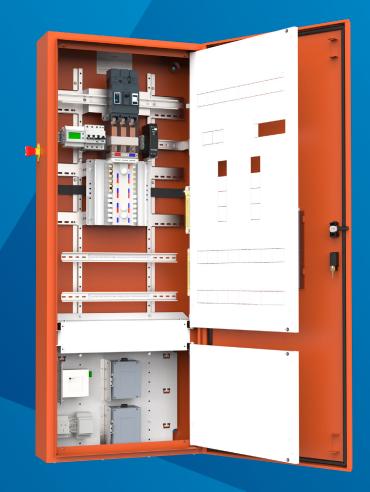


# Electric vehicle charging distribution boards

- NCC compliant solutions
- AS/NZS 61439 design verified
- Segregated load management zone
- IP42
- 250A main switch
- Overall energy metering
- 36mm space per charger for metering
- Fully encapsulated busbar
- Optional stop / E-stop
- Load shedding models

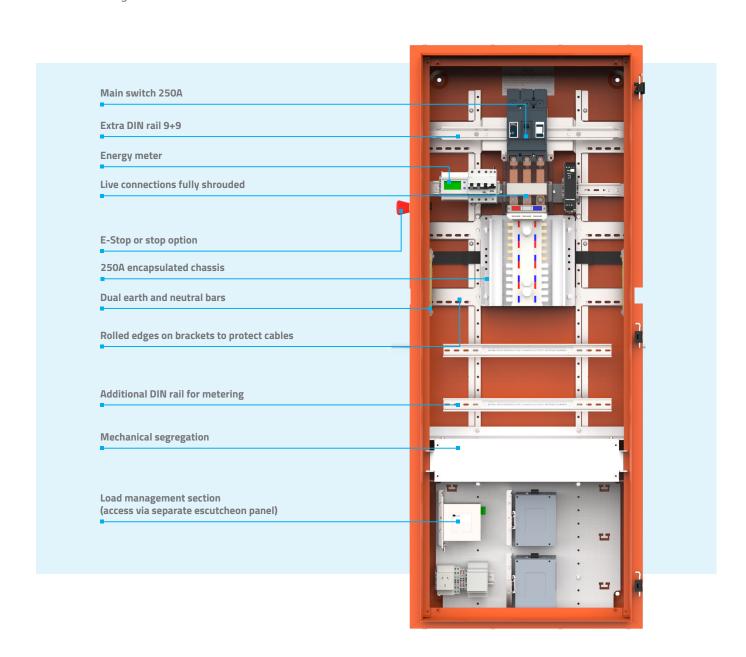


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## Electric vehicle charging distribution boards

The release of the 2022 version of the National Construction Code introduced a number of provisions in Section J9D4 regarding facilities for electric vehicle charging. Section J9D4 requires many classes of building with associated carparks to have dedicated distribution boards for electric vehicle charging.

NHP can make it easy to comply with the new requirements via a standardised distribution board in the Concept Plus Panelboard range.



### EV distribution board architecture



### Dynamic load management

- Site energy meter and TCP router
- Additional hardware required if more than 5 EV DBs

### Static load management

- No site energy meter
- Each DB set up with static maximum allowable current
- No limit to number of DBs



### EV distribution board with load management kit



Switch

Power outlet



EVLM server

Required if more than 1 EV DB Site network switch



Power supply



### EV chargers

Feeds up to 24 EV chargers per DB (each max. 32A)

### **Delta AC Max EV smart chargers**

- 4G / Wi-Fi/ Ethernet
- Single phase wired 7.4kW
- Three phase wired 22kW
- With 5M cable and Type 2 plugCat no: EIAWE22KTSE5A04
- Without cable (socket with shutter only)

Cat No: EIAWE22KTSH0A04

### **Distribution boards**

Without control load management zone					
Number of poles	Type charger	Extra DIN rail	Height	Cat no grey*	
24 way	1 phase	2 rows x 24	1080mm	CPLMSX24M250G	
48 way	Mix 1/3 phase	3 rows x 24	1512mm	CPLMSX48M250G	
72 way	3 phase	3 rows x 24	1728mm	CPLMSX72M250G	

With single module control load management zone					
Number of poles	Type charger	Extra DIN rail	Height	Cat no grey*	
24 way	1 phase	2 rows x 24	1296mm	CPLMSXCS24M250G	
48 way	Mix 1/3 phase	3 rows x 24	1728mm	CPLMSXCS48M250G	
72 way	3 phase	3 rows x 24	1944mm	CPLMSXCS72M250G	

With double module control load management zone				
Number of poles	Type charger	Extra DIN rail	Height	Cat no grey*
24 way	1 phase	2 rows x 24	1512mm	CPLMSXCD24M250G
48 way	Mix 1/3 phase	3 rows x 24	1944mm	CPLMSXCD48M250G

Load sheding without control load management zone 160A (no energy meter)					
Number of poles	Type charger	Extra DIN rail	Height	Cat no grey*	
24 way	1 phase	2 rows x 24	1296mm	CPLL24M160G	

<sup>\*</sup> Replace G with O for orange distribution panelboard

### **Emergency stop kits**

Description	Cat no.
Stop kit (shunt trip)	CELAEVS
Fail safe emergency stop kit (Under voltage trip)	CELAEVES

### Load management kits

Programed number of chargers	Available ethernet ports	Charger plug capacity	Control zone required	Cat no.
12	4	12	Single	EVLM2CP12DBA*
24	4	24	Single	EVLM2CP24DBA*
12	12	12	Double	EVLM2CP12DBB
24	24	24	Double	EVLM2CP24DBC

<sup>\*</sup> External ethernet switch may be required



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### **NHP Electrical Engineering Products**