the station.					
For stations installed on a wall, at least 300 mm of extra cable length should be available from the height of the station installation.					
Double Socket Station	Cable gland clamping range	14-25.5 mm cable thickness			
	AC input wires maximum size	• 16 mm² per wire: solid (VD) wire • Maximum 6 mm² per wire: stranded (VDS) wire with ferrules			
	AC input wires minimum size	• 16 A Station: 4 mm² • 32 A Station: 6 mm²			
Single Station	Cable gland clamping range	Clamping range for 14-25.5 mm cable thickness			
	AC input wires maximum size	• 10 mm² per wire: solid (VD) wire • Maximum 6 mm² per wire: stranded (VDS) wire with ferrules			
	AC input wires minimum size	• 16 A Station: 4 mm² • 32 A Station: 6 mm²			

6 AC Supply Guide Installation						
	With Circuit Breakers			With Fuses (gG)	Load Balancing	
Short Circuit Protection	Single power supply, 1-Phase	16 A	1 x 40 A maximum, 1P, Curve B or C	1 x 35 A maximum	Optional	
		32 A			Required	
	Double power supply, 1-Phase	16 A	2 x 20 A maximum, 1P, Curve B or C	2 x 20 A maximum	Optional	
		32 A	2 x 40 A maximum, 1P, Curve B or C	2 x 35 A maximum		
	Single power supply, 3-Phase	16 A	1 x 40 A maximum, 3P, Curve B or C	3 x 35 A maximum	Optional	
		32 A			Required	
	Double power supply, 3-Phase	16 A	2 x 20 A maximum, 3P, Curve B or C	6 x 20 A maximum	Optional	
		32 A	2 x 40 A maximum, 3P, Curve B or C	6 x 35 A maximum		
	If you have opted for a capacity less than or equal to 16 A (3.7 kW or 11 kW charging), 20 A instead of 40 A is sufficient.					
	Residual Current Protection	Residual current circuit breaker (RCCB): minimum 100 mA (S) Selective, 4P, A EV, or B				

The cable trajectory from the main distribution station up to the Alfen Eve must be protected against short-circuiting and over-current with:

- Curve B or C circuit breakers (or otherwise in compliance with local standards and regulations).
- Type gG fuses (or otherwise in compliance with local standards and regulations).

7 Installation Documentation/Images		
	Photo of the charger installation locations (walls or concrete pads, anchoring bolts, and conduit stub ups *) *For all applicable stations	
	Photo of the AC supply cable and termination of the cables (if applicable *) *For all applicable cable terminations	
	Photo of the available area around the chargers (for service clearances)	
	Photo of the installed bollards/wheel stops (if applicable)	
	Photo of the distribution panel (front open) with visible breakers	
	Photo of the distribution panel (external)	
	Photo of the Smart Meter Screen showing IP set-up (if applicable)	

7	Installation Documentation/Images		
	Photo of the home modem/router port where station is wired (if applicable)		
	Photo of the distribution panel cable terminations		
	Photo of the station individual breakers and labels with visible breaker model / settings		
	Photo of the mains disconnect/breaker feeding station subpanel/breakers with visible breaker model/settings		
	Site SLD (Single Line Diagram) *Including breaker settings		
	Site layout drawing (If available)		
	Make, model, and specification of the AC cabling (size, material, isolation, ratings) used to feed the stations		
	Electrical measurements:		
	a. Line to Line Voltage (L1-L2, L1-L3, L2-L3)		
	b. Line to N Voltage (L1-N, L2-N, L3-N)		
	c. N to G Voltage (N-G)		
	d. Grounding Impedence		
	Provide a list of serial numbers and MAC addresses of the stations installed on site (*Only if station installation is included together with the civil works and electrical installation works)		
	#	Serial	MAC address

- The photos should be in .jpg format.
- The photos should be sharp and focused on the item being documented.
- The resolution of the photos should be between 5.0-12.1 MP.

Legal disclaimer

ChargePoint is not responsible for verifying this information, and the creator of the protocol remains responsible for this information.

ChargePoint accepts no ongoing responsibilities for the electrical design and the installation specifics.



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